

## Road Users' Awareness and Utilization of Traffic Information on *Google Map* in Abeokuta Metropolis of Ogun State, Nigeria

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### Abstract

Globally, mobility and transportation are major socio-economic activities within human settlements. In Nigeria, automobiles are mostly used for the conveyance of people and goods. However, limited road networks, ineffective railway system and poor road transportation management remains perennial problems, leading to other challenges relating to human health and lifestyles. Hence, the need for effective uses of available mobile and digital traffic informational services such as *Google Map*. Therefore, this study investigated road users' awareness and utilization of traffic information on *Google Map* in Abeokuta metropolis Ogun State, Nigeria. Descriptive survey research design was adopted, and multistage sampling technique was adopted to select 175 road users as respondents within study area. Instrument for data collection was a researcher-designed questionnaire named 'Awareness and Utilization of on *Google Map* Traffic Information Questionnaire' (AwUtGoMaTrInQ);  $r = 0.947$  and the data was analysed using descriptive statistic. Findings revealed that majority (54.3%) are vehicle owners; with (54.3%) daily transit frequency, majority (81.1%) reported smart phones accessibility with (73.1%) activated *Google Map* mobile account. Again, majority of the road users in Abeokuta metropolis are fully aware of traffic information on *Google Map* to a large extent; aggregate mean score = 2.50 and are relatively utilizing traffic information on *Google Map*; mean scores range between 2.14 to 2.43. The study concluded that the road users are fully aware and are relatively utilizing traffic information on *Google Map*. It recommends that road users should continue to use information from *Google Map* to plan their journey time and to reduce traffic congestion on the major roads in Abeokuta metropolis.

**Keywords:** Awareness, *Google Map*, Road users, Traffic information, Utilization

### Citation

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### Introduction

Transformational development nations, region and continents of the world are unattainable without transportation, because transportation is considered as a critical factor for physical, economic, and political development and growth (Oyesiku, 2002). In this regard, one of the impediments to the free flow of human and vehicular movements is traffic congestion and accidents in major cities and nations of the world which are mostly caused by road users.

This could be the reason why Ihara (2011) noted that automobiles play a significant role in conveying people and moving their goods from one place to the other upon which their lifestyles and economy are dependent on all aspects of the society. Mobility and transportation are fundamental social and economic activities within and among human settlements and it is important for both rural and urban developments.

Road users are commuters which include private vehicle owners, commercial vehicle drivers who have access to drive a vehicle, some users who have access

to use a vehicle, government drivers, and company drivers who ply major roads. Some of the road users varied in demographic and psychological behavior as their driving competence varied also. It is rather unfortunate that the significant numbers of transport systems are threatened by the livability of the cities they serve. This may be one of the reasons why traffic congestions and accidents represent about 54.5% of all noticeable urban transport externalities (World Bank, 1999). Gbadamosi (2013,) also submits that land conversion from its original development plan also contributes to traffic congestions and accidents on the major roads. Hence, efforts by some industry players to proffer solutions to the problem associated with traffic control and managements. In the same vein, most of the considerable results and successes recorded so far in the history of mankind are the direct result of modern technologies.

One of such technological successes is the development and launching of *Google Map*. *Google Map* is an application on the Internet that gives road direction to users who are familiar with its use. For instance, a road user who does not have knowledge on how to get to a destination could get direction using the *Google Map* precision and accuracy. *Google Map* is a digital technology aimed at the map of the world. It is a mapping and navigation application for desktop and mobile devices from Google (Mathew, 2013). The maps offer turn-by-turn direction to a destination along with 2D and 3D satellite views, as well as public transit information along with dedicated parking assistance features. Mathew (2013) further reported that, the mobile version of the *Google Map* was first released for Android devices in 2008 and it was made available for other mobile platforms, including *Symbian*, *Blackberry*, and *Palm*; Apple Mapping app was also powered by *Google Maps* data. *Google Maps* utilizes the device's GPS capability if present as well as Google's own cellular and Wi-fi location finding services for its functionalities.

In August 2013, *Google Map* was rated to be the world's most popular app for smartphones, with over 54% of global smartphone owners using it at least once (Carlson, 2016). There are also *Google Street* views which the maps also offer through photographic views of the turns, which show the real streets and surroundings (Brown, 2017). On directions and transit, *Google Maps* provides a route

planner, allowing users to find available directions through driving, public transportation, walking, or biking. Google has partnered globally with over 800 public transportation providers to adopt General Transit Feed Specification (GTFS), making the data available to third parties (Brown, 2017). Accordingly, research studies on the causes of traffic congestions, crashes and deaths revealed as follows; crash exposure (Williams, 2005) as well as inappropriate driving experience, higher-order perception, and alcohol-induced driving, long travel time, underage driving as well as stress and maturity contribute to the substantial increase in drivers, congestion (Peck, 2011).

In Nigeria, for instance, Lagos-Ibadan Express way being the only highway that connects Lagos State to other parts of the country, commuters traveling from their residential areas to other states spent substantial part sometime long numbers of hours in traffic on a one-way journey to their destination as a result of multiple accidents involving articulated Lorries and other minibuses. Thus, sharing correct and up-to-date information about traffic congestion and accidents are considered essential and will assist motorists in planning their journey. Federal Road Safety Corps (FRSC) saddled with responsibilities of traffic management in Nigeria, in its statistics recorded 3,947 road crashes and 1,758 deaths in the first quarters of the year 2020 (FRSC, 2020).

Invariably, there are other issues surrounding traffic congestions that often impede free movement of vehicles on inter-city or intra-city road. However, limited roads networks and road transportation management is becoming a perennial problem to human and vehicular movements upon which economic growth and developmental activities are dependent. For instance, some vehicles often breakdown with highly flammable contents, land misuse activities, reckless driving, traffic volume exceeding road capacity during festive periods and road re-construction, and over-speeding from the drivers are a few of the challenges on major city roads in Nigeria. These factors are partly responsible for the increase in vehicular movement which further aggravates the flow of traffic on existing roads. Also, the National Bureau of Statistics (NBS) report indicated that the major cause of road crashes in the second quarter of the year, 2020 which accounted for 47% of the total crashes was speed violation (NBS,

2020). The report also revealed that a total of 855 Nigerians got killed in road traffic crashes. For example, the astronomical growth of vehicle ownership and use is growing bigger than the capacity of road traffic volume leading to expansion and re-construction of roads. The motor vehicle ownership growth rate is rising every year. NBS report further indicated that a total of 54,672 national driver's licenses were produced in Q2 2020 while a total of 155,552 vehicle number plates were produced in the same period. This implies that the number of vehicles plying major roads in Nigeria has increased astronomically placing a burden on traffic management.

Atubi (2012) noted that traffic management has been quite poor in many developing countries, despite the growth in transport demand and supply. The effect of traffic congestion and accident has become an impediment to people's mobility. To ease traffic congestions and motor accidents on the major roads could have been the reasons for some radio stations to initiate traffic broadcast programmes on morning and evening belts as well as the use of *Google Map* for navigation in the time of congestion. Consequently, sharing of traffic information is a strategy mostly employed by the stakeholders to influencing the public to behave more safely in traffic. Awareness of information on communication media platforms has been considered by many people as the most crucial ways of sensitizing road users to adopt safe road behaviours. In sharing traffic information by media outlets is regarded as part of fulfilling its social contract with the public through multiple channels that may include cell phones, social media platforms, and web interfaces (Atakiti, Ogunwemimo, Alao, Chioma, & Ofurum, 2016).

With the consideration for the role of technology in traffic management, this study is anchored on the Technological Determinism Theory; the theory is an approach that assumes that a society's technology determines the development of its structure and cultural values. According to Folarin (2003) the theory is believed to have originated from an American sociologist and economist Thorstein Veblen (1857 – 1929). The theory suggests that society's technology drives the development of its social structure and cultural values. Technological determinism seeks to show technical development, media, or technology as a whole, as a key mover in

history and social change (Folarin, 2003). It states further that, particular technical developments, communications technologies or media or most broadly, technology in general are the sole or prime antecedent causes of change in society, and technology is seen as the fundamental condition underlying the pattern of social organization.

According to the theory, people learn, feel and think the way they do because of the message they receive through the currently available technology. The present information technology presents people with the unique opportunity of communicating and interacting with one another through numerous sensory organs using digital tools, resources, devices and applications for information sharing, social networking and interactions. The theory assumes that the entire growth and development in the society is seen as being determined by technology; such that new technologies transform society at every level, including institutions, social groups and individuals. The theory applies to the study as it suggests that information and communications technologies in particular, are the basis on which the past, present, and even the future of the society is being determined. This implies that technologies such as *Google Map*, mobile and digital devices or the use of Internet tools and resources has the potentials to ensure a 'changed society'. Hence, ideas, concepts and information conceived in the *Google Map* Application which is available to members of the Nigerian public and globally, as well possess abilities to benefit road users in the curtailments of road and traffic challenges leading to accidents and deaths in the Nigerian society.

Many studies in recent past have reported on traffic management and they are found to be relevant and related to this current study. For instance, Salim (2014) investigated communication's role in safety management and performance for the road safety practice, by conducting a survey using a questionnaire among 165 employees and 135 managers. It argues that communication among organizations could play an important role in increasing road safety. The study, set out to get in-depth knowledge of the role of communication, thus, the study measured managers' and employees' perceptions of the communication's role on six safety management and performance criteria for road safety practices Findings from the study revealed that safety

feedback is identified as the most important safety management issue to road safety practices and it would predict the level of safety knowledge, safety motivation, safety compliance, and safety participation. The study concludes that communication should help the concerned agencies and organizations in improving their ability to assess the road safety indicators and to the future development of the safety performance management for road safety practices in such agencies and organizations.

Again, Atakiti *et al.*, (2016) reported on the role of media in educating road users on traffic management in Lagos State, Nigeria. The study adopted the survey research design using purposively sampling technique, it involved 300 road users from Ikorodu Road, Ojota, Alapere, Third Mainland Bridge axis and Victoria Island. The study revealed that the majority (63.4%) of the road users in Lagos monitor traffic information daily which provides useful tips on traffic management and hints on alternative routes during gridlock. The study concluded and established the fact just like that in most megacities in the world; road traffic is a problem in the city of Lagos, that usually, halting the flow of vehicular movements and business at a slow pace. From the foregoing, it is evident that previous studies focused more on reporting traffic situations, drivers' licensing issues as well traffic education using conventional media, but not many studies have focused on the use of *Google Map* in traffic monitoring

Mobility and transportation is fundamental to all human activities and more importantly, for social and economic development. Thus, automobiles play a significant role in conveying people and moving their goods from one place to the other upon which their lifestyles and economy are dependent on all aspects of the society. However, limited roads networks and road transportation management is becoming a perennial problem to human and vehicular movements upon which economic growth and developmental activities are dependent. For instance, the journey of few minutes or an hour, might take commuters over four to five hours due to traffic congestion, bad roads and limited roads networks within Ogun State. The resultant effects lead to man-hour loss, low productivity and economic loss.

Despite the traffic and vehicular movements monitoring by Ogun State Traffic Management Agency and the availability and accessibility to functional information on *Google Map* to members of the public to provide information or road directions and avoid traffic gridlocks, it is worrisome that traffic congestion and road crashes remains unabated as significant numbers of road users are still cut-up in the web of traffic congestion and accidents in Ogun State on daily basis.

From the foregoing, this study sets out to investigate the awareness and utilization of information on *Google Map* by road users in Ogun State. Therefore, this study investigated road users' awareness and utilization of traffic information on *Google Map* in Abeokuta metropolis, Ogun State.

### **Methodology**

Descriptive survey research design was adopted, and multistage sampling techniques were adopted to select 175 road users as respondents in Abeokuta metropolis. At the first stage, the cluster sampling was used in which the whole Abeokuta Metropolis was clustered according to major Local Governments Area that formed the metropolis; that is Abeokuta South and North. Thus, Abeokuta South Local Government had 15 political wards while Abeokuta North had 16 wards. At second stage, stratified sampling was used to delineate the whole areas with major traffic congestions where Adatan-Obatoko, Panseke-Adigbe, Lafenwa-Brewery, Olomore-Ita-Oshin were identified respectively. This was done for proper demarcation of the respondents' area. After this, purposive sampling was used to select 175 road users (vehicle owners) around these areas within the metropolis. Instrument for data collection was a researcher-designed questionnaire titled 'Awareness and Utilization of on *Google Map* Traffic Information Questionnaire' (AwUtGoMaTrInQ)  $r=0.947$ . The instrument was sectioned into A and B. Section 'A' was on demographic characteristics of the respondents while section 'B' was on analytical variables. Data collected were analysed with descriptive Statistical Package for the Social Sciences (SPSS) version 20.0.

## Data Presentation, Results and Discussion of Findings

**Table 1:** Distribution of Demographic Information of Respondents (n= 175)

Variable		Frequency	Percentage
<b>Gender</b>	Male	98	56.0%
	Female	77	44.0%
<b>Age</b>	Below 20yrs	5	2.9%
	21–30yrs	42	24.0%
	31-40yrs	64	36.6%
	41-50yrs	45	25.7%
	51-60yrs	16	9.1%
	61yrs & above	3	1.7%
	<b>Highest Educational Qualification</b>	No formal education	5
Secondary education		7	4.0%
ND/NCE		35	20.0%
HND/B.Sc./B.Engr.		93	53.1%
Postgraduate		35	20.0%
<b>Marital Status</b>	Married	119	68.0%
	Single	52	29.7%
<b>Occupation</b>	Divorced	4	2.3%
	Student	16	9.1%
	Civil servant	116	66.3%
	Entrepreneur	41	23.4%
	Chauffeur	2	1.1%
<b>Vehicle Ownership &amp; Accessibility</b>	<b>Own a private vehicle</b>	<b>95</b>	<b>54.3%</b>
	Access to drive a car	29	16.6%
	Access to use a vehicle	35	20%
<b>Driving skills</b>	Competent to drive	95	54.3%
	Licensed to drive	29	16.6%
	Inability to drive	35	20.0%
<b>Frequency of Transit</b>	Daily	97	55.4%
	Two days/week	8	4.6%
	Three days/week	25	14.9%
	Weekly	21	12.0%
	Missing value	23	13.1%
<b>Mobile Phone Type/Available</b>	Android phone	142	81.1%

	Iphone	23	13.1%
	Other phones	10	5.7%
<b>Google Map Activation</b>	Yes	128	73.1%
	No	36	20.6%

Table 1 shows the demographic information of the respondents; the table revealed that 56% of the respondents were male road users while 44% were female road users. In addition to that, crosstabs report revealed that out of the 56% male road users, 19.04% were competent, 28% were licensed to drive while 5.04% were inability to drive; also, out of the 44% female road users, 8.36% were competent, 14.96% were licensed to drive while 9.68% were inability to drive.

The table further shows that majority (53.1%) of the respondents were HND/B.Sc./Bachelor degree holders, 20% had postgraduate certificates, 20% were ND/NCE holders, 4% were SSCE holders while 2.9% had no formal education; 68% were married, 29.7% were single while 2.3% were divorced; 66.3% (majority) of the respondents were civil servants, 23.4% were entrepreneur, 9.1% were students while only 1.1% were chauffeur.

The table also revealed vehicle ownership and accessibility, 54.3% of the respondents owned private vehicle, 20% had access to use vehicles, 16.6% had access to drive vehicles while 9.1% of the road users

did not specify; 55.4% used the road on daily basis, 14.9% three days per week, 12% daily, 4.6% two days per week; based on available mobile phone, 81% of the road users used android phone, 13.1% used iPhones while 5.7% used other phones; and lastly, 73.1% of the road users in Abeokuta Metropolis had their Google Map activated while 20.6% did not.

In summary, majority (54.3%) are vehicle owners, daily transit frequency (54.3%), accessibility to Smart phones (81.1%), and majority (73.1%) has activated mobile account on *Google Map*.

Data presentation is in accordance with the research questions as follows:

**Research Question One:** What is the extent of awareness of traffic information on Google Map by road users in Abeokuta metropolis, Ogun State?

To answer this question, the data obtained from the respondents were subjected to descriptive statistics and the result is presented in Table 2a and Table 2b.

**Table 2a:** Extent of Awareness of Information on *Google Map* by Road Users in Abeokuta Metropolis, Ogun State (n= 175)

SN	Statements	Fully Aware	Partially Aware	Not Aware	Mean	Std. Dev.
1.	<i>Google Map</i> is an application available on the internet	143 (81.7%)	20 (11.4%)	12 (6.9%)	2.75	.572
2.	<i>Google Map</i> provides traffic direction on the highway	122 (69.7%)	35 (20.0%)	18 (10.3%)	2.59	.670
3.	<i>Google Map</i> is accessible on the Mobile devices	136 (77.7%)	25 (14.3%)	14 (8.0%)	2.70	.611
4.	<i>Google Map</i> required internet connection to function	129 (73.7%)	29 (16.6%)	17 (9.7%)	2.64	.654
5.	<i>Google Map</i> has no restrictions to its use	84 (48.0%)	59 (33.7%)	32 (18.3%)	2.30	.760
6.	<i>Google Map</i> provides names of street	113 (64.6%)	44 (25.1%)	18 (10.3%)	2.54	.676
7.	<i>Google Map</i> provides distances between	117	42	16	2.58	.655

locations	(66.9%)	(24.0%)	(9.1%)		
8. <i>Google Map</i> is accessible to the public	113 (64.6%)	42 (24.0%)	20 (11.4%)	2.53	.693
<b>Aggregate mean 2.6</b>					

**Source Field Survey, 2021; Decision mean = 2.00**

**Table 2b:** Extent of Awareness of Road Users in Abeokuta Metropolis, Ogun State on the Benefits/Uses of Information on *Google Map* (n= 175)

SN	Statements	Fully Aware	Partially Aware	Not Aware	Mean	Std. Dev.
9.	<i>Google Map</i> provides names of towns	116 (66.3%)	39 (22.3%)	20 (11.4%)	2.55	.692
10.	<i>Google Map</i> description is accurate	84 (48.0%)	68 (38.9%)	23 (13.1%)	2.35	.702
11.	<i>Google Map</i> predicts time to complete a journey	93 (53.1%)	51 (29.1%)	31 (17.7%)	2.35	.766
12.	<i>Google Map</i> provide traffic direction for cross country travels	91 (52.0%)	45 (25.7%)	39 (22.3%)	2.30	.811
13.	<i>Google Map</i> provide cautions on traffic congestions on the highway	100 (57.1%)	44 (25.1%)	31 (17.7%)	2.39	.772
14.	<i>Google Map</i> provides descriptions on demand by users	108 (61.7%)	45 (25.7%)	22 (12.6%)	2.49	.710
15.	<i>Google Map</i> guides road users to alternative route	101 (57.7%)	49 (28.0%)	25 (14.3%)	2.43	.731
<b>Aggregate mean 2.4</b>						

**Source Field Survey, 2021; Decision mean = 2.00**

Table 2a and Table 2b show the Mean and Standard Deviation of awareness of information on *Google Map* by road users in Abeokuta metropolis, Ogun State. The tables revealed that majority of the respondents were fully aware with all the information about the *Google Map*. All the items in the table had their mean scores greater than the decision mean of 2.00. Further, the aggregate mean score of the items is 2.50 which is far greater than the decision mean score of 2.00. This implies that road users in Abeokuta metropolis, Ogun state are fully aware of information on *Google Map*. Therefore, road users in Abeokuta metropolis of Ogun State are fully aware of information on *Google Map* to a large extent.

This finding corroborates the submission of Atakiti *et al.*, (2016) that awareness and informational services with the use of communication media platforms and multiple channels including mobile or cell phones, social media platforms and web interfaces are good

ways of sensitizing road users on safe road use and behaviours. This finding also justifies the Technological Determinism Theory which assumes that a society's technology determines the development of its structure and cultural values (Folarin, 2003).

**Research Question Two:** What is the extent of utilization of traffic information on *Google Map* by road users in Abeokuta metropolis, Ogun State?

To answer this question, the data obtained from the road users in Abeokuta metropolis, Ogun State were subjected to descriptive statistics and the result is presented in Table 3a and Table 3b.

**Table 3a:** Mean and Standard Deviation of Accessibility to Information on *Google Map* by Road Users in Abeokuta Metropolis, Ogun State (n= 175).

SN	Statements	VTM	TM	NTM	Mean	Std. Dev.
1.	Accessibility to active <i>Google Map</i> mobile Application	98 (56.0%)	54 (30.9%)	23 (13.1%)	2.43	.715
2.	Sustenance of active <i>Google Map</i> Mobile Application	82 (46.9%)	60 (34.3%)	33 (18.9%)	2.28	.763
3.	Active Internet access for <i>Google Map</i> Mobile Application	100 (57.1%)	48 (27.4%)	27 (15.4%)	2.42	.745
4.	Unrestricted access to <i>Google Map</i> Mobile Application	73 (41.7%)	64 (36.6%)	38 (21.7%)	2.20	.773
5.	Active engagements on <i>Google Map</i> for traffic directions	84 (48.0%)	50 (28.6%)	41 (23.4%)	2.25	.811
6.	Locating streets on <i>Google Map</i>	90 (51.4%)	49 (28.0%)	36 (20.6%)	2.31	.793
7.	Calculating distance between location on <i>Google Map</i>	75 (42.3%)	57 (32.6%)	43 (24.6%)	2.18	.803
8.	Ease of access to <i>Google Map</i>	87 (49.7%)	59 (33.7%)	29 (16.6%)	2.33	.746
<b>Aggregate mean = 2.3</b>						

Source Field Survey, 2021; Decision mean =2.00.

Note: VTM = Very True of me; TM = True of me; NTM = Not True of Me

**Table 3b:** Mean and Standard Deviation of Utilization of Information on *Google Map* by Road Users in Abeokuta Metropolis, Ogun State (N = 175)

SN	Statements	VTM	TM	NTM	Mean	Std. Dev.
9.	Locating towns on <i>Google Map</i>	85 (48.6%)	52 (29.7%)	38 (21.7%)	2.27	.796
10.	Accurate locating streets' description on <i>Google Map</i>	75 (42.9%)	63 (36.0%)	37 (21.1%)	2.22	.772
11.	Accurate locating towns' description on <i>Google Map</i>	72 (41.1%)	62 (35.4%)	41 (23.4%)	2.18	.786
12.	Accurate predicting transmit timing on <i>Google Map</i>	69 (39.4%)	62 (35.4%)	44 (25.1%)	2.14	.793
13.	Active engagements on <i>Google Map</i> for traffic direction during interstate trips	78 (44.6%)	49 (28.0%)	48 (27.4%)	2.17	.833
14.	Received cautions on traffic congestion on <i>Google Map</i>	73 (41.7%)	55 (31.4%)	47 (26.9%)	2.15	.817
15.	Providing descriptions on <i>Google Map</i> on demand for other road users	85 (48.6%)	53 (30.3%)	37 (21.1%)	2.27	.791
16.						
<b>Aggregate mean = 2.25</b>						

Source Field Survey, 2021; Decision mean = 2.00.

Note: VTM = Very True of me; TM = True of me; NTM = Not True of Me

Table 3a and Table 3b show the Mean and Standard Deviation of utilization of information on *Google Map* by road users in Abeokuta metropolis, Ogun State. The tables revealed that majority of the respondents fully utilized all the information gotten from the *Google Map*. All the items in the table had their mean scores (ranging 2.14 to 2.43) which greater than the decision mean of 2.00. Again, the aggregate mean score of the items is 2.25 which are greater than the decision mean score of 2.00. This implies that road users in Abeokuta metropolis of Ogun State are fully utilizing the information on *Google Map*. Therefore, road users in Ogun state are relatively utilizing the information on *Google Map* to a very good extent.

This finding further affirms the postulations of Atakiti, *et al.*, (2016) who reported on the role of information and communication media in educating road users on traffic management in Lagos State, Again, finding further justifies the Technological Determinism Theory which argues that the entire growth and development in the society is seen as being determined by technology (Folarin, 2003). This implies new technologies such as *Google Map* traffic information services could transform society at every level, including institutions, social groups and individuals as reported in this study.

### Summary of Findings

In summary findings from this study revealed that road users in Abeokuta metropolis of Ogun State recorded as follows; majority (54.3%) are vehicle owners, daily transit frequency among the majority (54.3%), accessibility the majority to Smart phones (81.1%), and majority (73.1%) has activated mobile account on *Google Map*.

Further, majority of the road users in Abeokuta metropolis are fully aware of information on *Google Map* to a large extent with an aggregate mean score of the items = 2.50 which is far greater than the decision mean score of 2.00. On utilization of the information on *Google Map*, road users in Abeokuta metropolis of Ogun State are relatively utilizing the information on *Google Map* to a very good extent as all the indicators had their mean scores ranging from 2.14 to 2.43) with each greater than the decision mean of 2.00.

### Conclusion and Recommendation

In conclusion, outcomes from this study revealed that majority (54.3%) are vehicle owners, with daily transit frequency of (54.3%), majority (81.1%), have accessibility to smart phones with (73.1%) activated mobile account on *Google Map*. Finding further revealed that majority of the road users in Abeokuta metropolis are fully aware of information on *Google Map* to a large extent aggregate mean score = 2.50 and are relatively utilizing the information on *Google Map* to a very great extent mean scores ranges between 2.14 to 2.43.

Traffic agencies in Ogun State should try to sensitize the drivers through their unions for the use of *Google Map* to plan their journey and to ease congestion on the road. The road users also need to apply and effectively utilize the information received on *Google Map* so as to guide them in order to use alternative routes in case of traffic congestion and so as not to compound traffic problem on the major roads. The media, relevant Government agency and stakeholders in the road transport industry need to create more awareness on the use of relevant and available technology to resolve road traffic congestions on major roads in Ogun State.

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