

## **The importance of Stakeholders in the management of Nigerian transport system.**

**By**

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### **Abstract**

*A very efficient transport system is key to supporting economic growth and development of any economy, however bad routes and inefficient transport facilities are some of the challenges that can mitigate against such plans thereby affecting the users of the roads who are the stakeholders to contribute in that regard. It is against these background that this paper using secondary data looks at the Nigerian transport system, the problems confronting her and then examining the role that stakeholders can play in ensuring a better and efficient transport system in the country. Solutions proffer include amongst others improving effort in regulation enforcement coordination, collaboration, infrastructure provision, service provision and better emergency service.*

### **1.1 Introduction**

Transportation plays a vital role in human activities, forming the foundation of socioeconomic interactions. In many developing nations, the absence of adequate transport facilities often obstructs economic progress. A robust transportation network is essential for supporting economic advancement. Common challenges in developing countries include poor road conditions, insufficient vehicle fleets, inadequate train services, overcrowded airplanes, and congested ports (Avanenge Faajir and Zizi Hassan, 2016).

In Nigeria, transportation poses a significant challenge amid rapid urbanization. Cities such as Lagos, Kano, Aba, Abuja, and Port Harcourt face unique transportation issues that disrupt the supply chain for goods and services. For example, Patience Chinyelu Onokala and Chidinma Joy Olajide (2019) illustrate how road transport currently handles the majority of passenger and goods movement across the nation. While roads are overexploited and often misused, there

remains untapped capacity in the waterways. Historically frequented railways are now underutilized, while air travel, although heavily used, demands significant improvements and expansion. This overreliance on road transportation has led to environmental problems and a high incidence of road traffic accidents in Nigeria. Inefficiencies at Nigerian ports have resulted in lost opportunities for importing goods and redirected shipments to other West African ports. The underutilized inland waterways and aging railway system exacerbate these issues, while air transportation, despite being overused, still needs considerable enhancements.

Together, these factors detrimentally affect the contribution of various transportation modes to the country's economic growth. The challenges encountered negatively influence the transport sector's role in economic development. The stakeholders impacted include users of the transportation system, composed of customers, employees, owners, governmental bodies, and community members. This paper thus investigates the significance of stakeholders in the effective management of Nigeria's transport system. The study is organized into eight sections: background information, conceptual review, theoretical framework, the importance of the transport system, challenges facing Nigeria's transport system, and the roles and expectations of stakeholders in addressing these challenges.

## **Conceptual Review**

### **2.1 Transport System**

Jean-Paul Rodrigo (2020) defines a transport system in "The Geography of Transport Systems" as the interconnections between nodes, networks, and demand. These relationships convey spatially expressed demand, the flows between locations, and the infrastructures designed to manage and connect these flows. All components of a transport system are intended to facilitate the movement of passengers, cargo, and information, whether these elements operate separately or together. According to Vocabulary.com (2023), a transport system consists of the means and equipment essential for transporting passengers or goods.

## **2.2 Stakeholders**

A stakeholder refers to any individual, group, or organization having a vested interest in the decisions and activities of a business or project. Stakeholders may be affiliated with the organization or have no formal connections. They can exert direct or indirect influence over the organization's activities or projects. Their support is often critical for the success of a business or endeavor, indicating the organization's legal obligations to them. Stakeholders can be positively or negatively affected by an organization's choices and thus may express concerns and engage in its activities (Nick Barney and Brian Holak, 2023). Typically, stakeholders encompass customers, employees, investors, suppliers, boards of directors, community members, organizations, and government entities.

## **2.3 Theoretical Review**

The complex nature of urban goods distribution necessitates a thorough understanding of stakeholder preferences and perceptions, particularly given that their interests frequently diverge. According to Taniguchi and Tamagawa (2005), analyzing stakeholder behavior is vital when assessing urban freight transport and evaluating city logistics strategies. Key stakeholders in urban freight transport include shippers, freight carriers, residents, and city administrators (Taniguchi et al., 2005).

The behavior of stakeholders significantly influences the outcomes of city logistics initiatives, making it a crucial factor in research involving decision-support systems. Multi-agent models are frequently employed to represent this behavior. Russo and Comi (2015) suggested that the minimal acceptance rate among stakeholders can be addressed by analyzing and selecting city logistics solutions that take into account the needs of all stakeholders. Lindholm and Ballantyne (2015) emphasized the importance of involving freight stakeholders in urban transport policies, reinforcing the necessity of their inclusion in decision-making processes. According to Taniguchi et al. (2014), collaboration and consensus among stakeholders are vital for the successful implementation of city logistics projects, given the varying expectations of different

stakeholders. Lindholm (2014) noted that freight quality partnerships serve as a means to integrate stakeholders into the transport planning process. Kiba-Janiak (2015) asserted that it is essential to engage all stakeholders when developing long-term city logistics plans, as their involvement is critical to urban development strategies. Khayyat and Awasthi (2015) argued that stakeholders might be content operating their businesses independently, without engaging with others in the market. They further noted that substantial financial advantages could be overlooked by stakeholders who do not participate in collaborative scenarios. Thus, understanding stakeholder behavior in urban freight transport planning is fundamental for success. Research that incorporates stakeholder behavior has been increasing in recent years. For instance, Golob and Regan (1999) interviewed about 1,200 transport operators, both independent and employed by various sized companies, regarding their practices aimed at reducing congestion, which they classified based on perceived effectiveness. Quak and Koster (2005) examined goods distribution from the perspective of tenants, analyzing multiple case studies in the Netherlands. A survey conducted by Holguín-Veras et al. (2006) focused on differential charges for road use from carriers' perspectives. Sinarimbo (2005) summarized potential solutions and best practices adopted by carriers, retailers, and administrators in urban settings across Asia and Europe, including strategies like consolidating goods in urban distribution centers, overnight deliveries, access restrictions (such as time or weight limitations), and dedicated truck lanes. Each of these solutions highlights the importance of stakeholder involvement and their individual objectives. According to Taniguchi et al. (2001), primary stakeholders include retailers (who receive goods), carriers (who transport goods), the public (who live, work, and shop in urban areas), and administrators (who facilitate urban development). Effective city logistics solutions should encourage the integration of diverse perspectives. Tamagawa et al. (2010) explored the interactions among shippers, carriers, administrators, and residents through a multi-agent model to assess city logistics measures. Additionally, Lepori et al. (2010) put forth a methodology for collecting and analyzing stakeholder needs, identifying all relevant participants in urban freight transport, understanding

community needs, assessing stakeholder requirements, and defining a set of requirements for city logistics projects.

## **2.4 Nigeria's Transport System**

Nigeria's transport network has seen significant expansion in recent years to support its growing population. In 2020, the transport and storage sector was valued at N2.6 trillion (\$6.9 billion) at current basic prices, a decrease from N3 trillion (\$8 billion) in 2019, according to the National Bureau of Statistics (NBS). The transportation system comprises railways, roads, waterways, pipelines, and airports.

### **2.4.1 Railways**

The Nigerian Railway Corporation (NRC) manages rail services nationwide for both freight and passengers, yet private sector involvement remains limited, as the majority of intercity rail routes lack commercial viability. The latest NBS data indicates that the rail system transported 2.6 million passengers in 2017, 3 million in 2018, and 723,995 in the first quarter of 2019. Revenue from passenger tickets amounted to N1.2 billion (\$3.2 million) in 2017, N1.9 billion (\$5.1 million) in 2018, and N520.8 million (\$1.4 million) in the first three months of 2019.

### **2.4.2 Roads**

Nigeria's roads and highways serve as the backbone of its transport network, handling 90% of all passenger and freight traffic, as reported by the National Integrated Infrastructure Master Plan (NIIMP). This segment is the largest in terms of contribution, contributing N2.4 trillion (\$6.4 billion) to GDP in 2020, down from N2.7 trillion (\$7.2 billion) the previous year. The government is therefore focused on maintaining existing roads—many of which are in poor or unpaved conditions—and constructing new ones. The 2021 budget allocated N168 billion (\$451.2 million) for road construction, rehabilitation, and dualization, along with N54 billion (\$144.2 million) for building and renovating bridges, and N4 billion (\$10.7 million) specifically for the rehabilitation of a bridge in Lagos.

### **2.4.3 Waterways**

Nigeria boasts 8,600 kilometers of inland waterways. The longest routes include the Niger River and its tributary, the Benue River, while the busiest areas, especially for larger powered vessels and commercial activities, lie within the Niger Delta and along the coastal route from Lagos Lagoon to the Cross River. Although the Nigerian Merchant Navy is not a legally recognized entity, senior officers are represented by the Merchant Navy Officers' and Water Transport Senior Staff Association. The maritime industry is regulated by the Nigerian Maritime Administration and Safety Agency (NIMASA), which oversees regulations related to Nigerian shipping, maritime labor, and coastal waters. This agency also conducts inspections and provides search and rescue services.

### **2.4.4 Pipelines**

As of 2004, Nigeria had 105 kilometers of pipelines for condensates and hydrocarbons, contributing to the efficiency and effectiveness of the national transport system.

Various pipeline projects are underway to enhance the domestic distribution of natural gas and to facilitate its export to Benin, Ghana, and Togo via the West African Gas Pipeline. There is also potential for exporting to Algeria, where Mediterranean export terminals exist, through the proposed Trans-Saharan gas pipeline.

In Nigeria, the primary airports are Murtala Muhammed International Airport in Lagos and Nnamdi Azikiwe International Airport in Abuja. Additionally, three other international airports serve the country: Mallam Aminu Kano International Airport in Kano, Akanu Ibiam International Airport in Enugu, and Port Harcourt International Airport in Port Harcourt, as reported by FAAN. In 2019, arrivals at Nigeria's 30-plus airports reached 8.8 million, while departures totaled 8.7 million, marking a 7.4% increase from the combined total of 16.4 million passenger movements in 2018. Cargo traffic also saw growth in 2019, increasing from 164.9 million kg in 2018 to 174.9 million kg. Air mail transport rose from 47.3 million kg to 55.6 million kg. The domestic terminals in Abuja and Lagos accounted for 25% of passenger

movements and 30% of aircraft movements in 2019, with Murtala Muhammed International Airport (MMIA) handling 81% of all cargo.

## **2.5 The stakeholders involved in Nigeria's transportation system include, but are not limited to:**

1. The three tiers of government: federal, state, and local.
2. The Nigerian populace as a whole.
3. Manufacturers, producers, and consumers.
4. Importers and exporters.
5. International stakeholders.
6. Various transport operators across all modes of transportation.
7. Financial institutions, including international financiers, banks, insurance companies, and multilateral entities like the World Bank and African Development Bank.
8. Research and development institutions focused on capacity building, such as NITT, Zaria, and MAN, Oron.
9. Additional stakeholders providing ancillary services and supplies.

### **3.1 The significance of a transport system**

The movement of passengers and goods is essential for economic and social activities, including commuting, manufacturing, goods distribution, and energy supply. Each transportation movement serves a specific purpose, originating from a point, potentially passing through various intermediate locations, and culminating at a final destination. Mobility relies on transport systems, which encompass infrastructure, modes, and terminals. These systems facilitate interaction among individuals, institutions, corporations, regions, and nations, enabling them to engage in economic, social, cultural, or political activities.

### **3.2 Challenges facing Nigeria's transportation industry**

Nigeria's transport system faces numerous challenges, including but not limited to:

- Lack of coordination and regulation
- Absence of advanced management techniques within transportation companies
- Issues related to information and communication technology
- Shortage of skilled personnel
- Rigid bureaucracy
- Underfunding
- Corruption and deteriorating infrastructure
- Lack of trust in policies
- Insufficient human capacity and expertise
- Over-reliance on foreign consultants and assistance
- International collaborations that may be counterproductive
- A lack of reliable data and information crucial for transport planning and policy development
- A complete lack of regular interaction and coordination among the three tiers of government to align local, state, and federal transportation matters for better synergy
- A bias favoring certain modes of transport over others
- Political and economic inconsistencies that undermine transport's positive impact on economic development
- Political instability and legislative gaps
- Intense competition between domestic and foreign operators

### **3.3 The role of stakeholders in addressing Nigeria's transportation issues**



- Stakeholders recognize that while the government is making efforts to address transportation issues, they expect improvements in areas such as regulation, enforcement, coordination, collaboration, infrastructure development, service delivery, and emergency management.
- There is a call for the National Crash Database to effectively support the National Bureau of Statistics, serving as a clearinghouse for data with comprehensive information.
- Stakeholders endorse a lead-agency approach for collaborative operations, emphasizing that stakeholders should be included in the provision and management of urban transport infrastructure, which encompasses government bodies, funding institutions, community-based organizations (CBOs), non-governmental organizations (NGOs), traditional leaders, communities, and the public.
- The key stakeholders outlined above are expected to work together to create a robust transport infrastructure for the country.
- Engaging with the population is crucial, specifically by identifying their mobility needs during planning.
- The Federal Ministry of Transportation anticipates coordination among manufacturers, producers, importers, and exporters through government agencies and parastatals to cultivate stakeholder relationships.

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