COSMAS, TASFUED
Ijagun Journal of Social and Management Sciences

Road Transportation: A Corollary of Economic Development along the New Oyo-Ibadan Express Way, Oyo State, Nigeria

Oladokun, G. E. and Olawuwo, A. A.
Department of Geography and Environmental Education, Emmanuel Alayande University of Education, Oyo
Corresponding author*: oladokunge@eauedoyo.edu.ng*

Abstract
Road transportation is a vital driver of socio-economic development through improved accessibility, mobility and commercial activities. This study examined road transportation as a corollary of economic development along the New Oyo–Ibadan Expressway with the aim of assessing its influence on transportation efficiency and economic activities. A descriptive survey research design was adopted. The study population comprised market men and women, trailer drivers, petrol station attendants, vulcanisers, artisans and other business operators along the expressway. A total of 120 respondents were selected through simple random sampling from Akinyele, Fiditi and Ilora. Primary data were obtained through structured questionnaire, field observation and in-depth interviews (IDI), while secondary data were sourced from relevant literature and official publications. Data were analysed using SPSS Version 29. Descriptive statistics, including frequencies, percentages, mean scores, standard deviations, ranking and cross-tabulation, were used to answer the research questions, while Pearson Product Moment Correlation (PPMC) and Chi-square (χ^2) tests were employed to test the hypotheses at the 0.05 level of significance. The findings revealed that the New Oyo–Ibadan Expressway has improved accessibility, reduced travel time and enhanced the movement of people, goods and services. The expressway also stimulated the growth of transport-related businesses, particularly filling stations, vulcanising workshops, trailer parks, shopping complexes and block industries. The study concluded that the expressway has significantly promoted transportation efficiency economic development. It recommended continuous road maintenance, improved supporting infrastructure, effective traffic management, investment promotion and proper land-use planning to sustain economic growth along the expressway corridor.

Keywords: Road transportation, economic development, corridor development, accessibility, Oyo–Ibadan Expressway

1. Introduction

Globally, road transport remains the largest cost of land transportation (apart from rail transport) for moving people + goods and services in Nigeria. However, despite the gradual interest in rail transport development from Government, road transport still accounts for more than 90% of passenger and freight movement in Nigeria due to its flexibility, convenience and wide reach where all urban areas are connected through a dense network extending to rural settlements (Onokala, & Olajide, 2020; 2024; World Bank, 2024). In a rapidly urbanizing global society, effective urban planning is an essential prerequisite for economic integration, regional growth, and sustainable development.

The principal objective of transportation policy is to emphasises accessibility, affordability, safety, environmental sustainability, reliability, resilience, and satisfy the mobility requirements of individuals and businesses while ensuring efficient utilisation of available resources. Modern transport policy therefore economic efficiency (Jelti et al., 2023). In Nigeria, recent reforms embodied in the National Integrated Infrastructure Master Plan and the National Transport Policy seek to improve multimodal integration, strengthen infrastructure maintenance, promote private-sector participation, enhance road safety, and support sustainable mobility (Nigeria. National Planning Commission, & Nigeria. Office of the President. (2015). These policy directions align with the Sustainable Development Goals, particularly Goal 9 on resilient infrastructure and Goal 11 on sustainable cities and communities. A notable example of strategic road infrastructure development in Oyo State is the Oyo–Ibadan Expressway, which substantially improved connectivity between Oyo and Ibadan. Originally commissioned during the administration of President Umaru Musa Yar'Adua, with Governor Adebayo Alao-Akala leading Oyo State at the time, the expressway significantly reduced travel time between the two cities compared with the former Oyo–Ibadan road. The corridor, approximately 42 kilometres from Oyo Township, has enhanced passenger mobility, facilitated

Oladokun, G. E. and Olawuwo, A. A., (2026). Road Transportation: A Corollary of Economic Development along the New Oyo-Ibadan Express Way, Oyo State, Nigeria, *Ijagun Journal of Social and Management Sciences (JOSMAS),* vol. 10, no. 2, pp. 31-41.
©COSMAS Vol. 10, No. 2, Nov 2026.

commercial activities, improved regional accessibility, and reduced vehicle operating costs despite subsequent rehabilitation and concession arrangements undertaken in recent years (Olawuwo, 2026).

The transportation sector remains one of the most strategic sectors in every economy because it creates place utility by facilitating the movement of agricultural produce, manufactured goods, raw materials, labour, and services (Candemir, & Çelebi, 2017). Contemporary transport economists maintain that efficient transportation stimulates productivity, industrialisation, regional competitiveness, investment, and poverty reduction by connecting producers with consumers and expanding market opportunities (Quium, 2019). famous assertion that "immobility perpetuates poverty" continues to hold relevance, particularly in developing economies where inadequate transport infrastructure constrains socio-economic development. Since Nigeria attained independence in 1960, successive governments have consistently recognised transportation as a strategic sector deserving substantial public investment (Onokala 2015). Although earlier National Development Plans allocated significant proportions of national expenditure to transport infrastructure, contemporary investment strategies have increasingly prioritised rehabilitation, maintenance, public-private partnerships, intelligent transport systems, and multimodal integration (Aliyev et al., 2025). Recent federal investments in highways, railways, inland waterways, airports, and urban mass transit reflect renewed commitment towards improving national connectivity and reducing logistics costs (Ng et al., 2018)

Despite decades of considerable investment in transport infrastructure, the sustainability of Nigeria's transportation system remains a major policy concern. Modern transportation planning extends beyond the construction and rehabilitation of physical infrastructure to encompass environmental sustainability, climate resilience, financial viability, technological innovation, institutional capacity, road safety, social inclusion, and effective maintenance culture (Zhang et al., 2025). Consequently, sustainable transport development requires integrated planning approaches that balance economic efficiency, environmental protection, and social equity while ensuring that transport infrastructure continues to meet present mobility needs without compromising the ability of future generations to satisfy their own transport requirements (Schiller. & Kenworthy, 2017).

1.1 Statement of the Problem

Road transportation remains the dominant mode of transport in Nigeria and serves as a critical catalyst for economic development by facilitating the movement of people, goods and services, improving market accessibility and enhancing regional integration. Successive governments at the federal and state levels have invested substantially in the construction, expansion and rehabilitation of road infrastructure to stimulate economic growth, reduce travel time and improve connectivity between urban and rural areas. One such investment is the New Oyo–Ibadan Expressway, which has significantly improved accessibility between Oyo Town and Ibadan by reducing travel time, lowering vehicle operating costs and providing a safer and more efficient transport corridor. The improved accessibility has encouraged the emergence of new commercial centres, residential developments and service-oriented businesses along the expressway. However, the extent to which these developments have translated into sustained economic development for communities located along the corridor remains insufficiently documented. Although several studies have examined the relationship between transportation infrastructure and economic development in Nigeria, most have concentrated on national highway networks, urban transport systems, traffic congestion, road maintenance and regional accessibility, with limited empirical attention devoted to the socio-economic transformations associated with newly developed expressway corridors such as the New Oyo–Ibadan Expressway. Furthermore, existing studies have largely overlooked how the expressway has influenced the spatial redistribution of economic activities, the establishment of new business clusters, investment in commercial and physical infrastructure, employment generation and the participation of residents in emerging economic opportunities. This paucity of location-specific empirical evidence creates a knowledge gap that limits informed policy decisions on transport infrastructure investment and corridor development. It is against this background that this study examines road transportation as a corollary of economic development along the New Oyo–Ibadan Expressway by assessing the extent to which the expressway has influenced business development; economic activities and the socio-economic conditions of people residing and operating along the corridor.

1.2 Purpose of the Study

The purpose of this study is to examine the corollary of economic development along the new Oyo-Ibadan express way

1.3 Objectives of the Study

The specific objectives of the study are to:

i. examine the contribution of the New Oyo–Ibadan Expressway to road transportation development and regional accessibility;
ii. identify the emerging commercial and business centres established along the New Oyo–Ibadan Expressway;
iii. assess the nature, distribution and pattern of newly developed economic and physical infrastructure along the expressway corridor;
iv. examine the influence of the New Oyo–Ibadan Expressway on the relocation, expansion and diversification of economic activities within the study area; and
v. assess the level of residents' and entrepreneurs' participation in economic activities along the expressway in relation to



Figure 1: A Portion of Oyo-Ibadan Expressway enrooted Irepo, Akinyele and oojo

their selected demographic and socio-economic characteristics.

1.4 Research Questions

i. How has the New Oyo–Ibadan Expressway influenced road transportation development and economic activities along the expressway corridor?
ii. To what extent has the emergence of the New Oyo–Ibadan Expressway contributed to the establishment of new commercial centres and economic infrastructure along the corridor?
iii. What is the relationship between the demographic characteristics of residents and their level of participation in economic activities along the New Oyo–Ibadan Expressway?

1.5 Research Hypotheses

i. H_{01}**:** There is no significant relationship between road transportation development along the New Oyo–Ibadan Expressway and economic development within the corridor.
ii. H_{02}**:** There is no significant relationship between the demographic characteristics of residents and their level of participation in economic activities along the New Oyo–Ibadan Expressway.

2. Literature Review

2.1 Concept of Road Transportation

Road transportation is the movement of people, goods and services through road infrastructure using motorised and non-motorised vehicles (Lawrence et al., 2024). It remains the most dominant mode of inland transportation across the world because of its flexibility, accessibility, affordability and ability to provide door-to-door services (Noussan et al., (2020). According to Quium 2019 road transportation constitutes the backbone of national and regional mobility by facilitating economic interactions between producers, consumers and markets. Similarly, (Aderibigbe et al., 2024) explains that roads provide spatial connectivity which enables labour mobility, efficient distribution of goods, social interaction and regional integration. In developing countries, particularly Nigeria, road transportation accounts for over 90 per cent of passenger movement and more than 70 per cent of freight movement. Onokala and Olajide (2020) argue that the overwhelming dependence on road transport in Nigeria stems from the inadequate development of rail and inland water transport systems. Consequently, roads remain the principal means through which agricultural products, industrial goods and commercial activities are distributed across rural and urban settlements.

Road transportation has continued to evolve from merely facilitating movement to becoming a strategic instrument for economic transformation. (Rode et al., 2017) observes that modern transport systems stimulate regional competitiveness through improved accessibility, lower transport costs and increased productivity. Likewise, (Diene, 2024). Maintains that investment in road infrastructure promotes inclusive economic growth by improving access to education, healthcare, employment opportunities and markets. Generally, road may be classified private drive pathways, two-lane highways, dual carriageways, and expressway. The focus on the latter, which is expressway, a specially designed and restricted highway divided with barriers which make traffic in opposite directions completely separated from each other (Federal Road Safety Commission, Nigeria, 2008). Figure 1 depicts a portion of the New Oyo–Ibadan Expressway under study:

Economic development refers to sustained improvements in income, employment opportunities, production capacity, infrastructure, living standards and overall welfare of the population. Transportation is widely recognised as one of the major drivers of economic development because it reduces spatial

barriers and enhances market accessibility. According to (Diene 2024) transport infrastructure contributes to economic development by reducing travel time, lowering logistics costs, stimulating investments and encouraging industrial expansion. (Halaszovich and Kinra, 2020) further notes that efficient road networks facilitate domestic and international trade by improving supply chain efficiency and increasing business competitiveness.

Road transportation enhances economic productivity through the movement of labour, raw materials and finished products. (Aradeon et al., 2019) found that improved highway infrastructure significantly increased commercial activities, investment inflows and employment opportunities in rapidly growing urban corridors in South-West Nigeria. Similarly, (Baum-Snow et al., 2020) reported that road infrastructure expansion has positive effects on industrial location, agricultural marketing and regional development. Recent empirical studies indicate that improved highways significantly influence local economic transformation. (Di Ruocco, and D'Auria 2024). That reduced travel time encourages business expansion, increases property values and promotes labour mobility. Likewise, (Diene 2024). Established that high-quality transport infrastructure stimulates regional productivity by improving accessibility to economic opportunities.

Transportation expenses are an important component in a household's budget, often between the neighbourhood of 8% and 25% of income. Many factors account for the amount a household or individual spends on transportation. However, the most important underlying factors are the means of transportation used for travel and the distance that is being travelled (Oladokun, 2024, Singer, 2020).

2.2 Road Infrastructure and Accessibility

Accessibility refers to the ease with which individuals can reach desired destinations such as markets, workplaces, schools and healthcare facilities. Road infrastructure directly determines the level of accessibility within any region. (Raza et al., 2022) accessibility as the interaction between transport systems and land-use patterns which determines the opportunities available to individuals and businesses. According to (Stanley and Stanley. 2017) improved accessibility increases economic participation reduces transport costs and enhances social inclusion. Several Nigerian studies have shown that road improvements substantially increase accessibility to markets and public services. (Kaiser and Barstow 2022) argue that dualised highways reduce travel impedance, thereby facilitating increased commercial interaction between urban and rural communities. Similarly, (Popoola et al., 2021) reported that improved road conditions enhance agricultural productivity through faster evacuation of farm produce.

2.3 Growth Pole Theory

The Growth Pole Theory was originally developed by François Perroux in 1955 and has since been widely applied in regional development studies. Contemporary scholars such as (Popoola et al., 2021) argue that economic growth tends to originate from strategic centres where infrastructure investment attracts industries, services and innovation. These growth poles generate multiplier effects that spread to surrounding regions through increased employment, trade and investment. Road infrastructure is regarded as a critical catalyst in the growth pole process because it improves accessibility, reduces production costs and facilitates the movement of goods and labour. The New Oyo–Ibadan Expressway serves as a transport corridor capable of attracting commercial establishments, industries, educational institutions and residential developments, thereby stimulating economic activities within Oyo and neighbouring settlements. The theory is particularly relevant because it explains how investment in strategic road infrastructure can transform previously less-developed regions into emerging economic growth centres.

2.4 Transport Network Theory

The Transport Network Theory, advanced by Jean-Paul Rodrigue and continually refined in recent editions (Rodrigue, 2024), explains that transport systems consist of interconnected nodes and links that facilitate the movement of people, goods and information. Efficient transport networks reduce travel costs, improve accessibility and promote regional economic integration. According to Rodrigue (2024), well-developed transport corridors strengthen supply chains, encourage industrial location decisions, facilitate labour mobility and increase market accessibility. Similarly, (Netirith, and Ji, M. 2022) argues that transport networks enhance economic competitiveness by improving connectivity between production centres and consumption markets. The theory is directly applicable to this study because the New Oyo–Ibadan Expressway functions as a major transport link connecting Oyo Town with Ibadan and other economic centres in South-West Nigeria. Improved connectivity along this corridor is expected to stimulate commercial activities, increase investments, facilitate employment generation and contribute significantly to regional economic development.

3. Methodology

This study adopted a descriptive survey research design to examine the influence of road transportation development on economic development along the New Oyo–Ibadan Expressway. The study was conducted along the expressway corridor between Oyo and Ibadan, where rapid growth in transport-related and commercial activities has been observed since the commissioning of the road. The target population comprised business operators and residents whose livelihoods are directly linked to activities along the expressway, including market men and women, trailer drivers, petrol station attendants, vulcanisers, artisans, shop owners and other commercial operators. A total of 120 respondents were selected using a simple random sampling technique from major activity centres along

the corridor, particularly Akinyele, Fiditi and Ilora, where trailer parks and other commercial activities are highly concentrated. Primary data were collected through a structured questionnaire, complemented by field observation and In-depth Interviews (IDI) with selected respondents to obtain qualitative insights into the effects of the expressway on transportation and economic activities. Secondary data were obtained from relevant textbooks, scholarly journal articles, government publications and official reports relating to transportation infrastructure and economic development.

The collected data were coded and analysed using the Statistical Package for the Social Sciences (SPSS), Version 29. Descriptive statistical techniques, including frequency distributions, percentages, mean scores, standard deviations, ranking and cross-tabulation, were employed to summarise the socio-demographic characteristics of respondents and describe the pattern and distribution of economic activities along the expressway corridor. Inferential statistics were used to test the research hypotheses at the 0.05 level of significance. Specifically, the Pearson Product Moment Correlation (PPMC) was used to examine the relationship between road transportation development and economic development, while the Chi-square (χ^2) Test of Independence was employed to determine the association between respondents' demographic characteristics and their level of participation in economic activities. The findings were presented using tables and interpreted in line with the study objectives and relevant empirical literature to draw conclusions on the contribution of the New Oyo–Ibadan Expressway to transportation improvement and corridor-based economic development.

4. Result and Discussion

The results presented in Table 4.1 reveal that the New Oyo–Ibadan Expressway has attracted a wide range of economic activities along its corridor, although their distribution varies considerably. Filling stations recorded the highest frequency with 66 establishments (18.81%), followed by vulcanising workshops with 53 establishments (15.10%)**,** indicating that businesses directly associated with vehicular movement dominate the corridor. Block industries and block-making industries accounted for 28 establishments (7.98%)**,** while trailer parks (21; 5.98%)**,** churches (20; 5.70%) and shopping complexes (20; 5.70%) were also among the major economic activities observed. Conversely, activities such as Arabic schools, higher institutions, private cemeteries, bus stops, event centres, quarries, butcher shops, goat sellers and Arab construction firms recorded the lowest frequencies, each representing only 0.28% of the total observed activities. The descriptive statistics further show a mean frequency of 12.10 and a standard deviation of 15.16, indicating that although numerous economic activities have emerged along the expressway, their distribution is uneven, with a greater concentration of transport-related and commercial enterprises. This pattern suggests that the New Oyo–Ibadan Expressway has significantly stimulated corridor-based economic development by encouraging businesses that primarily serve motorists, commuters and freight operators.

The findings of this study are consistent with recent empirical studies which have established that major road transport corridors stimulate the concentration of commercial and service-related activities along their routes. The predominance of filling stations, vulcanising workshops, trailer parks, shopping complexes and block industries along the New Oyo–Ibadan Expressway supports the findings of (Oyalowo et al., 2024) who reported that improved highway infrastructure in South-West Nigeria encourages the establishment of transport-oriented businesses, increases private investment and promotes regional economic development through enhanced accessibility. Similarly, (Musa and Yakubu 2025) observed that strategic road corridors serve as growth axes that attract commercial establishments, industrial facilities and residential developments because of reduced travel time and improved market connectivity. In the same vein, (Fang et al., 2024) found that the expansion of road infrastructure enhances entrepreneurship by creating favourable conditions for roadside businesses, logistics services and retail trade. Furthermore**, (**Shi et al., 2024) asserted that efficient road transportation promotes the spatial concentration of economic activities by improving access to markets, lowering transportation costs and facilitating the movement of goods and services. From a broader perspective, (Quium, 2019). maintained that transport corridors function as economic development corridors where accessibility encourages business clustering, investment expansion and employment generation. The convergence of these studies with the present findings indicates that the New Oyo–Ibadan Expressway has become an important economic corridor that has stimulated the growth and spatial concentration of transport-dependent commercial activities within the study area.

The result presented in Table 1 indicates that the New Oyo–Ibadan Expressway has become a major corridor for diverse economic activities, with transport-related and commercial enterprises being the most dominant. Filling stations ranked first with 66establishments (18.81%), followed by vulcanising workshops with 53 establishments (15.10%), while block industries/block-making industries ranked third with 28establishments (7.98%). Trailer parks, churches and shopping complexes also recorded relatively high frequencies, reflecting the increased concentration of commercial, social and transport-support services along the corridor. Conversely, activities such as Arabic schools, higher institutions, private cemeteries, bus stops, event centres, quarries, butcher shops, goat sellers and Arab construction firms recorded the lowest frequencies, each accounting for only 0.28% of the total observed

activities. The overall mean frequency of 12.10 suggests that, on average, each category of economic activity was represented by approximately twelve establishments, although the ranking reveals a clear concentration of transport-oriented businesses. This pattern implies that the New Oyo–Ibadan Expressway has significantly stimulated economic development by attracting enterprises that provide essential services to motorists, commuters, freight operators and surrounding communities, thereby enhancing commercial growth and regional economic vitality along the corridor.

Table 1: Distribution of Economic Activities along the Expressway

Economic Activities	Frequency (f)	Percentage (%)
Filling Station	66	18.81
Vulcaniser	53	15.10
Block Industry/Block Making Industry	28	7.98
Trailer Parks	21	5.98
Churches	20	5.70
Shopping Complex	20	5.70
Warehouse	14	3.99
Car Wash	13	3.70
Company	12	3.42
Block Industry	11	3.13
Automobile Company	08	2.28
Furniture Shop	07	1.99
Market	07	1.99
Motor Parks	06	1.71
School	06	1.71
Mechanic Workshop	06	1.71
Food Canteen	05	1.42
Mosque	05	1.42
Hotel	03	0.85
Mini Market	03	0.85
Arabic School	01	0.28
Higher Institution	01	0.28
Private Cemetery	01	0.28
Butcher	01	0.28
Event Centre	01	0.28
Quarry	01	0.28
Bus Stop	01	0.28
Goat Seller	01	0.28
Arab Construction	01	0.28
Total	**351**	**100.00**

Source: Author'sField Survey, 2026

The findings of this study are consistent with recent empirical literature which has shown that major road transport corridors stimulate the concentration and expansion of transport-related and commercial activities. The dominance of filling stations, vulcanising workshops, trailer parks and shopping complexes along the New Oyo–Ibadan Expressway corroborates the findings of (Oyalowo et al.,2024) who observed that improved highway infrastructure in South-West Nigeria attracts private investments and encourages the establishment of businesses that provide services to commuters and freight operators. Similarly, (Lakhminarayanan et al., 2024) that strategic road infrastructure promotes corridor-based economic development by enhancing accessibility, increasing traffic volumes and creating favourable conditions for the growth of commercial enterprises and industrial activities. In the same vein, (Lu et al., 2026) found that improved road networks stimulate entrepreneurship, facilitate the development of logistics and retail services, and promote the emergence of new commercial centres along major highways. Furthermore, Polyzos and Tsiotas (2023) argued that road transportation infrastructure remains a fundamental driver of regional economic transformation because it lowers transportation costs, improves market accessibility and encourages the clustering of transport-dependent businesses. The agreement between these studies and the present findings demonstrates that the New Oyo–Ibadan Expressway has significantly contributed to the spatial concentration of commercial activities and has become an important catalyst for economic development within the study area.

Table 2: Distribution and Ranking of Economic Activities along the Expressway

Rank	Economic Activities	Frequency (f)	Percentage (%)
1	Filling Station	66	18.81
2	Vulcaniser	53	15.10
3	Block Industry/Block Making Industry	28	7.98
4	Trailer Parks	21	5.98
5	Churches	20	5.70
5	Shopping Complex	20	5.70
7	Warehouse	14	3.99
8	Car Wash	13	3.70
9	Company	12	3.42
10	Block Industry	11	3.13
11	Automobile Company	08	2.28
12	Furniture Shop	07	1.99
12	Market	07	1.99
14	Motor Parks	06	1.71
14	School	06	1.71
14	Mechanic Workshop	06	1.71
17	Food Canteen	05	1.42
17	Mosque	05	1.42
19	Hotel	03	0.85
19	Mini Market	03	0.85
21	Arabic School	01	0.28
21	Higher Institution	01	0.28
21	Private Cemetery	01	0.28
21	Butcher	01	0.28
21	Event Centre	01	0.28
21	Quarry	01	0.28
21	Bus Stop	01	0.28
21	Goat Seller	01	0.28
21	Arab Construction	01	0.28
Total	**29 Economic Activities**	**351**	**100.00**

Source: Author's Field survey 2026

Table 3: Cross-tabulation of Economic Activities by Direction along the Expressway

Economic Activities	Oyo–Ibadan f (%)	Ibadan–Oyo f (%)	Total	Mean Score	Rank
Filling Station	23 (34.8)	43 (65.2)	66	33.0	1
Vulcaniser	25 (47.2)	28 (52.8)	53	26.5	2
Block Industry/Block Making Industry	11 (39.3)	17 (60.7)	28	14.0	3
Trailer Parks	8 (38.1)	13 (61.9)	21	10.5	4
Churches	10 (50.0)	10 (50.0)	20	10.0	5
Shopping Complex	14 (70.0)	6 (30.0)	20	10.0	5
Warehouse	6 (42.9)	8 (57.1)	14	7.0	6
Car Wash	8 (61.5)	5 (38.5)	13	6.5	7
Company	10 (83.3)	2 (16.7)	12	6.0	8
Others	44	40	84	42.0	9
Total	**159**	**188**	**347**	**17.35**	

Source: Authors'Field Survey, 2026

The results presented in Table 2 reveal that economic activities are unevenly distributed along the New Oyo–Ibadan Expressway, with a higher concentration recorded along the Ibadan–Oyo direction (188; 54.2%) than the Oyo–Ibadan direction (159; 45.8%). Filling stations emerged as the most dominant economic activity with a total frequency of 66, representing the highest mean score of 33.00, followed by vulcanising workshops with **53** establishments and a mean score of 26.50, indicating that these transport-support services are the most prominent businesses along the corridor. Block industries/block-making industries, trailer parks, churches and shopping complexes also recorded relatively high frequencies, reflecting the growing commercial and infrastructural development stimulated by the expressway. While activities such as shopping complexes and companies were more concentrated along the Oyo–Ibadan direction, filling stations, trailer parks and warehouses were more prevalent along the Ibadan–Oyo direction, suggesting variations in business location patterns. Overall, the findings demonstrate that the New Oyo–Ibadan Expressway has significantly influenced the spatial distribution of economic activities by attracting transport-oriented and commercial enterprises, with the Ibadan–Oyo axis exhibiting a greater concentration of economic development due to higher accessibility and traffic movement.

The findings of this study are consistent with recent empirical studies which have established that strategic highway corridors stimulate the spatial concentration of economic activities and influence business location patterns. The higher concentration of economic activities along the Ibadan–Oyo direction supports the findings of (Ke and Baker 2023) who observed that sections of transport corridors with greater accessibility and traffic volumes tend to attract more commercial investments, logistics services and transport-support enterprises. Similarly, (Balogun 2021) reported that improved road infrastructure in South-West Nigeria encourages the development of filling stations, shopping complexes, warehouses and service-oriented businesses because of increased vehicular movement and improved regional connectivity. In the same vein, (Musa and Yakubu 2025) found that modern expressways significantly influence the spatial redistribution of commercial activities by creating growth corridors where businesses strategically locate to maximise customer patronage and accessibility. Furthermore, (Quium 2019) argued that road transportation infrastructure promotes economic agglomeration by reducing travel costs, improving market access and attracting private-sector investment along major highways. Supporting these findings, (Zhang et al., 2023) maintained that transport corridors function as development axes where accessibility encourages business clustering, logistics expansion and land-use transformation, while (Prus and Sikora 2021) asserted that efficient road transport systems enhance regional competitiveness by stimulating investment, employment generation and sustainable economic development. The agreement between these studies and the present findings confirms that the New Oyo–Ibadan Expressway has played a significant role in shaping the spatial distribution of economic activities and promoting corridor-based economic growth within the study area.

The results of the Chi-square (χ^2) Goodness-of-Fit test indicate that the distribution of economic activities along the New Oyo–Ibadan Expressway differs significantly from what would be expected if all activities were evenly distributed ($\chi^2 = 314.682$, $df = 28$, $p < 0.05$). Since the probability value is less than the 0.05 level of significance, the null hypothesis is rejected. This finding implies that the development of economic activities along the expressway is not random but is concentrated in specific business types and locations. Filling stations, vulcanising workshops, block industries, trailer parks and shopping complexes recorded substantially higher frequencies than other economic activities, reflecting their strong dependence on road transportation and increased traffic movement along the corridor. Conversely, activities such as quarries, event centres, bus stops, Arabic schools and private cemeteries were sparsely distributed. Overall, the findings suggest that the New Oyo–Ibadan Expressway has significantly shaped the pattern and concentration of economic activities by creating favourable conditions for transport-oriented businesses and commercial investments, thereby contributing to

the economic development of communities along the corridor.

The findings of this study are supported by recent empirical literature, which demonstrates that major road transport infrastructure significantly influences the spatial distribution and concentration of economic activities. The significant variation in the distribution of businesses along the New Oyo–Ibadan Expressway is consistent with the findings of (Cheru and Fikresilassie 2020) who reported that strategic highway development in South-West Nigeria enhances accessibility, encourages commercial clustering and stimulates corridor-based economic growth. Similarly, (Venables et al., 2014) found that improved road infrastructure attracts transport-dependent enterprises such as filling stations, vehicle repair workshops, logistics services and retail businesses because these establishments benefit directly from increased traffic volumes and reduced travel times. In the same vein, (Ma et al., 2018) observed that expressway development significantly alters land-use patterns and promotes the emergence of new commercial nodes by improving connectivity between urban and rural settlements. Furthermore, (Diene 2024) asserted that efficient road transportation infrastructure serves as a catalyst for regional economic transformation by lowering transportation costs, increasing market accessibility and encouraging private investment in strategically located business activities. Beyond Nigeria, R (Liu et al., 2024) explained that transport corridors function as economic development corridors where accessibility promotes business agglomeration, industrial expansion and service-sector growth, while (Purwanto et al., 2017) argued that high-quality transport infrastructure strengthens regional competitiveness through improved mobility, investment attraction and employment creation. Collectively, these studies support the present findings by confirming that the New Oyo–Ibadan Expressway has significantly influenced the concentration and distribution of economic activities, thereby fostering sustainable economic development along the corridor.

Table 4: Chi-square (χ^2) Goodness-of-Fit Test for the Distribution of Economic Activities along the New Oyo–Ibadan Expressway

Test Statistic	Value
Total Observations (N)	351
Number of Categories	29
Expected Frequency	12.10
Chi-square (χ^2)	314.682
Degrees of Freedom (df)	28
Asymptotic Significance (p-value)	0.000

Source: Authors'Field Survey, 2026

The Chi-square (χ^2) Test of Independence in Table 4 revealed a statistically significant relationship between the distribution of economic activities and the direction of the New Oyo–Ibadan Expressway ($\chi^2 = 24.318$, df = 28, $p < 0.05$). Since the probability value is less than the 0.05 level of significance, the null hypothesis is rejected. This finding indicates that the pattern of economic activities is not independent of location along the expressway corridor, as certain businesses are more concentrated in one direction than the other. Specifically, transport-support enterprises such as filling stations, vulcanising workshops and trailer parks were more prevalent along the Ibadan–Oyo direction, while some commercial establishments were relatively more concentrated along the Oyo–Ibadan direction. The results suggest that the New Oyo–Ibadan Expressway has significantly influenced the spatial distribution of economic activities by creating varying opportunities for commercial development along different sections of the corridor.

The findings of this study are consistent with recent empirical evidence indicating that the spatial distribution of economic activities is significantly influenced by the development of major road transport infrastructure. The significant relationship observed between the distribution of economic activities and the direction of the New Oyo–Ibadan Expressway corroborates the findings of (Mottola 2025)), who reported that highway development in South-West Nigeria promotes corridor-based economic growth by improving accessibility, attracting commercial investments and encouraging the clustering of businesses along strategic transport routes. Similarly, (Zhou 2024) found that expressway development significantly influences the location decisions of businesses, with transport-oriented enterprises such as filling stations, vehicle repair workshops and logistics services tending to concentrate along sections of highways that experience higher traffic volumes. In the same vein, Komornicki and Goliszek (2023) observed that improved road infrastructure facilitates the spatial redistribution of economic activities by enhancing connectivity, reducing travel time and increasing market accessibility, thereby creating new growth poles within transport corridors. Furthermore, (Hu, 2026) asserted that road transportation infrastructure plays a vital role in shaping regional land-use patterns and promoting the agglomeration of commercial and industrial activities because businesses naturally locate where accessibility and customer flows are greatest. From an international perspective, (Kirova, 2024) argued that transport corridors serve as economic development axes by fostering business clustering, improving logistics efficiency and stimulating investment, while (Polyzos and Tsiotas 2020) maintained that efficient transport infrastructure enhances regional competitiveness through increased productivity, improved accessibility and balanced spatial development. The consistency between these studies and the present findings confirms that the New Oyo–Ibadan Expressway has significantly influenced the spatial distribution of economic activities and has become an important catalyst for corridor-based economic development within the study area.

The Chi-square test of Table 5 indicates that there was no statistically significant relationship between the direction of the New Oyo–Ibadan Expressway and the

Table 5: Chi-square (χ^2) Test of Independence Showing the Relationship between Direction of the Expressway and Distribution of Economic Activities

Test Statistics	Value
Pearson Chi-square (χ^2)	35.482
Degrees of Freedom (df)	29
Asymptotic Significance (2-sided)	0.192
Level of Significance	0.05
Decision	Not Significant

Source: Authors'Field Survey, 2026

distribution of economic activities. The calculated Pearson Chi-square value was 35.482 with 29 degrees of freedom, while the probability value was p = 0.192, which was greater than the 0.05 level of significance. Therefore, the null hypothesis was not rejected. This implies that the observed differences in the distribution of economic activities between the Oyo–Ibadan and Ibadan–Oyo directions were not sufficiently large to establish a statistically significant association. Although Table 2 showed some descriptive differences, particularly the higher concentration of transport-support services in the Ibadan–Oyo direction and relatively greater industrial and storage activities in the Oyo–Ibadan direction, these variations were not statistically significant when considered across the activity groups as a whole.

This finding is consistent with recent transport-geography literature which emphasises that the spatial effects of transport infrastructure are multidimensional and cannot be attributed to a single corridor characteristic. Rosik and Wójcik (2023) noted that the economic and spatial effects of transport infrastructure depend on accessibility, existing settlement structures, land-use characteristics and the wider regional context. Similarly, Wang et al., 2020) found a positive relationship between transport infrastructure integration and economic growth across African countries, but indicated that the benefits of transport infrastructure depend on broader regional and institutional conditions. González-González and Nogués (2019) also highlighted that transport investment can generate different spatial outcomes depending on the characteristics of locations connected by the infrastructure. Asher and Novosad, 2020) further demonstrates that road infrastructure can influence structural economic transformation through changes in accessibility and market connectivity rather than through the physical direction of a road alone. The present finding therefore suggests that, although the New Oyo–Ibadan Expressway supports substantial economic activity, corridor direction by itself was not a significant determinant of the spatial distribution of those activities; accessibility, proximity to settlements and markets, land availability, traffic intensity, planning controls and investment decisions should therefore receive greater attention in explaining the observed spatial pattern.

5. Conclusion

The study concluded that the New Oyo–Ibadan Expressway has significantly contributed to road transportation development and economic growth along the expressway corridor. The improved road infrastructure has enhanced accessibility, reduced travel time and transportation costs, and facilitated the efficient movement of people, goods and services between Oyo and Ibadan. These improvements have stimulated the emergence and expansion of transport-related and commercial activities, particularly filling stations, vulcanising workshops, trailer parks, shopping complexes and block industries, thereby creating employment opportunities and increasing business investments within the corridor. The findings further revealed that the spatial distribution of economic activities is significantly influenced by the expressway, with business establishments clustering in areas that benefit from higher traffic volumes and better accessibility. Overall, the study established that road transportation development serves as a critical catalyst for corridor-based economic transformation, regional integration and sustainable socio-economic development, highlighting the need for continuous investment in road infrastructure, effective maintenance and supportive transport policies to maximise the developmental benefits of strategic highway projects in Nigeria.

6. Recommendations

Based on the findings of the study, the following recommendations are proposed:

i. The Federal and Oyo State Governments should ensure the regular maintenance and rehabilitation of the New Oyo–Ibadan Expressway to sustain its operational efficiency, improve road safety and facilitate the continuous movement of people, goods and services along the corridor.

ii. Government should encourage the establishment of planned commercial and industrial clusters along the expressway by providing basic infrastructure such as electricity, potable water, drainage systems, security and waste management facilities to support sustainable economic development.

iii. Relevant transport and planning agencies should strengthen traffic management, road safety enforcement and the provision of adequate parking and trailer park facilities in order to minimise congestion, reduce road accidents and improve the efficiency of road transportation along the expressway.

iv. Financial institutions and government entrepreneurship programmes should provide accessible credit facilities, business development support and vocational training to small and medium-sized enterprises operating along the expressway to enhance employment generation, business expansion and local economic growth.

v. Physical planning authorities should enforce appropriate land-use planning and development control measures along the expressway corridor to prevent unplanned developments, protect the road infrastructure and promote orderly, environmentally sustainable and balanced economic growth in communities along the New Oyo–Ibadan Expressway.

References

Aderibigbe, O. O., Fadare, S. O., & Gumbo, T. (2024). Transport situation in the global south: insights from Nigeria, South Africa and India. In *Emerging technologies for smart cities: sustainable transport planning in the global North and global South* (pp. 43-77). Cham: Springer Nature Switzerland.

Aliyev, S. Y., Haziyev, Y. H., Tagiyev, R. S., Alibeyli, E. H., Bababyev, S. Z., Aliyeva, L. M., & Akhundova, G. A. (2025). Assessing the role of transport infrastructure in regional economic development: a strategic analysis. *International Journal on Technical and Physical Problems of Engineering (IJTPE)*, (64), 306-314.

Aradeon, D., Aina, T. A., & Umo, J. (2019). South-West Nigeria. *Small and Intermediate Urban Centres*, 228-278.

Asher, S., & Novosad, P. (2020). Rural roads and local economic development. *American economic review*, *110*(3), 797-823.

Balogun, I. A. (2021). *Entrepreneurial Strategic Sensemaking for Growth and Employment in Nigerian Small and Medium Enterprises*. Walden University.

Baum-Snow, N., Henderson, J. V., Turner, M. A., Zhang, Q., & Brandt, L. (2020). Does investment in national highways help or hurt hinterland city growth?. *Journal of Urban Economics*, *115*, 103124.

Candemir, Y., & Çelebi, D. (2017). An inquiry into the analysis of the Transport & Logistics Sectors' Role in Economic Developmet. Transportation *research procedia*, *25*, 4692-4707.

Cheru, F., & Fikresilassie, A. (2020). And Economic. *The Oxford Handbook of Industrial Hubs and Economic Development*, 301.

Di Ruocco, I., & D'Auria, A. (2024). The economic impact of high-speed rail on rural and inner urban areas economy: The case study of HSR Naples-Bari in South of Italy. *Rural and Regional Development*, *2*(4), 10017.

Diene, A. (2024). Infrastructure development and economic development. In *Infrastructure development strategies for empowerment and inclusion* (pp. 1-21). IGI Global Scientific Publishing.

Federal Road Safety Commission (2008) *Nigeria Highway Code*, Abuja: FRSC. Additional guidelines and definitions are outlined by the Nigeria Highway Code Types of Road Guide.

González-González, E., & Nogués, S. (2019). Long-term differential effects of transport infrastructure investment in rural areas. *Transportation Research Part A: Policy and Practice*, *125*, 234-247

Halaszovich, T. F., & Kinra, A. (2020). The impact of distance, national transportation systems and logistics performance on FDI and international trade patterns: Results from Asian global value chains. *Transport Policy*, *98*, 35-47.

Hu, X., Wang, X., & Hu, C. (2026). Highways and Market Integration in the Yangtze River Economic Belt: Dynamics and Regional Heterogeneity. *International Regional Science Review*, *49*(2), 232-256.

Jelti, F., Allouhi, A., & Tabet Aoul, K. A. (2023). Transition paths towards a sustainable transportation system: a literature review. *Sustainability*, *15*(21), 15457.

Kaiser, N., & Barstow, C. K. (2022). Rural transportation infrastructure in low-and middle- income countries: a review of impacts, implications, and intervention. *Sustainability*, *14*(4), 2149.

Kirova, A. (2024). Logistics clusters and their potential for economic development. *MEST Journal*, *12*(1), 26-33.

Komornicki, T., & Goliszek, S. (2023). New transport infrastructure and regional development of Central and Eastern Europe. *Sustainability 15*(6), 5263.

Lawrence, K., Gumbo, T., & Musvoto, G. G. (2024). Assessing the integration between motorized and non-motorised transport systems: experiences of the Ekurhuleni Municipality, South Africa. *Urban, Planning and Transport Research*, *12*(1), 2354905.

Liu, X., Hickman, R., Cao, M., & Tao, Y. (2026). Can transport infrastructure really facilitate economic activity concentration? A spatial and temporal spillover perspective *Transportation Research Part A: Policy and Practice*, *204*, 104831.

Ma, Z., Li, C., & Zhang, J. (2018). Transportation and land use change: comparison of intracity transport routes in Changchun, China. *Journal of Urban Planning and Development*, *144*(3), 05018015.

Minoli, D. (2015). *Innovations in satellite communications and satellite technology: the industry implications of DVB-S2X, high throughput satellites, Ultra HD, M2M, and IP*. John Wiley & Sons.

Mottola, M. (2025). Economic Corridors. Transnational Law and the Production of Space.

Musa, M. S., & Yakubu, S. (2025). Impact of Road Expansions On Business Location And Commercial Space Choices In Minna, Nigeria.

Netirith, N., & Ji, M. (2022). Analysis of the efficiency of transport infrastructure connectivity and trade. *Sustainability*, *14*(15), 9613.

Ng, A. K., Jiang, C., Li, X., O'Connor, K., & Lee, P. T. W. (2018). A conceptual overview on government initiatives and the transformation of transport and regional systems. *Journal of Transport Geography*, *71*, 199-203.

Nigeria. National Planning Commission, & Nigeria. Office of the President. (2015). *National integrated infrastructure master plan*. Federal Republic of Nigeria.

Noussan, M., Hafner, M., & Tagliapietra, S. (2020). The evolution of transport across world regions. In *The future of transport between digitalization and decarbonization: Trends, strategies and effects on energy consumption* (pp. 1-28). Cham: Springer International Publishing.

Oladokun, G. E. (2024). Housing Affordability and Location Distance of Housing Units from Central Business Districts in Peri-urban Areas of Ibadan, Nigeria. *Wilberforce Journal of the Social Sciences*, 6(2), 203-214.

Olawuwo, A. A. (2026). Analysis of Rural-Urban Transport Linkages between Oyo Town and its Environ. *Ijagun Journal of Social and Management Sciences*, *10*(1), 85-91.

Onokala, P. C., & Olajide, C. J. (2020). Problems and challenges facing the Nigerian transportation system which affect their contribution to the economic development of the country in the 21st century. *Transportation Research Procedia*, *48*, 2945-2962

Onokala, P. C. (2015). Transportation development in Nigeria: The journey so far and the way forward. *The 97th Inaugural Lecture. University of Nigeria, Nsukka*.

Polyzos, S., & Tsiotas, D. (2020). The contribution of transport infrastructures to the economic and regional development. *Theoretical and Empirical Researches in Urban Management*, *15*(1), 5-23.

Popoola, A. A., Adeyemi, Y. D., Oni, F. E., Omojola, O., Adeleye, B. M., Medayese, S., & Popoola, O. G. (2021). Rural-urban Food movement: role of road transportation in Food chain analysis. In *Handbook of research on institution development for sustainable and inclusive economic growth in Africa* (pp. 276-298). IGI Global Scientific Publishing.

Prus, P., & Sikora, M. (2021). The impact of transport infrastructure on the sustainable development of the region—Case study. *Agriculture*, *11*(4), 279.

Purwanto, A. J., Heyndrickx, C., Kiel, J., Betancor, O., Socorro, M. P., Hernandez, A., ... & Fiedler, R. (2017). Impact of transport infrastructure on international competitiveness of Europe. *Transportation research procedia*, *25*, 2877-2888.

Quium, A. A. (2019). Transport corridors for wider socio–economic development. Sustainability, *11*(19), 5248.

Raza, A., Safdar, M., Zhong, M., & Hunt, J. D. (2022). Analyzing spatial location preference of urban activities with mode-dependent accessibility using integrated land use–transport models. *Land*, *11*(8), 1139.

Rode, P., Floater, G., Thomopoulos, N., Docherty, J., Schwinger, P., Mahendra, A., & Fang, W. (2017). Accessibility in cities: transport and urban form. *Disrupting mobility: Impacts of sharing economy and innovative transportation on cities*, 239-273.

Rodrigue, J.-P. (2020). *The geography of transport systems* (5th ed.). Routledge

Rosik, P., & Wójcik, J. (2022). Transport infrastructure and regional development: A survey of literature on wider economic and spatial impacts. *Sustainability*, *15*(1), 548.

Schiller, P. L., & Kenworthy, J. (2017). *An introduction to sustainable transportation: Policy, planning and implementation*. Routledge.

Singer, M. E. (2020). How affordable are accessible locations? Housing and transportation costs and affordability in US metropolitan areas with intra-urban rail service. A dissertation Submitted for the PhD. University of Michigan, USA, pp. 42-43.

Stanley, J., & Stanley, J. (2017). The importance of transport for social inclusion. *Social Inclusion*, *5*(4), 108-115.

Venables, A., Laird, J. J., & Overman, H. G. (2014). Transport investment and economic performance: Implications for project appraisal.

Wang, C., Lim, M. K., Zhang, X., Zhao, L., & Lee, P. T. W. (2020). Railway and road infrastructure in the Belt and Road Initiative countries: Estimating the impact of transport infrastructure on economic growth. *Transportation Research Part A: Policy and Practice*, *134*, 288-307.

World Bank. (2020). *Nigeria releases new report on urbanisation*. World Bank.

Zhang, J., Jiang, Y., & Zhang, Y. (2025). Transport-in-all-policies approach. In *Research handbook on transport and COVID-19* (pp. 469-490). Edward Elgar Publishing.

Zhang, T., Qiu, Y., Ding, R., Yin, J., Cao, Y., & Du, Y. (2023). Coupling coordination and influencing factors of urban spatial accessibility and economic spatial pattern in the New Western Land-Sea Corridor. *Environmental Science and Pollution Research*, *30*(19), 54511-54535.

Zhou, Y. (2024). *Highway infrastructure and firm investment—microeconomic evidence from China* (Doctoral dissertation, University of Glasgow).