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THE CHALLENGES AND OPPORTUNITIES OF RAIL TRANSPORT AS AN ALTERNATIVE MASS TRANSPORT PROVIDER IN NIGERIA

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ABSTRACT:

This study examines the transport situation in urban centres across the globe and the need for mass transportation in Nigeria. It attempted to find out the major mass transit options and opted for rail transit system because of its special characteristics and attributes as well as the numerous potentialities. Furthermore, the paper discusses some of the problems associated with rail transit system in Nigeria and concluded by recommending some policies as a way forward.

Keywords: Rail Transit System, Mass Transit, Urban Centre, Public Transport

1.0 INTRODUCTION

One of the major problems arising from the socio-economic development of a nation has to do with the increasing volume of traffic and the increasing need for quicker means of movement that involves a large quantity of people at a particular period of time. This has become a food for thought for planners, policy makers, transport experts and engineers. Generally speaking, it has become apparent all over the World that the demand for road space is on the increase and as a result many vehicles brought unto the road are increasing vehicular congestion while the road network has not been able to accommodate an increase in vehicular traffic. This was compounded by the increasing need to move from one place to another for so many reasons. Hence the alternative means of movement which will be faster, time and cost saving as well as reducing general wastage.

Such problems identified above are very common in the urban areas with high population density, numerous socio-economic activities and high number of vehicles. In most countries of the world especially the developing countries, cities have been growing at a rate which is considered too fast for urban infrastructures to cope with, creates spatial imbalance in population distribution in which case affect the government policies. In Nigeria for instance, there is a growing concern about location policies which are centered in a few metropolitan areas such as Lagos, Ibadan, Benin, Enugu, Port-Harcourt, Kano, Kaduna, Jos and Abuja to mention a few while between 1950 and 2000 the rate of urbanization in the country has been leaping between 19%

and 51% according to Umeana (1998).

This therefore suggests a geometric increase in the problems associated with urbanization which include infrastructural failures, stress, high poverty level, high crime rate, unemployment and concomitant mobility crisis. In a country like Nigeria, where transportation system is full of many inadequacies as city growth increases or expands there is an expected increase in cost of overcoming separation distance. However, in light of the existing problems and its anticipated increase in its gravity, one question needs to be answered: that is, what strategy would be the most adequate in containing these problems? Among other ways in which the above problems could be solved or minimized is through the introduction of mass transit systems which could be categorized into the following according to Adeniji (1993). These are:

- i. light rail transit system (i. e. the trams or streeters , per-metro),
- ii. rapid rail transit (i.e. the subways, metros, and underground rails),
- iii. the bus systems which could be of standard single deck, larger single deck and double deck or articulated and
- iv. the ferry systems.

However, this paper will focus on the rail transport system as an alternative for meeting mass transportation demand in Nigeria and it is structured into six major sections, firstly the need and justification for mass transportation in Nigeria, secondly the characteristics and attributes of the rail transit system, thirdly, the potentialities of rail transport and the fourth section discussed the various problems facing rail transport in Nigeria while section five deals with the way forward by recommending some policies and finally the conclusion.

1.1 THE CONCEPT OF RAIL TRANSIT SYSTEM

Rail transportation is one of the alternative ways of solving the persistent mobility problems of the urban centres of the world. This has been used successfully in the developed world as well as in some developing world such as Cairo Egypt, Singapore China and Bombay, India according to Ajiboye et al (1994). The rail transport as discussed above is made up of rapid and light rail transit systems. The rapid rail transit system is often called metros, subways or underground and operate on completely exclusive rights of way and at the fastest and highest transit capacity currently. The exclusive right of way is usually provided in underground tunnels or in few cases elevated while a small section of the network may run at surface level. The metros usually involve very high capital, operation and maintenance outlay which is why they are normally owned by the public sector.

The light rail transit systems on the other hand are usually referred to as a wide range of electrically powdered rail systems. Trams and streeters which operate on tracks and share the roadway with others are at one extreme. On the other extreme are premetro systems which are operated on exclusive rights of way and often designed for conversion to rapid rail systems when desired. The basic features of the light rail systems

are passengers usually boarding from the road surface or from low platforms while the track ways may have sections of exclusive right of way.

The light rail transit systems can be categorized into three main types namely the trams which are fixed rails and usually operating as single units in mixed traffic and mostly on city street while the second light rail transit is made up of light rail vehicles which sometimes are articulated and usually operating in trams of one or more units, either on-street or in segregated rights-of-way or a mixture of both. Finally, the third one is the light rail transit metro which are light rail vehicles operating in trains along completely segregated tracks either on the surface, elevated or underground. The capacity of LRT systems operating on reserved street track is the region of 20,000-36,000 passengers per hour per track at journey speeds of 15-25 KPH with 5 or 6 car trains.

1.2 THE POTENTIALITIES OF RAIL TRANSPORT

The potentialities of all transport as an alternative for meeting mass transportation demand in Nigeria is very high since it is a mass transit system that provide the means by which the majority of the society can be moved enmass at a particular point in time. Many of the urban centers of the world are over populated. Lagos metropolis for instance has a population exceeding 8 million and has transportation problems which have defied several solutions according to Adeniji (1993). Furthermore, the available public transportation especially the bus-systems cannot meet the demand of the people because the demand are more than the supply while the buses are grossly inadequate and the number of function mass transit buses of standard single deck, larger single deck and double deck or articulated which has the fare paying passenger carrying capacity of 80 to 160 passenger per trip and 1000 to 2400 passengers per day are reducing every day as a result of the economic depression of the World, exorbitant prices of new vehicles, high maintenance cost, inadequate availability of genuine spare parts, declining purchasing power, galloping inflation, deteriorating per capital income and high ever mounting debt problem.

Similarly the congestion of traffic and people as well as the need for the majority of the people to move at a particular time to schools, offices, workshops, religious centres, markets and other places such as recreational centres. For instance, despite the availability of 200,000 vehicles in Lagos according to Ikya (1993) in which 75% of them are private cars and taxis of 4/5 passengers capacity and not every resident or family of the city has a car of their own and where they have a car not everybody could drive because of their age, physical and emotional disability and more importantly not everybody could have the vehicle at a time. In essence, there is a great need to move the large pool of people from their respective origin to destination. The question then arises, how would they move? Adeniyi (1993) agreed that one universally accepted advantage of buses is their flexibility in meeting changes in the shape of city development and the quantity and quality of public transport demand while they are the commonest mode of transit in the world and virtually ubiquitous. However, passengers could be moved more effectively through the use of rail transport which has

a very high passenger carrying capacity as discussed above.

Ajiboye et al (1994) shows that among most serious urban traffic problems in Lagos are congestion, inadequate number of vehicles, long waiting time at bus-stops, long traveling time, pollution etc while the World Bank Policy Paper on urban transport noted that in Lagos, the average vehicle travels at about half the speed of its counterpart in London and Frankfurt and this indicated that a large amount of time and energy are often wasted. Furthermore, Ikya (1993) said on the average, over 14 million passenger trips are generated every working day of the week by vehicles entering and leaving Lagos Island for metropolitan Lagos. This however revealed that despite the number of vehicles on roads, they have not been adequate to ameliorate the massive problems of commuters while the available vehicles cause heavy hold-up on the highways especially during the traffic peak periods. Therefore a light slash rapid rail mass transit scheme will be the best option for use in this circumstance. Table 1 show the number of passengers carried and revenue generated through the Nigeria Railway Corporation from 1983 to 1999 .The maximum passenger population was 15, 553,000 in 1984 and the least 784,491 in 1994.

All over the world, the commercial nature of urban centres continue to attract more people from the rural areas which are made up of functionary and interacting parts according to Don (1990). These functionary parts are as a result of urban land use which consists of residential, educational, commercial, industrial, social, recreational and administrative centres while transport constitutes the major interacting parts of any urban city . The spatial imbalance that is often created by these land use types are therefore result into the existence of desire in one place and fulfillment in another. This therefore required that the land must be used to the maximum and records have shown according to Adeniji (1993) that a mass transit bus has a carrying capacity of 80 to 160 passengers and 1000 to 2400 passengers per bus per day while a light rail transit metro has a passenger carrying capacity of 20,000-36,000 per hour per track and a conventional taxi/car carries just 4 people per trip. For the best utilization of the land for transport, the rail transportation is the best.

Every urban centre has its peculiar transport problem which often depends on the morphology of the city coupled with the socio-economic, political and the environment. Lagos for example serves as a commercial nerve centre of the country and it is a mode from which socio-economic, political, ideology and developments diffuse to other areas in the North, East, West, South-south and Middle belt regions. For all these to take place there must be a mean to transfer these messages and one of such is through an effective rail transport. This therefore allows every member of the community to achieve their daily socio-political and economic activities. Another potential of rail transport as an alternative for mass transport is in the area of safety. It is safer to ride in a train than in a bus and worst more to ride in private vehicles. Researchers have shown according to Adeniji (1993) that the accident rate of bus transport per 100,000 bus kilometers is between 1:53 while that of rail is far lesser. Onakomaiya (1993) gave a lot of newspapers headlines about the various accidents that

involved buses such as "10 killed as train hits passenger bus", "14 killed in road crash", "18 killed in crash", "family loses 4 children", "30 lives lost in bus disaster", "72 people killed in ghastly bus crash and loaded Molue plunges into Majidun River as well as 21 bodies recovered and 50 feared dead" etc.

With the introduction of train mass services there is likely to be high reduction in the number of vehicles on the road in the cities. It would therefore result in improving the environmental quality in term of reduction in atmospheric pollution and noise, which is good health wise for all, particularly the residents.

Rail transport as an alternative for mass transit is more reliable, safer, time saving and has decongesting effect on highway traffic. A single trip by rail often conveys great passenger population as well as very heavy freight thereby makes less commuters and lighter traffic highway. Consequently, the highway infrastructures will require less maintenance and last longer.

The availability of rail transportation also enhances socio- economic activities in its neighborhood. For instance rail mode of transportation was in its effective years, one of the highest employers of labour and one of the biggest revenue sources for the government in Nigeria. This may go a long way to reduce theft cases, because the employed are more in number, thereby reduces pressure to commit crime.

Effective rail transport facilitates faster and safer delivery of goods over long distance than road transport. Besides, considering the lesser land use for rail road, it is comparatively more cost effective than it is for highway.

With the high cost of petroleum products and with little or no alternative energy source in many parts of the world more especially Nigeria, the introduction of fast reliable and efficient rail transportation will be a welcome relief to so many people, families and organizations. Since it would reduce fuel consumption and enables them to save and invest more.

1.3 RAILWAY TRANSPORT PROBLEMS

In spite of the interactive, socio-economic and political roles played across the globe and their varying developmental impacts, many railway systems especially in developing World including Nigeria are seriously sick and suffering from rapidly declined productivity and unimpressed operating and financial performance among other things. Oshinubi (1993) believed that rail transportation has not been adequately favored for a long time in all developmental plans of the Federal Republic of Nigeria. He went further to say that since independence of the country as well as since establishment of railway in Nigeria, there has always been that implacable force that is repelling all attempts made to develop it by the well meaning forces of progress.

Galenson and Thompson (1994) believed that insufficient rail operation coupled with chronically inadequate earnings have continued to aggravate and perpetuate the deficiencies in basic rail infrastructure provision and maintenance while the aforementioned problems are magnified by the macro-economic crises currently faced by many countries.

Other general problems affecting the rail transport are summarized by Adesanya (2001) as state ownership and control, undue government interference, unrealistic rates and tariffs which are often government imposed, excessive labour force with huge salaries and pension bills, resistance of railways in meeting the needs of clients as well as slow consideration and response to institutional raters even when the need for them are too obvious. The effect of all these usually service differences and subsequent railways losses of market shares to the trucking industry in particular and a large and direct financial burden on the public budget.

Ademiluyi (2002) also summarized the factors affecting good performance of the Nigerian Railway corporation as follows: the shift in government major source of revenue from agriculture to petroleum, haphazardly constructed rail lines by the British Government, competitions by other modes of transport, poor technology, the viable rail routes in Nigeria have not been exploited particularly East West and the metropolitan rail lines. However government pays little or no attention to rail lines construction and rehabilitation, mismanagement and deteriorating conditions of the infrastructure. Other problems mentioned by Duncan (1984) and discussed by Ademiluyi (2002) are excessive curvature on tracks, light weight rail, poor track condition, weak bridges, weak rail as well as inadequate and poor signaling of stations while there is also the problem of low morale of staff arising from unpaid accumulated salaries and other allowances and benefits arrears.

The rail transport has all along been facing the keen competition from the trucking industry of freight and the commercial buses popularly called luxurious buses on long distance journey. The Nigerian Railway Corporation for instance is faced with problems that concern state of its equipments, its quality of service as well as financial and management problems which directly affect freight and passengers movement. Hamid (2001) revealed that out of a total number of 2880 wagons owned by the Nigerian Railway Corporation in 2000 only 1229 representing 42. 67% are fit and the rest wagons are unfit and accidental while the number of passengers and freight carried are declining on yearly basis as shown in Table 1 below.

**Table 1: NIGERIAN RAILWAY FREIGHT AND PASSENGERS TRAFFIC
RECORDS AND RECEIPTS 1983- 1999.**

YEAR	NO OF PASSENGER CARRIED	PASSENNGER REVENUE ₦	FREIGHT TONNAGE	FREIGHT REVENUE ₦	TOTAL EARNINGS ₦
1983	12,145,000	29,877,000	1,619,000	36,199,000	66,376,000
1984	15,553,000	33,147,000	1,458,000	33,335,000	66,402,000
1985	11,432,000	36,295,000	1,182,000	34,247,000	70,452,000
1986	9,818,000	39,059,000	825,000	36,336,000	75,395,000
1987	7,363,000	35,750,000	353,000	45,632,000	51,382,000
1988	4,196,000	25,117,000	294,000	13,200,000	38,317,000
1989	6,520,000	24,318,000	270,000	18,155,000	42,473,000
1990	6,345,000	31,403,000	374,000	35,911,000	67,314,000
1991	3,443,000	19,300,000	330,000	64,460,000	83,760,000
1992	1,747,000	17,013,000	204,000	499,732,000	66,745,000
1993	1,502,000	11,625,000	106,000	25,841,000	40,468,000
1994	784,491	36,809,884	106,000	121,911,902	158,791,999
1995	2,889,977	56,114,354	107,878	133,911,902	190,056,256
1996	2,626,326	112,907,828	137,661	161,348,795	274,256,624
1997	2,946,194	126,456,928	533,150	219,175,125	345,632,053
1998	1,070,424	74,457,494	1,513,077	438,779,607	543,236,801
1999	1,788,171	88,891,088	737,711	394,618,829	483,509,917
TOTAL	92,170,029	801,541,276	10,150,477	1,832,794,060	2,634,567,650

Source: - Nigerian Railway Corporation, 2000

For instance in 1983, 12,145,000 passengers were carried and this increased to 15,553,000 in 1984 but by 1985 it decreased to 11,432,000 and went deeper to 9,818,000,

7,363,000, and 4,196,000 in 1986, 1987 and 1988 respectively while in 1989 it increased to 6,520,000 and further declined to 6,345,000, 3,443,000, 1,747,000 and 1,502,000 in 1990, 1991, 1992 and 1993 respectively. However, in 1994 it was as low as 784,491 but further increased to 2,889,977 in 1995 which was 268% increment but declined to

2,626,026 which represent 9% in 1996 and rose in 1997 to 2,946,194 which represent 12%.

On the revenue generated from the passengers, the highest was in 1997 when N126,456,928 was realized and followed by N112,907,828 in 1996 but fell to N74,457,494 in 1998 and further increased to N88,891,088. However, the least revenue generated from the number of passenger carried was in 1993 with N11, 625,000.

On the freight tonnage carried by the Nigerian Railway Corporation it was 1,619,000 in 1983, 1,458,000 in 1984, 1,182,000 in 1985, 825,000 in 1986, 353,000 in 1987, 294,000 in 1988 and 270,000 in 1989 while it increased to 374,000 in 1990 which is 38.5% increment. This went further to 330,000 in 1991, 204,000 in 1992, 106,000 in both 1993 and 1994, but increased to 107,878 in 1995, 137, 661 in 1996 and 533,150 in 1997 while it increased to 1,513,077 in 1998 which is 184% increment after which there was a sharp decline 737, 711 in 1999.

From the revenue generated through the freight tonnage. The highest revenue generation was in 1992 where N499, 732,000 was generated followed with N438, 779,607 and N394, 618,829 collected in 1998 and 1999 respectively. However the least amount was in 1988 when N13.2 million was generated.

In the total earnings of the Nigerian Railway Corporation, there was improvement from 1983 to 1986 when, N66, 376,000, N66, 402 000, N70, 452,000 and N75,395,000, were generated from both passengers and freight carried in 1983, 1984,1985 and 1986 respectively but declined to N 51,382,000 in 1987 and N38,317,000 in 1988 but increased to N42,473,000, N67,314,000 and N83,760,000 in 1989, 1990 and 1991. But it also fell to N66, 745,000 and N40, 686,000 in 1992 and 1993 respectively. However there was a great improvement in revenue generation when it was increased by 292% to N158,791,999 in 1994, N190,056, 256 in 1995, N274,256,624, N345,632,053 and N543,236,801 in1996, 1997 and 1998 but declined to N483,509, 917 in 1999. The highest revenue generated by the Nigerian Railway Corporation in the 20th century was in 1998 with revenue earning of N543, 236,801.

Having identified the problems facing the Nigerian Railways, the challenges would therefore be to tackle them, which would undoubtedly improve the productivity and performance of the organization in general and rail freight and passenger operations in particular.

1.4 POLICY RECOMMENDATIONS

The twentieth century is that of urban transition as well as great human transportation involving sheer number of people unprecedented in human history. The cities all over the world including Nigeria are swelling up in size day by day, as many rural dwellers often want to migrate to urban centres for obvious reasons.

In order to forestall the chaotic nature of transport in the urban centres in Nigeria which this study has revealed, these basic policy recommendations can be made that: the governments as a matter of urgency, integrate the railway system into the sustainable urban development programmes,

the adequacy of investment in railways must be gauged against the role which the network is expected to play in the transport system of the nation, the Nigerian Railway Corporation should be commercialized so as to enable it has a bigger capital base and also a more objective management, there is need to pursue without delay an integrated and intermodal rail transport within the overall transport framework where road, rail, public and private transport provisions can be brought together with land use and development issues. the rail network should be reintegrated and integrated into other areas of the cities in order to offer fast moving passenger travel, there should be speed and operational efficiency that suite the contemporary thinking of the world, the railway operations can be understood and analyzed promptly by the application of Management Information System and such outcome are readily utilized for planning purpose, the signal and communication system should be automated to meet an increasing dependence on the use of images and sensors for rail operations and finally aggressive public enlightenment campaign programmes should be embarked upon to further encourage the use of the railway.

1.5 CONCLUSION

It is a known fact that most urban centres in the world and more especially in the developing country like Lagos, Nigeria, a metropolis with a population exceeding 8 million has serious transportation problems which have defied several solutions in search of a workable solution. It is therefore suggested that with the high potential of rail transport in the world today and Nigeria in particular, greater attention in resources should be devoted to the upgrading and revitalization of the country's railway system which has been in a state of neglect in the past decades.

Since the rail transit systems have worked in some urban centres of the developing and developed countries with more than one million people, a moderate and well managed project of this nature properly adopted in our local situation will certainly work. For instance, the committee of experts in transport which was set up in the mid 80s by the Federal Government to work on the transport policy found out that in the United Kingdom, the mass transit revolves round rail systems which is used for both intra and inter state services. Therefore as part of their recommendations, they stated that it is in the rail system lies the ultimate success of the mass transit scheme in Nigeria.

This recommendation is hereby supported considering the facts gathered so far. The earlier the rail transit system is effectively operational in our nation the greater the productivity and growth of the nation.

REFERENCES

- Ademiluyi I. A (2002) 'Rail Transportation System in Nigeria: A Critical Appraisal and Guidelines For actions'. A Paper Presented at the National conference on Revitalization of the Railway system in Nigeria: The Challenges of 21st Century. Centre for Transport Studies, Olabisi Onabanjo University Ago - Iwoye.
- Adeniji, Kunle (1993) 'The concept of Mass Transit and Implications for Local And State Governments Operation of Public Transport .In The Proceedings on the National Workshop on "Operation and Management of Mass Transit at the Local Government Level in Nigeria: A Challenge for the '90s and Beyond". Held at Gateway Hotel Abeokuta, between March 29 and 31, 1993. Zeneeth Consultants, Ibadan.
- Adesanya A (2002), 'Declining Fortunes of Rail Transport in Nigeria: Response and Direction of Policy. NISER monograph series No 8
- Ajiboye, A. O. et al (1994) "Proposal for Rail Mass Transit For Lagos Metropolis. A Group Term Paper in DPT 609: Mass Transit Operation and Management. Centre for Transport Studies, Ogun State University Ago-Iwoye.
- Ajiboye, A. O. (2002) 'The Potentialities of Rail Transport as an Alternative for meeting Mass Transportation Demand in Nigeria in the New century. A Paper Presented at the National conference on Revitalization of the Railway system in Nigeria: The Challenges of 21st Century. Centre for Transport Studies, Olabisi Onabanjo University Ago - Iwoye.
- Badejo B. A. (1994) "Organizational Structure for Mass Transit /Public Transport Management and Operations by States and Local Governments". Zeneeth Consultants Ibadan.
- Don R. P. (1990) "Urban Rail Transit Projects: Forecast Versus Actual Ridership and Cost" United States Department of Transport. Final Report October 1990
- Filani M. O. (1997), "The Structural Adjustment Programme and Mobility in Nigeria". Tenth Convocation Lecture Delivered at the Ogun State University Ago - Iwoye
- Galenson, A and Thompson L. S. (1994) "The Evolution of the World Banks Railway Lending" World Bank Sectorial Paper Washington D. C
- Hamid, A. M. (2001) "Problems and Challenges of Rail Freight Transportation 1970 - 2000: A case of the Nigerian Railway Corporation" Unpublished M .Sc. Transport Thesis, Ogun State University Ago Iwoye
- Ikya, S. G. (1993) "A Keynote Address Delivered by the Sole Administrator, Federal Urban Mass Transit Programme at the Opening Ceremony of the

National

Workshop on Operations and Management of Public Transport/Mass Transit at the local

Government Level in Nigeria A Challenge for the 1990s and Beyond Held at Gateway

Hotel, Abeokuta, between March 29 and 31, 1993. Zeneeth Consultants, Ibadan.

Onakomaiya S. O. (1993) "Accidents and Safety Measures Defensive Driving in Mass Transit/Public Transport Operations by State and Local Governments" Zeneeth Consultants. Ibadan.

Oshinubi, L. O. (1993), 'Rail options for Urban Mass Rail Transit service in Nigeria' Monograph.

Rail Working Party (1998), Railway Infrastructure Organizing for an Integrated Transport Policy. A Discussion Paper of Rail working Party of the Chartered Institute of Transport in the United Kingdom.