CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

The life wire of any nation is fundamentally tied to the fact that mobility and accessibility are essential to the achievement of social and economic goals. Before the advent of modern transportation system, man facilitated movement with the help of camel, horses and oxen which were domesticated to follow a particular track often created to link human settlements. These animals were used to pull loads on cart wheels, the first of which were developed by the natives of North America and later spread to Europe, India and China in 3000-4000 BC. The first organised omnibus public transit system within the city originated in Paris, France, in 1662. Also in 1769 Nicolas-Joseph Cugnot was credited to have built the first-propelled mechanical vehicle or automobile, by adapting an existing horse-drawn vehicle. By July 1826 the first omnibus was introduced into London. (www.http://inventors.about.com (21st March, 2012)).

The industrial revolution in the late 18th century paved way for engine propelled vehicles. The first buses to be powered by internal combustion engines were used in 1895 and, with the development of modern road transportation and technology, bus manufacturing have become globalised.

Similarly, in the pre colonial African societies, the demand and supply of transport was based on subsistence economy. Farm produce which was the mainstay of the economy was transported manually. With subsequent human evolution, and the advent of inter-regional commercial activities along the trans-Sahara routes, the use of camels in the savannah grassland and the canoes in the riverine areas came into existence. By 1860, commercial activities had commenced in the Niger Basin while the European trading activities operated along the coast lines of the present day Nigeria (Zaki 2010).

Following the desire of the British authority to maximally exploit the resources of the region, transportation of raw materials from the hinterland to the coastal area became very popular. The attendant economic activities in these regions gradually attracted movement of people from the countryside giving rise to the present day towns and cities.

The post colonial Nigeria economy experienced boom with high rate of urbanisation due to population increase. This resulted into increased demand for vehicular activities particular buses to convey people from one point to another. The phenomenal increase in population and city size was noticeable in most cities especially state capitals and local government headquarters. Adesanya (1994) asserted that the population of Lagos grew at a phenomenal rate of about 15% annually in the 1970's while those of Ibadan, Ilorin, Kano, Port Harcourt and Abeokuta grew at between 10-20% annually in the 1970's and 1980's. The rapid

increase of population was accompanied by a rapid expansion of the metropolitan towns. It was predicted that for every additional 1,000 people, in developing cities, an extra 350-400 cubic transport trips per day would be generated. Similarly, for every additional square of city growth, an extra 500 public transport trips per day will be generated (UITP 1975 & 1979; Jacob et al, 1987). Furthermore, a city like Lagos with a population of 9,113,605 in 2006 was projected to have about 12,252,970 million population by 2015 (FRN GAZETTE VOL 94). The resultant effect of this on transportation will create great challenges for government. While there will be need to reduce traffic congestion, air pollution and increased traffic-related safety, lose in productive man hour could negatively influence the socio-economic fabric of the urban society.

A cursory look at urban transportation services in Nigeria reveals that buses are the most popular mode due to mass movement of people, cheaper fare, high level of reliability, and safety. In view of its apparent advantages over other means, the Research will focus on Bus Rapid Transits (BRT) as a means of mitigating urban transportation challenges. Attempt will be made to use the experience in Lagos as a lesson for Federal Capital Territory (FCT), Abuja.

The implementation of Bus Rapid Transit (BRT) system as new innovation by the Lagos state government became operational on 17th March 2008 in Lagos. The transformation in this sector will serve as a standard that could be introduced to other states with similar challenges. The present BRT in Lagos consists of a

22km route that is 65% physically segregated and 30% separated by road marks to form a distinct corridor.

On the other hand Abuja with a population of I.4million (2006 census) is estimated to be growing at rate of 9.3% yearly between 2007 and 2015(FRN GAZETTE VOL 94). Being the administrative capital of Nigeria, there is a high influx of persons with the resultant effect on existing social infrastructure and transportation. The way out for effective flow of economic activities would be the introduction of BRT system.

1.2 **STATEMENT OF THE RESAERCH PROBLEM**

With a population of about 140 million from 2006 census and an average growth rate of 3.2% yearly, it is anticipated that Nigeria will have the population of about 189 million by 2015 (FRN GAZETTE VOL 94). The implication of this is that there will be high drift of young men and women from the rural to urban centres in search of livelihood. In view of the cosmopolitan nature of the Federal Capital City, and the concentration of commercial activities in Lagos and other viable state capitals in Nigeria, movement into these towns in search of employment will be unprecedented. The demographic pressure occasioned by this drift may impact negatively on social infrastructure such as transportation system. Some other associated challenges occasioned by this development are traffic congestion, pollution, stress, emotional imbalance, depression, time hour loss,

accident and economic loss to the individual and the nation in terms of the Gross Domestic Product (GDP).As a developing economy, the only panacea to these numerous challenge is the provision of an integrated urban transport system that will be sustainable, popular and cost effective.

It is in the light of the above that this research will focus on the efforts of Lagos State Government in transforming intra urban transportation in the state with the operations of the Bus Rapid Transit (BRT) system and explores its workability in the Federal Capital, Abuja.

1.3 **OBJECTIVE**:

The general objective of this study is to evaluate the impact of Bus Rapid Transit (BRT) scheme in Lagos for the past four years of operation and use the experience to mitigate transportation challenges of FCT.

1.3.1 **Specific Objectives are**:

i. To examine road transport challenges in Lagos before the inception of BRT scheme.
ii. To examine various types of government interventions in road transportation in Lagos before the inception of BRT scheme.
iii. To assess the impact of BRT as a means of transportation in Lagos since inception.

iv. To identify the challenges confronting road transportation in Federal Capital Territory (FCT), Abuja.

v. To make recommendations and develop implementation strategies to overcome road transportation challenges in FCT based on Lagos experience.

1.4 **RESEARCH QUESTIONS**

The study will attempt to answer the following questions:

i. What where the challenges confronting road transportation in Lagos before the inception of BRT scheme in 2008?

ii. What are the various government interventions in road transportation in Lagos before the inception of BRT in 2008?

iii. What are the impacts of BRT scheme on transportation in Lagos since 2008?

iv. What are the challenges confronting road transportation in FCT?

v. What recommendations and implementation strategies can be suggested to overcome road transportation challenges in FCT based on the experience of Lagos?

1.5 **SCOPE OF THE STUDY**

This research intends to look at the challenges that confronted land transportation in Lagos between 2002 and 2012 and focus on the impact of BRT scheme in mitigating these problems since August, 2008. It will also examine the

challenges of road transportation in FCT within the same period of time with the view to addressing these challenges based on Lagos experience.

1.6 **SIGNIFICANCE OF THE STUDY**

The importance and benefit of the study is to help policy makers formulate appropriate policies necessary for the improvement of the present road transportation system in the urban cities. It could also help managers in this important scheme of the economy to use the recommendations to improve on their managerial skills. The research is also to serve as contribution in literature to the body of knowledge for future researchers on the same subject matter.

1.7 **LIMITATION**(S)

Being a new programme in Nigeria, the research work was threatened by paucity of reference material. The delay and incomplete return of questionnaires constituted another limitation especially with the illiterate class of commuters in both Lagos and Abuja. However, these limitations did not constitute serious hindrance to the quality of the research.

CHAPTER TWO

LITERATURE REVIEW

This chapter deals with review of relevant literature on the topic with conceptual clarifications. The clarifications were based on key components that made up the topic, "***Bus rapid transit and urban transportation challenges".*** The concepts varied in meanings depending on the schools of thought. The main concepts are, bus rapid transit, urban transit, transportation and challenges.

2.1 CONCEPTUAL CLARIFICATION

2.2.1 Bus Rapid Transit (BRT)

According to online definition and concept, Bus Rapid Transit is described as a high capacity urban public-transit system with its own right-of-way. The expression BRT is mainly used in the United States of America, while in Europe and Australia, it is often called ***busway.*** It espoused that the system uses buses on a wide variety of rights-of-way, including mixed traffic, dedicated lanes on surface streets, and busways completely separated from other traffic.

Levinson et al (2001),in Bus Rapid Transit – Implementation Guidelines, posited the system as "*A flexible, high performance rapid transit mode that combines a variety of physical, operating and system element, into an integrated system with a quality image and unique identity.*"

The two concepts agreed that the system is unique and flexible, and tailored to meet ever challenging traffic of a particular environment. This physical environment encompass route segment which is also known as corridor where the vehicle operates in a dedicated manner.

In his submission, Abii (2009) states that BRT system has existed for over three decades in Latin America, and has just been added to Africa's transport mode as part of the drive towards sustainable urban transport. The principle of BRT is to stimulate a mass transit system using exclusive rights of way lanes in line with the metro system as known in developed countries, using bus technology instead of rail. The BRT, with dedicated right of way lane and cleaner technology has proved to be useful in many Asian and Latin American countries. The BRT is said to be cost effective and draws on best practices from modern metro systems in managing its operations, including pre-board fare collection, fare verification, enclosed stations that are comfortable, clear route maps and real-time information displays.

Siveknmar et al (2008), also posit that BRT is a mode of transportation with great flexibility with main features such as:

i) *"Provision of means of separation from mixed traffic. This could be done along or partially on the bus route or by creating a bus lane by road markings or through the provision of slightly raised median.*

ii) Provision to guide on boarding and alighting from facility for pre collection of fare and provision of quality low floor bus.

iii) Provision of unique appearance of buses, bus stops and lanes.

iv) Provision of additional priority measures at grade intersections with provision for passenger information at stations or on-board.

v) Provision of feeder system such as Park and Ride system.

vi) Provision of integrated and coordinated information technology system incorporating signal priority, vehicle tracking to real-time and passenger information to enable pre-planned trip''

The above operational features are fundamental to the success of BRT scheme in any part of the world. This is adopted by the researcher to serve as benchmark for BRT operation in Lagos and FCT

The United States Department of Transportation, Federal Transit Administration (2001) defines BRT as a flexible form of rapid transit that combines advanced bus technologies and innovative bus operations with management techniques into an integrated system that can provide enhanced transportation services equivalent of light rail transit system. The goal of BRT scheme is therefore to increase the level and quality of bus service through the integration of vehicles, facilities, services and intelligent transportation system (ITS). As a result, bus service can become safer, more reliable and dependable mobility option.

To further give clarity to the subject of study, the following key words would be considered and adopted for better understanding of the BRT operation. These include:

i) **Right-way:** A dedicated bus lane which allows the bus to operate separately, without interference from other modes of traffic. In most cases these lanes are physically separated while in other places there are merely separated with markings.

ii) Bus Priority/Intelligence Transport System (ITS): Preferential treatment is given to buses at intersections through the extension of green light time or activation of the green light upon detection of an approaching bus.

iii) Branding: For purpose of identity, all BRT buses are branded in same colour. The brand's identity contributes to its attractiveness, as an alternative to striving cars.

iv) Level Boarding: Unlike the conventional bus stops, BRT systems features low buses to speed passengers boarding and enhance accessibility.

v) Stations: BRT systems feature significant investments in building shelter/enclosed stations, which may incorporate attractive sliding glass doors or windows for smooth ticketing. This style of station is seen

through the operating corridors in Lagos Nigeria, Bogata in Columbia, Ottawa and Cleveland in the United States of America.

2.2.2 **Urban transit**

Rodrigue (2012) asserts that transit is dominantly an urban transportation mode, particularly in large urban areas. He defines urban transit as mobility within a densely populated settlement area. The urban environment is particularly suitable for such transit, because it provides conditions fundamental to its efficiency, namely high density and significant short distance mobility demands. Since transit is a shared public service, it potentially benefits from economic activities related to high densities and from economies of scale related to high mobility demands. The lower the density in which a transit system is operating, the lower the demand, with the greater likelihood that it will be run at a loss. Transit systems are made up of many types of services, each suitable to a specific set of market environment. Different modes are used to provide complementary services within the transit system and in some cases between the transit system and other transport systems. A version of the urban transit system is the Bus Rapid Transit (BRT) introduced by Lagos State Government in the Nigerian space.

2.2.3 **Transportation**

The concept of transportation has been defined in many ways by different authors and scholars. However, it is important to note that, transportation has always been ascribed to human activity from the most primitive to the most advanced state of development.

According to Okoko (2006), transportation is a process that involves movement of goods and persons from a given point of origin to specific destination. An efficient system of transport service is an essential tool for the economic transformation of any nation. It lowers distribution costs, thus, permitting wider markets, large scale production and in effect reduces poverty by creating jobs.

Zaki (2010), on the other hand, suggests that transportation refers to the movement of people and goods in a municipal or urban area in a manner that minimises environmental degradation, system cost, traffic safety problems and traffic congestions, while ensuring access even to the poor to meet their needs for mobility. He further observes that with the growing index of urban population, transport problems associated with rising level of low occupancy vehicle (LOV) will call for a sustainable transport mode.

In his paper titled, "Potential Transportation technology transfer for economic and social development", Al-Tanhid (1998), defines transportation as an

act of carrying goods, persons etc from one place to another. This according to the paper could be on road, water, ship or along rails by train. He further stated that, transportation in Nigeria has been under pressure despite government interventions. He emphasised on the relationship between population and transportation. According to him, people, goods, activities and movement are basic elements of transport demands and thus, evolution of transportation system. In Nigeria, the population and conglomerate activities are concentrated in larger or more grown up cities such as Lagos, Abuja, Port Harcourt, Kaduna, and Ibadan. He summarised by suggesting that, higher demand and evolutional transportation system is eminent in these cities.

Odumosu (2011), also posited that an interesting feature of a country's space economy is the aerial variation and specialization in the distribution of its natural and human resources which explains why people, goods and services move from one place to the other. People have to move from one location to the other, to avail themselves of the opportunities existing in space. In the main, the major function of transport is to conquer friction of distance created by the separation of the areas of "desires and fulfilments." He further explained the concept of public transportation to mean:

I. A government owned transportation system used by a person for public service e.g. official cars assigned top government functionaries.

II. Government owned transport system operated or used for the service of the people in return for payment e.g. the BRT service.

The whole definitions as postulated by different scholars above underscored the imperative of transportation in the evolution of urban centres/cities. As earlier stated in the background, none of these definitions was all inclusive or logically placed to meet the required need of this study. It is however, adopted that transportation may be defined as *movement of people, goods and services from one location to another in an organised, reliable, safe and economical manner*.

From the review of the foregoing literature, the need for a robust transportation system and management has been espoused and created windows for thoughts on improvement. As such the following reasons have been adduced to justify the need for public transportation.

I. Rapid urban population growth and high demand for movement.
II. The dispersal of population and settlements.
III. The large number of personal vehicles on urban roads and the resultant traffic congestion with problems necessitating the need to pull movement.
IV. Poor transport service provision in some areas and the mobility need of the poor.
V. Significant imbalance between transport demand and supply and the need for efficient utilization of inadequate transport infrastructure.

2.2.4 **Challenge**

Free online dictionary defines the concept of Challenge as "A test of one ability or resources in a demanding but stimulating undertaking." While *Wikipedia*, defines the same concept as a general term referring to "things that are imbued with difficulty and victory." From the two definitions, challenge means a difficult task especially for the person who is making attempt, finds it enjoyable and also belief that it is surmountable.

Mimiko (2012), in his paper defines challenge as "a hurdle or difficulty faced in the course of plotting one's way to a defined objective". Embedded in all the definitions is the fact that challenge is surmountable. The ability to overcome inbuilt challenges and accomplish set objectives translates to success in any enterprise. For the purpose of this study, the above definition by Mimiko is hereby adopted.

2.2.5 **Urban transport infrastructure**

Basically, land use in cities are made up of residential, industrial, educational, recreational, commercial and administrative components and people access to them by an effective transport infrastructure. Urban transport infrastructure therefore forms the foundation of the urban transport system that facilitates the movement of goods and persons within and between the different land uses. It is only when the basic infrastructure are provided that a city can be assured a reliable, safe and easy access for meeting the population travel demand.

According to Connor (1993), the transport infrastructure needs of a city may include:

A) **Bus Transport**

i) Rolling stock (buses, maintenance and emergency vehicles).

ii) Terminal depots

iii) Garages and shops

iv) Office building

v) Bus stops and shelters

vi) Road improvement for bus priority

vii) Fare collection equipments

viii) Software for routing, inventory and analysis

B) **Rail Transport**

i) Track

ii) Stations including fare collection equipment

iii) Escalators and elevations

iv) Rolling stock, which include work trains , rider cars and hopper cars.

v) Signals and communications

vi) Power equipments substation and circuit breakers

vii) Ships

viii) Yards

ix) Depots

x) Security systems

xi) Safety systems (fire system, water hydrants, etc)

xii) Accessibility to generality of the public

xiii) Economical in terms of cost.

In Nigeria, urban transportation is by road and for the purpose of this study, urban transportation infrastructure will focus on the perspective of roads and their complementary facilities.

2.2.6 **Urban transport infrastructure in Lagos**

The terrain of an area or city determines the eventual form of transport infrastructure to be developed. Lagos as a commercial nerve centre of the country enjoys road, rail, water and air systems of transportation and serves as a gate way into the country by investors and transit alike. The sea ports equally serve as harbours for vessels and ships. However, for the purpose of this study, the road infrastructure would be the focus of discuss. The complex system of Lagoons, Islands, coastal lines and depressions ensured that the city initially grew as isolated communities linked only through the axial south-north road. In the 80s, reclamation efforts of the government made it possible for Lagos to be linked through bridges (Ikya 1997). At the moment, Lagos is linked with expressways in an integrated manner to relieve the pressure on the original axial roads.

Urbanization in Lagos has been very high and rapid, giving rise to the demand for new and improved transport system to meet the increasing mobility need of the populace.

2.2.7 **Urban Transport Infrastructure in Abuja**

One of the strongest arguments against the continuous retention of Lagos as the Capital City of Nigeria was the dearth of transport infrastructure and its bottlenecks. This led to the formal movement to Abuja under the administration of General Ibrahim Babangida (rtd) on December 12, 1991. In an attempt to avoid the mistakes of Lagos, two distinct categories of transport infrastructure were designed for the Abuja Master Plan, to ensure an efficient transport system for the capital city. The first deals with the provision of infrastructural facilities to accommodate the daily functions of transport within the capital city itself. The second category of infrastructure is to link the capital city to the rest of the world, even though the two overlap in provision of efficient transport system in the city.

Abuja the Federal Capital City currently consists of major roads and complementary facilities within the city with series of peripheral and transverse freeway to link the central area with the satellite towns. Under the first category as contained in the master-plan, four different transit infrastructures were recommended for the city viz:

a) Buses only exclusive right of ways (BRT)

b) Buses mixed with other traffic on general facilities provided.

c) Light rail transit (LRT)

d) Rail Rapid Transit (RRT).

However, from the entire mode stated above, only bus mixed with other traffic on general facilities is operational, while the other three are at various stages of development. The influx of people coupled with the hike in commercial activities, has continued to create greater burden on the transport infrastructure in FCT.

2.3 **LITERATURE REVIEW**

Federal Gazette vol.94 projected Nigeria population growth at a very rapid rate with urban population likely to grow at between 15 to 20 percent by 2015. Evidence of such urban change is usually manifested in its expansive and pattern of landscape. The state of infrastructure and services in such cities are often stressed and compound great challenge for planning and development. In a situation where this scenario is manifested, research and planning becomes imperative as they provide tools and guide to policy makers with the view to mitigating the challenges.

Aworemi (2003) viewed the "factors militating against public transport operation in Nigeria" and came to the conclusion that, urban public transport sector is characterised by low growth rate in terms of vehicle in use, passengers carried and

route or kilometres operated. He concluded that the conventional bus operators were unable to meet the total demand of the travelling masses. He emphasised that by late 1970s and early 1980s, some states owned public transport companies (Lagos, Kaduna, and Kano) collapsed and those that survived were operating under serious financial and manpower constraints. Hence they were providing skeletal and erratic services only in few cities.

Arising from his findings, the failure was attributed to the decline in urban transportation. The cumulative effect of which were:

a) Prohibitive prices of petroleum products and spare parts which significantly impacted on the performance and/or rate of fleet utilization. This limited the efficiency and effectiveness of their operation.
b) Mismanagement and over politicisation of the mass transit agencies.
c) Record of low cost recovery rates resulting to high default in servicing the loans obtained.
d) Record of low operational performance over the years.
e) Low fleet utilisation.
f) Standard of service was unsatisfactory in most agencies, binging about passengers discomfort, overcrowding, long waiting hours and unreliability.
g) Poor financial performance as operating cost exceeds revenues expected for the agencies.

Chidoka O (2008), posited that transportation in the United States of America, United Kingdom or Canada is strictly controlled by government agencies at the federal and state levels. That similarly, entrance into land transportation industry in India, South Africa or Thailand is also strictly controlled and regulated. That it was mandatory for operators to obtain licence and practice commercial transportation in all developed countries. However, in Nigeria the only statute connected to the above is section 115 of National Road Traffic Regulation (NRTR) 2004, and section 5 of Federal Road Safety Commission (FRSC) Act 2007. These provide for establishment of safety units by all transport operators to ensure professionalism in the industry, and develop rapid, safe, efficient and convenient fleet transportation system for the country.

Consequently, in attempt to achieve this, the FRSC has introduced a compact and articulated policy framework for effective public transportation planning, management and development of human resources. Similarly, the implementation of Road Transport Safety Standardization Scheme (RTSSS) policy guidelines was developed to address areas of urgency such as capacity development for urban transportation management in Nigeria.

In consideration of the transport fare regime, a review of fares will suffice taking into account the increasing cost of providing public transportation. It is pertinent to note that, transport operation has since been deregulated following the failure of Federal Mass Transit Programme. The implication

remains that, government should allow forces of demand and supply to determine the fare for a particular trip or distance without much intervention. This will create room for competition and development of the sector. While government palliatives will help to moderate the fares for its citizenry.

Grava (1974), The UNDP study on swift movement in the Lagos Metropolis posited both administrative and traffic management solutions for Lagos. The administrative solutions were the establishment of transport division in the State's Ministry of Works and Planning to coordinate the city's transport system and the reorganisation of Law Enforcement Agents to enforce traffic regulation. The traffic management solutions include improvement of bus stops and intersections, introduction of bus lanes, provision of ferry and rail service and traffic control devices.

However, in 2002 Lagos Metropolitan Area Transport Authority (LAMATA), was established and empowered to declare network of primary and secondary roads. The powers vested on them carries large bulk of road traffic and co-ordination of public transport including route planning. The result of this development gave birth to the BRT system in Lagos as a model for Nigeria. While, the United Nation Development Programme (UNDP) study considered it relevant for the Federal Capital Territory (FCT).

Owan (2008), on mobility problem in urban centres, as a case study of Abuja and Kubwa posited that the following factors inhibit swift movement. These factors included:-

a) Lack of adequate attention to provision of increasing movement needs in urban areas.
b) Decline in the general vehicle fleet and the high inflationary cost of vehicles and spare parts.
c) High cost of urban travel, partly occasioned by the continued withdrawal of subsidy on the petroleum products.
d) Inadequate awareness of transport infliction of land use development.
e) High accident rates resulting from among other factors misuse and abuse of already deficient infrastructure.
f) Application of urban road design standard often without social cultural and economic realities.
g) The neglect of non-motorised mode of travel.
h) Ineffectiveness (where it exist) of land use control and regulatory instruments.
i) Inadequate institutional framework for plan formulation and implementation at different levels of government or authorities.

In all the works presented above, various urban traffic management techniques have been proposed. There are very limited studies on the evaluation of the existing techniques to determine their relevance and effectiveness in other cities. This research attempts an in-depth evaluation of the BRT system in Lagos and applies the result to other cities with particular reference to FCT.

In the same vein, traffic congestion, delays, parking problems, among others dominate the studies. The symptoms of urban transportation problems, and inherent basic causes including underlying factors were not properly addressed. For example, no focus was made on political factors in ameliorating urban transportation problems in the literatures. Hence, this research will address the political perspectives and its effect on BRT system in Lagos for a better performance in FCT.

Similarly, it is also worth mentioning that, most of the literatures were research works which only addressed specific problems with little on the implementation. However, as an applied research, this work will go beyond proffering solutions but design suggestions and implementation strategies in addressing the problems.

However, a key factor in urban transportation, the user did not receive adequate emphasis in those studies. Even with the best state of the art facility, road user behaviour is cardinal to the achievement of smooth and effective system. It is hoped that this research will also shade light on road users'

behaviour, patience, observance of traffic regulations, among others as it relates to both passengers and drivers as a component. Their influence in urban transportation under the BRT scheme is of great importance and key to its success.

CHAPTER THREE

METHODOLOGY OF THE STUDY

This chapter deals with the various methods and tools deployed by the researcher to collect data for the study including methods used in analysing them to arrive at logical decisions. The researcher used questionnaires and semi-structured interviews as instruments for data collection.

3.1 SOURCES OF DATA

3.1.1 PRIMARY SOURCE

Data was collected from targeted respondents who mostly are commuters and operators of the BRT as well as from officials that manages the operations. Questionnaires were administered in Lagos and FCT.

3.1.2 SECONDARY SOURCE

These include text books by scholars, projects of participants of previous EIMC Courses, as well as Libraries at the ISS, FRSC National headquarters, Lagos state government and Institute of Transport Technology, Zaria. The Researcher also made use of internet sources in the course of the study.

3.2 **METHOD OF DATA COLLECTION**

3.2.1 PRIMARY DATA COLLECTION

The basic tools used for the collection of data were questionnaires and structured interviews. In the process, thirteen (13) items with multi-choice (closed) questionnaires of two (2) parts were used. A total of four hundred (400) respondents from the two locations were administered with two hundred (200) questionnaires each. The semi-structured interview contained seven questions which were also administered on the sampled population.

3.2.2 SECONDARY DATA COLLECTION

The Researcher made use of textbooks, journals, published and unpublished materials with internet sources to enrich this work. This was achieved through visits to libraries at the ISS and FRSC as well as LAMATA and AUMTCO offices.

3.2.3 SAMPLING POPULATION

The sample population consist of commuters in Lagos and FCT, including staff of LASTMA and AUMTCO. Lagos was chosen because it is the only city where BRT scheme is operational in Nigeria with the carriage capacity of about 200,000 people per day. The FCT with a surging population is already engulfed in similar traffic challenge. From the thousands of commuters in the two locations, a

total of four hundred (400) sample population was selected and equally distributed for ease of evaluation.

3.2.4 SAMPLING TECHNIQUE ADOPTED

The Researcher used non-probabilistic simple random sampling technique for collection of data in the area of study.

3.2.5 SAMPLING SIZE

Four hundred (400) respondents were drawn from the target population with two hundred (200) each picked from the two locations. The questionnaires were distributed as follows:

FCT:- Zuba 25, Lgbe 25, Gwagwalada 25, Kuje 25, Nyanya 25,Kubwa 25, Karu 25, AUMTCO 25. Total 200

Lagos :- Ojodu 22, Ikeja 22, Lagos Mainland 22, Oshodi 22, Lagos Island 22, Apapa 22, Iyana Ipaja 22, Ojota 22, LAMATA 24. Total 200

However, respondents completed and returned 164 in FCT and 156 in Lagos making 82% and 78% of response respectively.

3.2.6 INSTRUMENT APPLIED ON POPULATION

The questionnaires had two parts comprising Bio-Data as section A and section B focuses on substantive matters which aim at eliciting vital information from the respondents. This was done to provide answers to the research questions covered in by the 13 items and 21sub-items captured in the questionnaires. However, the confidentiality of responses was assured in the course of the

exercise. In the process of carrying out this study, semi-structured type of interview was also used with both open and closed methods of answers. The researcher encountered series of delays and disappointments, before respondents from LAMATA and AUMTCO eventually submitted their answers to the Researcher.

3.2.6 TECHNIQUE OF DATA ANALYSIS.

The Researcher adopted a simple frequency technique to the occurrence of values for each of the variables as already reflected in the data matrix. At the end of the frequency count, percentages and graphical illustrations in the form of bar and pie charts were used to show frequency distribution.

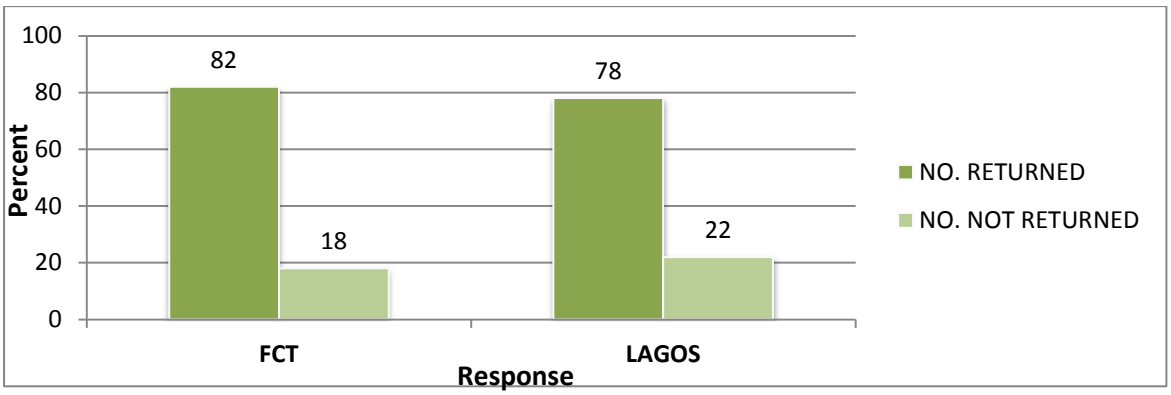
CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND DEDUCTIONS

This chapter presents the analysis of data obtained from the administered questionnaires and the semi-structured interview with interpretation of findings. Out of the four hundred (400) questionnaires administered to the target population at the two locations (i.e. Lagos and FCT), three hundred and twenty (320) were retrieved, which accounts for eighty percent (80%) of the questionnaires used for the analysis.

4.1 DATA ANALYSIS AND INTERPRETATION

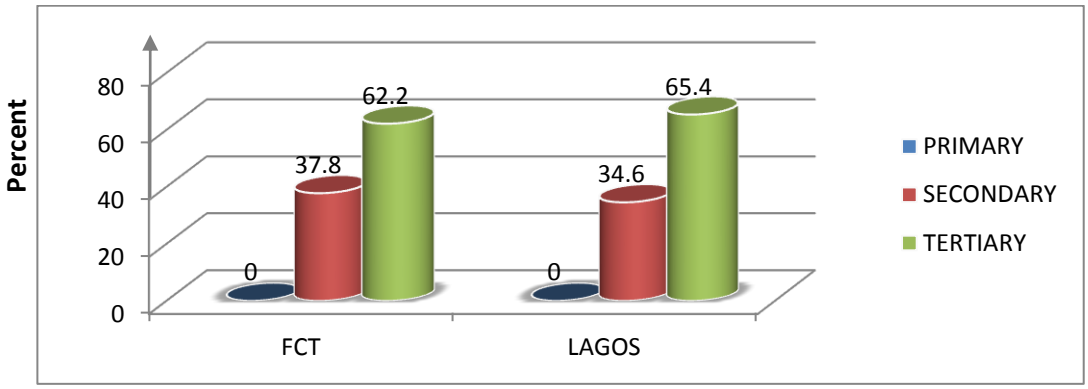
FIGURE 4.1 QUESTIONNAIRE ADMINISTRATION



SOURCE: FIELD WORK SURVEY, 2012

Figure 4.1 above shows the distribution of questionnaires to the two locations chosen for this study. Out of the 200 administered to each of the two locations, FCT returned 156 both representing 82% and 78% respectively. This shows that both locations understood the need for the BRT scheme and its functionality.

FIGURE 4.2 **EDUCATIONAL QUALIFICATIONS OF RESPONDENTS**



SOURCE: FIELD WORK SURVEY, JULY 2012 **Response**

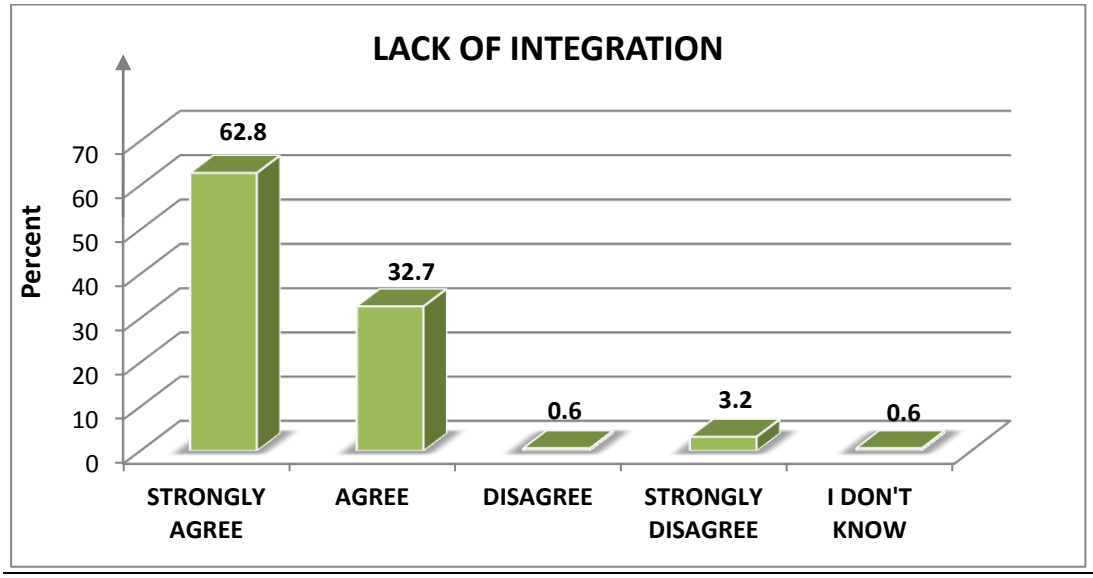
The above graph shows that in FCT, 62 (37.8%) of the respondents had secondary education, while 102 (62.2%) were graduates of tertiary education. Similarly, in Lagos, 54 (34.6%) of the respondents had secondary school education while 102 (65.4%) were graduates of tertiary institutions. The two locations recorded zero primary education. The analysis shows that all the respondents in FCT and Lagos were educated and well informed to understand the content of the questionnaires and practice of BRT system.

4.3-4.10 WHAT WERE THE CHALLENGES CONFRONTING ROAD TRANSPORTAION IN LAGOS BEFORE 2008?

FIGURE 4.3: **Absence of Integration**

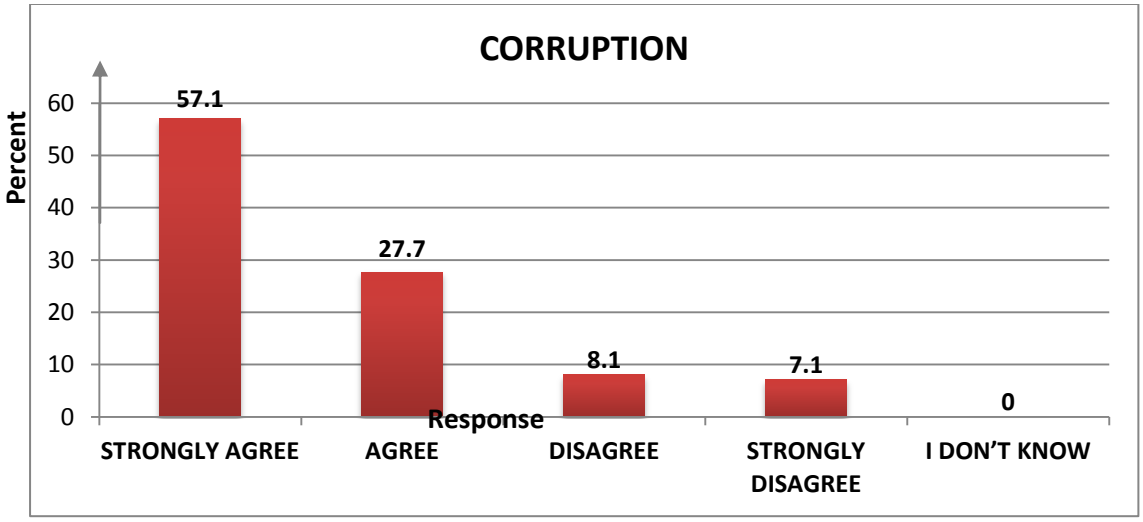
Figure 4.3 below reveals that in Lagos, 98(62.8%) of respondents strongly agree that absence of integration among transport modes was responsible for transportation problems, 51(32.7%) agree, 1(0.6%) disagree, 5(3.2%) strongly

disagree while 1(0.6%) were ignorant. This suggests that absence of other modes of transport before 2008 was part of the problem of land transportation in Lagos.



SOURCE: FIELD WORK SURVEY, 2012

FIGURE 4.4 **Corruption**

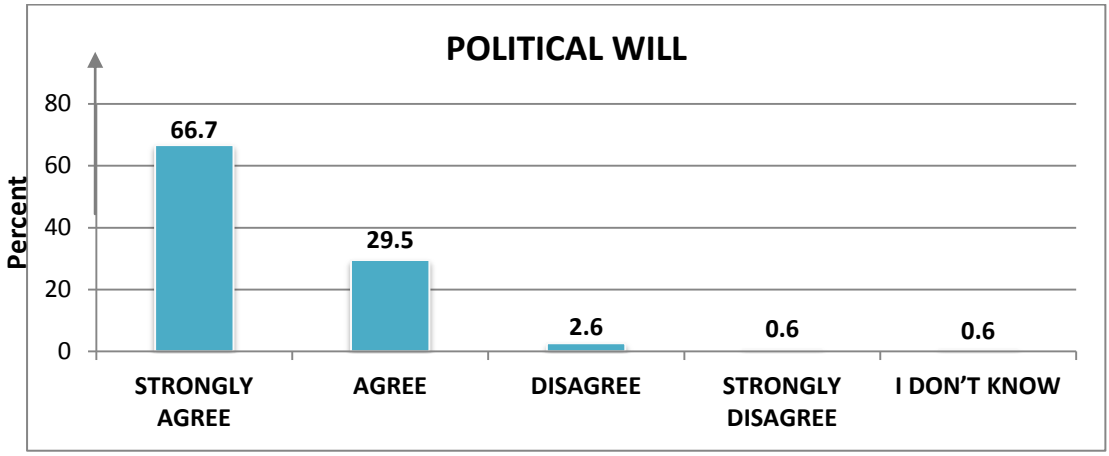


SOURCE: FIELD WORK SURVEY, 2012

The findings in Figure 4.4 above shows that in Lagos, 89 (57.1%) of respondents strongly agree that corruption by officials of government was responsible for urban transport problems before 2008, as 43(27.7%) agree, while

13(8.1%) disagree, and 11(7.1%) respondents strongly disagree. This signifies that on the average, 84.8% of the respondents in Lagos agree that corruption by officials of government was responsible for transportation problems before the introduction of BRT.

FIGURE 4.5 **Political will**



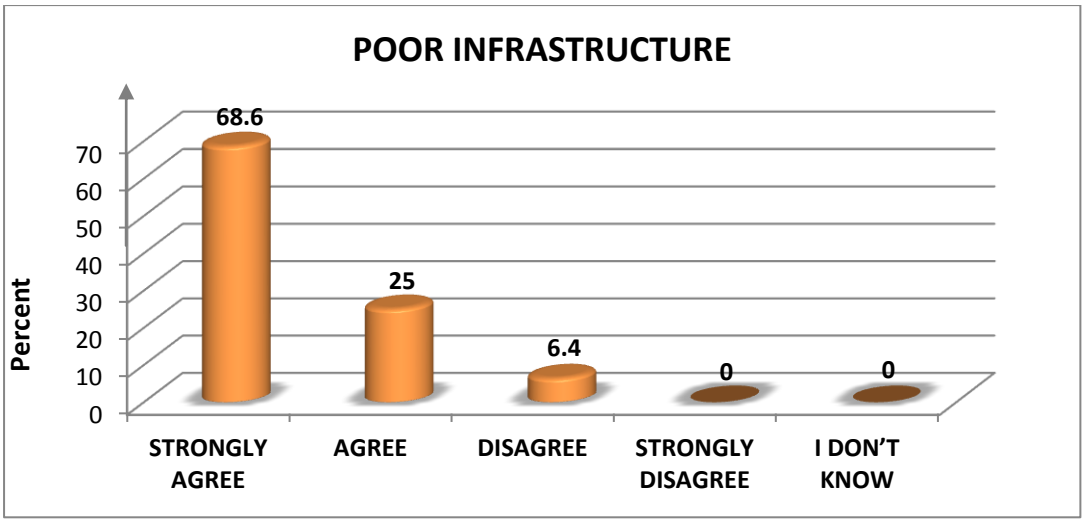
SOURCE: FIELD WORK SURVEY, 2012

Figure 4.5above reveals that in Lagos, 104 (66.7%) of respondents strongly agree that lack of political will by policy makers was responsible for transportation problems, 46 (29.5%) of respondents agree, 4(2.6%) disagree, 1(0.6%) strongly disagree, while 1(0.6%) were ignorant. The above analysis implies that lack of political will by principal agents of government accounted for road transportation problems in Lagos before 2008.

Figure 4.6 below shows that in Lagos, 107 (68.6%) of respondents strongly agree that poor infrastructure was responsible for urban transportation problems before 2008, 39(25%) of respondent agree, while 10(6.4%) disagree. The implication of above analysis is that poor conditions of roads, absence of dedicated

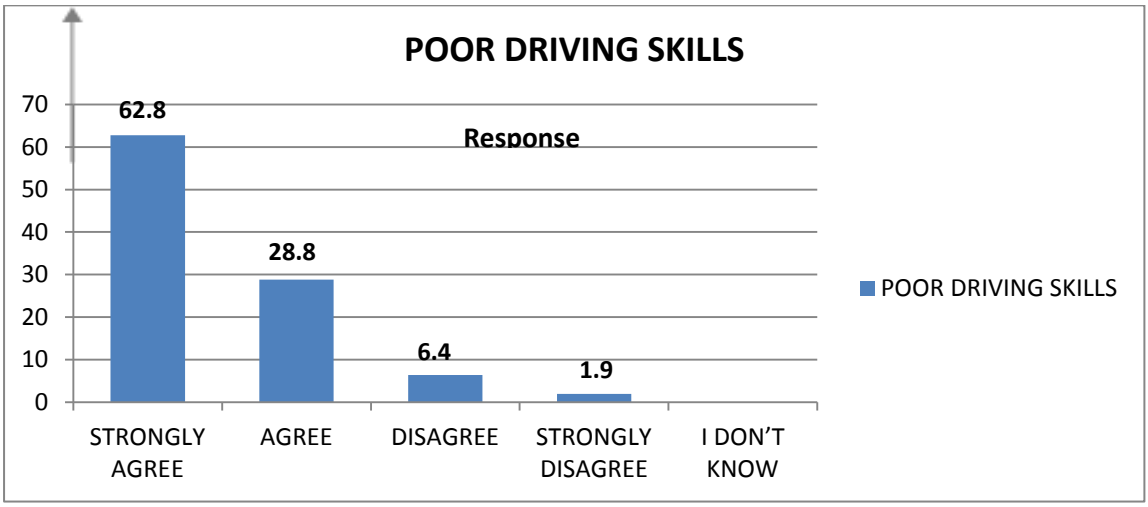
lanes, traffic light were responsible for road transport challenges in Lagos before the introduction of BRT.

FIGURE 4.6 **Poor Infrastructure**



SOURCE: FIELD WORK SURVEY, 2012

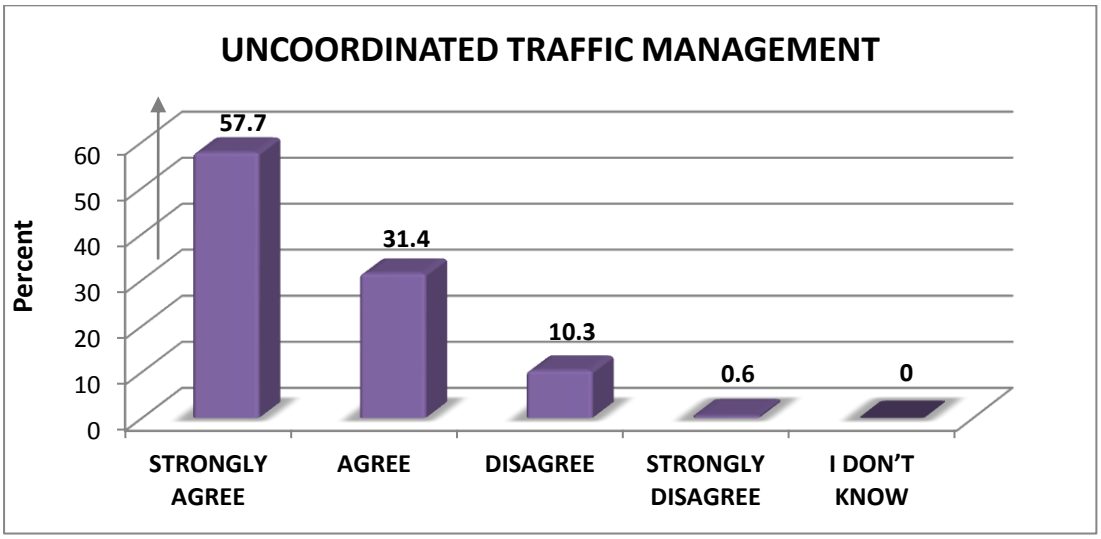
FIGURE 4.7 **Poor driving skills**



SOURCE:FIELD WORK SURVEY, 2012

The above Figure 4.7 reveals that in Lagos, 98(62.5%) of respondents strongly agree that poor driving skills was responsible for road transport challenge before 2008, 45(28.8%) respondents agree, 10(6.4%) respondents disagree, while 3(1.9%) strongly disagree. The above analysis suggests that majority of drivers do not possess necessary skills required for effective and safe operations before the inception of BRT.

FIGURE 4.8 **Uncoordinated Traffic Management**

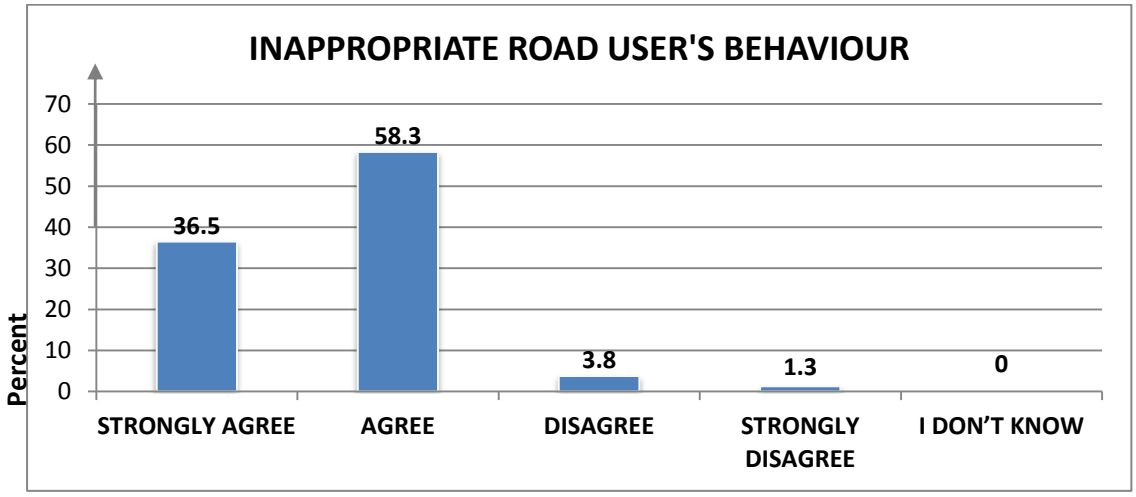


SOURCE: FIELD WORK SURVEY, 2012

The above Figure 4.8 shows that in Lagos, 90 (57.7%) of respondents strongly agree that uncoordinated traffic management was responsible for road transportation problem, 49(31.4%) respondents agree, 16(10.3%) respondents disagree while only 1(0.6%) respondents strongly disagree. This suggests that multiple traffic enforcement agencies without proper coordination constituted problems of effective traffic management before 2008.

Figure 4.10 below shows that in Lagos, 57(36.5%) of respondents strongly agree that negative road users behaviour contributes to urban road transportation problem, 91(58.3%) agree, 6(3.8%) disagree, while 2(1.3%) strongly disagree. This suggests that, negative behaviour of road users such as street trading, dumping of refuse, street begging among other factors, contribute to transport problem.

FIGURE 4.10 **Inappropriate Road User's behaviour**



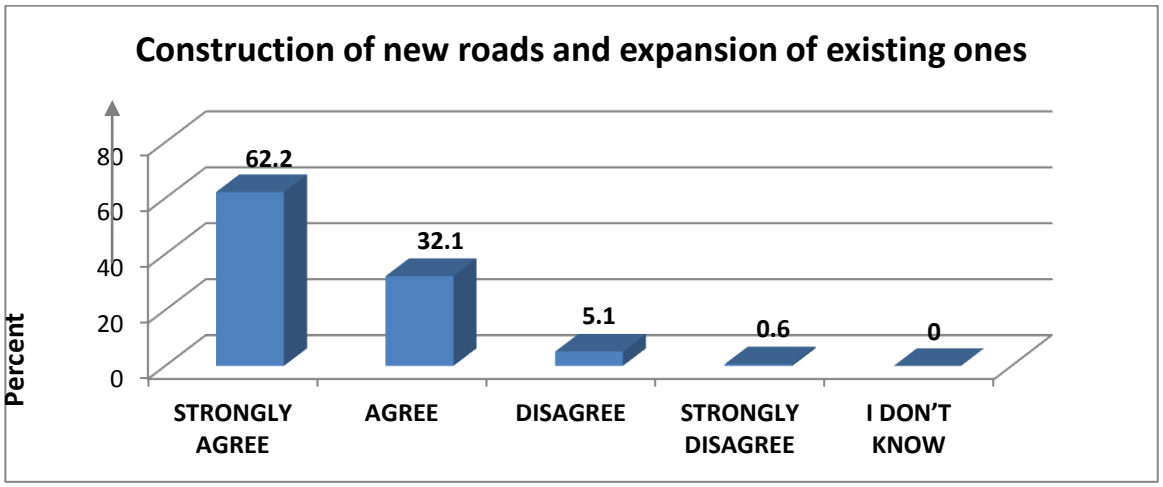
SOURCE: FIELD WORK SURVEY, 2012

4.11-4.13 WHAT ARE SOME OF THE INTERVENTIONS OF GOVERNMENT IN ROAD TRANSPORT IN LAGOS BEFORE MARCH, 2008?

Figure 4.11 below indicates that in Lagos, 97 (62.2%) of respondents strongly agree that construction of new roads and expansion of existing ones solved urban transportation problem, 50 (32.1%) agree while 1(0.6%) disagree.

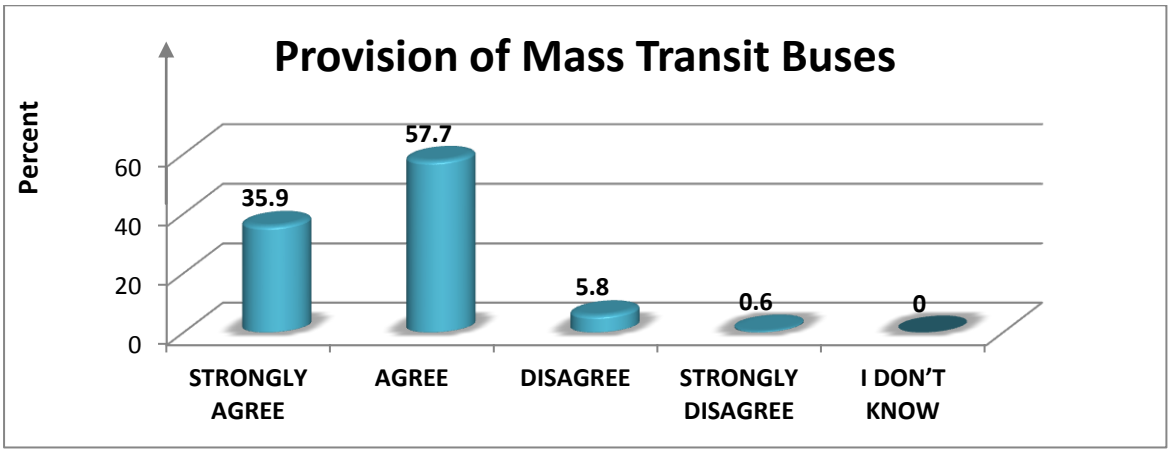
This suggests that construction of roads and rehabilitation of existing ones by government before the introduction of BRT played a positive role in alleviating urban transport challenges.

FIGURE 4.11 **Construction of new roads and expansion of existing ones**



SOURCE: FIELD WORK SURVEY, 2012

FIGURE 4.12 **Provision of mass transit Buses**

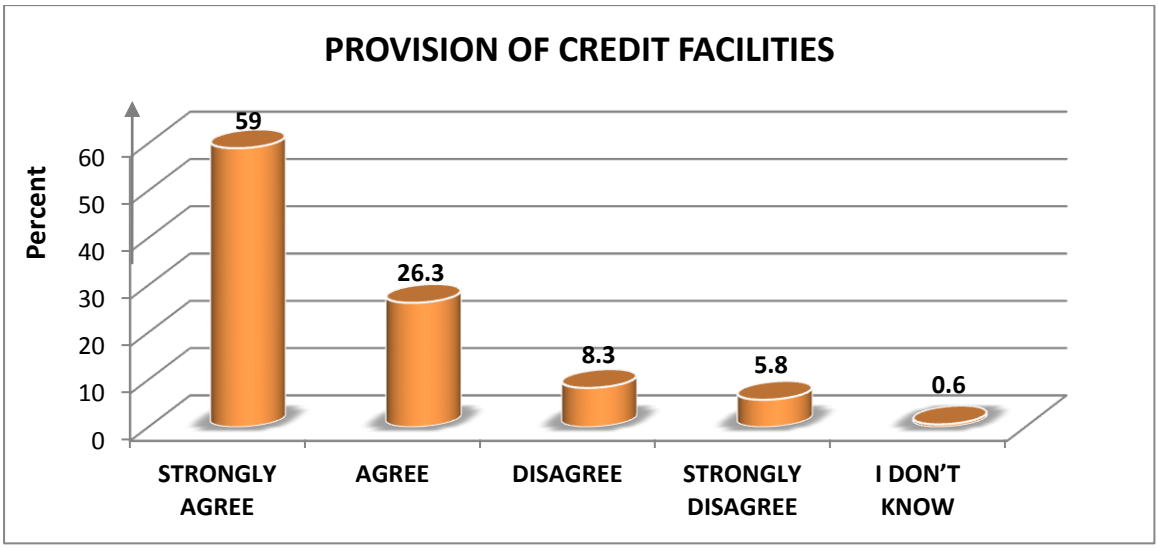


SOURCE: FIELD WORK SURVEY, 2012

Figure 4.12 above indicates that, 56(35.9%) of respondents strongly agree that provision of mass transit buses by government under the defunct Federal Urban Mass Transit Authority alleviated transport challenges, 90(75.7%) agree,

9(5.8%) disagree while 1(0.6%) strongly disagree. This reveals that provision of Mass Transit Buses by the Government could alleviate urban transport challenges.

FIGURE 4.13 **Provision of credit facilities**



SOURCE: FIELD WORK SURVEY, 2012

The above figure 4.13 shows that in Lagos, 92 (59%) of respondents strongly agree that provision of credit facility to transport operators improved urban road transportation problems, 41(26.3%) agree, 13(8.3%) disagree while 9 (5.8%) strongly disagree. The analysis above suggests that provision of credit facilities to transport operators by government can greatly improve their efficiency.

4.14-4.17 WHAT ARE THE IMPACTS OF BRT SCHEME ON TRANSPORTATION IN LAGOS?

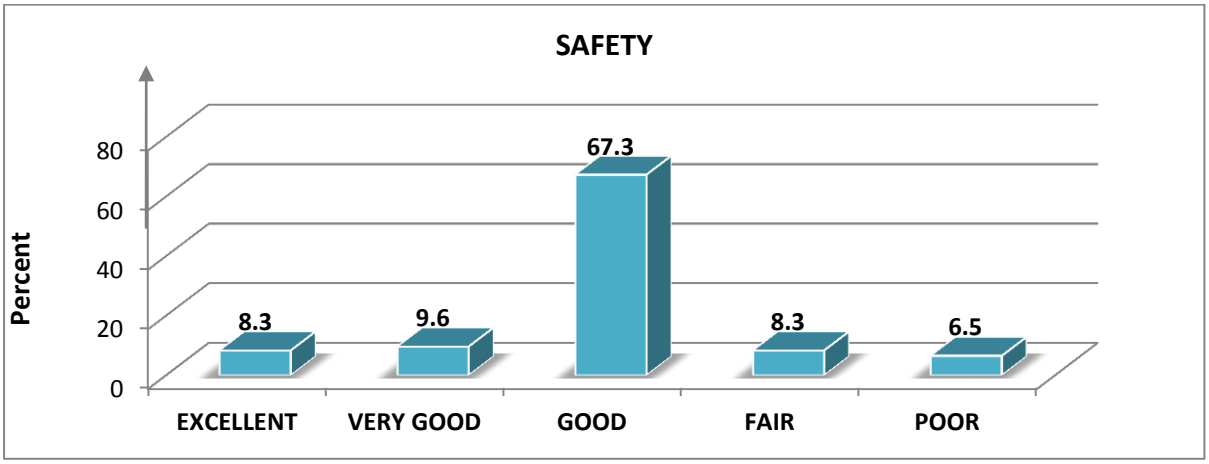
Figure 4.14 below reveals that 1 (0.6%) of respondents rate BRT as excellent, 77 (49.4%) rate it as very good, 73 (46.8%) rate it as good, while 5

(3.2%) rate it as fair in terms of reliability. From the above analysis, it is evident that BRT is the choice transportation mode in Lagos.

FIGURE 4.14 **Reliability**

SOURCE: FIELD WORK SURVEY, 2012

FIGURE 4.15 **Safety**



SOURCE: FIELD WORK SURVEY, 2012

Figure 4.15 above reveals that, 13 (8.3%) of respondents in Lagos rate BRT as excellent, 15 (9.6%) rate it as very good, 105 (67.3%) rate it as good, 13(8.3%) rate it as fair while 10 (6.5%) rate it as poor in terms of safety. It can be deduced

from the above that majority of commuters have assessed BRT mode of urban transportation as secured and dependable.

FIGURE 4.16 **Journey Time**

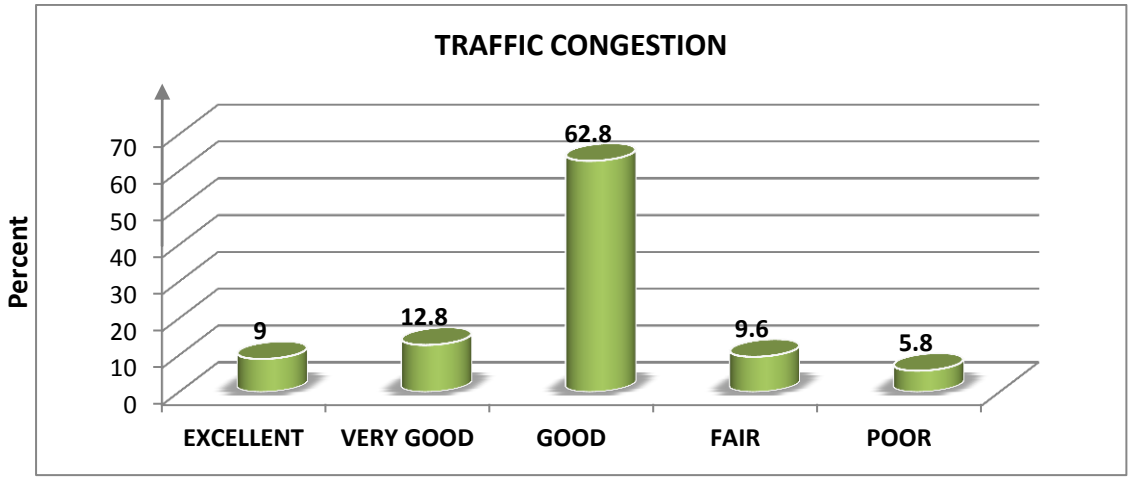
SOURCE: FIELD WORK SURVEY, 2012

The above figure 4.16 indicates that 48 (30.8%) of the respondents rate BRT as excellent in terms of reduction of journey time, 50 (32.1%) rate it as very good, 54 (34.6%) rate it as good, and 3 (1.9%) rate it as fair, while 1 (0.6%) respondent rate it as poor. This signifies that BRT mode of operation for urban transportation saves journey time as it is faster and enables commuters to reach their destinations early as against other mode of transportations.

Figure 4.17 below indicates that 14 (9%) of respondents rates BRT to have reduced traffic congestion along the corridor as excellent, 20 (12.8%) rate it as very good, 98 (62.8%) rate it as good, 15(9.6%) rate it as fair while 9(5.8%) of respondents rate it as poor. This signifies that, majority of commuters have

dropped their cars to commute on BRT thereby reducing number of vehicles on the corridor.

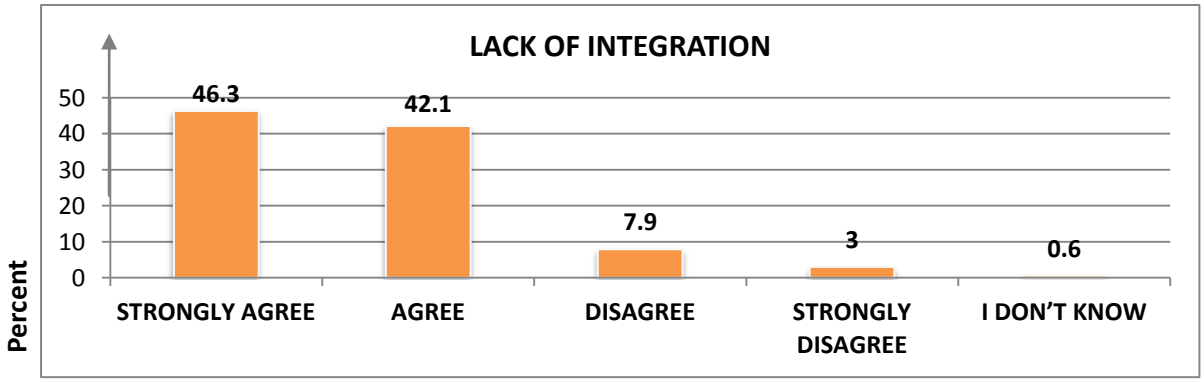
FIGURE 4.17 **Traffic Congestion along BRT Corridor**



SOURCE: FIELD WORK SURVEY, 2012

4.18-4.22 WHAT ARE THE CHALLENGES CONFRONTING ROAD TRANSPORTAION IN FCT?

FIGURE 4.18 **Lack of integration among other modes**

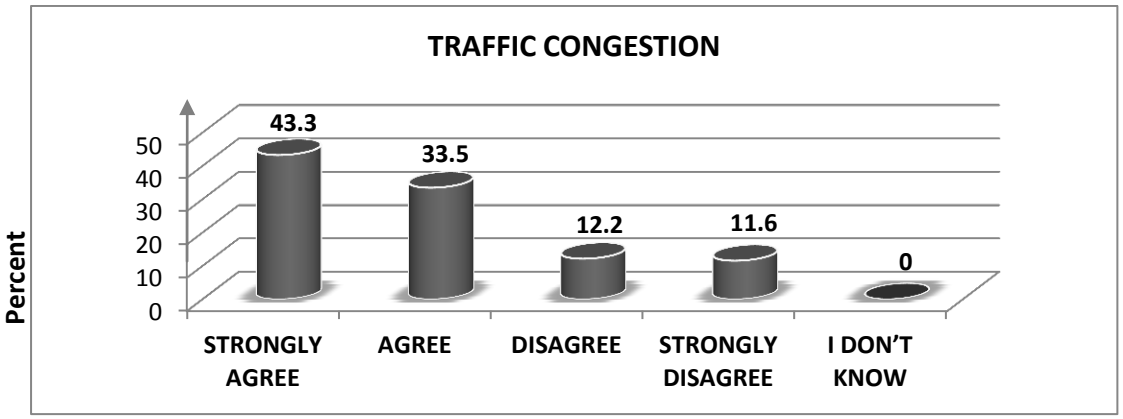


SOURCE: FIELD WORK SURVEY, 2012

Figure 4.18 reveals that in FCT, 76 (46.3%) of respondents strongly agree that lack of integration among other modes of transportation is responsible

for transport problems, 69(42.1%) agree, 13(7.9%) disagree, 5(3.0%) strongly disagree while 1(0.6%) indicated ignorance.

FIGURE 4.19 **Traffic Congestion**

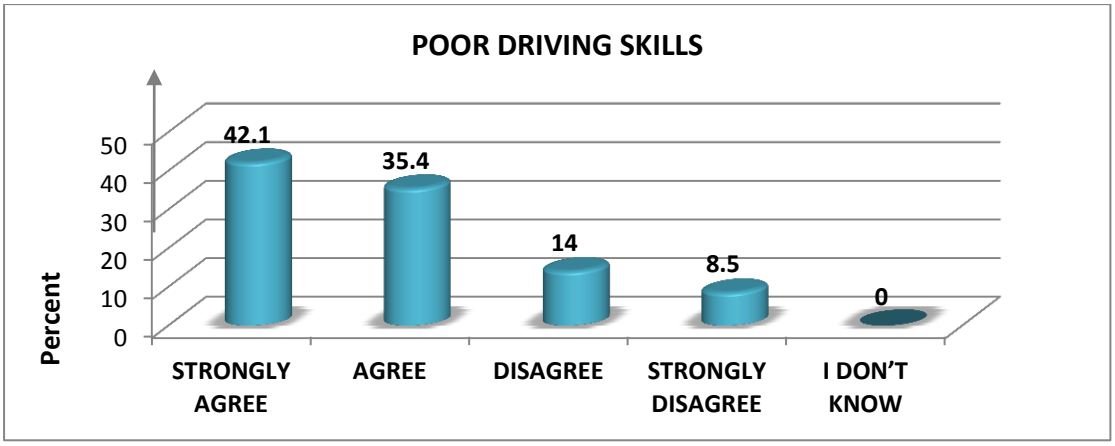


SOURCE: FIELD WORK SURVEY, 2012 **Response**

Figure 4.19 above shows that in FCT, 71 (43.3%) of respondents strongly agree that traffic congestion is responsible for the transportation problems in the city, while 55(33.5%) agree, and 20(12.2%) disagree, as 19(11.6%) strongly disagree. This signifies that most residents use their private vehicles to the city centre because of the absence of alternative mode of transportation.

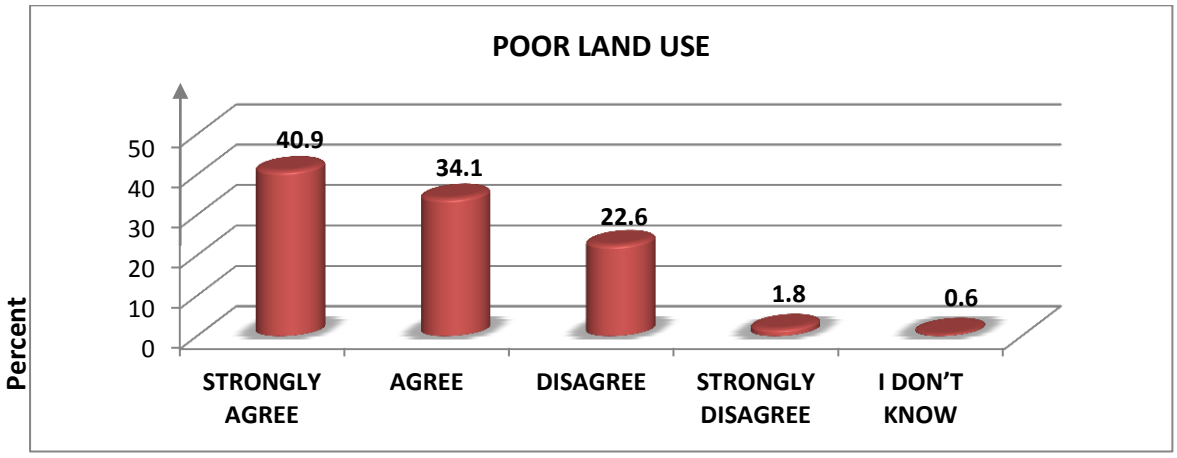
Figure 4.20 below reveals that in FCT, 69(42.1%) of respondents strongly agree that poor driving skill by operators of buses is responsible for the city's transport problem, 58(35.4%) respondents agree, 23(14.0%) respondents disagree, while 14(8.5%) respondents strongly disagree. This signifies that most drivers in FCT lack the required training and experience to operate safely.

FIGURE 4.20 **Poor Driving skills**



SOURCE: FIELD WORK SURVEY, 2012

Figure 4.21**Poor land use**



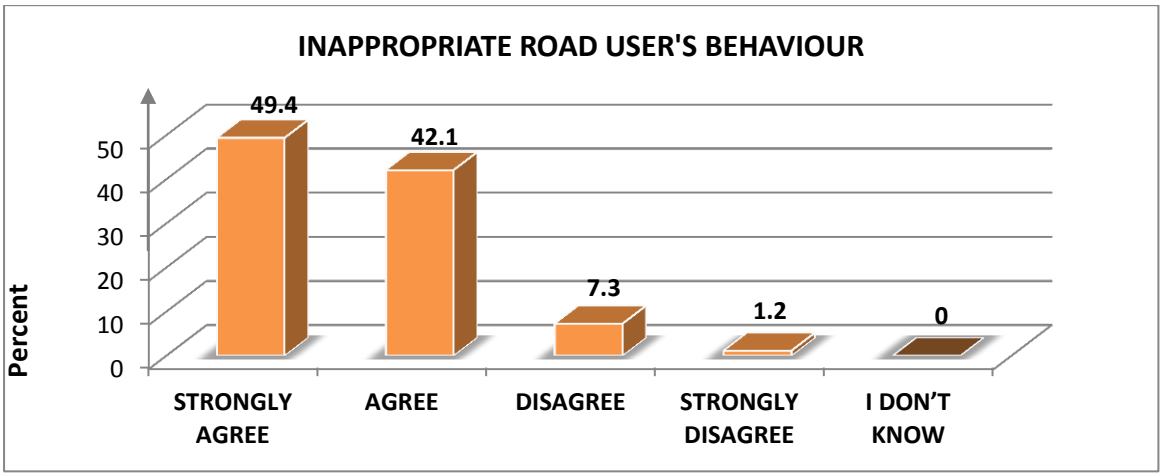
SOURCE: FIELD WORK SURVEY, 2012 **Response**

Figure 4.21 above reveals that in FCT, 67(40.9%) of respondents strongly agree that poor land use is responsible for urban transport problem, 56(34.1%) of respondent agree, 37(22.6%) disagree, 3(1.8%) strongly disagree while 1(0.6%) of respondent were ignorant.

Figure 4.22 below shows that in FCT, 81(49.4%) of respondents strongly agree that road users behaviour contributes to urban transportation

problems, 69 (42.1%) of respondents agree, 12(7.3%) disagree while 2(1.2%) strongly disagree. This suggests that, negative behaviour of road users such as street trading, dumping of refuse, street begging among other factors, contribute to transportation problem in FCT.

Figure 4.22 **Inappropriate Road User's behaviour**

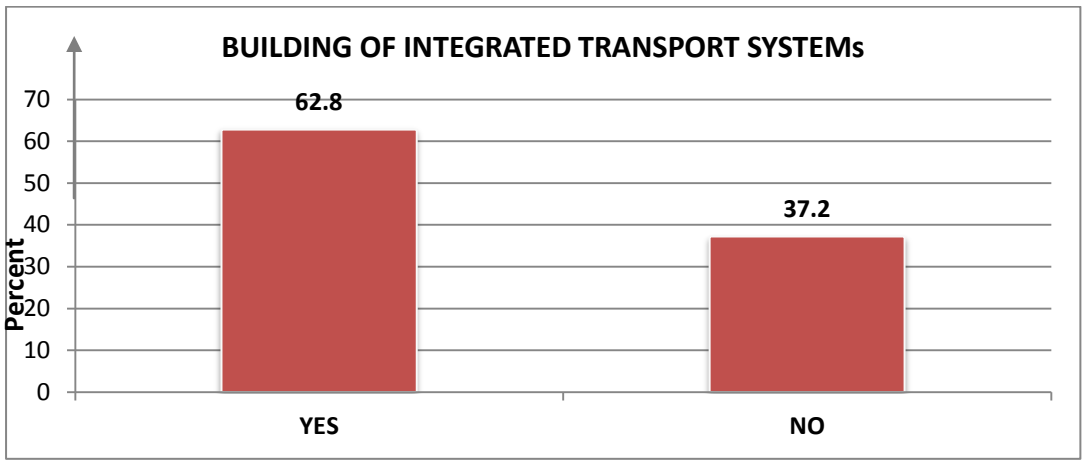


SOURCE: FIELD WORK SURVEY, 2012

4.23-4.28 WHAT ARE SOME OF THE SUGGESTED REMEDIES TO OVERCOME ROAD TRANSPORTATION CHALLENGES IN FCT BASED ON LAGOS EXPERIENCE?

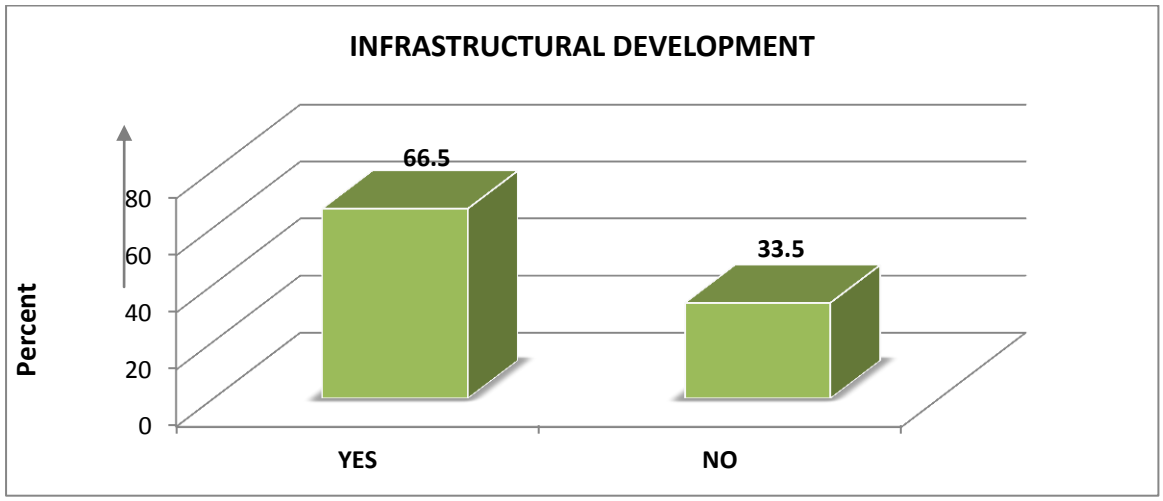
Figure 4.23 below reveals that, 103 (62.8%) of respondents agree that building integrated transport system FCT will alleviate transportation problems, while 61(37.2%) of respondents disagree. The analysis indicates that investment in multiple mode of urban transport such as BRT, Light Rail, among other modes could alleviate transport problems FCT.

FIGURE 4.23 **Integrated Transport Systems**



SOURCE: FIELD WORK SURVEY, 2012

FIGURE E 4.24 **Infrastructural Development**

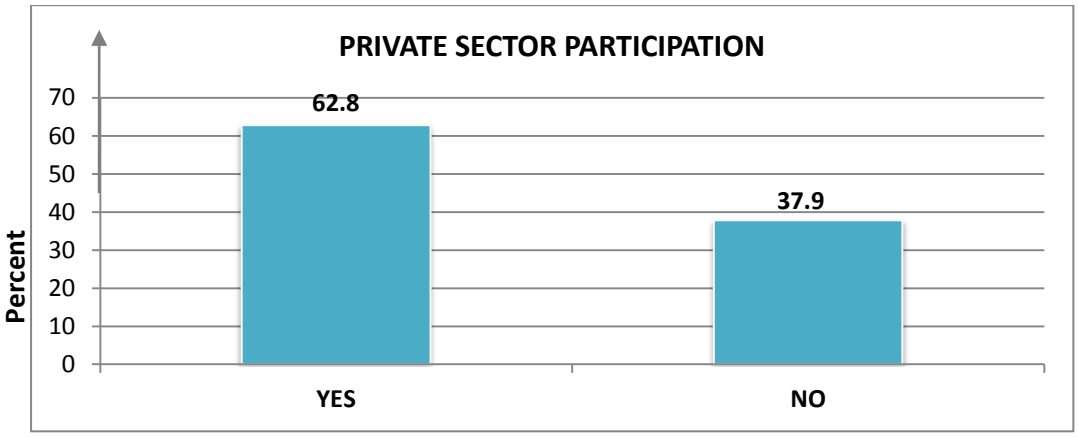


SOURCE: FIELD WORK SURVEY, 2012

Figure 4.24 above reveals that, 109(66.3%) of respondents agree that provision of additional road infrastructure will solve transportations problems in FCT, while 55(33.5%) of respondents disagree. It can be deduced that,

infrastructural development if strongly improved upon could remedy the present transportation problems in both FCT.

FIGURE 4.25 **Private Sector Participation**

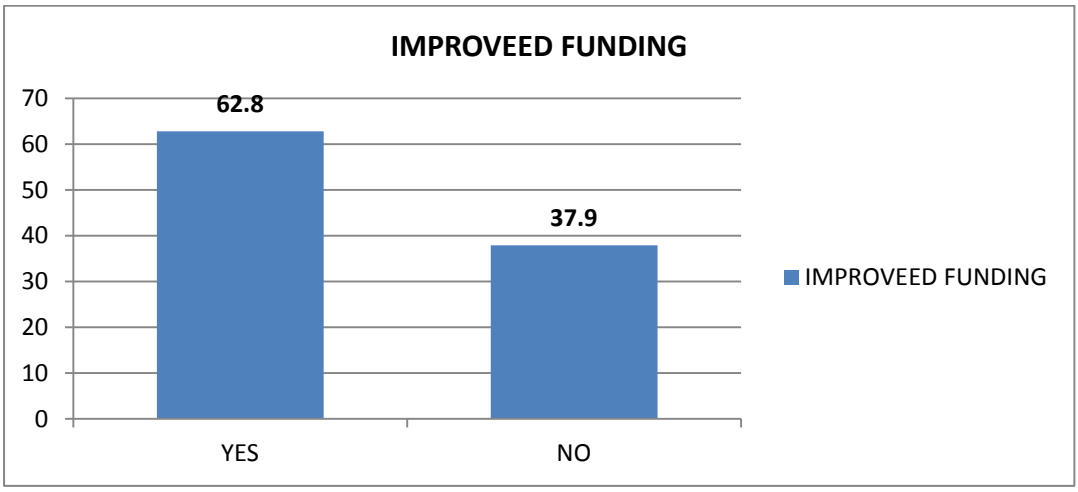


SOURCE: FIELD WORK SURVEY, 2012

Figure 4.25 above reveals that, 103(62.8%) of respondents agree that involvement of private sector in the provision of mass transit bus could provide solution to urban transport problems in FCT, while 61(37.9%) disagree. This analysis suggests that private sector participation in the provision of mass transit could mitigate urban transportation challenges.

Figure 4.26 below reveals that, (62.8%) of respondents agree that improved funding could solve the problems of urban transportation in FCT, while 61(37.2%) of respondents disagree. The implication is that improved funding by government to implement Abuja master plan could improve transportation in FCT.

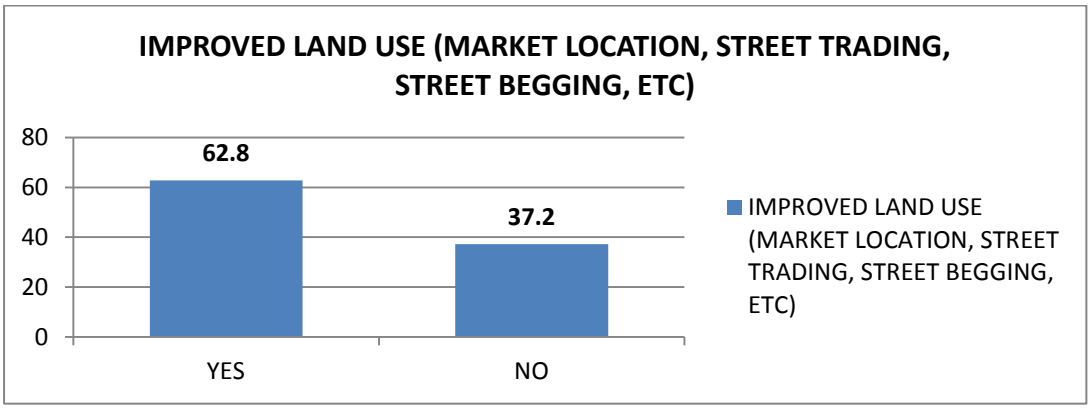
FIGURE 4.26 **Improved Funding**



SOURCE: FIELD WORK SURVEY, 2012

E: Improved Land Use. (Market Location, Street trading, Street begging etc.)

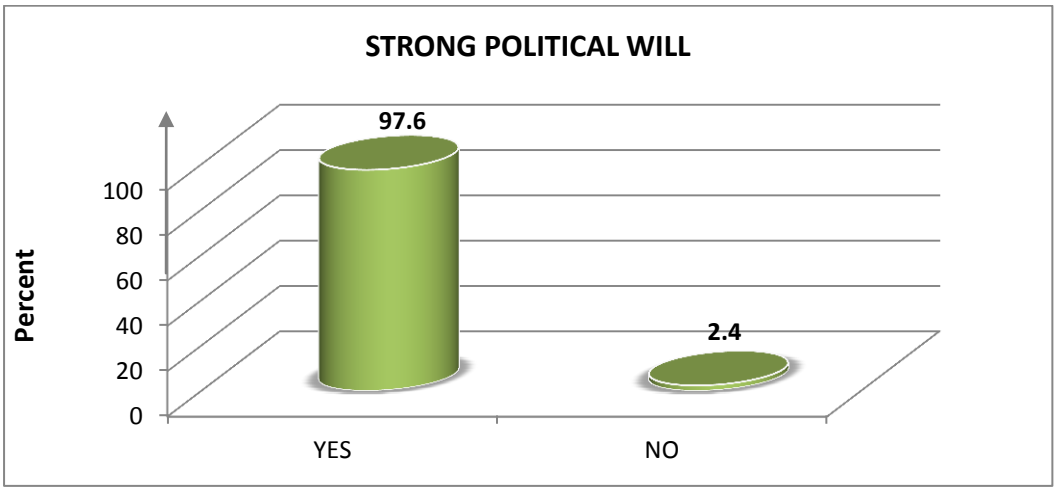
FIGURE 4.27



SOURCE: FIELD WORK SURVEY, 2012

The above figure 4.27 shows that, 103(62.8%) of respondents agree that improvement in land use could mitigate urban transportation problems particularly in FCT, while 61(37.2%) of respondents disagree. The analysis indicates that respondents recommends situating markets, bus stops, schools, and other crowd pulling establishments away from motorways as a way forward.

FIGURE 4.28 **STRONG POLITICAL WILL**



SOURCE: FIELD WORK SURVEY, 2012

Figure 4.28 above shows that, 140 (89.7%) of respondents agree that that political will by policy makers could solve urban transportation problems while 16(10.3%) of respondents disagree. This indicates that strong political will by those in high authorities of government could solve problems of urban transportation as demonstrated by the Executive Governor of Lagos State, Babatunde Raji Fashola (SAN), with the introduction of BRT.

4.3 INTERVIEW ANALYSES

The researcher was scheduled to physically meet with officials of the two agencies for interview (LAMATA and AUMTCO), but due to exigencies of time and distance, it was only possible to carry out one interview at AUMTCO while the response from LAMATA was sent via e-mail **(KOjelabi@lamata-ng.com).**

Analysis of both the written and oral responses confirmed that urban transportation in Nigeria is faced with numerous challenges. Some of these were exposed by respondents to include traffic congestion, lack of integration of other mode of transportation, poor infrastructure and lack of maintenance where it exist, and conflicting regulatory policies. Others are high level violation to traffic laws, inadequate professionals/ experts and high road traffic accidents.

From data analysis, respondents suggested that the introduction of BRT in Lagos mitigated some of these challenges in many ways among which includes; reduction of traffic congestion, reduction in pollution, infrastructural development as regards depots, and terminals. It also reduced frequent theft arising from the operations of unregistered commercial vehicles popularly referred to as "one chance", human capacity development, fleet capacity utilisation, and reduction in journey time.

4.4 SUMMARY OF FINDINGS

The findings of this research work revealed that most respondents are fully aware of BRT as a mode of urban transportation. Surprisingly, a good number of respondents in FCT where the BRT is yet to commence claimed to understand the scheme and equally offered sufficient rating in their assessment.

On the whole, a comprehensive assessment of respondents in the two locations on the operation of BRT was positive. In specific terms, the rating was

carried out on the key deliverables of BRT which are reliability, travel time, safety, vehicle condition, quality of personnel, boarding facilities and provision of passenger information. Furthermore, in the area of government efforts towards alleviating the problems of urban transportation, majority of respondents in the two locations strongly agree that construction of new roads and expansion of existing ones, provision of transit buses, extension of credit facilities to operators of urban mass transit, decentralisation of offices, provision of standard bus shelters and construction of fly-over bridges at major intersections within urban centres will go a long way to mitigate the challenges of urban transportation.

The study further revealed that corruption, inadequate funding, lack of political will, poor road infrastructure are responsible for urban transportation challenges. Other factors as revealed are uncoordinated traffic management, low driving skills by operators of urban transit buses, and negative road user behaviours.

Finally, recommendations, made by the respondents suggests that to improve road transportation in FCT, Government should pay attention to infrastructural development through urban renewal programme with the provision of an integrated transit system, private sector participation, improved funding, human capacity development and strong political will.

4.5 DISCUSION OF OBJECTIVES USING FINDINGS

In analysing the opinion of respondents on factors responsible for road transportation challenge in Lagos before 2008, it was evident that corruption was rated as one of the major factor. It was generally agreed that lack of proper accountability by stakeholders have contributed to failures in the execution of projects for social benefits. This was not the case since the implementation of the BRT scheme as it is anchored on public private partnership.

Furthermore, majority of respondents believed that inadequate funding contributed to transport problems in Lagos as procurement of buses are capital intensive and require robust financial support to succeed. Huge funding is also required to maintain effective spear parts inventory for sustainable bus operations. However, this constraint was taken care of during the conception of BRT project through robust financial arrangements with the private sector. Most respondents equally believed that lack of political will through non implementation of previous transport policies contributed to Lagos transportation problems. This phenomenon has become a thing of the past because the present transformation in transport sector in Lagos is a product of radical implementation of policy instrument and should equally be extended to FCT as the new federal capital city.

It was also the view of most respondents that drivers operating within urban centres lack proper driving skills. The implication remains that bus drivers in urban centres often ignore safety and exposes themselves to avoidable risks of

accidents. However, this negative tendency is gradually becoming a thing of the past as the BRT operation has attracted capacity development and professionalism in bus operation.

It was the opinion of most respondents that poor infrastructure significantly contributes to transportation challenges in Lagos. Unfortunately, the economy of Nigeria is road driven, and the absence of good road infrastructure has slowed down the level of economic development. This challenge has been mitigated with the inception of BRT through infrastructural development as regards depot, terminals, and bus shelters along the corridors. The findings further revealed that BRT as a mode of urban transportation is more reliable than other modes. In most cities where the BRT operates, other transport modes such as Taxis, Mini Buses service, private vehicles, train services, operate side by side. However, from the survey, BRT has become the popular choice of transportation in Lagos because it is dependable and with it, an average journey time is significantly reduced compared with other modes. Furthermore, majority of respondents perceived that BRT mode of transportation is safer compared with other modes.

Finally, in analysing the findings regarding challenges confronting road transportation in FCT, the survey revealed that majority of respondents strongly agreed that traffic congestion, lack of integration, poor infrastructure, conflicting regulatory policies are responsible. Other factors are lack of political will by senior

government officials and corruption. These were some of the challenges which have been mitigated with the implementation of BRT in Lagos.

From the foregoing discussion, it is obvious that the objectives of the study have been achieved.

4.6 DISCUSSION OF THE THEME USING FINDINGS

The theme of this research is, "Bus Rapid Transit (BRT) as a means of mitigating Urban Transportation challenges". Judging from the findings, it is clear that, there is a positive co-relation between the two. The parameters investigated include factors responsible for urban transportation challenges and the findings have established that BRT as a mode of urban transportation provided solutions to them.

Consequently, the findings further suggest the following lessons as fallout of Lagos experience. These include infrastructural development, private sector participation in urban transportation, improved funding for urban transportation and investment in integrated transportation system. Others are capacity building for operatives of the system, transparency in financial management and improved land use.

CHAPTER FIVE

CONCLUSION, RECOMMENDATIONS AND IMPLEMENTATION STRATEGIES.

5.1 CONCLUSION

This study dwelt on urban transportation challenges and the impact of Bus Rapid Transit (BRT) in ameliorating such challenges. The study traced the history of transportation and various modes that had existed before now and what currently exist, including the introduction of modern bus services in urban centres such as BRT in Lagos. The study also exploited concepts on the topic to justify their relevance to the study.

In the course of the research, various tools were employed for the collection of data which includes primary and secondary sources with questionnaires and semi-structured interviews. Four hundred (400) questionnaires were distributed with 320 completed questionnaires successfully returned and subjected to quantitative analyses using appropriate statistical techniques. Interview conducted with a senior official of AUMTCO in FCT and written responses obtained from LAMATA official in Lagos, further gave their views on the topic.

Though the study revealed successes of BRT as a mode of urban transportation in Lagos, the scheme is yet to operate in FCT. This notwithstanding,

the BRT in Lagos has achieved among others, reliability, reduction in journey time, safety, infrastructural development in terms of terminals and bus shelters, bus maintenance culture, human capacity development and professionalism. The research further reveals that urban transportation in Nigeria is generally weighed down by other challenges such as corruption, inadequate funding, lack of political will and poor road infrastructure. Others are uncoordinated traffic management, low driving skills by operators of urban transit buses and negative behaviours by road users. It is on the strength of these that recommendations are made.

5.2 RECOMMENDATIONS AND IMPLEMENTATION STRATEGIES

The following recommendations and implementation strategies are proffered arising from the findings of this research.

Recommendation 1

Federal government should embark on the construction of an integrated transport system in FCT for mass movement of commuters to and from satellite towns.

Implementation strategies

i. Federal Capital Territory Administration to commence the construction of BRT System in FCT from first quarter of 2013 using the newly expanded road corridors into the city centre.

ii. The Minister of FCT to ensure the completion of Abuja light rail by December 2014 as a long term measure.

Recommendation 2

Minister of Federal Capital Territory should sustain the funding of mass transit bus procurement, maintenance and operation for the FCT.

Implementation strategies

i. Federal government to reduce the lending rate by financial institutions to make it economically viable for investors in the sector to obtain credit facilities as from January 2013.

ii. Federal government to institute import subsidy regime on buses, spear parts and other consumables in 2013 fiscal policy.

Recommendation 3

Federal government should re-engineer its fight against corruption.

Implementation strategies

i. Federal government to immediately liaise with the National Assembly to strengthen through legislation, agencies such as the Independent Corrupt

Practices and Related Offences Commission (ICPC) and Economic and Financial Crime Commission (EFCC) to enable decisive handling of corrupt issues.

ii. The judiciary to expeditiously handle all cases of corruption as forwarded by law enforcement agencies.

iii. All law enforcement agencies saddle with the responsibility of tracking and monitoring public procurements and contracts are to live up to their responsibilities.

Recommendation 4

Federal government should evolve a strategic plan to address the issue of improper urban land use and controls and come up with a proper pattern that will give less pressure to roadways.

Implementation strategy

i. Minister of FCT to direct the department of Development Control to relocate all markets, schools and other high density establishments off the major corridors before December 2013.

Recommendation 5

All the existing drivers operating in fleet of urban transport companies in FCT should undergo compulsory retraining for improved skills as minimum standards for recruitment of new entrants should be reviewed.

Implementation strategies

i. Federal Road Safety Corps to organise a compulsory refresher course for all drivers of AUMTCO to build capacities as from January, 2013.

ii. FRSC to conduct compulsory eye test before drivers' licences are issued.

iii. FRSC to conduct alcohol test for drivers at parks and sensitise the commuters before long distance trips.

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