

Mass Transportation System in Nigeria: Strategies for Effective Maintenance Culture in Public Sector Operations of Enugu State

Kingsley Efobi^{1*} Christopher Anierobi²

1. Department of Urban and Regional Planning, University of Nigeria, Enugu campus, PMB 01129, Nigeria
2. Department of Urban and Regional Planning, University of Nigeria, Enugu campus, PMB 01129, Nigeria

* E-mail of the corresponding author: okey.efobi@unn.edu.ng

ABSTRACT

Transportation is the engine that drives the growth and development of people and countries. Mass transportation is the movement of large number of people, goods and services from one place to another in one vehicle. It is therefore inevitable for the socio-economic and socio-cultural integration of nations. Up till date, the Nigerian government expends huge financial resources on mass transportation sector on an annual basis particularly road transportation, which is the focus of this study. Despite this, the increasing rate of accidents crashes and break down of vehicles prevails. Some aspects of the sector like the railway system have gone moribund. The sector is beset and littered with obsolete and broken down vehicles and facilities; inadequacy of modern vehicles, carriers and facilities; prevalence of obsolete facilities and vehicles that are in poor conditions, poor operational capacity among other worrisome conditions. These have led to high rate of accidents and crashes; loss of lives, properties, man hour and per capita income; general environmental pollution, congestion and degradation; economic retardation as well as unsustainable development in the country. Though the Nigerian public mass transportation system has evolved over the years, it still faces huge challenges which bother much on maintenance culture. Maintenance for the mode and means of mass transportation facilities in Nigeria is being relegated to the background while favoring new procurements. This paper therefore looks into the public operated mass transportation system in Enugu state, Nigeria, with a view to determining strategies for effective maintenance culture for a sustainable development. The study revealed that the Enugu State Transportation Company (ENTRACO) has been operating under capacity and the official record of ENTRACO for the year-2013 showed that this public sector operated mass transport system currently has forty three operational buses out of which 60% are functional while 40% are out of service. 95% of responses by the randomly selected administrative heads in the organizational hierarchy of ENTRACO, identified gross lack of maintenance culture as the bane of the sector which hitherto, operates below capacity in its service delivery to the over teeming population and commuters in the state. Privatization, public private partnership among others anchored on total overhauled mass transportation system and a properly reviewed policy that enthrones an efficient management and enforcement machinery which guarantees an articulated maintenance culture were recommended.

Key words: Mass Transportation System, Maintenance Culture, Public Sector Operators in Enugu, Nigeria

1.0 INTRODUCTION

Transportation has been described as an essential ingredient in the economic life of every nation. It is the engine that drives the growth and development of people and countries. Mass transportation which is the movement of large number of people, goods and services is inevitable for the socio-economic and cultural integration of nations. For this reason, the issue of mass transportation has attracted the attention of several administrations in Nigeria. In January 1989, the Federal government launched the mass transit program to enhance the transportation system in the country. Nevertheless, attempts at evolving a meaningful mass transportation system in Nigeria have been elusive. A number of problems have plagued the nation's transport industry including general inadequacy of mass transit facilities relative to demand, inefficiency in the management and running of public transport corporations and the absence of an effective maintenance culture (Adetunji M.A, 2013).

The principal motive of mass transit is the movement of many passengers in one vehicle at a time from one place to the other. For the purpose of this paper, mass transit will be viewed as any transportation system which can transport a large number of passengers (from forty and above) at a time in one vehicle and for which operations are regulated by time schedule, fixed routes and stops. From this classification, mass transit systems therefore include road transit, the commuter rail system of transit, and riverine waterways (e.g. passenger ferries) among others. Whatever the mode and means of mass transportation, there is need for the development of an effective maintenance culture so as to ensure safety, regularity, comprehensiveness and the continued operation of the mass transit facilities and system.

Maintenance as it relates to mass transportation pre-supposes a calculated attempt to support, sustain or uphold available mass transit facilities. On the other hand, it can mean all efforts undertaken to keep or restore all mass transit facilities to a state of preservation and acceptable standard for its present and intended use. This paper will focus mainly on road transportation maintenance; the analysis will be hinged on government–financed transport facilities in Nigeria. While examining the effects of lack of adequate maintenance on mass transit facilities provided for mass transportation, efforts will be made to highlight various strategies that could be employed to achieve proper maintenance of mass transit facilities in the country.

2.0 Effects of Lack of Maintenance on Mass Transportation in Nigeria

A well developed maintenance culture for mass transportation system will help to ensure that available facilities provided for the mass transit program do not deteriorate beyond repair. In Nigeria, the story has always been different. Over the years, most of the mass transit facilities provided by different regimes in the country like the mass transit programs have ended up moribund, due to lack of maintenance of vehicles and facilities. Available buses are inadequate at serving the teeming population of the people and they often break down frequently and are finally grounded and abandoned. Roads are neglected until they turn into patches of pot-holes and death traps while traffic lights, road signals/signs and other road furniture are left till they are defaced and destroyed. This affects both federal and state government mass transits schemes.

Ojiah (1989) noted that the Niger State Transport Authority has a disproportionately high number of grounded vehicles mainly due to mechanical faults. The story is the same for other states of the federation such as the Enugu State Transport Corporation (ENTRACO), Transport Company of Anambra State (TRACAS), Benue Links, Abia Line, Imo State Transport Company (ITC), and Delta Line among other state mass transportation schemes. Some of them are already defunct like the oriental line; Bendel Transport Services limited (BTSL) and many other state owned transport corporations. For this reason, it is common knowledge in Nigeria today that while private bus services like Ekene Dili Chukwu of Anambra State are still operating profitably, almost all the state owned bus services at one point or the other have folded up unceremoniously, while most of the existing ones are operationally inefficient.

Many roads in the country are in the state of disrepair due to lack of proper maintenance. The tarred surfaces of most highways have dilapidated and degenerated into death traps. Unchecked erosion and flood menace have also contributed to the poor state of most roads. In Anambra State for instance, the all important Agulu-Nanka-Ekwulobia road is a typical example while in Imo State, the Akokwa-Orlu road is another example to mention but a few. Little wonder that mass transit vehicles that operate on these roads have very limited life span.

In addition, some of the roads have been over stretched due to a rapid increase in the number of road users with the result that traffic congestion are now the order of the day especially in most urban center like Lagos, eg. Oshodi, Idumota, Herbert Macaulay, Orile Igamu, mile 2 and Yaba as well as in other large cities of the country. Traffic lights, road signals/signs such as the Zebra crossings, Speed limit sign post among others have all deteriorated and are gradually disappearing from our roads. These phenomena are detrimental to public mass transit users especially for very dangerous intersections like railway crossings. The Federal Government established the Federal Road Maintenance Agency (FERMA) for the maintenance of Federal Government roads throughout the country but the impact of this agency is yet to be felt, given the poor and dilapidated state of our roads and the associated increasing number of fatal and near fatal accidents. These situations emphasize absence of a proper maintenance culture and constitute clogs in the wheel of an efficient mass transit program in Nigeria.

3.0 Strategies for Maintenance of Mass Transportation Facilities

Maintenance can be articulated at two main levels namely (1) Preventive and (2) Corrective maintenance. In preventive maintenance works are carried out periodically on the available vehicles and other facilities before they breakdown while for corrective maintenance; repairs are carried out when vehicles and other transport facilities have completely broken down.

3.1 Preventive maintenance

Under Preventive Maintenance, the following strategies will be discussed namely servicing and ratification.

(a) Servicing

This is usually undertaken at regular intervals of varying frequency before the facility breaks down. It ranges from simple cleaning of mass transit vehicles and facilities like buses down to changing or cleaning of plugs, oil and other lubricants, vehicle parts like contact sets that are dirty or soaked with oil. Servicing is a preventive measure. A vehicle with little or no mechanical fault, if left without servicing occasionally, will eventually break down. Thus, servicing is a good strategy that can be employed to ensure that mass transit facilities like vehicles provided for the mass transportation programs are properly maintained.

(b) Rectification

This strategy can be utilized very early in the life of mass transit facilities especially on vehicles or other related facilities. It is usually as a result of damage to goods in transit or installation or even incorrect assembly, that

such repairs are needed. It can also be as a result of some short comings in the original design. No matter the cause of damage, rectification helps to ensure that components and materials are suitably installed for maximum efficiency in the performance of facilities provided.

3.2 Corrective maintenance

The following strategies will be discussed under this category. They include upgrading, and modification.

(a) Upgrading

Upgrading as a strategy for mass transit maintenance involves salvaging or “correcting” facilities that are structurally sound, but which for some reasons are losing their utility value. Such vehicles or facilities can be upgraded to some pre-determined standards. For instance, roads that were previously not tarred could be tarred and provisions made for drainage facilities. Those that were previously tarred but which have degenerated and are too narrow can be expanded and possibly converted to dual carriage ways with provisions made for bus stops, off street parking, side walks, bus stop shelters and traffic lights where necessary. In Enugu for instance, Agbani road is an example of a road which is undergoing upgrading from a single to dual carriage way with an addition of road furniture, like bus stops which are furnished with chairs and solar lights.

(b) Modification

This involves changing the former status of particular mass transit facilities to a more convenient place. Typical examples are the intersections found in Uwani and Ogui areas of Enugu. Such interactions can be modified and converted into round-about or reduced to T-Junctions.

From what we have discussed so far, it is evident that the application of one or more of the above strategies in the maintenance of mass transit facilities will help inject new life into the nation’s mass transit program.

4.0 Factors Militating Against the Maintenance of Mass Transportation System in Nigeria

In spite of the general awareness of the need for maintaining mass transit vehicles and facilities in Nigeria and despite various government efforts at achieving efficiency in the public mass transportation system, various factors influence the operational capacity for service delivery. These factors include the following:

4.1 Nonchalant attitude: On the part of government, public mass transit operators and passengers, there is still a general nonchalant attitude in the country towards the conditions of vehicles and other transportation facilities as regards the application of maintenance culture. This is one of the peculiar problems militating against the development of an efficient public mass transportation system which is anchored on maintenance culture for vehicles and mass transit facilities in Nigeria. To start with, the general attitude of the average Nigerian is that public property is no man’s property, such that most times, people entrusted with the authority of managing public mass transportation facilities do not care about maintaining them until they finally grind to a halt.

4.2 Inadequate Government Funding: Government on the other hand is often only ready to invest huge sums of money into public mass transit programs and other projects with little or no consideration for maintenance. According to Ngoke (1988), the annual maintenance cost is generally very small compared to the original capital investment on projects. For this reason, it is usually very difficult to carry out maintenance works on public transport facilities provided for mass transit programs, due to poor funding.

4.3 Non availability of vehicle spare parts: In addition, most vehicles provided for mass transit programs in Nigeria are imported from abroad with little or no consideration for the availability of spare parts. As a result, as soon as these vehicles develop any minor faults or have accidents, they are abandoned because the equipment and spare parts needed for the repairs are not available in the country while the available ones are expensive.

4.4 Poor condition of Roads: Again, some of our roads are in terrible conditions of disrepair. Most of them have turned into death traps with patches of pot-holes while some have dangerous intersections that easily cause accidents thereby shortening the life span of some vehicles provided for mass transit program. The efforts of the Federal Road Maintenance Agency (FERMA) have not been commensurate and sustainable in its service delivery as enshrined in its edict.

4.5 Corruption and indiscipline: There is also a general lack of discipline on the part of those entrusted with the duties of managing and maintaining public mass transportation vehicles and facilities. In Nigeria, corrupt practices and financial indiscipline are prevalent especially among public functionaries. Most times, a great percentage of the allocation for the maintenance of public mass transportation systems are diverted into private pockets while the purchase of cheap and substandard vehicles, facilities and motor spare parts, in order to make personal gains persists. This has been responsible for the collapse of many governments owned Transport Corporations.

4.6 Poor Policy and Program Initiative and Implementation: Government is yet to evolve an effective policy, program and implementation strategies which are geared towards the development of a suitable maintenance culture that will ensure the continued operation of the mass transit programs in the country. This has led to poor budgeting and haphazard acquisition of new mass transit facilities which suffer from lack of maintenance.

4.7 Poor Transportation Data bank: Data bank is grossly lacking in the public transport sector of Nigeria. Where they exist, they are poorly recorded, projected, analyzed, interpreted and applied. This therefore makes for unplanned public mass transportation system in the country.

4.8 Poor Organizational structure: This has been indicted for poor performance of organizations. The need for reinventing or re designing the organizational structure of public agencies, companies, institutions or systems; so as to incorporate formal and informal sectors, have been stressed. (Efobi et al, 2013, Anierobi et al, 2013). This will go a long way towards enhancing efficient operation of the system.

5.0 THE EXISTING CONDITION OF THE ENUGU STATE TRANSPORT COMPANY

This study identified the public sector operated mass transport system in Enugu state and employed the interview and observation methods in the study of its existing condition. Twenty randomly selected administrative heads in the organizational hierarchy of ENTRACO were the respondents. Findings showed that the attempt at ameliorating the transportation problems of the masses through the establishment of the Enugu State Transport Company (ENTRACO) in 1997 with the mandate of ensuring effective mass transportation for the public has not been realized. Records showed that ever since then, the vehicle stock have been fluctuating from about thirty to fifty, to a little above hundred buses as at year, 2000 and then declining tremendously to forty. Presently, in the year-2013, official record of ENTRACO showed that this public sector operated mass transport system currently has forty three operational buses out of which 60% are functional while 40% are out of service. 95% of the respondents in the organizational hierarchy of ENTRACO, identified gross lack of maintenance culture as the bane of the sector which hitherto, operates below capacity in its service delivery to the over teeming population and commuters in the state.

6.0 RECOMMENDATIONS AND CONCLUSION

From the discussions above, it is evident that there is an urgent need to develop an efficient maintenance culture in the nations' mass transportation system, in order to ensure the continued existence and update of public mass transportation vehicles and facilities which are provided for mass transit programs. An efficient mass transit system is one which is regular and ensures the comfort, prompt and safe conveyance of passengers to their various destinations in good time. This can only be possible when mass transit facilities provided for mass transportation systems are maintained in good time for better results. The following, recommendations are made for the development of an effective mass transportation maintenance policy.

- a) Government should develop policies and policy implementation mechanisms that aim at emphasizing efficient data bank and regular maintenance culture, upgrading of all mass transit vehicles and facilities and also making funds available for effective operations and service delivery of the system.
- b) More emphasis should be placed on the maintenance of roads, road signs/signals, upgrading and procurement of standard quality vehicles.
- c) Government owned mass transport corporations should set up maintenance workshops and original standard quality spare parts stores and manufacturing firms, where their vehicles can be repaired in order to cut down on maintenance costs.
- d) Vehicles imported into the country should be standardized. This will encourage private industrialists in the country to invest in the manufacture of their spare parts.
- e) Government should encourage the training of more experts on the administration, operations and maintenance of vehicles acquired for the implementation of the mass transportation programs, while strictly checking corrupt practices of officials.

Finally, an efficient maintenance culture will not only help to preserve the economic value of mass transit facilities provided but will also help avoid unwarranted and unnecessary deteriorations in the system. Though the task of maintenance is not without some peculiar problems, the writer believes that more advantages will be reaped in it. For once, it will help ensure the continued operation of the mass transportation system which in turn will reduce the nation's transportation problems.

REFERENCE:

1. Adetunji Musilimu Adeyinka (2013): Assessment of the Quality of Urban Transport Services in Nigeria. Academic Journal of Interdisciplinary Studies. Published by MCSER-CEMAS-Sapienza University of Rome. *E-ISSN 2281-4612, ISSN 2281-3993, Vol 2 No 1.*
2. Anierobi Christopher .M. and Efobi Kingsley . O (2013): Towards incorporating the informal sector operators in the Organizational structure of solid waste management agencies in Anambra state, Nigeria. Journal of civil and environmental research, ISSN 2224-5790 ,Vol.3, no.9, 2013; www.iiste.org
3. Efobi Kingsley .O. and Anierobi Christopher .M. (2013): Re-Inventing the Organizational Structure of Environmental Management Agencies of Nigerian Cities: Towards Sustainable Service Delivery In Anambra State. Journal of Public Policy and Administration Research ISSN 2224-5731. www.iiste.org
4. *Enugu State Transport Company (ENTRACO) Official records, 2013*
5. Ngoka, N.J (1988): Proceedings of the national conference on maintenance, management and technology. Enugu.
6. Ojeh, D. (1989): "Enter a new era". Financial post, August.