The Effects of Market Location on Traffic Flow in Lagos State

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***Abstract*:-Markets playscrucial role in the economic life of the people, and they are essential in the distribution of commodity, however pointed out that the rapid growth of urban centres has generated management problems. The most important of these problems are the encroachment of the open spaces environment and health issues including solid waste management, water supply, housing, traffic congestion and water pollution respectively. This research is however aimed at identifying the significant impact of commercial activities on traffic flow on Lagos road in order to in order to recommend ways to curtail the menace.To achieve the aim and objectives hypotheses were formulated. In order to validate the hypotheses regression statistical tools was used. Regression estimates the coefficients of the linear equation, involving one or more independent variables that best predict the value of the dependent variable. The first hypothesis reveals a low coefficient of determination. This can be seen from R-squared of 0.24. The R-squared reports that the independent variables can explain 24 per cent of total variation in the influence of the market in traffic flow in the area, while 76% are accounted for by other variables other than the market location, where some of the traffic are influenced by the non-availability of parking space by the banks and other parameters.The second hypothesis reveals an average coefficient of determination; this can be seen from R-squared of 0.672, which reveals the market location will have 67% impact on traffic flow in the area, while the other 33% of the traffic gridlock in the area is not as a result of the presence of the market, the research thus reveals the market is greatly influencing traffic flow in the area.**

The research however revealed that most of the shops and banks along the road are with small or no parking space, which thus result to their customer parking along the road, thereby inhibiting the free flow of traffic in the area. It can however be concluded that market location has negatively affected traffic flow in the study area, as the road thus not only lead to the market but connects with other places such as Ajangbadi, Shibiri etc., the road has been nightmare to motorist as enough provision is not made for parking which may be as a result of land use conversion, the available parking space is not properly utilized by motorist as they consider it too expensive, thereby causing many of the buyers to park their vehicles by the road side which invariably leads to traffic in the area.

Keywords: **Transport, commuter, commercial activities, traffic jam**

I. INTRODUCTION

1.1 Background to the Study

Market according to world bank (2009) is described as any institutions, system, social relations, procedures and infrastructure put in place to enable businesses sell their goods, services and labour in exchange of money to people. Market is essential in the economic life of the people, and they are indispensable in the distribution of commodity. However, commercial activities are essential in the sustenance of any town or city of today, which however makes market indispensable. Transaction between people is expedient because it makes life go on (Fakere and Fadamiro, 2012).

Fadamiro (2005) opined that the speedy growth of urban centres has generated numerous management problem, which some can be traced to its inception. The most significance of this problems are the encroachment of open market spaces and health related issues which include solid waste management challenges, water supply, traffic congestion, housing and water pollution respectively. Fadamiro (2005) identifies open spaces and road by market centres encroachment as one of the greatest challenges bedeviling Nigeria urban centres today. It is thus important to note that these challenges can be traced to poor planning of market environment. Many markets spring up in haphazard manner in close proximity to major roads in the cities, which however hinders the free flow of traffic, thereby disrupting urban functionality and aesthetic qualities in the urban settings. Fakere and Fadamiro (2012) also established that appropriate siting and planning of markets will enormously project the image of the city, and also enable free flow of commercial activities.

Gbadamosi (2004) identifies the significant importance of transportation in daily activities of human being, and it is difficult to conceive a situation where transportation where transportation does not play significant role in the life of any individual. Therefore, transportations help in the achievement of the basic objectives of living in the city which involves the functional efficiency of land uses, services and improvement, infrastructure in the quality of life. The horizontal and vertical spreads of any city are dependent on the nature and function of transportation system. Therefore, the spread and the quality of transportation between land uses and places in the cities and inextricably bound with the transport system, which is also directly linked with planning system.

The impact of traffic congestion is profound to anyone witnessing delay on Lagos roadways particularly in areas where there is incessant encroachment of markets to the road which is more pronounced during the peak period of the day. An estimated 8 million people travel to work via public transportation each day on the 9,100 roads and expressways

available in Lagos (World Bank, 2009). With more than 1 million registered vehicles in 2011, there are potentially more than one million trips made during the peak travel periods of the day; this is much more during seasonal festivities such as Easter and Christmas when there is an influx from other parts of the country and shopping and other commercial activities is more.

Traffic congestion is a regularphenomenon for Commuters in Lagos. According to Adebiyi (2011), the congestion is partly caused by traders who display their items by road side, for the benefit of road users who are on the lookout for items displayed along the road and motorist who often park indiscriminately during the purchase of items from the traders. The impacts of congestion are many fold; some indirectly while some are directly, such as the impact ofmotorists' sense of wellbeing, be it times wasted sitting in a traffic queue and the changes in the behaviour of drivers. Such behaviour might include rude gestures, verbal insults, deliberately driving in an unsafe or threatening manner, or making threats. This can further lead to disagreements, assaults, and collisions which may result in injuries and even deaths. Other effects include missed of appointments, higher fuel consumption resulting to higher bill, decreased productivity, coupled with high degree of stress and so on. Some of the effects are less physical, such as theineradicableimpact left behind by the vehicles on the environment during their idling in traffic.

1.2 Statement of the problem

The dependency of urban environment as observed by Hougendoorn (2001) has reached a point where 30 to 60% of urban areas are taken over by road transportation infrastructure in an attempt to convey a high level of accessibility to respond to mobility demand of vast areas and create an enabling ground for commercial activities accommodation, whereas majority of the commercial centers such as markets and banks etc. never put the parking space for their customers into consideration, thereby compounding the situation on the ever busy roads. An observation of land use development in relation to transport infrastructure development reflect a competitive land use activities with land use segregation reflecting their location in areas with their optimum condition when compared to other land use. Urbanization in Nigeria is proceeding at an unprecedented rate. Already, 45 out of every 100 people are city dwellers. In 1959, the figure was only 29 (UNESCO, 1963). Lagos as an emerging megalopolis and acclaimed economic and business capital of Nigeria hindered by unprecedented environmental problems arising from Transport infrastructure and land use problems arising from lack of a comprehensive and coherent national urban planning and effective city governance policy. Lagos is noted for its traffic congestion.

The peculiar problem of Alaba international market is the phenomenal impact of the indiscriminate change in land uses with its attendant negative impact on transportation infrastructure, for the fact that there is no corresponding modification of transport network/route to accommodate the visualize impact of land use change with increased influence of people arising from patronage of emerging commercial activities in the area compounded the traffic bottleneck as a result of high traffic intensity without justification for the new phase of land use arising from land use conversion that are mostly commercial in nature.

1.3 Aim and Objectives

This research therefore aims to critically examine the effects of market location on traffic flow in Lagos state. To achieve the aim, below are the objectives:

1. To study the commercial activities in the study area.
2. To investigate if street trading affect vehicular movement in the area.
3. To analyze if relationship exist between market location and traffic flow in the area.
4. To suggest possible solutions to the identified problems attributed to the market location on traffic flow.

1. 4 Research questions

1. What commercial activities are predominant in the study area?
2. Does street trading affect vehicular movement in the study area?
3. Does relationship exist between market location and traffic flow in the area?
4. What are the possible solutions to the identified problems attributed to the market location on traffic flow?

1.5 Statement of the research hypotheses

These hypotheses are statement drawn from the specific objectives of the study to test if the statements are true at a particular level of significance.

Hypothesis one

H_0: Street trading does not affect vehicular movement in the study area

H_1: Street trading affects vehicular movement in the study area

Hypothesis two

H_0: No relationship exists between market location and traffic flow in the area

H_1: Relationship exists between market location and traffic flow in the area

1.6 Scope of the study

This research work is majorly focused on Alaba international market road being an international commercial center notable for land use conversion and road encroachment by commercial activities, the research will be based on the information generated from the road users and the traders, in

order to identify the causes of constant encroachment of the road by the traders despite Government effort at abating the menace, and the recommendation from the research will enable the Government adopt another approach at combating the menace.

1.7 Significance of the study

The research will be of immense benefit to many people, organization and government. It will be of immense benefit to the motorist as the recommendation from the research will save the motorist from constant gridlock which often result to wastage of time and resources, the recommendations from the findings will also enable the Government determine the root cause of the problem, as researchers are majorly concerned about the current situation of the market not considering how we arrived at the current state, it will be of benefit to the traders also as the recommendations will enable them carry out their trading activities with minimal hassle as most of the traders are often exposed to danger due to constant gridlock, carbon emission inhaled and vehicular brake failure which often result to severe accident. The research will also contribute positively to the existing literature, constituting a new platform on which to evaluate the hypotheses that trading by the roadside does not only promote their commercial activities but also exposes them to danger and constitute public nuisance.

1.8 The Study Area

Lagos State is one of the smallest states of all the 36 states in Nigeria, and also the commercial nerve of Nigeria, Lagos is bounded on the south by Guinea coast of Atlantic Ocean, bounded at the west by republic of Benin, bounded at the North and East by Ogun State. Lagos state lies approximately from latitude 60 2' North, to 60 4 North; and from longitude 20 45' East to 40 20' East. The state have explosive growth rate of 5.7 per cent annually. The state's population is currently estimated around 21 million inhabitants (Lagos State Government).

Alaba International Market in Ojo area of Lagos State, Nigeria is considered as the biggest and largest market in West Africa. The market serves other neighboring countries such as Togo, Benin and Ghana, among others. Some groups of traders especially the Ibo tribes of Eastern part of Nigeria are known to have specialized in assembling, fabricating and importing components and parts of all kinds of products electronics and households to suit all types of categories of consumers. This ethnic group constitutes the major players of the market. Alaba International Market was able to gain popularity in Nigeria and among West Africa countries as it remains an easy, accessible and open market for all kinds of imports especially electronics, households' items from China, Japan, India and other Far East countries. The popularity of the market was made possible because of the fact that Nigerians and other West Africa nations are quite receptive to foreign goods and products, regardless of quality, durability and product life. The habit, belief and notion of using imported items are a sort of satisfaction that the people of Nigeria cherish much.

Map of Lagos

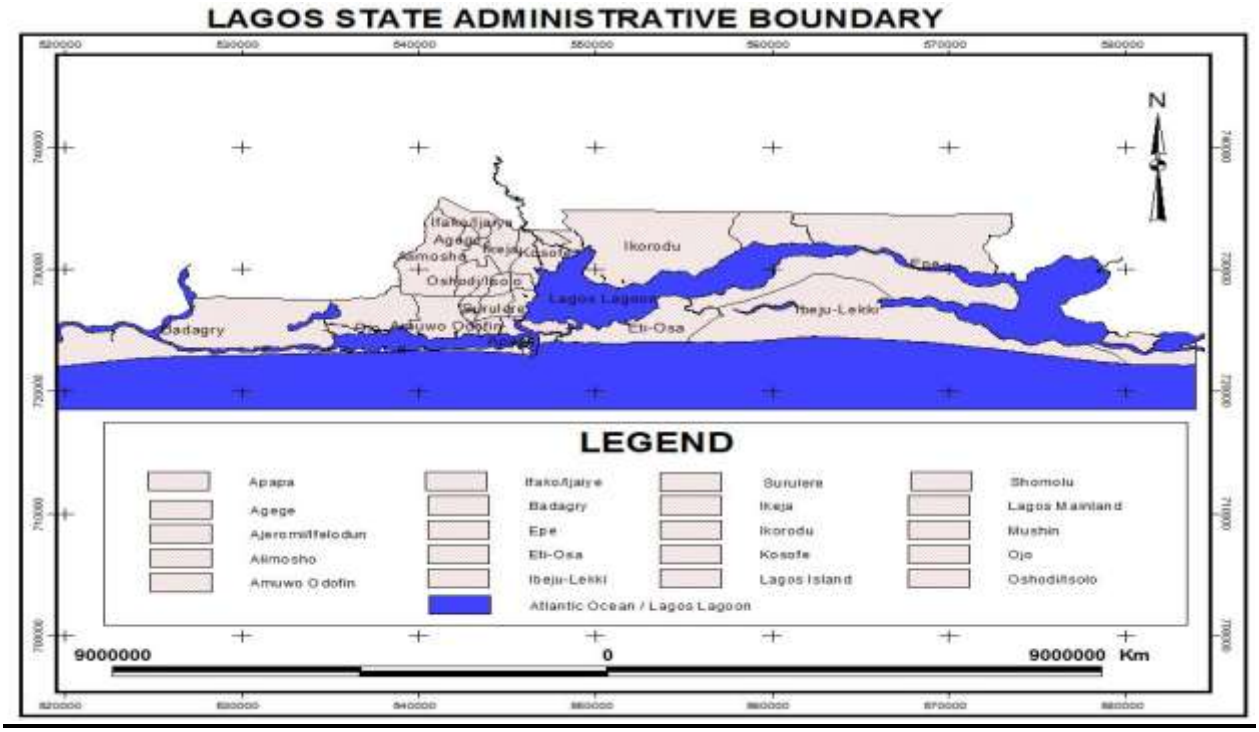

Figure 1.1: Map showing Lagos State

Source: Lagos State University GIS laboratory

II. LITERATURE REVIEW

Market is an institution for the exchange of goods and services, and it is also a place of actualizing economic desires (Callon 2003). According to Muli (2007), he identifies market is an organization that enables the buyer and the seller exchange their goods, and it is also a regular meeting place for the purpose of acquiring, and also dispose-off, locally produced goods or imported goods and services. Market is into two categories, traditional or modern, based on its commodity of specialty, and services provided, and location, the period of operation, the physical settings among others (Cooper, 2008). Similarly, market has been classified according to their temporal specialization, which gives the market a unique characteristic. Therefore, markets are divided into: daily, periodic and special markets (Bromley, 1971). According to him, daily market makes up the integral part of major market centres. Daily markets have a large volume of traders, thus it is operated once or twice a week and it shares some characteristic of a periodic markets. Periodic market are usually held regularly on one or more fixed days each week or month usually in smaller market centres. Special markets are often held at annual fairs and may be held from one day to one week to three months as the case may be.

Cooper (2008) identifies the most popular market in any settlement, which is called the king's market, usually adjacent the king palace. This is prominent in the city structure of Nigeria's traditional urban areas. The king's market usually predates every other ones. It is however not necessarily the largest traditional market as things is changing from the traditional to the modern market (Muli, 2007). This view according to Cooper, (2008) is obvious in the metropolitan areas where there are many markets established through urban planning to reduce congestion. He further opined that women are the major traders there, as trading is a good profession for women because it considered more flexible. Daily markets are held between 8am and 6pm. This makes them popular, as they are open for the longest number of hours. Some daily markets specialize in the transaction of specific goods while some trade in a wide range (variety) of goods. These characteristics enable buyers patronize them at any time of the day. According to Hodder and Ukwu (1969) one of the characteristic of periodic markets is that they show clear correlation in their location with the distribution and hierarchy of settlements. According to Balogun (2011), majority of traders in traditional markets operate on daily basis while only few of the traders operate on periodic basis.

Facilities and Services to be considered in the Development of Markets

Balogun (2011) listed some facilities and services to be considered in the development of market centres as follow:

a. The market must be accessible for motor, to ease the movement of people and goods, vehicles for loading and offloading of goods.
b. Provision of adequate drainage system that is well maintained in order to guide against erosion at the market sites.
c. Provision of adequate toilet facility for the market users.
d. Provision of adequate parking spaces, loading and off-loading havens must be provided to guide against street parking.
e. Provision of adequate shops and stalls to prevent on-street trading.
f. Provision of hydrants in case of fire outbreak.
g. Provision of adequate water supply.
h. Social cultural facility in the markets.
i. Provision of health care facility in case of emergency.
j. Provision of adequate waste disposal facility
k. Provision of the security services to safeguard their properties.
l. There should be market council of elders in place saddled with the responsibility of managing the markets.

Defects in the Market System

According to Food and Agriculture Organization of the United Nations (FAO) (1999) the defects of existing markets should next be defined as clearly as possible. They include:

I. Physical problems

1. Poor site location and road access. This is often the main issue. It becomes difficult to resolve where there are planned road improvements that would provide access advantages, but have not yet been carried out;
2. insufficient sales space, particularly of temporary spaces at peak periods and during peak seasons, leading to produce being sold in the open, with consequent spoilage;
3. the presence of poorly designed and constructed sheds, making the marketing process inefficient and inhibiting customer flow;
4. a general lack of building and facilities maintenance;
5. insufficient circulation space and traffic management measures, leading to vehicular and pedestrian congestion;
6. lack of parking provision and areas for unloading;
7. poor condition of roads and paving;
8. inadequate drainage and severe flooding problems, leading to produce losses and potential health problems;
9. inadequate site security and overnight storage facilities; and
10. Inadequate hygienic provision for meat, poultry and fish handling, including a lack of refrigeration facilities.

II. Social and managerial problems

1. difficulties in enforcing market bye-laws and regulations;
2. an inefficient or uncontrolled use of market sales space with low sales
3. volume per trader and, often, low rents or charges;
4. A high, unmet, demand for places in the market frequently combined with high-profit margins for traders; and market management which establishes no clear relationship between revenues and costs, leading to the market being under-funded, especially for repairs and maintenance. (FAO, 1999).

The economic and social costs of traffic congestion

According to Hougendoorn (2001) there are two principal categories of causes of congestion, and they are; (a) micro-level factors (e.g. relate to traffic on the road) and macro-level factors that relate to overall demand for road use. Congestion is "triggered" at the "micro" level (e.g. on the road), and "driven" at the "macro" level by factors that contribute to the incidence of congestion and its severity. The micro level factors are, for example, many people and freight want to move at the same time, too many vehicles for limited road space. Many trips may be delayed by events that are irregular, but frequent: accidents, vehicle breakdowns, poorly timed traffic signals, special events like mass social gatherings, political rallies, bad weather conditions, etc. which present factors that cause a variety of traffic congestion problems. On the other side, macro level factors e.g. land-use patterns, employment patterns, income levels, car ownership trends, infrastructure investment, regional economic dynamics, etc. also may lead to congestion.

Using the 'triple bottom line' approach which comprises economic, environmental and social value, the Greater Toronto Transport Authority (2008) categorized the costs of traffic congestion into five major clusters as follows:

1. Excess time delay – automobile users: Longer travel times result in a cost to motorists in the form of value placed on this excess time spent travelling. This is referred to as an 'opportunity cost' which is equivalent to the value of activities forgone. The added unpredictability of travel time is included in this cost.

There is also the associated inability to forecast travel time accurately, leading to drivers allocating more time to travel "just in case", and less time on productive activities.

2. Excess time delay – transit, public and private users: For transit operations occurring on shared roadways, these transit users experience a cost of excess travel delay in the same form as automobile users.

3. Increased vehicle operating costs: Vehicle operating costs increase in congested traffic conditions due to the stop-and-go nature of travel; wear and tear on vehicles as a result of idling in traffic and frequent acceleration and braking, leading to more frequent repairs and replacements. Additionally, high traffic volumes represent operating costs in excess of the socially optimal level

4. Excess accident externality costs: Congested traffic conditions result in a higher accident rate, which translates into additional costs to automobile users

5. Excess vehicle emissions externality costs: As with operating costs, vehicle emissions increase with congestion due to the stop-and-go driving conditions, and the total amount of emissions is inefficiently high due to excess traffic volume.

In addition to the above costs that affects motorists directly, excess congestion also entail an indirect cost on the economy as a whole. The above costs of congestion result in a higher cost of business activity, due to 1) the direct increase in transportation costs and 2) the adverse impact on the labour market, as higher commuting costs are manifested in higher wages and decreased demand for labour, which leads to a suboptimal allocation of labour resources. The end result is that overall economic output (measured by GDP) will be below the level that would exist in the absence of congestion. Further, excess congestion results in higher transportation and logistics costs for various industries, due to the higher direct costs of transportation (fuel expenses, labour costs, maintenance, etc.) and several direct costs such as the need to maintain higher levels of inventory as a buffer against delivery time reliability, a higher frequency of missed deliveries, and so on. These effects serve to both increase costs and decrease revenue, with a concomitant reduction in employment.

Reducing congestion

In terms of measures aimed at reducing congestion, Hougendoorn (2001) observed that this can be either demand or supply side oriented and distinguished both types of measures. Three main factors influence the supply side of road travel. Firstly, capacity is one of the most important elements of road space supply. For example, the total kilometers of road sand the number of lanes determine the capacity of the road network. Secondly, the operation of the road network influences supply. Maximizing the efficiency of operations, such as optimizing signals improves "supply". Thirdly, the supply of the road transport equation is also affected by incidents such as accidents or road works. Importantly, the last two aspects can be influenced by traffic management approaches. It is thus the supply-side of the road network that can be optimized by traffic management tools. Supply of road space is mainly determined by past investment decisions and current operations. Changes in the supply side of road space thus involve construction of new road space or reductions in existing road space. Changes in traffic operations are also considered to be supply side measures.

Demand for road space is influenced by a large number of issues. Essentially, demand is created when the need for travel

between an origin and a destination arises. Demand therefore strongly depends on socio-economic and population factors. Another important factor influencing demand is the relative cost of road travel as well as the availability of alternative means of transport. Other aspects that influence demand for road travel are availability of parking and the social perception of car versus public transport travel.

In Nigeria, street trading has reached an alarming stage that it is now a subject of concern to physical planners and city managers. Street trading causes different problems such as encroachment on right of way by the traders, traffic congestion as vehicles cannot pass smoothly on time and defacement of aesthetics appearance of the street. As the street traders continue to litter or dump their wastes on the roadsides, it seriously pollutes the environment resulting in health problems and reduction of the road width or in drainage systems which block the water ways leading to flooding whenever there is high rainfall which a times causes loss of lives and properties and so on.

III. RESEARCH METHODOLOGY

3.1 Introduction

Methodology is the systematic, theoretical analysis of the methods applied to a field of study. It comprises the theoretical analysis of the body of methods and principles associated with a branch of knowledge. Typically it encompasses concepts such as paradigm, theoretical model, phases and quantitative or qualitative techniques. This chapter focuses on the description of the techniques used by the researcher in carrying out this study. It includes the methods, the instrument used for data collection, the procedure for the instrument distribution, and method of data analysis.

3.2 Types and Sources of Data used

The data for this study were primary data and secondary data. The primary was sourced from field survey conducted between February and March, 2018, the continuous sales of items along road side at Alaba international market. The instrument of data collection was structured questionnaire, which was carefully prepared through the consultation of journals and other relevant information's on the effect of market location on traffic flow in Lagos state. The questionnaire was constructed by the researcher aimed at providing answers to some of the research questions, First section comprises of demographic question where the participants were asked to furnish information with regards to their gender, educational level, age, marital status, monthly income, the second section is aimed at identifying the trading pattern along the study area, and other related information's on street trading along the study area. The secondary data consisted of Maps of the study area which was extracted online through Google Map.

3.3 Sample and Sampling Techniques

The sample size for the field survey was 100 respondents; simple randomly distributed to the market people along the road and passer bye that researcher was able to get their attention, the instrument dissemination was carried out in the morning and evening which is the period sale is usually rampant and when there is usually heavy traffic flow. Statistical sampling is an important research tool for a number of disciplines, because it allows people to learn more about a population without studying every single individual in the population. For the purpose of this type of research that involve selected few respondents, their opinion was sort through the questionnaire, and carefully sorted out.

3.4. Research Instrumentation and administration

Research instruments are tools used in obtaining, gathering, measuring or assessing information. The critical research instrument which was used for this study is questionnaire, which was distributed to the sample population, aimed at generating information from them based on the research objective.

The questionnaires were designed into 2 sections, A and B, "A" of the questionnaire focused on the demographic information of the respondents, such as the Gender of respondents, Age, marital status, qualifications, occupation, marital status, monthly income and size of household. Meanwhile section B focused on the factors pertaining to market activities in the study area.

3.5 Techniques of Data analysis

The data collected was sorted out in order to identify the ones that were not correctly filled, that might constitute problem during analysis. The data analysis was based on the questionnaire computed for the research work, as the research questions was analyzed using Statistical Package for Social Sciences (SPSS) computing software. Both descriptive and inferential statistical analyses were utilized in the study. The generated frequencies of the answered questions from the respondents were presented in simple percentages in a tabular form and graphs for easy interpretation.

Afterwards, the earlier stated hypotheses were tested using Regression analysis. In statistics, regression analysis is a statistical process for estimating the relationships among variables. It includes many techniques for modelling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables. More specifically, regression analysis helps one understand how the typical value of the dependent variable (or 'criterion variable') changes when any one of the independent variables is varied, while the other independent variables are held fixed.

This sought to investigate the impact of commercial activities on the free flow of traffic in the study area. The basic idea behind survey methodology is to measure variables by asking

people questions and then examine relationship among the variables, in order to draw conclusion from the generated responses of the respondents, thereby using the generated data to test the earlier stated hypothesis in order to validate it and decide if the null hypothesis is to be accepted or forgone in order to go for the alternative hypothesis.

IV. DATA PRESENTATION AND RESULT DISCUSSION

4.1. Data presentation

This chapter is aimed at carrying out a comprehensive analysis of generated data, using a statistical package popularly known as SPSS through coding, computation and analysis, and information generated later presented in tabular form for easy interpretation. For the purpose of this research, a research questionnaire was the major tool of generating information's from the respondents; since the sample population is relatively small, random sampling was however adopted for fair representation. A total of hundred (100) questionnaires were administered, retrieved and scrutinized for the research.

The analysis is divided into three categories, the first category contains the demographic characteristics of the participant, while the second category contains research questions aimed at analyzing the factors responsible for traffic congestion in the study area, if the roadside trading is responsible for that, they are all aimed at providing answer to the research questions, in order to test the null hypothesis if to be forgone or uphold. The generated tables and figures that elucidate each question are presented as follows:

4.2. Analysis of Socio demographic variables

Age:		
Below 18 years	12	12.0
18-25 years	15	15.0
26-35 years	47	47.0
36-45 years	16	16.0
46-55 years	8	8.0
Above 55 years	2	2.0
Total	100	100.0
Sex:		
Male	54	54.0
Female	46	46.0
Total	100	100.0
Marital Status:		
Single	28	28.0
Married	43	43.0
Divorced	13	13.0
Widow/ widower	16	16.0
Total	100	100.0
Occupation:		
Business	48	48.0
Trading	43	43.0
Civil servant	9	9.0
Total	100	100.0
Education level:		
Primary 6	9	9.0
WAEC	41	41.0
OND/HND/BSC	36	36.0
Post Graduate/ M.Sc.	14	14.0
Total	100	100.0
Income level monthly		
Less than N50,000	39	39.0
N 51,000 – 100,000	37	37.0
N 101,000-150,000	17	17.0
N 151,000 – 200,000	6	6.0
N 201,000 – 250,000	1	1.0
Total	100	100.0
Size of household:		
1-5 people's	11	11.0
6-10 people's	37	37.0
11-15 people's	52	52.0
Total	100	100.0

Source: Field work, 2016

The table presented above is aimed at revealing the age of the respondents, the research revealed that 12% are below 18 years, 15% are between 18-25 years, 47% are between 26-35 years, 16% are between 36-45 years, 8% are between 46-55 years while 2% are above 55 years respectively, it thus revealed that larger percentage of the respondents are between the age of 26-35 years, the table presented above reveals the sex of the respondents, 54% are male while 46% are female respectively, it thus revealed larger percentage of the respondents are male, the table presented above reveal the marital status of the respondents, it reveals 28% are single, 43% are married, 13% are divorced, 16% are widow/widower respectively, and the research thus revealed the married respondents dominated the sample population, the table presented above reveal the occupation of the respondents, as it reveals 48% are self-employed, 43% are trader, 9% are civil servant, the research thus revealed that larger percentage of the respondents are into one business or the other,

The table presented above also reveal the education level of the respondents, it thus reveal 9% are primary 6 holder, 41% are SSCE holder, 36% are OND HND/ BSC holders, while 14% are Post Graduate/M.Sc. holder respectively, it thus revealed majority of the respondents are WAEC holders, the

table presented above reveal the income level on monthly basis of the respondents, it reveals 39% get less than 50,000, 37% earn between 51,000 – 100,000, 17% earn between 101,000-150,000, 6% earn between 151,000 – 200,000, 3% earn between 201,000 – 250,000, while 1% earn between 251,000 – 300,000 respectively, it thus revealed majority of the respondents earn less than 50,000 monthly, the table presented above reveal the size of the household of respondents, it reveals 11% are between 1-5 people's, 37% are between 6-10 people's, while 52% are between 11-15 people's respectively, it thus revealed larger percentage of the respondents are between 6-10 people's as represented with table 4.2.

4.3. Research Questions

The research also revealed why the respondents were found at the area, 63% are there for trading, 22% are there for banking purpose while 15% are just passing by, it thus shows larger percentages of the respondents are there for trading purpose, the research also reveals if the respondents has ever witnessed accident at the area, 19% said yes, while 81 said no, it thus shows accident is not rampant in the area, probably because of the clumsy nature of the area which does not allow the vehicle move at high speed, the respondents that said yes, they were asked how often do they experience the accident, 89% said once a while 11% said constantly, with larger percentage of the once a while respondent's, it thus shows accident is not a frequent phenomenon in the area, the research reveals the usual time of traffic in the study area, 43% said its between 7am-9am, 3% said between 9am-11am, 6% said between 11am-1pm, 9% said between 3pm to 5pm, 21% said between 3pm-5pm, while 18% said its between 5pm-7pm respectively, majority of the respondents confirmed traffic is prevalent in the morning between 7am-9am followed by 3pm-5pm, which is the closing time, which are all refer to as peak period, the research reveals days of the week when traffic is more, 32% said Mondays, Tuesdays and Wednesdays are 6% respectively, 5% said Thursday, 29% said Fridays, while 22% said Saturdays, the research thus shows that the traffic is more on Mondays.

The research also reveals the factors responsible for the traffic, 3% attributed it to existence of potholes, 40% attributed it to indiscriminate parking, 9% attributed it to road side trading, 14% said flooding, while 6% said bad vehicles, the research however reveals majority of the traffic is attributed to indiscriminate parking of vehicles along the road by those that want to patronize the market, the research also reveals the average time motorist or the traffic last before flowing, 72% said less than 30 minutes, 21% between 30-60 minutes, while 7% said over 60 minutes, it does shows the traffic usually last for less than 30 minutes in most cases, the research also reveals different recommendations by respondent's in order to combat the traffic in the area, 9% said the potholes should be filled, 60% said sellers should be removed from the study area, 20% said traffic officers should be positioned at different areas in the study area, 11% said the road should be expanded, the research thus reveals majority are of the opinion the sellers should be removed from the road side because some of the traffic is as a result of those commuters trying to patronize the sellers along the road.

Figure 4.1: picture showing a typical traffic at Alaba International Market road

Figure 4.2: picture showing a typical traffic caused by indiscriminate parking

The research reveals majority of the respondents do not make use of the parking lot by parking along the road, and what are the problems associated with the parking area, 41% said because of inadequate parking lot, 3% said it's because of overzealousness of enforcement agency, 4% said because of poorly designed parking spaces, 21% expensive cost of parking within the area, 3% said inconsistencies in parking policy within the area, 2% said because of inconsistency of parking management and operation in the area, while 26% said because of lack of effective monitoring of use of parking lots, the research thus reveals more parking space should be provided and proper monitoring should be done to ensure its being use by the people, the research reveals what impact or benefit would improve mobility against congestion challenges brings within the area, 68% said it will improve accessibility and mobility demand, 5% said it will reduce time wastage thereby increasing productivity, 5% said it will reduce pollution, while 22% said it will reduce maintenance cost of vehicles and reduce roadways wear and tear, the research reveals it will enhance mobility in the area.

The research reveals the impact of traffic congestion and implication, 49% said it will lead to time wasting of motorist and passengers, 4% said it leads to inability to forecast travel

time accurately, 13% said it leads to fuel wastage and increase air pollution, 23% said it will lead to tear and wear on vehicles as a result of idling in traffic while 11% said it will lead to stress and frustrated motorist, the research thus revealed majority of the respondents complained it leads to time wasting of motorist and passengers, the research reveals the effect of street trading in the area, 56% said it leads to traffic congestion, 7% said it leads to accident, 12% said it leads to longing of time, while 25% said it leads to restricted movement, the research reveals majority of the respondents said trading along the road often leads to traffic congestion as a result of those parking indiscriminately to purchase some items, the research is aimed at revealing if refuse dumps along the road constitute to the traffic in the study area, 3% Strongly agrees, 6% agrees 36% undecided, 32% disagree, 23% strongly disagree, it thus reveals majority of the respondents disagree refuse dumps along the road constitute to the traffic, it thus shows no refuse dumps in the area so it thus not constitute to the traffic in the area, the research is aimed at revealing if continual sales along the road expose the marketers to danger due to break failure and carbon inhaling, 42% Strongly agrees, 26% agrees 18% undecided, 10% disagree, 4% strongly disagree, it thus reveals majority of the respondents strongly agrees continual sales along the road expose the marketers to danger due to break failure and carbon inhaling.

Figure 4.3: picture showing a commercial bank without parking space

Figure 4.4: picture showing a busy shop without parking space

The research is aimed at revealing if provision of larger parking lot will reduce the traffic along the road, 69% Strongly agrees, 11% agrees 12% undecided, 5% disagree, 3% strongly disagree, it thus reveals majority of the respondents strongly provision of larger parking lot will reduce the traffic along the road as majority of the parking space are usually congested, the research is aimed at revealing if street trading has greatly influenced traffic flow in the area, 58% Strongly agrees, 19% agrees 9% undecided, 7% disagree, 7% strongly disagree, it thus reveals majority of the respondents strongly agrees street trading has greatly influenced traffic flow in the area.

4.4. Test of Hypotheses

The earlier formulated hypothesis shall be tested using regression statistical tools. Regression estimates the coefficients of the linear equation, involving one or more independent variables that best predict the value of the dependent variable. It will be used to test the impact of the independent variable on the dependent variable.

4.4.1 Hypothesis one

H_0: Street trading does not affect vehicular movement in the study area

H_1: Street trading affects vehicular movement in the study area

Variable	***Value***
R^2	0.249
Adjusted R^2	0.062
F-statistic	6.463
p-value	0.013

Source: Field work, 2016

The coefficient value of the regression result presented above reveal the significant impact the market location is having on traffic flow in the area. According to the result R-squared measures the success of the regression in predicting the values of the dependent variable within the sample. It may be interpreted as the fraction of the variance of the dependent variable explained by the independent variables. A close inspection of the table above indicates that the specified model has a little coefficient of determination. This can be seen from R-squared of 0.249. The R-squared reports that the independent variables can explain about 24 per cent of total variation in the influence of the market in traffic flow in the area, while 76% are accounted for by other variables other than the market location, where some of the traffic are influenced by the non-availability of parking space by the banks and other parameters.

Considering the coefficient statistics results in order to validate the earlier stated hypothesis, the initially stated null hypothesis will be rejected if the p-value is less than 0.05. the result thus reveal a p-value of 0.03, which is less than 0.05, it is however pertinent to earlier stated null hypothesis which

states that street trading does not affect vehicular movement in the study area to embrace the alternative hypothesis, the rejection of the null hypothesis is because it lacks statistical support.

4.2.2 Hypothesis two

Hypothesis two

H_0: No relationship exists between market location and traffic flow in the area

H_1: Relationship exists between market location and traffic flow in the area

Variable	***Value***
R^2	0.672
Adjusted R^2	0.451
F-statistic	80.573
p-value	0.000

Source: Field work, 2016

The coefficient value of the regression result presented above reveal the significant relationship that exists between market location and traffic flow in the area. According to the result, the coefficient value is 0.672, which reveals the market location will have 67% impact on traffic flow in the area, while the other 33% of the traffic gridlock in the area is not as a result of the presence of the market, the research thus reveals the market is greatly influencing traffic flow in the area.

Considering the coefficient statistics results in order to validate the earlier stated hypothesis, the initially stated null hypothesis will be rejected if the p-value is less than 0.05. The result thus reveal a p-value of 0.00, which is below 0.05, it is however pertinent to reject the earlier stated null hypothesis which states that The improvement and management of inland water transport infrastructure has not attracted commuters away from road travel along the study area, we therefore go for the alternative hypothesis which states that no relationship exists between market location and traffic flow in the area, the acceptance of alternative hypothesis is because it receives statistical support.

V. SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The research reveals several of the shops aside the one in the main market were not initially designed for commercial purpose, so there was no provision for parking space, in that case many of the customers will have to park by the road side, where some touts even collect parking fee from them thereby compounding the traffic on the road. The research also discovers some banks along the road which are not properly sited as there is no enough parking spaces for their customers, the customers end up parking by the road side. Traffic is observed to be prevalent in the morning during the rush hour and later at night when the sellers that mostly positioned their market by the road side where they can be easily seen have arrived, thereby compounding the problem. The main market parking space is pegged at the rate of 200 naira for cars and the price for trucks varies depending on the size, many of the customers who believe they only have limited time for the purchase of their items in the market usually feel cheated paying 200 naira just for a short period, so rather prefer parking their vehicle in little available space outside the market thereby compounding the problem. The commercial activities on the road has constituted nuisance for motorist as smaller vehicles and buses are left with little space, when trailers needs to come into the market to offload items, the problem get compounded as the road becomes so narrow, where motorist have to queue up for the road to be cleared, all this and many more are responsible for traffic bottleneck around Alaba international market

5.2 Recommendations

Based on the findings of the research, the following recommendations were made:

1. State traffic officers should be allocated to the study area, as most of the traffic officers stationed in the area are mostly from local government, so there presence is not really felt.
2. During the peak period that is in the morning and the evening during the closing period, the traffic officers should be on top of their game because this is the most prevalent time of traffic.
3. Task force should be allocated to the area, vehicles that park indiscriminately or sellers that put their items on the road should be sanctioned, as they are discovered to be the architect of traffic in the area.
4. The expansion of the road should be considered as the road often receive trailer laden with container which often block the road during their entering or turning because of the narrowness of the road.
5. Enough parking spaces should be provided, considering the size of the market there should be provision for larger parking lot to accommodate buyers.
6. The price of the main parking space should be reviewed and those touts collecting money from vehicles owner along the road should be closely monitored as they discourage motorist from patronizing the main park.
7. The sellers should be sensitized as the continual sales along the road exposes them to lot of dangers such as accident if break failure occurs, and inhaling of carbon monoxide which is harmful to their health.

5.3 Conclusion

According to the research, it can be concluded that the market location has negatively affected traffic flow in the study area,

as the road thus not only lead to the market but connects with other places such as Ajangbadi, Shibiri etc., the road has been nightmare to motorist as enough provision is not made for parking which may be as a result of land use conversion, the available parking space is not properly utilized by motorist as they consider it too expensive, thereby causing many of the buyers to park their vehicles by the road side which invariably leads to traffic in the area. Proper monitoring and sanction of road side sellers and indiscriminate parking by the road side will go a long way at reducing the traffic in the area to barest minimal.

REFERENCES

[1]. Adebiyi, O. (2011). Fuel Subsidy: The True Story Desert Herald Newspaper, November 10, 2011.

[2]. Balogun, F. A. (2011). Management of Traditional Markets in Ibadan: A Focus on Oja'ba and Oje Markets.

[3]. Bromley, R. J. (1971). The Organization of Quito's urban markets: Towards a reinterpretation of periodic central places, Institute of British Geographers: Transaction.

[4]. Callon, M. (2003).Purchasing software components at the dawn of market.Herkules Publication, Oulu University.

[5]. Cooper, N. (2008). Nigerian women as traders.A Report on Nigeria Lesson Plan. www.worldbank.org/htm/schools/glossary/html. Accessed 14th December, 2010.

[6]. Fadamiro, J. A. (2005). Urban Aesthetics and Environmental Quality: The challenges for Architectural Profession in Nigeria. The Built Environment Journal 1 (2), 212-219

[7]. Fakere, A. A. and Fadamiro, J. A. (2012). Decentralization of Markets and Environmental Sanitation Scheme: A Focus on Urban Core of Akure, Nigeria. Journal of Environment and Earth Science www.iiste.org ISSN 2224-3216 (Paper) ISSN 2225-0948 (Online) Volume 2 No.8, 2012.

[8]. FAO.(1999). *State of the World's market 1999.*Rome. www.fao.org/docrep/w9950e/w9950e00.htm.

[9]. Gbadamosi KT (2004). Perspectives of the Nigerian Urban Transport system.Obstacles and option for sustainability. Being a lecture delivered at the 2004 Annual congress at the University of Free state, Bloemfontein, South African.

[10]. Hodder, B. W. and Ukwu, U. I. (1969). Markets in West Africa: Studies of Markets and Trade among the Yoruba and Ibadan. Ibadan: Indian University Press.

[11]. Hougendoorn, S. P. and Bovy, P. H. I. (2001).State-of-the-art of Vehicles Traffic Flow Modelling.*Journal of System and Control Engineering,* 215(4), 283-303.

[12]. Muli, S. J. (2007). Analysis of market typology and function in development. University of London Press, London.

[13]. World Bank (2009). Ghana Innovation Market place 2009 in Tema, Ghana News Agency. www.the freedictionary.com/market; accessed on 25thMay, 2013.