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Review Article

A REVIEW OF ROAD TRANSPORT PLANNING IN NIGERIA

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Abstract: Transport is the cornerstone of civilization, and the importance of transport infrastructure to a nation cannot be overemphasized, as efficient transport infrastructure and network facilities act as catalysts for development. The all-embracing phenomenon called transportation is a measure of the relationship between places. Transportation performs the role of linking supply and demand. As a means of conveying people, goods and information through places, the provision of transport facilities and services is very crucial to the economic, political, social and cultural life of any country or nation. Thus considered, transport contributes to the overall development of a country since it serves as an essential means of collecting, moving, transferring and distributing people as well as goods from place to place.The rapid urbanization around the world means that more people will be making more trips in urban areas. Since transportation is the lifeline of any urban society, it could make or mar the environment depending on the interactive measures and degree of responsiveness to transport planning and management in urban development. It is central to the flow of knowledge, information and commercial goods. The type of available transport, and how they are used, tells a great deal about a society and its values. (Oni 2003). Also, transportation is an essential part of human activity, and in many ways forms the basis of all socio-economic interactions. Indeed, no two locations will interact effectively without a viable means of movement. In many developing countries, inadequate transport facilities are often the norm rather than the exception.Road transport is the most commonly used mode of transportation in Nigeria today. Road traffic depends on the pattern of human settlements, accounting for more than 90 per cent of the sub-sector's contribution to the Gross Domestic Product (GDP). Road transport activities involve the conveyance of passengers' en-masse or in small numbers, the transportation of animals, farm produce and merchandise and the rendering of mobile services (clinics, libraries and banks). The optional use of motor cars for pleasure, which can be distinguished from the three uses listed above, also contributes tremendously to the importance of road transport in Nigeria. This is more predominant in Nigeria than in most other African countries because of the

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poor state of alternative means of transportation by which journeys could have been made, and also due to the psychological satisfaction offered by the possession of a car. Thus, a good transport system is essential to support economic growth and development. This paper therefore describes and explains in detail road transportation infrastructure and planning in Nigeria from 1981-2014, highlighting the successes and challenges of the different planning strategies carried out.

Keywords: Road Transport Planning; Infrastructure Maintenance; Public Policy; Traffic Congestion; Nigeria.

1.0 INTRODUCTION

Transport is the cornerstone of civilization and the importance of transport infrastructure to a nation cannot be overemphasized as efficient transport infrastructure and network facilities act as catalysts for development. The all-embracing phenomenon called transportation is a measure of relationship between places. Transportation performs the role of linking supply and demand. As a means of conveying people, goods and information through places, the provision of transport facilities and services is very crucial to the economic, political, social and cultural life of any country or nation. Thus considered, transport contributes to the overall development of a country since it serves as essential means of collecting, moving, transferring and distributing people as well as goods in from place to place.

The rapid urbanization around the world means that more people will be making more trips in urban areas. Since, transportation is the life wire of any urban society; it could make or mar the environment depending on the interactive measures and degree of responsiveness to transport planning and management in urban development. It is central to the flow of knowledge, information and commercial goods. The type of available transport, and how they are used, tells a great deal about a society and its values. (Oni 2003). Also, transportation is an essential part of human activity, and in many ways form the basis of all socio-economic interactions. Indeed, no two locations will interact effectively without a viable means of movement. In many developing countries, inadequate transport facilities are often the norm rather than the exception.

Road transport is the most commonly used mode of transportation in Nigeria today. Road traffic depends on the pattern of human settlements, accounting for more than 90 per cent of the sub-sector's contribution to the Gross Domestic Product (GDP). Road transport activities involve the conveyance of passengers' en-masse or in small numbers, the transportation of animals, farm produce and merchandise and the rendering of mobile services (clinics, libraries and banks). The optional use of motor cars for pleasure, which can be distinguished from the three uses listed above, also contributes tremendously to the importance of road transport in Nigeria. This is more predominant in Nigeria than in most other African countries because of the poor state of alternative means of transportation by which journeys could have been made and also due to the psychological satisfaction offered by the possession of a car. Thus, a good transport system is essential to support economic growth and development.

This paper therefore describes and explain in details road transportation infrastructure and planning in Nigeria from 1981-2014, highlighting the success and challenges of the different planning strategies carried out.

1.1 ROAD INFRASTRUCTURE IN NIGERIA

Nigeria has the largest road network in West Africa and the second largest south of the Sahara, with roughly 108,000 km of surfaced roads in 1990. However they are poorly maintained and are often cited as a cause for the country's high rate of traffic fatalities. In 2004, Nigeria's Federal Roads Maintenance Agency (FERMA) began to patch the 32,000-kilometre federal roads network, and in 2005 FERMA initiated a more substantial rehabilitation. The rainy season and poor equipment pose challenges to road maintenance.

Oni et al (2013) examined the present state of transport infrastructure in Nigeria and highlights the government's policy thrust in infrastructural development. They realized that rural areas, where the bulk of the citizen's population resides, are largely deprived of basic pieces of transport network and infrastructure. The major road transport infrastructure in Nigeria consists of 32,000 km of Federal highways including seven major bridges across the Niger and Benue Rivers, the Lagos ring road, the third mainland axial bridge; 30,500 km of state roads; and 130,000 km of local roads (Buhari, 2000). Buhari, stated further that as at June 1996, only 50% of the Federal roads and 20% of the State roads were in reasonably good condition. Only an estimated 5% of the local rural roads were freely motorable.

A nation- wide survey was conducted by the Central Bank of Nigeria (CBN) on the state of highways in the country in December 2002. The survey revealed that the road network, as at December 2002, was estimated at 194,000 kilometers. It was also shown that most of the roads were in a bad condition, especially those in the South Eastern and North Western parts of the country. The pattern is generally the same for the roads in the other parts of the country. Some of the roads, constructed over 30 years ago, had not been rehabilitated even once, resulting in major cracks (longitudinal and transverse), depressions, broken down bridges and numerous potholes that make road transport slow and unsafe (CBN, 2002). Road transport accounts for about 90% of the internal movement of goods and people in Nigeria. Except the railway is revived and the inland waterways are developed, this proportion is likely to rise even higher in the nearest future. The predominance of the road over other modes is not only because of its inherent advantages but because government has paid greater attention to this mode. At present the road transport in Nigeria is characterized by:

- Large number of small-scale operators of goods and passenger vehicles, many with a limited professional and business capacity, resulting in inefficient services.
- Uncoordinated activities and services leading to in efficient services.

- Non compliance with traffic regulations and poor enforcement.

The survey also shows that the state of Nigerian roads had remained poor for a number of reasons. Such reasons include faulty designs, lack of drainage and very thin coatings that are easily washed away; excessive use of the road network, given the underdeveloped nature of waterways and railways which could serve as alternative means of transport; absence of an articulated road programme, and inadequate funding for road maintenance. Oni et al, recommended in their study that Government should expand substantially, urban and rural road infrastructure, with proper concern for the needs of public transport infrastructure (railway, dedicated bus routes) and that Private sector should also be encouraged to participate in the provision of transport infrastructure.

Filani (2010) opined that in the last 50 years, the Nigerian economy have witnessed substantial growth, despite intermittent economic shocks. Against this background, the pertinent issues to ponder about include the roles that the transport sector has played in the socio-economic growth and development of Nigeria since independence. What is clear to date is that the various transport sub sectors have witnessed varying degrees of growth, changes and contribution to the national economy. Nigeria has become increasingly dependent on the road system to meet virtually all its inland transport needs as the rail, pipeline and inland waterway systems have deteriorated. At the same time, the road network itself has suffered from continuing lack of maintenance and investment by the three levels of government, Federal, State and Local. As provided for in the Constitution, the different tiers of government have independent responsibilities for the planning, financing and maintenance of their roads. Three major issues affect the road network:

- misuse particularly as a result of axle overloading causing damage to roads;
- neglect of periodic and routine maintenance and an absence of emergency maintenance; and
- inadequate design and construction.
- The above diagnosis reveals that:
- There is an urgent need to ensure an adequate and efficient maintenance of the existing road network. Failure to do so imposes high costs on road users and raises the cost of rehabilitation works.
- Past failures to ensure adequate and effective maintenance, due largely to the inadequacy of resources, are the major cause of the current massive need for road rehabilitation.
- In addition to rehabilitation needs, there is the need to check the misuse of road infrastructure due to excessive axle load.
- The costs of rehabilitation and improvement programmes are very high and government is finding it increasingly difficult to meet them.
- Lack of transit parks for trucks along the Federal roads;

- To find the funding to meet the high cost of rehabilitation and improvement programmes;
    - Additional sources of revenue need to be considered to fund the roads, including user charges in the form of road tolls; and
    - Better control and more efficient use of available funds is also needed.

1.2 SIGNIFICANCE OF TRANSPORTATION

- Akinbami & Fadare (1998) opined that transportation system do enhance the productivity and quality of life of a community if properly planned and managed. At the same time, development stimulates demand for transport
- Importation and exportation depends so much on transportation which provides the movement and logistics for the goods imported or for export. In real terms, transport development is considered one of the greatest technological breakthroughs. This is because man has through this feat recreated the concept of distance and nearness.
- It provides access to employment, health, education and services;
- alleviates regional inequality and fosters national integration
- The socio-political relationship between countries could not have been possible without transport links between them.
- Transport can therefore be labelled as the catalyst that stimulates and improves human existence on earth and reduces distance for man's trips in space.
- It is also clear that through transport, man has been able to move in space, circulate around the urban areas or centres of the world, thereby improving and enhancing his knowledge on planet earth.
- It allows markets to operate by enabling the seamless movement of goods and people
- It provides vital links between spatially separated facilities and enables social contact and interaction;

2.0 OVERVIEW OF THE NIGERIAN TRANSPORT SYSTEM

The evolution of modern transport system in Nigeria can be categorized into two distinct phases. These are:

(a) The Colonial Period: The colonial period marked the origin of modern transport system. The basic structure of the Nigerian transport system was imposed by the British Colonial masters to exploit the country's natural resources and their subsequent transportation to ports for shipment abroad(Filani,2010). This pattern had implications on the design and routing of the networks for the movement of goods and services, but also for the levels of development of the country's rural areas and the urban centres that service them. The networks of rail, water and road developed then were geared essentially to meet the exportation of cash crops, such as groundnuts, cocoa, cotton and palm products and to the importation of cheap, mass produced consumption goods. These early transport systems were planned in the most economic way possible, as typified in sub-standard road and rail alignments and a sub base, which later proved inadequate to accommodate heavy vehicles. This led to the emergence of new towns like Enugu, Jos, and Kafanchan, coastal towns located along networks developed at the expense of other disadvantaged towns which contributed to the emergence of regional inequalities which still predominant in the Nigerian space economy till today.

The successful implementation of many projects before and after independence and up to a point in the history of Nigeria as a nation was due substantially to the strategy of pursuing economic and social development through periodic national development plans. The history of development plans in Nigeria can be traced to the colonial era when the British Colonial Office mandated the colonies to prepare development plans for the disbursement of the Colonial Development and Welfare Funds in 1940. This led to formation of National Development Plans in 1959.

(b) The Post Colonial period/ Independence Period:

At independence in 1960, Nigeria had the opportunity of making a choice between two broad strategies for transport development, namely:

- Either to accept the inherited transport system ad adequate and continue to develop an export-oriented transport system
- Make a comprehensive economic survey of the country as it was and as it should be, so as to establish overall transport needs and priorities and provide the basis for examining the adequacy or otherwise of the inherited transport networks in meeting these needs (Filani, 1981).

With a re-orientation of goals after Independence, transport became one of the instruments of unification of the country and an important tool for social and economic development. The development of petroleum resources from the 1950's had significant impact on the nation's social and economic growth, putting increasing demands on the transport system. Goods and passenger movements in Nigeria are performed mainly by road, with the railway and inland waterways playing significant, but less important roles. International freight movement is principally by sea while air transportation is the main passenger carrier.

Government's investment in the country's transport system sector consumed a substantial portion of available public investments fund in the first 25yrs after independence. In the road transport sub-sector, the lack of road maintenance often necessitates subsequent reconstruction. The inadequate replacement and the poor maintenance of vehicles, contribute to high social costs of atmospheric pollution, and results in high operating costs.

2.1 NATIONAL DEVELOPMENT PLANS

Theoretically, development plans involve deliberate efforts on the part of government to speed up the process of social and economic development of a country. The essence of planning by government, therefore, is that it could make a conscious choice regarding the rate and direction of growth. The most logical interpretation of this is that the relative rates at which heavy industry, light industry, agricultural improvement, transport and commerce, housing and the like are to be pursued become a matter of conscious policy (Ayinla, 1998).

Between 1962 and 1985, Nigeria had formulated and launched four national development plans which had made it possible for governments to articulate many policies.

- The First National Development Plan had the objectives of constructing the Niger Bridge, construction a number of Trunks 'A' roads. The plan however was interrupted by two major political events, namely, the military intervention in 1966 and 1967-1970 civil war. Also, the plan failed because fifty percent of resources needed to finance the plan was to come from external sources, and only fourteen percent of the external finance was received (Ogwumike, 1995).
- The Second National Development Plan launched by General Gowon shortly after the civil war was a post-war development plan. The major plan for the transport sector was the reconstruction of federal roads battered by war. The plan only had a statement of policy on transport. The policy sought to encourage a coordinated development of various forms of transport, which were capable of carrying persons and goods at the lowest cost per unit service (Usman,1989).The Transport objectives included coordinated development in the transport sector, economic efficiency and, by implication, the promotion of socio-economic integration of the country through its transport system.
- The Third National Development Plan, launched by General Gowon covered a five-year period from 1975-1980. As far as the first three national development plans (1962-68, 1970-74, and 1975-80) were concerned, there was no clearly articulated strategy for making investments in the transport sector to bring about spatial efficiency in the country (Filani,1981).
- The Fourth National Development Plan, (1981-1985) launched by President Shehu Shagari in 1981 on behalf of the Federal Government showed continued heavy concentration on the inter-urban road linkages for evacuation routes as was planned from the colonial era. Feeder roads, most especially the farm to market and rural to rural linkages were completely neglected, inadequately maintained where they existed, or left largely in the hands of the local communities (Aloba, 1986 and Filani, 1993). In 1985, about 23 percent of national roads were in a bad state. This rose to 30 percent in 1991 and 50 percent in 2001. The current dependence of Nigeria on its road system increases the urgency of addressing the issue. Unless roads and bridges are kept in good conditions they cannot support the desired

socio-economic development of the country. Good as this may sound, in 1986; there was a gradual movement towards a cessation of national development plans in Nigeria.

2.2 POST-1985 ROAD TRANSPORTATION PLANNING TILL THE PRESENT

In the post-independence history of Nigeria, no period has witnessed the type, scope and the depth of reformatory and alleviative measures aimed at addressing prevailing transport problems as well as improving the overall performance of the sector like the post-1985 period. Road transport, even before the period under review, had started to play a dominant role in the overland movement of passengers and goods, following the low number of locomotive trains in the rail transport subsector that can allow for any meaningful competition. In spite of the rapid increasing importance of roads, rural transport, especially rural roads, did not receive the desired attention to foster the growth and development of rural communities, let alone their contribution to the national economy.

2.2.1 Directorate of Food, Roads and Rural Infrastructure (DFRRI)

The most ambitious effort towards rural roads provision after independence was the creation of the Directorate of Food, Roads and Rural Infrastructure (DFRRI) in February 1986. The main function was the mobilisation of rural community organisations as the core of the strategy for rural development. The responsibility of the plan included the implementation of the Rural Roads Programme among others. The rural roads programme was aimed at opening up several thousands of rural settlement, by linking them with different classes of feeder roads (Adesanya, 1991). Within its first four years, nearly 30,000kilometres of rural roads with Grade C specification were constructed, 5000 rural communities were provided with potable water, and 200 villages were provided with electricity (Mabogunje, 1995). Unfortunately, the programme did not achieve the desired result of opening up thousands of rural settlements (Okunade and Amuwo, 1990). Hence, in 1994, the activities of DFRRI were taken over by relevant department under the Federal Ministry of water Resources and Rural Development and state ministries (CBN Annual Report, 1994).The rapidly-deteriorating physical condition of virtually all classes of roads and the pervasive poor maintenance culture became a grave threat not only to most roads and the enormous investment on them, but also to the lives of people and vehicles plying on them.

Consequently, by the late 1980s, policy decisions on roads in Nigeria started to shift towards highways rehabilitation and maintenance as opposed to new road projects. The poor physical condition of virtually the entire road system in Nigeria, due to inadequate maintenance, was aptly described as having serious repercussions for the productive sectors of the economy; hence the urgent need to move away from new construction to much more road rehabilitation and maintenance, in order to mitigate the worsening socio-economic interrelationships with the economy. To a large extent, tolling on federal roads and bridges became an important source of revenue to the federal government in the early 1980s. However, the arrangement for toll collection on concerned federal roads changed in 1996. Hitherto, the Highways Division of the Federal Ministry of Works and Housing (FMW&H)

was responsible for the collection of tolls at the toll gates. Due primarily to the need to reduce revenue leakage at the toll plazas and increase toll-gate takings (and by implication, the availability of more funds for road repairs and maintenance), the management and collection of tolls on selected federal highways and bridges became the responsibility of private contractors as from February 1996 (Adesanya, 1999). The toll gates and plazas on the nation's highways were demolished in January, 2004 as directed by the Federal Government, due to unwholesome malpractices by their operators.

2.2.2 FEDERAL URBAN MASS TRANSIT PROGRAMME (1988)

With respect to passenger movement and private sector domination in the business of mass transit in the past, some State governments have attempted the mass transit system before, but they failed because of lack of strategic management. The Federal Government initiated the Urban Mass Transit Programme (FUMTA) in 1988, in order to complement and support the efforts of private operators (whose services had suffered so much, due to the unpleasant effects of the Structural Adjustment Programme) as well as to respond to the mobility crisis arising from the gross inadequacy of the various modes of public transportation in virtually all the urban centres in the country and assist state governments to either set up or reinvigorate their ailing bus undertakings (Oyesiku, 2004). Between 1988 and 2000, the defunct FUMTA (Federal Urban Mass Transit Agency), embarked on different projects in support of the state government mass transit programmes and, much later, the private sector. This includes procurement and allocation of over 2,000 buses to the states on very soft loan terms. In 2000, the National Council on Privatisation (NCP) set up the Transport Sector Implementation Committee, since then, the government has been looking for ways to encourage private sector involvement in the sector.

2.2.3 THE NATIONAL TRANSPORT POLICY:

The introduction to the National Transport Policy document of 1993 states that: "At present, the Nigerian transport system functions in a crisis situation", and one of the principal causes, it identified was "a major imbalance between the needs of Nigerian society and economy for adequate transport facilities and the ability of the transport sector to meet such demands".

This statement was drafted and remains valid today, in 2010, in respect of most of the transport system. The imbalance in supply and demand for transport capacity overall, and in the development of the different modes of transport, has in fact increased over the period since 1993.

The fundamental goal of this National Transport Policy is to develop an adequate, safe, environmentally sound, efficient and affordable integrated transport system within the framework of a progressive and competitive market economy.

- An "**Adequate Transport System**" means that available transport infrastructure and services meet the needs of all Nigerians for access to the market, place of employment and to basic social services. The transport system will serve as an instrument for social, political and economic unification; strengthening the operation of markets, facilitating production and resource development, and promoting relationships with the outside world.

- A "**Safe Transport System**" means that all reasonable standards are set and actions taken to prevent accidents and minimize the number of potential victims and the destruction of property. Effective safety measures should protect transport operators and their employees, users of transport services and the public at large.
- An "**Environmentally Sound Transport System**" means that reasonable, effective actions will be taken to diminish atmospheric, water and other pollution, through proper planning of infrastructure and the establishment of appropriate regulatory standards.
- An "**Efficient Transport System**" means that the transport services are provided in a way that ensures resources are used efficiently and the economic potential of appropriate technology is used to achieve sustainable gains in productivity in order to reduce costs and improve service quality. An efficient transport system also implies the progressive reduction of social costs, the control of other external costs of transport, and the expenditure of public funds in away that is properly justified and carefully managed.
- An "**Affordable Transport System**" means that adequate transport services can be enjoyed by all classes of Nigerians at reasonable cost, and where market mechanism fails to provide this, the Government will intervene to support the provision of essential transport services.
- An "integrated transport system" means the effective connectivity between ports, rail, road, inland waterways and air, thereby making use of the advantages of different modes to ensure seamless movement of goods and people and better utilization of resources.

This National Transport Policy therefore provides the guidelines for planning, development, co-ordination, management, supervision and regulation of the transport sector as well as:

- Explaining Government's decisions and actions in the sector by espousing the goals and principles that guide it;
- identifying existing gaps and short-comings and how to address them;
- showing how actions in the different modes are linked in pursuit of common goals;
- providing the basis for a system of monitoring and accountability; and
- Ensuring consistency in the application of policy principles across all modes and in pursuit of different objectives (National Transport Policy Draft, 2010)

According to the National Transport Policy document at hand now, the transport sector would take advantage of the private sector initiative to do the following:

1. Improve the efficiency of operatives and management of transport parastatals

2. Achieve the desired reduction in the cost of providing transport services
3. Facilitate further development in the nations transport infrastructure
4. Eliminate congestion both in the intra-city and inter-city traffic flows.
5. Encourage the emergence of Nigeria as a transport hub for West and Central Africa sub-region.

2.2.4 The Road Vision 2000

Experience over the years has shown the government alone can no longer adequately undertake the funding of all social services including the provision of good roads, as well as their management. Against this background, the Federal Ministry of Works, and Housing held a 3-day International Seminar on Private Sector Participation in Road Management in Nigeria in September 1995 with the objective of seeking alternative ways for funding the maintenance of the nation's road network. After exhaustive discussions of papers presented by eminent scholars and international experts, the following major recommendations were made.

(i) Government should promote an enabling environment for the attraction and retention of the interest of the private sector in road management.

(ii) A legal framework should be put in place to ensure policy continuity for private sector participation in road management and financing.

(iii) A levy on the petroleum pump price should be devoted to road maintenance to improve the poor state of the nation's road network, in view of the fact that the petroleum pump price is a transport-related revenue. Encouraged by the outcome of the seminar on `Private Sector Participation in road Management' and in order to find a lasting solution to the problems of the road sector, the Ministry of Transport launched the ROAD VISION 2000 Programme in June 1996 in Lagos. The Programme also recommends the following:

(i) Creation of a National Roads Board, as an autonomous agency governed by a Board composed of private sector, government and road user representatives, (private sector to be in majority and provide the chairman).

(ii) Creation of a Road Fund, to mobilize funds from road user charges like fuel levy on premium motor spirit (PMS) and diesel, international transit fees, tolls on roads and bridges, donor funding, and heavy vehicle fees (the fuel levy to be collected by the National road Board).

(iii) Establishment of Legal Framework, for private financing of road maintenance projects

The Road Fund is expected to be generated from road user charges derived principally from a levy on the pump price of fuel. The fund will be used to finance routine and periodic maintenance and needed rehabilitation to make Nigerian roads attain adequate level of service, traffic management and also road safety. This practice has obtained in most countries of the world at some point in time or the other. It is even on record that the African countries that have adopted the reforms have achieved significant improvements in the conditions of their road network. The Ministry therefore strongly believed that setting-up the Road Fund is a necessary and bold step for government to enable it solve the age-long problem of inadequate and unstable

funding of road maintenance. Unfortunately, this proposal which had been developed into relevant Bills (The Road Authority Bill and the Roads Fund Bill) for consideration by the National House of Assembly is yet to become Acts that will make them effectual (Ogwude, 2008).

2.2.5 FRSC (Federal Road Safety Corps)

Road safety certainly worsened from the late 1970s to early 1980s, when there was a substantial increase in vehicle population and road accidents as well as carnage on Nigerian roads, between 1980 and 1985 (Onakomaiya, 1991). It is quite disturbing that the road accident fatality index (death per 1000) of 0.43 for Nigeria in 1999 and 2001 was the highest in Africa (Arosanyin, 2001, Jacob et all 2000 and Gbadamosi, 2003). Available data (NBS,2006) also show that there have been oscillations in accident figures; nevertheless, they have been on the high side. Virtually all accident cases involve a casualty and fatalities.Also, road study undertaken in 1998 indicates that N300 billion will be required over the next 10 years to bring national road network into a fairly good condition. After the recovery, an average of N24 billion will be required each year for subsequent maintenance and N32 billion per year for road rehabilitation. Further neglect of these roads implies a loss of network value of N80 billion per year and additional operating cost of N53 billion per year. In 1999, the FRSC emerged with the Nigerian Police Force, to streamline road safety activities under one law enforcement command. It was later separated from the Nigerian Police in November, 2003. The National Road Traffic Regulations of 1997 were introduced as a basis for a unified motor vehicle and motor cycle administration in Nigeria, which before then, was so disparate (Ibrahim, 1997). Each state was given its own road traffic regulations, licensing procedures for drivers and vehicles, an arrangement which encouraged the ownership of multiple drivers' licences, and creating difficulty in tracing stolen vehicles and so on. These regulations made provision for uniform licensing schemes, Proof of Ownership Certificate, national Standard vehicle Inspection scheme and the enhanced National Drivers' License Scheme (Ibrahim, 1997).The issue of road safety has been of deep concern to the Nigerian people and relevant authorities. Except roads and bridges are kept in good conditions they cannot support the desired socioeconomic development of the country.

2.2.6 The Federal Roads Maintenance Agency (FERMA)

This agency was created on 30 November, 2002, through FERMA (Establishment, etc) Act, 2002. Specifically, FERMA is to ensure efficient and effective monitoring and maintenance of all existing federal trunk roads or such other roads as may be declared from time as federal trunk roads by the National Assembly. FERMA observes that, as at mid-2007, only 15 percent of federal roads have structural integrity that was good enough to last 10 years, while about 50 percent of federal roads requires urgent work to prevent them from imminent collapse (FERMA WEBSITE). FERMA, at the moment, has laid out some phased road programmes under its Medium Term Road Sector Maintenance Management Strategy (MTRSMMS). This includes Systematic Road Strengthening and Enhancement (SRSE) Programme, on which FERMA's road concessioning initiative is to be anchored. The second phase is the Performance Based Maintenance Management Programme (PBMM), whereby SRSE competent concessionaires would be responsible for the follow-up maintenance of newly-constructed or repaired roads by them, for concession periods ranging from 5 to 15 years, under an assessed or predetermined fixed monthly fee. Apart from FERMA, the highways Department of the Federal Ministry of Works and Transport is charged with the construction of new highways, and the reconstruction and rehabilitation of badly-damaged highways, while FERMA is charged with maintaining the highways at acceptable levels of usability. Another critical area of policy concern during this period is road financing and management. The stark reality is that the public sector is facing a serious budgetary crisis (which may yet worsen in the foreseeable future) and cannot adequately fund road provision, rehabilitation and maintenance alone. This situation necessitated the exploration of alternative ways of funding and managing roads on a sustainable basis.

2.2.7 NEEDS (National Economic Empowerment and Development Strategy)

Since 2003, many transport sectors related reforms have been undertaken; example is the NEEDS (national Economic empowerment and development strategy). Within the framework of this strategy in 2003, there have been a series of infrastructure reforms proposed as means of poverty reduction. Beside the poor state of infrastructure, including transport infrastructure, was seen and regarded as an inhibiting factor in meeting the needs of the average investor and in increasing the cost of doing business.

Under the NEEDS strategy (2003-2007), the government planned to:

- Rapidly privatise key infrastructure services, so as to ensure effective service provision;
- Provide targeted interventions in the provision of infrastructures, especially to rural areas and vulnerable groups.
- Encourage private sector initiatives and participation in the provision of transport infrastructure using methods like: build-operate-transfer(BOT), build-own-operate(BOOT), rehabilitate-operate-transfer(ROT) and concessioning; and;
- Provide counterpart funding for major infrastructure projects for which either the resource involvement is too high or the incentive too low for private sector participation.

In 2004 Nigeria's Federal Roads Maintenance Agency (FERMA) began to patch the 32,000-Kilometer Federal roads network. The rainy season and dearth of road construction / maintenance equipment pose challenges to road maintenance. Road users therefore, suffer an additional vehicle operating costs of N53 billion due to poor condition of Nigerian roads.

2.2.8 OPERATION 500 ROADS PROJECT 2004

Further, Operation 500 Roads Project was launched in April 2004, whereby 500 roads were selected for repairs and rehabilitation. Nevertheless, it turned out that federal roads got more attention than state and local government roads. Although a few state governments established their own road maintenance agencies, many states are still saddled with meeting enormous road repairs and maintenance needs. In short, rural accessibility remains inadequate and this has significant implications for productivity and growth as well as for rural poverty alleviation. In addition, the Federal Ministry of Works and Housing continues to advocate the adoption of the build-operate-transfer (BOT) scheme in road development but, in reality, there has not been any significant achievement in this respect.

2.2.9 INFRASTRUCTURE CONCESSION AND REGULATORY COMMISSION (ICRC)

In 2008, the government set up the Infrastructure Concession and Regulatory Commission (ICRC) to identify and promote opportunities for Public Private Partnerships (PPPs) in infrastructure between government and private sector operators. All PPPs in the sector must be approved by the ICRC in order to be recognised by the Federal Government. The government is conducting a comprehensive review of the transport sector in order to gain reliable data for transport planning – the last such survey was undertaken in 1983. The Nigerian Institute for Transport Technology was also commissioned to carry out the survey in January 2010. The National Transport Commission Bill, introduced in 2009, will set up an independent regulator for the sector; the bill went before a ministerial committee in June 2010, which means it should be implemented in the near future. The Federal Ministry of Works is now at the forefront of promoting the use of Build-Operate-Transfer (BOT) scheme in road construction. In fact, some roads and bridges have been earmarked for development through the BOT scheme. At the moment, the Lagos-Ibadan expressway has been concessioned to Messrs Bi-Courtney Highway Services Limited in August, 2009, under a Design-Build-Operate-Transfer (DBOT) arrangement valued at #90 billion, for a period of 25 years. During this period, the concessionaire is to recoup its investment through the administration of tolls and other charges on road support services such as trailer parks and rest areas.

2.3.0 First National Implementation Plan (1st NIP) 2010-2013 & the Nigerian Vision 20:2020

The First National Implementation Plan (1st NIP) 2010-2013 was prepared in pursuance of the goal set in the Vision20:2020. It contains a macro-economic and strategic framework which encompass the vision statement, strategic objectives, plan and programme thrusts, national investment priorities, macro-economic policy thrusts, projections and outlook that will drive the development of the economy in the direction prescribed in the Vision. The vision statement is that:

"By 2020, Nigeria will have a large, strong, diversified, sustainable and competitive economy that effectively harnesses the talents and energies of its people and

responsibly exploits its natural endowments to guarantee a high standard of living and quality of life to its citizens".

The blue print on vision 20: 2020 constitutes a transport development strategy that is private- sector driven, providing an environment capable of addressing the issues of wealth creation, employment generation and poverty reduction. The vision 2020 houses the National Transport Policy with the objective to develop an adequate, safe, environmentally sound and efficient transport system in the context of a progressive and competitive market economy (The Draft National Transport Document,2010).

Igbuzor (2010) explains that the Nigeria Vision 2020 economic transformation blueprint is a ten-year plan for stimulating Nigeria's economic growth and launching the country onto a path of sustained and rapid economic growth to become one of the top twenty economies by 2020. Against the background of the numerous challenges and constraints obstructing the growth and development of the country, the plan identifies some of the actions that will ensure the successful realisation of the vision as follows:

- Expansion of investments in critical infrastructure;
- Fostering private sector-led non-oil growth to build the foundation for economic diversification;
- Investing in human capital development to enhance national competitiveness;
- Changing the value system to encourage honesty, industry and eliminating the culture of worshipping money;
- Entrenching merit as a fundamental principle and core value;
- Addressing threats to national security;
- Deepening reforms in the social sector and extending reforms to the states and local governments
- Correcting the weaknesses inherent in the revenue allocation framework;
- Intensifying the war against corruption; and
- Establishing the process for free and fair elections

National Investment Priorities

The programmes and projects contained in the plan are those considered vital or priority projects for the purpose of realizing the goals of the Vision and the 1st NIP. These are physical infrastructure (power, energy, transportation, water, housing, etc); human capital development; productive sector; regional development; governance and security, knowledge-based economy and general administration with shares of 3 per cent, respectively. Thus, public sector investment priorities will be on the rehabilitation and expansion of the nation's stock of infrastructure and on those areas critical for growing private sector investment.

Objectives, Targets and Strategies

In line with the Vision, and during the first phase of the implementation plan, the following objectives for the transport sector will be pursued: provision of adequate transport infrastructure and services for balanced socio-economic development of the country; provision of safe, efficient and cost-effective transport services for the country; development of the capacity to sustain and continuously improve the quality of transport infrastructure and service delivery in the country. Other objectives are creation of an enabling environment for private sector participation in the provision of transport infrastructure; and development of a seamless intermodal transport system.

Objectives on Roads

- Recovery of 30 per cent of the existing bad federal roads (7,677km), by 2013. Currently*, about 70 per cent of the existing roads are in a deplorable condition*
- Complete road works that have reached 50 per cent completion as at Dec 09
- To rehabilitate and reconstruct the major trunk roads
- To concession major and viable routes
- Secure funding arrangements from both the private and public sector for the remaining 40 per cent of the bad federal roads
- To introduce private sector participation in the upgrade and maintenance of roads

Summary of Road projects to be funded solely from Federal Government allocation

- Dualization of Onitsha – Owerri Road and Onitsha Eastern by-pass
- Dualization of Ibadan – Ilorin Road section
- Dualization of the Abuja – Abaji – Lokoja road
- Dualization of the Kano – Maiduguri Road
- Dualization on the East – West Road. Warri to Oron via Port Harcourt
- Construction of Kano western by-pass
- Construction of Panyam – Bokkos Wamba Road

Private sector involvement in the transformation of the transportation sector is pivotal to the realization of the overall strategic direction of the sector as articulated in the NV 2020 economic transformation blue print. Consequently, existing and new public-private initiative will be given.

Table 1: Key proposed projects and programmes for PPP

Project Government financial commitment	Projects aim
Lagos-Ibadan Express Way concession	Upgrading of existing road by expansion to 8 lanes between Lagos – Shagamu and 6 lanes between Shagamu – Ibadan with construction of bridges.
Concession of 1.35 km Guto-Bagamabridge across River Benue.	
Completion of 1.35 km with adjourning roads	This is to reduce travel time between Enugu and Abuja by 2 hours
Construction of 2nd Niger Bridge across River Niger at Onitsha / Asaba	Completion of 1.75 km bridge 14 km road with 3 New Flyover bridges and 3 other bridges.
Rehabilitation and expansion of Shagamu – Benin, Benin-Asaba, Abuja-Kaduna, Lagos – Badagry, Seme Border, Abuja – Kaduna, Kaduna – Kano dual carriageways services on the roads.	to international standards in order to facilitate smooth transport of passengers, goods and priority by the Federal Government to ensure their completion within the plan period.

Source: Nigerian Vision 20:2020

2.3.1 Country Strategy Paper (CSP) & Country partnership Strategy (CPS)

This Country Strategy Paper (CSP) proposes a strategy for supporting Nigeria's development efforts over the period 2013-2017 and is anchored on creating a sound policy environment and investing in critical infrastructure. This strategy is aligned with the long-term development agenda of the new administration as outlined in the vision 20:2020 and anchored on the Government's Transformation Agenda 2011-2015, the Country Partnership Strategy (CPS) (2011-2013) - jointly prepared by the World Bank, African Development Bank (ADB), United States Agency for International Development (USAID) and the Department for International Development (DFID); and with the Country Assistance Framework (CAF) currently being developed by the donor community in Nigeria.

For these reasons, the CSP is based on two strategic pillars:

- Pillar I -Supporting the Development of a Sound Policy Environment; and

- Pillar II–Investing in Critical Infrastructure to Promote the Development of the Real Sector of the Economy.

Pillar I is proposed because of the valuable lessons learnt from the ADB's operations in Nigeria. A fundamental lesson is that the quality, availability and timeliness of policy advice and analytic work are crucial for government effectiveness at any level of development. Hence, the Bank would step-up its efforts to deliver high quality policy advice through targeted analytical and advisory work (non-lending activities). Specific areas of focus would include topics such as resource mobilization, oil resources and subsidy management, public private partnerships, job creation, green growth, gender mainstreaming, and regional integration.

Pillar II is proposed to support the delivery of key infrastructure particularly in the road transport, energy, agriculture, and water and sanitation. Environmental sustainability of operations will be critically assessed for green growth. Critical infrastructure development and promotion of inclusive and green growth are in line with the Government's Transformation Agenda, the Bank's Long-Term Strategy, and the Regional Integration Strategy for West Africa (2011-2015).

In May 2010, the government said that it was planning to reclassify the roads in order to shift some of the burden of maintenance off the Federal Government. The Government will therefore introduce user charges on Federal Roads, as the primary means of augmenting as the primary means of augmenting the budgetary allocation for road maintenance and rehabilitation. The Ministry of Works was responsible for the construction of new roads and the major upgrade of existing roads. The Government will continue to contribute to the funding of road construction and maintenance, and attract additional funding by promoting private sector investment in the upgrade and maintenance of roads and management of tolls through Public Private Partnership. In this way, performance risk will be passed to the private sector and there will be a strong discipline for efficient delivery of services. However, though the government has a number of plans for the road transport sector, but what the nation has inherited in the absence of well-articulated development plans are budget frauds, road contract scandals, oil scams and unchallenged or unchecked high level of financial corruption at all level government in Nigeria, which ends up crippling development in all the sectors of the economy.

Challenges and Weaknesses of CSP

The country is facing several challenges to achieve a strong inclusive growth. Turning these challenges into opportunities is critical to setting the country on the path of reaching the Vision 20:2020 objective. The key challenges holding back the country's long-term aspiration are corruption, particularly as evident in lack of transparency and accountability in the management of the country's vast oil and gas resources, governance and weak institutional capacity, the infrastructure deficit, lack of long term financing for Small and Medium Enterprises (SMEs), challenging social harmony, and weak business environment. Other daunting challenges include poor policy outcomes resulting from weaknesses in policy formulation and implementation.

3.0 PROBLEMS MILITATING AGAINST ROAD TRANSPORTATION SYSTEM IN NIGERIA

- Indiscipline and Corruption among Transport and law enforcement agencies.
- Enforcement problems depicted through disobedience and disregard for laws, traffic signs and rules for safe driving.
- Poor driving habits of Nigerian drivers through over-speeding, drink driving and drunk driving.
- Market and marketing activities, stacking of building materials on roads and occasional traffic/parking over spill from religious and social centers.
- Poor Transit Facilities – Lack of sidewalks, pedestrian walkways, cycle ways, comfort stations, street lights, bus stops, and traffic control devices; and lack of Traffic Information Systems.
- Unguided and Inconsistent Land-use Planning Practices – No systematic guide/plan to guide the city’s growth, and lack of an integrated, comprehensive and coordinated positive policy; poor and non-integrative institutional arrangement. Environmental deficiencies and general urban management problems frequent friction and conflicting responsibility among different levels of government over land-use controls.
- Poor maintenance and management of road infrastructures.

3.1 WAY FORWARD FOR SOLVING TRANSPORTATION PROBLEMS IN NIGERIA

The present system of transportation can be described as ‘highways’ to nowhere, therefore, there is urgent need to engage professionals to assist in achieving functional, responsive, sustainable and beyond sustainability of transport in Nigeria. Many researchers have written concerning the sustainable measures for proper Nigeria’s transportation systems. Sustainable transportation involves infrastructure investments and travel policies that serve multiple goals of economic development, environmental stewardship and social equity. (Spaethling,1996).

A sustainable transportation system has its goal service output and stewardship of the landscape and resource base, not simply the efficiency of the highway system. The objective of which is to maximize the use of the transportation system to achieve economic and related social and environmental goals, without sacrificing the ability of future generations to do so. This can be accomplished by: Concentrating on moving people and goods rather than vehicles.

Improving the efficiency of existing infrastructures through technical fixes in a multi-modal network, and addressing public concerns regarding social equity in system design is any way of improving on the deteriorating state of road infrastructures in Nigeria. (Oni, 2002). Also, there should be rehabilitation of key trunk roads and welcoming investment in road construction and maintenance. This is supposed to be the mission of the government to bequeath to this nation an efficient, sustainable, affordable and environmentally friendly inter-modal transport system through Public Private Partnership (PPP) either through concessioning, joint ventures or Build Own Operation and Transfer (BOOT arrangements".

Oni, (2002) Government should adjusts the following strategies public enlightenment on the need for regular maintenance of vehicles, use of appropriate tyres, corrects driving habits and relative energy efficiency of various vehicles, eradicate the sale of adulterated and leaded fuel, set up emission standards for imported vehicles, promote research on alternative energies such as electricity and solar energies, as well as phased programme of low-emission automobile fuel such as unleaded gasoline and compressed natural gas, need to recognize professionalism in transport management initiatives, need for database and information networking on land use, land use pattern, demographic and population attributes mapping of the physio-graphic situation, industrial developments their locations and localization and socio-economic activities, need for transport development plan and conference whereby all stakeholders in the area of transportation are brought together to articulate the goals. Maintenance management system, Heavy investment on transport infrastructure/furniture, improvements in urban land use practices, improvements in telecommunication services.

4.0 SUMMARY AND RECOMMENDATIONS

In summary, this paper has traced the history of road transport development planning in Nigeria from 1981to the present time. The various objectives of road transports sector in the development plans were identified to have followed in the steps of our colonial masters, where roads where specifically designed to exploits the country's natural resources and their subsequent transportation to ports for shipment abroad.

From our discussion, it has been shown that at a point around 1986, there began some signs of inconsistency in the implementation of development plans, which ultimately led to a total abandonment of the tradition of having development plans. This has been found to be one of the major factors militating against good governance in Nigeria; the business of governance began to be haphazardly conducted, while the quality of life began to decline. The paper has reported that as a result of the cessation of development plans in Nigeria, the country has suffered some negative consequences among which are deplorable poverty profile and unchecked high level of corruption. The implication of all these is hindrance of economic growth because the country's resources, which are to be used for development, are being plundered.

To remedy the negative consequences, it is hereby recommended that the present democratic government should go back to the revision and implementation of the various strategies in the comprehensive development plans. To this end, there is the need for the following institution to be established or, where they are already in existence, they must be strengthened. First is the establishment of a National Council on Development Plans. This council, to be chaired by the President, should, among other things:

- supervise the implementation of national development plans;
- ensure harmonization of existing policy measures with the future development objectives and strategies;
- ensure effective and consistent dissemination of the development plan vision to institutions and the wider public; and
- co-ordinate and monitor all inter-sectoral related activities spanning rural development, poverty alleviation, water supply, urban and rural environmental sanitation, health, education, agriculture, control of population growth, electricity supply, communications, transportation, etc.

Secondly, to ensure the success of the road sectors development plans in Nigeria, corruption must be eliminated. Consequently, it is suggested that all laws on corruption should be strengthened. Institutions such as the Independent Corrupt Practices and Other Related Offences' Commission (ICPC) and Economic and Financial Crime Commission (EFCC) should be given more support by the government so that the implementation of road development plans at any state will be free of corruption. Since the attainment of independence in 1960, the problems of Nigerian road transport system include bad roads; inadequate fleets of buses or trucks; irregular, inadequate and overcrowded trains and airplanes and congested ports. These are common features of the developing world. In line with these are physical problems such as dearth of suitably-trained transport managers and planners, capital restructuring bottlenecks, serious issues of institutional reforms and ineffective traffic regulations.

Finally, for development plans to lead to good governance, the bureaucratic processes in Nigeria should be developed to facilitate effective governance. This can be done by removing the bureaucratic red tape, which often undermines good governance via policy implementation as embedded in development plans.

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