# Causes of Non-Compliance with Road Setbacks in Awka Capital Territory

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# **ABSTRACT**

Due to the issue of non-compliance with road setbacks in Awka capital territory, (ACT) resulting to different kinds and magnitudes of environmental problems like road accident, human congestion, traffic congestion and flooding. This study assessed the Causes of Non-Compliance with Road Setbacks and their associated environmental implications in ACT, with a view to providing a workable template and modified framework for solving the problems of non-compliance with road setbacks. To achieve the stated aim, the study identified the causes of non-compliance with road setbacks in ACT. The causes of non-compliance with road setbacks in ACT were corruption among planning authorities, failure of law enforcement agents to enforce regulations; improper city planning; population growth; among others. The study made the following need recommendation: the urgent government to develop and introduce stronger Commission/Board/Authorities checkmate the other existing planning agencies.

*Keywords:* Non-compliance, Road, Setbacks, and strategic advantage.

## 1.1 INTRODUCTION

In spite of increasing knowledge of modern planning and number of planners, physical development and planning in many Nigerian cities, such as Awka Capital Territory of Anambra state has remained a theatre of chaos and disorder. This is manifested in urban sprawl, poor access to dwellings, poor/bad drainage, and housing congestion, uncontrolled and increasing

density of physical development, among many other problems.

Formal urban and regional planning activities in Nigeria began with the Planning Ordinance of 1902, which empowered the then Colonial Government to establish Government Reservation Areas (GRAs). As Oyesiku and Alade (2004) noted, the Ordinance, which specified how European reservation areas should be located and segregated from the native location, was the first town planning regulation that made conscious attempt to effectively plan for any segment of a Nigerian town. This was the first attempt to institutionalize colonial or formal urban development in Nigeria and thus formed the fulcrum upon which urban and regional planning projects' execution would be carried out in Nigeria. Urban and regional planning delineates the forms in which urban growth should be channeled.

Prominent among the challenges of metropolitan areas/mega cities are the tasks of rapid territorial expansion, cultural and ethnic diversity, and non-compliance to planning standards, extensive infrastructure networks, urban global poverty, competitiveness, transportation, communication, social services, and potentials for environmental degradation, urban aesthetics, energy consumption, physical planning regulation and security, lack of executive capacity to deliver or implement relevant urban and regional planning laws. It is within this perspective that this paper is poised to assess the level of compliance to space standards for urban development and control measures that can

be adopted for effective development control within Lagos Metropolis.

## 1.2 Objectives

The aim is achieved through the following objective

To identify the causes of non-compliance with road setbacks in Awka Capital Territory;

# 1.3 Research Hypotheses

The following hypotheses were postulated to guide this study:

H<sub>0</sub>: The causes of non – compliance to road setback in the three road types (Trunks A, B and C) in ACT are not significant.

## 1.4 RESEARCH METHOD

The study was conducted by mainly through the survey method and interview of Professionals and non-professionals in ACT, Awka in Nigeria. Secondary data were obtained through books, journals, and internet. Empirical works of other scholars were consulted. A simple size of 400 was obtained from the population of 778,061 at 5% error tolerance and 95% degree of freedom using Yamane's statistical formula 385(96.3%) of the questionnaires distributed were returned while 15(3.7%) of the questionnaires distributed were not returned. The questionnaire was designed in Likert scale format. The researchers conducted a pre-test on the questionnaire to ensure the validity of the instrument. Data were collected using relevant techniques (survey design, field measurements, ARC GIS 10.4 software, and Maps). One sample T - Test was used to test the hypothesis.

### 1.5 LITERATURE REVIEW

# 1.5.1 Essence of Setbacks in Developmental Projects

Spear (2006) studied bluff erosion of Lake Superior at Madison-Wisconsin using both experimental and field survey methods. Considering the reasons for setback requirements, he stated that Lake Superior bluff shorelines have been eroding for thousands of years and will continue to do so. Because the erosion is often episodic, land owners may not observe bluff recession

over periods of a few years. There may be periods of ten or more years with little or no erosion followed by several years of rapid erosion. To protect a structure from this erosion and resulting bluff retreat, it is necessary to have sufficient building setbacks to account for this continuing process.

This will minimize the future chances of a building having to be moved or even destroyed because of an unsafe location at the top of the bluff. Akhuewu (2010) assessed the impacts of on-street parking on commercial activities in Auchi and identified the characteristic of on-street parking which are noted to be the nature of parking which affects the street based on the nature of the environment. He observes that in developed countries like Europe and America, majority of the vehicle owners in a commercial area parked their cars in accordance with the parking principles and guideline.

This is because there are provisions of parking space that are enough for both the users of the spaces and those residing within the area. This was as a result of planning with the inclusion of parking facilities to discourage any obstruction on the streets. The various characteristics that linked with street parking advantageous due to monitoring and control of street parking in the developed nations of the world. In the African context, the nature of street parking is different from the way it is in developed nations as non-compliance with the parking lots provisions abounds. In some areas within the continent, roads are being constructed without provision of or adherence to any setback, walkways, and other necessary components of the road.

In the work of Rye (2010) on Parking Management for policy makers in developing cities, he noted that the construction of new roads, the expansion of existing roads, the building of parking lot require the acquisition of part of the exchange space. The more space allocated to transport, the greater the requirement for more traffic space. According to him

automobile has an insatiable appetite for space, it uses space at home, at work, shopping and even when some spaces are empty, and they are tied up or reserved for the automobile. Automobiles do not only have exclusive space for moving, they also have a" zone of influence" which expands as the speed and quantity of traffic increases, thus reducing the effectiveness of exchange space and the level of interaction.

Gruan (1972) studied cost of getting to work in New York City noted that private Meanwhile, on-street parking in most cases results into chaotic traffic due to parked cars along the road and this has led to large amount of traffic circulating looking for a parking space, thus contributing congestion and pollution. Aluko (2011) assessed the level of public compliance to space standards for urban development in Lagos State using field survey (questionnaire survey and interview methods). He found that from evidence on ground many parts of the state are besieged with the issue of none observance of set environmental development policies and laws, some of the common contraventions identified include:

Encroachment on public rights of way and open spaces, Buildings spring up under high-tension lines with their roofs a few metres below the lines, General violation of urban and regional planning laws in most states of the federation and construction of properties on public utility setback. He stated that this occurrence has caused the purpose of establishing these laws and policies which is sustainable development to be partially defeated or relegated to the background.

Asiyanbola and Akinpelu, (2012), studied the challenges of on-street parking in Nigerian cities' transportation routes using questionnaire survey method. They observed categories of space in urban centres to include exchange space and movement space, which related to motor park, interchange point, etc.

As city transportation system expands, it takes up more spaces. They also noted that

one of the major goals of transportation planning, especially in the provision of adequate road infrastructures, walkways, setbacks, etc; is to ease the movement of passengers and goods on urban roads. There is therefore need for extensive walkways and setbacks in the design of any road network as there may be need for expansion with time.

Olorunfemi (2013) assessed onstreet parking in Lokoja Nigeria, using questionnaire survey and field observation methods. In his findings he stated that in most of the cities in developing countries the planning of road networks lacks the provision of the entire basic infrastructure to be provided for the safe and orderly movement of vehicles. An ideal road network should have exclusive lanes to segregate fast moving and slow moving vehicles, cycle lanes, exclusive bus bay, service lanes and extensive walkways and setbacks. When all these are not strictly adhered to, there is bound to be problems time like road failure, with congestion, accidents and subsequent loss of lives and property through demolition processes in the bid to expand the existing roads.

# 1.5.2 Causes of Non-compliance with Road Setbacks Rapid Urbanization and Population Growth

Okpala (1987), in his review on regional planning in Nigeria and other developing countries stated that rapid urbanization, rural-urban migration and decades of steady economic downturn, decay of urban infrastructure and negligent urban housekeeping have contributed to non-compliance with building regulations in many Nigerian cities. One problem of the Nigerian urban built environment is non-compliance with building bye-laws and regulations. The major areas of default are setbacks, building along utility lines and non-adherence to the provision of adequate ventilation.

Rodeny and Brian, (1995) in their book titled "Transportation systems, policy

and planning: A Geographical Approach", noted that unmanaged growth of motorization is the root cause of many of today's urban transport problems.

Due to imperfect systems of transport pricing, prices do not reflect the true cost of the provision of the transport services and facilities. Consequently, this has led to a waste of resources, insufficient funds to develop and maintain infrastructure. distortions in modal choice and generation of externalities (pollution and congestion). Ideally, an efficient pricing system should be in place to realize the full cost of travel from the motorists to rectify the current situation. In addition rapid rise in motorization has led to major problems with congestion in most growing cities.

Weiner (2003) studied the global epidemic of illegal building and demolition and their implication for Jerusalem, using field survey method and critical review of works of earlier researchers. He opined that due to rapid global urbanization, millions of people in third world cities lived in slum. It has also been predicted that by 2030, the number of slums will double if the current situation persists.

Ogunbodede, (2006) evaluated the management of traffic congestion AkureOndo State using GIS applications and field survey methods. According to him, many urban centers in Nigeria lack adequate transport facilities that ensure smooth intra urban movement. This is because its rapid growth of cities anywhere in the world has not impacted only on the land use, but also on the spatial expansion. With this need for spatial expansion over time, which is not properly accommodated in some early provisions in the urban physical plan or may have exceeded the size of provisions made over time; people tend to encroach into established setbacks. For example, the commuting distance of Lagos increased from 20km in 1970 to 35km in 1995; that of Kaduna increased from 6km to 10km during the same period, while in Akure, the commuting distance increased from 5.2km in 1966 to 6.4km in 1976, 10.5km in 1986 and, 13km in 1996 and 1996.

The increase in commuting distance has impact on trip attraction, fares paid by commuters and traffic build-up in some land use areas. He also recommended the need for different modes of transportation as a vital tool to combat this problem in the land transportation system.

Attenkah, (2011) in his review report titled "Demolition of all unauthorized structures in Tema: Ghana urban issues" stated that due to the increasing rate of urbanization in developing countries illegal structures as a form of shelter are common place. This has resulted to the development of slums in these countries and extensions in already existing buildings that are not in tandem with the existing plans of some of the affected areas.

In a research conducted by Ajayi, (2011) on "Traffic Management in A Rapidly Growing City: A Case Study of Ado-Ekiti, Ekiti State, Nigeria" he applied field survey and questionnaire survey methods and observed that the change in the status of Ado-Ekiti as the State Capital in 1996 has further strengthened its role as the economic nerve center and administrative headquarters of Ekiti State. This led to mass movement of people to the state, and increased inter and intra city travels. This has resulted to continuous change in the land use mix in Ado-Ekiti with consequent implications on the transport network, stock and services. These have led to increased contacts, interaction and physical movement on the road in the urban center, resulting to increased accidents. mixed land activities, erectence of some illegal structures along the roads, spillover effects where vehicles now use the setbacks established for pedestrians as their own passage way, delay and the platoons of vehicles on major roads in the state capital. Hence the rate of increase in population and traffic volume is putting more and more pressure on infrastructure and traffic in Ado-Ekiti.

Michael (2014) worked on," traffic management in a rapidly growing city: the case study of Ado-Ekiti, Nigeria" using Geo information techniques and field survey method. In his findings the issue of inadequate transport facilities has been a long standing one in Nigerian cities. This includes bad roads, pedestrian walkways, street furniture and parking facilities etc. Illegal parking is also a major problem that causes traffic congestion in environment. This is because on-street parking is a common phenomenon in the absence of parking facilities. Therefore, the corridors meant for efficient movement of automobiles is reduced. Thus, it becomes a major problem in cities and especially in the Central Business District (CBD), where multi-storey buildings are common and the land use is devoted mostly to commercial purposes.

### 1.6 RESULTS AND DISCUSSION

# **1.6.1** Test of Hypothesis

The causes of non – compliance to road setback in the three road types (Trunks A, B and C) in ACT are not significant. In testing this hypothesis: One-Way ANOVA was used to test for the significance of the Causes of non-compliance as responded by the Professionals and Non-Professionals, then at the end conclusion was made.

Table 3.1 presents T-test for hypothesis two while table 5.61 presents one-sample test for hypothesis two.

Table 1: One-way ANOVA for non-professionals						
	N	Mean	Std. Deviation	Std. Error Mean		
Causes	12	3.863862E0	.4974782	.1379756		

Source: Author's statistical computation from field work (2018).

From table 1, it is observed that the causes of non-compliance with road setback are significant with mean of 3.8638

Table 2: One-Sample Test for non-professionals							
Test Value = 0							
	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference		
					Lower	Upper	
Causes	28.004	11	.000	3.8638615	3.563238	4.164485	

Source: Author's statistical computation from field work (2018).

From Table 2, it is observed that level of significance difference is 0.000 which is less than 0.05. This shows that the causes responded by non-professionals are significant in ACT.

Table 3:One-Way ANOVA for Professionals							
	N	Mean	Std. Deviation	Std. Error Mean			
Causes by Professionals	12	4.3500	.28911	.08346			

Source: Author's statistical computation from field work (2018).

Table 4: One-Sample T-test for Professionals							
	Test Value = 0						
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference		
					Lower	Upper	
Causes by Professionals	52.122	111	.000	4.35000	4.1663	4.5337	

**Statistical tool:** One sample T - Test.

**Reason for choice of tool:** One level of observation was analyzed.

**Decision Rule:** Accept the null hypothesis if the p – value is greater than or equal to 0.05, otherwise, reject the null hypothesis.

# Degrees of freedom: 11

Decision, Conclusion and Reason: From Table 4, it is observed that the p-values of the tests are 0.00, which is less than 0.05.

This implies that the causes of non-compliance to road setbacks in ACT are significant for both the non-professionals and the professionals.

# 1.6.2 DISCUSSIONS OF RESULT

From the result of the analysis, the causes of non-compliance had been identified through the opinions of non-professionals and professionals in the ACT as follows:

Failure of law enforcement agents, corruption among planning authorities, improper city planning, rapid urbanization, population growth, difficulty in land accessibility, nonchalant attitudes of Government, high cost of land acquisition, high cost of living, competition for business space, siting of structures before road construction and greedy attitudes of developers.

Furthermore, it was confirmed by non-professionals and professionals that the major causes of non-compliance with road setbacks in ACT, Were corruptions among planning authorities and failure of law enforcement agents respectively through the ranking of order of PCA factor score coefficients. This finding is in line with the findings of literature (Aliko 2000 &Ogeah 2013).

The finding also agrees with the responses of some Ochabridgade (non-Governmental organization) task force and some staff of Anambra State Physical Planning Board (ANSPPB), interviewed at their sites and offices respectively. The result disconfirmed the hypothesis. It disqualified the work of Ikejiofor (2005), Ugonabo and Emoh (2013) and FAO 2008 which stated that difficulty in land accessibility is the majors factor that promotes the resistance of people to leave their old sites of business, residence or others only to expanding this fixed piece of land to a point of encroaching into the setback area. Cost of living is part of causes of non-compliance with road setbacks in ACT, but not significant.

# 1.7 CONCLUSION AND RECOMMENDATIONS

## 1.7.1 Conclusion

Based on the findings, the following conclusions were drawn: there is massive incidence of non-compliance with road setbacks in ACT and the major causes of it are the corruption of planning authority and failure of law enforcement agents. Due to the low level of compliance to the ACTDA standard, it is also concluded that there is

high rate of non-compliance with road setbacks in siting of structures in ACT. Consequently, having the high rate of non-compliance in ACT, Anambra State, it would mean to result danger to ACT environment Causes of non-compliance with road setbacks were significant in ACT.

### 1.7.2 Recommendations

Provided that there is massive incidence of non-compliance with road setbacks in ACT, to adequately handle the problem of non-compliance with road setbacks in the area, the developed template should be used accordingly. Also, there is need for post occupancy assessment which periodic/ deals with the continuous systematic assessment of the level of compliance road setbacks to environmental orderliness of sited structures of aesthetics, terms drainage, accessibility, productivity and sustainability. This can effectively be done by Estate Managers/Surveyors for sustainable urban environment and socio-economic development. Without proper management and maintenance, there would be nothing like sustainable development.

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How to cite this article: Okafor B.N. Causes of non-compliance with road setbacks in Awka Capital Territory. International Journal of Research and Review. 2020; 7(9): 75-81.

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