

# Analysis Of Intra – City Water Transportation In Lagos State

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*Abstract: Traffic congestions experienced in Lagos State daily have culminated into delayed and unpredictable travel times, excessive loss of energy, and loss of veritable man hour. This of course is the resultant effect of the state's over reliance on the road for conveying its ever growing population. However, for a mega city like Lagos and owing to the fact that about 30% of the state is been accounted for by water bodies, the need to fully harness the potentials of water transportation to serve as a complement and alternative mode to road has become more compelling. The study made use of the primary source of data which was collected using a structured questionnaire. The questionnaire was administered on a randomly selected sample of 250 water transport users in Lagos State. Of the 250 questionnaires administered, 211 questionnaires were received for analysis using the Statistical Package for Social Sciences (SPSS). Secondary data was also sourced to serve as complement to the primary data, thus allowing for a robust research. Reviewed were requisite theories and concepts, past works of various scholars, textbooks, journals and data collected from relevant government agencies. Descriptive statistical tools such as percentages were adopted to present the socio - economic characteristics of users and the Spearman's Ranked Correlation Analysis was used to explain the relationship between frequency of travel, education and income of respondents.*

*Findings showed that the about 65% of sampled population are male, 48.35 % are degree holders, 34% of respondents are young within the 26 – 34 yrs age bracket, 34% married and 59% of sample are self employed. Also, that majority of the respondents (58%) are daily users and about 50% of the respondents observed that water transportation service in the state is either bad / very bad. The result also showed that a number of factors were identified as been responsible for low water transport commuting in the state and they include poor water infrastructure,( ) weak policy formulations( ), safety and security issues( ), exorbitant fares( ), inaccessibility and unavailability() amongst others. Further analysis revealed that there exist an insignificant relationship between frequency of travel, education and income of respondents.*

*Public Private Partnerships (PPP) initiatives such as Build, Operate and Transfer (BOT) etc so as to encourage investors to develop water infrastructure. It is also recommended that there is the need to conduct research, develop operational techniques and promote the use of technology to ensure safe and efficient deployment of water transportation system*

**Keywords: Transportation, Passengers, Travel, Commuting.**

## I. INTRODUCTION

It cannot be over emphasized that transportation is an integral part of human activity thus forms the basis for all socio economic interactions, indeed no two locations can

interact effectively without a viable means of movement. An efficient, reliable and safe transport is pivotal to economic growth and development.

Transportation is the main artery via which the economy of any nation flows and its development is one of the most

indispensable enzymes necessary for the activation of economic, socio - political and strategic development of a nation. This goes on to say that the development of an efficient, safe and dynamic transport system is vital for a meaningful and sustainable social, economic growth and development of a nation. More so, since transport as an economic function enhances the productive use of human and material resources, It therefore creates the utility of place and time and thereby ensuring that goods and services are moved promptly seamlessly and safely.

Water transportation plays a vital role in urban growth and development, in clearer terms, water transport is pivotal to growing and development of all sectors in the economy. It has played a very significant role in bringing different parts of the world closer and is indispensable to foreign trade. Water transport helps to bridge the gap by the inabilities of land transport to cope with the unfolding trends and it plays a crucial role in the connection of the foreland to the hinter land. It involves the process of moving people, goods etc. by barge boat, ship or sail boat over a sea, ocean, lake, canal, and river. In its simplest form, it connotes transportation via water. It serves as a complementary and alternative mode to land and rail based transport. In addition, it is an essential tool for growing and developing all sectors of the economy. Indeed it can help in achieving greater functionalities in all activities in space especially when natural and human resources are not together in one location. Water travel as all initiatives and activities put together to ensure the ease of movement of people from land to water and vice versa (Badejo, 2000). Intra city water transport is truly peoples' transport.

Moreover the role and importance of water transportation in Lagos State cannot be over emphasized. Apart from the fact that It is a sustainable and the most environmentally friendly mode in terms of energy consumption, noise and gas emission and also that it remains the oldest means of transporting persons and goods from point to point (Fellinda, 2006), it has the ability to tackle traffic congestions challenges in Lagos Metropolis when used as a complement mode to road. Lagos roads and its furniture are saturated and over – stretched with the responsibility of moving millions of residents daily. water travel is a realistic .and potentially effective option given that Lagos state is blessed with abundant water bodies that could be harnessed to offer fast, safe, comfortable and cheap water transportation services,

## II. STATEMENT OF THE PROBLEM

Transport is the backbone of any society as it is one of the factors which determines the form and socio-economic development of any nation. In Lagos, it is evident that an effective intermodal transportation system is absolutely essential to modern urban civilization leading to economic growth and development.

However, intra city water travels in the state have gradually lost relevance. The potential of water transport in the state is yet to be fully appreciated and effectively utilized. In spite of the availability of large amount of water bodies around Lagos, the city remains very congested as traffic grid locks are experienced all around the metropolis daily. This is

because of the over reliance of its habitants on roads for intra city commuting Road hauls accounts for over 90% of the daily traffic flow in Lagos are they characterized by delayed and unpredictable transit time, loss of energy and veritable man hour, etc. LAMATA (2009). It is therefore safe to say that for effective transportation in any given society, there must be involvement and active participation of the various modes to allow for the realization of full intermodal integration and only through this can seamless transportation be achievable.

As a mega city, the center of excellence should not be entirely dependent on one mode of transport as it is been asserted that a single means of travel cannot adequately meet urban needs. Asenime (2008). Major urban centers of the world which Lagos can be likened to have the presence of at least three transport modes which serve as complementary modes to each other to ensure an ever moving city. Lagos been the largest city in Nigeria and its commercial hub can be said to be uni- modal. The state rely mostly on the road mode to commute its teeming population daily which takes about 90% of the total traffic flow in the state. The presence of other modes such as rail and water are barely felt. Intra city water ridership in the state isn't encouraging as passengers still prefer to move by use road despite its peculiarities' than to ride via water for various reasons. This undoubtedly has hampered the demand for water transport service in the state

Consequent upon this, the need to analyze water transport demand in the state has become compelling as increased water ridership is viable option to rid Lagos roads of its heavy vehicular congestion and in turn keep the state moving. .

## III. WATER TRANSPORTATION IN LAGOS STATE

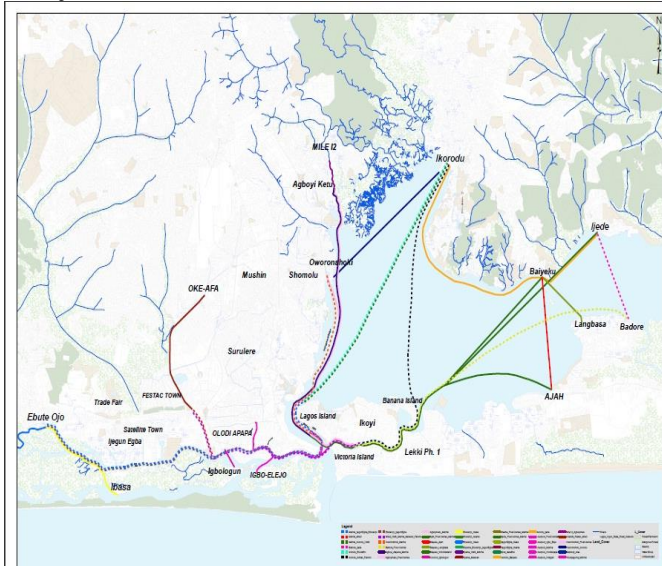
The merits of water based travel are un-ending; it is familiar, accessible, relatively cheap and convenient, hence providing a transport system that is effective and seamless while serving local needs. It also has the potential to address isolation thus minimizing the impact on the environment. In other words, water transportation is very important, not just for its own sake, but because it has the potential to reduce traffic gridlock, eliminate poverty and reduce isolation. Water transport plays a vital role in urban growth and development, in clearer terms, it is pivotal to growing and development of all sectors in the economy. It has equally played a very significant role in bringing different parts of the world closer and is indispensable to foreign trade.

Water transportation in Lagos dates back to the 70's when she was still the federal capital territory. Ferry services were operated to Apapa, CMS, Ebute-Ero and so on by Federal Inland Revenue Service (FIRS).The state government under the Lateef Jakande administration also provided ferry services with her "ItaFaji".and "Baba Kekere" boats and The Ferry Services Corporation was established which is now the Lagos State Waterways Authority (LASWA) created in 2008 by National Inland Waterways Authority Act (Repeal) Law 1997

Lagos operates and runs ferry services on 12 routes in the state which are: - Ikorodu – Marina/CMS, Marina – Mile 2, Ikorodu – Addax/ Falomo, Ikorodu – Ebute Ero, Marina – Ijegan Egba -Ebute Ojo, Mile 2- Marina/CMS- Mekwen-

Falomo, Badore – Ijede, Badore – Five Cowries, Marina – Oworomsoki, Ebute Ojo – Ijegun Egba, Oworomsoki – Five Cowries and Bayeku to Langbasathrough the three under listed lines

- ✓ Ikorodu to Marina (North Direct line).
- ✓ Ebute Ojo (LASU) to Marina via Satellite Town (Ijegun Egba) (West Line).
- ✓ Ijede- Badore to Marina via Lekki and Falomo ( East line)



Source LASWA 2015

Figure 3.1: Ferry service routes in Lagos state

#### IV. OVERVIEW OF WATER TRANSPORTATION: KINDS, MERITS AND DEMERITS

Water transport is the cheapest and the oldest mode of transport. It operates on a natural track and hence does not require huge capital investment in the construction and maintenance of its track except in case of canals. The cost of operation of water transport is also very less. It has the largest carrying capacity and is most suitable for carrying bulky goods over long distances. It has played a very significant role in bringing different parts of the world closer and is indispensable to foreign trade. Water transport consists of the following:

- ✓ Inland water transport
- ✓ Ocean-transport

**INLAND WATER TRANSPORT:** Inland water transport consists of transport by rivers, canals and lakes.

**RIVERS:** Rivers are a natural waterway which can be used as a means of transport. They are suitable for small boats as well as big barges. River transport played a very important role prior to the development of modern means of land transport. Their importance has gradually declined on account of more reliable and cheaper transport services offered by the railways.

**CANALS:** They are artificial waterways made for the purpose of irrigation or navigation or both. Canal transport requires a huge amount of capital investment in construction and maintenance of its track i.e., the artificial waterways. The cost of the canal transport is, therefore, higher than that of

river transport. To add to it, the cost of providing water for the canals is also a very big problem of canal transport.

**LAKES:** Lakes can be either natural like rivers or artificial like canals.

#### MERITS OF INLAND WATER TRANSPORT

- ✓ **LOW COST:** Rivers are a natural highway which does not require any cost of construction and maintenance. Even the cost of construction and maintenance of canals is much less or they are used, not only for transport purposes but also for irrigation, etc. Moreover, the cost of operation of the inland water transport is very low. Thus, it is the cheapest mode of transport for carrying goods from one place to another.
- ✓ **LARGER CAPACITY:** It can carry much larger quantities of heavy and bulky goods such as coal, and, timber etc.
- ✓ **FLEXIBLE SERVICE:** It provides much more flexible service than railways and can be adjusted to individual requirements.
- ✓ **SAFETY:** The risks of accidents and breakdowns, in this form of transport, are minimum as compared to any other form of transport.

#### DEMERITS OF INLAND WATER TRANSPORT

- ✓ **SLOW:** Speed of Inland water transport is very slow and therefore this mode of transport is unsuitable where time is an important factor.
- ✓ **LIMITED AREA OF OPERATION:** It can be used only in a limited area which is served by deep canals and rivers.
- ✓ **SEASONAL CHARACTER:** Rivers and canals cannot be operated for transportation throughout the year as water may freeze during winter or water level may go very much down during summer.
- ✓ **UNRELIABLE:** The inland water transport by rivers is unreliable. Sometimes the river changes its course which causes dislocation in the normal route of the trade.
- ✓ **UNSUITABLE FOR SMALL BUSINESS:** Inland water transport by rivers and canals is not suitable for small traders, as it takes normally a longer time to carry goods from one place to another through this form of transport.

#### V. REVIEW OF RELEVANT LITERATURE

The United Nations Economic Commission for Europe (UNECE) asserted that inland water transport is a viable alternative of addition to road and rail transport, though environmentally – friendly and, frequently the most economical mode of inland transport. It remains largely under exploited in Europe. This goes to show that the under - utilization of the water transport sub sector is not just a national but global issue

According to Akande et al (2011), inland water transport, has prior to the 80”s received little attention from Nigerian government. He stated that very little was done to develop inland water facilities while land and air received priority attention. However, the rapid urban growth, population, commercial units, institutions and vehicular traffic lead to congestions and stress on the nation’s road and as allowed the

government and the private sector had a rethink about the water transport sub sector since water transport has the ability to tackle congestion problems when used as a compliment. In a recent study of ferry service routes in Lagos, Adejare et al, (2011) stated that traffic congestions are considered as one of the main urban problems with an estimated cost of \$100 billion in the US and comparable costs in other countries. (Victoria Transport Policy Institute, 2005). The social and economic wastes from congestion have necessitated the need for water transportation as a full time support to the development of Lagos.

Akpomere and Nyorere (2013) were of the opinion that in Lagos, the potentials of water transport remains largely untapped as it's evident in the state traffic flow matrix with water transport moves only one percent of the state total traffic flow.

Badejo (2000) cited that as an alternative mode, water transport has all initiatives and activities put together to ensure the ease of movement of goods and persons from land to water and vice versa Also in 2011, he explained that in spite of the inherent potential if Nigerian inland water ways to deliver efficient and effective transport services to the people and the community, progress and opportunities in the sector that could have been harnessed to generate revenues and boost economies have been stymied by various negative factors such as lack of vision , policy and political will.

Ndikom (2013) opined that the state of Nigeria inland waterways despite its great potentials is under prioritized, underutilized and highly underdeveloped. He went further saying that the federal government currently hopes to address this through the dredging of the lower Niger. Also, Obeta (2014) posited that Inland water transport in Nigeria has had a long history of neglect by both government and the private sector. He explained that little efforts were made to develop inland water transport facilities prior to the 1980s. This stems largely from policy inconsistency, limited private sector involvement, and conflicts between and among agencies involved in the management of inland water transport in Nigeria He also made reference to Ndikom (2013) which stated that there has been a considerable decline in the use of water transport in Nigeria. This was attributed to several physical constraints impending growth and performance in the sector. This has created an urgent need for innovative actions and strategies which can radically improve the sector so that it continues to remain the bedrock of trade, industrial and economic growth.

In this light, Olawepo (2010) explains that the level of state government and private sector involvement in developing inland water ways is steady and progressive. He mentioned that as part of the developmental efforts of government to make policy that will in turn drive water transportation in the state to improve residents' quality of lives and to sustain economic development, Lagos Metropolitan Area Transport Authority (LAMATA) is doing everything possible to open waters route and develop infrastructure in the state .LAMATA (2009).

Going further, Badejo (2011) was of the opinion that public – private partnership provides a viable option to revive water transportation in Nigeria. He explained that the direct merits the private partners will bring on board will include but

not limited to huge financial investments, needed expertise and experience e. t .c while indirect benefits expected to accrue to the sub sector includes better and improved water transport security, easy multi modal linkage and so on.

Somalia (2013) posited that for the transportation sector to move forward in Nigeria, there is a need for the government to formulate enduring and sustainable transport policies that will enable the country cater to the future of transportation.

## VI. DISCUSSION OF FINDINGS

This presents the empirical analysis of demand of commuters in Lagos State as regards intra city water ridership. These items are investigated through the responses to two hundred and eleven questionnaires retrieved out of the two hundred and fifty questionnaires produced and administered. Respondents were grouped based on their occupation, educational qualification, age and annual income to determine the reliability of the data collected.

The responses are however used to analyze each of the research questions as discussed below. It will see the use of frequency table to present the distribution and opinion of the respondents on the issues raised in the questionnaire. The frequency table will show the count (frequency) and the percentage of respondents in each category.

### A. ANALYSIS OF RESPONSES

#### a. SOCIO-ECONOMIC CHARACTERISTIC OF RESPONDENTS

To understand respondents' background, lifestyle and attitudes to intra city water transport and transport modal choice, questions relating to their socio-demographics were asked. Factors such as age, gender, income, marital status were considered important as identified in literature (Clarke et al, 1983).

S/N	Respondents	Frequency	Percentage (%)
1	Age below 18 yrs.	16	7.58
2	18 – 25 yrs.	42	19.91
3	26 – 34 yrs.	71	33.65
4	35 – 45 yrs.	44	20.85
5	Above 46 yrs.	38	18.01
	<b>Total</b>	<b>211</b>	<b>100</b>

Source: Fieldwork, November, 2015

Table 6.1: Age Distribution of Respondent

The age distribution of respondents as in table 6.1 above clearly shows that there are more commuters between the ages of 26 with the rest age group accounting about 55%.

S/N	Respondents	Frequency	Percentage (%)
1	Male	136	64.45
2	Female	75	35.55
	<b>Total</b>	<b>211</b>	<b>100</b>

Source: Fieldwork, November, 2015

Table 6.2: Gender Distribution of Respondent

Table 6.2 above shows the gender distribution of respondents in the survey with more proportion of the population to be males.

S/N	Respondents	Frequency	Percentage (%)
1	SSCE	32	15.12
2	OND / NCE	58	27.49
3	HND / BSC	102	48.34
4	OTHERS	19	9.00
	<b>TOTAL</b>	<b>211</b>	<b>100</b>

Source: Fieldwork, November, 2015

Table 6.3: Academic Qualification of Respondents

Taken into account the literacy level of respondents, the above Table 6.3 depicts that almost half of the sample are HND / B.SC degree holders leaving the other categories to about 51%. This is an indication that the level of intelligence of the respondents is sufficiently high and their ability to comprehend survey questions cannot be doubted thus making their responses reliable.

S/N	Respondents	Frequency	Percentage (%)
1	Student	09	4.27
2	Self employed	124	58.77
3	Civil Servant	35	16.58
4	Un employed	14	6.64
5	Others	29	13.74
	<b>Total</b>	<b>211</b>	<b>100</b>

Source: Fieldwork, November, 2015

Table 6.4: Occupation of Respondent

The occupation of the respondents from the Table 6.4 reveals that most intra city water users in Lagos are mostly self-employed individuals accounted for by more than half of the entire population.

S/N	Respondents	Frequency	Percentage (%)
1	Single	38	18.01
2	Married	71	33.65
3	Divorced	43	20.38
4	Widowed	27	12.80
5	Rather not answer	32	15.17
	<b>Total</b>	<b>211</b>	<b>100</b>

Source: Fieldwork, November, 2015

Table 6.5: Marital Status of Respondents.

The Table 6.5 shows that 33.65% of the sample are married individuals which constitute the largest percentage of the entire population. Following this is the divorced group to single, widowed and rather not say.

S/N	Respondents	Frequency	Percentage (%)
1	Below N10,000	13	6.16
2	N10,001 and N25,000	32	15.17
3	N25,001 and N50,000	68	32.28
4	N50,001 and 75,000	46	21.80
5	N75,001 and N100,000	33	15.64
6	Above N100,000	19	9.00
	<b>Total</b>	<b>211</b>	<b>100</b>

Source: Fieldwork, November, 2015

Table 6.6: Average Monthly Income of Respondents

There are relative variations in the annual income of sample across different groups. Respondents with an annual income below N120, 000 are much lower than other income

groups as is shown in Table 6.6 above. This suggests that respondents are within the middle income group in Nigeria.

### b. TRAVEL CHARACTERISTICS OF COMMUTERS

This section explains the travel characteristics of intra city water commuters in Lagos State

S/N	Respondents	Frequency	Percentage (%)
1	Yes	73	34.60
2	No	138	65.40
	<b>Total</b>	<b>211</b>	<b>100</b>

Source: Fieldwork, November, 2015

Table 6.7: Status of Travel by Water in Lagos State?

The Table 6.7 above shows that the larger proportions of the sample have not travelled by water in the state.

S/N	Respondents	Frequency	Percentage (%)
1	Daily	123	58.29
2	Weekly	38	18.01
3	Monthly	29	13.74
4	Yearly	21	9.95
	<b>Total</b>	<b>211</b>	<b>100</b>

Source: Fieldwork, November, 2015

Table 6.8: Frequency of Travel by Water in Lagos State

According to the Table 6.8, 58.29% of the sample travel by water daily in Lagos, This goes to show that a larger percentage of commuters do their daily commuting via water which may include home to work trips, home to school trips etc.

S/N	Respondents	Frequency	Percentage (%)
1	Very good	04	1.90
2	Good	25	11.85
3	Average	81	38.39
4	Bad	62	29.38
5	Very Bad	39	18.48
	<b>Total</b>	<b>211</b>	<b>100</b>

Source: Fieldwork, November, 2015

Table 6.9: Performance Level of Intra City Water Transportation In Lagos

From the table 6.9 above, respondents with 38.39% rated water travel performance while 18.48% of respondents were of the opinion that water travel performed poorly in the state.

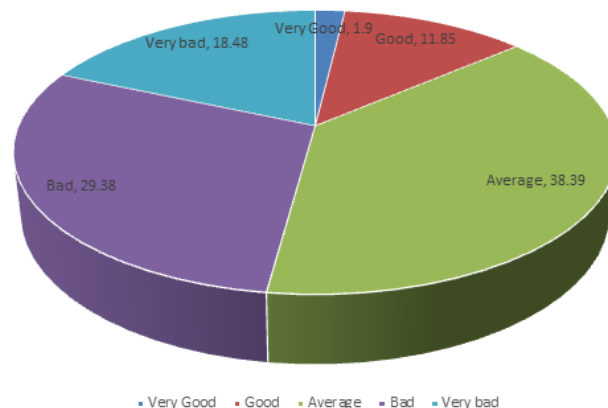


Figure 6.1.0: showing respondents rating of water transport performance in Lagos

S/N	Respondents	Frequency	Percentage (%)
1	Ikorodu to	46	21.80

	Marina/CMS		
2	Marina to Mile 2,	25	11.84
3	Ikorodu to Addax/ Falomo,	19	9.00
4	Ikorodu to Ebute - Ero	26	12.32
5	Marina to Ijegun Egba - Ebute Ojo	13	6.16
6	Mile 2 to Marina/CMS- Mekwen to Falomo	18	8.53
7	Badore to Ijede	12	5.69
8	Badore to Five Cowries,	08	3.79
9	Marina to Oworomsoki,	09	4.27
10	Ebute Ojo to Ijegun Egba,	17	8.06
11	Oworomsoki to Five Cowries	06	2.84
12	Bayeku to Langbasa	12	5.69
	<b>Total</b>	<b>211</b>	<b>100</b>

Source: Fieldwork, November, 2015

Table 6.1.0: Regular Routes of Respondents.

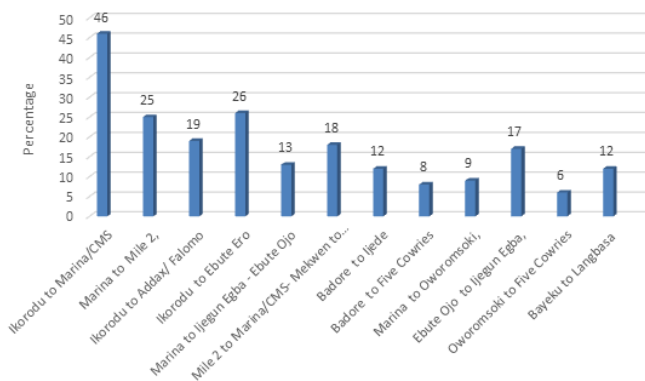


Figure 6.2: showing water routes of respondents in Lagos State

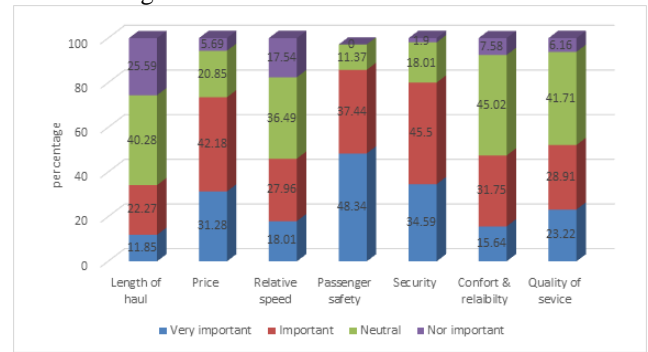
S/N	Factors Considered	Frequency	Percentage (%)
1	Length of haul	19	9,00
2	Price	44	20.85
3	Relative Speed	21	9.95
4	Passenger Safety	52	24.64
5	Security	38	18.01
6	Comfort and Reliability	23	10.90
7	Quality of Service	14	6.64
	<b>Total</b>	<b>211</b>	<b>100</b>

Source: Fieldwork, November, 2015

Table 6.1.1: Factors That Influence Demand For Intra City Water Travel

The table above 6.1.1 shows that respondents with a percentage of 24.64% consider passenger safety as their number 1 factor considered when deciding to travel via water. This is closely followed by price and security leaving quality

of service as the least factor that influence water travel demand in Lagos State.



Source: Fieldwork, November, 2015

Figure 6.3: showing factors considered important by respondents

In an attempt to understand the different factors and how they are prioritized, respondents were presented with seven possible factors considered when making their decision to travel via water were asked to identify how important they consider these factors when making decision to travel via water. The results are represented in the figure 6.3 illustrated above.

As expected, there was variation in the responses, although commuters considered some factors more important than others. As shown in figure above passenger safety, security and price were considered most important by more respondents.

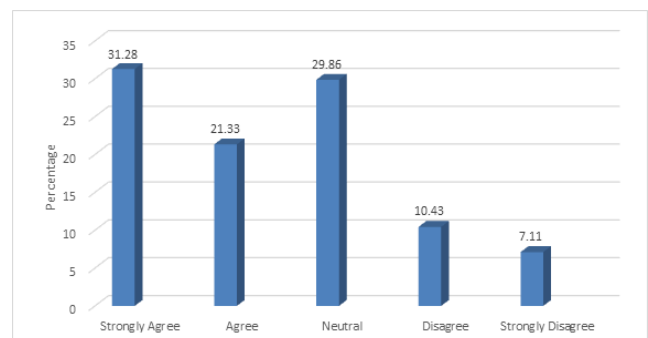
S/N	Respondents	Frequency	Percentage (%)
1	Yes	139	65.88
2	No	72	34.12
	<b>Total</b>	<b>211</b>	<b>100</b>

Source: Fieldwork, November, 2015

Table 6.1.2: Possibility of Travel If The Stated Factors Were Positive

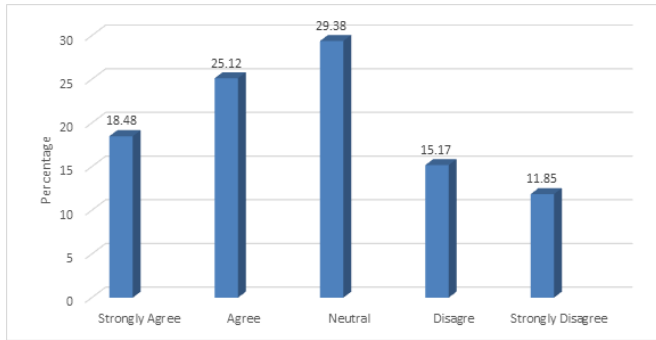
The above table 6.1.2 shows that more commuters' would be willing to travel via water in Lagos State if the above itemized factors were favorable. This is an indication that with increased intra city water ridership in Lagos, traffic can be diverted to the water thereby lessening the burden on the roads and thus eradicating road traffic congestion in the state

c. SUGGESTED POLICY MEASURES TO ENCOURAGE INTRA CITY WATER RIDERSHIP IN LAGOS STATE?

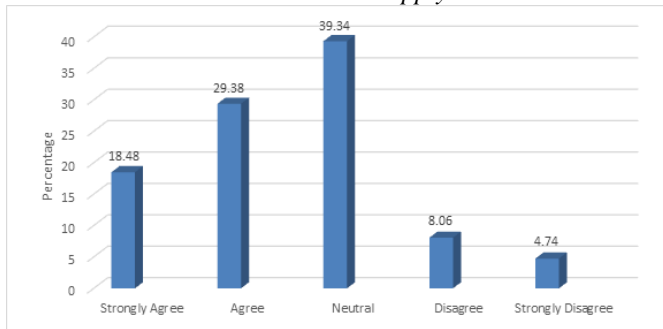


Source: Fieldwork, November, 2015.

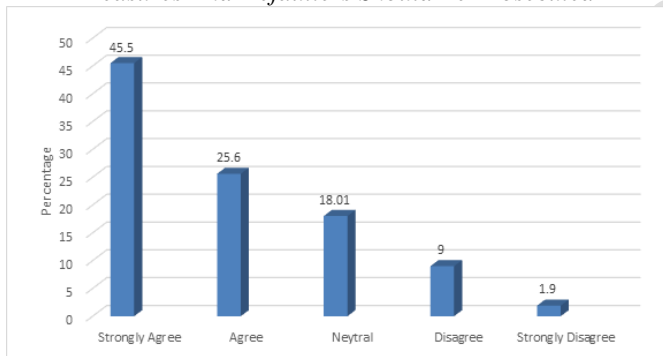
Figure 6.4: Policy Measure 1: Government Should Build More Water Infrastructure and Develop More Water Routes



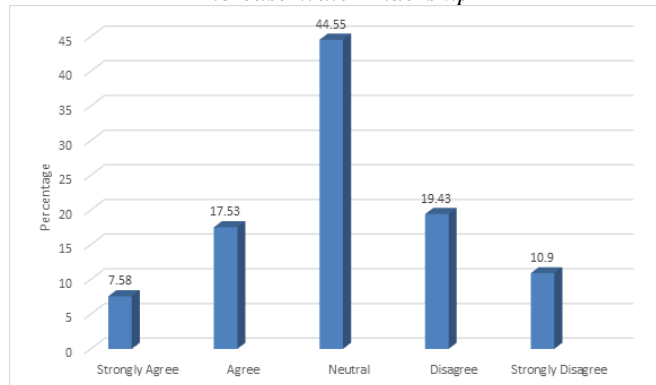
Source: Fieldwork, November, 2015  
Figure 6.5: Policy Measure 2: Government Should Provide Credit Facilities To Prospective Investors So As To Improve Water Travel Supply



Source: Fieldwork, November, 2015  
Figure 6.6: Policy Measure 3 Government Should Ensure Full Compliance of Water Operators To All Security And Safety Measures And Defaulters Should Be Prosecuted



Source: Fieldwork, November, 2015.  
Figure 6.7: Policy Measure 4 Fares Should Be Subsidized To Increase Water Ridership



Source: Fieldwork, November, 2015  
Figure 6.8: Policy Measure 5: Government Should Ensure That Adequate Insurance Cover Is Provided For Commuters In The Event Of Mishap

Analysis of Data Collected.

The data analysis was carried out through simple descriptive and correlation analysis. to confirm the hypothesis that were postulated.

	N	Minimum	Maximum	Mean	Std. Deviation
<b>FREQUENCY (Y)</b>	211	1	365	222.84	169.392
<b>INCOME(X1)</b>	211	10	100	49.80	27.790
<b>OCCUPATION(X2)</b>	211	9	21	19.28	3.024
<b>EDUCATION (X3)</b>	211	15	20	17.90	1.619
<b>Valid N</b>	211				

Table 6.6: Descriptive Statistics

HYPOTHESIS 1

H0 There is no significant relationship between frequency of travel by water and income.

H1 There is significant relationship between frequency of travel by water and income.

		<b>FREQUENCY (Y)</b>	<b>INCOME(X1)</b>
<b>FREQUENCY (Y)</b>	Pearson Correlation	1	-.890**
	Sig. (2-tailed)		.000
	N	211	211
<b>INCOME(X1)</b>	Pearson Correlation	-.890**	1
	Sig. (2-tailed)	.000	
	N	211	211

Table 6.5: Correlation Analysis between Frequency of Travel by Water and Income

Correlation is significant at the 0.01 level (2-tailed), therefore the null hypothesis is rejected and the alternate as there is significant relationship between frequency of travel and income.

HYPOTHESIS 2

H0 There is no significant relationship between frequency of travel by water and educational qualification..

H1 There is significant relationship between frequency of travel by water and educational qualification..

		<b>FREQUENCY (Y)</b>	<b>EDUCATION (X3)</b>
<b>FREQUENCY (Y)</b>	Pearson Correlation	1	-.717**
	Sig. (2-tailed)		.000
	N	211	211
<b>EDUCATION (X3)</b>	Pearson Correlation	-.717**	1
	Sig. (2-tailed)	.000	
	N	211	211

Table 6.5: Correlation Analysis between Frequency of Travel by Water and Educational Qualification

Correlation Is Significant At The 0.01 Level (2-Tailed), therefore the null hypothesis is rejected and the alternate accepted as there is significant relationship between frequency of travel and educational qualification..

Summarily, from the analysis of data collected, there is a significant relationship between the frequency of intra city water travel in Lagos State and the income

## VII. RECOMMENDATION

Even though water transport systems are not the final solution to transport problems in Lagos but it will help form an integrated system of different modes. Despite the fact that the private sector has helped reform the existing transport system in Lagos Metropolis by providing a more competitive service rather than competing for passengers, the system requires the water transit be given increased respect and priority in transportation planning decisions, including investment.

There is need to ensure greater coordination with local planning and operating agencies for the purpose of identifying water potential, the need to conduct research, develop operational techniques and promote the use of technology to enable safe and efficient deployment of water transportation system.

The Lagos water transport system has been a victim of unpreparedness; the result of which was to be trapped into obsolescence through poor infrastructure, policy inconsistency, unprofitable and uneconomic returns on investment. There is need to reposition the water transport system so that it can contribute positively to the social, economic, cultural and political progress of the country. It is for these reasons that partnership between public and private sectors has become an inevitable option to salvage the sinking water transport transportation and make it more result oriented, functional and sustainable.

Taking seriously the twin-issue of safety and security in the water transport system, example of which is the necessity for the establishment, and on the other hand, adequate funding of the Marine Police and Coast Guards to ensure operational efficiency.

In order to improve customer satisfaction on water transport, the decision maker and provider have to improve service quality in water transport system.

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