

Transportation Policy and Urban Development in Nigeria: An Analysis of Tricycle Transportation within Uyo Metropolis

Eyo, Uforo Etim¹

Department of Industrial relations and Human Recourse Management, Ritman University, Ikot Ekpene, Akwa Ibom State, Nigeria.

orcid.org/0009-0009-0207-4277

Iseh, Matthew Joshua²

Department of Statistics, Akwa Ibom State University, Mkpato Enin, Nigeria

orcid.org/0000-0003-2696-7319

Iyoho, Emem Ubong³

Department of Public Administration, Akwa Ibom State University, Nigeria

Paper Number: 240392

Abstract:

The contribution of tricycle operations to urban development in Nigeria, with a focus on Uyo Metropolis, is examined in this paper together with the role that transportation policy plays in the economy. This study aims to determine how tricycle operations contribute to urban development by increasing employment creation in the capital city of Uyo and by investigating how tricycle operation lowers the number of traffic accidents. The study used a survey research design, collecting data from primary and secondary sources through a thorough and structured questionnaire/interview process and Focus Group Discussions (FGD) from cross-sectional surveys of federal road safety corp-Akwa Ibom State Command, market women, civil servants, and commercial tricycle operators. Through a well-structured model and hypothesis testing, the study used economic/statistical development theory as a theoretical framework to determine how transportation operations improve urban growth. According to the results, commercial tricycles have helped people who would have otherwise been unemployed find work directly (as riders) and indirectly (as mechanics and sellers of spare parts), which has aided in socioeconomic development. Additional research demonstrates that tricycle transportation contributes to a lower accident rate in the city of Uyo. Among other things, the report suggests that a government insurance policy be put in place to help Keke operators deal with issues like theft or breakdowns. The goal of the policy is to support the tricycle industry as urbanization increases.

Keywords: *Correlation coefficient, Employment opportunities, Keke operators, Regression analysis, Hypothesis test*

1. Introduction

It is well known that every policy implemented by any government, whether public or private, aims to address current or future needs. In this case, the public sector is given a lot of attention, as the Akwa Ibom state government banned motorcycles from operating in Uyo city on July 9, 2012, in an effort to promote urban development. Eyo (2023). Nigerian urban development depends on government policies. Public policy is viewed as a purposeful set of measures implemented by the government to address the issue of urbanization, of which the Nigerian government should make a concerted effort to address issues related to it, of which transportation is a component. Mobility is the factor that links the transportation sector to the economy as a whole. Eyo (2023)

Statement of Research Problem

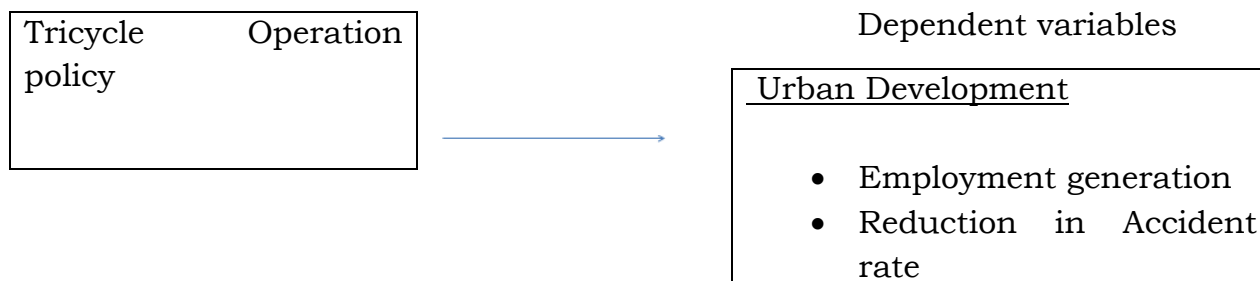
As a result of the state government's policy to address urban issues, the state government banned the operation of private and commercial motorcycles in the Uyo capital city July 9, 2012, and introduced the use of tricycles. As part of their constituency briefing programs, the state administration and lawmakers bought tricycles (called locally as Keke Napep) and gave them to interested transporters at discounted prices in an effort to improve the lives of those who had been prohibited from riding motorcycles. (2023) (www.AKSGonline).

The socioeconomic development of Akwa Ibom State has been equally impacted by the numerous difficulties that commuters and operators have encountered. Among other issues, these challenges include the absence of government policies to support and encourage those involved in the tricycle industry, the high operating costs, the need to meet daily revenue generation goals by drivers, timelines, safety, the impact of task force activities, and the level of experience of operators. If these issues are thoroughly examined, they will help to address the issue of unemployment. Again, the issue of the Area Registration policy in Uyo city has been considered, which indicates that a keke rider is only allowed to operate where he has registered to a particular street or Area within Uyo city. Due to this, riders do not always observe and adhere to the road signs and the rules of carrying more passengers than the numbers stipulated by the Federal Road Safety Corp in order to avoid accidents. Tricycle operators and riders occasionally failed to observe the traffic lights and road signs that served as a guide to overcome and reduce the accident rate. (2019, Garba). Following the aforementioned, two primary goals are established to direct this investigation in accordance with the research questions and hypotheses. These are to: Analyze the relationship between employment creation and tricycle operation policy in Uyo Capital City, and second, analyze the relationship between tricycle operation policy and accident rate reduction in Uyo city.

2. Review of Related Literature and Theoretical Framework

Conceptual Framework of Tricycle Operation and Socio-Economic Development

Independent Variable



2.1 Government Policy

As part of its urban development policy, the Akwa Ibom State government banned motorcycles from entering the city of Uyo on July 9, 2012. A governing body's suggested or carried out course of action is known as a policy. Groups of people that work together to support and steer a community, unit, business, institution, etc. are known as governing bodies. Depending on whether you're looking at a government, corporation, institution, or another body, policies can take many different shapes. In general, policies do have certain characteristics in common: Policies are authoritative statements supported by an individual or organization with the authority to do so. Laws and principles are shaped by policies, which also specify how and occasionally by whom actions should be carried out (Eyo, 2026).

A government policy is a rule or principle that hopefully better guides decisions, resulting in positive outcomes that enhance the community or unit. Government policies contain the reasons things are to be done in a certain way and why. This leads to the development of procedures and protocols to see that policies are conducted in an appropriate manner. Procedures and protocols dictate the “how,” “where,” and “when” of how policies will be executed. (www.wikipedia/governmentpolicy/2024).

Government policy describes a course of action-what government intends to do for the betterment of the people as regards to urban development which brings about a starting point for change. They can influence how much tax the community pays, immigration status and laws, pensions, parking fines, and even where you go to school. While policies are driven to be non-discriminatory,

they can affect specific groups of individuals. Policies are not laws, but they can lead to laws (Eyo, 2023).

Since there were many accidents and criminal activities during the early days of motorcycle use, the Akwa Ibom State Government decided it was appropriate to outlaw the activities. Since the primary goal of this policy was to address societal issues that affected the community, it was possible to introduce tricycle operations in Uyo City. Government agencies are always looking for ways to improve the lives of citizens and communities.

2.2 Development

Development as a concept has endured years of widespread disapproval with regard to its definition. Various academics have attempted to define the notion in different ways. Values inevitably influence how the concept of development is defined. As noted by Chambers (2005), what is beneficial and what kind of change is important if growth entails positive change? These positive developments have historically been associated with higher living standards, improved health care, particularly in lowering the mortality rate, improved people's well-being, and other common good initiatives that are thought to benefit society as a whole (Iseh and Udoh 2022).

According to Eyo (2023), development is defined as a positive or growing progression from one stage to another that indicates improvement. One modernization strategy for urban development has been the introduction of tricycle operations within the city of Uyo. According to Anger (2010), development means progressing from a state of scarcity or lack of money to one of plenty and prosperity. Socioeconomic development, according to Imoh-Ita (2022), is the component of changes or transformations in the citizens' standard of living, whether they are positive or bad.

Jhingan, (2007) termed development as indicators of basic needs, which includes health, education, food, water and housing. The place of social indicators is that they relate to ends which refers to human development of which economic development is a means to those ends, social indicators tell how different countries prefer to allocate GNP among alternative uses.

Generally, development is defined as a state in which things are improving. But it is defined in different ways in various contexts, social, political, biological, science and technology, language and literature. In the socio-economic context, development means the improvement of people's lifestyles through improved education, incomes, skills development and employment. It is the process of economic and social transformation based on cultural and environmental

factors. Atakpa & Udoms (2017) puts it as one of the ways of explaining economic development to see it in terms of the capacity to reduce or eliminate poverty, inequality and unemployment within a growing economy.

Economic development also consists of improvements in various aspects of the life of the entire population of a country evidenced in greater number of useful jobs for employable persons, better levels of education, more and better government services, better agricultural and industrial skills and techniques, higher production and lower personal and regional socio-economic inequalities than before (Kalu, 2021).

Again, there is a close relation between environments, ways of living, and technology of Economic development is the development of the economic wealth of countries or regions for the well-being of their inhabitants. Economic growth is often assumed to indicate the level of economic development. The term “economic growth” refers to the increase (or growth) of specific measures such as real national income, gross domestic product, or per capita income. The term economic development, on the other hand, implies much more. It is the process by which a nation improves the economic, political, and social well-being of its people (Bassey et. al, 2010).

Socio-economic development, thus, is a process of improvement in a variety of ways. It has to influence all aspects of human life in a country. Again, its major indicator, the GDP is a specific measure of economic welfare that does not take into account important aspects such as leisure time, environmental quality, freedom, social justice, or gender equality. Another indicator, the per capita income also does not indicate the level of income equality among people. These indicators do not ensure that the benefits of development have been equally distributed and have reached particularly to the disadvantaged groups of society. This is why a new concept of human development is being used. It is focused on the overall quality of life that people enjoy in a country, the opportunities they have and the freedoms they enjoy.

2.3 Employment-Generation

Employment generation refers to the process of creating new job opportunities within a given economy or society. It involves the creation of work opportunities for individuals, leading to increased employment rates and reduced unemployment. Employment generation can occur through various means, such as the establishment of new businesses, expansion of existing industries, government initiatives and policies, foreign investments, and entrepreneurship. It is a crucial aspect of socioeconomic development, playing a significant role in poverty reduction, economic growth, and overall welfare improvement. (Helling, 2018)

Employment generation is a natural process of social development. Human beings bring with them into the world an array of needs that present employment opportunities for others to meet. Were it not so, the world could not have sustained a more than tripling of population over the past century. To this, in the activities of tricycle operation, the government generates employment through direct (riders) and indirect effort (spare parts dealers, mechanics, Keke importers). The government makes direct efforts at employing people in various departments for administrative purpose considering the Akwa Ibom State Internal Revenue Service Commission (Eyo, 2023). They run various taxation system for the state Government and when result in an increased output of goods and services, they lead to further increase in employment. The various private consultants are also used as an enterprise that are linked to government enterprises might which might also benefit from increase their output and employment also. This way tricycle operation also indirectly generates employment. The ultimate goal of economic growth is to improve the living standard of people in any country. This goal is sustainably achieved, primarily through people's employment income. Thus, employment is seen as the main mechanism through which the goal of socio-economic performance is reflected and achieved (Iseh & Matthew 2025, Ekong et al. 2021, & Helling, 2018). In the same vein, the twin issues of job creation and full employment are regarded as socio-economic fundamentals and the availability of good jobs is mostly used as an important and strategic measure of the health of any economy.

Employment is one of the most important social and economic issues in Nigeria. It is seen as a relationship between two parties, usually based on a contract between employer and employee. In other words, employment is seen as the total number of people in a community, state or country that are gainfully working. According to Kareem (2015), employment refers to the number of people who either work in government establishments or parastatal or private sectors. It could equally mean people who are self-employed or are unpaid family workers. In most civilized countries of the world, achieving full employment has been one of the main macroeconomic focuses of the government in order to attain economic growth and development. A country's socio-economic development is the process where the real per capital income of a country increases over a long period of time. This is measured by the increase in the amount of goods and services produced in a country. However, the level of employment can be used to measure or drive the level of economic growth and development in a country.

2.4 Tricycle Operation policy and Employment Opportunities (Job Creation)

Tricycle operations have many benefits such as job creation to youths both direct (riders) and indirect (spare part dealers, and mechanics) and sources of income. Eyo 2023, in his study on tricycle operation as an alternative of socio-Economic Development within Uyo metropolis revealed that the monetary benefit accrued to KEKE NAPEP operators ranges from (₦90, 000- ₦120, 000) monthly. His finding was supported by the study of Raji, (2012) on the appraisal of Auto Rickshaw as poverty alleviation strategies in Lagos Metropolis, Nigeria.

Tricycles have helped in easing transport challenges in Nigeria as well as in reducing time and resource wastage. For instance, a study by Eyo (2023) revealed that tricycles have helped in reducing all incidents of agricultural losses to a significant level in Nigeria. They also maintained that because tricycles are always available and affordable to the low-income earners, their goods are easily transported to their homes on time with the aid of tricycles; thereby reducing losses resulting from thefts, bushfires, animal destruction and physical damages to the barest minimum. Tricycles, known as “Keke” in Nigeria local parlance, are lightweight, flexible and open-sided vehicles designed to carry three adult passengers and a driver (Omoke, 2019). Tricycles have been represented in the literature with a variety of names, namely low-cost transport, intermediate public transport, paratransit and informal public transportation, (Obiechina 2012).

There is also a high level of Employment opportunities in Uyo Metropolis of which Tricycle operation has really contributed to the generation of employment opportunities to not just graduate or residents but operators within Uyo metropolis who would have remained unemployed of which an estimated number of over 10,000 (ten thousand people) are directly engaged in tricycle activities thereby generating income to those who would have remained unemployed, to ensure mass gainful employment for the idle workforce and also to sustain wealth creation, (Eyo 2023).

3. Theoretical Frameworks

This study adopted the John Maynard Keynes Economically Conserved Theory (1937).

John Maynard Keynes economically conserved, also known as general theory of employment propounded by John Maynard Keynes in (1937), states that every employment depends upon effective demand. For any rate of employment opportunities in transportation depends upon its effective demand as a need.

Effective demand results in output, output creates income. Income provides employment. Keynes in his theory regarded employment as a function of income because of his assumption that all the four quantities above effective demand (ED), output (O), Income (Y), and employment (E) are equal to each other. $ED = O = Y = E$

To this, the theory has been adopted and narrowed to tricycle operation, because for any level of employment in the sector depends upon the level of the demands in the transport service-tricycle operations. This shows that; employment depends on the demand of any variable. It is widely acknowledged that tricycle operation has a crucial role to play in socio-economics development. More specifically, it has been recognized that the provision of a high-quality transport system is a necessary precondition for the full participation of remote communities in the benefits of national development: Adequate, reliable and economic transport is essential, although not in itself self-sufficient, for the social and economic development of rural areas in developing countries. In general, interventions which reduce the transport burden by bringing basic services such as revenue generations, movement of goods and people from one place to another, water supply and health clinics closer to the users, and affordable means of transport that are suitable to people and their daily work are more likely to reduce their transport burden. To this, the relevance of this theory is link to the demand and use of tricycle by commuters and payment made upon services which in returns generate revenue to the government, employment opportunities -income to the riders and movement of people and goods from one place to another.

3.1 Ekwekwekwea theory

The theory was propounded by Eyo (2022), while conducting research to find out the socio-economic development variables of tricycle operation policy in Akwa Ibom State. The proponent observed and linked development of nations, states, local governments, organizations, ministries, agencies, department and individual to input oriented factors such as funding, monitoring/ assessment and evaluation. He opined that an organization, individuals and countries are and will be developed as a result of advance idiosyncratic components emanating from human capital development. To him he was of the opinion that more funding and training of workers in an organization and citizens of a country will bring and offer more opportunities to individuals who would have remained unemployed, Eyo (2023). Urban development in this case is possible through the policy formulation and implementation strategy embark upon by the Akwa Ibom State Government in 2012 in finding a solution to the problem of Employment opportunities and frequent Accident within Uyo metropolis.

3.2 Research Methodology

The study adopted the survey method and descriptive research design with the study population of about 10,500 (three thousand five hundred) that consists of total population of registered Keke riders within Uyo metropolis. (Akwa Ibom State Internal Revenue Service-AKSIRS, 2006). The sample size for this study was 400 of which the sampling techniques used in this study was Taro Yamani. Again, the sampling procedure applied in this research was simple random sampling. This study adopts both primary and secondary source of data collection. Data collected were analyzed using descriptive analysis on a Pearson moment correlation analysis order to arrive at a scientific acceptance. Data are presented in tabular form for easy calculation and comprehension.

4. Data Presentation and Analysis

A total of 400 copies of questionnaires were sent to respondents, out of these, 250 copies representing 62.5% were returned from the field. Table 1 gives details of the returned questionnaires.

Table 1: Summary of the administered questionnaire

Questionnaire	Frequency	Percentage
Returned	250	62.5
Not returned	150	37.5
Total	400	100

Source: field Survey 2026

From the Table 1, it shows that out of 400 copies of questionnaire issued within Uyo metropolis, 250 representing 62.5% were returned and duly filled while 150 representing 37.5% were not returned.

Table 2: Gender Distributions of Respondents

Sex	Frequency	Percentage %
Male	200	80
Female	50	20
Total	250	100

Source: Field Survey (2026)

From the Table 2, it is observed that out of 250 returned questionnaires, 200 were from male respondents, while 50 were from female respondents, representing 80% and 20% respectively.

Table 3: Age distribution of respondents

Year	No. of Respondent	Percentage%
------	-------------------	-------------

19-28	60	24
29-38	100	40
39-48	70	28
49-above	20	8
Total	250	100

Source: Field Survey (2026)

Table 3 reveals that respondents between the ages of 19 and 28 made up 24% of the sample, followed by those between the ages of 29 and 38 (40%) and 39 and 48 (28%) and those aged 49 and over (20%).

Table 4: Class of Respondents

Category of Respondents	No. of Respondents	Percentage %
Keke Riders	195	78
Keke mechanics	20	8
Civil servants	30	12
FRSC-AKS	5	2
Total	250	100

Source: Field survey 2026.

Table 4 shows that 195 of the 250 returned questionnaires, or 78% of the total, came from Keke riders, and 20 of those were 8% of the respondents were from Keke mechanics, 12% were from the civil servants (30 questionnaires), and 2% were from the Federal Road Safety Corp, Akwa Ibom State Command (5 respondents).

4.1 Analysis of Research Questions and Responses

The analyses in this section are done as per the research questions and hypotheses formulated for this study. The analysis is to ascertain the highest positive response rate to the questions on the questionnaire.

Research Question: Does Tricycle Operation contribute to Employment Generation within Uyo metropolis?

Tables 5: Responses on Tricycle Operation generation and Employment generation?

S/ N	Employment opportunities	Extent Of Agreement			S/D %	TOTAL %
		S/A %	A %	D %		
1	Tricycle operators who would have remained unemployed are engaged in the business.	140 (56%)	100 (40%)	8 (3.2%)	2 (0.8%)	250 (100%)
2	Over 10,500 tricycle operators are engaged in the tricycle business	130 (52%)	110 (44%)	8 (3.2%)	2 (0.8%)	250 (100%)
3	Tricycle operation provides means of livelihood to dealers and spare parts operators	135 (54%)	110 (44%)	5 (2%)	-	250 (100%)
4	Graduates who would have remained Un-employed have source of income through tricycle operation	105 (42%)	135 (54%)	10 (4%)	-	250 (100%)

Source: field survey 2026

"Tricycle operators who would have remained unemployed are engaged in the business," according to Table 5, which 140 respondents, or 56% of the sample, strongly agreed with. Eight respondents, or 3.2%, disagreed with it, two respondents, or 0.8%, strongly disagreed, and 100 respondents, or 40%, concurred. Additionally, 130 respondents, or 52% of the sample, strongly agreed with the statement that "Over 10,500 tricycle operators are engaged in the tricycle business," while 110 respondents, or 44%, agreed. Eight respondents, or 3.2%, disagreed, and two respondents, or 0.8%, strongly disagreed. Also, it was observed that 110 respondents, or 44%, agreed with the statement that "tricycle operation provides means of livelihood to dealers and spare parts operators," while 5 respondents, or 2%, disagreed. Of these, 135 respondents, or 54%, strongly agreed. Lastly, 135 respondents, or 54%, agreed with the statement that "Graduates who would have remained unemployed have source of income through tricycle operation," 10% disagreed, and 105 respondents, or 42%, strongly agreed.

4.2 Test of Hypotheses

Case I

Testing of hypothesis to determine if there is a significant relationship between the tricycle operation and employment generation.

H_{01} : There is no significant relationship between the tricycle operation and employment generation.

H_{11} : There is a significant relationship between the tricycle operation and employment generation.

Pearson Product Moment Correlation (PPMC) and regression results are used in testing and giving analysis to the above hypothesis with the examination of the responses to the questions on the relationship between tricycle operation and employment generation by the government.

Table 6: Pearson Product Moment Correlation Coefficients for case I

		EO1	EO2	EO3	EO4
EO1	Pearson Correlation	1	.947**	.932**	.549**
	Sig. (2-tailed)		.000	.000	.000
	N	250	250	250	250
EO2	Pearson Correlation	.947**	1	.935**	.594**
	Sig. (2-tailed)	.000		.000	.000
	N	250	250	250	250
EO3	Pearson Correlation	.932**	.935**	1	.603**
	Sig. (2-tailed)	.000	.000		.000
	N	250	250	250	250
EO4	Pearson Correlation	.549**	.594**	.603**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	250	250	250	250

Source: Researcher's Computation (2026)

The Pearson Product Moment Correlation coefficients generated were 0.947, 0.932, 0.549, 0.935, 0.594, and 0.603, which were found to be statistically significant at the 5% level of significance. Table 6 shows that tricycle operators who would have remained unemployed are engaged in the transport business; over 10500 tricycle operators are employed in the business; tricycle operation provides means of livelihood to dealers and spare parts operators; and

graduates who would have remained unemployed have a source of livelihood through income earned from tricycle operation. Given the high association coefficients found, this suggests that tricycle operation has a considerable impact on employment chances. Thus H_{01} is rejected which implies that there exist a strong relationship between tricycle operation and employment generation.

Case II

Again, the nature and degree of relationship between tricycle operation (independent variable) and employment opportunities (dependent variable), the regression and correlation results are presented in Table 7.

$H_{02}: \beta_1 = 0$ There is no significant relationship between the tricycle operation and employment generation.

$H_{12}: \beta_1 \neq 0$ There is a significant relationship between the tricycle operation and employment generation.

The hypothesis testing here involves statistically evaluating whether the regression coefficient of tricycle operation is significantly different from zero, and to essentially determine if tricycle operation has a meaningful impact on the employment opportunities in the given model. This will be achieved using the t-test. The model is given as:

$$EO = \beta_0 + \beta_1 TRICOP + \varepsilon$$

where EO is employment opportunities, $TRICOP$ is tricycle operation, β_0 is the mean value of the response variable when the predictor variable in the model is zero and β_1 represents a unit change in the level of tricycle operations to a corresponding change in employment opportunities. ε is the error term or unexplained variance.

Table 7: Analysis Results for Hypothesis Two

EO	= 0.105 + 0.243TRICOP
t-stat = (1.242)	(40.370)
Prob. = (0.215)	(0.0000)
R= 0.932; R ² = 0.868; F-stat= 1629.734; Prob. (F-stat) = 0.000	

Source: Researcher's Computation (2026)

If tricycle operations remain unchanged, Table 7 indicates that job possibilities will continue to be favorable at an average of 0.105 units. This suggests that there is a chance that job possibilities will continue to be favorable if tricycle operations stay the same. Likewise, there will be a 0.243 unit rise in employment chances for every unit change in the level of tricycle operations.

With a calculated t-statistic value of 40.370 and a probability value of 0.000 (Sig = 0.000), this positive relationship is statistically significant. However, because the obtained probability value is less than 0.05 at the 5% level of significance, H_{02} is rejected to confirm that there is a significant relationship between the tricycle operation and employment generation.

Tricycle operation (TRICOP) and employment opportunities (EO) are positively correlated, according to the correlation (PPMC) coefficient R value of 0.932. This suggests that keke operations and employment opportunities have a strong and favorable link. Nonetheless, this is considered a strong positive correlation. Additionally, the obtained coefficient of determination (R^2) value of 0.868 indicates that tricycle operation has a good predictive potential to explain changes in employment chances. This indicates how well the model matches the data, with tricycle operation accounting for 86.8% of the variability in employment opportunities. Other variables or factors that were not taken into account in this study are responsible for the remaining 23.2% of the variations. The error term provides this.

Lastly, it can be concluded that there is a goodness-of-fit relationship between tricycle operation and employment opportunities since the calculated F-statistic value obtained is 1629.734 and the probability (sig) value is 0.000. This suggests that there is statistical significance in the relationship. This suggests that the previously stated null hypothesis will not hold, and it is thus rejected. This suggests that the operation of tricycles and the creation of jobs are positively and significantly correlated.

4.3 Discussion of Findings

4.3.1 Tricycle Operations and Employment Generation

Tricycle operators earn income and sustain themselves and their families through the offering of transportation services to commuters, market women and men, and business owners. This is an indication that operating a tricycle is a familiar employment for many not only in Akwa Ibom State but in the entire country. This assertion is affirmed by the established positive and significant relationship between tricycle operations and employment generation. Which is in line with the postulations of Eyo (2023). This indicates that the higher the numbers of tricycle operators, the more employments are generated for the teeming unemployed graduates and non-graduates in Akwa Ibom State and Nigeria as well. Furthermore, a decline in tricycle operations is an indication that, employments would not be generated leading to high number of persons stating unemployment. There is no doubt that tricycle operations is a means

of employment generation hence, this finding affirms what was expected via a priori being in agreement with the works of Eyo (2023).

4.3.2 Analysis of How Tricycle Operations Generate income within Uyo Metropolis.

Table 8: Estimated income for Tricycle Operators within Uyo Metropolis

Year	Daily Ticket Charges ₦	Fare Charges Per Drop ₦	Daily Income to Riders ₦	Monthly Income ₦
2016	70	50	2,500× 30days	75,000
2017	70	50	2,500× 30days	75,000
2018	70	50	3000× 30days	90,000
2019	100	70	3000× 30days	90,000
2020	100	100	3500× 30days	105,000
2021	200	100	4000× 30days	120,000
2022	300	100	5000× 30days	150,000
2023	350	150	7000× 30days	210,000

Source: field work 2026

The fieldwork revealed that in 2016, each Keke rider could earn up to 2,500 Naira per day, with a monthly revenue of 75,000 (seventy-five thousand Naira) minus fuel usage. The daily ticket was sold for 70 Naira, with a 50 Naira fee every drop. Similarly, the same thing was recorded for 2017. Again, in 2018, the ticket fee was 70 naira, each drop cost 50 naira, and the riders' anticipated daily earnings were 3,000 (three thousand naira) out of a monthly income of 90,000 (ninety thousand naira). With a daily income of 3,000 (three thousand naira) and a monthly income of 90,000 (ninety thousand naira), the daily ticket fee and charges per drop both increased to 100 and 70 naira, respectively, in 2019. The daily ticket price and per-drop fees in 2020 were 100 Naira, respectively, while riders' expected daily revenue was 3,500 Naira and their monthly income was 105,000 Naira.

Additionally, it was mentioned that in 2021, the daily ticket price was 200 Naira, and each drop cost 100 Naira. At the same time, the expected daily earnings of a rider were 120,000 and 4,000 Naira, respectively. The expected monthly income was one hundred and twenty thousand Naira. In 2022, it was observed that the daily ticket price was 300 Naira, and each drop cost 100 Naira. Each rider might return home with an estimated 5,000 Naira, assuming they earned around 150,000 Naira each month. Last but not least, in 2023,

the daily ticket fee is 350 naira, the fee per drop is 150 naira, and the daily income of a rider is noted to be 7000 naira, with an expected income of 210,000 naira.

4.3.3 Summary of How Tricycle Operation Generate Income to Operators within Uyo Metropolis bringing about Employment Generation

Table 9: Estimated Annual income for Tricycle Operators within Uyo Metropolis

Year	Daily Income N	Monthly Income N	Total income (Annual) N
2016	2,500	75,000	900,000
2017	2500	75,000	900,000
2018	3000	90,000	1,080,000
2019	3000	90,000	1,080,000
2020	3500	105,000	1,260,000
2021	4000	120,000	1,440,000
2022	5000	150,000	1,800,000
2023	7000	210,000	2,520,000

Source: Field Work 2026

It was discovered that a tricycle operator may earn up to 900,000 (nine hundred thousand) in 2016. The same amount was predicted to have been made in 2017. About 1,080,000 (one million eighty thousand Naira) was earned by each tricycle operator in 2018, and the similar amount was reported in 2019. The analysis also revealed that a rider's yearly income in 2020 was 1,260,000 (one million two hundred and sixty thousand naira), however in 2021, that same rider's annual income was 1,440,000 (one million four hundred and forty thousand naira). Once more, a rider's yearly earnings in 2022 might reach 1,800,000 (one million eight hundred thousand Naira). Lastly, a rider may earn up to 2,520,000 (two million five hundred and twenty thousand) in 2023, according to estimates. To sum up, tricycle operations have significantly improved Akwa Ibom State's socioeconomic development by creating job opportunities, which has raised people's standards of living. Some

riders use their tricycle profits to feed their families, pay their rent and bills, and invest and reinvest.

Table 10: Impact of Motorcycle and Tricycle Operation policy on the rate of road accident within Uyo Metropolis (1992-2023)

Year	Recorded cases	Comments
1992-1995	7000	High Cases
1996-1999	7561	High Cases
2000-2003	6453	High Cases
2004-2007	7433	High Cases
2008-2011	6350	High Cases
2012-2015	1050	Reduced cases
2016-2019	722	Reduced cases
2020-2023	451	Minimal cases

Source: Field Work /AKSFRSC2026.

Table 10 shows that there were approximately 7000 recorded traffic accident cases in Uyo city between 1992 and 1995, 7561 suspected cases between 1996 and 1999, 6453 recorded cases between 2000 and 2003, 7433 recorded cases between 2004 and 2007, and 6350 recorded cases between 2008 and 2011. Motorcycles were in use in the capital city of Uyo throughout these times. However, given the period when motorcycles were outlawed and tricycles took over as the primary commercial mode of transportation in Uyo City, Table 10—which is highlighted in bold fonts—shows that the accident rate decreased from 2012 to 2015 to 1050. It also shows that the number of recorded cases decreased from 2016 to 2019 to roughly 722, and from 2020 to 2023, the total number of recorded cases decreased to roughly 451, indicating a slight decrease in accident cases in Uyo City.

5. Conclusion

Tricycle operating policy has contributed and has demonstrated a favorable association with employment generation, according to the research analysis. This suggests that, given Nigeria's current high unemployment rate, tricycle businesses offer jobs to both qualified and unskilled workers, as well as to both men and women. It goes without saying that tricycle operations have a major role to play in generating cash for the government and the populace, given that

transportation accounts for a larger portion of the economy. The analysis make it abundantly evident that tricycle operations have a significant role in creating jobs in Akwa Ibom State.

Finally, tricycle operation shows significant reduction in the rate of accident within Uyo metropolis as compared to when motorcycles were still invoked. It can be stated that tricycle operation is a significant contributor to urban development of Akwa Ibom State.

The Akwa Ibom State Government should consider empowerment programmes such as the provision of tricycles to teeming unemployed youths in other local government areas of the State which will help reduce the high level of unemployment in the state, as well as contribute to improvement of internally generated revenue of the government. Government should implement a policy on insurance to address some challenges faced by the Keke operators related to accident/break down or theft. In addition, there is need to incentivize tricycle operators and organized some training and workshops on road usage/safety management as this would further boost their operations and enhance reduction of accident cases within uyo metropolis.

References:

- *Ajiboye A. O. & Dosunmu V. A. (2022). Analysis of the sources of finance of micro, small, and medium-scale transport enterprises in Nigeria. The case of commercial motorcyclists. The Interface: A Biannual Journal of Management 3(2): 75-85.*
- *Anger, B. (2010). Poverty eradication, millennium development goals and sustainable development in Nigeria, journal of sustainable development 3(4) pp138-145.*
- *Atakpa O.E & B. E. Udoms (2017). Democracy, governance and economic development of Nigeria: challenges and prospect. (UJSD) VOL. 2 No. 1(2017). PP34-51.*
- *Basseyy, K. J., Udoh, N. S., and Iseh, M. J. (2010). Empirical Analysis of Priority Queuing on a FCFS Queue Discipline in Nigerian Banking System, Journal of the Nigerian Association of Mathematical Physics Vol.16, 521-530.*
- *Ekong, N., Moffat, I., Usoro, A., and Iseh, M. (2021). A comparative study study of the impact of dummy variables on regression coefficients and canonical correlation indices: an empirical perspective. International Journal of Analysis and application, Vol. 19(4): 576-586.*

- Eyo, U. E. (2023). *Tricycle Operation and Socio-Economic Development within Uyo Metropolis*. *AKSU Journal of Administration and Corporate Governance (AKSUJACOG)* Volume 3, Issue 2 — pp. 165-176
- Eyo, U. E., Ekong, E. D., & Atairet, C. A. (2025). *Nigerian Correctional Service and Social Welfare of Inmates in the Nigerian Correctional Service, Akwa Ibom State, Nigeria (2019– 2024)*. *Intercontinental Journal of Education, Science and Technology*, 9(1), 66– 71.
- Garba A. (2019). *Commercial tricycle and employment generation in Kaduna State, An Academic Thesis, Kasu*.
- Helling, A. (2018). "Transportation and economic development: A Review", *public works Management & Policy*, Vol. 2, No. 1, pp. 79-93.
- Imoh, I. I. (2012). *Rural Development Policy and National Development: The Way Forward*. *Journal of Resourcefulness and Distinction*, 4(1).
- Iseh, M. J. and Udoh, N. S. (2022). *Modelling the Risk Index of Infant Mortality in Nigeria*. *Abacus (Mathematics Science Series)* Vol. 49 (2):350-373.
- Iseh, M. J. and Matthew, M. A. (2025). *Comparative Cost-analysis on Progression in HIV/AIDS Antiretroviral intake Stages using Semi-Markov Chain and Survival Analysis Models*. *African Journal of Mathematics, Statistics and Actuarial Science*, Vol. 1(2): 27-51.
- Iyer, N. V. & Badami, M. G., (2007). "Two-wheeled motor vehicle technology in India: evolution, prospects and issues," *energy policy*, Oxford: Elsevier, ISSN 0301- 4215, ZDB-ID 186295-9. - Vol. 35.2007, 8, p. 4319 4331.
- Jhingan, M. L. (2022). *The economics of development and planning*. Vrinda Publications (P) Ltd.
- Kalu, J. E. (2021). *Issues in problems and policies of development in Atakpa O.E & B. E. Udoms (2017) Democracy, governance and economic development of Nigeria: challenges and prospect. (UJSD) VOL. 2 No. 1(2017). PP34-51*.
- Obiechina, M. E. (2012). *Analysis of Revenue Generation as a tool for socio-economic and Infrastructural development in Nigeria*. *CBN Bullion*, 34(4), 41-54. In Anyanwu, J. C (1993) *Monetary Economics: Theory, Policy and Institutions*, Onitsha-Nigeria: Hybrid Publishers Ltd.
- Omoke, N. I., Lasebikan, O. A., Onyemaechi, N. O. & Ajali, N. (2019). *Auto tricycle injuries and the vulnerability of occupants and pedestrians in a developing country: A multi-center study*. *Nigerian Journal of Clinical Practice*, 22, 971-976.
- Raji, B. A. (2018). *Appraisal of autorickshaw as a poverty alleviation strategy in Nigeria: an example of Lagos Metropolis*. *Ethiopian Journal of Environmental Studies & Management*, 8(1):81–96.
- [www.google](http://www.google.com).AKSG.online.2023
- [www.wikipedia](http://www.wikipedia.com)