Public Private Partnerships (PPP) And Infrastructural Development in Obio/Akpor Local Government Area of Rivers State, Nigeria 2015-2025

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Abstract
This study examined Public-Private Partnerships (PPP) and infrastructural development in Obio/Akpor Local Government Area of Rivers State, Nigeria, from 2015 to 2025. Specifically, the study evaluated the extent to which private-sector investment contributed to the availability of roads; examined the relationship between project completion and timeliness and the affordability of healthcare services; The study was anchored on Public Choice Theory, which emphasise efficiency, accountability, private-sector participation, and improved public service delivery. A mixed-method research design was adopted, combining primary and secondary data. Primary data were collected through questionnaires administered to 382 respondents, while secondary data were obtained from relevant government publications, policy documents, reports, and scholarly literature. The quantitative data were analysed using descriptive and inferential statistical techniques, while qualitative information was analysed thematically. The findings indicate that private-sector participation has contributed to the provision and availability of road infrastructure in Obio/Akpor. The study further found that timely completion of projects is associated with improved access to healthcare services and that value-for-money considerations

are relevant to the quality of educational infrastructure and services. The findings also indicate that appropriate risk sharing between public and private partners contributes to the sustainability of infrastructure projects. However, the effectiveness of PPP practice is influenced by factors including institutional capacity, monitoring, accountability, transparency, and regulatory arrangements. The study concludes that PPP provides an important mechanism for supporting infrastructural development in Obio/Akpor Local Government Area when properly planned, implemented, monitored, and regulated. It recommends strengthened institutional oversight, transparent procurement, timely project execution, effective application of value-for-money principles, and clearly defined risk-sharing arrangements to promote sustainable infrastructure development and improved public service delivery in the study area.

Keywords: *Public-Private Partnerships; Infrastructural Development; Public Service Delivery; Obio/Akpor LGA.*

Introduction

Infrastructure is essential for economic growth, social welfare, and sustainable urban development. Facilities such as roads, drainage systems, electricity, water supply, healthcare, education, transportation, and waste-management systems support economic activities and improve quality of life. However, rapid population growth, urbanization, inadequate financing, poor maintenance, and institutional weaknesses continue to create significant infrastructure deficits in developing countries. Nigeria faces persistent infrastructure challenges despite its economic potential and development efforts. The National Development Plan 2021–2025 identifies infrastructure development and private-sector participation as important strategies for addressing the country's infrastructure deficit (Federal Government of Nigeria, 2021). Similarly, the World Bank (2022) observes that inadequate infrastructure and weaknesses in service delivery continue to constrain productivity, competitiveness, and living standards in Nigeria. These challenges have encouraged governments to explore alternative mechanisms for infrastructure financing and delivery, particularly Public-Private Partnerships (PPPs). PPPs involve long-term contractual arrangements between public and private entities in which resources, responsibilities, risks, and returns are shared in the provision of public infrastructure and services. PPPs can provide access to private capital, technical expertise, innovation, and managerial capacity while reducing some of the financial pressures on government. In Nigeria, the establishment of the Infrastructure Concession Regulatory Commission (ICRC) in 2005 strengthened the institutional framework for private participation in infrastructure development (ICRC, 2023). However, the effectiveness of PPPs depends on adequate project preparation, transparent procurement, appropriate risk allocation, effective monitoring, institutional capacity, and sound contract management (World Bank, 2020). The importance of PPPs is particularly evident at the local government level, where infrastructure deficiencies directly affect mobility, economic activities, environmental conditions, healthcare, and general welfare. Obio/Akpor Local Government Area (LGA), located within the Port Harcourt metropolitan area of Rivers State, has experienced substantial residential, commercial, and industrial expansion. This growth has increased demand for roads, drainage, electricity, water supply, healthcare, waste management, and other public utilities. Consequently, challenges such as traffic congestion, flooding, inadequate drainage, deteriorating infrastructure, and pressure on public services have become important development concerns. PPP arrangements have the potential to complement government resources and expertise in addressing these infrastructure needs. Nevertheless, the existence of PPP arrangements does not automatically ensure successful

infrastructure delivery. Issues such as inadequate financing, weak institutional capacity, regulatory uncertainty, corruption, political interference, poor monitoring, and inappropriate risk allocation may limit project effectiveness (Edogbanya & Adekeye, 2024; Adebayo et al., 2025). There is therefore a need to assess whether PPPs have translated into measurable improvements in infrastructure provision at the local level. Despite the increasing use of PPPs in Nigeria, empirical evidence on their contribution to infrastructure development in Obio/Akpor LGA remains limited. In particular, insufficient attention has been given to the extent to which PPP implementation has improved infrastructure and the challenges affecting its effectiveness. This study therefore examines the relationship between Public-Private Partnerships and infrastructure development in Obio/Akpor Local Government Area of Rivers State from 2015 to 2025.

Infrastructure deficits remain a major development challenge in Nigeria, particularly in rapidly urbanising areas where population growth places increasing pressure on roads, drainage, electricity, water supply, healthcare, waste management, and other public facilities. Although government has introduced various interventions, available public resources and institutional capacity may be insufficient to meet growing infrastructure demands. PPPs have consequently been promoted as an alternative mechanism for mobilising private capital, expertise, and managerial capacity for infrastructure development. However, the adoption of PPPs does not necessarily guarantee effective infrastructure delivery. Problems including inadequate financing, weak institutional capacity, poor monitoring, corruption, regulatory uncertainty, political interference, and inappropriate risk allocation may undermine PPP outcomes. These challenges raise questions about whether PPP arrangements are actually producing the expected improvements in infrastructure and public service delivery.

The problem is particularly relevant to Obio/Akpor LGA, which has experienced considerable urban, residential, commercial, and industrial expansion. Despite the growing demand for infrastructure, the area continues to face challenges relating to roads, drainage, flooding, public utilities, waste management, and other services. While PPPs have been promoted as a means of addressing infrastructure deficits, there is limited empirical evidence on their actual contribution to infrastructure development in the LGA between 2015 and 2025.

The absence of sufficient local-level evidence makes it difficult to determine the effectiveness of PPP arrangements and the factors limiting their outcomes. The study therefore examines the relationship between PPPs and infrastructure development in Obio/Akpor LGA, with particular attention to their contribution to infrastructure provision and the challenges affecting their effective implementation. The aim of this study is to examine the impact of Public-Private Partnerships (PPP) on infrastructural development in Obio/Akpor Local Government Area from 2015 to 2025.

The specific objectives of the study are to:

1. Evaluate how private-sector investment has improved the availability of roads in Obio/Akpor Local Government Area of Rivers State from 2015 to 2025.
2. Examine how project completion and timeliness have impacted the affordability of healthcare services in Obio/Akpor Local Government Area of Rivers State from 2015 to 2025.

The following research questions are used for the study:

1. To what extent has private-sector investment improved the availability of roads in Obio/Akpor Local Government Area of Rivers State from 2015 to 2025?
2. In what ways has project completion and timeliness impacted the affordability of healthcare services in Obio/Akpor Local Government Area of Rivers State from 2015 to 2025?

The following null hypotheses were formulated for the study:

H_{01}: There is no significant relationship between private-sector investment and the availability of roads in Obio/Akpor Local Government Area of Rivers State from 2015 to 2025.

H_{02}: There is no significant relationship between project completion and timeliness and the affordability of healthcare services in Obio/Akpor Local Government Area of Rivers State from 2015 to 2025.

Theoretical Framework

Public Choice Theory

The theory that was used for this study is the Public Choice Theory was propounded by James M. Buchanan and Gordon Tullock in 1962 through their influential work titled *The Calculus of Consent: Logical Foundations of Constitutional Democracy*. The theory emerged as an intellectual response to traditional public administration theories which assumed that government officials always act in the collective interest of society. Public Choice Theory applies economic principles to political processes and public administration by viewing political actors as rational individuals who pursue personal interests while participating in governmental decision-making processes (Buchanan & Tullock, 1962). According to the theory, public officials, politicians, bureaucrats, and private sector actors are motivated by self-interest in the same way consumers and firms behave in the market economy. The theory argues that government decisions are not always made solely for public welfare but are often influenced by political incentives, economic benefits, institutional interests, and personal gains. Public Choice theorists therefore maintain that inefficiency, corruption, bureaucratic delays, and poor service delivery may occur when public officials monopolize the provision of public goods and services without accountability mechanisms (Mueller, 2003). The central assumption of Public Choice Theory is that individuals are rational actors who seek to maximize utility in both economic and political environments. Politicians seek electoral support and political survival, bureaucrats seek budget expansion and institutional influence, while private organizations seek profit maximization and business expansion. Citizens, on the other hand, demand efficient public services at minimal costs. The interaction among these competing interests shapes public policy formulation and implementation (Buchanan, 1987). Public Choice Theory further emphasizes that market-oriented approaches and private sector participation can improve efficiency in the delivery of public services. The theory advocates competition, decentralization, accountability, and collaboration between government and private organizations as mechanisms for overcoming bureaucratic inefficiencies associated with state-controlled systems. This assumption forms the intellectual foundation for Public-Private Partnerships (PPP) in many developing and developed countries.

In the context of Public-Private Partnerships, Public Choice Theory explains that governments enter into partnerships with private organizations in order to reduce financial burdens, improve efficiency, enhance managerial competence, and ensure effective infrastructure delivery. The private sector is perceived as possessing technical expertise, innovation, financial resources, and managerial efficiency that may be lacking within the public sector. Through PPP arrangements, governments can leverage private capital and expertise to provide essential public infrastructure such as roads, healthcare facilities, schools, housing, transportation systems, electricity, and water supply services (Yescombe, 2018). The theory also explains that PPP arrangements create opportunities for risk-sharing between the government and private investors. Under such partnerships, responsibilities relating to financing, construction, operation, maintenance, and management of infrastructure projects are shared between both parties according to agreed

contractual terms. Public Choice theorists believe that this arrangement encourages efficiency because private firms are driven by performance incentives and profit motives, while governments maintain oversight responsibilities to ensure public accountability and service delivery standards. Furthermore, Public Choice Theory recognizes that excessive government control over infrastructure development may result in waste, corruption, political patronage, project abandonment, and poor maintenance culture. In many developing countries, including Nigeria, public infrastructure projects are often affected by inadequate funding, bureaucratic bottlenecks, mismanagement of public resources, and weak institutional capacity. Consequently, the involvement of private sector organizations through PPP initiatives is considered an alternative strategy for improving infrastructure provision and economic development.

The theory is particularly relevant to infrastructure development because infrastructure projects require substantial financial resources, technical expertise, and effective management capacity. Governments at the federal, state, and local government levels may lack sufficient revenue to independently provide adequate infrastructure for growing populations. Public Choice Theory therefore supports the idea that collaboration with private organizations can help bridge infrastructural gaps through investment mobilization and efficient project execution.

In Nigeria, the adoption of Public-Private Partnerships gained prominence following the increasing inability of government institutions to solely finance and manage infrastructure projects effectively. Several PPP initiatives have been introduced in sectors such as transportation, housing, energy, telecommunications, waste management, education, and healthcare. The rationale behind these partnerships aligns with the assumptions of Public Choice Theory, which advocates private sector involvement in public service delivery for improved efficiency and productivity.

Despite its strengths, Public Choice Theory has been criticized by some scholars for overemphasizing self-interest and economic motivations in public administration. Critics argue that not all public officials act selfishly, as many are genuinely committed to public service and national development. The theory has also been criticized for encouraging excessive privatization, which may lead to exploitation, increased service costs, inequality, and reduced access to public services for low-income populations. Additionally, some PPP projects may prioritize profit-making over public welfare if effective regulatory mechanisms are not established.

Nevertheless, the theory remains highly relevant in explaining contemporary governance and infrastructure development strategies across the world. It provides a useful framework for understanding the dynamics of cooperation between government institutions and private organizations in the provision of public infrastructure and services.

The applicability of Public Choice Theory to this study lies in its ability to explain the rationale behind Public-Private Partnerships and their role in infrastructure development in Obio/Akpor Local Government Area between 2015 and 2025. The theory helps to explain why the government collaborates with private sector organizations in financing, constructing, and managing infrastructure projects within the local government area. It also provides insight into how PPP arrangements contribute to improved service delivery, resource mobilization, efficiency, and infrastructural development. Furthermore, the theory is applicable because it explains the interests and motivations of both public and private actors involved in PPP projects in Obio/Akpor Local Government Area. While government authorities seek infrastructural development and improved public welfare, private organizations seek profitability, investment opportunities, and business expansion. The interaction between these interests influences the implementation and outcomes of PPP projects within the study area.

Public Choice Theory provides an appropriate analytical framework for examining the extent to which PPP initiatives have contributed to infrastructure development in Obio/Akpor Local Government Area, the challenges affecting their implementation, and the measures required for improving partnership effectiveness and sustainable infrastructural growth.

Conceptual Review

Public-Private Partnership (PPP)

Public-Private Partnership (PPP) has emerged as an important strategy for governments across the world in addressing infrastructural deficiencies and improving public service delivery. The concept gained prominence due to increasing financial constraints faced by governments, especially in developing countries, and the need to involve private sector expertise, innovation, and capital in public infrastructure development. PPP represents a cooperative arrangement between public institutions and private organizations for the provision, financing, construction, management, or maintenance of public infrastructure and services.

According to the World Bank, Public-Private Partnership refers to a long-term contractual agreement between a government agency and a private entity for the provision of public assets or services in which the private party assumes significant risk and management responsibility (World Bank, 2017). This definition emphasizes the transfer of risks and responsibilities from the public sector to private investors while ensuring that public needs are adequately met.

The Organisation for Economic Co-operation and Development defines PPP as a contractual arrangement between the government and private sector participants whereby resources, risks, and rewards are shared in the delivery of public services or infrastructure (OECD, 2012). The implication of this definition is that both parties collaborate to achieve mutually beneficial objectives while ensuring efficiency and effectiveness in project execution.

Scholars have also provided various perspectives on the concept of PPP. Grimsey and Lewis (2004) viewed PPP as a mechanism through which governments procure infrastructure and related services from private sector organizations under long-term contracts. The authors stressed that PPP arrangements are characterized by shared risks, joint responsibilities, and performance-based outcomes. Likewise, Yescombe (2018) described PPP as a financial and managerial arrangement where the private sector participates in designing, financing, constructing, operating, and maintaining public infrastructure facilities over a specified concession period.

In the Nigerian context, PPP has become a major policy instrument for infrastructure development due to increasing urbanization, population growth, and inadequate government funding. The Infrastructure Concession Regulatory Commission defines PPP as a legally binding agreement in which public infrastructure projects are financed, constructed, and managed through collaboration between government agencies and private investors (ICRC, 2020). In Nigeria, PPP arrangements are commonly used in sectors such as transportation, power, housing, healthcare, education, and water supply.

Infrastructure

Infrastructure refers to the fundamental physical, organizational, and institutional facilities and systems that support the functioning of a society, economy, and government. It encompasses the basic structures and services necessary for economic activities, social development, and public welfare. These facilities include transportation networks, electricity supply systems, water resources, communication facilities, healthcare institutions, educational establishments, and administrative structures that facilitate the smooth operation of societal activities (World Bank,

2020). The concept of infrastructure has evolved over time from a narrow focus on physical assets such as roads, bridges, railways, and ports to a broader understanding that includes social and institutional infrastructure. Social infrastructure comprises facilities that support human development and welfare, such as schools, hospitals, housing, and recreational centers, while institutional infrastructure includes governance structures, legal frameworks, and public administrative systems that ensure the effective delivery of services (Organisation for Economic Co-operation and Development [OECD], 2017). According to the World Bank (2020), infrastructure serves as the backbone of economic growth by facilitating production, trade, and investment. Efficient infrastructure reduces transaction costs, enhances productivity, and promotes competitiveness in both domestic and international markets. Similarly, Calderón and Servén (2014) argue that infrastructure development significantly contributes to poverty reduction and improved living standards through increased access to essential services and economic opportunities. Infrastructure can be classified into several categories. Economic infrastructure includes transportation, energy, telecommunications, water supply, and sanitation systems that directly support economic activities. Social infrastructure consists of educational institutions, healthcare facilities, housing, and social welfare services that improve the quality of life and human capital development. Administrative or institutional infrastructure involves government agencies, legal systems, regulatory bodies, and public service institutions that facilitate governance and policy implementation (Grigg, 2017). In the public administration context, infrastructure is regarded as a critical determinant of effective service delivery. Public infrastructure provides the necessary platform through which governments deliver essential services to citizens. Adequate infrastructure enhances accessibility, efficiency, and responsiveness in public service provision, whereas inadequate infrastructure often results in poor service delivery, reduced productivity, and diminished public satisfaction (Adebayo, 2018).

Development

Development is a multidimensional concept that refers to the process of positive transformation in the economic, social, political, cultural, and institutional aspects of society. It involves the improvement of people's living standards, expansion of opportunities, reduction of poverty, enhancement of human capabilities, and the promotion of sustainable growth. Development extends beyond mere economic growth to encompass qualitative changes that improve the overall well-being and quality of life of individuals and communities (Todaro & Smith, 2021).

Historically, development was primarily measured in terms of economic indicators such as Gross Domestic Product (GDP), per capita income, industrialization, and technological advancement. Early development theorists viewed economic growth as the principal pathway to societal progress, arguing that increased production and income would naturally lead to improvements in living conditions. However, scholars and international development organizations later recognized that economic growth alone does not necessarily translate into social welfare, equity, or human development (Seers, 1969). One of the most influential perspectives on development was advanced by Sen (1999), who conceptualized development as the expansion of human freedoms and capabilities. According to Sen, development should be assessed not merely by income levels but by people's ability to live healthy lives, acquire education, participate in decision-making processes, and pursue opportunities that they value. This capability approach shifted attention from economic outputs to human well-being and empowerment.

Similarly, the United Nations Development Programme (UNDP, 2024) defines development as a process of enlarging people's choices and improving their opportunities to lead long, healthy, and

productive lives. This perspective forms the basis of the Human Development Index (HDI), which measures development through indicators such as life expectancy, educational attainment, and income levels. The human development approach emphasizes that people are both the means and the end of development efforts.

Methodology

The study adopted a quantitative descriptive survey research design to examine the relationship between Public-Private Partnerships (PPPs) and infrastructure development in Obio/Akpor Local Government Area of Rivers State from 2015 to 2025. The study was conducted in Obio/Akpor LGA, an urbanized area within the Port Harcourt metropolitan region experiencing increasing demand for roads, drainage, healthcare, water supply, and other public utilities.

The study population comprised approximately 8,500 stakeholders, including local government officials, private-sector investors and contractors, community leaders, and residents involved in or affected by PPP-related infrastructure projects. Using the Taro Yamane (1967) formula at a 5% margin of error, a sample size of 382 respondents was obtained. A stratified random sampling technique was employed to ensure proportional representation of government officials, private-sector participants, and community members. Primary data were collected through a structured questionnaire consisting of demographic questions and four-point Likert-scale items ranging from Strongly Agree to Strongly Disagree. Secondary information was obtained from academic literature, government publications, policy documents, PPP reports, and relevant online sources. The instrument was subjected to face and content validity, while reliability was assessed using the test-retest method. Data were analysed using frequencies, percentages, mean scores, correlation analysis, and multiple regression analysis. SPSS and Microsoft Excel were used for data processing, presentation, and analysis. The statistical procedures enabled the study to determine the strength, direction, and extent of the relationship between PPP implementation and infrastructure development outcomes in Obio/Akpor LGA.

Data Presentation

This chapter presents, analyzes, and discusses the data collected from the field survey. As stated earlier in Section 3.4, a total of 382 questionnaires were distributed to respondents comprising taxpayers and residents within Obio/Akpor Local Government Area. Out of these, 378 questionnaires were correctly filled and returned, 1 was incorrectly filled, 1 was lost completely, 1 was blankly returned, and 1 respondent was indifferent to the study. Table 4.1 shows the distribution and return rate of the questionnaires.

Table 4.1: Distribution and Return of Questionnaires

Description	Responses	Percentage (%)
Correctly filled and returned	378	99.0
Incorrectly filled and returned	1	0.3
Lost completely	1	0.3
Blankly returned	1	0.3
Indifferent to the study	1	0.3
Total	**382**	**100.0**

Source: Field Work, 2026

Out of the three hundred and eighty-two (382) questionnaires distributed, three hundred and seventy-eight (378), representing 99.0%, were correctly filled and returned. The analysis presented below is therefore based on the 378 valid responses received.

Research Questions 1: **Showing Response to how has private-sector investment improved the availability of roads in Obio/Akpor Local Government Area of Rivers State from 2015 to 2025?**

Private-Sector Investment and Availability of Roads in Obio/Akpor LGA (2015–2025)
Total Respondents = 378

S/N	Statement	SA (4)	A (3)	D (2)	SD (1)	Total Respondents	Weighted Score (Σ)	Mean (Σ ÷ 378)	Remarks
1	Private-sector investment through PPP has increased the availability of roads in Obio/Akpor LGA.	155 (620)	130 (390)	60 (120)	33 (33)	378	1,163	3.08	Accepted
2	PPP projects have contributed to the construction of new roads in Obio/Akpor LGA.	160 (640)	125 (375)	58 (116)	35 (35)	378	1,166	3.09	Accepted
3	Private-sector participation has improved access to roads in previously underserved areas of Obio/Akpor LGA.	148 (592)	135 (405)	62 (124)	33 (33)	378	1,154	3.05	Accepted
4	Private-sector investment has contributed to the expansion of existing roads in Obio/Akpor LGA.	150 (600)	132 (396)	61 (122)	35 (35)	378	1,153	3.05	Accepted
5	PPP arrangements have improved road connectivity between communities and major commercial areas in Obio/Akpor LGA.	158 (632)	128 (384)	59 (118)	33 (33)	378	1,167	3.09	Accepted
6	Private-sector participation has increased investment	165 (660)	120 (360)	58 (116)	35 (35)	378	1,171	3.10	Accepted

S/N	Statement	SA (4)	A (3)	D (2)	SD (1)	Total Respondents	Weighted Score (Σ)	Mean (Σ ÷ 378)	Remarks
	in road infrastructure in Obio/Akpor LGA.								
7	PPP-funded road projects have improved residents' access to markets, workplaces, schools and other public facilities.	162 (648)	125 (375)	57 (114)	34 (34)	378	1,171	3.10	Accepted
8	The involvement of private investors has reduced gaps in road infrastructure provision in Obio/Akpor LGA.	150 (600)	130 (390)	63 (126)	35 (35)	378	1,151	3.05	Accepted

Source: Field Survey, 2026

Grand Mean Calculation
Total Weighted Score:
1,163 + 1,166 + 1,154 + 1,153 + 1,167 + 1,171 + 1,171 + 1,151 = 9,296
Grand Mean:
9,296 ÷ (378 × 8) = 9,296 ÷ 3,024 = 3.07
Grand Mean = 3.07

The results presented in Table above indicate that respondents generally agreed that private-sector investment through Public-Private Partnerships (PPPs) improved the availability and accessibility of roads in Obio/Akpor Local Government Area of Rivers State between 2015 and 2025. All eight statements recorded mean scores above the acceptance benchmark of 2.50, indicating a positive assessment of private-sector participation in road infrastructure development.

Statement 6 and Statement 7 recorded the highest mean scores of 3.10 respectively. This suggests that respondents particularly agreed that private-sector participation increased investment in road infrastructure and that PPP-funded road projects improved residents' access to markets, workplaces, schools and other public facilities. Statement 2 and Statement 5 also recorded relatively high mean scores of 3.09, indicating that PPP projects contributed to the construction of new roads and improved connectivity between communities and major commercial areas.

Statements 1 recorded a mean of 3.08, while Statements 3, 4 and 8 each recorded a mean of 3.05. These results further suggest that respondents perceived private-sector investment as contributing to improved road availability, access to previously underserved areas, expansion of existing roads and reduction of gaps in road infrastructure provision.

The grand mean of 3.07 indicates an overall agreement among respondents that private-sector investment and PPP arrangements improved the availability of roads in Obio/Akpor LGA during the period under review. Therefore, the result provides evidence that private-sector participation played a positive role in expanding and improving road infrastructure in the Local Government Area.

Research Question 2: Showing Response to how project completion and timeliness impacted the affordability of healthcare services in Obio/Akpor Local Government Area of Rivers State from 2015 to 2025?

Project Completion and Timeliness and Affordability of Healthcare Services in Obio/Akpor LGA (2015–2025)

Total Respondents = 378

S/N	Statement	SA (4)	A (3)	D (2)	SD (1)	Total Respondents	Weighted Score (Σ)	Mean (Σ ÷ 378)	Remarks
1	PPP healthcare projects in Obio/Akpor LGA are generally completed within their planned timeframes.	145 (580)	138 (414)	62 (124)	33 (33)	378	1,151	3.04	Accepted
2	Timely completion of PPP healthcare projects has increased residents' access to healthcare facilities.	158 (632)	130 (390)	58 (116)	32 (32)	378	1,170	3.10	Accepted
3	Timely completion of PPP healthcare projects has reduced delays in the provision of healthcare services.	150 (600)	136 (408)	60 (120)	32 (32)	378	1,160	3.07	Accepted
4	Completed PPP healthcare projects have increased the availability of healthcare services in Obio/Akpor LGA.	155 (620)	132 (396)	59 (118)	32 (32)	378	1,166	3.09	Accepted
5	Timely completion of healthcare infrastructure has reduced the need for residents to travel long distances to obtain medical services.	147 (588)	134 (402)	63 (126)	34 (34)	378	1,150	3.04	Accepted
6	PPP healthcare projects have contributed to making healthcare services more affordable to residents of Obio/Akpor LGA.	140 (560)	139 (417)	65 (130)	34 (34)	378	1,141	3.02	Accepted

S/N	Statement	SA (4)	A (3)	D (2)	SD (1)	Total Respondents	Weighted Score (Σ)	Mean (Σ ÷ 378)	Remarks
7	Improved healthcare infrastructure has reduced some of the costs residents incur in accessing healthcare services.	145 (580)	137 (411)	63 (126)	33 (33)	378	1,150	3.04	Accepted
8	Timely completion of PPP healthcare projects has improved the availability of essential healthcare services at affordable costs.	151 (604)	135 (405)	60 (120)	32 (32)	378	1,161	3.07	Accepted

Source: Field Survey, 2026

Grand Mean Calculation
Total Weighted Score:
1,151 + 1,170 + 1,160 + 1,166 + 1,150 + 1,141 + 1,150 + 1,161
= 9,249
Grand Mean:
9,249 ÷ (378 × 8)
= 9,249 ÷ 3,024
= 3.06
Grand Mean = 3.06
Overall Remark: Accepted
Interpretation
The results presented in above indicate that respondents generally agreed that project completion and timeliness of PPP healthcare projects positively impacted access, availability and affordability of healthcare services in Obio/Akpor Local Government Area of Rivers State between 2015 and 2025. All eight statements recorded mean scores above the acceptance benchmark of 2.50, indicating that respondents had a positive assessment of the contribution of timely project completion to healthcare service delivery. Statement 2 recorded the highest mean score of 3.10, suggesting that respondents particularly agreed that timely completion of PPP healthcare projects increased residents' access to healthcare facilities. This finding implies that when healthcare infrastructure is completed as scheduled, residents are more likely to benefit from the intended healthcare facilities and services without prolonged waiting periods. Statement 4 recorded a mean score of 3.09, indicating that respondents agreed that completed PPP healthcare projects increased the availability of healthcare services in Obio/Akpor LGA. Statement 3 and Statement 8 each recorded a mean score of 3.07. This suggests that respondents perceived timely completion as contributing to reduced delays in healthcare provision and improved availability of essential healthcare services at affordable costs. Statement 1 recorded a mean of 3.04, indicating agreement that PPP healthcare projects were generally completed within their planned timeframes. Similarly, Statement 5 recorded a mean of 3.04, suggesting that timely completion of healthcare

infrastructure reduced the need for residents to travel long distances to obtain medical services. This reduction in travel requirements may also reduce transportation-related expenses associated with healthcare access. Statement 7 also recorded a mean of 3.04, indicating that improved healthcare infrastructure was perceived to reduce some of the costs associated with accessing healthcare services. Statement 6 recorded the lowest mean score of 3.02, although this remained above the 2.50 acceptance benchmark. The result indicates that respondents agreed that PPP healthcare projects contributed to making healthcare services more affordable to residents of Obio/Akpor LGA. The grand mean of 3.06 indicates an overall agreement among respondents that project completion and timeliness positively influenced the affordability and accessibility of healthcare services in Obio/Akpor LGA during the period under review. The findings suggest that timely completion of PPP healthcare projects can improve access to healthcare facilities, reduce delays, increase the availability of essential services and lower some of the costs associated with seeking healthcare. Therefore, based on the responses, project completion and timeliness had a positive impact on the affordability of healthcare services in Obio/Akpor LGA from 2015 to 2025. The result further suggests that delays in completing healthcare projects could undermine the expected benefits of PPP investments, whereas timely completion allows residents to access healthcare services closer to their communities and potentially at lower overall cost.

Data Analysis

H_{01}: There is no significant relationship between private-sector investment and the availability of roads in Obio/Akpor Local Government Area of Rivers State from 2015 to 2025.

Chi-Square Test of Private-Sector Investment and Availability of Roads

Response Category	Observed Frequency (O)	Expected Frequency (E)	$(O-E)^2/E$
SA	1,248	756	320.19
A	1,025	756	95.72
D	478	756	102.23
SD	273	756	308.58
Total	**3,024**	**3,024**	**826.72**

Calculated $\chi^2 = 826.72$
df = 3
Critical $\chi^2 = 7.815$
Level of significance = 0.05

Decision

Since the calculated χ^2 value of 826.72 is greater than the critical value of 7.815, the null hypothesis is rejected.

Conclusion

The result indicates that the observed responses differ significantly from an equal distribution across the four response categories. The high concentration of responses in the SA and A category, as shown in above, provides strong evidence of respondents' positive assessment of private-sector investment and road availability in Obio/Akpor LGA during the period under review.

H_{02}: There is no significant relationship between project completion and timeliness and the affordability of healthcare services in Obio/Akpor Local Government Area of Rivers State from 2015 to 2025.

Chi-Square Test of Project Completion and Timeliness and Affordability of Healthcare Services

Response Category	Observed Frequency (O)	Expected Frequency (E)	$(O-E)^2/E$
SA	1,191	756	250.33
A	1,081	756	139.71
D	490	756	93.59
SD	262	756	322.80
Total	**3,024**	**3,024**	**806.43**

Calculated $\chi^2 = 806.43$
df = 3
Critical $\chi^2 = 7.815$
Level of significance = 0.05

Decision

Since the calculated χ^2 value of 806.43 is greater than the critical value of 7.815, the null hypothesis is rejected.

Conclusion

The result indicates a statistically significant difference in the distribution of respondents' opinions concerning project completion and timeliness and the affordability of healthcare services. The predominance of SA and A response suggests that respondents generally perceived timely completion of PPP healthcare projects as contributing positively to access, availability and affordability of healthcare services in Obio/Akpor LGA.

Discussion of Findings

Private-Sector Investment and Availability of Roads in Obio/Akpor LGA

The findings presented revealed that private-sector investment through Public-Private Partnerships (PPPs) had a positive influence on the availability and accessibility of roads in Obio/Akpor Local Government Area of Rivers State between 2015 and 2025. The table recorded a grand mean of 3.07, which was above the acceptance benchmark of 2.50. This indicates that the respondents generally agreed that private-sector participation contributed to the development, expansion, accessibility and connectivity of road infrastructure in the Local Government Area.

The primary data showed that Statement 6, which examined whether private-sector participation increased investment in road infrastructure, recorded the highest mean of 3.10. Similarly, Statement 7, concerning improved access to markets, workplaces, schools and other public facilities, also recorded a mean of 3.10. These findings suggest that respondents perceived private-sector investment not merely as an additional source of infrastructure financing but also as a mechanism through which residents' ability to access important socioeconomic activities was improved. The findings are consistent with the broader PPP literature. The World Bank notes that PPPs can mobilise additional sources of funding and financing for infrastructure and that private-sector incentives can be aligned with public-sector objectives throughout the project life cycle.

Such arrangements can improve infrastructure delivery when appropriately designed and implemented.

The result is also relevant to the situation in Obio/Akpor. The Local Government's own recent development priorities identify road infrastructure as an important component of quality of life and emphasise collaboration with state and development agencies to repair roads, grade earth roads and improve connections between communities. Obio-Akpor LGA This supports the survey finding that road availability and connectivity remain important dimensions of local development. Furthermore, Statement 2 and Statement 5 recorded relatively high means of 3.09, indicating agreement that PPP projects contributed to the construction of new roads and improved connectivity between communities and major commercial areas. This finding suggests that the effect of private-sector participation extends beyond the physical provision of roads to the broader economic function of road infrastructure. Improved connectivity can facilitate movement of people and goods and make markets, employment opportunities, schools and other public facilities more accessible. Statements 1, 3, 4 and 8 also recorded means above 3.00, further demonstrating that respondents perceived improvements in road availability, access to underserved areas, expansion of existing roads and reduction of infrastructure gaps. This finding is consistent with the World Bank's observation that PPPs can help address infrastructure deficits by mobilising private finance and applying private-sector incentives to infrastructure delivery.

However, the findings should not be interpreted to mean that PPPs automatically guarantee successful infrastructure delivery. Evidence from Nigeria indicates a mixed PPP performance, with outcomes influenced by stakeholder coordination, institutional frameworks, project preparation and contract management. The World Bank's review of Nigerian PPP experience specifically identified weaknesses in PPP preparation and contract management as important concerns. Therefore, the primary finding from above is that private-sector investment positively influenced road availability in Obio/Akpor LGA, but the sustainability of these benefits depends on effective project preparation, appropriate contractual arrangements, monitoring and institutional capacity.

Completion, Timeliness and Affordability of Healthcare Services in Obio/Akpor LGA

The findings presented in Table 4.7 revealed that project completion and timeliness had a positive influence on access to and affordability of healthcare services in Obio/Akpor LGA between 2015 and 2025. The table produced a grand mean of 3.06, which was above the acceptance benchmark of 2.50. This indicates that respondents generally agreed that timely completion of PPP healthcare projects contributed to improved healthcare access, reduced delays, increased availability of services and reduced some costs associated with obtaining healthcare.

The highest mean score of 3.10 was recorded by Statement 2, which examined whether timely completion of PPP healthcare projects increased residents' access to healthcare facilities. This finding indicates that respondents considered timely project completion an important factor in making healthcare facilities available for use. A healthcare facility that remains incomplete cannot provide the services for which it was established, regardless of the amount already invested in it. Thus, timely completion converts infrastructure investment into actual service delivery.

Statement 4 recorded a mean of 3.09, indicating that respondents agreed that completed PPP healthcare projects increased the availability of healthcare services. Statements 3 and 8 also recorded relatively high means of 3.07, indicating that timely completion reduced delays in service provision and improved the availability of essential healthcare services at affordable costs.

These findings are consistent with the World Bank's assessment that well-designed PPPs can support on-time and on-cost delivery, while also generating efficiency gains and improving service delivery. However, the World Bank emphasises that these benefits depend on appropriate project design, institutional arrangements, project preparation and contract management.

The affordability dimension is particularly important. Statement 6 recorded a mean of 3.02, while Statement 7 recorded 3.04. Although these were the lowest and one of the lower scores respectively, they remained above the acceptance benchmark. This suggests that respondents perceived PPP healthcare projects as contributing to affordability, but the effect on affordability may not be as strong as the effect on physical access and service availability.

This distinction is important because affordability involves more than simply having a healthcare facility nearby. It can include consultation fees, treatment expenses, transportation costs, medicine costs and other out-of-pocket expenditures. The Federal Ministry of Information and National Orientation has similarly identified affordability and financial protection as important components of healthcare reform in Nigeria, including efforts to expand health insurance coverage for vulnerable populations. Statement 5, which concerned the reduction in the need to travel long distances for medical services, recorded a mean of 3.04. This finding provides an important link between infrastructure development and affordability. When healthcare facilities are closer to residents, transportation expenses and the time costs associated with seeking healthcare may be reduced. The findings therefore suggest that timely completion affects affordability indirectly as well as directly. It makes facilities available, reduces delays, improves service availability and may reduce transportation-related costs. The result supports the broader PPP principle that infrastructure delivery should be assessed not simply in terms of physical construction but in terms of the services and benefits that the infrastructure makes available to citizens.

Consequently, the study concludes from Table 4.7 that timely completion of PPP healthcare projects contributed positively to healthcare accessibility and affordability in Obio/Akpor LGA, although affordability also depends on other factors such as healthcare financing, operating costs and users' ability to pay.

Conclusion

Based on the findings of the study, it is concluded that Public-Private Partnerships have made a positive contribution to infrastructural development in Obio/Akpor Local Government Area of Rivers State between 2015 and 2025. The partnership between government and private-sector investors has provided an alternative mechanism for mobilizing resources, delivering infrastructure and improving public services. First, the study concludes that private-sector investment through PPP arrangements has contributed to improved road availability and accessibility in Obio/Akpor LGA. Private-sector participation has supported the development and expansion of road infrastructure and improved connectivity between communities and important economic and social facilities. This indicates that PPPs can complement government efforts in addressing infrastructure deficits where public resources alone may be inadequate. Second, the study concludes that timely completion of PPP healthcare projects contributes to improved access to and affordability of healthcare services. Infrastructure that is completed within the planned timeframe allows residents to benefit from healthcare facilities and services without prolonged delays. Furthermore, the availability of healthcare facilities closer to residents can reduce transportation costs and other expenses associated with seeking medical attention.

Third, the study concludes that value for money is an important determinant of the effectiveness of PPP projects in the education sector. Where resources invested in educational infrastructure are

efficiently utilized, the resulting facilities can improve the learning environment, availability of teaching and learning materials, and overall quality of educational services. This implies that PPP success should not be measured solely by the amount of money invested but also by the quality and usefulness of the outputs delivered. Fourth, the study concludes that effective risk sharing between the public and private sectors promotes the sustainability of PPP infrastructure projects. Proper allocation of financial, operational and project-related risks can encourage private-sector participation, reduce the financial burden on government, improve maintenance and minimise the possibility of project abandonment. Generally, the study concludes that PPP is a viable strategy for addressing infrastructural deficits in Obio/Akpor LGA, provided that projects are properly planned, transparently procured, adequately financed, completed on schedule, effectively monitored and maintained over their useful life. The success of PPPs therefore depends not merely on the participation of private investors but on the quality of the institutional framework governing the partnership.

Recommendations

Based on the findings and conclusions of the study, the following recommendations are made:

1. The Rivers State Government and Obio/Akpor Local Government authorities should strengthen the planning and implementation of PPP projects by conducting adequate feasibility studies before projects are approved. Projects should be selected based on clearly identified infrastructure needs and their expected social and economic benefits.
2. Government and private-sector partners should establish realistic project timelines and enforce contractual provisions relating to project completion. Delays should be investigated promptly, and appropriate corrective measures should be taken to prevent prolonged project execution and cost escalation.

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