



Strategies for Mass Transportation System in Public Sector Operations of Zamfara State

^{1*}Bello Baba Hassan, ^{2**}Yusuf Ahmad

¹Department of Banking and Finance, ²Department of Quantity Surveying
Abdu Gusau Polytechnic Talata Mafara, Zamfara State

ABSTRACT

People and nations both experience growth and development as a result of transportation. The moving of a large number of people, commodities, and services from one location to another using a single vehicle is known as mass transportation. As a result, it is necessary for national socio-economic and cultural unity. As of now, the Nigerian government spends a significant amount of money each year on the mass transportation sector, notably road transportation, which is the subject of this research. Despite this, the number of accidents, wrecks, and vehicle breakdowns is rising. The railway system is one area of the industry that has become obsolete. The industry is plagued and strewn with outdated and damaged equipment, inadequate modern carriers, equipment, and vehicles, antiquated equipment and vehicles that are in bad shape, limited operating capacity, and other alarming situations. These have caused a high number of accidents and wrecks, losses in human life, material goods, labor hours, and per capita income, general environmental pollution, traffic congestion, and environmental deterioration, economic stagnation, and unsustainable growth in the nation. Even though Nigeria's public transportation system has improved over the years, it still confronts significant difficulties that have a negative impact on maintenance practices. In Nigeria, new purchases are prioritized above maintaining the infrastructure for modes and methods of public transit. In order to identify ideas for a successful maintenance culture for sustainable growth, this research examines the publicly managed mass transit system in Zamfara state, Nigeria. According to the research, the Zamfara State Transport Authority (ZSTA) has been running below capacity. The ZSTA's official report for 2013 stated that this public transportation system now has forty-three operational buses, of which 60% are in working order and 40% are out of commission. The sector has historically operated below capacity in providing services to the state's overcrowded population and commuters, according to 95% of replies from administrative chiefs randomly chosen from the organizational hierarchy of (ZSTA). A properly evaluated policy that enthrones an effective management and enforcement apparatus that ensures an articulated maintenance culture was advocated, along with alternative strategies like as privatization and public-private partnerships.

Keywords: Public Sector Operators in Zamfara, Nigeria; Mass Transit System; Maintenance Culture

1.0 Introduction

Every country's economic existence has been said to depend heavily on transportation. It is the force behind the expansion and progress of both individuals and nations. The movement of a large number of people, products, and services, known as mass transportation, is necessary for the socioeconomic and cultural blending of countries. Because of this, various Nigerian governments have been interested in the topic of public transit. The mass transit initiative was introduced by the federal government in January 1989 to improve the nation's transportation network. However, efforts to develop a useful public transit infrastructure in Nigeria have proved unsuccessful. The nation's transportation sector has been beset by a variety of issues, including a general lack of mass transit infrastructure in comparison to demand, ineffective administration and operation of public transportation businesses, and the absence of a strong maintenance culture (Adetunji M.A., 2013).

The transportation of several people from one location to another in a single vehicle is the main goal of mass transit. For the sake of this essay, mass transit will be defined as any kind of transportation that can carry 40 or more people at once in a single vehicle and whose operations are governed by a timetable, set routes, and stops. As a result of this categorization, mass transit networks also include riverine waterways (such as passenger ferries), commuter rail, and road transportation. Whatever the form and methods of mass transit, it is necessary to have an efficient maintenance culture in order to guarantee the facilities and system's continuing functioning as well as their security, regularity, thoroughness, and safety. When it comes to public transit, maintenance implies a deliberate effort to maintain, preserve, or uphold existing mass transit assets. On the other hand, it may refer to all actions done to maintain all mass transportation facilities in a condition that is appropriate for their current and planned usage. This essay will mostly concentrate on maintaining road transportation, with an emphasis on government-funded transportation infrastructure in Nigeria. Attempts will be made to highlight different solutions that might be used to accomplish appropriate maintenance of mass transit infrastructure in the nation while assessing the impact of inadequate maintenance on facilities supplied for mass transportation.

2.0 Effects of Poor Maintenance on Nigerian Mass Transit

The availability of facilities offered for the mass transit program won't degrade beyond repair with the aid of a well-established maintenance culture. The situation in Nigeria has never been the same. Due to poor vehicle and facility maintenance over the years, the majority of the mass transport facilities offered by various regimes in the nation, such as the mass transit programs, have become moribund. Buses that are now on the road are insufficient to transport the thronging number of people, regularly break down, and are eventually grounded and abandoned. Traffic lights, road signals/signs, and other pieces of roadside furniture are left until they are vandalized and destroyed while roads are neglected until they become patches of potholes and death traps. This has an impact on public transportation programs run by the federal and state governments.

According to Ojiah (1989), mechanical problems account for a disproportionately high number of ground vehicles at the Niger State Transport Authority. The situation is the identical in other federally recognized states, including those with state-run mass transit systems like the Zamfara State Transport Authority (ZSTA), Kaduna State Transport Authority, Kano Line, and Katsina Transport Authority. A few of them have already folded. Because of this, it is well known in Nigeria today that while private bus companies like Kangiwa Transport in Kebbi State are still making a profit, nearly all state-owned bus companies have abruptly shut down at some point, and the majority of those that are still in operation are inefficient from an operational standpoint.

Due to improper upkeep, many of the nation's roadways are in poor condition. The majority of motorways' tarred surfaces have deteriorated into death traps. The poor condition of the majority of roads is also a result of unchecked erosion and the threat of flooding. For instance, the crucial Sokoto-Gusau road in Zamfara State is a classic example, and the Sheme-Kankara route in Katsina State is another, to name just a few. It is understandable why the lifespan of mass transport vehicles traveling on these routes is so short.

Additionally, some of the country's highways have become overcrowded as a consequence of a sharp rise in the number of users, leading to a general state of traffic congestion, notably in the majority of its metropolitan centers. Traffic lights, traffic signals and signage, including zebra crossings and speed restriction signs, have all degraded and are slowly vanishing from our roadways. Users of public mass transport suffer from these occurrences, particularly at very risky locations like railroad crossings. Given the poor and crumbling condition of our roads and the rising number of fatal and near-fatal accidents that result from them, the Federal Government established the Federal Road Maintenance Agency (FERMA) for the maintenance of Federal Government roads across the nation, but the impact of this agency has yet to be felt. These instances highlight the lack of an appropriate maintenance culture and pose obstacles to Nigeria's effective mass transportation program.

3.0 Maintenance Techniques for Mass Transit Facilities

There are two major categories of maintenance: preventive maintenance and corrective maintenance. When doing corrective maintenance, repairs are made after vehicles and other transport facilities have entirely broken down, whereas preventative maintenance involves performing routine maintenance on the available vehicles and other facilities before they break down.

3.1 Preventive upkeep

The following strategies, servicing and confirmation, will be covered under preventive maintenance.

(a) Servicing

This is often done in advance of the facility breaking down at regular periods of different frequency. It includes anything from straightforward cleaning of mass transit equipment and vehicles like buses to replacing or cleaning plugs, oil, and other lubricants, as well as vehicle components like unclean or oil-soaked contact sets. Service is a preventative action. Even a car with few or no mechanical issues can ultimately breakdown if it is sometimes neglected. Servicing is a sound tactic that may be used to guarantee the correct upkeep of mass transit equipment, such as the cars supplied for the programs.

(b) Rectification

Especially on cars or other connected infrastructure, this method may be used relatively early in the life of mass transport systems. Such repairs are often required as a consequence of product damage during installation, transport, or even wrong assembly. It might also be due to certain flaws in the original design. Regardless of the origin of the damage, rectification makes sure that parts and materials are placed properly for the best possible performance of the facilities offered.

3.2 Correctional upkeep

Under this heading, the following tactics will be covered. They consist of alteration and upgrading.

(a) Upgrading

Upgrading as a mass transit maintenance plan entails rescuing or "correcting" assets that are physically sound but are losing their functional value for various reasons. Such equipment or vehicles may be updated to meet certain requirements. For instance, roads that had not previously been tarred may be tarred and drainage systems could be included. Those that were formerly tarred but have become narrow and deteriorated may be widened and maybe converted to dual carriageways with the required infrastructure for bus stops, off-street parking, sidewalks, bus stop shelters, and traffic signals. Zaria

Road in Kaduna State is one example of a road that is being upgraded from a single to dual carriage way with the inclusion of road furniture, such as bus stations that are outfitted with seats and solar lighting.

(b) Modification

This entails moving the old location of certain mass transport facilities to a more practical location. It is clear from what we have covered so far that using one or more of the aforementioned tactics in the nation's mass transportation program will be given fresh vitality with the aid of facility maintenance.

4.0 Factors Working Against Nigeria's Mass Transit System's Maintenance

Various variables affect the operational capability for service delivery even though there is widespread knowledge of the need to maintain mass transit vehicles and infrastructure in Nigeria and despite several government initiatives to improve the efficiency of the public mass transportation system. These elements consist of the following:

4.1 Casual attitude:

The general attitude of the government, public mass transit operators, and passengers regarding the state of cars and other transportation infrastructure, as well as the implementation of maintenance culture, is still present in the nation. This is one of the particular issues impeding the creation of an effective public mass transit system in Nigeria that is based on a maintenance-oriented culture for both cars and mass transit equipment. First of all, since the ordinary Nigerian believes that public property belongs to no one, those in charge of administering public mass transit systems often neglect to keep them in good working order until they come to a complete standstill.

On the other hand, government is sometimes only willing to spend substantial quantities of money into public mass transportation systems and other infrastructure with little or no thought for upkeep. Ngoko (1988) asserts that yearly maintenance expenses for projects are often quite low in comparison to the initial capital outlay. Due to inadequate financing, it is sometimes exceedingly difficult to carry out maintenance on the public transportation facilities offered by mass transit systems.

4.2 Lack of vehicle spare parts availability:

In addition, the majority of the vehicles used in Nigeria's mass transportation systems are bought from outside with little to no thought given to spare component availability. As a consequence, as soon as these cars have even minor problems or are involved in accidents, they are abandoned since the tools and replacement parts required for maintenance are either unavailable or prohibitively costly in the nation.

4.4 Poor state of roadways:

It goes without saying that some of our roadways are in a horrible state of disrepair. Some of them have risky crossings that are easily the scene of accidents, and the majority of them have degenerated into death traps with patches of potholes, reducing the lifespan of some of the cars given for mass transport programs. The Federal Road Maintenance Agency's (FERMA) attempts to supply services in accordance with its directives have not been sufficient and sustainable.

4.5 Corruption and indiscipline:

Those in charge of managing and maintaining the equipment and infrastructure for public mass transit also exhibit a general lack of discipline. Corruption and financial irresponsibility are widespread in Nigeria, particularly among public officials. The majority of the time, a large portion of the funds set aside for the upkeep of public mass transit systems are diverted into private wallets, and the practice of buying cheap, subpar cars, infrastructure, and motor parts in order to further one's own interests continues. Many transport corporations controlled by governments have collapsed as a result of this.

4.6 Ineffective Policy and Program Initiative and Implementation:

The government has yet to develop effective policy, program, and implementation strategies that are focused on the growth of an appropriate maintenance culture that will guarantee the country's mass transit programs continue to operate. Due to this, new mass transport infrastructure have been haphazardly acquired and are in need of upkeep due to bad budgeting.

4.7 Poor Transportation Data Bank:

Nigeria's public transportation industry has a severe shortage of data. The ones that do exist are not well projected, projected, analyzed, evaluated, or utilized. As a result, the nation's public mass transit infrastructure is unplanned.

4.8 A bad organizational structure has been blamed for firms doing poorly.

It has been emphasized that governmental institutions, businesses, and organizations must redesign their organizational structures in order to accommodate both the formal and unofficial sectors. (2013) Efobi et al. (2013) Anierobi et al. This will significantly improve the system's ability to operate more effectively.

5.0 Zamfara State Transport Authority Current Condition

The mass transit system in Zamfara situation that is run by the public sector was identified in this research, and its current situation was examined using interview and observation techniques. The respondents were ten administrative chiefs who were randomly chosen within the organizational structure of (ZSTA). The ZSTA, which was founded in 2003 with the goal of assuring efficient mass transportation for the general people, was found to have failed in its endeavor to alleviate the transportation concerns of the masses. Records revealed that since then, the number of vehicles has fluctuated between thirty and fifty, somewhat more than one hundred buses as of the year 2000, and then a sharp decline to forty. Presently, in 2013, official records from the (ZSTA) revealed that this public transportation system presently has forty-three operating buses, of which 60% are in working order and 40% are out of commission. 95% of respondents in the organizational hierarchy of (ZSTA) recognized a glaring lack of maintenance culture as the sector's downfall since it has historically operated below capacity in providing services to the state's excessively populous populace and commuters.

6.0 Conclusions and Recommendations

In order to ensure the continued existence and modernization of public mass transportation vehicles and facilities that are provided for mass transit programs, it is clear from the discussions above that there is an urgent need to establish an effective maintenance culture in the country's mass transportation system. A reliable mass transit system is one that guarantees the timely, comfortable, and safe transportation of passengers to all of their destinations. This is only achievable if the mass transit infrastructure offered by the mass transportation systems is maintained promptly for better outcomes. The following suggestions are provided for the creation of a successful maintenance strategy for public transit.

- a) The government should adopt rules and methods for putting those goals into action that emphasize an effective data bank and a regular maintenance culture, the modernization of all mass transit vehicles and infrastructure, and the provision of funding for the system's efficient administration and provision of services.
- b) The upkeep of roads, the installation of upgraded road signs and signals, and the purchase of cars of a minimum level should also get more attention.
- c) In order to reduce maintenance costs, government-owned mass transit organizations should establish maintenance facilities, original brand-name components warehouses, and manufacturing businesses.
- d) Imported automobiles have to adhere to standards. Private industrialists in the nation would be encouraged to make investments in the production of their spare parts as a result.
- e) While rigorously monitoring official corruption, the government should promote the training of more professionals in the administration, operation, and maintenance of the vehicles purchased for the execution of mass transit schemes.

Finally, an effective maintenance culture will assist prevent unneeded and unwanted system degradation as well as retain the economic worth of the mass transportation assets offered. Although the maintenance work is not without some odd challenges, the author thinks that more benefits will be gained from it. For once, it will contribute to ensuring the ongoing functioning of the mass transit system, which will, in turn, lessen the country's transportation issues.

Reference

-
- Kingsley Efobi, Christopher Anierobi (2014) Mass Transportation System in Nigeria: Strategies for Effective Maintenance Culture in Public Sector Operations of Enugu State: ISSN 2224-3232 (Paper) ISSN 2225-0573 (Online) Vol.4, No.1, 2014
- 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.
- 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
- 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
- Ngoka, N.J (1988): Proceedings of the national conference on maintenance, management and technology. Zamfara.
- Ojeh, D. (1989): "Enter a new era". Financial post, August.