An Assessment of the Usage of the Lagos Mass Transit Trains

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Abstract

The rail sector, despite its potential for curtailing the present chaotic transport situation in Lagos, remains inefficient and underutilized. In spite of past initiatives and the current attempt by the Lagos State Government to provide a mass transit rail service in Lagos, the share of rail mode in the transport sector has not been encouraging and the railway plays an insignificant role in urban mass transit in Lagos at present. This paper sets out to assess the usage of the Lagos mass transit trains. Hence, the paper determines the passenger traffic flow along the rail route in Lagos and the number of passengers carried between 2000 and 2009 by the Lagos Mass Transit Trains (LMTT) with a view to assessing the usage of the present LMTT. This paper also discusses the historical development of Nigerian railway and describes rail transport in Lagos. Data were obtained through secondary sources coupled with review of literature. The result of this study shows that for a period of 10 years (2000-2009), Lagos mass transit trains carried a total of 9,870,101 passengers, which gives an average of 987,010 passengers annually. This suggests that the service of the Lagos mass transit train is grossly underutilized. However, LMTT contributes enormously to NRC by carrying 68.5% of the total passenger traffic of NRC between 2000 and 2009. In terms of passenger traffic flow along the route of LMTT, for a period of 1 year, Agbado station recorded the largest number of passengers (393,811), followed by Ijoko (163,652) and Iddo (120,787), while Iganmu station has the lowest number of rail commuters (16,919). This study also discloses that the major commodities hauled by Lagos district of NRC from Lagos to the northern parts of the country in 2007 are Cars, Cement, Billet and Wheat.

Key words : *Lagos mass transit trains, Transport, Passenger, Development, Railway*

1. Introduction

Transport is a vital link that binds together the various component of a nation's economy on whatever scale and at whatever level (Adefolalu, 1993). Thus, efficient functioning of the urban life and economy depends to a large extent on the adequacy and efficiency of its transport system. Efforts have been made in the past at solving the problem of traffic congestion in Lagos through the construction of bridges, ring roads, and expressways; restriction of access to the city centre on alternate days between vehicles with odd and even registration numbers; and the conversion of previously two-way roads to one-way. Although these efforts have yielded some results, they have not done much to solve the problem of traffic con-

gestion, particularly during peak periods. A single means of travel cannot serve adequately the intra-urban needs of the majority of people living in the urban environment, especially where an urban environment (Lagos for instance) has a terrain that is dominated by water. There is therefore the need to have a modal split to share the total number of person trips - by rail, road and water transportation system. This will go a long way to reduce traffic congestion in Lagos. In actual fact, mass rail transit is increasingly being suggested as an important means of resolving the transportation situation in Lagos (Mabogunje, 2007).

Rail transport mode exists as the mainframe or pivot around which an integrated national transport system is built with other modes complementing it. Its capacity, which enables it carry large number of passengers and goods safely and securely over long distances at lower unit costs than other modes, also places it in good stead to serve as the *hub* of transport system of any nation (Nwanze, 2002). Many developed countries' mega-cities

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such as Moscow, Buenos Aires and Bombay are heavily dependent on rail for urban transport. Lagos is probably the only mega-city in the world without an efficient rail mass transit system.

Rail transport has been continuously developed through innovations, technical and commercial changes while railway speed record is being constantly improved. For instance, portions of the French high-speed rail system can reach speeds up to 515 km/hr (Rodrigue and Slack, 2009). International Labour Organization (1994) stated that for intercity travel, medium and high-speed rail travels constitute the first valid alternative to car and air travel in the increasingly congested road and air route networks. Some key factors promoting high-speed rail are that airports and highways may have no room to expand, and are often overloaded, while high-speed rail has the potential for high capacity on its fixed corridors, and has the potential to relieve congestion on the other systems (URL 1). However, the railway system in Lagos/Nigeria when compared with those in advanced countries of the world, still plays an insignificant role in urban mass transit and transportation as a whole.

In the first half of the twentieth century, railways enjoyed unchallenged domination of both freight and passenger traffic movement in Nigeria while road transport, now a competitive threat to the railways, was initially developed to feed them (Olanrewaju, 1986). Nigerian railways have played an immense role in the country's socio-economic development, helping to open up the hinterland, providing impetus for foreign and domestic trade, agricultural and industrial development as well as stimulating rapid urbanization. However, five decades after independence, the Nigerian railway system remains almost static in structure and is highly unresponsive to the emerging socio-economic and political challenges. Hence the railway system no longer exerts a strong influence nor plays a competitive role in modern Nigeria and particularly in Lagos State in which the nation's commercial capital is located.

In line with global trends for mega population centres like Lagos to have effective modern rail mass transit systems, the Lagos Metropolitan Area Transport Authority (LAMATA) developed a rail master plan, which would create a network of urban rail-based systems covering three major corridors of high commuter traffic demand: The North-South corridor between Ijoko-Alagbado and Iddo along the Nigerian Railway corridor (will be established on the same right-of-way as the proposed national high-speed railway from Iddo to Kano); the East-West corridor along the Ojo-Okokomaiko to Mile 2 axis; the Eastern corridor to serve the emerging development along

the Lekki to Epe axis; and a central ring between Victoria Island and Lagos Island connecting the three corridors (LAMATA, 2006; Mabogunje, 2007). A Memorandum of Understanding between LAMATA and NRC was signed in 2006, to grant access to the 100ft of NRC right-of-way required for the construction of the Light Rail Mass Transit line (URL 2). Rail mass transit is needed now, more so that the existing modes of transportation in Lagos cannot cope effectively with the movement of passengers and freight.

Efforts aimed at rehabilitating the railway system to enhance its performance in Lagos and Nigeria as a whole included a technical cooperation agreement signed between the NRC and the Rail India Technical and Economic Services between 1979 and 1982. Between 1995 - 1999 and from 2009 till date, fresh technical cooperation agreements were entered between the NRC and the China Civil Engineering Construction Corporation (CCECC). These agreements centered on improving rail tracks and communications facilities; rehabilitation of existing locomotives, coaches and wagons as well as supply of new ones; and re-opening of hitherto closed routes. Thus, on the 30th of October 2006, the Federal Government and the China Civil Engineering Construction Corporation signed an \$8.3billion contract for the construction of a standard gauge railway line covering 1,315 km from Lagos to Kano. Besides, the Lagos State Government in conjunction with NRC launched the Jubilee Rail Service in November 1992 to expand the rail commuter service in the state. While it lasted, the arrangement was epileptic as it was bedeviled with problems such as time-scheduling, staffing, ticketing, revenue sharing, cost-sharing, lack of infrastructure like car parks and high cost of operations. The Lagos Metropolis Mass Transit Train Service run by the Lagos district of NRC was launched in Lagos on the 26th April, 2001. Presently, the Lagos State Government through the Lagos Metropolitan Area Transport Authority (LAMATA) has taken up the challenge of developing an efficient Light Rail Mass Transit for Lagos.

2. Historical Development of Nigerian Railways

The general objective of railway construction in Nigeria between 1898 and 1927 was partly to maintain links between the central seat of colonial government in Lagos and other parts of the country. It was also intended in the words of the Act setting up the Nigerian Railway Corporation to engage as "carriage of passengers and goods in a manner that will offer full value for money, meet cost of operations, improve market share and quality of service,

Table 1. The Development of Rail Construction in Nigeria

Section	Year	Distance
Lagos – Ibadan	1898 – 1901	193 km
Ibadan – Jebba	1901 – 1909	295 km
Kano – Baro	1907 – 1911	562 km
Jebba – Minna	1909 – 1915	225 km
Port – Harcourt – Enugu	1914 – 1916	243 km
Enugu – Markurdi	1916 – 1924	220 km
Kaduna Junction – Kafanchan	1922 – 1927	179 km
Kafanchan – Jos	Opened to traffic in 1927	101 km
Kuru – Bauchi	1958 – 1961	166 km
Bauchi – Gombe	1961 1963	166 km
Gombe – Maiduguri	1963 – 1964	302 km
Ajaokuta – Warri	Under construction	277 km
Port – Harcourt – Onne	Under construction	19 km

Source: Nigeria Railway Corporation (2002)

ensure safety of operations and maximum efficiency, meet social responsibility in a manner that will meet the requirements of rail users, trade, commerce, industry, government and the general public (Nigerian Transport Profile, 1993). Initially, the Nigerian Railway Corporation was part of the civil service until 1955 when it became a public enterprise by an Act of Parliament (no. 26) of 1955.

Development of the rail industry was promoted by the discovery of coal in Enugu in 1914 and that led to the construction of the rail line from Port – Harcourt to Enugu which facilitated the export of coal through Port-Harcourt. In a way, the history of the Nigerian Railway system epitomizes the history of geographical area now known as Nigeria. The amalgamation of Northern Nigeria and the Southern Protectorates in 1914 had a parallel in the amalgamation of Lagos Government Railway and the Baro – Kano Railway in 1912 when the Nigerian Government Railway was established (Nigerian Railway Corporation, 1998).

Commencing in 1899 with 193 km snaking from Ebute Metta to Ibadan, at a cost of £100,000 per mile, the system which was steam – driven until the mid 1950s experienced continual extensions viz. Ibadan to Jebba 295 km 1901 - 1909; Kano to Baro 562 km 1907 - 1911; Jebba to Minna 255 km 1909 - 1915; Port-Harcourt to Enugu 243 km 1914 - 1916, Enugu to Makurdi 220 km 1916 - 1924; Kaduna to kafanchan 179 km 1922 – 1927(See Table 1). In the thirty-one years from 1927 to 1958 there was no railway development. Further development from 1958 took the tracks from Kafanchan to Bauchi in 1961 (238 km) and ultimately to Maiduguri in 1964(302) km.

The Nigerian Railway Corporation is 113 years old and it runs a unilaterally designed track system of 1067 mm narrow gauge. Only 30 km of its track distribution is in double track (within Lagos area). Nigerian Railway System actually commenced rail business activities with the

construction of the first rail line from Lagos to Ibadan (193 km) between 1898 and 1901. By 1964 when the construction of 640 km Kano-Maiduguri rail line, then known as Bornu extension, was completed, the present core of the railway network had been put in place. Presently, the Railway system is made up of 3505 route kilometres and 4332 track kilometres. In addition to this is the 19 km 1067 mm gauge extension from Port-Harcourt to Onne deep sea port and the 277 km standard gauge rail construction of 1435 mm from Ajaokuta to Warri. Out of the 3505 kilometres of rail network, 1055 kilometres consist of curved track, thus making the maximum permissible speed on the rails to only about 65 kilometres per hour, whereas the main line locomotives are calibrated for speeds of 110 kilometres per hour. However, most of the tracks (rail, sleeper, ballast and the formation) are damaged and are overdue for replacement. The poor condition of the track reduces efficiency and may lead to derailment.

The dilapidated nature of the present railway infrastructure was caused by years of neglect by successive governments which accorded the railway system a very low position in its programme. On a macro-level, the problem of the railway today is after-effect of the collapse of the agrarian economy. The decline in agricultural produce in the early 70's, was a consequential effect of the discovery of oil/petroleum. The result was the absence of appeal and interest in the business of agriculture which was our economic mainstay contributing about 93% of our national income and providing well of 75% of Nigeria's total working population.

The reduction in agricultural activities following the emergence of petrol economy led to low output of agricultural produce necessitating redundancy in the existing rail facilities because of capacity under utilization. Secondly, agricultural activities were no longer attractive thereby necessitating a shift in attention and government policies. With petrol, the government's capital expenditures would obviously have geared toward providing infrastructure to facilitate exploration and exploitation of the new economic gold. This development led to large constructions of refining plants, laying of pipelines, procurement of technology – capital equipment plus expertise.

Being that the agricultural sector is the biggest sectoral market for the survival and growth of the railway corporation, therefore in a macro view; the ailing railway had its pathological history traceable to the dwindling agricultural activities occasioned by government's neglect of them (Nigerian Transport Profile, 1993). However, the government has regretted the neglect of yesteryears and a programme to resurrect the rail system is being fashioned out (Nigerian Transport Profile, 1993). The Federal Gov-

ernment has proposed to construct the following new lines: Port-Harcourt- Onne narrow gauge (1067 mm), to connect the Onne port-19 km long, the Lagos-Abuja Express Line, the East –West Rail line, the Kaduna –Abuja Rail line, the Minna-Abuja line, the Ajaokuta-Otukpo Rail line and the Ajaokuta- Baro Rail line (Abubakar, 2002)

3. Rail Transport in Lagos

The need to have an efficient railway system in Lagos was probably not recognized until about 1879. Between 1879 and 1892, private (United Kingdom) interests made various applications to the colonial office for concession to construct railways not only in Lagos but across Nigeria. But because the colonial government was unable to guarantee interest on the capital sum required for the construction, the applications were not approved (Labisi, 1999).

A preliminary survey was however ordered in 1892 by the Secretary of State for the colonies to estimate the cost of railway construction. The survey showed great potentials for trade and in 1895, the Secretary of State for the colonies sanctioned the construction by the colonial government of a railway line from Iddo to Otta, a distance of 32 km (Labisi, 1999). Also, the tramway system was developed to convey people from one point to the other within Lagos. Actual work on the first line from Iddo to Otta commenced in 1898 and other lines from the South to the North were constructed thereafter. The Nigeria Railway Corporation (NRC) was established in 1912 by the amalgamation of the Lagos Government Railway and the Baro-Kano Railway. It originally operated within the Nigerian Government Railway Department, subsequently becoming an autonomous public corporation through the Nigerian Railway Corporation Act of 1955, as amended in the Laws of the Federation of Nigeria 1990. Its main objective was to offer optimal services for the carriage of persons and goods to the population.

In Lagos, the Nigerian Railway Corporation (NRC) renders both passenger and cargo services. The passenger services involve the movement of commuters from the northern part of Lagos State towards Iddo and Apapa in particular, at cheaper rates than is possible with the road system. Also passengers are carried from Iddo and other stations within Lagos district of NRC by express train to the northern parts of the country. The cargo service involves the transportation of farm produce and bulky raw materials from the hinterlands to the southern parts of the state. For this service, there is the Lagos to Idogo farm produce cargo train that mainly carries vegetables, fruits, cassava and maize. There is also the Iddo-Apapa bulky raw materials coach that conveys raw materials to the

Apapa port (after arriving at Iddo from the hinterland) for exportation. However, because these services are inefficient and underutilized, the entire transport system in Lagos, especially road, is highly overstressed lacking in capacity to cope with persistent increase in population, thus leading to widespread road congestion. Oni (2004) has suggested that high-capacity mass-transit system most appropriate for travel-demand corridors in which the peak hour demands exceed 20,000 persons per hour should be established.

To meet the city's long-term requirements, LAMATA has developed plans for a seven-line rail network totalling about 246 km. This is due to be completed by 2025. The first stage comprises two lines which are to be built by 2011. The two rail lines are the Red Line (Agbado to Marina) and Blue Line (Okokomaiko to Marina). The Red Line is a 31-kilometre rail route designed to have a six-kilometre spur to the Murtala Muhammed International Airport while the Blue Line would span 27 kilometres. The two lines would meet at Iddo and they will run across the lagoon to Marina by a suspension bridge to be specially constructed for that purpose (Alao, 2008). With the plans for the Red and Blue lines well underway, longer-term proposals are taking shape for a further five lines (Green, Yellow, Brown, Orange and Purple lines) to complete the 246 km network by 2025 (Mobereola, 2008).

The *Green Line* would run east from Marina to Lekki airport, paralleling the coast, while the *Yellow Line* would diverge from the Blue Line at National Theatre near Iddo and head northwest to Otta in Ogun State. A short branch off the Red Line at Oshodi would serve the international and domestic terminals at Murtala Mohammed International Airport.

The *Brown and Orange lines* would serve the northeast, sharing the Red Line tracks from Marina to Jibowu and then running to another junction at Ojota. The Brown Line would finish at Mile 12, while the Orange Line would continue north through Long Bridge to Redeem Camp in the satellite township of Mowe/Ibafo. Finally *Purple Line* would provide an orbital route running from Ojo in the west to Lagos-Ibadan Expressway Toll Gate in the northeast, where it would join the Orange Line tracks to Redeem (See the proposed Lagos Urban Rail network in Fig. 1). Interchanges would also be provided with the Yellow and Red lines in the northern suburbs. In addition, a monorail ring around Lagos Island is envisaged to serve the city centre.

The design of the mass transit rail project has been completed, paving way for the construction of the project with immediate effect. The first phase will include the construction of the Blue Line which is expected to be delivered by

Fig. 1 The proposed Lagos Urban Rail network

Table 2. Passengers Carried by LMTT at Each Station in 2007

Stations	JAN	FEB	MAR	APRIL	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC	Grand Total
Ijoko	7,958	12,553	10,386	7,010	10,114	9,536	15,136	15,782	18,072	20,854	23,541	12,710	163,652
Itoki	6,255	7,076	6,955	4,676	6,242	5,452	7,497	7,808	8,642	9,623	9,557	4,633	84,416
Agbado	23,143	27,112	24,899	14,800	21,723	23,590	38,137	39,885	46,020	51,133	57,081	26,288	393,811
Iju	2,540	2,926	2,282	1,225	2,008	2,299	4,334	4,683	5,873	6,586	7,018	2,956	44,730
Agege	844	813	660	277	613	958	1,692	1,857	2,981	3,559	3,588	1,325	19,167
Ikeja	1,974	2,116	1,459	477	1,166	1,850	2,821	3,637	5,631	5,270	5,610	2,002	34,013
Shogunle	736	847	760	377	742	1,736	2,940	3,522	4,818	4,634	5,361	2,140	28,613
Oshodi	4,898	4,932	4,413	1,887	1,101	Nil	Nil	Nil	Nil	Nil	Nil	Nil	17,231
Mushin	4,686	5,170	4,289	2,127	3,588	4,768	7,644	7,047	10,677	10,424	10,633	4,658	75,711
Yaba	4,018	4,511	3,246	3,020	2,334	3,286	4,833	5,642	7,921	7,578	8,366	3,490	58,245
Ebute Metta Junction	4,263	5,171	4,128	2,187	3,403	3,926	6,325	7,559	6,415	6,282	6,203	2,735	58,597
Ebute Metta	6,440	8,054	6,094	3,410	4,906	6,180	10,466	12,495	7,691	6,482	5,524	2,654	80,396
Iddo	3,172	4,053	4,229	2,517	3,203	4,269	7,363	8,319	16,510	22,347	29,560	15,245	120,787
Iganmu	621	773	920	547	696	756	927	1,547	2,424	3,182	3,140	1,386	16,919
Apapa Local	2,181	2,836	2,465	1,353	1,570	2,139	3,000	4,458	6,764	9,433	10,364	4,728	51,291
Total	30,279	35,500	29,784	17,048	20,801	25,324	40,558	47,067	150,439	167,387	185,546	86,950	564,187

Source: Nigerian Railway Corporation, Lagos District (2008)

August 2012 (Akinsanmi, 2010). On the Red Line rail construction, the Lagos State Government is waiting for the approval of the Federal Government to use its corridor to link Iddo through Agbado and Ijoko in Ogun State.

If the urban rail network is completed as planned, it would reduce traffic congestion and improve road safety, increasing travel efficiency and productivity across the whole region. It offers the potential to improve the quality

Fig. 2 Volume of Passenger boarding at stations in 2007

Table 3. Passengers Carried and Revenue Generated Yearly by LMTT (2000-2009)

Year	Number of passengers carried	Revenue ₦
2000	569,448	29,246,320
2001	834,869	35,390,920
2002	670,333	32,429,270
2003	1,068,260	64,310,755
2004	1,332,008	64,799,919
2005	621,820	52,900,415
2006	577,616	39,986,460
2007	1,310,439	77,140,400
2008	1,787,695	159,866,490
2009	1,097,613	128,295,160
Total	9,870,101	684,366,109

Source: Nigerian Railway Corporation, Lagos District (2010)

of the environment as well as raising living standards. Investment in the rail network would promote the spread of economic activity throughout the city and ultimately contribute to the creation of an integrated multi-modal passenger transport network.

4. Methodology

This study utilized secondary data obtained from the

Table 4. Volume of Passengers Carried by NRC and LMTT from 2000-2009

Year	Number of passengers carried by NRC	Number of passengers carried by LMTT	% Contribution of LMTT to NRC
2000	2,610,435	569,448	21.8%
2001	1,284,022	834,869	65.0%
2002	942,594	670,333	71.1%
2003	1,608,447	1,068,260	66.4%
2004	1,751,159	1,332,008	76.1%
2005	752,842	621,820	82.6%
2006	708,802	577,616	81.5%
2007	1,478,700	1,310,439	88.6%
2008	1,996,324	1,787,695	89.5%
2009	1,285,080	1,097,613	85.4%
Total	14,418,405	9,870,101	68.5%

Source: Okanlawon, 2011

Nigerian Railway Corporation. These include data on Passengers carried by LMTT at each station in 2007, Passengers carried and Revenue generated yearly by LMTT (2000-2009), Volume of passengers carried by NRC and LMTT from 2000-2009 and Commodities hauled by Lagos District of NRC in 2007. Relevant information was also obtained from textbooks, articles, reports, and internet.

The data collected were presented in Tables 2-5. The following secondary data were utilized in this study:

- Passenger Traffic Flow along the Route of the Lagos Mass Transit Trains (shown in Table 2 and Fig. 2).

Table 5. Commodities Hauled by Lagos District of NRC in 2007

Month	Commodity	Wagons	Tons	Point of Origin	Point of Destination
January	Car	80	160	Apapa Local	Kaduna
	Cement	12	466	Apapa Quay	Zaria
	Billet	9	302.005	Ebute Metta	Bukuru
	Luggage & Parcel / Country produce(350kg)				
February	Car	40	80	Apapa Local	Kaduna
	Cement	12	448	Apapa Quay	Kano
	Billet	20	1161.09	Ebute Metta	Bukuru
	Wheat	36	1241.06	Apapa Local	Kano
	Luggage & Parcel / Country produce(1850kg)				
March	Cement	12	465	Apapa Quay	Kano
	Wheat	12	416.29	Apapa Local	Kano
	Luggage & Parcel / Country produce(1950kg)				
April	Car	12	36	Apapa Local	Kano
	Wheat	12	416.58	Apapa Local	Kano
	Luggage & Parcel / Country produce(800kg)				
May	Wheat	24	829.62	Apapa Local	Kano
	Car	12	40	Apapa Local	Kaduna
	Luggage & Parcel / Country produce				
June	Wheat	23	766.55	Apapa Local	Kano
	Cement	12	465	Apapa Local	Kano
	Luggage & Parcel / Country produce(1360kg)				
July	Wheat	24	827.9	Apapa Local	Kano
	Cement	7	275.1	Apapa Local	Kano
	Luggage & Parcel / Country produce(4840kg)				
August	Wheat	12	413.6	Apapa Local	Kano
	Cement	12	471	Apapa Quay	Zaria
	Luggage & Parcel / Country produce(5665kg)				
September	Luggage & Parcel / Country produce(12450)				
October	Luggage & Parcel / Country produce(17637kg)				
November	Luggage & Parcel / Country produce(16220kg)				
December	Wheat	24	830.87	Apapa Local	Kano
	Luggage & Parcel / Country produce(21990kg)				

Source: NRC, Lagos district (2007 and 2008)

- Passengers Carried Yearly by Lagos Mass Transit Trains (presented in Table 3).
- Contribution of LMTT to NRC (revealed in Table 4).
- Commodities hauled by Lagos District of NRC in 2007 (presented in Table 5)

5. Findings/Discussion

5.1 Usage of the lagos mass transit train

The Lagos District of Nigerian Railway Corporation plays leading roles in operational activities of the NRC. Some of these operational roles are: conveying both local and imported goods from Lagos to the hinterland, running express passenger trains from Lagos to Kano, running intra-city and suburban mass transit trains for workers from satellite towns that surround Lagos, organizing tourist trains for school children and holiday makers and provision of party, picnic and social gathering ground in the forecourts (URL 3).

In order to determine the actual usage of the present Lagos mass transit train, available data on the number of passengers carried on monthly and yearly bases by the present LMTT were collected and used to determine the passenger traffic flow along the route of the LMTT and the average number of passengers carried yearly by LMTT.

5.2 Passenger traffic flow along the route of the lagos mass transit trains

As shown in Fig. 2 and Table 2, for a period of 1 year (Jan.-Dec. 2007), Agbado station recorded the largest number of passengers (393,811), followed by Ijoko (163,652) and Iddo (120,787) while Iganmu station has the lowest number of rail commuters (16,919). This reveals that the greater part of Lagos inhabitants are not benefiting from the use of the rail mass transit because the rail route in the mainland does not get to most parts of the state. The number of passenger carried in the month of April was lower

due to the 2007 general elections while Oshodi station got burnt in May 2007. Since then passengers have not been boarding the train at Oshodi station.

5.3 Passengers carried yearly by lagos mass transit trains

As shown in Table 3, for a period of 10 years (2000-2009), Lagos mass transit trains generated ₦ 684,366,109 and carried a total of 9,870,101 passengers, which gives an average of 987,010 passengers annually. Table 3 reveals that between 2000 and 2009, the railway carried less than 2 million passengers *yearly* in the whole of Lagos. If this scenario is put in comparative perspective with the Indian experience, which (according to the Cable News Network, 2006) operates 14,000 trains per day and carries an average of 16 million passengers per day, the sorry state of the Nigerian railway becomes glaring.

5.4 Contribution of LMTT to NRC

NRC carried a total number of 14,418,405 passengers in the whole country between 2000 and 2009 out of which LMTT carried 9,870,101 passengers, which is 68.5 % of the total (Okanlawon, 2011). This shows that LMTT contributes immensely to NRC by carrying 68.5 % of the total passenger traffic of NRC, while the remaining 31.5 % was carried by all the other NRC districts in the country (See Table 4).

5.5 Commodities hauled by lagos district of NRC in 2007

As shown in Table 5 the major commodities hauled by the Lagos district of NRC in 2007 are cars, cement, billet and wheat. These products are hauled by freight trains from Apapa local, Apapa Quay and Ebute Metta in Lagos to the northern parts of the country. A total of 10,112 tonnes of freight (using 407 wagons) were carried by Lagos district in 2007. No major freight was carried between September and November except for luggage and parcel/country produce carried by the LMTT due to the collapse of the rail bridge in Abeokuta.

6. Conclusion

For a period of 10 years (2000-2009), Lagos mass transit trains carried a total of 9,870,101 passengers, which gives an average of 987,010 passengers annually. This suggests that the service of the Lagos mass transit train is grossly underutilized. However, LMTT contributes enormously to NRC by carrying 68.5 % of the total passenger traffic of NRC between 2000 and 2009. In terms of passenger traffic flow along the route of LMTT, for a period

of 1 year (January - December 2007), Agbado station recorded the largest number of passengers (393,811), followed by Ijoko (163,652) and Iddo (120,787), while Iganmu station has the lowest number of rail commuters (16,919). This indicates that a vast majority of the workers in Lagos live far away from their work places and that a greater part of Lagos inhabitants are not benefiting from the use of the mass transit trains because the rail route in the mainland does not cover most parts of the state. Consequently, there is the need for urgent revitalization of railway system in Lagos/Nigeria to prevent the total collapse of the railway sector. Also, the Federal Government should urgently repeal the Nigerian Railway Act of 1955 to allow private participation in the development and operation of rail transport in Lagos.

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