

Urban Challenges and Informal Public Transport Services in Nigeria

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Abstract

Urban city dwellers needed to be conveyed from their places of abode to their places of work and back, on a daily basis. As the formal transportation sector dwindled in effectiveness, the informal sector grew to the point where it was meeting over 80% of urban cities' mobility demands. Proved to be indispensable in developing countries like Nigeria, where formal public transport systems were limited and irregular, at best, several modes of informal public transport services; minibuses, tricycles and motorcycles could easily access terrains and routes otherwise inaccessible to their formal counterparts. This paper discussed the roles of informal public transport services in Nigeria and how it complements its formal public transport, the risk associated with the informal public transport operations in Nigeria. In lieu of the negative externalities discussed, workable solutions were recommended such as inclusion and integration policy, and training and education.

Keyword: *Informal, Public Transportation, Risk, Services, Vehicles*

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1. Introduction

Transportation is an essential part of economic development. It is one of the indices for measuring the development of a country. Transport is an enabler of movement of goods and services from point of demand to that of supply. It is a blood regulatory system whose effective functionality is a necessity for sustenance of human life in general (Adeniji, 1999). Any nation that plays with its transport development undermines the major engine that propels socio-economic, political integration, security and development (Filani, 2001).

Transportation plays a vital role in social and economic development of a nation, particularly in facilitating movement of people, goods and services. Indeed, the provision of a high-quality transport infrastructure has been identified as a pre-condition for the full participation of remote communities in the benefit of national development.

An efficient transportation system plays a significant role in both the developing and developed country economies because it helps to reduce reliance

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on private motorized vehicle-ownership by providing an affordable and reliable alternative for commuters. The demand for urban public transport service is a direct consequence of the quality of the household, community or immediate environment and social networks of the country, therefore it is also very important to understand the nature of the public transport systems particularly in urban centres in order to make demand forecasts which plays a significant role for proper planning, policy formulation and operations.

In many developing countries, an informal public transportation mode is a predominant means of transportation which provides essential means of inter/intra-urban mobility. This reflects the fact that access to high capacity public transportation services is limited or virtually unavailable (Kassa, 2014). One factor that differentiates the informal from the formal public transportation modes is the lack of some of the necessary permits for operating legally. Thus, limited enforcement of regulations means these (informal) services can fill gaps left by inadequate formal public transportation (IGC, 2018).

Rapid urbanization in Nigerian cities has led to an unprecedented increase in demand for mobility services, and in the case where the formal public transport sector contributes a lesser percentage to the daily mobility in the city, most of the informal transportation vehicles are privately owned and operated informally. For instance, formal public transportation modes contribute 2.8% of daily mobility in Lagos with an estimated population of 22,281,339 in 2020, hence the dependence on informal public transportation modes to meet mobility demands. This consequently resulted to informal operators of mini-buses, tricycles and motorcycles (Oshodi, 2016). The informal public transportation widely used by large populations in the country has the comparative advantage of providing flexible service.

2. Informal Public Transportation

Transportation plays a vital role in social and economic development of a nation, particularly in facilitating movement of people, goods and services. Without doubt, road transport is the most utilized mode of transport in Nigeria. It involves the use of bicycles, motorcycle, tricycles, buses, motor cars, trailers, lorries, tankers and so on, in moving people, freight and services from one location to another where they are mostly required. In Nigeria, it is evident that an effective intermodal transportation system is absolutely essential to modern urban civilization leading to economic growth and development.

Poor public transportation management in Nigeria is one major problem that is affecting the growth of the economy. Loss of productivity time due to traffic congestion is one major challenge facing the transportation system in Nigerian urban centres. There is a wide range of public transport operating in Nigerian cities, from mini-buses to midi-buses that served urban resident daily travel demand. This wide range of public transport is not effective enough to reduce traffic congestion and sometime become the source of congestion (Ali, 2014).

Different authors have numerous definitions that prove informal public transportation as gap filler in the transport industry, complementing the formal transportation system to improve mobility in the cities, and thus account as a contributor to the economic development of developing nations, in terms of contributing to the GDP and employment of the low-class group (Selim, 2010). Cervero (2000) simply defined IPT as an unlawful operation whereby the operators carry out their daily activities in the informal system, operating outside the official institution of the society in a legal and social environment and regarded as an illegal operation based on non-sanctioned status. In economic and political context, World Bank stated IPT as “passenger transport service outside the transitional public transport regulatory system”. Traditionally, the provision of public transportation solely depends on the government. However, in developing countries, governments are incapacitated in organizing, regulating and funding public transportation, hence the inadequacy, thereby rendering privately operated public transport modes like tricycles, motorcycles, and mini-buses, the only dependable services that cater to the mobility needs of the population (Kumar, Singh, Ghate, Pal, Sangeetha & Wilson, 2016).

In developing countries, the urban passenger is dominated by an informal economy. There are numerous forms of informal passenger transportation modes, ranging from large, long-distance buses to taxis. These include very large numbers of auto-rickshaws, minibuses, motorcycle, and various forms of unregulated private hire taxis. IPT providers lack licenses and their vehicles are mostly unregistered. They pick up passengers in undesignated places, and they do not follow traffic rules (CDIA, 2011).

The IPT sector of any developing country plays a pivotal role in urban mobility. Comprising mostly small, low-performance vehicles, privately owned and operated, they fill the wide gap otherwise accentuated by the ill-preparedness of governments, in the urban transportation needs of the mostly urban populace, who, on the main, are low income earners and do not have private vehicles. In any typical developing country, the emergence and expansion of IPT operations was facilitated by the comprehensive failure of subsequent governments to provide otherwise more formal, aggregated, and cohesive functional means of transportation for the ever-growing urban populations of developing and growing cities (Detlaf, 2015). This lack of a formal setup facilitated the interloping of IPT providers, who appear and pick up otherwise ‘stranded’ passengers at curbs and bus stops (Nwaogbe, Ibe & Ukaegbu, 2012). Because of the fast-paced growth of most urban cities in developing countries, and the resultant influx of people, and a consequent high density of city centres, the formal transportation system, where it existed, could not any longer cope with the transportation requirements of such growth. This is where IPT modes of transportation started blossoming, providing feeder connections between neighbourhoods and trunk routes (Cervero & Golub, 2007). The declining and increasingly unreliable formal urban transportation sector services gradually lost out to the over-compensating IPT service providers, who

offered more frequent and somewhat 'guaranteed' commute (Nwaogbe, Ibe & Ukaegbu, 2012).

The operations of the IPT service providers are market-determined. That is to say, their routes are not necessarily fixed. Routes, schedules, and operating practices can and are fashioned to fit market needs. Owing to the relative smaller sizes of IPT modes like the mini buses, tricycles and motorcycles, they can tailor their services to suit consumer requests/needs, move between otherwise difficult-to-access suburbs, are not otherwise unnecessarily influenced by off-peak commute hours, and are both flexible and sensitive to changing market demands. This, of course, stands in sharp contrast to the otherwise rigid and unresponsive modus operandi of the formal public transportation sector (HABITAT, 2000).

3. Informal Public Transportation in Nigeria

The rapid rate of urbanization in Nigeria has become an issue of serious concern to policy makers in the various sectors including transport. However, Urban transportation on its part consists prominently of the conveyance of passengers and products between various origins and destination within and outside the city, where population growth rate is very high across the world. Cities and urban centres in developing nations experience growth rate of population in the range of 3% and 5%. The increasing population coupled with continuous growth of activities in urban centres' economies and family and individual livelihoods additionally lead to further increase in travel demand, vehicle possession and vehicle use, prompting expanded interest for movement (Oni, 2004). In order to further enhance the cities to become the engine of growth of nation and regions, urban transportation becomes an unavoidable segment of the urban framework.

Without doubt, urbanization is one of the most significant transformations of human society in history. The rapid rate of urbanization has engendered several challenges and problems to humanity. Therefore, it can be seen that intra-urban mobility in Nigeria remain inadequate and inefficient leading to long waiting time at bus stops, traffic congestions, scrabbling for few available public transports during peak hours. Obviously, travel needs of urban dwellers vary with age, income levels, locations of residences, workplace, shopping centres, schools and recreational areas, which in turn, result in variations in the length, cost and duration of urban trips. All over the world, attempts have been made to tackle the problems, yet the situation seems to get worse.

The informal public transportation sector in Nigeria provides the backbone of passenger transport for inter/intra-urban and, sometimes, inter-state mobility. The type of vehicles commonly used in Nigeria for IPT operations include Mini-buses, Tricycle (Keke Napep) and Motorcycle (Okada). There have been other vehicles before the emergence of Danfo that formed the foundation of informal public transportation. The history of public transportation started in Lagos state in the 1920s. Bus-based transportation was pioneered in Lagos by W.A. Dawodu and Charlotte Olajumoke Obasa. This was later followed by J.N. Zarpas Company in

1929, owned by a Greek business family. It provided a reliable and efficient bus transit system. This service was later supplemented by Oshinowo bus service. The Greek bus transit business was bought over in 1958 by the Lagos Municipal Authority and formed the first ever government owned municipal public transport service in Nigeria. By 1963, the fleet of buses had increased to about 148 buses. This was the beginning of government involvement in urban bus transport service in Nigeria (Ikya, 1993).

The utilization of public transport for intra-city movement purpose was largely concentrated in large urban centres like Ibadan, Kano, Enugu and Lagos, while commuters contend with the use of trekking within smaller towns as at 1960. However, the circumstances changed drastically by early 1970s as the travel distances in towns and cities increase. The public transport system, however, has been a prominent feature of urban automotive road transport development and growth and dominated transport system in the country for decades.

The use of motorcycles (okada) for urban public transportation service is not a new phenomenon in Nigeria. It has been mostly used as intra-city and inter-city urban and rural transport services especially in the coastal areas of Nigeria for the past three decades (Ogunsanya, 1993).

Commercial motorcycle business has created employment for many Nigerians especially unemployed youth and retired people. Some state governments in Nigeria anchored on the perceived benefits of motorcycle operations and thereby incorporate it into their poverty alleviation programme by distributing motorcycles to the unemployed people in their various states as part of poverty alleviation programme. Apart from people that are directly engaged in the riding of motorcycle for commercial operation, many people are also into the sale of motorcycles and its spare parts. Thus, the commercial motorcycle business has filled a huge gap in the public transportation system in the country. With the commercial motorcycle operation, people can easily go to areas previously inaccessible by conventional means of transportation.

Different policies have emerged to phase out the informal public transportation service due to lack of safety standards, limited regulation, poor maintenance, poor security, and frequent violation of traffic laws, yet the operation continues, due mainly to the fact that politicians need people in informal transport sector (transport unions) for grassroots mobilization during electioneering campaign (Alake, 2018).

The most recognized road transport associations today are the National Union of Road Transport Workers (NURTW) and the Road Transport Employers Association of Nigeria (RTEAN). RTEAN was also registered as a trade union in 1978 as an affiliate of the now known Nigeria Labour Congress (NLC). Although, the RTEAN predates NURTW, but it is less known and less active than the NURTW which has grown overtime with over 1.5 million membership throughout

the federation. RTEAN are the vehicles owners who engage members of NURTW to operate the vehicles.

The union has an administrative structure in which the secretariats are established in states, zones, branches and units. Each of these has elected officers, who are headed by chairperson, to coordinate the operations and activities of the union throughout the federation.

There is a history of regular clashes between the two unions over fees payable, amount to be remitted by members of NURTW and control of transport parks.

However, the under-listed transport unions play some key roles in the operations of the road transport system.

- National Union of Road Transport Workers (NURTW)
- Road Transport Employers Association of Nigeria (RTEAN)
- National Association of Road Transport Owners (NARTO)
- Amalgamated Commercial Motorcycle Riders Association of Nigeria (ACOMORAN)
- Articulated Motorcycle Owners and Riders Association of Nigeria (AMORAN)
- Tricycle Owners and Riders Association of Nigeria (TORAN)



Figure 1. Conventional bus transport in Lagos

4. Perennial Risks Associated with Informal Public Transportation in Nigeria

The growth of the urban centres in Nigeria, coupled with increasing population, results in greater demand for transport provision. In spite the fact that informal public transportation plays significant roles in meeting mobility needs, there are risks associated with the operations, major activities of the IPT is perceived as a negative impact. In Nigeria, informal public transport operation is a menace and it is with no doubt that the negative impact outweighs the positive impact. Operators, commuters and other road users, know and/or experience firsthand the risks associated with the day-to-day activities of the operation. The number of public buses, tricycles, and motorcycles competing on the roads are much more than other road users, coupled with the consecutive act of slowing down a bit without completely stopping to let passengers in and out of the vehicle, violating traffic rules, and the proliferation of operations (i.e. anybody can venture into public transport business since there is no proper regulation), and other mischievous things they are known for are alarming. So far, these have resulted to road traffic crashes, environmental degradation/pollution, traffic congestion, insecurity, and crime, amongst others. These concomitant consequences are discussed below;

Road Traffic Crashes

One of the major challenges of the Nigerian urban transportation system is the frequency of traffic accidents and fatalities. Today, it is quite obvious that road traffic crashes are a leading cause of death and injuries in the country. The accidents have not only been posing additional strain on the struggling health system but have become a big burden to the country's economy in terms of the country's loss of its potential human capital.

Urban areas are the most inclined to vehicle mishap because about 75% of auto collision happens in urban areas (Onokala, 2015). The increasing rate of road traffic crashes in Nigerian cities is directly linked to the informal public transportation operator's incessant poor behavior on the road. The high level of competition among the operators of mini-buses, tricycles (keke) and motorcycles (okada) in Nigerian major cities like Lagos is overwhelming. These operators drive recklessly, over-speed, obstruct traffic, disobey traffic rules, and maneuver within any available 'space', not sparing pedestrians or pedestrian walkways. All these activities pose danger to the lives of pedestrians and commuters, resulting to injuries and fatalities (Otunola, Kriticos & Harman, 2019, Eribake, 2009).

Another notorious behavior the operators are known for is the consumption of alcohol and drugs, before and even on the job. Hardly is there any motor park/terminal without alcohol and drug vendors. These illicit consumables cause drunk driving (driving under the influence of drugs/alcohol), and there is a higher tendency of such operators involving in road traffic crashes. Evidently, RTC is one of the perennial hazards associated with the IPT sector, this is corroborated by Afolabi and Gbadamosi (2017) on the effect of RTC in Nigeria, road traffic

accidents have been credited as being a potent causal factor of premature deaths, loss of millions of naira worth of property, as well as the equally appalling social costs of trauma on the part of survivors of these accidents victims.

In 2016, 5,053 Nigerians got killed from a total of 9690, while a total of 30,105 Nigerians got injured. Also, in the first quarter of 2017, 2556 RTC were recorded and 1,466 Nigerians got killed while 8672 Nigerian got injured (NBS 2016 and Q1 2017 report).

The Figure 1 shows the trend of accident cases recorded by the Federal Road Safety Corps in Nigeria.

Below are the graphical representations showing the trend of road traffic crash over the period 1960-2016 in Nigeria

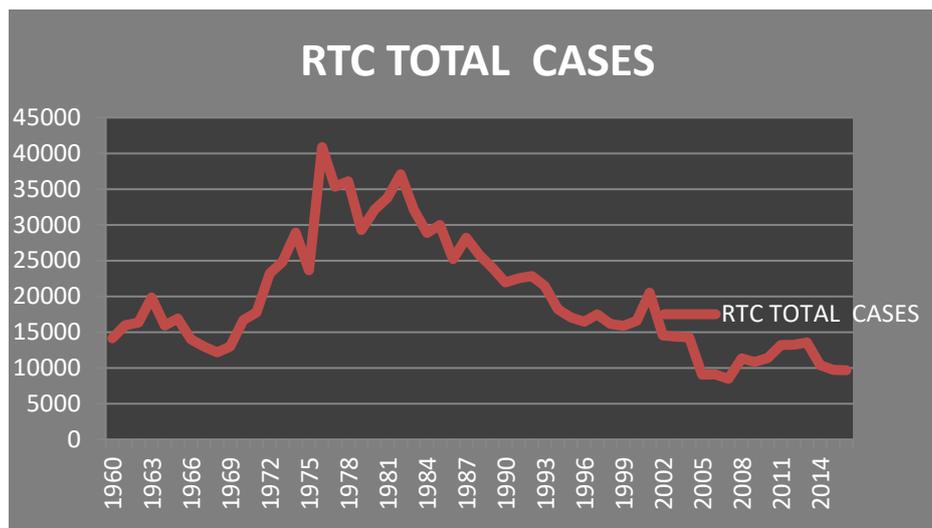


Figure 2. Trend of number of road accident in Nigeria reported from 1960-2016

The gradual reduction in the total number of road traffic accidents with its consequent casualty might be attributable to the increased in the level of transport infrastructure provision manifesting in improved road condition and connectivity through rehabilitation and construction, and to the success of effective road safety education and campaign embarked upon by government agency like the FRSC and other nongovernment organizations in the country.

Insecurity and Crime

Security in transport modes in Nigeria has been a major issue of discourse among stakeholders in the transport sectors largely due to the risk that various transport modes faces in Nigerian cities today. From evidence, Nigeria is seriously challenged by lack of comprehensive policy on transport security, inadequate legal and regulatory framework on transport security equipment, inadequate funding for security and ill-equipped training facilities.

One of the challenges facing the informal public transportation service is the issue of insecurity. Different natures and kinds of crime are committed on a daily basis. Otunola et al (2019) posited that the IPT service lacks trained personnel and policing, which made it a haven for criminal acts such as pick-pocketing, different forms of harassment, robbery, and kidnapping “one-chance”, during operations. In the city of Lagos, where crime is of a very high rate, commuters who sleep or sit by the window side in the bus have had their fair share in the tales of losing valuables to the unknown. Victims are thrown out of the bus while in motion, resulting to injuries and, sometimes, death.

Traffic Congestion

Without doubt, unguided and uncontrolled urbanization has put an expanded pressure on the existing transport infrastructure, giving rise to a perpetual state of gridlock that happens when urban road network is no longer able to accommodate the volume of traffic that utilizes them a situation that roadway demand being greater than its capacity. In addition, the unplanned growth of cities and the haphazard land use distribution are sometimes responsible for traffic congestion, leading to the wastage of time of the urban dwellers, reduce manpower productivity and also cause physical and psychological discomfort. The congestion has further contributed to increasing environmental burden of the impact of transport in the cities.

Traffic congestion is a very serious socio-economic nuisance caused by IPT providers, their blatant disregard for the safety of their passengers, especially, at pick up or drops off points is worrisome, disrupting traffic flow, particularly, at peak hours.



Figure 3. Traffic Congestion in Lagos

Environmental Pollution

The automobile is considered as the major source of more than 30% of the pollution in Nigerian urban environment (Ogunsanya, 2002). This is more so that the motor vehicle is a significant contributor to environmental pollution and coupled urban traffic that is characterized by many poorly maintained and sometimes unserviceable vehicles. These vehicles produce carbon-monoxide, lead, nitrogen-oxides and hydro-carbons. With rapidly increasing urban growth and corresponding increases in vehicle ownership and transport use, urban centres in Nigeria continually face increase in the negative environmental impact of transportation in the urban centres, making the mitigation of climate change a greater challenge. Associated with gaseous pollutants is traffic noise originating from motor engines, exhaust system, horns, brakes, and stereos system (Ogunmodede, 2004).

European Environmental Agency reported that bus contributed 72g CO₂/passenger/km, with the fleets of IPT vehicles in developing countries, IPT has played a major role in contributing hugely to environmental degradation. Most of the vehicles used for operations are not road worthy. Cervero and Golub (2007) stated that the informal nature of IPT, allows for poor checks and adherence to environmental safety standards and regulations.

Health Risk

Drivers of the informal public transportation units sometimes do not follow the carrying capacity of the vehicle in use. For instance, minibuses, with carrying capacity of fourteen (14) passengers, will be loaded with more than eighteen (18) people, while motorcycles of one passenger, will have three or more people on it, including the driver. Passengers are packed full and choked up in vehicles, and most of these vehicles especially mini-buses have lost their roof padding thereby creating a stuffy atmosphere due to heat. Commuting in public transport vehicles can be detrimental to one's health and the issue of safety and health are not taken into consideration by the drivers, their major concern being to get passengers to their destination so as to reload more passengers. The activities they engage in when journeying sometimes put passengers at risk (Wong et al, 2018).

Trauma

The trauma associated with living in overcrowded cities filled with fleets of IPT vehicles cannot be over-emphasized. Considered a nightmare, the struggle to catch a vehicle due to picking passengers while in moving traffic alone can cause physical and emotional trauma. Disadvantaged people such as school children, the physically challenged, and the elderly citizens are not left out in the challenge of boarding vehicles in the city of Lagos. The IPT sector lacks empathy for the disadvantaged people, not to talk of able bodies that suffer emotionally and physically to go about their daily activities.

5. Conclusions and Recommendation

Without doubt, the country faces monumental transport challenges in the urban centres as the long-term shortages are growing because the demand for transport is high and growing rapidly to meet the needs of expanding population and economy.

This paper concluded that IPT is clouded by negative externalities that are not only limited to commuters and other road users, but also affect the operators and the nation as a whole, yet the industry and activities remain indispensable in terms of meeting mobility demands. Government, in their various policies on transportation, has placed restrictions and bans on most of their operations, and none of these policies has been half-achieved so far. The informal sector thus reflects the large gap existing between the services provided by the government and the real needs of the population. The operations and other activities are flawed; hence, the following practicable solutions are recommended below;

Millions of people in developing countries earn from the informal sector, and the informal public transportation sub-sector is not an exception. Government policies have consistently been constant in displacing people in the informal sector of their jobs, with no alternate recourse provided or even proffered. Most of these individuals are the breadwinners of their respective homes, the government policies to restrict or ban their operation is discouraging and can lead to crime upsurge in the society. Kassa (2014), suggests an integration of elements from both the formal as well as the informal sectors of the economy in brainstorming sessions, whenever far reaching decisions are being considered which will impinge on the activities of the IPT sector, or during the policy formulation processes geared towards the generation of policies that would be more wholesome and all-encompassing. Input from the informal transport sector, as, indeed, from the larger informal sector of developing countries like Nigeria is valuable for the breeding of a healthy economy.

Information instruments such as workshops, seminars and public awareness campaigns, as well as the television, radio and training education should be used to improve driver education and all the aspects of sustainable public transport development in the country.

There is need to put more efforts towards the development of vehicle inspection operations in Nigeria. The government should endeavour to promote the operations of vehicle inspection officer (VIO) as it contributes to the efficiency of the public transport system in Nigeria.

In addition, state governments may have to restructure the existing public transportation operations, through the introduction of a contemporary safe, affordable, fuel efficient and environment friendly buses to replace the existing, dilapidated and unsound buses from major roads in the cities.

More importantly, city government must provide the infrastructure required for effective and efficient public transport systems implementation such as: terminals; bus shelters/stops; lay-bys; and bus repairs workshops.

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