A Geographical Analysis of Free Bus Shuttle System in Ondo State, Nigeria

Abstract

Movements of people especially students from residences to their schools have become fundamental to punctuality and critical to their studies to the extent that it has drawn attention of researchers in recent years. The transportation needs of secondary schools have not been given desired attention by public schools whereas it is not the same in private schools. As critical and important the transportation needs of any nation are, the bedrock of development which is education needs to be given priority. If not, the target of the Universal Basic Educational (UBE), without first providing adequate transport facilities for school children will be a mirage. The research aimed at examining the policy of the State Government in providing free shuttle buses for the students in the state, the challenges and ways forward. Seven (7) towns in Ondo State (Nigeria), where free shuttle buses were being practiced were purposively selected. The selected urban centres are Ikare, Owo, Akure, Ondo, Okitipupa, Irele and Igbokoda. Five public schools were sampled in each of the purposively selected urban centres. Thirty-five schools were involved in the research efforts. Qualitative and quantitative data where deployed in the research. The qualitative data involved personal observation and in-depth interview on parents, teachers and Principals The quantitative data was collected through structured questionnaire administered to students, teachers and operators of the shuttle bus. An in-depth interview was conducted on seventy (70) parents in the study area. In the same vein, ten students from each arm of the classes (JSS I to SSS III) in the school were selected randomly. The Principals of each school selected were also subjected to an in-depth interview as well as all the bus operators. Secondary source of data include the use of maps (Ondo State map), published articles and journals. Data on school population and other information on public schools that were relevant to this research were collected from the State Ministry of Education. Data collected from the field were analyzed using descriptive statistical techniques. The result shows that since the commencement of the free bus shuttle, rate of lateness had been drastically reduced. Moral teaching and instructions given at the morning assembly had impact on larger number of students who come to school on time. It also had impact on rate of cognitive development of the students as more students attend classes. However, some shortcomings were also noted. For example, the last periods of the day always record few students' attendance and by implications, very few of them access the instructions during this period. This is because most of them are always eager to go and queue at the bus stops. The paper recommends that more buses should be provided for the schools. For now, not all schools had the privilege of being included in the scheme. Government should consider such schools and include them in the scheme of free bus system that the Government has provided for the students in the State.

Key words: Shuttle bus, cognitive development, junior secondary school (JSS), senior secondary school (SSS).

1.0 INTRODUCTION

All over the world, an efficient transportation system is regarded as a means to other ends which have a pervasive impact on socio- economic and political development of any nation (Ogunsanya, 2004). However, contact must be made and there must be movement to overcome the barrier of distance. This is made possible through the availability of an efficient and effective transportation system. It is however important to note that transport and its other ancillaries are

critical to any nation's educational development. In view of this it will be difficult to visualize meeting the target of any universal educational system for all without improvement in the sector.

The ease of connecting people with desired places at regular interval, at reasonable time, with least cost and assured level of safety and comfort makes transport most especially for students more important. Therefore an efficient transportation system is needed for school management system of any contemporary society. In Nigeria, School shuttle bus service is a public transport bus service designed to quickly move school children between points of access to various educational land use. Such a bus system will shuttle between two points, normally without any intermediate stops and with a high frequency of trips.

One of the most significant explanations of the factors influencing movement in any space is the one given by Ullman (1956). The theory outlined three (3) conditions that affect transport development. The three conditions are: Complementarity, Intervening opportunity and Transferability. The three conditions in summary revealed that, there is no single area that is blessed with equal opportunities, resources, goods and services. This unequal distribution of opportunities over space necessitates spatial interaction. Thus, while desires exist in one part of the city, fulfillment exists at the other side of the same city space. Therefore, before two areas can interact, there must be an effective demand or deficit in one area and a surplus in the other.

The establishment of basis for interaction once in place, the next thing is on how to move man, goods and services across points of destination and origins. It is, generally, measured in terms of time, money, mileage and nature of the route between areas of demand and that of supply. Thus, where the cost is too high, interaction may be drastically reduced or cut-off. With reference to the area (Ondo State) under study, schools are not evenly located, hence the need to move some students from one part of the town to another using public or private vehicle. Movement by individual students to different schools is marred by some inconveniences which could be corrected using a regulated shuttle bus system as currently being practiced by Ondo State Government in Nigeria.

1.2 STATEMENT OF PROBLEM AND JUSTIFICATION FOR STUDY

Cities in recent times have grown spatially to the extent that they have started to threaten the transportation that made them possible. In the past, it was relatively easy to move within a

settlement because of the short distant to be covered but today the situation has changed dramatically. This is because the rapid growth of cities anywhere in the world has impact not only for the land use but also for the spatial expansion. For example, the commuting distance of Lagos increased from 20km in 1970 to 35km in 1995 while that of Kaduna increased from 6km to 10km during the same period (Ikya, 1993). In Akure, the commuting distance increased from 5.2km in 1966 to 6.4km in 1976, 10.5km in 1986, 13km in 1996 and 19km in 2006 (Ogunbodede, 2006). The increase in commuting distance has impacted negatively on the movement of students who preferred schooling in public schools far away from their parents' residential areas.

The urban transport sector has myriads challenges not only in developing countries but also in developed world. Such challenges manifest in form of inadequate and poor quality infrastructures, mismatch between demand and supply, increased rate of accidents and difficulties in accessing public transport system. Students who move from their residential areas to schools on daily basis are not spared from the challenges of public transport services as noted above.

Urban transport challenges are so complex in some of the urban or suburban centers in Nigeria, due to the poor level of public transport services as well as the ever increasing demand for easy and efficient transport system by the general populace for their immediate use most especially in the school environments (both in the primary, post primary and the tertiary institutions). Thus, students at all levels are often the major casualty since a large proportion of them have to move to school by public transport which are largely inefficient.

Accident is another major challenge to smooth movement of students from their homes to their schools. Such accidents manifest in various forms when crossing roads, when on commercial motorcycle (okada) or using taxi-cabs. All these type of accidents have claimed lives of some innocent students and maim others.

Kidnapping of students for ransom is a phenomenon that is rapidly gaining ground as a crime all over the world. The victims of this heinous crime are often subjected to rituals in some

cases and raping of the female students in other cases. The movement of secondary and primary school pupils from homes to schools has often been the target of these criminal activities. Students who shuttle from home to schools using public transport system have been made vulnerable to this heinous crime.

In view of this, Ondo State Government in fulfilling one of its electoral policies introduced the free shuttle school bus system to ease the transportation challenges of the secondary school students (JSSI to SSSIII) in the state. This research therefore, will examine the prospect, challenges of free shuttle bus system and the way forward. This will enable us provide advice to Governments on how to improve on the service delivery of the free shuttle bus system in the State. It will also be useful as a guide to other State of the Federation that may be interested in duplicating the scheme in their own educational system.

1.3 LITERATURE REVIEW:

One of the most significant explanations of the factors influencing movement in any space is the one given by Edward Ullman (1956). The theory outlined three (3) conditions as stated below:

i. Complementarity is largely created by area differentiation. There is no single area that is blessed with equal opportunities, resources, goods and services. This unequal distribution of opportunities over space necessitates spatial interaction. Thus, while desires exist in one part of the city, fulfillment exists at the other side of the same city space. Therefore, before two areas can interact, there must be an effective demand or deficit in one region and a surplus in the other.
ii. Intervening opportunity is the occurrence of alternate supply or demand for goods and services between two regions involved in spatial interaction. It is often referred to as spatial sponge which soaks away potential interaction between two complementary spaces because it provides alternate opportunity to satisfying consumer's needs. Thus, the degree of this intervening opportunity will determine the level of interaction between the two areas concerned.
iii. Transferability is the constraints imposed on movement of goods. It is generally measured in terms of time, money, distance and nature of the route between areas of demand and that of supply. Thus, where the cost is too high, interaction may be drastically reduced or cut-off. However, it must be noted that transferability conditions

are not static. They change with time as a result of improvement in transportation which in turn results to increase in interaction and trade.

When applied to the situation in Ondo State, we discovered that students move from residencial land use to educational land use thereby fulfilling the condition of complimentarity. In the same vein, private schools exist side by side with Government schools and in most cases are closer to residences. This act as intervening opportunity because proprietors take advantage of areas where the presence of Government is not felt to locate their schools. More importantly is the issue of transferability which reduce the number of potential secondary schools students in distance locations. The costs to get to such schools as well as time taken to cover the distance are constraints to patronage.

Pupils' transportation to schools has become one of the most important segments of the education system especially in the developed world like London, United State of America and United Kingdom to mention a few. However, the numbers of school pupils conveyed by the free buses scheme in some of these countries kept on increasing on daily basis which allow the school busing system to be one of the greatest service provider in these part of the world (Behrens, Lindholm and Woxenius 2010).

The running cost of these free buses is considered highly expensive and thus is estimated to be about $500 per pupil annually. In Pennsylvania the reverse is the case, in that school pupil buses systems are being run at the expense of the state government (Allen and Keith, 2008). However, this situation is not different from what is obtainable in recent time in some developing countries of the world like Nigeria. According to a national annual survey carried out by the United states of America between 1999-2010, a lot of school children were involved in road accident through public transport services (Behrens, Lindholm and Woxenius, 2010).

In Nigeria, a lot of movement challenges manifest in form of long waiting time for buses at the bus stop, overcrowded on board and high transport cost as well as problem of insecurity and poor safety measure for the school children. However, the significance of the free bus system in Ondo State was to create an enabling safety environment and zero tolerant road accident for the students through political will. This, according to Ondo State Government, will further bring

about total removal of transport cost for students shuttling to school on daily basis as well as enhance students' academic performance.

1.4 THE STUDY AREA

Ondo State of Nigeria is the study area. It is located in South Western part of Nigeria. It lies between Latitudes 5^0 45'N and 7°52'N of the Equator and Longitudes 4°20' E and 6° 05' E of the Greenwich Meridian. The State has land area of about 15,500 square kilometres with population census, put the total population of Ondo State at 3, 460, 877. It is bounded in the East by Edo and Delta States, in the West by Ogun and Osun States, in the North by Ekiti and Kogi States and in the South by the Bight of Benin and the Atlantic Ocean

Agriculture is therefore, the basic occupation of the people. (Ondo State Annual Report, 2009). Ondo State falls within the tropical region with a tropical climate of double maxima of rainy seasons (April-October) and dry season (November- March). Temperature throughout the year ranges between 21°C and 29°C with high relative humidity. The annual rainfall varies from 2,000mm in the southern part of the State to 1,500mm in the northern part The landscape around Idanre, Akure and the whole of Akoko region is hilly, and has ridges with large granite formation of different heights range between 250 and 500 metres above sea level respectively. This gave rise to drainage basins, rivers and creeks such as Oni, Ofosu, Ogbese, Ose, Owena, Oluwa, Ala among others.

1.5 METHODOLOGY

Reconnaissance visits were paid to seven (7) towns in Ondo State where free shuttle bus system were being practiced. These were followed by contact settings, acquisition of necessary clearance and authorization from the Principals of some purposively selected secondary schools. Another aim of the contact setting was to make concrete appointments for data collection arrangements.

The selected urban centres in which free shuttle buses were in operation in the State are Ikare, Owo, Akure, Ondo, Okitipupa, Irele and Igbokoda. All these centres were purposively selected to cover all the areas where the scheme is currently being practised in the study area for this research. Population: The population of the study revolves round the number of buses in use for the scheme, students in the beneficiary towns as well as bus operators. Sample frame: Five public schools were sampled in each of the (7) seven purposively selected urban centres. Thirty-five schools were therefore involved in the research efforts in the study area.

Two methods were adopted in the collection of relevant information for this research work. These are Primary and Secondary sources of data.

- Primary data adopted involved ;
- Qualitative data were collected through personal observation as well as in-depth interview on parents, teachers and Principals
- The quantitative data were also collected through structured questionnaire administered to students, teachers and operators of the shuttle bus.

Description of the instruments of data collection

- **In-depth interview**: an in-depth interview was conducted on seventy (70) parents in the study area (Ten parents in each selected urban centre) both male and female. Information required from them include; the impact of the free shuttle buses on the students, parents and quality of education in the state
- **Questionnaire:** The structured questionnaire used to elicit information on the free bus scheme were divided into 3 sections as stated below:

✓ On the Students that patronise the scheme,
✓ The Head of the Schools/HOD/Teachers that are involved in the scheme
✓ On the bus operators involved in the scheme.

Multi stage sampling techniques was adopted to collect data for this research. Seven Urban centres were selected purposively while simple random sampling technique was used to select only four public secondary schools in each of the urban centres. In the same vein, ten students from each arm of the classes (JSS I to SSS III) in the school were selected randomly. The Principals of each school selected were also subjected to an in-depth interview as well as all the bus operators.

Information collected from the students through the structured questionnaire include; transport constraints before and after the introduction of the school bus shuttle, information on access point, waiting and access time, safety measures and security both on board and at the bus stops, information on the operating system of the bus among others. Other information needed also include, the nature of the route network, similarly photograph of the buses convening the pupil

were taken and information were gathered from the bus operators on the attitude of the students at the bus stop, on board as well as the running cost of the buses

Secondary source of data include the use of maps (Ondo State map), published articles and journals and Data on school population

- **Data analysis**: Data collected from the field were analyzed using both statistics. Mean, percentages and charts were used for the description. similarly, Likert scale and group arithmetic mean was used to order student's perception of statement problem.

1.6 ANALYSIS AND DISCUSSION

The importance of socio-economic variables in the movement of peoples in any environment cannot be over-emphasised. It is even more important when viewed from the position of primary and secondary schools students who by circumstances had to depend on their parents for transport money to make their daily journey to schools possible. The focus of this study is on secondary schools students and therefore their demographic status is highly important for a study of this nature.

The socio-economic variables of respondents in this study are therefore divided into two viz: for teachers and for students.

Response from Teachers

As indicated in Figure 1, the sex of respondents shows that 51% of the teachers interviewed are females and 49% are males. The pattern of percentages of teachers involved in the study shows almost equal mix of teachers in terms of gender. However, the pattern clearly shows female domination of the profession.

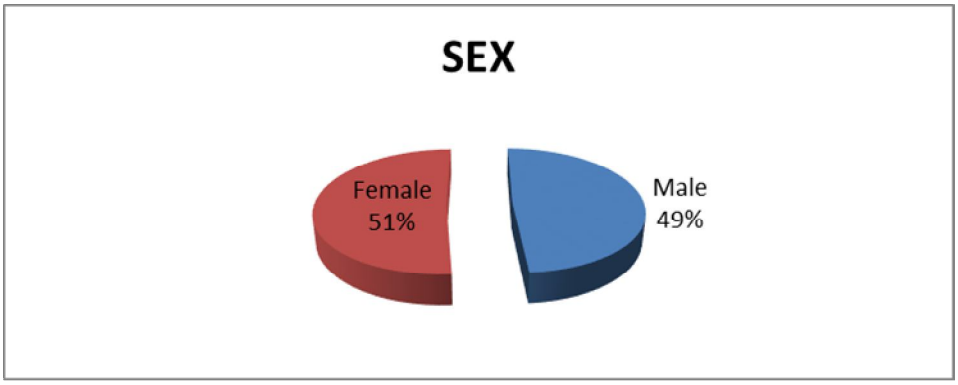

Figure 1: Sex of Teachers involved in the study (percentages)

The age range of teachers involved in the study is as shown in Figure 2. Age range of below 30, 35-40 and 41-45 years dominates the age pattern of teachers with over 46% of the total respondents under study. This shows that the teachers that participated in the research study are relatively young and very active in service.

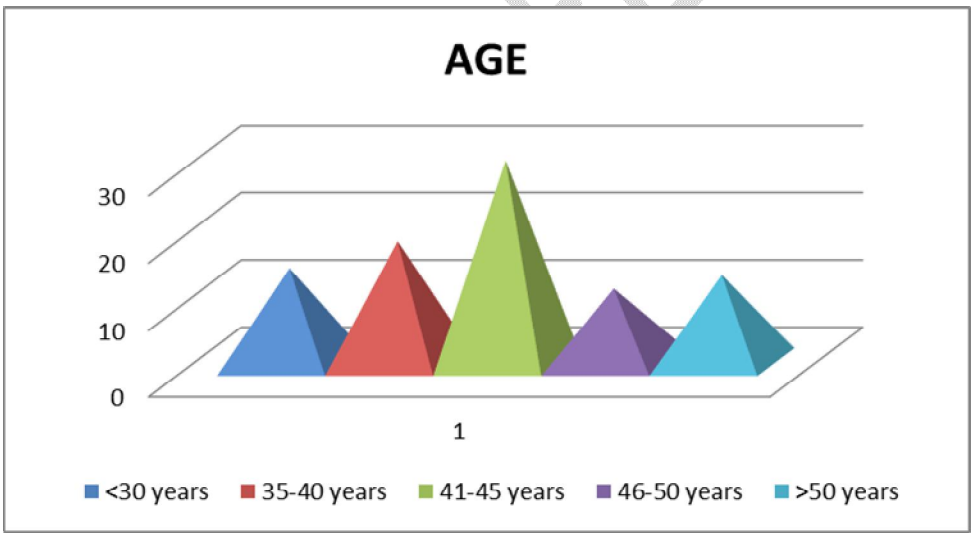

Figure 2: Age range of Teachers involved in the study.

Eight-eight percent (88%) of the teachers that participated in the study are married while four percent (8%) single and eight percent (4%) are divorced.

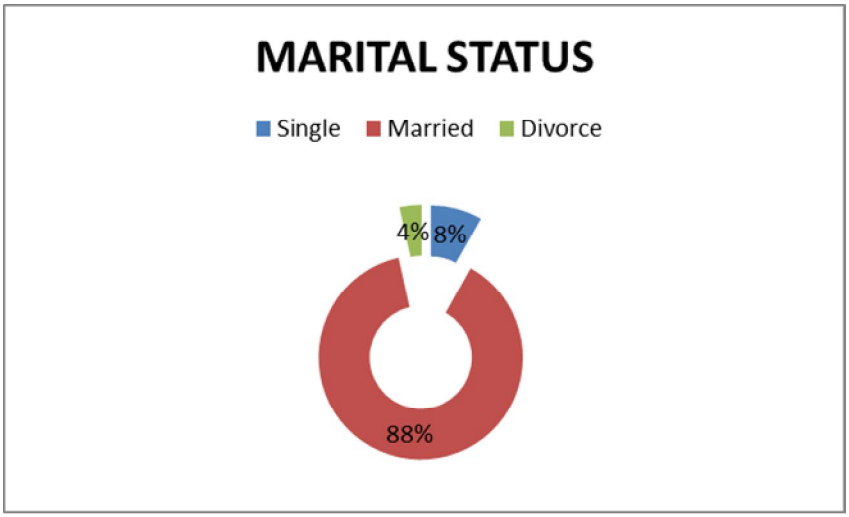

Figure 3: Marital Status of Teachers involved in the study.

In terms of educational background, the teachers in Ondo State are well certificated. Majority of them have Bachelors of Science or Bachelors of Education in their teaching subjects. Very few of them have NCE teaching in the secondary schools. Other qualifications that can be found teaching in the schools are HND, M.Sc and M.Ed. most of the teachers with B.Sc in teaching subjects have gone back to the university to obtain professional teachers certificate in education (PGDE) which make them properly qualified for the job.

Respondents from the students.

The age of the students that responded to the questions range from 11years to 19 years above. The dominant age range of the respondents is between 15 and 16. Very few students are found outside 19 years and above. It is believed that the students are quite matured for the questions that were posted to them on the issue of free shuttle system for public schools in Ondo State.

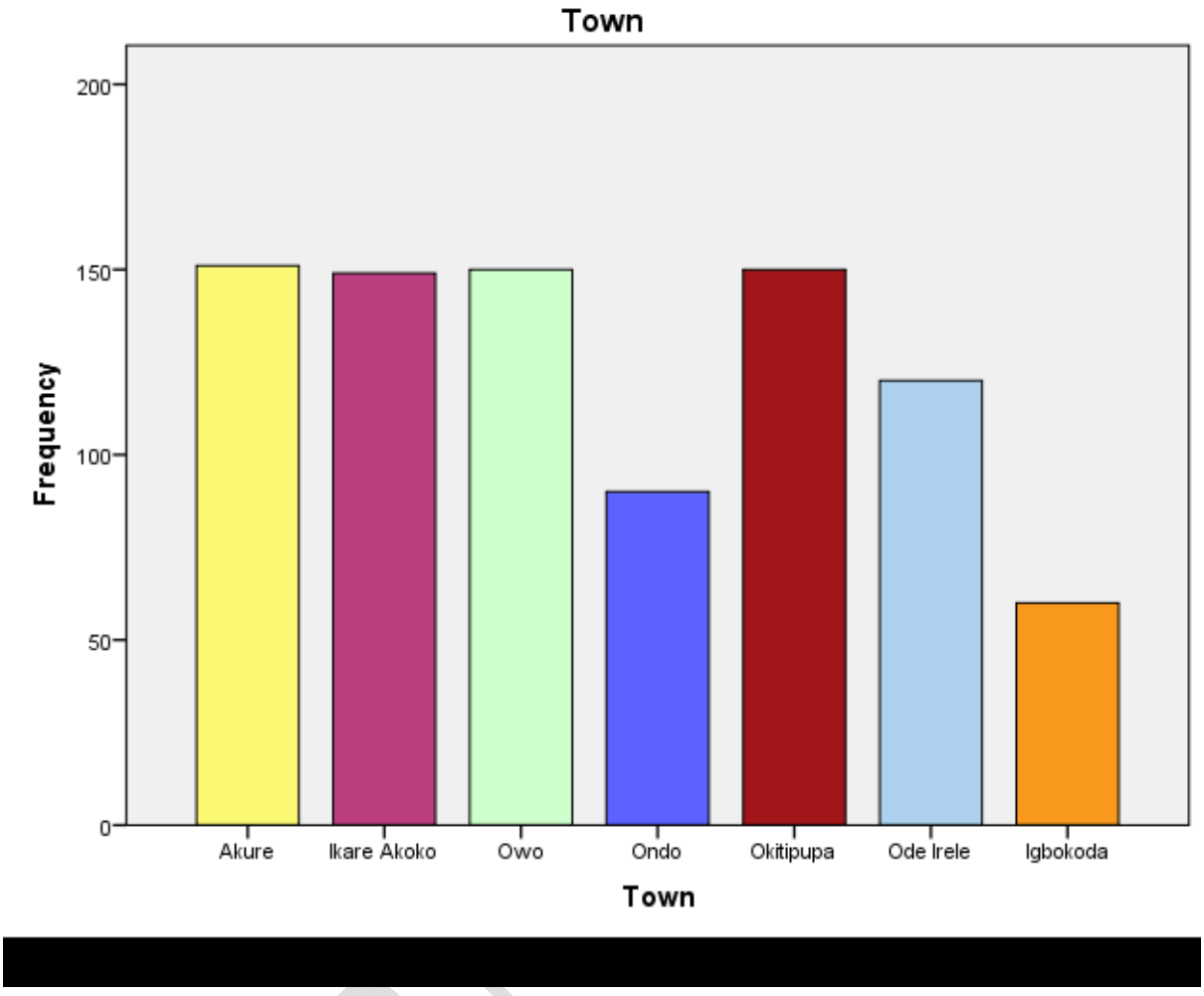

Figure 4: Towns visited in the study area

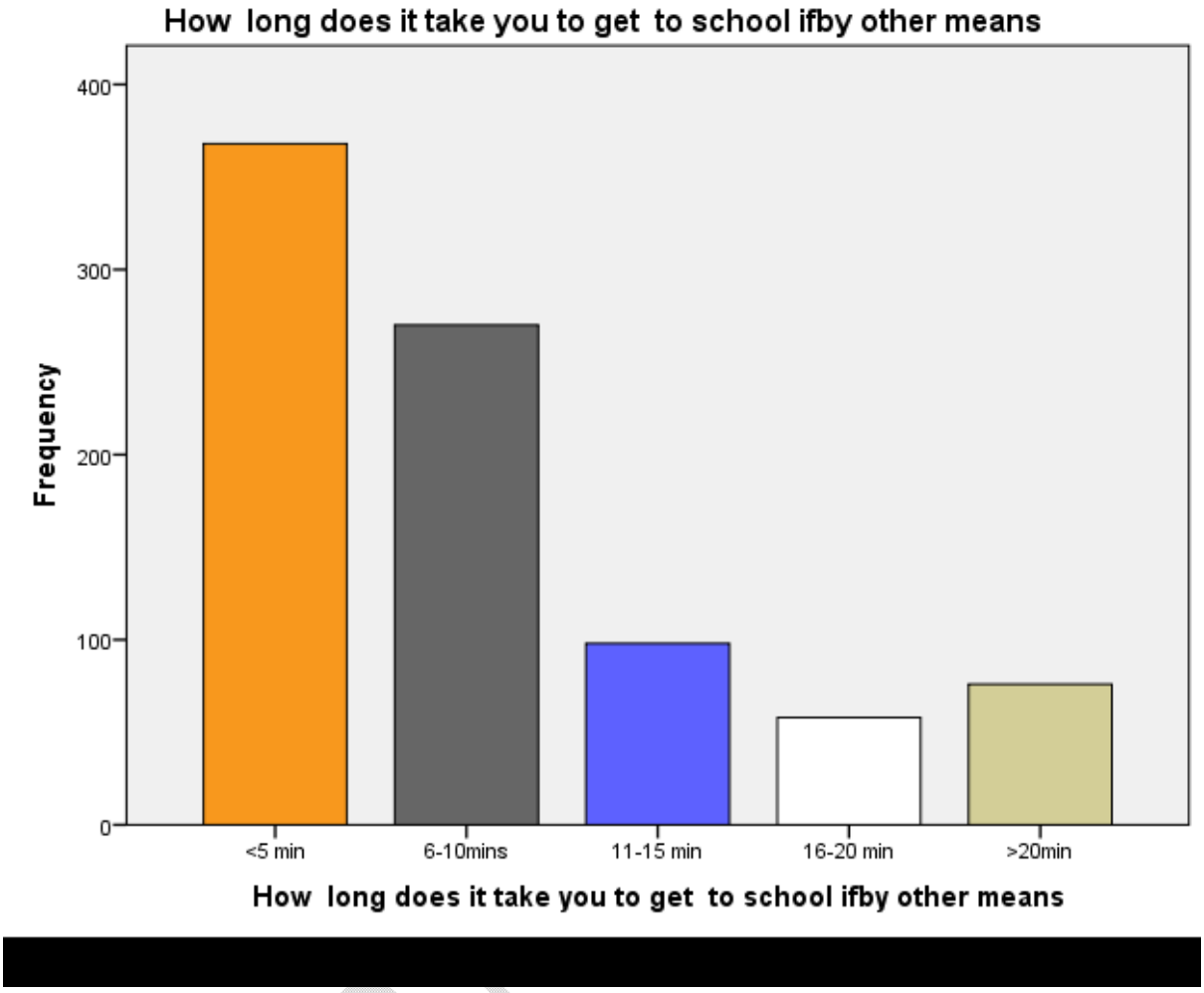

Figure 5: Time taken to get to school if by other means of transport is used

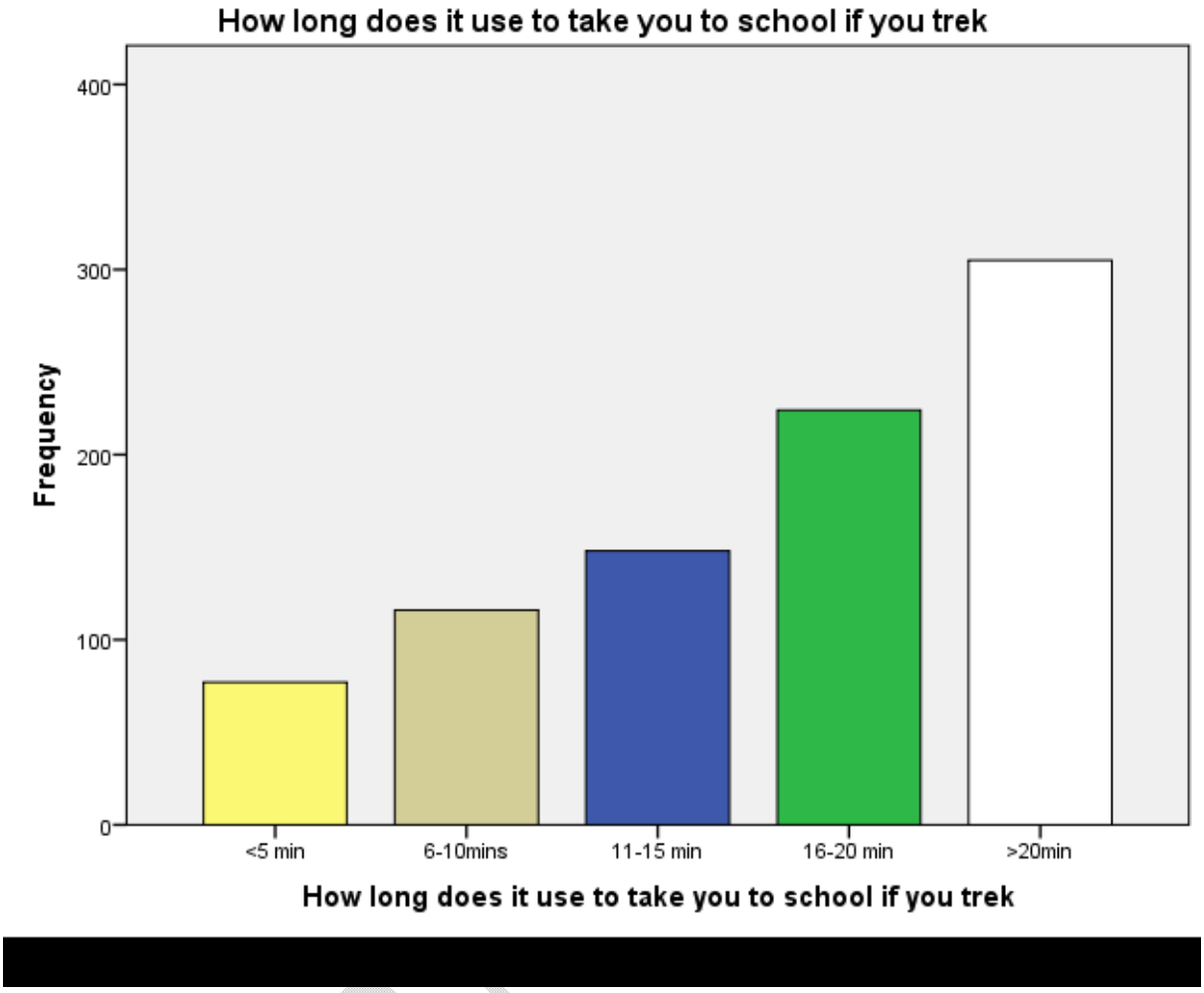

Figure 6: Time taken to get to school if Trekked from Home

The towns visited in Ondo State are as stated in **Figure 4**. The towns are Akure, Ikare-Akoko, Owo, Ondo, Okitipupa, Ode-Irele and Igbokoda. The copies of the questionnaire administered were not the same as for others with that of Ondo and Igbokoda because of the attitude of some Principals who failed to grant us audience because of the political situation of the State as at the time the field work was accomplished. However, we received maximum cooperation from Akure, Ikare-Akoko, Owo and Okitipupa.

Transport constraints of the students before and after the introduction of the Free Shuttle Bus Scheme

The transportation constraints of the students before and after the introduction of the free shuttle bus were examined. The students in addition to using trekking and bicycle which were non-motorised means of movement to their schools also use commercial motorcycle, tricycles, taxicabs and mini buses to actualize their movement to their schools. The study carried out however showed that trekking dominated all the means of daily movement of students to their schools. This shows that a lot of man-energy is used up in the journey to schools especially where the schools were not located within trekking distance to students' houses. It may not be a problem where their houses are close to schools. It should however be noted that Governor Ajasin's administration at inception of his administration encouraged the admission of secondary school pupils very close to their houses. As a matter of facts, the government encouraged giving admission to students in secondary schools to schools very close to their houses.

Unfortunately, the parents of brilliant students kicked against this policy because they want their wards and children to attend their old schools or schools that have good academic records. Subsequently, the Governments that took over yielded to the pressure of parents and started giving admission to pupils from primary schools without making walking distance to their choice of secondary schools an important criterion. The parents were thereafter left to foot the bills of transportation through public transport services or private vehicles of their parents. This was the genesis of how pupils of secondary schools in Ondo State migrated from trekking to the use of commercial vehicles as a means of movement to their schools.

Other noticeable constraints can be attributed to access to public transport during rainy season. During this season, the students find it extremely difficult to use motorcycle or trek to points were they can access automobiles to their schools. Those students that risk using motorcycles or trek are often beaten by rain and this may affect their studies. In some cases, the risk of accidents when riding Commercial motorcycles is another important constraints for the students.

Another noticeable constraint, though not common is the risk of students being kidnapped. There are cases of students that were kidnapped inside taxi-cabs or on the motor-cycles. Some students are also robbed inside the vehicles. These unpleasant situations make parents to make adequate provisions for their children or wards in order to get them to schools with minimum challenges. This was the situation until the free shuttle bus system was introduced by the State Government

The introduction of the free shuttle bus system was therefore a blessing to parents who were relatively poor as well as parents who were financially capable but could not guarantee the safety of their children who often take public transports because of some of the challenges enumerated before. A typical free bus system introduced to the Ondo State secondary school is shown by Plate 1 below.

Plate 1: Pictures of Buses used as free shuttle in Ondo State

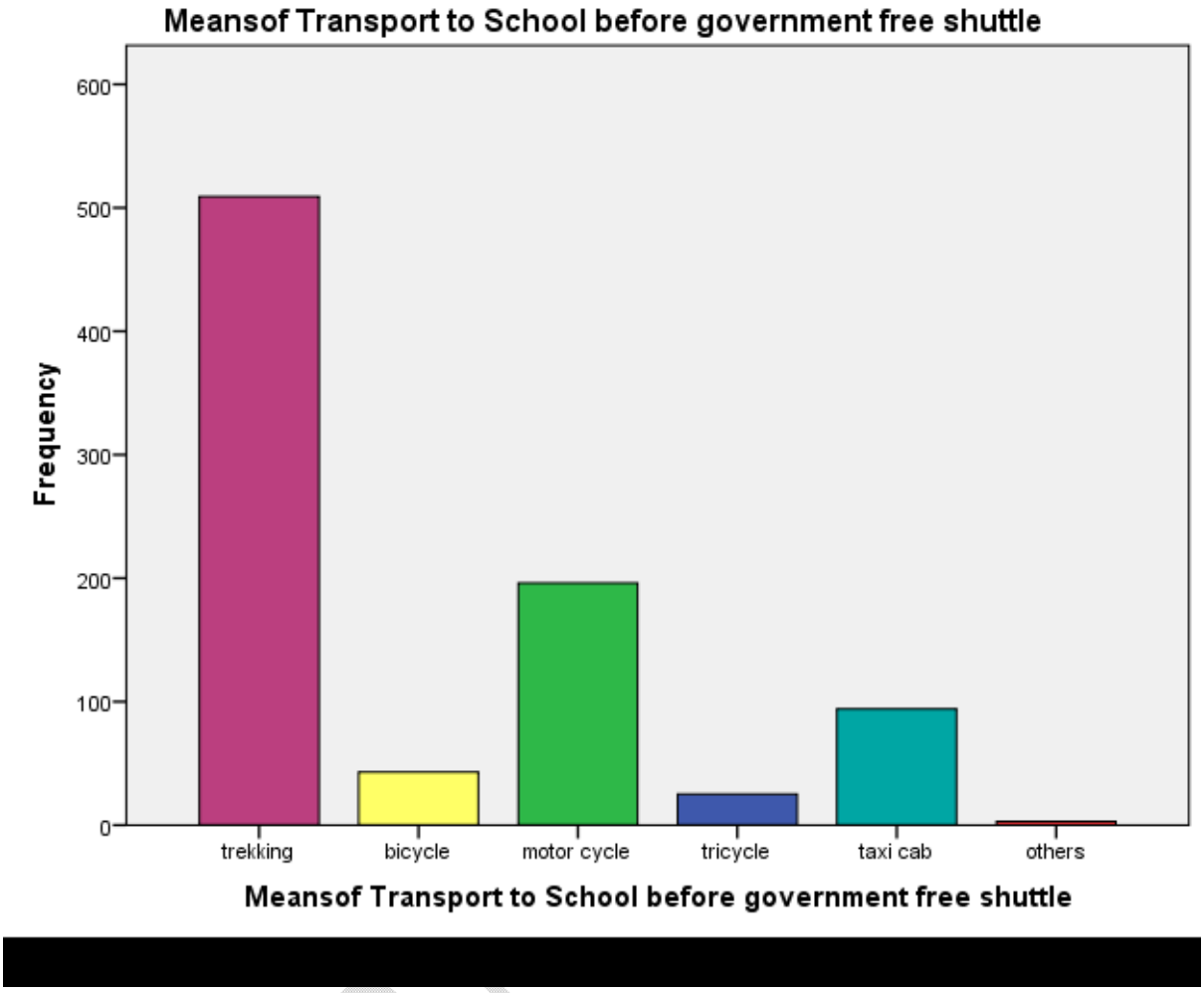

Figure 7: Means of Transport to Schools before Government Free Shuttle Buses

It was also discovered in the course of this research that some students get late to their schools before resumption time. This pattern is expected as a result of the fact that majority of the students pick schools of their choice outside their living abode environment. This made journey time to schools to be prolonged than what it used to be. Some of them still use trekking which also makes them to wake up very early in order to accomplish their aim of getting to schools before time of resumption. Although the statistics shows a high percentage of the pupils saying they don't get to schools late, however a large proportion of the students also confirmed that they get to schools late too (see Table)

Table 1: Resumption time of students before the introduction of the Free Shuttle Bus System

Resumption time	Before 8.00am	After 8.00am	Total
Frequency	387	493	880
percentage	43.98	56.02	100%

Plate 2 shows pupils around the schools in St Peters Government School bus stop, Akure queuing up for the free shuttle bus in one of the bus stop.

Plate 2: Students queuing up for Free Shuttle Bus at the St. Peters Bus Stop, Akure

In testing the reliability of free shuttle bus in Ondo State as perceived by the students, a four (4) item likert scale, measuring the frequencies of the responses from the students were taken. The frequencies were in a four (4) scale weighted 4,3,2 and 1 (strongly agreed, agreed, disagreed and strongly disagreed respectively). The mean of each statement item were analysed as stated in Table 2. The mean of each item was used to order the statement in descending order and in order of importance as perceived by the student. It was discovered that introduction of the free shuttle

bus has reduced the rate at which secondary school students get involved in accident drastically while undertaking trips to their schools. This is followed by the fact that free shuttle bus is safe and reliable. The study however rejected the statement that careless driving is common to the free bus shuttle system of the Ondo State Government as revealed by Table 2.

Attempt was also made to determine level of rejection or acceptance of each statement item by getting the Cumulative Gross Arithmetic Mean (CGAM) of the Table 2. The result shows that CGAM was 284.15 and this was set as a baseline for accepting or rejecting any statement that has to do with reliability of free shuttle bus as perceived by the students. Three statement item as shown in Table 2 were accepted while careless driving as being common to the free shuttle bus drivers was rejected.

Table 2: Reliability of Free Shuttle Bus as Perceived by Students

S/No	Statement of facts	SA	A	D	SD	Total	Mean of X	Order	Remark
1	Introduction of the free bus shuttle has really reduced your stress of getting to school and back home	534	205	101	30	870	298.3	3rd	Accepted
2	Introduction of the free bus shuttle has reduced the rate at which students are involved in traffic accident	605	178	60	27	870	310.1	1st	Accepted
3	Careless driving is common to the free shuttle bus drivers	176	229	330	135	870	218.6	4th	Rejected
4	Free shuttle bus is safe and reliable	604	170	74	22	870	309.6	2nd	Accepted

Cumulative Group Arithmetic Mean (CGAM) = 284.15

Generally, most of the cities in Nigeria are over populated as a result of rapid urbanization and this has led to increase in the demand for public transport. The demand for public transport transcends school age youths, government workers and businessmen in urban environment. In Nigeria, both the private and public sectors are involved in the provision of urban bus service. According to Oni (2004), the first public transport began in 1915 with two buses operated by a family. By 1929, J. N. Zarpas, a Greek business family commenced a

reliable and an efficient bus service which plied Obalende, Apapa and Idi-oro. This service was later supplemented by Oshinowo bus service.

In 1988, because of the then urban mobility challenges, the Federal Government directed that state established Mass Transit Agencies with the objectives of providing urban bus mass transit services commence business. The Mass Transit of the Government again failed. The private sector which had been practicing para-mass transits were further encouraged to take up the bus service provision in urban centers.

The situation had been like this especially in place like Lagos until the Government of Lagos State introduced the Rapid Bus System (BRT) to fill the gap which private providers of para-mass transit left behind. The BRT has successfully been operated in Lagos and more of new buses are daily being purchased to increase the existing stock of fleets. The para-mass transit and the BRT had been the major provider of commuting services to people in Lagos State inclusive the students in public secondary schools. The situation was however different in private secondary schools where school proprietors make provision for school buses that convey their students from residence to their schools.

On June 12, 2012 Ondo State government launched its free bus ride scheme for students in the state. The scheme began with 10 buses, each having 69 seats, as pilot scheme in the state capital, Akure. The buses convey pupils to and from the nearest bus stops to their various schools twice daily between 6.30am and 8.30 am and 1.30pm to 5.30pm.

After four (4) years on, no fewer than 90 buses now convey students and pupils across the state. The take-off of the Free School Shuttle bus programme four years ago was deliberately planned for June 12, as part of activities marking the year's annulled June 12, 1993 presidential election which has become a watershed in the nation's history. The free school shuttle scheme which has put the state in the world map has been adjudged one of the Mimiko led administration's programmes which exposes it as a progressive government with the determination to invest in the education of its children at no cost to the parents and guardian.

The Free School Shuttle bus scheme has also been applauded by parents, pupils and teachers in the state and the nation at large. The introduction of Free Shuttle Buses to convey students from their residences to schools in public schools is therefore novel and reduces a

number of risks attached to taking public buses with attendant risks. This is because the available public buses in cities have been discovered to be seriously inadequate for the teeming population that daily demand for them as shown in Plate 3.

Plate 3: Typical Para-Mass Transit Bus Demand in Lagos State.

Since the introduction of Free Shuttle Bus system in Ondo State, it was discovered that not all the schools have been incorporated into the scheme. Research findings show that few buses were put to use in cities where the pilot survey had been carried out. In effect, long queue exist in most of the bus stops. The Free shuttle Bus System has not been extended to sub-urban and rural areas where secondary schools also exist in the State. This means that a large proportion of the people for which the buses are meant for have no access to the facility.

It was also discovered that in urban areas where the scheme had been introduced, the distance of students from their homes to schools ranges from less than one (1) kilometre to over three (3) kilometres. A very high population of the students live in three (3) kilometres and

above to their schools. It is therefore imperative that these categories of students wait for the free buses provided by Government to their schools. Apart from the fact that the buses are free, the students enjoy riding in the buses which enable them to feel wanted and priding themselves as others in private schools use to do. Few of them also see it as part of the gains which their parents have bequeathed unto them by virtue of their voting into office the Government in power.

Therefore, in terms of adequacy of buses in terms of quantity, one can conveniently state that the free shuttle buses are inadequate in number and for the schools in the State. It takes between 6 minutes and 20 minutes to take a large proportion of these students to commute from their homes to their schools when they make use of public transport. This is not however the same when free shuttle bus systems are used especially when such buses do not experience traffic hold-up or accidents.

The students when asked whether they get home late before the introduction of free shuttle bus system confirmed that they do. However, most of them while trekking home are not in a hurry to do so because there is nothing like lateness. They also used the journey back to home to discuss and chat with their friends. So journey back to homes are not seen as a serious issue compared to journey to school in the mornig which attract some penalties if they are unable to resume before 7.45am in most schools.

When asked how long it takes the students to trek from home to schools. It was discovered that a large proportion of the students use 20 minutes and above to trek from home to schools. Figure 6 Vividly show that majority of the students interviewed spent not less than 10 minutes and above to trek from their homes to their schools. This definitely has an effect on the productivity of the students in terms of assimilation of courses whenever they settle down for academic studies.

With the introduction of free shuttle bus system, parents no longer foot the transport cost from home to schools for their children or wards. According to Officer in charge of the Free Shuttle Bus System in Ondo State Government, “the programme has gone a long

way to reduce the private cost incurred by parents in ensuring their wards acquire qualitative education. The school shuttle bus scheme transports no fewer than 53, 000 uniformed pupils and students across the state to and from schools, on a monthly basis. This saves parents an estimated 113 million naira that would have been spent on the transportation of their wards.

Findings show that before the scheme was introduced four years ago, most of the beneficiaries were spending an average of 100 naira as transport fare to and from their schools so, if 53, 000 pupils and students now benefit from the gesture, it means that government is helping the parents with 5.3 million naira daily and 113 million naira monthly".

The study also examined the advantages derived from using Free Shuttle Bus System by the students. Table 3 shows the perceived ways the students responded to the questions asked. Ten likert items specifically detailing advantages were asked. in descending order of rank. The most important advantage of the Free Shuttle Bus as perceived by the student is that with this commuting system, their academic performance in the school has changed positively. The students believed that they resume on time and settle down for meaning academic work with less stress when compared to the time when the scheme had not started. The second in the rank is that Free Shuttle Bus is efficient when compared with the former means of transport to their schools. The students believed that the buses are meant for them and to no other passengers. They do not struggle with other commuters for a seat and that the bus does not stop at will as do other public passenger transport system. The statements in Table 3 were subjected to whether to be accepted or rejected based on CGAM score of 259.9. the mean score of statements that were above this number were accepted while those below were rejected. Findings revealed that six (6) out of the statements of facts were rejected while four (4) were accepted. From Table 3, statement numbers 1, 2, 3, 7, 8 and 10 were rejected while statements 2, 5, 6 and 9 were accepted as some of the advantages of running Free Shuttle Bus for students in Ondo State.

Table 3 Advantages of Free Shuttle Bus as perceived by the Students

S/No		SA	A	D	SD	Total	Mean of X	order	Remark
1	Since the introduction of the free Shuttle bus , I don't spend money on transport to school	232	305	187	146	870	236.3	10th	Rejected
2	Free shuttle bus is convenient for me	223	390	158	99	870	247.7	9th	Rejected

3	Free shuttle bus is adequate for me	282	362	150	76	870	259	6th	Rejected
4	Free shuttle bus is efficient	341	348	102	89	870	270.1	2nd	Accepted
5	Free shuttle bus has reduced the rate at which students are being kidnapped or raped	376	289	106	99	870	267.4	3rd	Accepted
6	Free shuttle bus has improved the times at which students come early to school and leave on time	366	297	106	101	870	266.8	4th	Accepted
7	The introduction of the free shuttle bus has changed my attitude positively towards learning in schools	311	300	130	129	870	253.3	8th	Rejected
8	With the introduction of free shuttle bus system, I get to school before morning devotion.	322	301	143	104	870	258.1	7th	Rejected
9	The introduction of the free bus shuttle system has affected my academic performance positively	401	318	97	54	870	280.6	1st	Accepted
10	The bus mates are impatient with the students	280	364	160	66	870	259.8	5th	Rejected

Cumulative Group Arithmetic Mean (CGAM) = 259.91

The researcher also sought from the teachers of schools were this Free Shuttle Bus is practiced about their own opinion as regards the advantages derivable from the scheme. The teachers unanimously agreed that the sceme should be continued because of the numerous advantages which the students derived from it. The teachers also believed that lateness to class and by extension also to schools have reduced drastically since the scheme started. Others statement that were rejected according to the teachers is that the scheme has not really changed the learning attitude of the student with due respect to their academic performance. Table 4 also revealed that students still come late to school sometimes with a (mean of 243). It should however be noted that this figure is very close to 251.25 which is a mean of rejection. This closeness also revealed the importance of level of rejection of this statement item

Table 4: Advantages of Free Shuttle Bus as perceived by the Teachers

S/No	Statement of facts	SA	A	D	SD	Total	Mean of X	Order	Remark
1	Students are punctual	240	340	160	130	870	243	3rd	Rejected
2	It improves students' academic performance	140	280	350	100	870	220	4th	Rejected
3	The scheme should be continued	480	310	40	40	870	297	1st	Accepted
4	The scheme has positively changed the learning attitude of the student	230	340	210	90	870	245	2nd	Rejected

Cumulative Group Arithmetic Mean (CGAM) = 251.25

Challenges confronting the operational system of the free shuttle buses Scheme incude: On-Street parking obstructing Free Shuttle Bus Stops, Traffic Congestion in the CBD, Accidents, Pot holes on the road, Bad roads, Urban road network inadequacy, Poor management, Delays, Road complimentary facilities and that the scheme is not extended to private schools.

Conclusion:

The public transport investment projects have three major life-spans which can be categorized as long, medium and short term from the start of building to the time of operation when the benefits of the investment would start to manifest. According to Glen Weisbro, Corinne Mulley and David Hensher (2016), Cost-Benefit Analysis (CBA) is used as an aid to decision making. Government have a responsibility to demonstrate that funds spent on behalf of their citizens are good value. In the same vein welfare changes as embodied in the CBA are equally important. This welfarism attitude of the Ondo State Government in this regard is justifiable. This is because investment in transport by the government definitely had motivated students to take issue of punctuality more serious than before. Similarly, the culture of queuing up at designated bus stop has also shapen the urban spaces as well as the culture of orderliness by our students.

The free shuttle bus system has gone a long way to reduce the private cost incurred by parents in ensuring that their wards acquire qualitative education. The evaluation of the scheme

since it became operational has also shown that student are more willing to be punctual in school than before.

A lot still need be done to improve the scheme in Ondo State judging by the revelation from the research carried out in the State. The challenge experienced by the scheme had been noted in the previous discussions. However, planning and management strategies to combat the challenges can be divided into two: Short run solution and Long run solution

For the short run solution, Ondo State Government should focus attention on how to improve the proper functioning of the existing infrastructural facilities through proper maintenance of the pot poles and other urban transport infrastructures, enlargement of the existing bus stops, gradually increasing the fleet of buses, training and retraining of the drivers as well as the bus mates

For the long run solution, Government of Ondo State should endeavor to construct circular roads to divert traffic away from the CBD which is often congested with vehicles especially during the peak periods, add to existing Bus Stops, extend the use of shuttle bus to other towns in Ondo State, expansion and reconstruction of some major roads in some urban centres and adding free bus shuttle system to ply dedicated routes in order to enhance their efficiency.

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