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INFRASTRUCTURE DEVELOPMENT AND TAX REFORM POLICY IMPLEMENTATION IN ENUGU STATE, NIGERIA (2023 TO 2026): STAKEHOLDERS' PERCEPTIONS OF THE ECONOMIC IMPLICATIONS AND OUTCOMES

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ABSTRACT

This study assessed stakeholders' perceptions of infrastructure development and tax reform policy implementation in Enugu State, Nigeria, from 2023 to 2026, concentrating on their perceived economic implications and outcomes. The research was motivated by the need to establish whether government investments in infrastructure and changes in revenue administration have translated into perceived improvements in economic activities, business operations, employment opportunities and residents' welfare. Four objectives, two research questions and two null hypotheses guided the study, which drew on endogenous growth theory, public finance theory and policy implementation theory. A descriptive survey research design was adopted. The target population was 987,090 persons, from which a sample of 500 respondents, made up of 300 private business owners and 200 economists, was drawn from Enugu metropolis, Nsukka, and Nkanu East and Nkanu West through multistage sampling. Data were collected with a 20-item structured questionnaire covering infrastructure development and tax reform implementation, validated by economists, psychologists and experts in measurement and evaluation, with a reliability coefficient of 0.77. Mean ratings, standard deviations, mean differences and Welch's independent-samples t-test were used for data analysis at the 0.05 level of significance. The findings showed favourable perceptions of several infrastructure-related outcomes, particularly commercial activities and access to markets (grand means of 3.45 for business owners and 3.38 for economists), although the groups differed on business costs and residents' welfare. Tax reform perceptions were mixed, reflecting perceived improvements in revenue administration alongside concerns about compliance costs, enterprise expansion and residents' purchasing power. There was no significant difference between the groups on infrastructure development ($t = 1.47$, $p = 0.141$), but there was a significant difference on tax reform implementation ($t = 2.56$, $p = 0.011$). The study highlights the relevance of evaluating infrastructure and tax reforms jointly, while distinguishing stakeholders' perceptions from objectively assessed economic outcomes, and it recommends stronger project monitoring, fairer and more convenient tax administration and regular stakeholder-based policy evaluation.

Keywords: Infrastructure development, tax reform, policy implementation, economic growth, stakeholders' perceptions, Enugu State, Nigeria

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Introduction

Infrastructure development and effective tax administration are relevant instruments through which governments seek to encourage economic growth, strengthen public revenue, improve business productivity and promote citizens' welfare. Roads, electricity, water supply, transportation, healthcare and other public infrastructure can reduce production and distribution costs, improve access to markets and encourage private investment. Aschauer (1989) showed that public capital, especially core infrastructure such as roads, highways, water systems and power, is closely related to the productivity of the private economy, which means that infrastructure is not merely a form of government consumption but a productive input. Similarly, effective tax administration can encourage government revenue mobilisation and provide resources for public expenditure, although poorly designed or burdensome tax arrangements may constrain enterprise development, household consumption and purchasing power. Infrastructure and taxation are therefore closely connected, because public investment needs sustainable financing, while the economic benefits of taxation depend partly on the quality and accessibility of government services. Besley and Persson (2014) argued that the capacity of a state to raise revenue and its capacity to deliver public goods develop together, so that weak tax systems and weak public services tend to reinforce each other in developing countries.

In Enugu State, the administration of Governor Peter Ndubuisi Mbah, which commenced in May 2023, has emphasised infrastructure expansion, urban development, transportation, healthcare, education and increased internally generated revenue. The state government presented a record budget of about ₦971 billion for 2025, with substantial investments in roads, water infrastructure, healthcare, education and transportation as components of its development agenda (BusinessDay, 2024; Enugu State Government, 2024). About 86 per cent of that budget was allocated to capital expenditure, with education and road infrastructure receiving the largest shares (BusinessDay, 2024). The proposed 2026 budget of about ₦1.62 trillion continued this direction, with 80 per cent for capital expenditure and provisions for urban and rural roads, transport terminals, mass housing and the New Enugu City (Enugu State Government, 2025). On the revenue side, the Enugu State Internal Revenue Service reported internally generated revenue of about ₦406.77 billion in 2025, comprising tax and non-tax revenue, compared with ₦180.5 billion in 2024, and announced a target of ₦870 billion for 2026 (Enugu State Government, 2026). These figures show the scale of the state's development and revenue ambitions, although revenue growth alone does not establish the efficiency of tax reforms or their influence on residents.

The period under study also coincides with major changes in Nigeria's national tax framework. In June 2025, four tax reform laws were signed, namely the Nigeria Tax Act, the Nigeria Tax Administration Act, the Nigeria Revenue Service (Establishment) Act and the Joint Revenue Board (Establishment) Act, with implementation from January 2026. Among other changes, the laws consolidated many older taxes, exempted small companies with an annual turnover of ₦50 million or less from company income tax, raised the threshold below which individuals pay no personal income tax and changed the formula for sharing value added tax among the three tiers of government (Okpi, 2025). Enugu State operates within this wider tax framework, and some reforms introduced nationally may affect businesses and residents in the state, although their implications must be distinguished from policies independently implemented by the Enugu State Government. Because infrastructure spending and revenue statistics cannot by themselves show whether these policies have improved the everyday economic conditions of businesses and households, it is important to examine how stakeholders

experience them. This study therefore evaluated stakeholders' perceptions of infrastructure development and tax reform policy implementation in Enugu State between 2023 and 2026.

Statement of the problem

Despite the rise in government concentration on infrastructure development and revenue mobilisation in Enugu State, relevant questions remain about the extent to which these policies have created broadly shared economic benefits. Road construction and rehabilitation may improve transportation and market access, but their effects on business costs depend on road quality, connectivity, maintenance, traffic conditions and access to complementary infrastructure such as electricity and water. Infrastructure projects that are concentrated in urban centres may also leave rural communities with fewer gains, and projects that are poorly maintained or disconnected from the needs of businesses may produce limited economic returns. Likewise, increased government revenue may encourage development expenditure, but higher revenue collections do not necessarily mean that tax administration has become more transparent, equitable or affordable for businesses and households. The reported growth in internally generated revenue in Enugu State came mainly from non-tax sources, which means that it cannot be attributed exclusively to tax reforms, and the figures do not show whether taxpayers experienced more convenient administration, greater transparency or lower compliance costs (Enugu State Government, 2026).

At the same time, private business owners, who pay taxes and levies and use public infrastructure directly, and economists, who assess policies from the standpoint of the wider economy, may view the same policies differently. Business owners experience tax administration through compliance requirements, payments and operating costs, while economists may place greater emphasis on revenue mobilisation and the broader fiscal implications of reform. Little empirical evidence exists on how these two groups perceive the economic implications of infrastructure development and tax reform in Enugu State during the current administration, and whether their perceptions differ significantly. Without such evidence, government may rely solely on spending and revenue figures to judge policy success, while concerns about business costs, enterprise expansion and residents' purchasing power remain hidden. This is the gap the present research sought to fill by evaluating the perceptions of private business owners and economists within Enugu State on infrastructure development and tax reform policy implementation from 2023 to 2026.

Aim and objectives of the study

The general objective of this study was to evaluate stakeholders' perceptions of infrastructure development and tax reform policy implementation in Enugu State, Nigeria, from 2023 to 2026. The specific objectives were to:

1. determine the extent to which stakeholders perceive infrastructure development policy implementation as contributing to economic development in Enugu State;
2. examine stakeholders' perceptions of the influence of tax reform policy implementation on economic growth, business activities, employment opportunities and residents' welfare;
3. compare the mean perceptions of private business owners and economists regarding the economic implications of infrastructure development policy implementation; and
4. compare the mean perceptions of private business owners and economists regarding the economic implications of tax reform policy implementation.

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Research questions

The following research questions guided the study:

1. To what extent do stakeholders perceive the implementation of infrastructure development policies from 2023 to 2026 as contributing to economic development in Enugu State, Nigeria?
2. To what extent do stakeholders perceive the implementation of tax reform policies from 2023 to 2026 as influencing economic growth, business activities, employment opportunities and the welfare of residents in Enugu State, Nigeria?

Hypotheses

The following null hypotheses were tested at the 0.05 level of significance:

H_{01}: There is no significant difference in the mean perceptions of private business owners and economists regarding the contribution of infrastructure development policy implementation to economic development in Enugu State, Nigeria, from 2023 to 2026.

H_{02}: There is no significant difference between private business owners and economists in their mean perceptions regarding the influence of tax reform policy implementation on economic growth, business activities, employment opportunities and residents' welfare in Enugu State, Nigeria, from 2023 to 2026.

Literature review

Infrastructure development

Infrastructure development refers to the construction, rehabilitation, expansion and maintenance of physical and social facilities that support economic and social activities. Physical infrastructure includes roads, bridges, electricity, water supply, transportation networks and communication facilities, while social infrastructure includes schools, healthcare facilities and other services that build human capabilities and labour productivity. Infrastructure contributes to economic development through several channels. Upgraded roads can reduce travel time, ease the movement of agricultural products, connect businesses with customers and reduce distribution difficulties. Reliable electricity can support manufacturing, commercial services and digital businesses, while water supply and healthcare can improve public health and reduce the time and resources that households and businesses devote to managing infrastructure deficiencies. Nevertheless, infrastructure investment does not automatically produce economic growth. Straub (2008) observed that the benefits of infrastructure depend on the sector concerned, the quality and maintenance of projects and the institutional setting, and that estimates of infrastructure's effect on growth vary widely across countries and methods. The benefits therefore depend on project quality, geographical distribution, accessibility, maintenance, implementation effectiveness and the ability of businesses and households to use the facilities productively.

In Enugu State, road construction, urban renewal, transportation improvements, water projects, housing and the development of the New Enugu City form part of the government's development agenda. The government reported in its 2026 budget presentation that over 1,000 kilometres of roads had been completed or rehabilitated, and it planned further urban and rural roads, new transport terminals and 15,000 mass housing units for 2026 (Enugu State Government, 2025). The state government's published project monitoring platform also provides information about ongoing and completed projects across the local government areas of the state (Enugu State Government, n.d.). These are government reports of inputs and outputs, and they do not by themselves show how businesses and residents experience the projects. For this research, infrastructure development is operationally defined as stakeholders' evaluation of

improvements in transportation, transport difficulties, market access, electricity and other essential services, employment opportunities, private investment, business costs, access to public services, commercial activities and residents' welfare.

Tax reform policy implementation

Tax reform refers to changes in tax legislation, administration, collection procedures, compliance systems, enforcement and revenue management intended to improve the effectiveness, fairness, transparency and productivity of a tax system. Tax policy implementation concerns the practical processes through which tax laws and administrative policies are communicated, interpreted, enforced, monitored and evaluated. Effective implementation needs clear obligations, accessible information, appropriate administrative procedures, accountability and methods for resolving disputes. The Organisation for Economic Co-operation and Development (2010) stressed that the way tax administrations communicate with taxpayers, the services they provide and the fairness of their procedures influence whether taxpayers comply willingly, which shows that tax administration involves more than the setting of statutory rates. Tax reform can encourage economic development by improving revenue mobilisation, reducing revenue leakages and providing funds for infrastructure and public services. However, its effects on businesses and households depend on the nature of the reforms, their distributional consequences, the cost of compliance and the quality of government expenditure, and Djankov et al. (2010) found across countries that higher effective corporate tax rates were associated with lower investment and entrepreneurial activity.

A distinction is necessary between state-level revenue administration and national tax legislation. In Enugu State, the Enugu State Internal Revenue Service credited the growth of internally generated revenue to technology, electronic payment and the widening of the tax net without raising rates, together with measures to block revenue leakages, and it stated that tax revenue was expected to decline in 2026 as a pro-citizen tax reform was implemented (Enugu State Government, 2026). Of the ₦406.77 billion reported for 2025, about ₦51.5 billion was tax revenue and about ₦355.2 billion was non-tax revenue. These figures are significant, but their interpretation needs caution. Since non-tax revenue accounted for most of the reported total, the increase in internally generated revenue cannot be attributed exclusively to tax reforms, and the figures do not show whether taxpayers experienced more convenient administration, greater transparency or lower compliance costs. National reforms that took effect in January 2026, such as the exemption of small companies and the higher personal income tax threshold, may also shape how businesses and residents in the state experience taxation (Okpi, 2025). In this research, tax reform implementation means stakeholders' perceptions of tax information, administrative convenience, collection transparency, revenue mobilisation, compliance, operating costs, business expansion, employment, purchasing power and general economic conditions.

Economic growth and economic development

Economic growth refers primarily to an increase in the production of goods and services over time, commonly evaluated through changes in real gross domestic product or real output. Economic development is wider, as it encompasses improvements in living standards, employment, income opportunities, infrastructure, public services, productivity and the distribution of economic outcomes. A state may experience increasing government revenue and substantial infrastructure investment without all households or enterprises experiencing equivalent improvements in welfare. Calderón and Servén (2010) showed for Sub-Saharan Africa that both the quantity and the quality of infrastructure matter for growth and that

infrastructure development can also reduce income inequality, which means that the distribution of infrastructure benefits is as important as their size. Government expenditure, revenue growth, economic output and stakeholders' perceptions should therefore be handled as related but distinct measures. Perceptions of economic growth reflect how individuals interpret changes in commercial activity, employment, investment, business costs, income opportunities and public services. For the present investigation, perceived economic development is evaluated through reported improvements in transportation, market accessibility, business operations, commercial activities, employment opportunities, investment conditions and residents' welfare, with the recognition that perceptions alone cannot establish causal relationships between policy and growth.

Enugu development policies and their implications, 2023 to 2026

Enugu State's development agenda during 2023 to 2026 combines infrastructure investment, public service expansion, urban development, transportation improvements and revenue mobilisation. The 2025 budget prioritised education, healthcare, roads, water supply, agriculture and transport, reflecting an attempt to connect public investment with productivity and human development (BusinessDay, 2024; Enugu State Government, 2024). The 2026 budget proposal continued this direction through additional road projects, housing development, transportation improvements and investment in the New Enugu City (Enugu State Government, 2025). These measures may have several economic implications. Better transportation can reduce the difficulties associated with moving goods and people, improved healthcare and education may strengthen human capital, and expanded public infrastructure may make some locations more attractive to investors. Revenue reforms may increase the resources available for these investments, which is consistent with the argument that productive public capital supports economic performance (Aschauer, 1989). Nevertheless, the results depend on implementation quality, the distribution of projects, maintenance, fiscal sustainability and the extent to which the benefits reach businesses and residents. Higher revenue collections may also coexist with concerns about affordability, administrative burdens and purchasing power. The study therefore evaluated the perceptions of private business owners and economists to discover areas of perceived progress and continuing difficulties.

Theoretical framework

Three theoretical perspectives provide the analytical foundation for this investigation. The first is endogenous growth theory, which explains how investment in productive resources, human capital, innovation and knowledge can encourage sustained economic growth. Romer (1990) showed the importance of knowledge and technological change in creating economic growth, and from this perspective infrastructure can support economic development by creating the conditions under which firms invest, workers acquire skills and businesses adopt more productive methods. For Enugu State, improved roads and transportation facilities may strengthen connections between producers, markets, suppliers and customers, while investments in electricity, education and healthcare may support production and human capital development. The theory therefore suggests that infrastructure development should be assessed not merely by the number of projects completed but by whether the facilities encourage productive activities. Its limitation is that infrastructure investment does not necessarily generate growth where projects are poorly maintained, inaccessible or disconnected from the needs of businesses and communities.

The second perspective is public finance theory, which examines the relationship between government revenue, public expenditure, resource allocation and social welfare.

Musgrave (1959) identified three functions of the public sector, namely the allocation of resources, the distribution of income and the stabilisation of the economy. These functions are central to infrastructure and taxation, because governments collect revenue to finance public goods and services while also influencing the distribution of economic opportunities. From this perspective, efficient tax administration can increase the resources available for infrastructure development, but the welfare consequences of taxation depend on the fairness of the tax system, administrative effectiveness, the burden imposed on taxpayers and the quality of public expenditure. In Enugu State, the theory suggests that increasing internally generated revenue should be evaluated alongside the perceived accessibility, quality and economic usefulness of government infrastructure and services, and alongside its effects on business costs and household purchasing power. The theory also explains why taxpayers and analysts may judge the same reform differently, since the first group bears the burden directly while the second weighs it against public benefits.

The third perspective is policy implementation theory, which emphasises that policy outcomes depend on the translation of government decisions into practical actions. Pressman and Wildavsky (1973) showed the complexities involved in implementing public programmes, particularly where several institutions, administrative processes and decision points must be coordinated. A policy may be well designed but produce limited outcomes if funding is insufficient, responsibilities are unclear, coordination is weak, implementation is delayed or monitoring is inefficient. Applied to infrastructure development, the theory suggests that the economic usefulness of roads, water facilities and other projects depends on their completion, quality, accessibility and maintenance. Applied to tax reform, it indicates that the success of a reform depends on taxpayer awareness, administrative procedures, transparency, consistent enforcement and the capacity of revenue institutions. Together, the three theories guided the study: endogenous growth theory explains why infrastructure is expected to support economic activity, public finance theory explains the balance between revenue and welfare, and policy implementation theory explains why stakeholders may evaluate the same policies differently according to their experience of implementation.

Empirical review

Aschauer (1989) examined the relationship between public capital and aggregate productivity in the United States using time-series data. The analysis showed that the stock of non-military public capital, especially core infrastructure such as streets and highways, airports, electrical and gas facilities and water systems, was strongly related to private sector productivity, and that the decline in public capital investment helped to explain the slowdown in productivity growth. The study contributed to the empirical argument that infrastructure is not merely a government consumption item but can serve as a productive input. Its relevance to Enugu State lies in the possibility that road networks, transportation facilities and other infrastructure may reduce production constraints and support business performance. However, the findings arose from a different economy and period, and they cannot be transferred directly to Enugu State without considering differences in infrastructure quality, institutional capacity, industrial structure and project implementation. Calderón and Servén (2010) examined infrastructure and economic development in Sub-Saharan Africa and found that both the quantity and the quality of infrastructure were associated with higher growth and with lower income inequality, and that the region's infrastructure gaps held back its growth. For Enugu State, the implications include the potential contribution of roads, electricity, water supply and transportation to market access and

commercial activity, but improved facilities in urban centres may not produce equivalent gains in rural communities.

Straub (2008) reviewed the empirical evidence on infrastructure and growth in developing countries, assessing the conceptual and methodological challenges involved in estimating infrastructure's effects. The review highlighted the importance of distinguishing between different infrastructure sectors and recognised problems of measurement, reverse causality and differences across countries, which make the estimated effects of infrastructure vary from study to study. This perspective is important because governments often report infrastructure expenditure or project completion as evidence of development, although such indicators do not directly establish improvements in productivity or welfare. For Enugu State, the review suggests that infrastructure evaluation should consider transportation difficulties, market access, business operating conditions and public service accessibility. Djankov et al. (2010) evaluated corporate taxation and investment using data on effective corporate tax rates across 85 countries. Their results linked higher effective corporate tax burdens with lower investment, lower foreign direct investment and less entrepreneurial activity. The study demonstrates that taxation may affect investment decisions through its effects on the returns to capital, so tax reform should be evaluated not only through government revenue but also through its implications for enterprise expansion. Nevertheless, corporate taxation is not identical to every tax or levy faced by small businesses, and the study does not establish the effects of the specific reforms implemented in Enugu State.

Besley and Persson (2014) examined why developing countries collect a small share of national income in taxes, linking fiscal capacity to the structure of the economy, the strength of institutions and the political setting. Their analysis emphasised that fiscal capacity and institutional development are closely connected, since governments need administrative capacity to collect revenue effectively, while productive economic activity and institutional credibility influence the sustainability of public finance. For Enugu State, this perspective suggests that revenue mobilisation should be evaluated alongside administrative transparency, taxpayer understanding and the effective use of public resources, since higher revenue does not automatically show that tax administration is fair or that public expenditure is effective. The Organisation for Economic Co-operation and Development (2010) examined how tax administrations can understand and influence taxpayers' compliance behaviour, explaining the importance of taxpayer services, clear information, perceived fairness and the management of compliance risks. These issues matter in Enugu State because stakeholders may recognise improvements in revenue collection while continuing to experience administrative inconvenience or uncertainty about their obligations. Taken together, the reviewed studies come from other countries or regions, or are international analyses, and none evaluated the perceptions of private business owners and economists on infrastructure development and tax reform in Enugu State. The present study addressed this contextual and geographical gap.

Methodology

The study used a descriptive survey research design. This design was considered appropriate because the research sought to collect and analyse the opinions of private business owners and economists concerning infrastructure development and tax reform policy implementation in Enugu State from 2023 to 2026. The design helped the researchers to describe stakeholders' perceptions and compare the mean responses of the two groups, and it did not require the manipulation of policy variables. The study was carried out in Enugu State, south-eastern Nigeria. The selected locations were Enugu metropolis, Nsukka, and Nkanu East and

Nkanu West, which provided a basis for collecting responses from urban commercial centres and other areas of the state. Enugu metropolis was included because of its concentration of government institutions, commercial activities and infrastructure projects, Nsukka was included to capture perspectives from another relevant urban and commercial centre, while Nkanu East and Nkanu West provided additional geographical coverage. The target population was 987,090 persons, from which a sample of 500 respondents was drawn. The sample distribution was framed to capture both practical business experiences and economic evaluations of government policy implementation, as shown in Tables 1 and 2.

Table 1: Sample Distribution by Respondent Category

Respondent category	Sample size	Percentage (%)
Private business owners	300	60
Economists	200	40
Total	**500**	**100**

Source: Field Survey.

Table 2: Geographical Distribution of the Sample

Study location	Private business owners	Economists	Total
Enugu metropolis	150	150	300
Nsukka	100	50	150
Nkanu East and Nkanu West (combined)	50	0	50
Total	**300**	**200**	**500**

Source: Field Survey.

A multistage sampling procedure was used. First, Enugu metropolis, Nsukka, and Nkanu East and Nkanu West were selected as study locations. Second, respondents were classified into private business owners and economists. Third, respondents were selected within the specified locations according to the sample allocation, and they were recruited through professional networks and business associations. The instrument was a structured questionnaire containing 20 items. Section B, on infrastructure development policy implementation, contained ten items covering road transportation, transport difficulties, market accessibility, essential infrastructure, employment, private investment, business costs, public services, commercial activities and residents' welfare. Section C, on tax reform policy implementation, contained ten items covering taxpayer awareness, administrative convenience, transparency, revenue mobilisation, compliance, business operating costs, enterprise expansion, employment, purchasing power and general economic conditions. The questionnaire was subjected to expert validation by economists, psychologists and experts in measurement and evaluation. The economists evaluated the relevance of the items to infrastructure development, taxation and economic performance, the psychologists evaluated the clarity and appropriateness of the statements, and the measurement and evaluation experts reviewed the structure, wording, response options and suitability of the instrument. The reliability coefficient of 0.77 showed an acceptable level of internal consistency for exploratory social science research.

Research questions one and two were answered using item means, group mean ratings, standard deviations and mean differences. A mean of 2.50 or above was treated as showing

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agreement with a statement. Because several items describe adverse consequences, such as the effect of the tax burden on operating costs and the reduction of purchasing power, a high mean on those items indicates concern rather than a favourable outcome, and they were interpreted accordingly. The null hypotheses were tested with independent-samples t-tests at the 0.05 level of significance. Because the two groups differ in size and in their standard deviations, Welch's independent-samples t-test was used, since it does not assume equal variances. The decision rule was to reject the null hypothesis when the p-value was below 0.05 and to retain it when the p-value was 0.05 or above.

Results

Research Question One: To what extent do stakeholders perceive the implementation of infrastructure development policies from 2023 to 2026 as contributing to economic development in Enugu State, Nigeria?

Table 3: Mean Perception Ratings of Private Business Owners and Economists on Infrastructure Development Policy Implementation

S/N	Infrastructure development statement	Business owners (n = 300)	Economists (n = 200)	Mean diff.	Interpretation
1	Infrastructure projects have improved road transportation.	3.45	3.20	0.25	Agreement by both
2	Road improvements have reduced transportation difficulties.	3.67	3.27	0.40	Agreement by both
3	Infrastructure development has improved access to markets and commercial centres.	3.78	3.40	0.38	Agreement by both
4	Electricity and other essential infrastructure have supported business operations.	3.80	3.20	0.60	Agreement by both
5	Infrastructure projects have created employment opportunities.	3.54	3.50	0.04	Agreement by both
6	Infrastructure development has encouraged private investment.	3.08	3.00	0.08	Agreement by both
7	Infrastructure improvements have reduced business costs.	2.80	3.80	-1.00	Agreement by both; wide gap
8	Infrastructure has improved access to essential public services and economic opportunities.	3.45	3.35	0.10	Agreement by both
9	Infrastructure projects have increased commercial activities.	3.89	3.60	0.29	Agreement by both
10	Infrastructure implementation has improved residents' general economic welfare.	3.00	3.49	-0.49	Agreement by both; wide gap
	Grand mean (from ten item means)	**3.45**	**3.38**	**0.07**	**Overall agreement**

Criterion mean = 2.50. A mean of 2.50 or above shows agreement with the statement. Source: Field Survey.

Table 3 shows that private business owners and economists generally perceived infrastructure development as contributing positively to economic development in Enugu State between 2023 and 2026. The grand mean was 3.45 for private business owners and 3.38 for economists, showing agreement with the infrastructure statements overall, and every item recorded a mean above the criterion mean of 2.50 in both groups. The highest rating among private business owners was for increased commercial activities (3.89), followed by support for

business operations through electricity and other essential infrastructure (3.80) and improved access to markets and commercial centres (3.78). Economists also rated increased commercial activities favourably (3.60) and perceived infrastructure as contributing to employment opportunities (3.50). The lowest ratings were for private investment (3.08 and 3.00), which suggests that both groups saw the effect of infrastructure on investment as weaker than its effect on trade and market access. The findings were not uniformly consistent across the groups. Private business owners gave a mean of 2.80 to the statement that infrastructure had reduced business costs, while economists gave 3.80, a difference of 1.00 that shows a substantial gap in the perceived cost implications of infrastructure. Private business owners also rated improvement in residents' general economic welfare lower (3.00) than economists (3.49), which suggests that those who operate businesses directly feel the benefits of infrastructure less in their costs and household welfare than analysts expect.

Research Question Two: To what extent do stakeholders perceive the implementation of tax reform policies from 2023 to 2026 as influencing economic growth, business activities, employment opportunities and the welfare of residents in Enugu State, Nigeria?

Table 4: Mean Perception Ratings of Private Business Owners and Economists on Tax Reform Policy Implementation

S/N	Tax reform statement	Business owners (n = 300)	Economists (n = 200)	Mean diff.	Interpretation
11	Tax reforms have improved understanding of tax obligations.	3.90	2.00	1.90	Economists disagree
12	Tax administration reforms have improved the ease of meeting tax obligations.	2.07	3.27	-1.20	Business owners disagree
13	Tax reforms have improved transparency in collection and administration.	3.67	3.00	0.67	Agreement by both
14	Tax reforms have improved government revenue mobilisation.	3.89	2.09	1.80	Economists disagree
15	Tax reforms have encouraged compliance with applicable obligations.	3.84	3.00	0.84	Agreement by both
16	The tax burden has affected business operating costs.	3.85	3.05	0.80	Perceived adverse effect
17	Tax reform has influenced SMEs' ability to expand.	3.97	3.00	0.97	Perceived influence
18	Tax reforms have influenced employment opportunities.	3.43	3.90	-0.47	Agreement (employment affected)
19	Tax reforms have reduced purchasing power and disposable income.	3.92	3.00	0.92	Perceived adverse effect
20	Tax reform implementation has improved general economic conditions.	3.07	3.67	-0.60	Agreement by both; wide gap
	Grand mean (from ten item means)	**3.56**	**3.00**	**0.56**	**Mixed perceptions**

Criterion mean = 2.50. A mean of 2.50 or above shows agreement with the statement. Source: Field Survey.

Table 4 shows mixed perceptions of tax reform implementation. The grand mean was 3.56 for private business owners and 3.00 for economists. Although both groups agreed with several statements, their perceptions differed sharply on particular items. Private business owners gave high ratings to improved understanding of tax obligations (3.90), revenue mobilisation (3.89) and compliance (3.84), which suggests that business respondents perceived improvements in taxpayer awareness and revenue administration. Economists, however, disagreed that tax reforms had improved understanding of tax obligations (2.00) and revenue mobilisation (2.09). On the ease of meeting tax obligations, the pattern was reversed, as private business owners disagreed (2.07) while economists agreed (3.27), which shows that business owners who deal with tax administration directly did not find it easier to meet their obligations even though they understood them better. Both groups agreed, though at different levels, that tax reforms had improved transparency (3.67 and 3.00) and encouraged compliance (3.84 and 3.00).

The mean ratings also show concerns about the effects of taxation on business costs and residents' welfare. Private business owners recorded a mean of 3.85 for the statement that the tax burden has affected business operating costs, 3.97 for the statement that tax reform has influenced the ability of small and medium enterprises to expand, and 3.92 for the statement that tax reforms have reduced purchasing power and disposable income. Because these items describe adverse or constraining consequences, their high means show concern rather than a favourable outcome. Economists agreed with the same statements at lower levels (3.05, 3.00 and 3.00). Economists rated the improvement of general economic conditions at 3.67, compared with 3.07 among private business owners, and they also gave a higher rating to the influence of tax reform on employment opportunities (3.90 against 3.43). These results indicate that the groups differed in their evaluations of the overall economic implications of tax reform, with business owners more aware of costs and economists more positive about wider economic conditions.

Test of hypotheses

H_{01}: There is no significant difference in the mean perceptions of private business owners and economists regarding the contribution of infrastructure development policy implementation to economic development in Enugu State, Nigeria, from 2023 to 2026.

Table 5: Welch's Independent-Samples t-Test of Stakeholders' Mean Perceptions of Infrastructure Development

Respondent group	N	Mean	Std. Dev.	Mean diff.	t	df	p-value	Decision
Private business owners	300	3.88	0.87	0.11	1.47	457	0.141	H_{01} retained
Economists	200	3.77	0.78					

Welch's independent-samples t-test, two-tailed, at 0.05 level of significance. Source: Field Survey.

Table 5 shows that private business owners had a mean perception rating of 3.88, compared with 3.77 for economists, giving a relatively small difference of 0.11. The Welch t-statistic was 1.47, with about 457 degrees of freedom and a two-tailed p-value of 0.141. Since the p-value exceeded 0.05, the null hypothesis was not rejected. This result means that the study did not establish a statistically significant difference between the mean perceptions of private business owners and economists regarding infrastructure development policy implementation. Although the two groups differed on particular items such as business costs and residents' welfare, their overall evaluations of the contribution of infrastructure to economic development

were similar. The result is consistent with the possibility that both groups recognise the economic relevance of infrastructure even though their occupational perspectives differ.

H_{02}: There is no significant difference between private business owners and economists in their mean perceptions regarding the influence of tax reform policy implementation on economic growth, business activities, employment opportunities and residents' welfare in Enugu State, Nigeria, from 2023 to 2026.

Table 6: Welch's Independent-Samples t-Test of Stakeholders' Mean Perceptions of Tax Reform Policy Implementation

Respondent group	N	Mean	Std. Dev.	Mean diff.	t	df	p-value	Decision
Private business owners	300	3.87	0.89	0.20	2.56	446	0.011	H_{02} rejected
Economists	200	3.67	0.83					

Welch's independent-samples t-test, two-tailed, at 0.05 level of significance. Source: Field Survey.

Table 6 shows that private business owners recorded a mean perception rating of 3.87, while economists recorded 3.67, giving a mean difference of 0.20. The Welch t-statistic was 2.56, with about 446 degrees of freedom and a two-tailed p-value of 0.011. Since the p-value was below 0.05, the null hypothesis was rejected. There is therefore a statistically significant difference between the mean perceptions of private business owners and economists regarding the influence of tax reform policy implementation on economic growth, business activities, employment opportunities and residents' welfare in Enugu State. Private business owners held stronger views than economists on the effects of tax reform, which is consistent with the item-level results in Table 4, where business owners gave higher ratings to awareness, revenue mobilisation and compliance as well as to the adverse effects on operating costs, enterprise expansion and purchasing power.

Discussion of findings

The first finding of this study is that stakeholders generally perceived infrastructure development as contributing to economic development in Enugu State between 2023 and 2026, with the most favourable assessments for commercial activities, access to markets and support for business operations. This finding is consistent with endogenous growth theory, which emphasises the productive contribution of capital and infrastructure to economic performance (Romer, 1990), and with Aschauer (1989), who found that public infrastructure capital is strongly related to private sector productivity. It also agrees with Calderón and Servén (2010), who showed that the quantity and quality of infrastructure in Sub-Saharan Africa are associated with higher growth. The finding is in line with the government's reports of road construction, transport and urban development projects across the state (Enugu State Government, 2025). However, the lower ratings for private investment by both groups, and the gap between business owners and economists on business costs and residents' welfare, show that the benefits of infrastructure are not felt evenly. This agrees with Straub (2008), who noted that the growth effects of infrastructure depend on sector, quality, maintenance and setting, and with policy implementation theory, which holds that the usefulness of projects depends on their completion, quality, accessibility and maintenance (Pressman & Wildavsky, 1973).

The second finding is that perceptions of tax reform implementation were mixed. Private business owners reported favourable perceptions of taxpayer awareness, transparency,

compliance and revenue mobilisation, but they also expressed strong concern about operating costs, the ability of small and medium enterprises to expand and the purchasing power of residents, and they did not find it easier to meet their tax obligations. These results illustrate the tension identified in public finance theory between raising government revenue and protecting economic welfare (Musgrave, 1959). They also agree with Djankov et al. (2010), who found that higher effective tax burdens are associated with lower investment and entrepreneurial activity, and with the Organisation for Economic Co-operation and Development (2010), which stressed that convenience, clear information and fairness in tax administration shape how taxpayers experience and respond to the tax system. The economists' disagreement that tax reforms improved revenue mobilisation and taxpayers' understanding may reflect awareness that most of the reported growth in internally generated revenue came from non-tax sources (Enugu State Government, 2026). The findings also suggest that the national tax reforms which took effect in January 2026, including relief for small companies and low-income earners, may take time before they change the experiences of businesses and residents (Okpi, 2025).

The third finding is that there was no significant difference between private business owners and economists in their overall perceptions of infrastructure development, but there was a significant difference in their perceptions of tax reform implementation. The similarity on infrastructure suggests that both groups recognise the visible and practical benefits of roads, markets and transport for commercial activity. The difference on tax reform can be explained through public finance theory and policy implementation theory. Private business owners experience tax administration directly through compliance requirements, payments and operating costs, while economists may place greater emphasis on government revenue mobilisation and the broader fiscal implications of reform. Different stakeholders can therefore evaluate the same policy differently because they encounter different administrative procedures and economic consequences (Pressman & Wildavsky, 1973). This agrees with Besley and Persson (2014), who argued that fiscal capacity, institutional credibility and the effective use of public resources are closely connected, so that taxpayers' acceptance of reform depends on how they experience both collection and spending. The central implication is that policy success should not be assessed solely through infrastructure spending or revenue growth. It should also be reviewed through the quality of implementation, the distribution of benefits, business conditions, administrative fairness and residents' welfare.

Conclusion

This study assessed stakeholders' perceptions of infrastructure development and tax reform policy implementation in Enugu State, Nigeria, from 2023 to 2026. The results showed that private business owners and economists generally perceived infrastructure development positively, particularly in relation to commercial activities, market accessibility and support for business operations, and that their overall perceptions of infrastructure did not differ significantly. Perceptions of tax reform implementation were mixed. Business owners recognised improvements in taxpayer awareness, transparency, compliance and revenue mobilisation, but they also expressed concern about operating costs, the expansion of small and medium enterprises, the ease of meeting tax obligations and the purchasing power of residents, and their perceptions differed significantly from those of economists. Overall, the research highlights the need to connect infrastructure investment and revenue mobilisation with measurable improvements in productivity, business conditions, employment and residents' welfare. Since the study measured perceptions, its findings should be read alongside objective measures of

economic outcomes, and future studies should include households, workers and officials of revenue institutions and examine the effects of the national tax reforms that took effect in 2026.

Recommendations

Based on the findings, the study makes the following recommendations:

1. The Enugu State Government should continue improving road networks, transportation, water supply and other important infrastructure while strengthening project monitoring, maintenance and geographical coverage, and it should monitor the economic impact of projects on business costs, private investment and residents' welfare, which recorded the weakest or most divided ratings in this study.
2. The Enugu State Internal Revenue Service and other relevant revenue authorities should improve the fairness, transparency and convenience of tax administration by providing clear information on applicable tax obligations, simplifying administrative procedures, strengthening taxpayer support and communicating changes, including those arising from the national tax reforms, in a transparent manner.
3. The state government should institutionalise stakeholder-based policy evaluation by periodically collecting evidence from private business owners, economists, households and other relevant groups, and by publishing the results alongside expenditure and revenue figures, so that infrastructure and tax reform outcomes are judged by their effects on businesses and residents and not only by spending and collections.

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