

WWJMRD 2016; 2(6): 46-48
www.wwjmr.com
Impact Factor MJIF: 4.25
e-ISSN: 2454-6615

Owoputi Adetose Emmanuel
Department of Transport
Management Technology,
School of Management
Technology, Federal
University of Technology,
Akure, Ondo State, Nigeria

The impact of road development and expansion on urban cities “A case study of Akure Metropolis”

Owoputi Adetose Emmanuel

Abstract

The paper examines the role of road development and expansion in traffic management and social-economic development of Akure Metropolis the Ondo State capital. It also assesses the impact of road transportation in the city. The research methodology adopted in the field study work and utilizes environmental management system technique to determine the impact on local community of the various social-economic activities and professional judgment. The finding among others show that road development parameters were well within the range of metropolis city development agents and economic advancement in various beneficial uses of change materials for human settlement and is an agent of all other development in an urban expansion. Furthermore the finding show that ‘Choice for journey to work in Akure’ constitutes one of the most common movement patterns in the city and it reveals that Buses for school children, Free flow traffic during the pick-periods of 7.30 – 10 am and 3.30 pm to 6pm in the evening. The study finally recommends that in order to reduce traffic congestion and delays at road intersections in the city; road expansion should be encouraged and adequate infrastructure, road furniture’s such as off-street parking facilities should be provided which should be complimented with professional traffic human resources. It is therefore relevant to conclude that development of new area for residential housing estates, recreation, open spaces and educational facilities that are agents of city development and should be well integrated in the planning of cities in Nigeria.

Keywords: Road development, transportations, urbanization, socio- economic activities and impact assessment

Introduction

Transportation is a web of connected systems meeting particular needs through the interrelated and interdependent activities of its many component units. Irrespective of size, scope or area of concern. This definition holds the material evidence with which to understand the underlying principle behind any industry. Transportation is vital to the development of any country, economically transport provides and enhances the space-time quality and utility of goods and services , (Morlok 1978, David 1980). Socially transportation facilitates the formation of a wider variety of spatial patterns of human activities (Kadiri, 1996).

Road Transport is one of the foremost modes of transportation in the world. Today, road transport is one of the most widely used mode. Its development has led to rapid spatial development and growth in various cities and towns of the world and Nigeria is not an exemption. In Nigeria road mode of transportation is most widely used and this has thus led to development of various towns and cities of which Akure is one.

Road development in Nigeria could be said to have started with the need to connect one community to another through foot paths as the need for trade and commercial, inter dependence grew. It was an era when settlements started to discover that there were socio-economic needs that could only be met by other settlements which must be approached for such facilities. In the early days of road network development in Nigeria, vehicular traffic was spatially distributed across the available road network. All components that make functional road traffic environment such as road signs markings, painting, cycle path. Pedestrian, walk ways and zebra / pelican crossings were adequately provided and also maintained regularly by the authority, especially in urban centres (Onakomaiya, 1996).

More roads were constructed but without the components that make traffic environment safe and without care full plan for maintenance and soonest its overshadowed by bushy road potholes, signs that are often pulled down by inexperienced drivers.

Correspondence:

Owoputi Adetose Emmanuel
Department of Transport
Management Technology,
School of Management
Technology, Federal
University of Technology,
Akure, Ondo State, Nigeria

Transport infrastructure is widely recognized as one of the factors influencing the level of commercial activities of a country and its economic growth. An undeveloped road furniture, infrastructure network is a barrier to the free movement of people, goods, services, capital and production factors (Malago, 2005). The belief that transport infrastructure and road furniture have significant impacts on the development of urbanizations and cities economies has often been used to justify allocating resources to road construction and expansion, roads, bridges, overhead bridges, packing spaces, signs and traffic light with transit system to deliver economic, social benefits, easy congestion by connecting localities and firms to local and regional markets, aid the delivery of farm produce to markets, connect places of production with centers of sales and enable individuals to reach places where needs can be satisfied.

Inadequate roads and road furniture is a significant inhibitor to urbanization and commercial activities, it is a level of serious bottlenecks taking place due to an expansion of the private sector, lack of road construction and expansion lead to poor communication, constrain to network, commercial activities as it hinders them from moving goods, services over a geographical location. Akure has an extensive landscape with a lot of resources endowment spread over the city, this therefore requires the need for movement of goods and people between places. This has significantly shaped the existing road transport system as well as the development of transport itself. Akure then does not have extensive infrastructure of road system. Over the years different administration that have ruled Ondo State since its creation have not consistently accorded a key role to the transport or road sector to facilitate the economic opportunities, which lead to backward part of the state capital and does not encourage business activities. This implies that missing network as a whole means a significant reduction in the potential productivity of the State or Akure city. The neglect of road transport, road construction, road expansion and road furniture will lead to a lower productivity of the other production factors as the case often is in many State capital of the nation.

This work examines the impact of road development and expansion on urban cities and traffic management and socio-economic development of Akure Metropolis, with objectives of identifying the types of roads and road expansion, transport furniture in Akure; to analyze the relationship between Akure in 1990 - 2000 and Akure of present day;- 2014, to 2015 to assess the commercial activities, and to evaluate wider impacts accruable to commercial activities from investment in road construction, road expansion and transport furniture, infrastructure and develop guidance for wider impacts and how to assess them in the road expansion projects.

Road development in Akure: An historical perspective

Most major cities in Nigeria including Akure have been developing with the conventional land use approach (Jiboye 2005). This has generated diverse urban problems manifesting in the form of deterioration of cities into slums, pollution, congestion, unsanitary condition and epidemics. Most Nigeria cities are reputed to be the dirtiest, most unsanitary, least aesthetically pleasing and dangerously unsafe for living (Agbola 2002). They are characterized by non-functioning road infrastructural facilities and road

furniture, most poorly governed, intensively dotted with illegal structures, while physical growth and development of the roads in the cities had not been properly managed or controlled (Aluko 2000).

In Akure, (Aribigbola 2008) posits that a major instrument for planning in the city is the use of roads layout plan. Investigation revealed that to date a total of 5 major city roads were in Akure with numerous street roads. These are Oymekun-Oba Adesida road which links Ijare- Ilesha road through the town to Owo / Ado Benin express way, the second road is the road that link Ondo road to Arakale to Igbatoro, Oda road, Third is the Oke-Ijebu road to Oja Oba, while the road to Oke-Aro lead to Oja-Oba from Idanre. The Ilesha – Akure - Owo expressway is a one way motor road. In 2008 when little expansion of road were designed. This roads are micro- manage by local government and private land lords / residents There is palpable lack of information on the procedure for the provision of roads and drainages, extension of street lights, determination of road furniture, location of electric street poles and bus-stop use for transport services among others. The socio-economic characteristics of the transportation system was low and a one way traffic movement toward Oja-Oba and Alagbaka area.

There are two main categories of roads in the study area, namely track 'C' and 'D' which are the two that run through Akure town from Owo/Ado to First bank junction to Oba Adesida street, Oja Oba area to Oyemekun street to FUTA / Road Block junction to link Ijare- Ilesha road. The other one runs from Ondo road to Arakale to NEPA junction to Oda / Igbatoro road, The Idanre Akure road run through Oke-Aro to Arakale, Oja Oba area. It is the statutory responsibility of government to ensure proper management of roads and road infrastructures and easy transportation services by vehicles.

Finally, the Akure city as a system is expected to be addressed as an entity. The whole city has been selected for this study and not just a corridor because; all parts and sectors of the city must work together to achieve transportation sustainability. The Akure township economic decline has brought about decreasing investment on transport infrastructure and the collapse of mass transit systems, (Banjo, 1994 Fasakin 1990, 1996, 2000). Economic decline has also brought a new set of behavioral and environmental factors acting as fundamental causes of traffic congestion, even paradoxically in medium cities (Fasakin 2004). For Akure township the manifestation of these factor include selling and buying of goods on road, reserves drains, pedestrian walkways and even carriageways (Awolesi 1997, Ogundare 1999) pre-eminence of non-motorized 'carts and wheel barrows') transport used for itinerant hawking on high ways and roads, grade-level pedestrian crossing in preference to crossing on pedestrian bridges, double on – street parking, squalling by petty traders and boarding of vehicles and commercial motor cycles in the various illegal parks especially in the Central Business District (CBD) (Oyewole 1999, Fasaki 2001, 2002).

Road and Transport Infrastructure:

Transport infrastructure is widely recognized as one of the factors influencing the level of commercial activities of a country and its economic growth. An underdeveloped infrastructural network is a barrier to free movement of

people, goods, services, capital and production factors (Malago, 2005). The belief that transport infrastructure projects have significant impacts on the development of regional economies has often been used to justify allocating resources to road transport infrastructure, (Akinyosoye, 2010) Roads, bridges, transit systems and to deliver economic and social benefits by connecting localities and firms to local and regional markets and the delivery of farm produce to markets, connect places of production with centers of sales and enable individuals to reach places where their needs can be satisfied. As observed by Carruthers (2013) inadequate road infrastructure is a significant inhibitor to increased trade of the countries or state, bringing their transport infrastructure to standards comparable with countries/states of a similar per capital GDP will be costly but worthwhile. The clear meaning of these impacts or how they could be evaluated needs to be established, (Nijkamp & Rienstra 1996) Road expansion and infrastructure is an important requirement for the development of commercial sector, safety, traffic management, urbanization, socio-economic development and vehicle types that are available for working and operation, with welfare of the inhabitants. It is the cornerstone of both trade and investment.

Road transport infrastructure and road expansion is a prerequisite, though by no means a guarantee of economic development. However road transport investment is a particularly appropriate means of encouraging commercial activities, (Boopen 2006). In Ondo state capital "Akure" Many allocations of investment to transport have led to springing up of new markets and the effect which the provision of transport infrastructures can have on urbanization and economic growth is quite immense, (Filani 2001). Without road development and expansion, traffic congestion, disturbance to safety, economic and comfortable trips, turnaround time, loss of man-hour, high price of mobility and insecurity with frequent accidents occurrence will be increasing on daily basis, (Jansson 1987). Governments at all levels have different opinions as regards transport and road infrastructure decisions. They may invest in infrastructure as a response to serious bottlenecks taking place due to an expansion of urbanization and expansion of the private sector. On the other hand, governments can use transport infrastructure as an engine to boost the economy and to facilitate the exchange of goods and services between countries of the industrial world. These are passive investment strategy and an active strategy, where road transport expansion and infrastructure leading and inducing private trade and investments. According to Banister (1998), transport plays a vital role in commercial activities and also allows people to develop their own lifestyles. The availability of high quality road transport infrastructure allows expansion and modernization of aids to trade, such as banking, communication, publicity, insurance which are expanded and modernized for the smooth conduct of commerce, while lack of road transport infrastructure remains a constraint on their commercial activities as it hinders them from moving their goods over a geographical space.

Akure has an extensive landscape with a lot of resource endowment spread over the city. This therefore requires the need for movement of goods and people between places. This has significantly shaped the existing road transport infrastructure, expansion of roads as well as the

development of transport itself. The impetus for the transformation of transport sector in the city was provided through the State Government Administrations in order to move about rapidly, link the city up with towns and villages for trade and commerce, exploit the available resources as well as have firm administrative control being the State Capital. Over the years, Akure does not have extensive infrastructure of roads system. Over the years, different administrations that have ruled Ondo state since its creation on August 27, 1976 have not consistently accorded a key role to the transport sector in appreciation of its development, enhancing roles in the movement of people and goods and the facilitation of economic opportunities is otherwise economically backward. Parts of the town does not encourage businesses activities (Oyinloye). Rietveld & Nijkamp (2002) in their work posited 2012 that in many countries, road transport infrastructure is regarded as a critical success factor for competitive performance and internalization of local and regional economics. However, it is increasingly recognized that commercial activities in many state or nation is not only the result of a proper combination of private production factors such as labour and capital but also of infrastructure in particular. Only if wider impacts of provision of road transport infrastructure are well understood can government at any level or any private institution invest in it and subsequently lead to higher productivity of production factors.

A neglect of road development will lead to a lower productivity of the other production factors as the case often is in many state of the nation. The levels of urbanization in the developing world indicates that more people now live in cities than before. This makes cities highly congested, which then requires the needs for urban expansion through road development. There is also need for decentralization of economic activities in urban centres. The opening up of new area through road development can help in equal distribution and proper usage of infrastructural facilities and social amenities.

Conceptual Framework

Many urban centres in Nigeria suffer from inadequate facilities that could ensure smooth urban movement. This is because the rapid growth of cities, anywhere in the world, has impacts not only for the land use but 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 community distance increased from 5.2km in 1966 to 6.4km in 1976, 10.5km in 1986, 13km in 1996 and 19km 2006 (Ogunbodede, 2006). The increase in commuting distance has impact on trip attraction, fare paid by commuters and traffic build-up in some land use areas. Ways of mitigating these mobility problems and ensuring a smooth flow of urban traffic has been carried out in different studies as exemplified by the works of urban transport scholars. Some of the researches by these scholars were aimed at identifying the causes and dimension of transport problems (Okpala, 1977; Adeniyi, 1983; Aderamo, 1990; Bello, 1993 and Ogunbodede, 2006). Others were pre-occupied with various options for solving transport problems (Ogunsanya, 1987; Omiunu, 1988; Bolade, 1989; Ameyan, 1996; Badejo, 1998; Oni, 2004; Ogunbodede, 2010).

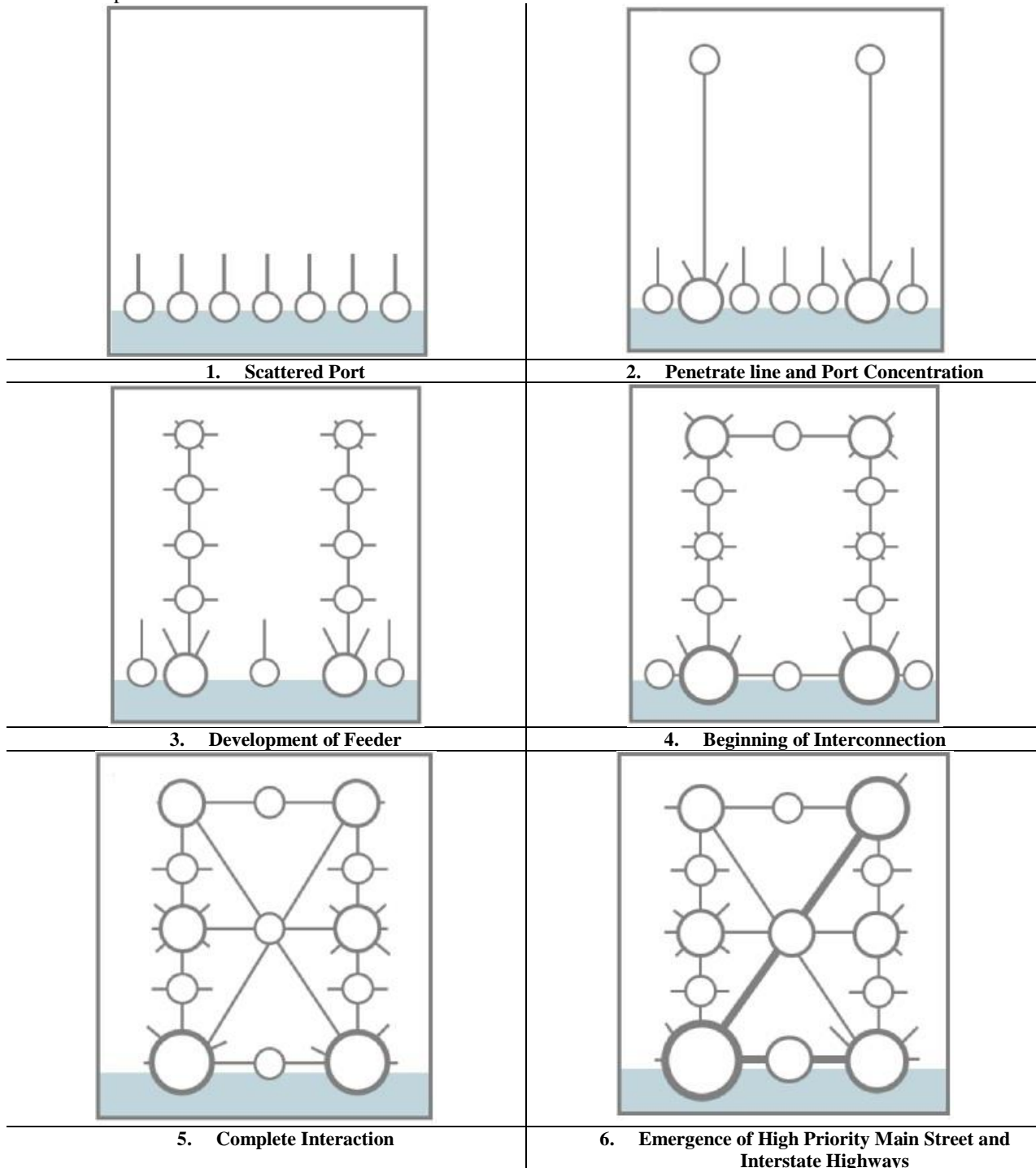
As wonderful as the impact of transport may be in our daily activities, it has been noted to possess "myriad of Negative effect". This is why Clark (1958) described transport as the maker and breaker of cities.

Theoretical Framework

Taafee, Marril and Gould (1963) put forward a theory to explain the spatio-temporal relationships that exists between transport and urban growth. The theory has four distinctive phases:

1. The first phase is pedestrian way, which represented the situation where the only means of transport was by foot, commuter could only make trips to wherever they could conveniently walk to, while the second phase shows the interaction of horse, bus and tramway.

A Model of the Development of Transport Network and Urban Growth



Source: Taafee, Morrill and Gould (1963)

Improvement in the transportation encourages urban development along the main roads by joining formally separated towns and villages into apparently unbroken urban areas, or in the case of single large settlements producing a characteristically star shape city. Improved passenger transport within cities has produced more subtle

morphological effects than the simple expansion of the urban area. Also improved internal transport has brought changes in the location of commercial centres. The group of a dominant city-centre, shopping area requires easy access from all the built up areas

Research Methodology

The study was carried out using on-the-spot evaluation of the loading locations-intra-urban terminals. The second involves the Identification of the boundaries of the built up area at the out skirt or the town served by the transport terminal for field check and updating of transport infrastructure and road development in the Akure city. The third stage involves division of the study area into traffic zones For the purpose of this study include socio-economic, informational trip information and traffic data for the purpose of grouping origins and destinations of movement.

Reconnaissance Survey Stage

The reconnaissance survey is investigation carried out by the researcher on study area for on-spot evaluation, to update information collected from secondary source. This is to ensure the inclusion of more recent information in the

study area that was not available on secondary source also to obtain ground truth information.

Impact Evaluation and Methodology:

In the evaluation assessment of the impacts identified predicted the international organization for standardization methodology was adopted. Based on its interactive nature, ability to combine both descriptive and quantitative analysis and simplicity, the ISO 1400 L. Environmental management system was used in evaluating the associated and potential impacts that were importance :- [1], Of impact on affected environmental component are Public interest perception [P], Frequency of impact [F], Risk factor [R], Legal regulatory requirement [L], The impacts were valued against the numerical scales described in Table 1 below. Also in accessing the overall impact rating of the project on the environment, the under listed factors were taken into consideration.

Table 1: Impact evaluation criteria

Rating Criteria					
	Importance (i)	Public interest Perception (P)	Frequency of impact (F)	Risk factor (R)	Legal regulation requirement (L)
No					0
Low	2	2	2	2	-
Intermediate	3	3	3	3	3
High	5	5	5	5	5

- (i) The commercial activities of the community i.e the level of vulnerability or sensitivity of the road expansion and development on the income generation and daily sales or market activity,
- (ii) the anticipated magnitude, extent and duration of the impact.
- (iii) the productivity assessment of the community
- (iv) the economic value and sustainability of the project and
- (v) the understanding of the possible interaction between the proposed project and the environment.

In giving rated values to each of the criteria used for the evaluation of impacts, a team of multi-disciplinary experts on transportation management, road engineering, financial accountant, social- economic and human health parameters, were requested to give independent ratings of the impacts based on the chosen scale. This was designed to reduced elements of subjectivity inherent in other rating processes. Rating from each expert were collected averaged and calculated, for each impact, The overall evaluation of all associated and potential impacts was either significant or not significant using the impact evaluation criteria discussed above.

The impact was rated as significant if (i) $1+P+F+R+L > 15$, (ii) $1 + F > 6$, (iii) $P = 5$.

(2) The structure of the model, (Transport Value)

The model incorporates two transport modes:- Private car and Public transport, for each mode a distinction is made between peak and off-peak traffic. The superscript notation used is:- Private car – Peak¹, Private car - off peak²; Public transport- Peak³, and public transport- Off-peak⁴. There are H household. In its extensive form, the utility of household h is written as a function of the quantity consumed of a composite numeracies good x_h , of its use of four types of

transport services x_{ih} (the number of kilometers individual h travels by transport service I [$i=1.....4$] and of a set of other variables that allow us to identify the major external effects associated with transport services in peak and off-peak periods specifically.

$U_h = U_h (x_{h1}, X_h^1, \dots, X_h^4, y^1, \dots, y^4, E, CA^1, \dots, CA^4)$ for all h(1) where y^1 is the average speed of transport service i, E serves as an indicator of the level of road expansion and CA^1 represents the number of activities associated with transport service i, It is assumed that y^i , E and CA^1 are taken as exogenously given by each household. Note however that these externality related variables indirectly depend on traffic levels. To be specific, average speed during peak and off-peak period is given by:

$$Y^i = Y (Q^1, Q^3) \text{ for } i = 1, 3 \text{ (2)}$$

$$Y^i = Y (Q^2, Q^4) \text{ for } i = 2, 4 \text{ (3)}$$

Where $Q1$ gives the total number of vehicle -km travelled by transport service i, and all partial derivatives are negative, reflecting that average speed decreases with $Q1$. With respect to the relation between transportation and passenger and distance, we simply assume fixed occupancy rates for passenger cars and public transport vehicles,

$$Q^1 = Q^1 (x^1) \text{ for all } i \text{ (4)}$$

Where $X1$ is the total number of passenger - km travelled by transport services i. In other word, we do not explicitly model the optimal provision of services by the public transport authority, but assumed that the services that the public transport firm adjusts its supply of vehicle - distance - km response to demand

Research Finding

Road is crucial in the context of urban expansion and development because it allows the residential and work places of urban dwellers to be separated and has the ability to change the traditional city to a more dispersed form. An example of this can be seen in Akure metropolis and some other cities:- (i) The construction of roads within Akure Metropolis and road expansion is 150km. There are Thirty - Nine (39) Bus- Stop and Forty (40) Bus –Terminal, 39 Streets were given street Lights, 14, Roundabout were build, 7, New Markets build in strategic locations within the Akure Metropolis, 40, of 34sitter buses for students Free transportation to & fro different school locations in Akure City., 120, Traffic officers were employed and trained to assist in Traffic management within the City. 4 major modern motor pack build for inter-state transportation, A new Ministry of Transport was established for Transport management and Policy on Transportation in the state . Road signs and Traffic Light were put in areas where it is highly needed to aid traffic system. Seven (7) major roads were expanded into double lines road.

All these led to development, growth and expansion of Akure in recent time. Thus road is crucial in the context of urban development and expansion, because it allows the residential and work places of urban dwellers to be separated and has the ability to change the traditional city to a more dispersed form

The impact of road development in urban expansion cannot be over-emphasized as it helps in redistribution and location of industrial firms, thereby creating employment opportunity for people who tend to live close to industrial firms this leading to urban expansion.

Development of roads has transformed many rural areas that were unknown about a decade ago to popular urban centres today. Notable examples include Oba-ile, Oda, Ogba, Shagari Village, Idanre, Alade, Awule, Oke -Aro, Oke – Ijebu, Shasha, Ijoka, Alagbaka , all in Akure metropolis.

Akure Metropolis can be described as the amalgamation of a considerable number of communities forming a continuously built up area. Akure Metropolis occupies a central position and this makes it easily accessible to all parts of the country by road, and air transportation. The population of Akure has increased due to natural increase migration as State Capital in Ondo State.

The land use types of Akure city includes, industrial, recreation, residential, commercial, transportation, agriculture, and open spaces, higher educational institutions. As Akure is becoming one of emerging mega cities in Nigeria, it has been witnessing congestion.

Some area very much congested which lead to over-utilization of social amenities and infrastructural facilities such as transport facilities, thereby resulting in urban sprawl. It has been observed that economic activities are highly concentrated along Oba Adesida Road, Oyemekun road, Arakale road, Oke-Aro road and Oke Ijebu road, Isekan Ondo-road, Hospital Road and Oke- Ogba areas.

The increase in population and expansion has attracted more housing estates in Akure, Ijapo Estate, Alagbaka Estate, Shagari Housing Estate. Oba-ile Housing Estate, The growing size of population of Akure, the narrow roads increasing in car ownership and general lack of discipline on the part of drivers are creating traffic problems in Akure and this is further exacerbated by the concentration of most

of the working places in the same area. So that traffic is essentially one directional during morning and evening peaks periods.” The impact of road development insolving the urban transport problem, since road development promotes outward expansion of cities because transport remain the key to the understanding of the land use changes’ [Aderamo 2002].

Work Schedule

One important aspect of road provision and expansion that deserve utmost attention is the work – schedule for road development in Ondo –State and mostly in Akure city, the State capital. The adherence to work schedule is largely a function of several factors such as good timing for project execution, fund availability, quality and quantity of manpower among others.

In Ondo- state, the local climate plays a significant role in timing project execution. This is because proposed work should be planned for execution and perhaps completed before the rain sets in around the month of May each year.

Road Constructed / Expanded in Akure Metropolis

The Length of roads built, expanded within Akure and its environment is 150km. The number of Bus-Stops and Terminal within Akure Metropolis is 39 Bus-Stop and 39 Terminal with shelter, The Bus-stop shelter & terminal along Oba Adesida road corridor are located as follows:- these are always in both side of the road 1. FUTA Junction bus-stop, 2. Council Bus-stop 3. Ilesha garage Bus-stop, 4.Lafe JUNCTION Bus-stop. 5 Champion Bus Stop 6. Works/ By – pass Bus –stop. 7.Oyemekun Bus _stop. 8. St Peters Bus- stop 9. Adegbola Bus-stop. 10. Cathedral Bus-stop. 11. Texaco Bus-stop, 12. Ezzo Bus -stop 13. Oke-Eda Bus stop. 14. First Bank Bus -stop. 15 Fiwasaye Bus -stop. 16. First Gate Bus -stop. 17. The Hope Bus -stop. 18 2nd Gate Ijapo Bus-stop 19. Oke-Ijebu Bus -stop. 20. Agbogbo Bus -stop. 21. Post Office Bus -stop. 22. Akure City Hall Bus –stop.

The Bus- stop Shelter along NEPA—Arakale road within the metropolis are 23. Bus park No 1. 24. Bus stop beside Sammy Store. 25. Bus Park 2, 26 Bus Park 3 27. Opposite St Thomas Bus -Park. 28 Bus stop beside UBA 29 Bus Park 4. 30. Bus Park 5.

The Street light projects in (8) Eight numbers of Street in Akure Metropolis are in

- (i) Street Light along Ilesha – road block- Akure / Owo junction - Oyemekun - Oba Adesida - Fiwasaye Girls Grammar School- Mobil junction Akure.
- (ii) Street Light along the median of Isinka - Ondo Motor park road
- (iii) Street Light along the median of NEPA - Arakale road Akure.
- (iv) Solar power street light along Fiwasaye Girls Grammar School to Ado / Owo Highway junction Akure,
- (v) Street Light along Fiwasaye Girls Grammar School - Mobil junction -Oba Ile Akure Airport junction
- (vi) Street Light along First Bank Alagbaka -CBN-Adekunle Ajasin Road
- (vii) Street Light along NEPA- Alagbaka road
- (viii) Street Light along First Bank Alagbaka _CBN-Government House Alagbaka.

Number of Round About and Beatification Sites Within Akure Metropolis,

There are nine numbers round about in Akure city as Stated below:-

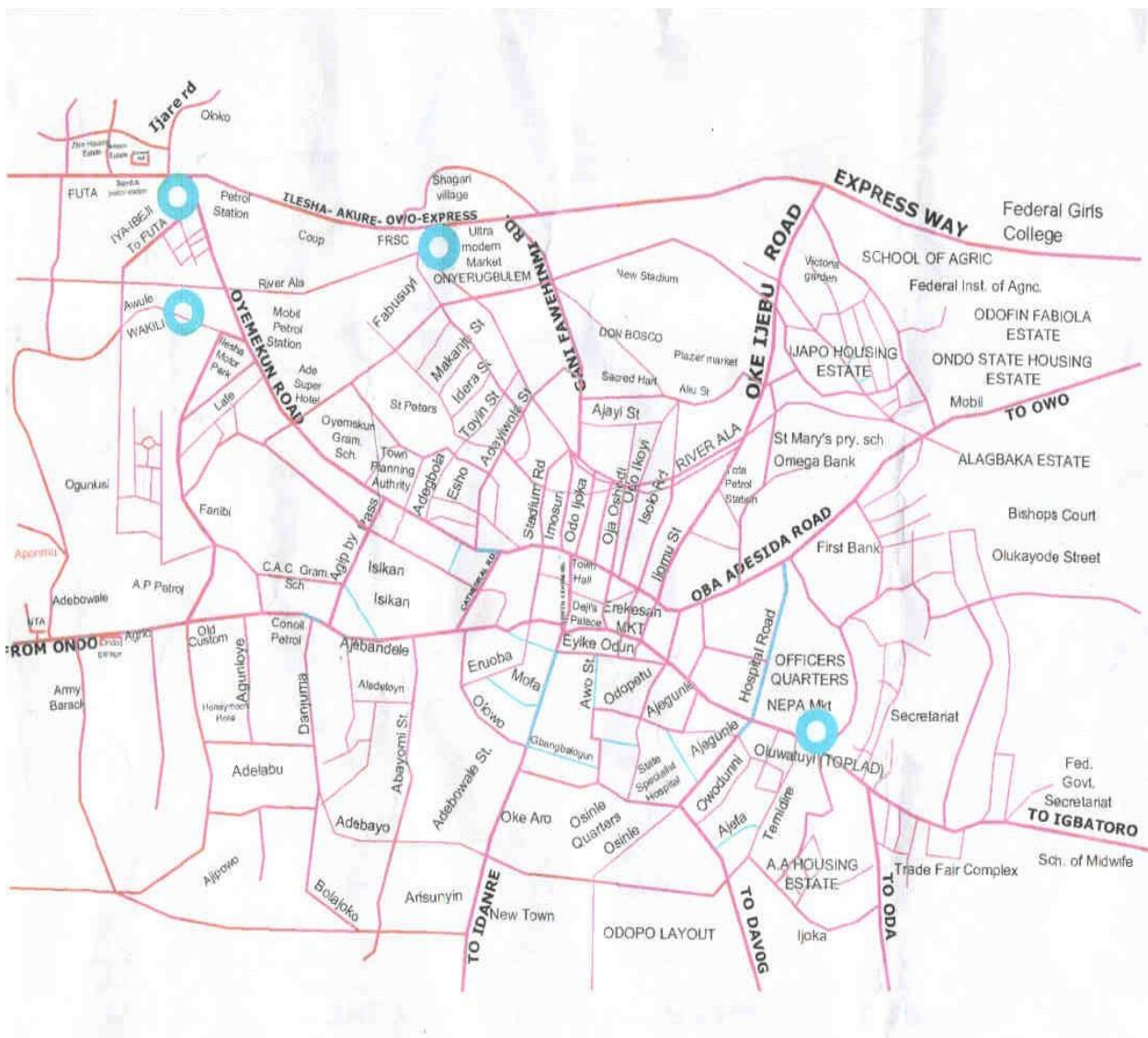
1. NEPA Roundabout
2. Isinka Roundabout
3. First Bank Roundabout
4. Fiwasaye Roundabout
5. Oke-Ijebu / Agbogbo Roundabout
6. CBN Quarter Roundabout
7. Oluwatuyi Roundabout
8. Olukayode Roundabout
9. Alafia Tayo Roundabout

Beautification of lands Adjoining Fiwasaye Girls Grammar School, Ilesha/ Owo Highway junction and Mini park, Opposite Bishop’s Court, Alagbaka Akure

2. Landscaping of the right of ways of Oba Adesida / Oyemekun road Akure
3. Cathedral to Isinka - Army Barrack
4. Beautification of median Akure / Ilesha / Owo express - Oyemekun -Oba Adesida -Fiwasaye junction.

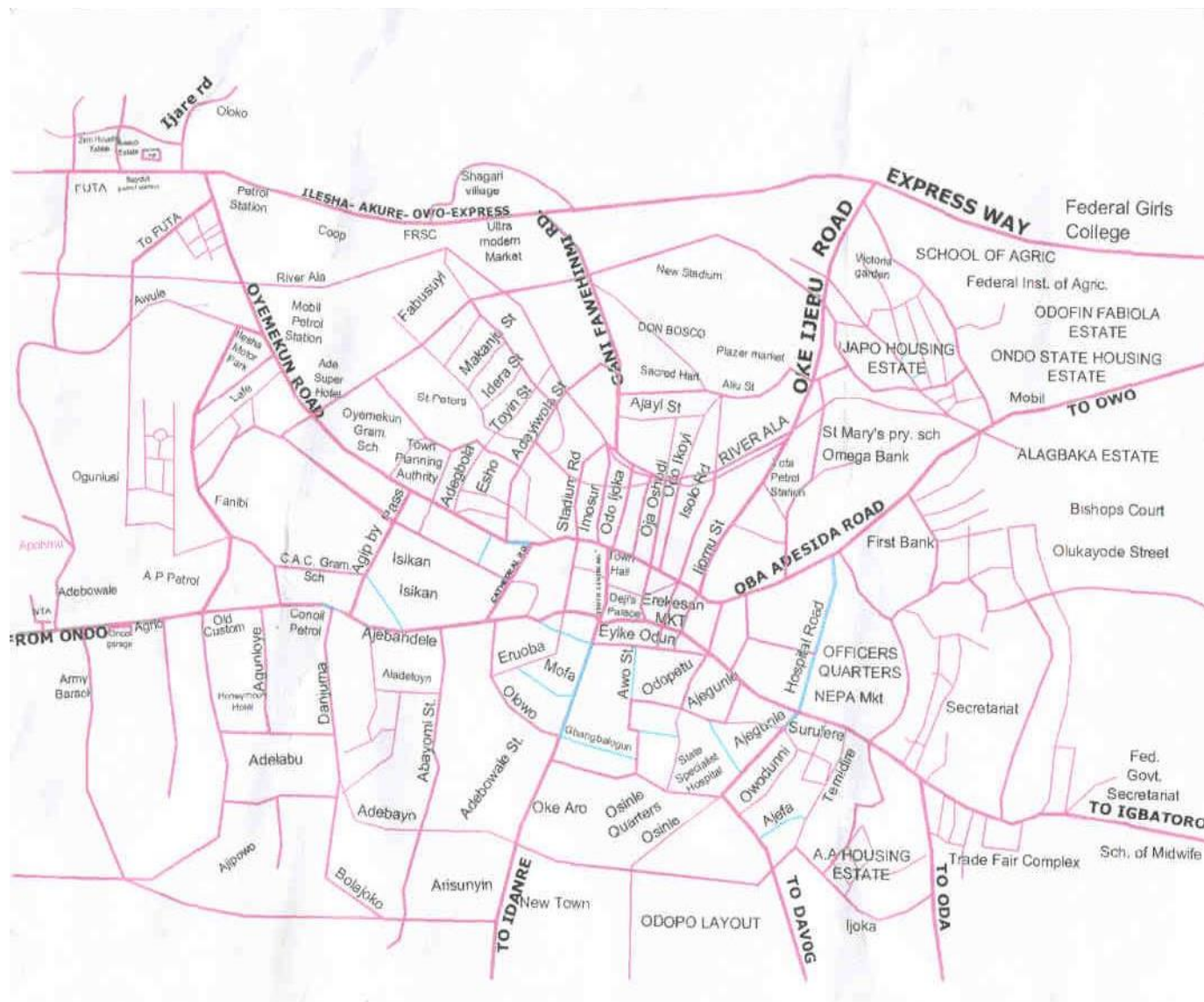
Some major inter-roads expansion in the metropolis to improve transportation problems and increase economic activities, commercial transactions, and industrial development with the population inflow to the State capital as modern Mega city includes :-

- i. Arakale road 7km, Oshinle road 18km. Oke Aro road 18km, Oba Adesida/ Oyemekun road 24km Oke Ogba Area 30km School of Agric road 11km, Oba Ile / Airport road 30km,, Adegbola Area road 21km Fanibi area 25 km Awule area 42km Ajigbowo area 18km Ijoka area road 45km Oda road 45km, Olokuta off Ilesha road 8km.



Source: Ministry of Works, Land and Housing, Akure, Ondo State.

Fig 1: The Study Area in the Local Setting



Source: Ministry of Works, Land and Housing, Akure, Ondo State.

Fig 2: The Road Network of the Study Area

1. Apart from state and Local governments efforts at providing rural roads, various communities under the Umbrella of Community Development Councils (CDCs) have conceived and embarked on road based and other support projects. However the rate of success in road projects and expansion has been very little.
2. Problem of inadequate funding, late fund disbursement, inadequacy of road plants, equipment and machinery, poor road and road plants maintenance, poor information base, lack of performance evaluation and irregular monitoring of roads affect road constructions in Akure.
3. It was observed that the construction and expansion, rehabilitation of roads gave little or no regard to some fundamental principles and conditions for road planning and implementation, instead emphasis was on equity in road distribution within and between LGAs, in spite of the obvious differences in transportation needs population size, industrial development, institution and working / commercial activities sizes and distribution pattern and so, on and areas of high commercial activities and industrial production capability.
4. This study provide information on wide ranging impacts of road transportation, expansion and infrastructure investment on Akure metropolis city in Ondo State. How such impact could be handled in project appraisal to boost businesses, the developing of (metropolis) cities and Urban expansion that will improve the efficiency of resources allocation in road transport infrastructure. It will also lead to ease the access between Spatial opportunities and also contribute to transport knowledge and transport management in urban expansion.
5. The increase in population and expansion has attracted more transport demands in Akure city. The role of road development is spatial development is important in solving the urban transport problem. There is no doubt that one of the greatest forces in spatial development of any area is road development as road expansion and road development promotes outward expansion of cities because transport remains the key to the understanding of the land use changes.

The role of road building and expansion in our daily activities cannot be over emphasized and without road, transportation can't take place.

The most important long-term recommendation is the creation of a road expansion and maintenance units to coordinate all road construction projects programs in Ondo State and largely in Akure metropolis.

The Road Expansion and Maintenance Units (REMU) is expected to be largely financed through statutory allocation and a proposed Road Trust Fund, which could constitute about 10 per cent of the total internally generated government revenue, so that adequate road planning and expansion implementation could be ensured.

References

1. Aderamo A. J (2002) Transport infrastructure and Nigeria Environment; A review, International review of Business and Social Sciences, Vol. 1 No 6.
2. Agbola T. (1986). City- Profile –Kaduna Cities 3 282-289.
3. Akinyosoye M. (2010) Infrastructure development in Nigeria. A roadmap to sustainable development. Greenhill services limited.
4. Aribigbola A. (2008) Improving urban land use planning and management in Nigeria; The case of Akure. Journal of Theoretical and empirical researches in urban management (3) 9 [http://um;rolno9.PDF](http://um.roln9.PDF).
5. Banister D (1998), Transport policy and the environment Routledge. London.
6. Boopen. S. (2006) Transport Infrastructure and economic growth; Evidence from Africa using dynamic panel estimates 5 (1) 37=52.
7. Canning D. & Pedroni P. (2008), Infrastructure. Long-run economic growth and causality tests for co-integration panels. The Manchester School.
8. Carruthers R. (2013), What prospects for Transport infrastructure and impacts on growth in souther and eastern Meditarreanean countries? MEDPRO report NO 3.
9. Fasakin J. O. (2002) Sustainable transport for a modern - sized City in Nigeria. Journal of Policy studies. Port Harcourt.
10. Fasakin J.O. (2004) Spatio-Temporal analysis of behavioral factors inducing traffic congestion in Akure, Nigeria Elsevier Science Publication Exeter U K.
11. Filani M (2001) Advancing the cause of private participation in the road transport sub-sector in Nigeria. A paper delivered at the 10th Anniversary celebration of the association bus- company (ABC) ltd. on May 14, 2003 at Ikeja, Lagos.
12. Jansson J.O. (1987) Investment policy in highways for central -city- bound travel Swedish National Road and Transport Research Institute.
13. Jimoh. H. I. (2000) Man Environment interaction. In Jimoh . H. I. & Ifabiy. I. P. (eds) Contemporary issues on environmental Management. Haytee Press. Ibadan 20-27.
14. Kessides C. (1996), A review of infrastructure impact on economic development. I Batten D Karlson C (eds) 12. 213 – 230.
15. Malago M.M. (2005) Transport and infrastructure in Poland; the current state and projects for the future. European Transport No 30. 54-60.
16. Montolio D & Rienstra S. (1996) Road investment and regional productivity growth; The effects of Vehicle intensity and congestion. Papers in regional sciences. 88 (1) 99-108.
17. Nijkamp P. & Rienstra S. (1996) Privatization of transport infrastructure;- Economisch en social Tijdschaft.Quinet. E. & Vickerman R. (2007) Principles of transport economics. Edward Elgar Publishing cheltenham Glos. GL 501 UA .U K,
18. Rodrigue J. P. (2009) The geography of transport system. Rodrigue second edition, Roulledge U S A.
19. Texas Transport Institute (TTI) (1999) urban roadways congestion, Retrievel from the worjd wide web. <http://mobility.tamu.edu/study/PDFs>.
20. Trimbath S. (2011) Transportation infrastructure; Paving the way, STP Advisory services LLC. Working paper STP2011.