

Property Development and Land Use Planning Regulations in Nigeria

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Abstract— Several land use planning regulations have been enacted in Nigeria over the years to control property development so as to ensure sustainable human environment. Despite the existence of these regulations, property development is still being carried out in ways that constitute environmental challenges in cities. With samples drawn from Abia State, this study examined the level of compliance of property development with planning regulations in Nigeria. The study was based mainly on primary data which were collected through direct observation, questionnaires, and through measurement of geometric variables of the buildings and their immediate outdoor spaces. Cluster and simple random sampling techniques were used to proportionately select buildings and respondents that were surveyed. Data collected were analyzed with descriptive and inferential statistics. Specifically, the *t*-test for paired samples was used to test the hypotheses of the study. Findings show that the level of compliance of buildings to planning regulations is not significant, with mean compliance rate being less than 20%. It also reveals that there is significant difference in the level of compliance to planning regulations between buildings constructed in the urban areas (with mean compliance rate of 14.5%), and those constructed in suburban/ rural areas (with mean compliance rate of 42%). Certain factors were found to be responsible for the low level of compliance among which are low level of physical planning and inadequate funding for planning authorities. The researchers therefore recommend that government should embark on the preparation of up-to-date land use plans for various towns and villages; implement the autonomy of the town planning authorities; and create the enabling environment for effective development control across the country.

Keywords— Abia State, planning regulations, property development.

I. INTRODUCTION

Nigeria is one of the countries with high rate of urbanization in Sub-Saharan Africa, with many of her large towns growing at between 4 and 5% per – annum despite the economic downturn (Ogundele, et. al., 2011). As the cities are growing, buildings are springing up like mushrooms especially at the urban fringes, in agricultural land, and without formal planning or layout. Property development in Nigeria has evolved from crude indigenous structures which were fabricated with local building materials like mud, wood, and thatch during the pre-colonial/early colonial era, to sophisticated buildings designed to cover large expanses of land, with multiple floors, and advanced technologies/materials in present dispensation. The changing trend in property development has reflected the changing settlement structure occasioned by rapid urbanization globally. In some developed cities of the world like New York, London, Amsterdam, Beijing, Dubai, Tokyo, etc., property development has kept pace with urbanization trend hence the existence of high-tech buildings towering above fifty floors, and compensating adequately for the limitations posed by urban space inadequacy. But in most cities of the developing countries, Nigerian cities inclusive, technological development has not matched with rate of urbanization. Population explosion in cities has put urban housing under pressure, and property developers have had to maximize construction on their limited urban land without considerations to land use planning regulations and the implications of urban densification on environmental safety and convenience. Under such circumstances, property development in some cities of the developing countries has given rise to increased environmental challenges as exemplified by traffic congestion, flooding, overcrowding, and waste pollution. Underpinning the discipline of town planning and its instruments of land use regulation is the belief that allowing uncontrolled property development results in haphazard, and socially undesirable outcomes as mentioned above. State intervention is needed to curb and

shape market and human impulses, especially in land development, and this is the justification for land use regulations and development control by town planning authorities.

Land use regulations are rules which indicate how land in particular areas can be developed and applied (Goodfellow, 2014). Land use regulations serve the purpose of restricting development in order to give effect to urban plans. Land use planning regulations in Nigeria has its origins in British town planning activities that developed initially in response to the negative urban impacts of the industrial revolution. They were essentially aimed at improving health and safety by regulating overcrowding, pollution, inadequate services, facilities and amenities. The land use controls were intended to better organise urban space and produce ordered, safe, hygienic living environments (Ola, 2011). The British colonial administration used two major laws to achieve her planning objectives, and these were the 1917 Township Ordinance, and the 1946 Town and Country Planning Ordinance. Within the 1917 Township Ordinance the urban areas in Nigeria were divided into three classes of townships: the first class township of which Lagos was the only one at that time; the second class townships which were towns located on the rail lines; and the other towns which were regarded as third class townships. The 1946 Town and Country Planning Ordinance, which was fashioned from the 1932 Town and Country Planning Act in Britain, was meant to regulate the improvement and development of the different parts of Nigeria through planning schemes and planning authorities, (Arimah, & Adeagbo, 2000). The 1946 Town and Country Planning Ordinance became the mainstream legislation on land use planning in Nigeria for about 46 years, until it was replaced by the Nigerian Urban and Regional Planning law CAP 88 of 1992, which was later amended as Decree 18 of 1999. This legislation which is the extant law for physical planning in Nigeria conceptualized planning at the three tiers of government in Nigeria: Federal, State, and Local government, administered by three planning establishments: the Planning Commission, the Board, and the Planning Authority respectively. It equally assigned responsibilities of regulating property development to the Development Control departments of the various planning establishments. Other instruments used for land use regulation in Nigeria include: the national Building code 2006; land use zoning, minimum plot size and subdivision regulations promulgated by different state governments and the Federal capital territory Abuja. In Abia State, the local version of the urban and regional planning law of 1992 was enacted as the Abia State

Planning Board and Planning Authority (ASBPBA) Law CAP 38 Volume II, 1999-2000. Based on this law, the public notice of March 7, 2006 that gave town planning form and impetus in Abia State was published (Umezurike, 2015). This public notice established fifteen Town planning Authorities in the fifteen local government areas of Abia State, whereas the state capital territory continued to be administered by the Umuahia Capital Development Authority (UCDA). This marked the beginning of purposeful physical planning and development control in Abia State.

Despite the existence of these planning laws and regulations and the establishment of the planning authorities, there is a common perception in most states of Nigeria, particularly in Abia State, that property development is still being carried out in ways that constitute environmental challenges in cities (Aluko, 2011). It is believed that in new residential developments, internal and external space standards are being violated. It has been argued that property developers flagrantly contravene planning regulations in the course of development after they have duly secured planning approval, whereas some do not actually obtain approval before construction. A pilot study carried out by the authors in the year 2016 indicated general noncompliance to regulations relating to access and roads, building setbacks, building density, habitability of rooms, location and site plans, lot sizes, and parking. This has implications for both accessibility and sustainability, and for quality of life including health. Also, there has been growing concern that the internal space of new dwellings may be getting smaller, and that less family size housing is being provided; smaller sizes of windows, doors, internal storage spaces, and spaces for relaxation are being provided (compliance with internal space standards of buildings will be covered in subsequent studies). Unfortunately the level of compliance of property developments to land use planning regulations in Nigeria has not been empirically determined. Using geometric survey techniques and samples drawn from the seventeen local government areas of Abia State, this study therefore examined rate of compliance of property developments with town planning regulations in Nigeria, with the view to deriving recommendations that would guide government policy on development control.

II. THE STUDY AREA, ABIA STATE

Abia in south-east region became a State in the federal republic of Nigeria in 27th August 1991. Abia is located between latitudes 04°45' and 06° 07' north; and longitudes 07° 00' and 08° 10' east. It is bounded at the west by Imo State, at the south by Rivers State, at the north by

Anambara and Ebonyi States, and at the east by Cross-River and Akwa-Ibom States. Abia State is made up of seventeen local government areas while the state capital is Umuahia. Abia State was among the first three states in Nigeria to domesticate the Nigerian urban and regional Planning Law CAP 88 of 1992 (Umezuruike, 2015), as the local version of the law (ASBPBA Law CAP 38 Volume II, 1999-2000) was passed in May 1999. This informed the choice of Abia State for this study. Figure 1 is the map of Nigeria showing the thirty-six states and federal capital territory Abuja; and Abia State showing the seventeen local government areas. Upon the creation of Abia State in 1991 she inherited the Aba and Umuahia Area Planning offices from the old Imo State, and these two became the foremost planning agencies in the State. The Aba Area Town Planning Office superintended over the Aba town planning authority, the Obingwa town planning authority, Isialangwa town planning authority, and the Ukwa town planning authority. The Umuahia Area Town Planning Office supervised the Ikwuano/Umuahia town planning authority, the Isuikwuato town planning authority, the Bende town planning authority, and the Arochukuw/Ohafia town planning authority. The two area town planning authorities then at Aba and Umuahia coordinated physical planning activities at the eight planning authorities across the State, and reported to the director of planning, and

then to the commissioner responsible for the ministry of lands, survey and urban planning. The passage of the Abia State Planning Board and Planning Authority law in 1999 abolished this old arrangement and made the whole of Abia State a planning area. It also established Town Planning Authorities in all the local government areas, with UCDA taking care of Umuahia north and south local government areas. However, the state planning board as envisioned by the law (CAP 38) is yet to be established till date, hence the department of planning under the act is currently operating under the auspices of the ministry of physical planning and urban renewal.

III. MATERIALS AND METHODS

The study was based mainly on primary data which were collected through direct observation, sampling of questionnaires, and through measurement of geometric variables of the buildings and their immediate outdoor spaces. The researchers adopted a triangulation of survey designs involving sampling of questionnaires, geometric survey, and oral interview. The geometric variables of buildings, their streets and outdoor spaces were measured using a handheld distance laser (SPECTRA QM55), and measuring wheels. Questionnaires were sampled on staff of the town planning authorities, while oral interviews were conducted on some developers.

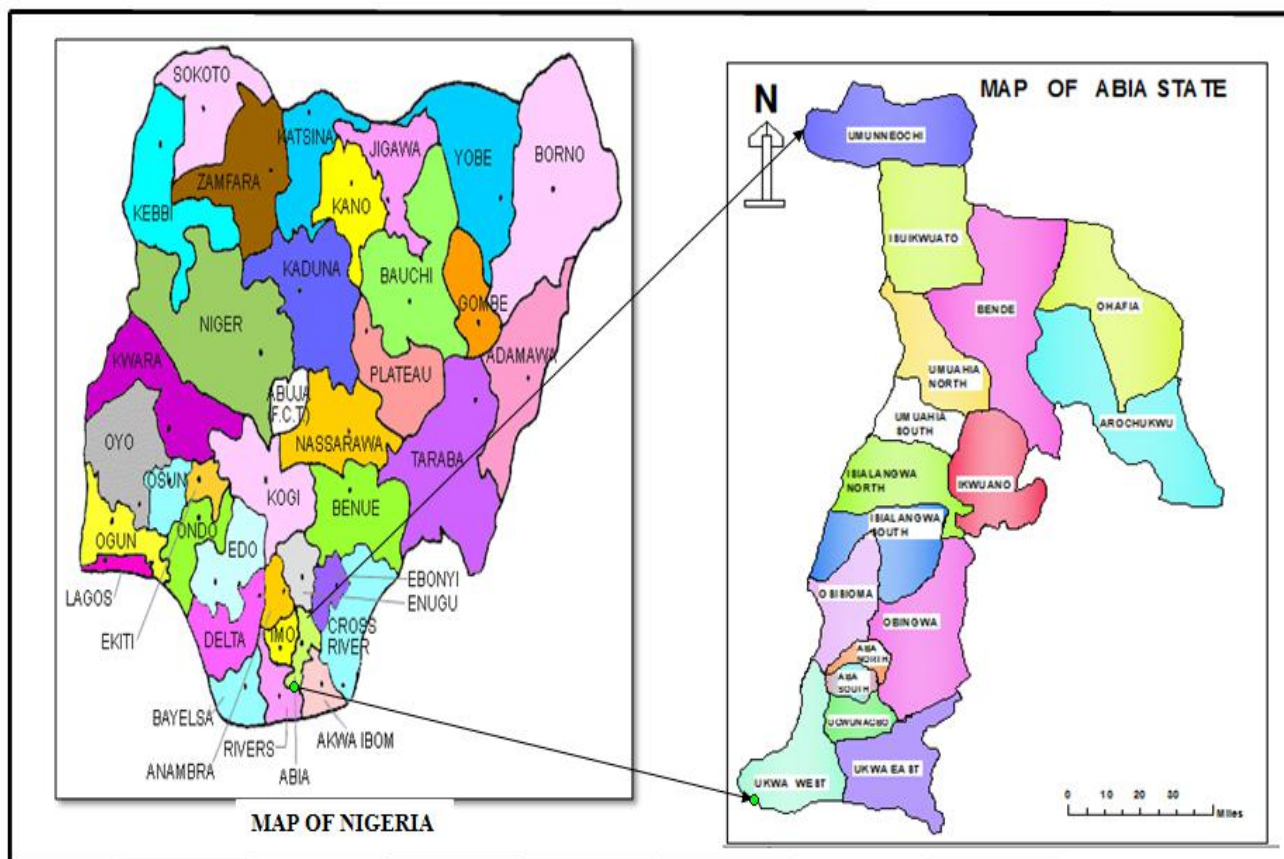


Fig.1: Map of Nigeria/ map of Abia State showing the seventeen local government areas

The population of study is classified into two: the buildings constructed in Abia State in the past ten years; and the total number of planning staff in the town planning authorities in the state. The buildings constructed in Abia State within the past ten years (2006 – 2016) amounted to 31,099. The study adopted this time frame because it represents the period in which active town planning has taken place in the state following the public notice of March 7, 2006 that marked the implementation of the ASPBPA Law CAP 38 of 1999-2000. The population of professional planning staff in all the town planning authorities in the state is 64. These population data were collected from the town planning authorities in fifteen local government areas of Abia State and the UCDA. For the buildings, the sample size of approximately 156 was estimated from the population; and for the planning staff the sample size of 45 was also estimated using the model derived by Miller and Brewer (2003). Cluster sampling technique was used to divide the study area into sixteen regions following the local government territorial structure/ planning authorities, and a given number of buildings and planning staff were selected from each region proportionately, with regard to their respective populations (see table 1). Simple random sampling method was then used to select the buildings where measurements were carried out as well as the planning staff that were sampled questionnaires. Data collected were analyzed with appropriate parametric tests using SPSS for Windows, Version 17. Specifically, the *t* - test for paired samples was used to test the hypotheses, and P value of ≤ 0.05 was considered statistically significant.

IV. RESULTS AND DISCUSSION

4.1 Major Land Use Planning Regulations in Abia State

The extant land use planning regulations in Abia State are part of national planning regulations for physical planning, and building codes in Nigeria; as well as other regulations enacted at the state level through the ASPBPA Law CAP 38 1999-2000, the Umuahia Capital Development Authority law No 8 of 1992, and other regulatory standards in the relevant state ministries. Some of the major land use regulations are as follows.

- i. Land use zoning: Regulations which segregate land into separate and often singular uses, such as residential, commercial, industrial, residential/commercial, and recreational. Zoning is usually articulated as part of layout schemes. Within each zone, particular activities are allowed or prohibited.
- ii. Building set-backs and height requirements, including fencing requirements: The distance between any residential building and property boundary (beacons) at the frontline should not be less than 6metres with 3metres at the rear, right and left side airspaces respectively in all government reservation areas (GRA) and all private approved layouts. Building set-backs from road centreline for different categories of roads are: Highways (18m); Primary roads (14m); Secondary roads (10m); residential collector roads (8m); residential access roads (8m).
- iii. Minimum plot size and subdivision regulation: Constraints relating to the minimum size which plots can be, and rules and laws pertaining to the subdivision of land into smaller plot sizes. These regulations aim to prevent excessive densities. High density plots are to be between 450m² to 600m²; medium density plots (600m² – 750m²); and low density plots to be 750m² up to 1,200m²
- iv. Floor area ratios and limits (FAR): Floor Area Ratio is a measure of development intensity, which is expressed as a ratio of the gross floor area of a building to its total land area (net). The purpose of this ratio is to control the bulk of a building and intensity of activity to a level, which is consonant with the level of existing or proposed infrastructure facilities. The FAR is generated by dividing the building floor area by the plot area. The recommended floor area ratios are: Residential = 1:1 (high density); Commercial = 1:3; Industrial = 1:0.75 and Community facilities = 1:0.75
- v. Plot Coverage: It measures the percentage of the total floor area of the plot covered by building. For high density area the maximum plot coverage is 50%; Medium density 40%, and low density 30%.
- vi. Infrastructure standards (for soft and hard infrastructures): Minimum standards or guidelines for the provision of infrastructures (e.g. street width, public space, service levels). Any thoroughfare or public way shall not have right-of-way less than 10.0m in width (i.e. 6.4m for vehicles, 0.6m and 1.2m for drainage and pedestrian walkway on both sides respectively) which has been dedicated or deeded to the public for public use.
- vii. Post - construction requirements: Certificate of fitness for habitation; As-Built Drawings; Changes in use and habitation. These are statutory documents to be submitted to the town planning authorities by the developer, in which the post construction state of the building and any possible change of use are

assessed by the appropriate authorities, and duly certified.

4.2 Buildings Constructed in Abia State between 2006 and 2016

Data on total number of buildings constructed in Abia State in the past ten years were collected from the town planning authorities in the state and Umuahia Capital Development Authority (UCDA), and are presented on table 1. It shows that a total of 31,099 buildings have been built within the period, with only 8,431 (27.1%) of the building having obtained planning approval or

undergoing the process of obtaining approval. This implies that about 72.9% of all properties developed in the state do not have development permit and are therefore in the contravention of land use planning regulations in the state. Table one also shows that the territory under UCDA recorded more growth in terms of number of buildings constructed within the period (28%), followed by Osioma region (21%), Aba-north (6.8%), Obingwa (6.2%), and Aba-south region (6.0%). Regions with the least growth rate in property development are: Umunneochi (1.8%); Ukwavest (2.0%); Ukwavest (2.1%); and Bende (2.8%).

Table.1: Buildings developed in Abia State between 2006 and 2016

S/N	Local Government Area	Number of Buildings	Number of buildings with planning approval	% Number of buildings with approval	% of Total buildings	Sample size
1	Aba North	2100	786	37.4	6.8	11
2	Aba South	1852	801	43.3	6.0	9.4
3	Arochuku	932	155	16.6	3.0	5
4	Bende	861	102	12.5	2.8	4
5	Ikwuano	1617	334	20.6	5.2	8
6	Isiala Ngwa North	1134	173	15.3	3.7	6
7	Isiala Ngwa South	1098	151	13.8	3.5	6
8	Isuikwuato	922	87	9.4	3.0	5
9	Obingwa	1914	448	23.4	6.2	10
10	Ohafia	772	113	14.6	2.5	4
11	Osioma	6540	1720	26.3	21.0	33
12	Ugwunagbo	814	120	14.7	2.6	4
13	Ukwa East	655	73	11.1	2.1	3
14	Ukwa West	613	89	14.5	2.0	3
15	Umuahia Capital territory	8710	3214	36.9	28.0	44
16	Umunneochi	569	65	11.4	1.8	3
	Total	31,099	8,431	27.1	100	156

Source: Authors' Field Survey, 2017, Compiled from town planning authorities in Abia State

Figure 2 illustrates the percentage number of building with planning approval in each local government area of Abia state. The chart shows that Aba-south L.G.A has the highest percentage buildings with planning approval (43.3%) followed by Aba-north (37.4%) and Umuahia Capital Territory (36.9%). Incidentally these are the core urban areas of Abia State. The local government areas that recorded the least number of buildings with planning

approval are Isuikwuato (9.4%); Ukwavest (11.1%); and Umunneochi (11.4%). Generally the chart shows that the average percentage of buildings with planning approval in Abia State is less than 20%, and this indicates an abysmal failure of the town planning authorities in their development control responsibilities.

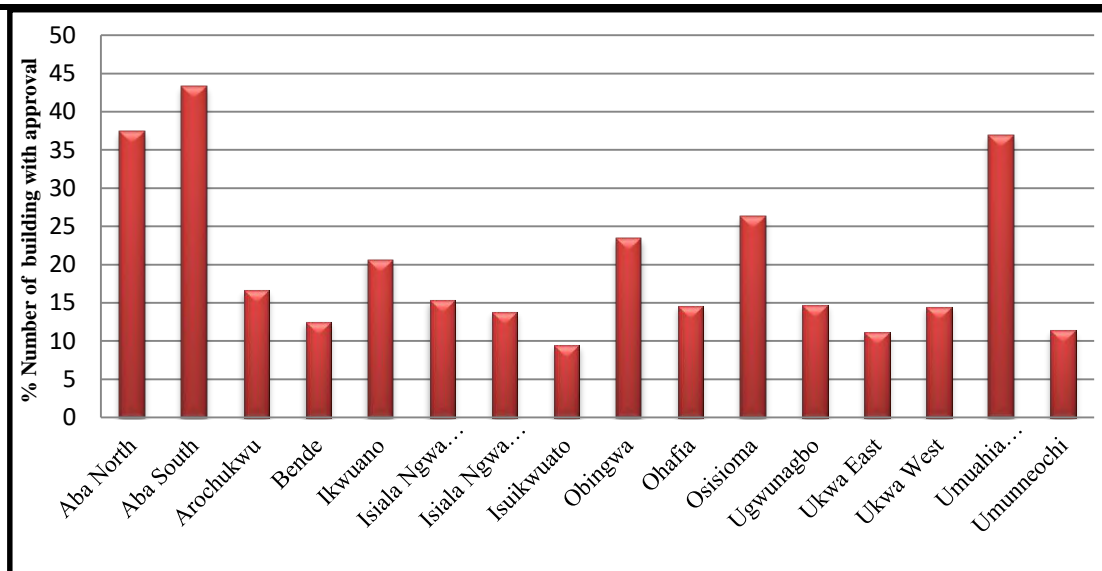


Fig.2: Percentage number of building with planning approval per local government area

4.3 Level of Compliance of Buildings to Planning Regulations in Abia State

The study examined the level of compliance of 156 randomly sampled buildings to a set of 9 land use planning standard in Abia State, and the data collected are shown on appendix –C, and have been summarized on table 2. The results could be reviewed as follows.

- i. Set-back from road centreline: this regulation recorded 55.8% compliance. But a careful look at the data on table 3 reveals that 80% of the building that met this standard is in the rural areas, and this was because of the homestead settlement pattern practice in rural areas in Abia State. If the urban areas are taken in isolation, the rate of compliance to this standard falls below 20%.
- ii. Set-back from property boundaries: the compliance rate to this standard is 39%. In considering properties that met this standard, every building in which its set-backs from property boundary are up to minimum standard in three out of the four directions of property line was considered to have complied with the regulation. Also, majority of the buildings that complied with the standard were in the rural areas.
- iii. Floor Area Ratio: this showed a compliance rate of 91.6%. The significant compliance recorded on this standard was not as a result of enforcements, but rather a natural outcome since majority of the buildings fall in the category of bungalows, followed by one storey buildings. High rise buildings (those exceeding four floors) are not common in Abia State.
- iv. Road/ Street Right-of-way: the compliance rate to this standard was very low (20%) across the state.

Most of the roads are narrow. Some of the roads only have the carriage ways but lacking road shoulder, sidewalk, drainage channel, and utility lane, etc. The suburban and rural roads were worse off with less than 5% compliance. Some settlements were built along narrow roads that may simply be regarded as footpaths. Greater percentage of the roads is un-tarred and in very bad shapes.

- v. Plot Coverage: this standard recorded 69.2%. The comparatively high compliance rate here was also as a result of buildings in suburban and rural areas, which have the pleasure of larger plots of land. But when the urban areas are taken in isolation, the compliance rate fell below 15% as can be seen from table 3.
- vi. Zoning standard has 66.7% compliance, and again, it is also skewed in favour of rural areas which are purely residential and agricultural. Significant number of buildings in the urban areas violated zoning standard, especially with commercial land use playing prominent role in the city of Aba.
- vii. Plot size standards showed 66.7% compliance. Buildings in the high density areas presented better compliance than those in the medium densities (Suburbs) and low density (rural) areas. This is because, government developed layouts are very few in number, whereas most developers buy land from private land holders whose concept of plot size is between 450 to 465 square meters irrespective of the density it falls.
- viii. Certificate of fitness for habitation/ as Built Drawings (0.0%): the survey showed that no building complied with these standards. In fact, the town planning authorities were in ignorance of this

regulation and therefore did not enforce it. Perhaps, this partly underscores the reason why developers freely modified their plans in the course of implementation after they had been given development approval.

ix. Change of use permit: significant percentage of the buildings has not changed usage since they were built. However for the few that changed, only 22.2% obtained change of usage permit, the rest did not.

Table.2: Compliance of buildings to planning regulations

S/N	Planning Standards	Minimum Standard	Number that met standard	Number that failed standard	Percentage compliance
1	Set-back from road centreline	*18m/ 14m/ 10m/ 8m	87	69	55.8
2	Set –back from property boundaries	**6m/ 3m/ 3m/ 3m	39	117	25
3	Floor Area Ratio	+ 1:1 / 1:3 / 1:0.75	143	13	91.6
4	Road/ Street Right-of-way		31	125	20
5	Plot Coverage	++ 50% / 40% / 30%	108	48	69.2
6	Plot size	#450 / 600 / 750m ²	75	81	48.1
7	Zoning		104	52	66.7
8	Certificate of fitness/ as Built Drawings	To be obtained by developer and submitted to town planning authority	0	156	0.0
9	Change of use	@ N	6	21	22.2
Notes	* 18m for Highways; 14m for primary roads; 10m for secondary roads; and 8m for residential access roads				
	** 6m Front of property, 3m at rear of property; and at both sides of property				
	+ 1:1 for residential high density; 1:3 for commercial; and 1:0.75 for industrial/ community buildings				
	++ 50% for High density area; 40% for medium density; and 30% for low density				
	# 450m ² for high density; 600m ² for medium density; and 760m ² for low density areas				
	@ N = not applicable, buildings which have not changed use = 129				

Source: authors' field survey 2017.

The study proceeded with the available data, to determine the significance of the rate of compliance to the planning regulations by property development in Abia State. Therefore a hypothesis was formulated thus: *H₀*, the level of compliance of property development to planning regulations in Abia State is not statistically significant. The *t* test for paired samples was performed to prove the hypothesis. The result is displayed in Appendix - A, and it showed *t* = - 0.352, and *P* value of 0.734, which is not statistically significant (*P* > 0.05). Hence we did not reject *H₀*, which affirms that the level of compliance of property developers to land use regulations in Abia State is not significant. The mean compliance rate was 19.7%. The study also considered the disparities in level of compliance to the planning regulations between urban areas and suburban/ rural areas in Abia State. The major urban areas in Abia state are Aba, and Umuahia, and parts

of Osisioma and Obingwa. Total number of buildings sampled in urban areas is 77, while the building sampled in suburban/ rural areas amount to 79. Table 3 shows the result of this analysis. The findings reveal that properties in suburban/ rural areas have considerably higher level of compliance with set-back from road centreline regulations, plot coverage, set-back from property boundaries, floor area ratio, and zoning regulations than properties in urban areas. Properties in urban areas only showed better compliance rate on road/ street right-of-way standards, and plot-size regulations. The study further formulated a second hypothesis to test the significance of these variations as follows.

H₀: there is no significant difference in the level of compliance to planning standards between properties developed in the urban areas, and those in suburban/ rural areas.

Table.3: Comparison of level of compliance to planning regulations between urban and suburban/ rural areas

S/N	Planning standard	Total number of buildings sampled	Number that complied with Standard		
			Urban Areas	Suburban / Rural areas	total
1	Set-back from road centreline	156	28	59	87
2	Set –back from property boundaries	156	13	26	39
3	Floor Area Ratio	156	62	81	143
4	Road/ Street Right-of-way	156	26	5	31
5	Plot Coverage	156	34	74	108
6	Plot size	156	53	22	75
7	Zoning	156	34	70	104
8	Certificate of fitness/ as Built Drawings	156	0	0	0
9	Change of use	156	4	2	6
	Total	*77 / 79	216	375	591
Notes	* 77 represents total number of buildings sampled in urban areas, while 79 is the number sampled in suburban/rural areas				

Source: authors' field survey 2017.

A *t* - test for paired samples was performed to prove the hypothesis (*H₀*): there is no significant difference in the level of compliance to planning standards between properties developed in the urban areas, and those developed in suburban/ rural areas. The result is shown in Appendix– B, and it presents $t = - 2.380$, and *P* value of **0.045** which is statistically significant ($P < 0.05$). Hence we reject *H₀*, signifying that there is significant difference in the rate of compliance to planning standards between buildings constructed in the urban areas, and those constructed in suburban/ rural areas. Buildings constructed in the urban areas showed mean compliance rate of 14.5%, and those constructed in suburban/ rural areas showed mean compliance rate of 42%. It is however observed that the higher level of compliance recorded in the rural areas is not as a result of development control but rather a natural adaptation of developers to more spacious land, which will eventually phase-out with increased urbanization. What this means is that, timely intervention in the suburban/rural areas to correct these planning aberrations through preparation and implementation of planning schemes would be of great benefit.

This is because, as these places get urbanized, the environmental challenges created by poor planning multiply, and may possibly reach catastrophic stages.

4.4 Factors Responsible For Low Level of Compliance to Planning Regulations

The study conducted a survey of 45 town planning officers in Abia state with structured questionnaires to determine the factors responsible for the low level of compliance to planning regulations, and the extent to which planning authorities carry out their statutory

planning functions. The results are shown on table 4 and 5 respectively. Table 4 reveals the following factors responsible for low level of compliance, in order of importance.

- Low level of physical planning. A 100% of the respondents identified low level of physical planning in Abia State as important reason for low compliance to planning regulations. They opined that planning in Nigeria and Abia State in particular, is presently synonymous with development control at its best. Other primary responsibilities of planning like preparation of planning schemes; land acquisition and creation of layouts; urban renewal and redevelopment are completely neglected. Planning in Nigeria is merely reactive rather than being proactive. Under this circumstance, there is no proper framework for planning regulation like the master plan or other planning schemes. Approved planning schemes are the fundamental basis for development control, and where they are lacking every other planning regulation lacks the basis for enforcement.
- Inadequate funding for planning authorities. 98.5% of respondents identified this factor as very important. The town planning authorities grapple with low funding from the ministry, resulting to their inability to pay staff salaries and to undertake planning activities.
- Enforcement risks. More than 90% of the respondents identified risks of mob attack during enforcement as a major hindrance to development control. The planning authorities are not attached with police unit thereby rendering the enforcement

- officers vulnerable to mob attack during field operations.
- iv. Selective implementation of regulations (90.6%). The planning authorities simply focus on planning duties that generates fund without necessarily ensuring that developers adhere to standards. The planning authorities today are simply revenue collectors for government.
 - v. High cost of approval fees. About 80% of respondents indicated that the relevant state government fees charged for plan approval are very high relative to the economic conditions of an average developer in the state. It is common occurrence for developers to make only part payment as to initiate approval process, and thereafter commence development without having to come afterwards to complete their payment. This accounts to why greater numbers of buildings do not have planning approval.
 - vi. Court cases. More than 80% of respondents alluded to the fact that court litigations are often used by developers to frustrate enforcement of planning regulations.
 - vii. Political interference. About 70% of respondents indicated that interference by political actors in the ministries play a major role in frustrating planning regulation. Highly placed individuals often use their political connections to influence planning authorities over their properties which are in contravention of planning regulations.

Table.4: Factors responsible for low level of compliance to planning regulations

S/ N	Factors	Number of / % Responses					Total Repons
		Not important	Slightly important	Uncertain/ No answer	important	Very important	
1	Poverty of residents	*31 / **69	13 / 29	1 / 2.2	0 / 0	0 / 0	45
2	Ignorance of residents	9 / 20	16 / 35.9	4 / 9.4	16 / 35.9	0 / 0	45
3	High cost of approval fees	0 / 0	0 / 0	3 / 6.3	36 / 80	6 / 12.5	45
4	Non flexibility of regulations	0 / 0	5 / 12.5	0 / 0	33 / 72	7 / 15.6	45
5	Selective implementation	0 / 0	1 / 2.1	0 / 0	41 / 90.6	3 / 6.3	45
6	Lack of up-to-date maps	0 / 0	0 / 0	0 / 0	11 / 24.5	34 / 75.5	45
7	Inadequate funding	16 / 35.8	11 / 25	8 / 17.2	10 / 22	0 / 0	45
8	Political interference	2 / 4.4	9 / 18.8	2 / 4.4	32 / 70.3	0 / 0	45
9	Shortage of professional staff	35 / 76.8	10 / 22	1 / 2.2	0 / 0	0 / 0	45
10	Low level of physical planning	0 / 0	0 / 0	0 / 0	20 / 44.4	25 / 55.6	45
11	Corruption of planning staff	1 / 2.1	15 / 32.8	10 / 22	19 / 42.2	0 / 0	45
12	Enforcement risks	0 / 0	0 / 0	0 / 0	4 / 9.4	41 / 90.6	45
13	Court cases	0 / 0	3 / 6.6	1 / 2.1	36 / 79.3	5 / 11	45
14	Delay in obtaining planning approval	1 / 2.2	4 / 8.9	1 / 2.2	31 / 68.8	8 / 17.8	64
* number of responses; ** Percentage responses							

Source: authors' field survey 2017.

Among all the statutory duties of the town planning authorities, they only carry out development control and a little of staff improvement as can be seen on table 5. Their core duties which include plan preparation: creation of subdivision plans and other planning schemes to guide development; and urban renewal are not being carried out as responses on table 5 show. The primary reasons given by the authorities for this negligence are poor funding, lack of equipment, and lack of the enabling environment by government. This has far reaching implications as it makes it very difficult for planning authorities to enforce the planning regulations within a holistic statutory framework. Moreover, development control activities are

simply reduced to revenue collection for government while illegal developments are allowed to go on.

The study further utilized oral interview survey to ascertain reasons why a good number of developers submit their plan to town planning authorities and yet do not follow it up to secure approval. Respondents identified five major reasons for this, and they are: high cost of fees charged for plan approval; bureaucratic bottleneck and unnecessary delays in obtaining approval; poverty and low income capacity of average developers in the country; corruption of planning staff, generally high level of ignorance of residents to planning requirements.

Table.5: The extent to which planning authorities carry out their statutory planning functions

S/N	Planning responsibility	Number of / % Responses			Total Responses
		Not a all	Very Slightly	Regularly	
1	Plan Preparation (Subdivision plans, Layout plans, etc)	*39 /**86.7	6 / 13.3	0 / 0	45
2	Development control	0 / 0	0 / 0	45/ 100	45
3	Urban renewal	31 / 60.9	14 / 39.1	0 / 0	45
4	Land Acquisition/ payment of compensation	45 / 100	0 / 0	0 / 0	45
5	Staff improvement	0 / 0	36 / 80	9 / 20	45
6	Research and Development	45 / 100	0 / 0	0 / 0	45

* number of responses; ** Percentage responses

Source: authors' field survey 2017.

V. CONCLUSION AND RECOMMENDATIONS

The study examined the level of compliance of property development to land use planning regulations in Nigeria using samples drawn from Abia State. Findings show that the level of compliance of buildings to planning regulations is not significant. The mean compliance rate was less than 20%, and the planning regulations which recorded very low compliance are: set-back from property boundaries; road/ street right-of-way; plot coverage; plot size; certificate of fitness for habitation/ as built drawings; and change of use standards. Findings also show that there is significant difference in the rate of compliance to planning regulations between buildings constructed in the urban areas, and those constructed in suburban/ rural areas. Buildings constructed in the urban areas showed mean compliance rate of 14.5%, and those constructed in suburban/ rural areas showed mean compliance rate of 42%, and the better compliance shown by the latter is because of ample land spaces available in rural areas as well as the homestead settlement pattern that is practiced there. This result implies that development control activities of the planning authorities have failed to deliver a sustainable and functional built environment, and therefore needs to be re-examined. It also means that timely intervention in the suburban/rural areas to correct these planning aberrations through preparation and implementation of planning schemes would be of great benefit.

The study ascertained factors which are responsible for the low level of compliance to planning regulations as follows: low level of physical planning; inadequate funding for planning authorities; enforcement risks; high cost of approval fees; court cases; and interference by the political class. The study therefore recommends the following. Firstly, government should embark on the preparation of an up-to-date land use plan, and strategic plans for various towns and villages, including its utilities and facilities. This will effectively guide growth and

development in a more sustainable manner, and provide the basic framework for a more realistic development control. Government as a matter of urgency should prepare and implement planning schemes for all fast growing suburbs and rural areas in Nigeria before urbanization fully catches up with them, while aggressive urban renewal should be used to correct the environmental challenges already created in the cities. Secondly, government should implement the autonomy of the town planning authorities as required by law, and ensure their funding through direct subvention as against the present situation where they are mere appendages to the ministries. Thirdly, the necessary logistics for the efficient functioning of the planning authorities (utility vehicles, tractors, and professional manpower) should be provided. There is also the need to create a police unit in the planning authorities to function with development control officers so as to minimize enforcement risks. Fourthly, government should cause there to be enforced the regulation requiring developers to carryout post construction assessment of their building, and prepare certificate of fitness for habitation and As-Built Drawings for submission to the planning authorities, as prerequisite for occupancy. This will greatly reduce the tendency of developers to deviate from their approved plans during implementation. Approval of development plan does not guarantee effective control of the built environment. It is just a part of the overall process of exercising control over the physical environment. Development control should end with the implementation of the approved plan, the use to which such structure is put into and the preservation of such structure in line with the planning scheme for such area. Fifthly, government should create the enabling environment for developers to be sensitized about the need to protect the environment by ensuring that their plans are approved prior to commencement of development. In this regard, government should place primacy on achieving

sustainable environment over revenue derived from plan approval. Fees charged in Nigeria to obtain development permit is very high and discourages an average developer. Part of the enabling environment would be to minimize political interference in planning duties, as well as reforming the judicial system to eliminate unnecessary technical grounds used by the courts to frustrate development control. Finally, the administrative machineries of the town planning authorities should be reformed to eliminate unnecessary bureaucracies in the process of plan approval, and to eradicate corruption.

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Appendix - A -

		Paired Samples Statistics			
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Building that met Standards	65.6667	9	49.76445	16.58815
	Buildings that did not meet Standards	76.0000	9	48.33994	16.11331

		Paired Samples Test							
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Building that met Standards - Buildings that did not meet Standards	-10.333	88.19014	29.39671	-78.12227	57.45561	-.352	8	.734

Appendix - B –

		Paired Samples Statistics			
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Building that complied to standard in urban areas	24.7778	9	18.57268	6.19089
	Building that met standard in Suburban/ rural areas	41.1111	9	33.01683	11.00561

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Building that complied to standard in urban areas - Building that met standard in Suburban/rural areas	-16.333	20.59126	6.86375	-32.16118	-.50549	-2.380	8	.045

Appendix C

S/ N	Building Location	planning Approval	Setback Road	Setback Ppty Boundary	Floor Area Ratio	Road right-of way	Plot Coverage	Plot Size	Zoning	Certificate fitness/ as Built Drawing	Change of use
1	Nicholas street	1	0	0	1	1	0	1	1	0	N
2	Brass road	1	1	0	0	1	0	1	0	0	N
3	Diobu street	1	1	0	0	1	0	0	1	0	N
4	Eziama	1	0	0	1	1	0	0	1	0	N
5	Margaret Ave	1	0	0	1	0	0	0	0	0	0
6	Aba –Owerri Road	1	0	1	1	1	0	0	1	0	N
7	Railway	0	0	0	1	0	0	0	0	0	N
8	Behind PZ	1	1	0	1	0	0	0	0	0	N
9	Factory Road	1	1	1	0	1	1	0	0	0	N
10	Old GRA	1	1	0	1	1	1	1	0	0	0
11	Osusu	1	0	0	1	0	0	0	1	0	0
12	Ebenma	1	0	0	1	1	0	0	0	0	N
13	Industrial Layout	1	1	0	1	1	0	0	0	0	1
14	Umuola Road	1	0	0	1	1	0	0	0	0	N
15	Ukegbu Road	1	0	0	1	0	1	0	0	0	N
16	7 UP	0	0	0	1	0	0	0	1	0	N
17	Eziukwu	1	1	0	1	1	0	0	0	0	0
18	Milverton Road	1	1	0	0	1	0	0	1	0	0
19	Asa Road	1	1	1	0	1	0	0	0	0	N
20	Ngwa Road	0	0	0	1	0	0	0	0	0	0
21	East Road	0	0	0	1	0	1	0	0	0	N
22	People's Road	0	0	0	1	0	0	0	0	0	N
23	Nnentu	0	0	0	1	0	0	0	1	0	N
24	Umuagbai	1	0	0	1	0	0	0	1	0	N
25	Cemetery	1	0	0	1	0	1	1	0	0	0
26	Ihiorji	0	0	0	1	0	0	0	0	0	0
27	Azikiwe Road	1	1	1	0	1	0	1	0	0	0
28	Nkwo Ngwa	0	0	0	1	0	0	1	0	0	N
29	River Layout	1	1	0	1	1	0	1	0	0	N
30	Ndi Orji	0	0	0	1	0	0	1	1	0	N
31	Ndi Ama	0	1	0	1	0	1	1	1	0	N
32	Abam	1	1	0	1	0	1	0	1	0	N
33	Obinkita	0	1	1	1	0	1	0	1	0	N
34	Umuchi	1	0	0	1	0	0	1	1	0	N
35	Amuvi	1	0	1	1	0	1	0	1	0	N
36	Alayi	0	1	0	1	0	1	0	1	0	N
37	Egwueke	0	1	0	1	1	1	1	1	0	N
38	Onu Ibina	0	1	0	1	0	1	1	1	0	N
39	Eluokwu	0	1	0	1	0	1	0	1	0	N
40	Amaokwe Item	1	0	0	1	0	1	0	1	0	N
41	Okoko Item	0	1	0	1	0	0	1	1	0	N
42	Oloko road	1	1	0	1	1	1	0	1	0	N
43	Inyila	0	1	1	1	0	1	1	1	0	N
44	Ngwugwo	0	0	0	1	0	1	1	1	0	N
45	Amawom	0	0	0	1	0	1	1	1	0	N
46	Umudike	1	0	0	1	0	0	1	1	0	N

47	Ogbuebule	1	0	0	1	0	1	1	1	0	N
48	Ariam	1	1	1	1	0	1	1	1	0	N
49	Okwe	1	1	0	1	0	0	1	1	0	N
50	Eziama Nsulu	0	0	0	1	0	1	1	1	0	N
51	Umuosu	1	1	0	1	0	1	1	1	0	N
52	Ezuala	0	1	0	1	0	1	1	0	0	N
53	Osusu Isialangwa	0	1	1	1	0	1	1	1	0	N
54	Amapu Ntigha	1	1	0	1	0	1	1	1	0	N
55	Umuoha	0	1	1	1	0	1	1	1	0	N
56	Ihie	1	1	0	1	0	1	1	1	0	N
57	Umuekea	1	0	0	1	0	1	1	1	0	N
58	Egbelu Mbutu	0	1	0	1	0	1	1	1	0	N
59	Mbutu Ngwa	0	1	0	1	0	1	1	1	0	N
60	Nneise	0	1	1	1	0	1	1	1	0	N
NOTE: * 0 = Building does not comply to minimum standard/ Not available ***N = , Not applicable ** 1 = Building complied to minimum standard / Available 0											

S/N	Building Location	planning Approval	Setback Road	Setback Ppty Boundary	Floor Area Ratio	Road right-of-way	Building Coverage	Plot Size	Zoning	Certificate of fitn/as Built Drawings	Change of use
61	Umuoba	1	0	0	1	0	0	0	1	0	N
62	Okpuhie	0	1	1	1	0	0	1	1	0	N
63	Isieketa	0	1	0	1	0	1	1	1	0	N
64	Ahaba	1	0	0	1	0	1	1	1	0	N
65	Ovim	1	0	0	1	0	1	1	1	0	N
66	Umuokogbue	0	0	0	1	0	1	1	1	0	N
67	Amaiye Uhu	0	0	0	1	0	1	1	1	0	N
68	Umunnekwu Agbo	0	1	0	1	0	0	1	1	0	N
69	Osusu Amaukwa	1	1	1	1	0	0	1	1	0	0
70	Ukpakiri	0	1	0	1	0	0	1	1	0	N
71	Mgboko	1	0	0	1	0	0	1	1	0	N
72	Umuariama	1	0	0	1	0	0	0	1	0	N
73	Mgboko Itungwa	0	1	1	1	0	1	1	1	0	N
74	Ovom 1	1	0	0	1	0	0	0	1	0	N
75	Umuobiakwa	0	0	1	1	0	1	0	1	0	N
76	Osaa Ukwu	0	0	1	1	0	1	1	1	0	N
77	Umuagu	1	1	1	1	0	0	0	1	0	N
78	Ohanze Isiahia	0	1	0	1	0	1	1	1	0	N
79	Agburuike Isiugwu	0	1	1	1	0	1	1	1	0	N
80	Umuaro	0	1	0	1	0	1	1	1	0	N
81	Isiama Ohafia	1	1	0	1	0	1	0	1	0	N
82	Ebem Ohafia	1	1	0	1	0	1	0	1	0	N
83	Ugwujinba	0	1	0	1	0	1	0	1	0	N
84	Erinma Abiriba	0	0	0	1	0	1	1	1	0	N
85	Ndi Icho	0	1	0	1	0	1	0	1	0	N
86	Ndi Agbo Nkporo	0	1	1	1	0	1	1	1	0	N
87	Umuojima	1	1	0	1	0	0	0	1	0	N
88	Abayi Umungasi	1	0	1	1	1	0	0	1	0	0
89	Aro Ngwa	1	1	0	0	1	0	0	0	0	N
90	Osokwa	0	0	0	1	0	0	1	1	0	0
91	Amapu Ife	1	1	1	1	0	0	1	0	0	N
92	Okpu Umuobo	1	0	0	1	0	0	0	0	0	0
93	Ahiaba Umueze	1	0	0	1	0	0	0	0	0	N
94	Okpuala Umuogor	0	0	1	1	0	1	1	1	0	N
95	Umuokorocho	0	0	0	1	0	1	0	1	0	N
96	Urrata	1	0	1	0	0	0	0	0	0	0
97	Ekeakpara	0	1	0	1	0	0	1	1	0	N
98	Umule	1	0	0	1	0	1	0	0	0	N
99	Amasato	1	1	0	1	0	0	0	0	0	N
100	Tonimas	1	0	0	0	0	0	0	0	0	0
101	Umuode	1	0	0	1	0	0	0	0	0	N
102	Flyover	1	0	0	1	0	0	0	0	0	0
103	Ezenwagbara rd	1	0	1	1	0	0	0	0	0	N
104	Enyinba road	1	0	0	0	0	0	0	0	0	0
105	Ala Ojii	0	1	0	1	0	1	1	1	0	N
106	Alozie street	1	1	0	1	0	1	0	1	0	N
107	Samek Road	0	1	0	1	0	1	0	1	0	N

108	Owerri Aba	1	0	0	1	0	0	0	1	0	N
109	Akanu Ngwa	0	1	1	1	0	1	1	1	0	N
110	Asa Umunka	0	1	0	1	0	0	0	1	0	N
111	Umugo	0	1	0	1	0	1	1	1	0	N
112	Ohambele	1	1	1	1	0	1	1	1	0	N
113	Obohia	0	0	0	1	0	1	1	1	0	N
114	Ohanku	0	0	1	1	0	1	0	1	0	N
115	Akwuete	0	1	0	1	0	1	1	1	0	N
116	Akanu - Ikwurianto	0	0	1	1	0	1	1	1	0	N
117	Owaza	0	1	0	1	0	1	1	1	0	N
118	Abayi Nchokoro	0	0	1	1	1	0	1	0	0	N
119	Okpuhie	0	1	0	1	0	1	1	0	0	N
120	Isieketa	0	1	0	1	0	1	1	1	0	N
NOTE: * 0 = Building does not comply to minimum standard/ Not Available ***N = , Not applicable ** 1 = Building complied to minimum standard/ Available											

S/N	Building Location	planning Approval	Setback Road	Setback Ppty Boundary	Floor Area Ratio	Road right-of-way	Building Coverage	Plot Size	Zoning	Certificate of fitness/ as Built Drawing	Change of use
121	Clifford Road	1	0	0	1	0	1	1	1	0	N
122	Umuwaya Rd	0	0	1	1	0	0	1	1	0	1
123	War Meseum rd	1	0	1	1	1	0	1	0	0	1
124	Okigwe Road	1	1	0	1	0	0	1	0	0	N
125	Aba road	1	0	0	1	1	0	1	1	0	N
126	Ikot-Ekpene Rd	1	0	1	1	1	0	1	0	0	0
127	Okpara Avenue	1	1	0	0	0	0	1	0	0	N
128	BCA Road	1	0	1	1	0	0	1	0	0	N
129	Nkwere Street	0	0	0	1	0	1	1	1	0	N
130	Calabar Road	1	1	0	1	1	0	1	0	0	N
131	Mbaise road	1	0	0	1	0	0	1	0	0	N
132	Ohafia Road	0	1	0	1	0	1	0	0	0	N
133	Cameroun Street	1	1	0	1	1	0	0	0	0	N
134	Finberg's Road	1	0	1	0	1	0	0	0	0	0
135	Ndume-Otuka	1	1	0	1	1	0	1	0	0	0
136	Afara Road	1	1	0	0	1	1	1	0	0	N
137	Umuokehi Road	1	1	0	1	1	0	1	1	0	N
138	Umuire Road	1	0	0	1	1	0	0	1	0	N
139	Umuawa Road	1	1	0	1	0	0	0	0	0	N
140	Amachara Road	0	1	0	0	0	0	1	1	0	1
141	Mission Hill	1	0	0	1	1	0	0	1	0	0
142	Umuahia –Ndume	1	1	1	1	0	0	1	0	0	N
143	Afaraukwu Rd	1	0	0	1	0	0	0	0	0	N
144	Olokoru Road	0	0	1	1	0	0	0	1	0	N
145	Amakama	1	1	0	1	0	1	0	0	0	0
146	Apu, miri	1	1	0	1	0	0	0	0	0	N
147	Ohuhu	0	0	0	1	0	1	0	0	0	N
148	Amuzi	0	0	0	1	0	1	0	1	0	N
149	Nnono	1	1	0	1	0	1	0	1	0	N
150	Nsudimo	1	1	0	1	1	0	0	1	0	N
151	Ahia Ukwu	0	1	0	1	0	1	0	1	0	N
152	Amaba Ime	1	0	0	1	1	0	1	1	0	N
153	Ndoro	1	1	0	1	0	1	1	1	0	N
154	Amuda	0	1	1	1	0	1	1	1	0	N
155	Ngodo	0	1	1	1	0	1	1	1	0	N
156	Amubiri	0	1	0	1	0	1	1	1	0	N
NOTE: * 0 = Building does not comply to minimum standard/ Not Available ***N = , Not applicable ** 1 = Building complied to minimum standard/ Available											