

METHODOLOGY

Introduction

This chapter addresses the methodology that was used in this study. While considering the collection of data and data analysis techniques. Data were collected from selected analysis and analyzed using descriptive statistics.

Research Design

The research design is the overall plan chosen to combine the many study components in a logical and cohesive manner, ensuring that the research problem is effectively addressed. It also serves as the guide for the collection, measurement, and analysis of data. Both qualitative and quantitative research design were employed for this study whereby data were drawn from documents obtained from Lagos State Ministry of Physical Planning Authority, and site inspection and based from on reconnaissance survey and direct observation.

Study Population

The study population comprises the proponents of land use planning and analysis reports (LUPARs) in Lagos State.

Data Types and Sources

The data on land use characteristics (residential, commercial, industrial and public use) are obtained from ministry of physical planning across all local governments in Lagos State.

Sampling Frame and Sample Size

The data available compromise across all local government in Lagos State. There are 20 local government in Lagos State which include Agege, Ajeromi-ifelodun, Alimosho, Amuwo-odofin, Apapa, Badagry, Epe, Eti-osa, Ibeju-lekki, Ifako-ijaye, Ikeja, Ikorodu, Kosofe, Lagos Island, Lagos mainland, Ojo, Mushin, Oshodi-Isolo, Somolu and Surulere. The LGAs were subdivided in Lagos metropolis and peri-urban area. The total number of data available is 245 LUPARS (Table 1.1).

Table 1.1 Number of LUPARs Collected from Study Area

| Study Area Region | Local Government Area | Total |
|-------------------|-----------------------|-------|
| Metropolis | Agege | 5 |
| | Ajeromi-ifelodun | 12 |
| | Alimosho | 17 |
| | Amuwo-odofin | 25 |
| | Apapa | 4 |
| | Eti-osa | 88 |
| | Ifako-ijaye | 14 |
| | Ikeja | 17 |
| | Kosofe | 17 |
| | Lagos island | 3 |
| | Lagos mainland | 3 |
| | Mushin | 1 |
| | Ojo | 1 |
| | Oshodi-Isolo | 12 |
| | Somolu | 4 |
| | Surulere | 3 |
| Peri-urban | Badagry | 2 |
| | Epe | 1 |
| | Ibeju-lekki | 10 |
| | Ikorodu | 6 |
| | Total | 245 |

Methods of Data Collection

Data extraction method was used for this study. The required data were extracted from LUPARs which were approved planning documents. Furthermore, site inspections were done to verify the compliance of the land use analysis report data with existing condition of the development. The instrument used was an observation checklist which was only used to address the last objective of this study.

Ethical Considerations

The reports acquired from Planning Authorities are government approved documents on land use planning and analysis. This study was therefore preserved the confidentiality of the reports and proponents.

Data Analysis

The data collected for this study were analysed using qualitative analysis. Specifically, a content analysis was performed using Microsoft Word and Microsoft Excel Version 2016.

Data analytical techniques

Qualitative analyses deals with elusive and imprecise data that can be challenging to gather and quantify. Since intangibles cannot be quantified by numerical numbers, machines find it difficult to perform qualitative analyses. The foundation of qualitative analyses is an understanding of people and organizational cultures. A quantitative, systematic, and intersubjective method for assessing recorded human communication is known as quantitative content analysis. It's a mathematical method that gathers data, examines, quantifies, and evaluates it. Descriptive content analysis is the process of utilizing statistical methods to summarize or describe a set of data.

Data analysis by Objectives

The analysis of the data was done based on the objectives of the study as follows:

Objective 1

This objective is to determine the types of land use projects addressed by the LUPARs in Lagos State. The land use planning and analysis report is carried out for any development in Lagos state which are residential, commercial, industrial and public use development. Data on these different land use types was obtained from land use planning and analysis reports. Descriptive statistics which include frequency distribution with simple percentages were used in analysing each of the land use projects.

Objective 2

This objective is to assess the existing situation of different land uses on site as contained in the LUPARs in the study area. Data were obtained from land use planning and analysis reports on project site location, road network, drainage system, street light, traffic light, power supply source, telecommunication service, sewage system, solid waste management, public/semi-public services, power supply infrastructure, site inventory of building use around each site. Both quantitative and descriptive content analyses was performed on the data obtained from the LUPARs to equate how well do developers comply with model city/master plan.

Objective 3

This objective is to evaluate the compliance level of the projects based on the LUPARs in the study area. Data obtained from LUPARs on (zoning, maximum no of floors, minimum plot size, maximum coverage per plot, density, parking requirement, provision of landscape, permissible number of dwelling units, floor area ratio, setbacks and complementary use) is compared with the

model city/master plan to equate how well do developers comply with the plan regulations. Descriptive statistics such as frequency distribution, cross tabulation and arithmetic mean were used to analyse the data collected.

For a better understanding of the research methods, the data required, method of data collection and method of data analysis for each objective are as presented in Table 1.2.

Table 1.2: Methodology Matrix

| Objective | Data Required | Method of Data Collection | Methods of Analysis |
|---|--|---------------------------|---|
| i. Assess the types of land use projects addressed by the LUPARs in Lagos | Data obtained included residential land use, commercial land use, industrial land use, institutional land use and mixed-use land use | Secondary data | Descriptive content analysis (frequency and percentage) |
| ii. Examine the existing situation of different land uses on site as contained in the LUPARs in the study area. | Data were obtained from exiting situation around each site on road network, drainage system, street light, traffic light, power supply source, telecommunication service, sewage system, solid waste management, public/semi-public services, power supply infrastructure, site inventory of building use around each site | Secondary data | Descriptive content analysis (frequency and percentage) |
| iii. Evaluate the compliance level of the projects based on the LUPARs in the study area. | Data obtained included how well do developers comply with the following regulation zoning, maximum no of floors, minimum plot size, maximum coverage per plot, density, parking requirement, provision of landscape, permissible number of dwelling units, floor area ratio, setbacks, complementary use | Secondary data | Descriptive content analysis (frequency and percentage) |

Source: Author, 2022

RESULTS AND DISCUSSION

Introduction

This chapter documents the results of the analysis of the data collected for this study. The chapter is organised into sections based on the objectives of the study, which are to determine the types of land use projects addressed by the LUPARs, compare the different land use addressed by LUPARs with approved planning standard and finally, evaluate the compliance level of the projects based on the LUPARs in the study area. Except above stated, all tables and figures emanated from the author's secondary data in 2022.

Types of Land Use Projects

Lagos state being a mega city consists of different land uses. From the results gathered in Figure 1.1, it is observed that there were 73.45% residential, 19.47% commercial, 3.54% industrial, 3.10% institutional and 0.44% mixed land use in metropolis area while for peri-urban area there were 78.95% residential, 15.79% commercial and 5.26% institutional land use in peri-urban area. Therefore, the total number for land uses across study area were 73.88% residential, 19.18% commercial, 3.27% industrial, 3.27% institutional and 0.41% mixed land uses making a total of 100% land uses in the study area.

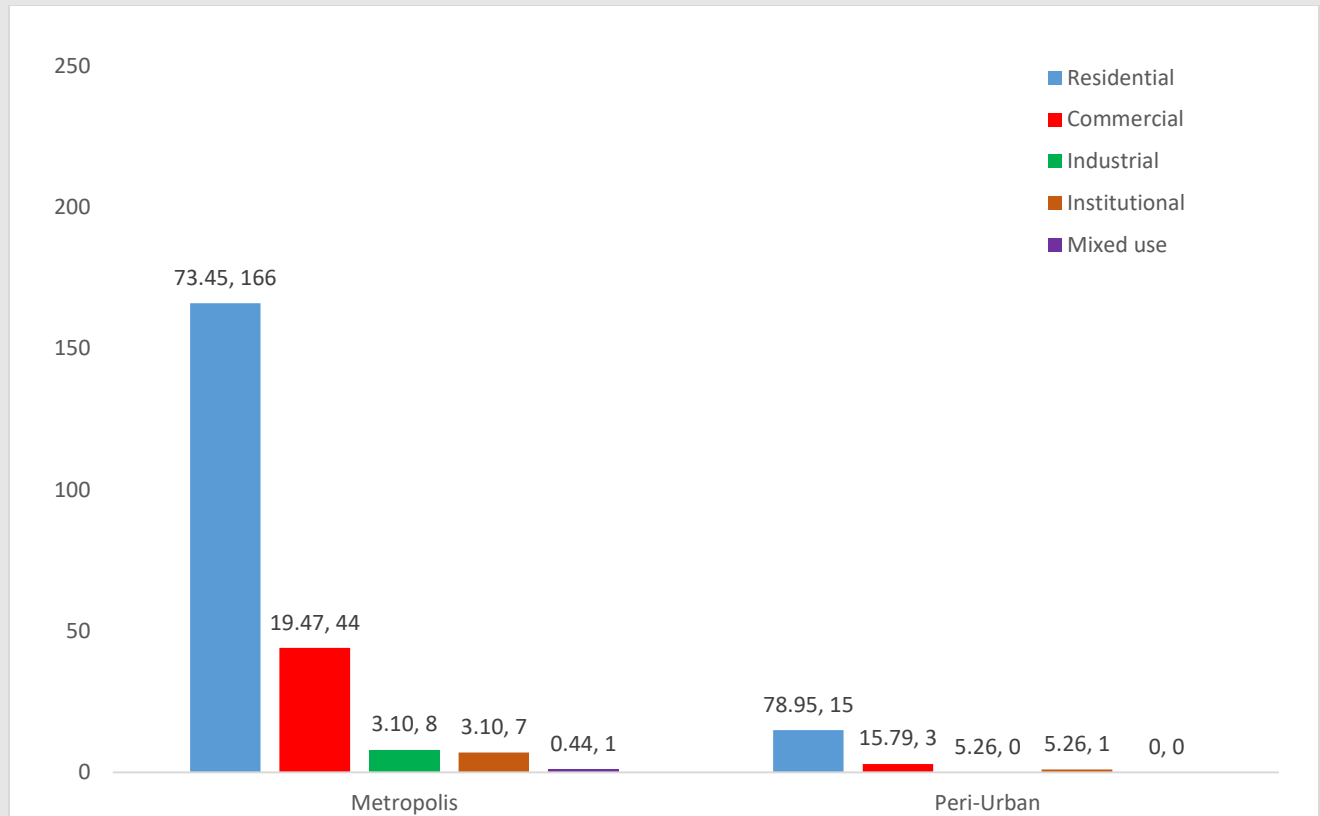


Figure. 1.1: Land Use Projects

Existing Situation of Land Uses

Attributes such as basic facilities are very essential parts of a built up environment. Road condition refers to the state of a road and how well it is maintained. The condition of a road can be affected by various factors such as weather, traffic, and the quality of construction. Some of the indicators of road condition include the smoothness of the surface, the presence of potholes or cracks, the quality of road markings and signs, and the overall level of cleanliness. According to Table 1.3, 39.18% of the respondents accounting across the study area are in good road condition while 37.55% are in fair condition and 23.27% of the roads are bad within the study area. Metropolis area had the highest number of good and fair road conditions which are 42.04% and 38.05% respectively.

Table 1.3: Road Condition

| Study Area | Bad | Fair | Good | Grand Total |
|-------------|-----------|-----------|-----------|-------------|
| Metropolis | 45(19.91) | 86(38.05) | 95(42.04) | 226(100) |
| Peri-urban | 12(63.16) | 6(31.58) | 1(5.26) | 19(100) |
| Lagos State | 57(23.27) | 92(37.55) | 96(39.18) | 245(100) |

Street lights are important for public safety, as they help to reduce accidents and crimes by providing visibility on roads and in public areas at night. They also improve the overall quality of life in urban areas by allowing people to navigate safely after dark and promoting a sense of security. From Figure 1.2, 76.55% of the respondents accounting show that there are presence of street light in most places while 23.45% have no street lights in metropolis area. Peri-urban area has presence of 26.3% of street light while 73.68% did not have access to street light. Hence, majority of the respondents accounting across the study area have presence to street light.

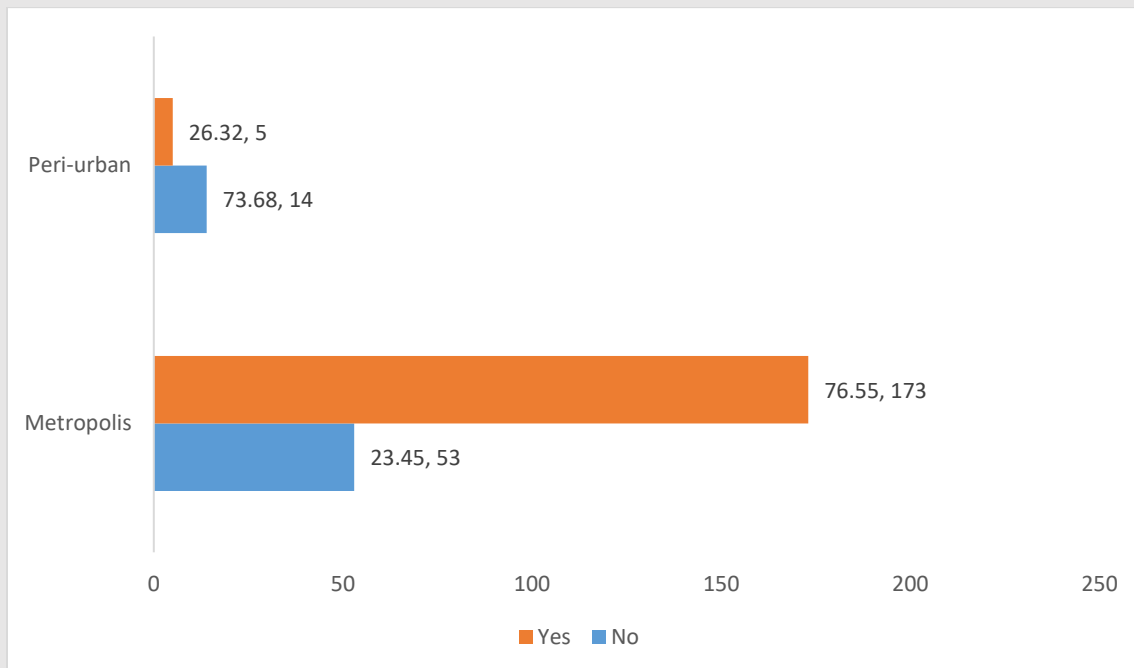


Figure. 1.2: Street Light

According to Figure 1.3, it was noted that 245 respondents accounting which is the total number of respondents, 75.10% did not have traffic light in study area and 24.90% of respondents accounting have traffic light in the study area. Therefore, 73.45% respondents does not have access to traffic light in metropolis area and 94.74% respondents does not have traffic light in peri-urban area while 26.55% respondents have access to traffic light in metropolis area and 5.26% respondents have access to traffic light in peri-urban area.

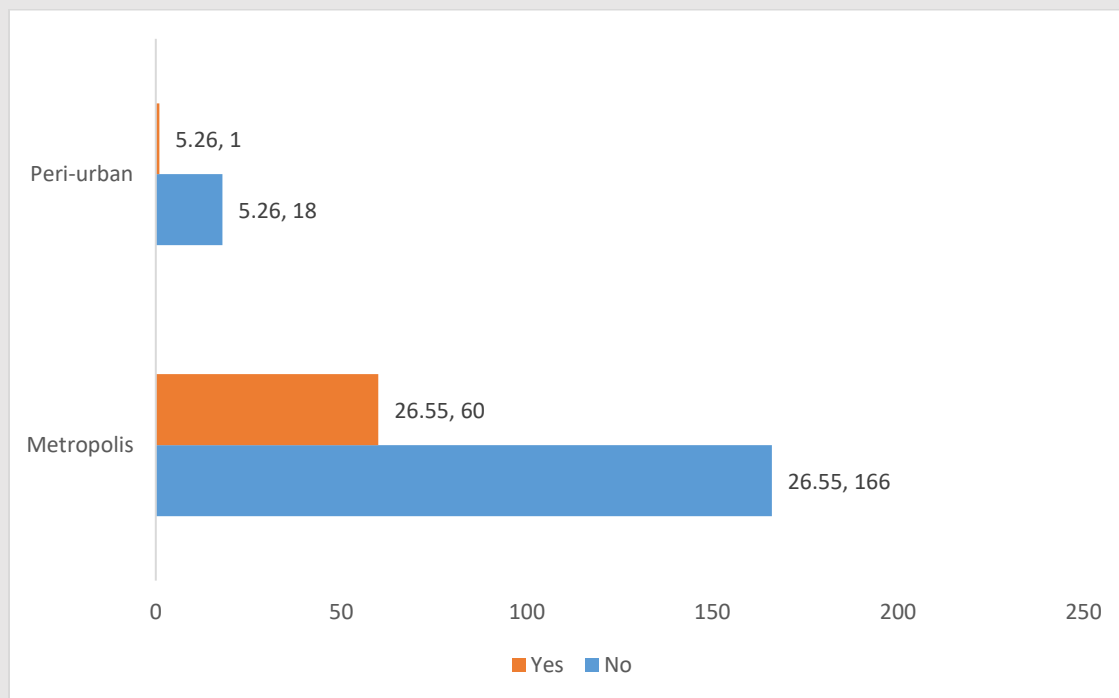


Figure. 1.3: Traffic Light

A drainage system is a network of structures and facilities designed to manage the flow of water and prevent flooding. It consists of various components such as pipes, channels, gutters, catch basins, and storm water retention ponds. Table 1.4 shows the result of the data collected during the study. It is observed that 26.53% of the respondents accounting across the study area evaluating the existing state of drainage system based on condition as bad, 41.63% of the respondents

accounting as fair and 31.84% said the state of drainage system is good in the study area. Respondents accounting for 24.34% in metropolis area believed the drainage in their area was bad, 41.59% respondents accounting believed their drainage was fair while 34.07% respondents accounting said there drainage is good. 52.63% respondents accounting in peri-urban rated the drainage system as bad, 41.63% respondents accounting and 31.84% said they would rate the drainage system as fair and good respectively.

Table 1.4: Drainage System

| Study Area | Bad | Fair | Good | Grand Total |
|-------------|-----------|------------|-----------|-------------|
| Metropolis | 55(24.34) | 94(41.59) | 77(34.07) | 226(100) |
| Peri-urban | 10(52.63) | 8(42.11) | 1(5.26) | 19(100) |
| Lagos State | 65(26.53) | 102(41.63) | 78(31.84) | 245(100) |

The choice of water supply source depends on factors such as the location, availability of water, and the quality of the water source. According to Table 1.5, 55.92% of respondents accounting rated water supply sources in the study area are fairly okay, though 21.22% of respondents accounting were bad water supply across the study area and the final 22.86% of respondents stated there is good water supply source across the study area.

Table 1.5: Water Supply Source

| Study Area | Bad | Fair | Good | Grand Total |
|-------------|-----------|------------|-----------|-------------|
| Metropolis | 50(22.12) | 124(54.87) | 52(23.01) | 226(100) |
| Peri-urban | 2(10.53) | 13(68.42) | 4(21.05) | 19(100) |
| Lagos State | 52(21.22) | 137(55.92) | 56(22.86) | 245(100) |

Table 1.6 shows that 47.76% of the respondents accounting agreed to the fact that there is fair telecommunication service in most region of the study area, 41.22% of respondents accounting

stated the telecommunication service were in good condition while 11.02% of the respondents accounting said the telecommunication service are bad in the study area.

Table 1.6: Telecommunication Service

| Study Area | Bad | Fair | Good | Grand Total |
|-------------|-----------|------------|------------|-------------|
| Metropolis | 22(9.73) | 107(47.35) | 97(42.92) | 226(100) |
| Peri-urban | 5(26.32) | 10(52.63) | 4(21.05) | 19(100) |
| Lagos State | 27(11.02) | 117(47.76) | 101(41.22) | 245(100) |

According to Table 1.7, 47.37% of respondents accounting in peri-urban area rated the sewage system based on existing condition as bad which is majority while 26.32% of respondents accounting had good and bad sewage system respectively. 22.12% respondents accounting in metropolis area believed the sewage system in their area was bad, 45.58% of respondents accounting shows their sewage was fair while 32.30% of respondents accounting said there sewage system was in good shape.

Table 1.7: Sewage System

| Study Area | Bad | Fair | Good | Grand Total |
|-------------|-----------|------------|-----------|-------------|
| Metropolis | 50(22.12) | 103(45.58) | 73(32.30) | 226(100) |
| Peri-urban | 5(26.32) | 9(47.37) | 5(26.32) | 19(100) |
| Lagos State | 55(22.45) | 112(45.71) | 78(31.84) | 245(100) |

Table 1.8 shows that 17.55% of the respondents accounting across the study area evaluating the existing state of solid waste management system based on existing condition as bad while 37.55% of the respondents accounting as fair and 44.90% said the state of solid waste management system is good in the study area. 16.81% of respondents accounting in metropolis area believed the solid waste management in their area was bad, 36.26% of respondents accounting believed their solid

waste management was fair while 46.90% of respondents accounting said there drainage is good. 26.32% of respondents accounting in peri-urban area rated the solid waste management system as bad, 52.63% of respondents accounting are fair and 21.05% said they would rate the solid waste management system is good.

Table 1.8: Solid Waste Management System

| Study Area | Bad | Fair | Good | Grand Total |
|-------------|-----------|-----------|------------|-------------|
| Metropolis | 38(16.81) | 82(36.26) | 106(46.90) | 226(100) |
| Peri-urban | 5(26.32) | 10(52.63) | 4(21.05) | 19(100) |
| Lagos State | 43(17.55) | 92(37.55) | 110(44.90) | 245(100) |

Power supply is an electronic device that converts electrical energy from a primary source into the correct voltage, current, and frequency needed to power electronic devices or systems. From Table 1.9, it is seen that many of the respondents accounting are not satisfied with their current state of power supply (primary source) which 38.37% while 36.33% of the respondents accounting are a little bit satisfied with the current power supply and 25.31% are satisfied with their current state of power supply (primary source) in the study area. Therefore, metropolis area had the highest number of respondents accounting that are not satisfied with power supply and fairly okay with power supply which are 37.17% and 36.73% respectively.

Table 1.9: Power Supply (Primary Source)

| Study Area | Bad | Fair | Good | Grand Total |
|-------------|-----------|-----------|-----------|-------------|
| Metropolis | 84(37.17) | 83(36.73) | 59(26.11) | 226(100) |
| Peri-urban | 10(52.63) | 6(31.58) | 3(15.79) | 19(100) |
| Lagos State | 94(38.37) | 89(36.33) | 62(25.31) | 245(100) |

Power supply infrastructure refers to the physical systems and components that make up the electricity distribution network, including power generation plants, transmission lines, substations, transformers, distribution lines, and meters. As revealed by Figure 1.4, 5.26% of power supply infrastructure in peri-urban area are in bad condition while 52.63% were in fair condition and 42.11% of power supply infrastructure are in good condition. 18.14% of power supply infrastructure in metropolis area were in bad condition while 55.31% of power supply infrastructure were fair and 26.55% were good power infrastructure in metropolis area.

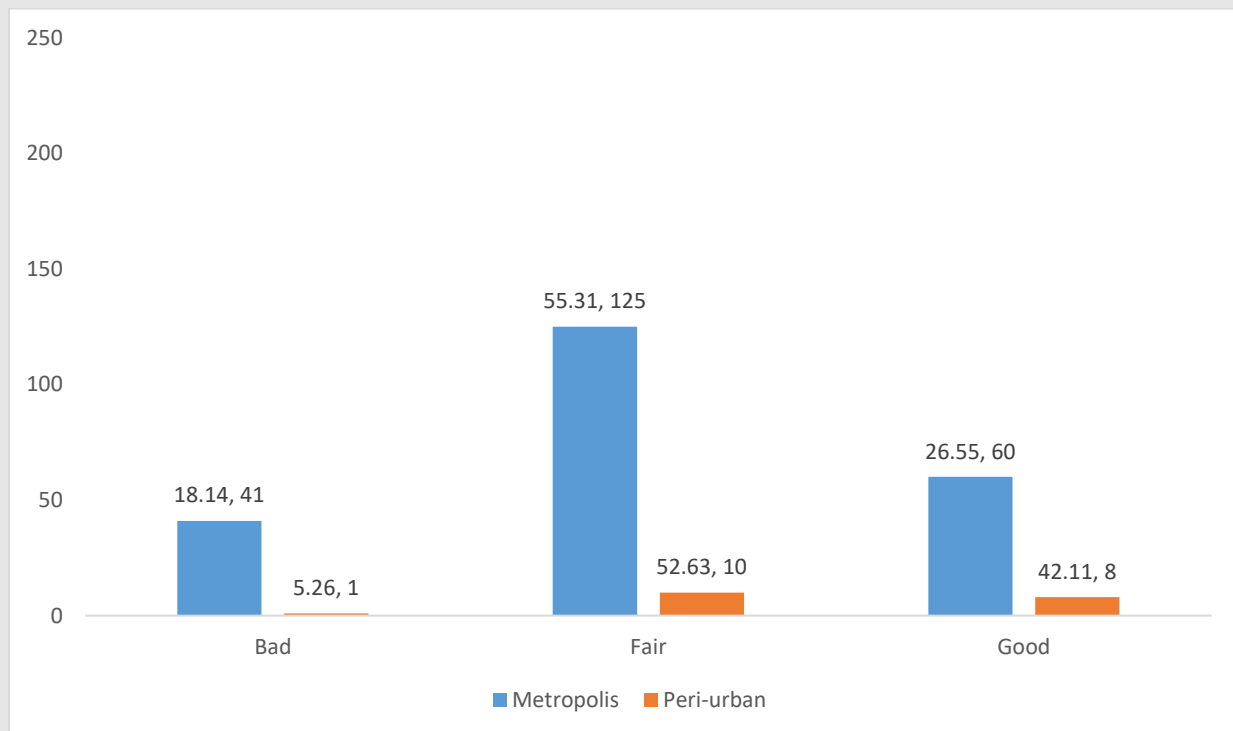


Figure. 1.4: Power Supply Infrastructure

From Figure 1.5, 16.81% of respondents accounting in metropolis area rated the public and semi-public services as good, 73.89% of respondents accounting and 9.29% said they would rate the public and semi-public services as fair and bad respectively. 42.11% of respondents accounting in peri-urban area believed the public and semi-public services in their area was good, 36.84% of

respondents accounting believed their public and semi-public services was good while 15.79% respondents accounting said there public and semi-public services are bad.

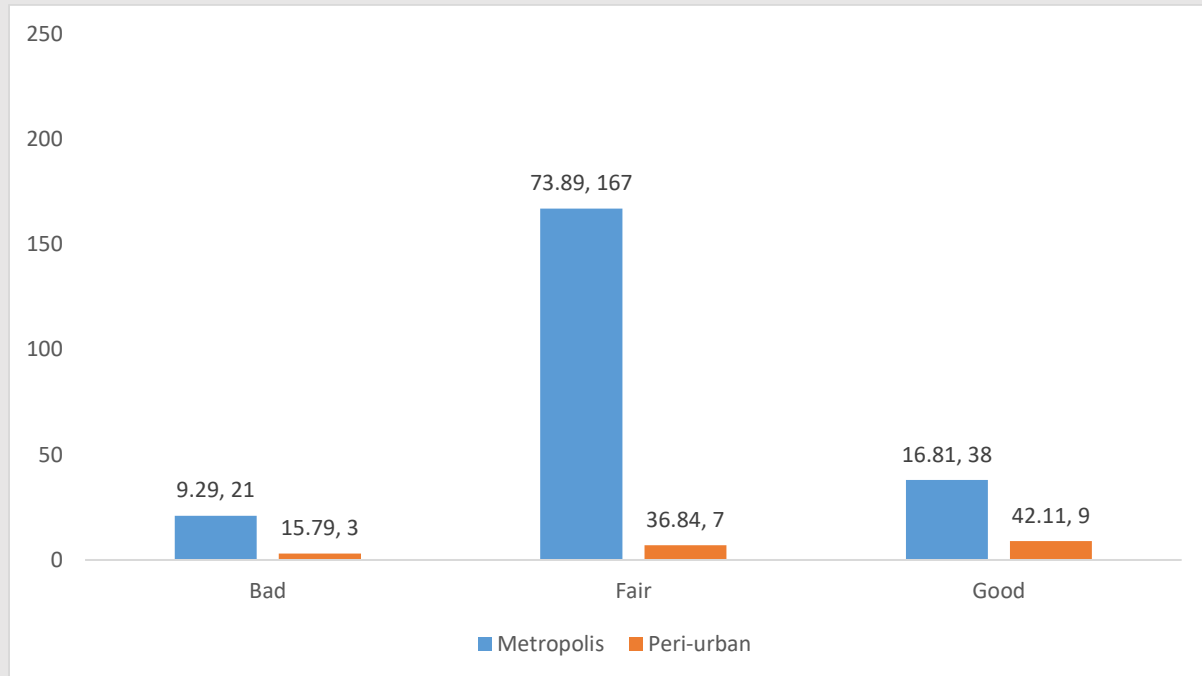


Figure. 1.5: Public and Semi-Public Services

Level of Compliance with Projects Based on LUPARs

Table 1.10 shows that 95.51% of the respondents accounting across the study area conforms to the zoning requirement while 4.49% of the total respondents accounting claimed not conform with the zoning requirement. 95.58% of respondents accounting in metropolis area conforms with zoning requirement while 4.42% of respondents accounting did not conform with the zoning requirement. 94.74% of respondents accounting in the peri-urban area conforms with zoning requirement while 5.26% of respondents accounting did not conform with the zoning requirement.

Table 1.10: Zoning Requirement

| Study Area | Conforms | Not conform | Grand Total |
|--------------------|-------------------|--------------------|--------------------|
| Metropolis | 216(95.58) | 10(4.42) | 226(100) |
| Peri-urban | 18(94.74) | 1(5.26) | 19(100) |
| Lagos State | 234(95.51) | 11(4.49) | 245(100) |

Table 1.11, 100% of the respondents accounting in peri-urban area conforms with the maximum no of floors regulation. For those respondents accounting in the metropolis area 99.56% conforms to the maximum no of floors regulation while 0.44% did not conform with the maximum no of floors regulation. Therefore, 99.59% conforms with maximum no of floors regulation while 0.41% did not conform with maximum no of floors regulation across the study area.

Table 1.11: Maximum no of Floors

| Study Area | Conforms | Not conform | Grand Total |
|--------------------|-------------------|--------------------|--------------------|
| Metropolis | 225(99.56) | 1(0.44) | 226(100) |
| Peri-urban | 19(100) | 0(0) | 19(100) |
| Lagos State | 244(99.59) | 1(0.41) | 245(100) |

Table 1.12 shows 80.82% of respondents accounting complied with the minimum plot size requirement and 19.18% did not comply with the minimum plot size requirement across the study area. 80.97% of respondents accounting in metropolis area complied with minimum plot size requirement while 19.03% of respondents accounting did not comply to their minimum plot size requirement. 78.95% of respondents accounting in peri-urban area complied with minimum plot size requirement while 21.05% of respondents accounting did not comply.

Table 1.12: Minimum Plot Size

| Study Area | Conforms | Not conform | Grand Total |
|-------------|------------|-------------|-------------|
| Metropolis | 183(80.97) | 43(19.03) | 226(100) |
| Peri-urban | 15(78.95) | 4(21.05) | 19(100) |
| Lagos State | 198(80.82) | 47(19.18) | 245(100) |

According to Table 1.13, the total number of respondents accounting across all area were 100%, those who complied to maximum coverage per plot regulation 88.16% of respondents accounting while 11.84% of respondents accounting didn't comply to the maximum coverage per plot regulation across the study area. Metropolis has the highest number of respondents accounting that conforms to maximum coverage per plot regulation though 10.62% of respondents accounting did not conform to the maximum coverage per plot regulation. 26.32% of the respondents accounting in the peri-urban area did not conform to the maximum coverage per plot regulation while 73.68% of those in the peri-urban area conforms to the maximum coverage per plot regulation.

Table 1.13: Maximum Coverage per Plot

| Study Area | Conforms | Not conform | Grand Total |
|-------------|------------|-------------|-------------|
| Metropolis | 202(89.38) | 24(10.62) | 226(100) |
| Peri-urban | 14(73.68) | 5(26.32) | 19(100) |
| Lagos State | 216(88.16) | 29(11.84) | 245(100) |

From Table 1.14, 98.78% of the total respondents accounting across the study area complied with the density requirement while 5.26% of the respondents accounting didn't comply with the density requirement. Area which complied the most with the density requirement was the metropolis area, where 99.24% of respondents accounting complied with the density requirement though 0.88% of

those in metropolis area didn't comply with density requirement. 94.74% of those respondents accounting in peri-urban area complied with the density requirement while 5.26% didn't comply with density requirement.

Table 1.14: Density Requirement

| Study Area | Conforms | Not conform | Grand Total |
|-------------|------------|-------------|-------------|
| Metropolis | 224(99.24) | 2(0.88) | 226(100) |
| Peri-urban | 18(94.74) | 1(5.26) | 19(100) |
| Lagos State | 242(98.78) | 3(1.22) | 245(100) |

Table 1.15 shows 80.41% of the respondents accounting conforms to the parking requirement across all areas while 19.59% didn't conform to the parking requirement across all areas. Most of the respondents accounting that conforms to the parking requirement across all areas were those in peri-urban, 89.47% conforms to the parking requirement while 10.53% didn't conform to the parking requirement. 20.35% of those in metropolis didn't conform to the parking requirement while 79.65% conforms to the parking requirement.

Table 1.15: Parking Requirement

| Study Area | Conforms | Not conform | Grand Total |
|-------------|------------|-------------|-------------|
| Metropolis | 180(79.65) | 46(20.35) | 226(100) |
| Peri-urban | 17(89.47) | 2(10.53) | 19(100) |
| Lagos State | 197(80.41) | 48(19.59) | 245(100) |

Figure 1.6 shows 59.59% of the respondents accounting across all study area complied with the provision of landscaping regulation while 40.41% of respondents accounting didn't bother to

comply with the provision of landscaping regulation. The study area who the most was the low is metropolis area as 59.73% of them complied with the provision of landscaping regulation while the remaining 40.27% of the respondents accounting decided not to comply with the provision of landscaping regulation. Those whose area are in the peri-urban area had 42.11% of respondents accounting that decided not to comply with the provision of landscaping regulation but the remaining 57.89% of respondents accounting complied with the provision of landscaping regulation.

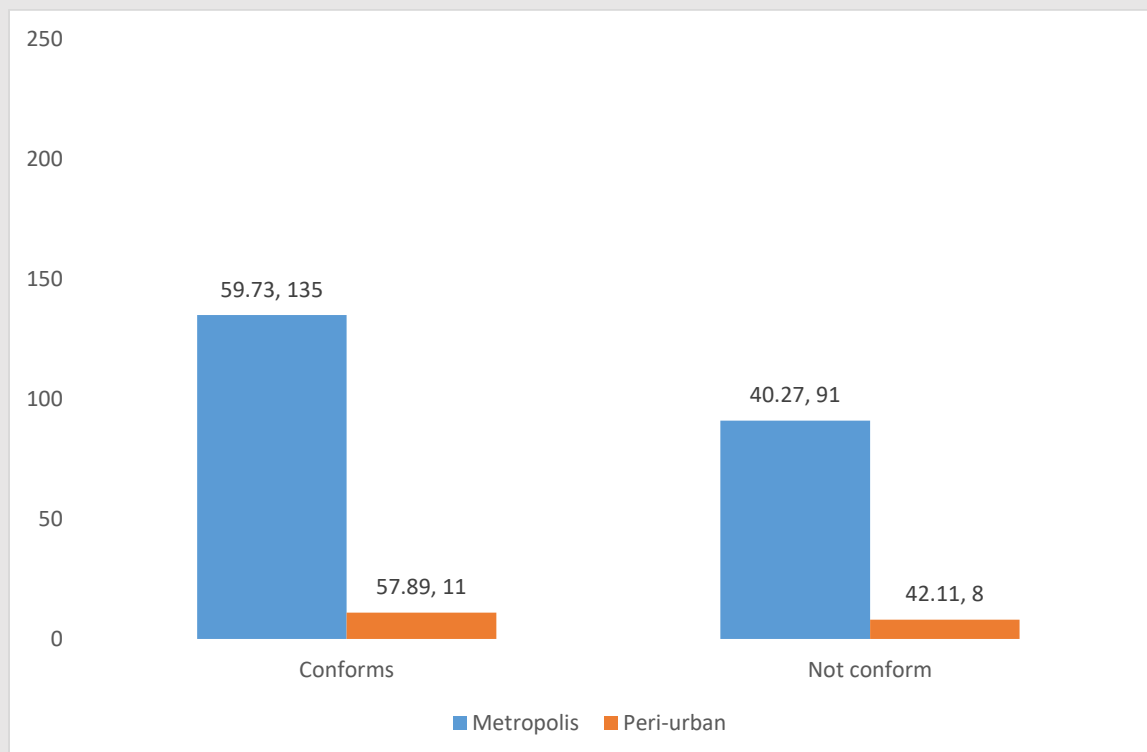


Figure. 1.6: Provision of Landscaping

From Figure 1.7 shown, 88.57% of the respondents accounting across all area conforms to the permissible number of dwelling units' requirement while 11.43% didn't bother to conform to the permissible number of dwelling units' requirement in the study area. The area who to the permissible number of dwelling units' requirement didn't conform the most is the metropolis area

as 12.39% of respondents accounting didn't conform while the remaining 87.61% conforms to the permissible number of dwelling units' requirement. Peri-urban area all the respondents accounting conforms to the permissible number of dwelling units' requirement which is 100%.

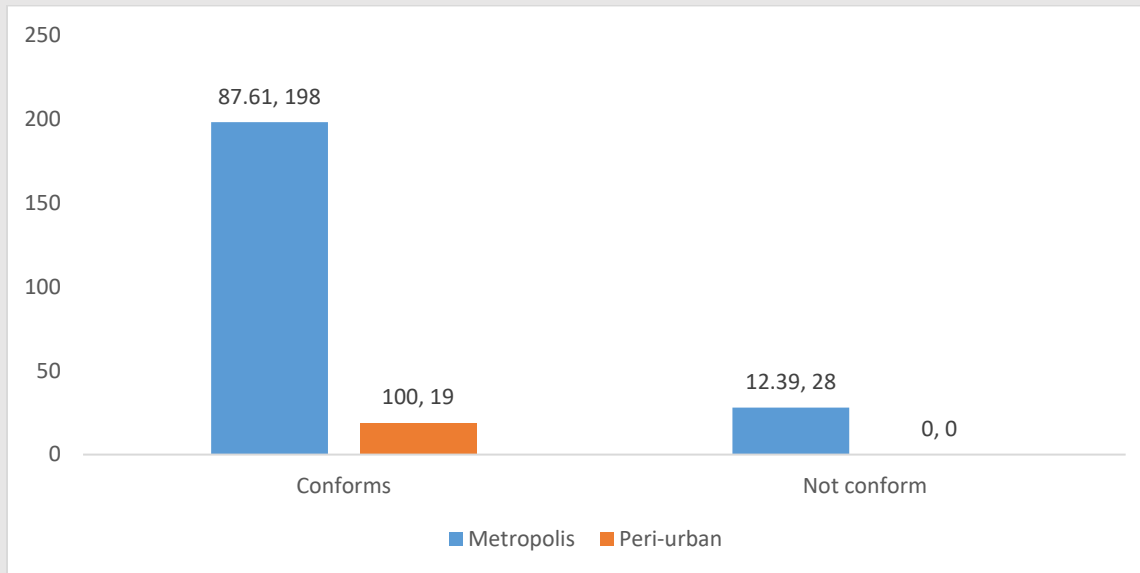


Figure. 1.7: Permissible Number of Dwelling Units

According to Table 1.16, the total number of respondents accounting across all area were 100%, those who complied to front setback regulation 90.61% of respondents accounting while 9.39% didn't comply to the front setback regulation across the study area. Peri-urban has the highest number of respondents accounting that conforms to front setback regulation though 5.26% of respondents accounting did not conform to the front setback regulation. 9.73% of the respondents accounting in the metropolis area did not conform to the front setback regulation while 90.27% of those in the metropolis area conforms to the front setback regulation.

Table 1.16: Front Setback

| Study Area | Conforms | Not conform | Grand Total |
|-------------|------------|-------------|-------------|
| Metropolis | 204(90.27) | 22(9.73) | 226(100) |
| Peri-urban | 18(94.74) | 1(5.26) | 19(100) |
| Lagos State | 222(90.61) | 23(9.39) | 245(100) |

From Table 1.17, 89.82% of the respondents accounting complied with the rear air space requirement in metropolis area while 9.73% of the respondents accounting didn't comply with the rear air space requirement in metropolis area, 100% of the report complied with the rear air space requirement in the peri-urban area. Therefore, there was no record of any respondents accounting that didn't comply with the rear air space requirement in peri-urban area.

Table 1.17: Rear Air Space

| Study Area | Conforms | Not conform | Grand Total |
|-------------|------------|-------------|-------------|
| Metropolis | 203(89.82) | 23(10.18) | 226(100) |
| Peri-urban | 19(100) | 0(0) | 19(100) |
| Lagos State | 222(90.61) | 23(9.39) | 245(100) |

Table 1.18 indicates that, 87.35 % of the respondents accounting across all area conforms to the right side setback regulation of the study area while 12.65% of the total respondents accounting claimed not to conform to the right side setback regulation of the study area. 94.74% of respondents accounting in peri-urban area conform to the right side setback regulation while 5.26% of respondents accounting didn't conform to the right side setback regulation. 86.73% of respondents accounting conforms to the right side setback regulation in metropolis area while 13.27% of the respondents accounting didn't conform to the right side setback regulation.

Table 1.18: Right Side Setback

| Study Area | Conforms | Not conform | Grand Total |
|-------------|------------|-------------|-------------|
| Metropolis | 196(86.73) | 30(13.27) | 226(100) |
| Peri-urban | 18(94.74) | 1(5.26) | 19(100) |
| Lagos State | 214(87.35) | 31(12.65) | 245(100) |

According to Table 1.19, 88.94% of the respondents accounting in metropolis area complied with the left side setback regulation though 11.06% of the respondents accounting in the metropolis area didn't comply with the left side setback regulation. 94.74% of the respondents accounting in peri-urban area complied with the left side setback regulation while 5.26% didn't comply with the left side setback regulation. Hence, 89.38% of the respondents accounting complied with the left side setback regulation in the study area though 10.61% of the respondents accounting didn't comply across all area.

Table 1.19: Left Side Setback

| Study Area | Conforms | Not conform | Grand Total |
|-------------|------------|-------------|-------------|
| Metropolis | 201(88.94) | 25(11.06) | 226(100) |
| Peri-urban | 18(94.74) | 1(5.26) | 19(100) |
| Lagos State | 219(89.39) | 26(10.61) | 245(100) |

From Table 1.20, 100% of the respondents accounting in metropolis area complied and 100% of respondents accounting in peri-urban area complied. Therefore, all respondents accounting in peri-urban area conforms to the highway and road requirement and in metropolis area all respondents accounting conforms to the highway and road requirement.

Table 1.20: Highway and Roads

| Study Area | Conforms | Not conform | Grand Total |
|-------------|----------|-------------|-------------|
| Metropolis | 226(100) | 0(0) | 226(100) |
| Peri-urban | 19(100) | 0(0) | 19(100) |
| Lagos State | 245(100) | 0(0) | 245(100) |

Figure 1.8 shows 78.95% of the respondents accounting in peri-urban area didn't comply with the complimentary use regulation while 21.05% of the respondents accounting in peri-urban area complied with the complimentary use regulation. 53.98% of the respondents accounting in metropolis area didn't comply with the complimentary use regulation while 46.02% of the respondents accounting in metropolis area complied with the complimentary use regulation.

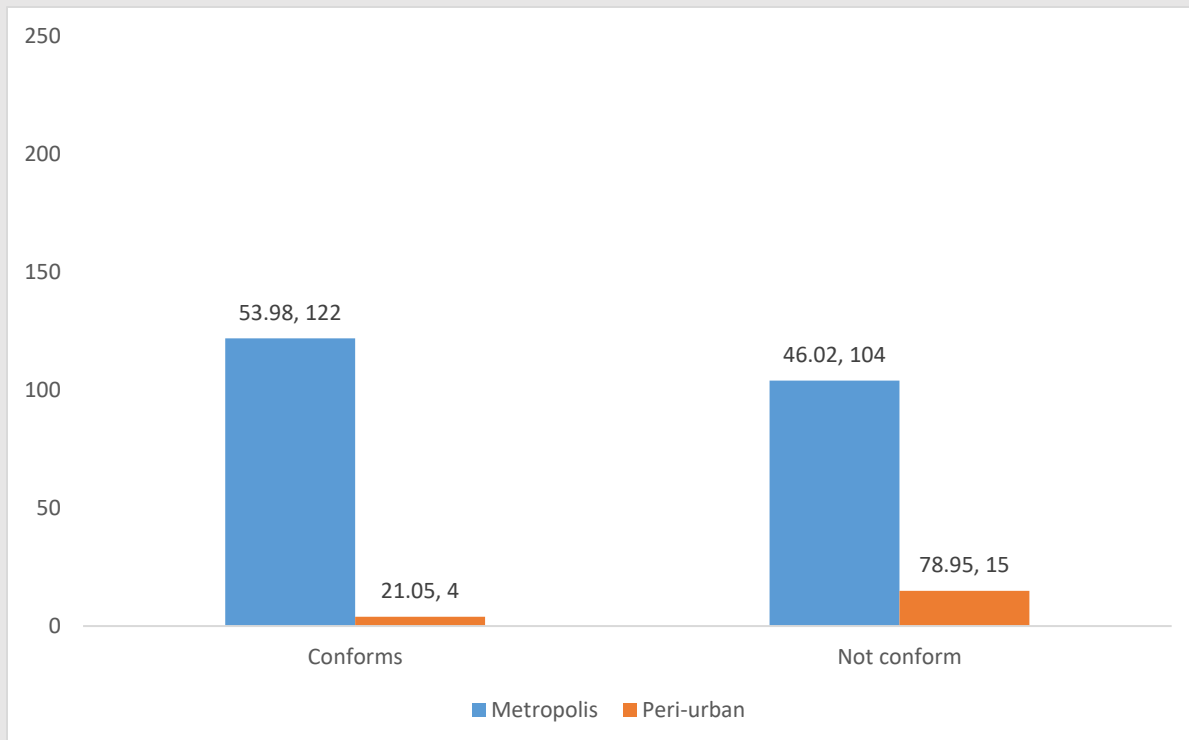


Figure. 1.8: Complimentary Use

Figure 1.9 indicate the compliance level in floor area ratio requirement, 61.22% of the respondents accounting across all area conforms to the floor area ratio requirement while 38.78% of the respondents accounting didn't bother to conform to the floor area ratio requirement in the study area. The area which the floor area ratio requirement didn't conform the most is the metropolis area as 38.5% of respondents accounting didn't conform while the remaining 61.5% conforms to the floor area ratio requirement. 57.89% of the respondents accounting in peri-urban area conforms to the floor area ratio requirement while 42.11% of the respondents accounting did not conform.

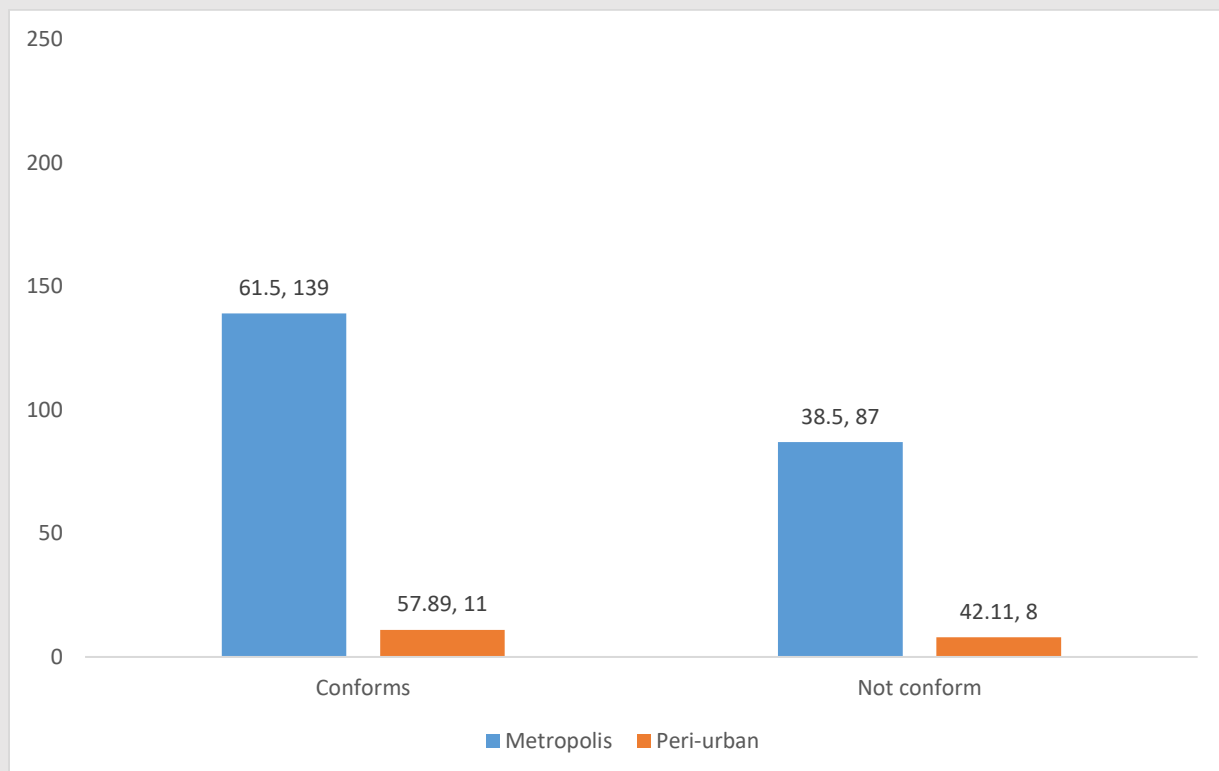


Figure. 1.9: Floor Area Ratio

From the results gathered in Table 1.21 shows the level of compliance that conforms comparison between metropolis and peri-urban areas in the study area. 92.30% out of the total respondent accounted conforms to the land use planning regulation across the study area in metropolis area

and the remaining 7.69% conforms to the land use planning regulation in the peri-urban area. Thus, this result explains that majority of the land use planning regulations that conforms were from the metropolis area while others were in peri-urban area.

Table 1.21: Conforms Comparison between Metropolis and Peri-Urban Areas

| Planning Standard Regulation | Total no conforms | |
|------------------------------|-------------------|------------|
| | Metropolis | Peri-urban |
| Zoning | 216(7.57) | 18(7.57) |
| Maximum no of floors | 225(7.88) | 19(7.89) |
| Minimum plot size | 183(6.41) | 15(6.30) |
| Maximum coverage per plot | 202(7.08) | 14(5.88) |
| Density | 224(7.85) | 18(7.56) |
| Parking | 180(6.31) | 17(7.14) |
| Landscaping | 135(4.73) | 11(4.62) |
| Permissible dwelling units | 198(6.94) | 19(7.98) |
| Front setback | 204(7.15) | 18(7.56) |
| Rear air space | 203(7.11) | 19(7.98) |
| Right side setback | 196(6.87) | 18(7.56) |
| Left side setback | 201(7.04) | 18(7.56) |
| Highway and road | 226(7.92) | 19(7.98) |
| Complimentary use | 122(4.27) | 4(1.68) |
| Floor area ratio | 139(4.87) | 11(4.62) |
| Total | 2854(92.30) | 238(7.69) |

According to Table 1.22 the not conform comparison between metropolis and peri-urban areas is illustrated, and 91.93% of the total respondents accounted that does not conform to the land use planning regulation in metropolis while 8.06% does not conform to the land use planning regulation in the peri-urban area. Hence, minority of the land use planning that did not comply

with the approved planning standard were from the peri-urban area and majority that did not comply were in the metropolis area.

Table 1.22: Not conform Comparison between Metropolis and Peri-Urban Areas

| Planning Standard | Total no Not Conform | |
|----------------------------|----------------------|------------|
| Regulation | Metropolis | Peri-urban |
| Zoning | 10(1.87) | 1(2.13) |
| Maximum no of floors | 1(0.19) | 0(0) |
| Minimum plot size | 43(8.02) | 4(8.51) |
| Maximum coverage per plot | 24(4.48) | 5(10.64) |
| Density | 2(0.37) | 1(2.13) |
| Parking | 46(8.58) | 2(4.26) |
| Landscaping | 91(16.98) | 8(17.02) |
| Permissible dwelling units | 28(5.22) | 0(0) |
| Front setback | 22(4.10) | 1(2.13) |
| Rear air space | 23(4.29) | 0(0) |
| Right side setback | 30(5.60) | 1(2.13) |
| Left side setback | 25(4.66) | 1(2.13) |
| Highway and road | 0(0) | 0(0) |
| Complimentary use | 104(19.40) | 15(31.91) |
| Floor area ratio | 87(16.23) | 8(17.02) |
| Total | 536(91.93) | 47(8.06) |

From Table 1.23, 84.13% of the respondents accounted across all area complied with the approved planning standard regulation while 15.87% of the respondents accounted across all area does not comply with the approved planning standard regulation in the study area. Therefore, majority of the compliance level complied with the approved planning standard requirement while minority of the compliance level does not comply with the approved planning standard requirement across the total study area.

Table 1.23: Compliance of Buildings to Planning Regulations

| Planning standard | Conforms | Not conforms |
|----------------------------|-------------|--------------|
| Zoning | 234(7.55) | 11(1.89) |
| Maximum no of floors | 244(7.89) | 1(0.17) |
| Minimum plot size | 198(6.40) | 47(8.06) |
| Maximum coverage per plot | 216(6.99) | 29(4.97) |
| Density | 242(7.83) | 3(0.51) |
| Parking | 197(6.37) | 48(8.23) |
| Landscaping | 146(4.72) | 99(16.98) |
| Permissible dwelling units | 217(7.02) | 28(4.80) |
| Front setback | 222(7.18) | 23(3.95) |
| Rear air space | 222(7.18) | 23(3.95) |
| Right side setback | 214(6.92) | 31(5.32) |
| Left side setback | 219(7.08) | 26(4.46) |
| Highway and road | 245(7.92) | 0(0) |
| Complimentary use | 126(4.08) | 119(20.41) |
| Floor area ratio | 150(4.85) | 95(16.30) |
| Total | 3092(84.13) | 583(15.87) |

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

Introduction

This chapter focuses on the summary of findings based on the objectives of the study. The conclusion of the study is provided while recommendations are made for the identified problems in the study. Further area to be researched on regarding this study are likewise stated.

Summary of Findings

This study assesses the land use planning and analysis reports' in relation to perception of frequency of different land uses, existing situation of facilities, actual situation of utilities/ services and the level at which developers comply to the physical planning permit regulations in the study area, findings shown through the aggregated data collected that most of the respondents accounting were metropolis area while few were peri-urban area. Also, it was observed that there were 5 types of land uses in the study area, residential land use had the highest numbers of respondents accounting followed by commercial land use then institutional and industrial land use while mixed land use had the lowest number of report.

From the study conducted it was noted that existing situation of facilities, utilities and services area fairly okay, majority of the road conditions were in good shape, with availability of street lights in most areas, though most area did not have access to traffic light in the study area. Also, the drainage system is fairly okay because there is a good road network. From the study 21.22% of the total water supply sources are bad while 55.92% are fair and the remaining 22.86% are good, when summed up total respondents accounting are 245 in total.

The results shows that majority of the telecommunication service are fairly okay though few respondents accounting were not okay with the telecommunication serviced saying it is bad. From the data collected most of the existing situation utilities, services and facilities were in fair condition. Majority of the sewage system are fair, most of solid waste management system are in good shape, 38.37% of respondents accounting of the total power supply are bad while 36.33% of respondents accounting are fair and the remaining 25.31% of respondents accounting are good, when summed up total respondents accounting are 100% in total. Also, there is adequate power supply infrastructure, public and semi-public services in the study area because majority are fairly okay.

Due to Land use planning and analysis report, developers are ready to comply with the Lagos state physical planning permit regulations amongst the regulations is the zoning requirement. Most of the respondents accounting do ensure that there zoning requirement conforms to the approved planning standard of the area just a few does not conform to the approved planning standard. According to the results majority of the respondents accounting complied with the minimum no of floor regulation just a few did not comply. Likewise, most of the maximum floor area conforms to the approved planning standard. Majority of the respondents accounting agreed to the maximum coverage per plot regulation to avoid haphazard development, it is understood that most of the respondents accounting complied with the physical planning permit regulations on density requirement.

Most of the respondents accounting conforms to parking requirement because an aesthetic pleasing environment is very essential for living, the data shows that there is a high level of compliance in term of provision of landscaping. In addition, it is observed that most permissible no of dwelling unit complied to the approved planning standard. The setbacks, road network, floor area ratio and

complimentary use all complied to the planning requirement to ensure it is in accordance to the compliance level of Lagos state urban and regional planning and development law.

In synopsis findings from the reports showed that the level of compliance of development is significant and in accordance with the approved planning standard. The level of compliance rate was above average across the study area, and the planning regulations which recorded above average compliance are: zoning requirement, maximum no of floors regulation, minimum plot size, maximum coverage per plot, density requirement, parking requirement, provision of landscaping regulation, permissible number of dwelling units requirement, setbacks regulation and floor area ratio requirement. Descriptive findings also showed that there is a large difference in the rate of compliance to planning regulations between construction in the metropolis areas and those constructed in peri-urban areas.

Conclusion

To this end, this study revealed the level of compliance of land use planning and analysis reports in Lagos State using samples drawn from Lagos State Physical Planning Permit Authorities in all local government areas. This study described that land use planning and analysis activities were carried out more often in metropolis area than peri-urban area. It concluded that some information available in the LUPARs are at variance with those obtained during site inspections. This might have influenced granting approval on development permits where they were not supposed to be granted.

Recommendation

Land use planning and analysis reports can be more effective and impactful if the preparation is equally efficient, certain recommendation are therefore needed to improve the quality of LUPAR preparation. From the study, it was observed that the land use planning and analysis report imposed

by the Lagos State Physical Planning Permit Authority went a long way in increasing the rate of compliance level, ensuring that developers meet up with the approved planning standard. The land use planning and analysis report increased the rate of compliance, here are likely suggestions that should help solve the issues highlight in the summary.

Firstly, government especially the Ministry of Physical Planning and Development Agencies should provide effective land use planning procedure that would monitor and ensure that developers meet up with approved planning standard requirement before carrying out any development, by doing this it would reduce the level of haphazard development in our built up environment because before developers go into any construction that must have complied by the guidelines and abstained away from development that does not meet up with minimum standard and false information. This will successfully direct growth and development in a more sustainable way and offer the fundamental structure for a more practical development control.

Secondly, provision of adequate funding for planning authorities is very essential because for land use development to be coordinated effective and in line with overarching policy goals, planning agencies must have appropriate money. It can result in better decision making, enhanced infrastructure, greater public involvement and accelerated economic development. This would reduce the act of bribery and corruption among physical planning agencies officers within the study area.

Thirdly, public awareness on land use can improve the compliance level of land use planning. Government should organize public enlightenment programmes and campaign on the importance of land use planning as this might change developers' perspective toward land use planning and also improve level of compliance with planning regulation within the study area and beyond.

Lastly, government should provide additional personnel and modernized technology for supervising and observing land use operations. The government should arrange for both skilled and unskilled personnel to receive training. Agencies within the ministry of physical planning and development should get training on appropriate client-client interaction.

Limitations of the Study

This study is restricted to Lagos State and therefore limited to its geographic scope. It also used secondary data and descriptive analysis. The information could therefore not be generalised for the whole country. In addition, the results of the study are interpreted within the locational and subject contexts of Lagos State, Nigeria.

Implications for Further Research

There are many issues to explore in land use and analysis reports. This study had however addressed issues regarding planning regulation, effects of land use planning and level of compliance. Other areas that can be researched into include:

- i. Assessment of land use planning analysis and its resilience
- ii. The impact and role of policymakers and planners in land use planning and analysis.