



# THE CONTRIBUTION OF NEIGHBOURHOOD FACTORS ON THE CHOICE OF RESIDENTIAL LOCATIONS IN IBADAN CITY.

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## ABSTRACT

This study investigates the significant contribution of neighbourhood factors on the choice of residential users' locations in their decision making process within Ibadan North Local Government Area (IBNLGA) of Oyo State. The research is a survey type in which the residential property users, and the property managers or agents within the three residential densities (high: Mokola, Oniyanrin, Omitowoju and Inalende-Ode Olo areas; medium: Basorun, Idi-Ape, Basorun, and Ashi areas; and low: Bodija Old and New Estates, Ikolaba Estate areas) of the selected neighbourhoods in IBNLGA; were administered structured and close-ended questionnaire to collect relevant data needed for analysis. The data were analysed using the binary logistic regression statistics (in which the dependent variable was choice of location and the variables of influence were ten neighbourhood factors) with the aid of Computer Aided Statistical Package for Social Science (SPSS) Version 16. The result of the analysis revealed that neighbourhood factors influencing users' choice of residential location varied among the three residential neighbourhoods. At P- value 0.05 levels, the common significant factor in the choice of residential neighbourhood in all the residential densities was the rent passing. In high density neighbourhood, the most significant factor for the choice of residential location was noise level and others. In medium density areas, only distance to working place had the highest influence on users choice of location while shopping centres and availability of recreation facilities were significant factors of influence to users' choice of location in residential low density neighbourhood. The study recommended among others that end-users paramount needs should be incorporated into the housing and urban renewal programs / development schemes from their conception to execution in order to create a balanced and responsive urbanized society.

**Keywords:** *Location, Neighbourhood factors, Residential property, Users' choice, Ibadan*

## INTRODUCTION

Neighbourhood describes the development characters, planning and allocation of land use, the type and quality of life of the people living within the vicinity, their taste and economic entity and harmonizing social interactions, convenience and comfort. Its attributes however vary among diverse social groups propelled by the zoning arrangement and infrastructural facilities.

Neighbourhood constitutes a significant portion of the entire land use within the city development, Its planning and allocation mechanisms between socio-economic groups synchronizes convenience, comfort, and direct close contact relationships (Coker, Awokola, Olomolaiye, and Booth, 2007; & Aluko, 2011). Neighbourhood also indicates the type and quality of life of the people living within the vicinity, reflecting their taste and economic entity. Its features or attributes therefore vary among diverse social groups propelled by the zoning arrangement and infrastructural facilities.

The existence of neighbourhood reveals the effects of externalities of household units and their social interactions on household. These social interactions defer in intensity and importance in the lives of residents (Aluko, 2011). The consciousness of a decent housing unit, poses a quest for a choice of neighbourhood, possessing certain features void of preventable health hazards and diseases, but characterizing the availability of clean air, access to potable drinking water, adequate shelter, security, good transport interlinks and other basic services and facilities (Smersh, Smith and Schwartz, 2003; Sangodoyin and Coker, 2005; Aluko, 2006; & Coker, *et.al.*, 2007). As properties differ in characteristics so also there exists different neighbourhoods having peculiar attributes. These attributes become factors that influence the decision to reside in a neighbourhood or to relocate from such neighbourhoods. The Appraisal Institute (1991) cited in Nuhu (2008), identified the neighbourhood attributes/factors to include age of neighbourhood, rate of construction and vacancy, market activity levels, absorption rate, turnover rate, volume of property transactions, motivation of buyers and sellers, property use before and after sale, presence of desired amenities, maintenance standards, economic profile, and age of occupants.

Tenants/users therefore give considerations to certain neighbourhood features aside the property structural characteristics itself. A residential property with an average provision of inbuilt facilities may not arouse the interest of some, due to the quality of the immediate environment in which the property is situated. The aftermath effects of such neighbourhood may be abandoned property or when occupied, it often results to unwillingness to pay rents especially

by sitting tenants.

The motivating factor for the choice of residential property in a particular location may therefore be aligned to neighbourhood considerations rather than mere features of the property. This was pointed out in Omole (2001) that housing condition is the totality of the 'state' of the physical, environmental and the satisfactory level of a particular dwelling unit, measured against some variable of liveability at a particular time. This indicates that environmental features of a neighbourhood, contribute to the 'state' and wellbeing of any property as poor housing conditions can affect people's health status (both mental and physical) and can worsen existing health problems (Omole, Eke, Olorunfemi and Bako, 2013). A healthy and conducive neighbourhood having basic amenities and infrastructures can therefore be a booster to social well-being of city dwellers (Megbolugbe, 2007).

The decision to reside in a neighbourhood however, may not be a free factor, as some occupants reside where a vacancy existed due to limited choice of accommodation as evident in major cities in Nigeria such as Ibadan, Lagos and Port Harcourt, Warri and few other state capitals (Sanni and Akinyemi, 2009). For instance, in Lagos, Omole, *et al.*, (2013), affirms that high level of urbanization and economic deprivation has made Lagos populace seek for a place of abode and not housing in its totality. The attraction of the urban poor to reside near Central Business District while the affluent at outskirts, and particular ethnic groups concentrating in certain parts of the city signifies distinct features peculiar to their socio-economic status (Sanni and Akinyemi, 2009).

In addition, lack of basic features such as access roads, schools, refuse disposal systems, transportation systems, proximity to places of employment, safety, management, and spaces for economic activities such as shopping centres in the neighbourhoods may affect the decision of users to residential choice (Sanni and Akinyemi, 2009). Equally, the presence of pollutants, such as noise emanating from nearness to market, mechanic workshop or Motor Park; areas prone to natural disasters such as flooding; nearness to high power voltage wire installations in an environment, crime prone areas and the likes, pose great threat to neighbourhood choice and also affect quality of life (of residents), level of socio-economic development and environmental health (Omole, *et al.*, 2013). Hence the study evaluates the contribution of neighbourhood factors on the residents' choice of location within Ibadan Metropolis. The other section of the paper is divided five parts namely: literature review, study area; research methods, discussion of findings ; conclusion and recommendations.

## LITERATURE REVIEW

### Residential Land Use and Urbanization

Residential land use, among the various competing urban land uses, is the largest consumer of land in urban areas (Ogunleye, 2012). The unending quest for urban land use is associated with many factors first of which is population increase. This excessively high level of concentration of urban population is as a result of rapid urbanization in many developing countries over the past half-century (Dimuna and Omatsone, 2010), necessitating an increase in demand for residential land use shown by different patterns.

Though it is difficult to attain an acceptable demographic estimation in Nigeria, available statistics suggest emphatically that urban growth is on the rise and towns and cities growing in leaps and bounds (Onibokun and Kumuyi, 2004). Adeniji & Ogundiji (2009) however cautioned that competition on land space for housing in the face of weak policy and poverty is becoming enormous. Nearly 80% of the urban population are living in slums and squatter settlements without adequate water, lighting, sanitation and waste disposal in Nigeria (Dimuna and Omatsone, 2010). Taking Ibadan urban centre into consideration, Fourchard, (2003) observed that the inner city area which is the oldest part of the city, has the lowest quality residence and the highest population density in the city. In the 19th century, large compounds for extended families and warrior lineages constituted this part of the city.

Considering the existing demographic features and land use characteristics, Coker, *et al.* (2007) in its contribution on the challenges of urban housing quality and its associations with urban environment zoned Ibadan urban centre into three major residential zones as follows: High-density residential district with a density of over 300 persons per hectare, and includes Mapo, Oje, Beere, Inalende, Oke-Padi, Yemetu, Oniyanrin, Agbokojo, Agbadagbudu; Medium-density residential district with a population density of 100 – 300 persons per hectare, including Ojoo, Agbowo, Sango, Ore-Meji, Oke-Bola, Oke-Ado, Molete, Challenge; and Low-density residential district with less than 100 persons per hectare and encompasses such wards as Bodija, Basorun, Iyaganku, Jericho, Akobo, Ashi, Idi-Ishin, Total Garden.

Residential land use pattern therefore appears to overlap with the trend of local population decentralization in the areas. This is as result of the choice of migrants into the peripheral parts of the city. Ibadan Residential land use pattern can be further explained as shown in Table 1.

Table 1: Some Residential Neighbourhood Land use distribution

S/N	DENSITY TYPES	AREAS
1.	Low Density	University of Ibadan, Polytechnic Ibadan, Old Bodija, Ikolaba, U.C.H., Agodi G.R.A., Kongi, Jericho G.R.A., Iyaganku, Adeoyo State Hospital, Oluyole Extension
2.	Medium Density	Ashi, Bashorun, Iwo Road, Secretariat, Oke-Itunu, Oremeji, Oke-Bola, Oke-Ado, Challenge, Felele.
3.	Traditional Core High Density	Mokola, Oke-Aremo, Ekotedo, Oje, Beere, Apesin, Olorunsogo, Owode, Molete, Oke-Are, Odo-Ona, Sanyo, Odinjo,
4.	Non-Traditional Core High Density	Eleyele, Sabo, Apata, Ijokodo, Orogun, Agbowo

Source: Adopted from the map of Ibadan residential zones: Laurent (2010)

### Neighbourhood Development and its Attributes

Neighbourhood can be defined as an area with superlatively identifiable and recognizable characters with either natural or artificial boundaries such as streams, river, hills culverts, drainages and fenced walls. The land use pattern and the urban growth can influence the neighbourhood look as well. Neighbourhood may exhibit newness, growth, decay and renewal stages. In Harvey (1996) some neighbourhoods are observed to be static in character while some are dynamic at various rates of speed. These different states make them to gain public recognition and favour especially from potential residents. Neighbourhood attributes are therefore many and varied depending on when it evolved and the extent of its dynamism. It ranges from being physical or environmental, social, economic, to governmental or institutional. It includes parking availability, size of the catchment area and transit accessibility, similarly, coffee and bakery sites, parks, grocery stores, schools, restaurants and gas stations and other features that create attractiveness and serenity

Cities have been noted for diverse neighbourhood traits and quality. Some are natural based on the physical factor like its terrain, flooding historical settings, religious emoluments; and artificial features in terms of planning arrangement infrastructural provision social amenities; while some are new in character some are old reflecting its origin with distinct cultural and religious beliefs.

In developing countries like Nigeria, most cities have residential neighbourhood that are already wearing out in features. Fourchard (2003) pointed out three major cities in Nigeria which are closely associated with overcrowded and dirty/ degraded environments as Lagos, Ibadan and Onitsha. Gbadegesin and Aluko (2010) enumerated various

issues or phases relating to loss of urban quality. They include environmental degradation, crime and insecurity, poor air quality, housing problem, traffic congestion, poor waste management, inadequate urban utility services (water, sanitation and sewage, electricity, fuel etc.). The foregoing situations have made the urban areas breeding places for crimes and defiant behaviours thus, making the urban centres unsafe for people, unattractive to investors, unfavourable to economic activities and inimical to good governance. Other hazards include the toll of incessant road accidents while motorists become impatient when commuting through congested traffic. Coker, *et al.*, (2007), suggested that the general lack of neighbourhood infrastructures such as roads, drains, sanitation waste disposal and recreational facilities is an issue that will require governmental and institutional intervention. Over population does not just affect the standard of living, but also the neighbourhood environment.

Nwaka, (2005) pointed out that most residential properties are located in neighbourhoods with overcrowded conditions which do not provide adequate defences against disease and other health hazards. Coker and Olutoge (2006) in a study on prevention of guinea worm infection, recommended that a new approach to portable water supply be adopted thereby developing new sources of potable water. This indicates a gloomy state of our urban centres with no adequate potable water. Omole, *et al.* (2013), opined that well organized cities with paved-tarred roads, good drainage system in appropriate places, electricity and water supply, green areas and aesthetically pleasing environment will enhance environmental health and create bearable and liveable urban development as poor housing conditions can affect people's health status (both mentally and physically). Testing the hypothesis on the relationship between environmental condition and health status, Omole *et al.*, (2013) realised that at  $\alpha = 0.05$ , there is statistically significant relationship between environmental condition and health status.

Also, according to Din, Hoesli and Bender, (2001), there is evidence indicating that both internal and external neighbourhood attributes impact on real estate market. The perception of urban real estate development is therefore dependent on the neighbourhood quality. Good intrinsic value parameters as well as very attractive neighbourhood quality traits give confidence to long term prospects for real estate investment and enhance the economic prospects of the residents.

## **Empirical Studies on Tenants' Choice of Residential Location**

Studies have shown that tenants' choices of residential location are often influenced by the neighbourhood attributes. Fourchard, (2003) conducted an interview in different neighbourhoods of Ibadan with two sets of occupants in the city the indigenous occupants in the core centre and migrants (mostly Hausa) and found out that most occupants choose where they reside based on location, status, kind of activity, perception of the kind of neighbourhood and the quality of amenities provided in the neighbourhood. It also observed that majority consider their poverty ratio more than the conditions of their environment and thus do not see the reason to relocate. Most indigenes reside where they are because they were born there and the social affiliation that links them together from childhood to adulthood makes it difficult for them to leave the place (Fourchard, 2003). Ethnicity or racial segregation as a socioeconomic variable seems to be very significant in affecting the choice of users' neighbourhood preference, especially when neighbourhood safety is considered probably due to the perceived indigenous affiliation (Guo, and Bhat, 2006).

Other reasons for preferring one neighbourhood to the other in Sanni and Akinyemi, (2009) include transportation and travel pattern, consideration for property functionality and spaciousness, rating of existing facilities especially, children's schools, socioeconomic, cultural, administrative or purely psychological factors, as well as demographic consideration of household and influence of work place, are various factors behind the choice of residential property location.

Guo, and Bhat, (2006) opined that zones characterized by higher percentages of office space are less preferred to those with more residential or other land use purposes and School quality has a significant impact on households' residential location choice. In its opinion, Curtis & Montgomery, (2006), identified option of no choice, price affordability, proximity to work, neighbourhood services neighbourhood character, family/social contacts as variables considered important to housing and location choices. However, Coker, *et.al.*, (2007) observed that residential properties located in the more recently-developed areas of the city (low-density zone) tend to fare best compared to those in the high and medium-density zones from perspectives of both housing conditions and neighbourhood environment; and hence concluded that the quality of housing and neighbourhood environment reduces as the degree of density or level of crowdedness increases.

In addition, residential locations with good

road network have comparative advantage over developments with poor transport network. Urban locations with such relative advantage as elucidated by Oni, (2008), are found where different transport routes converge with high degree of compactness, connectivity, density, length and accessibility are exhibited within the intra- and inter- urban road networks. Transport route is major determinant for choice of residential location as observed by Rodriguez (2013). Proximity to basic necessities such as work place, market, Motor Park, shopping mall, children's school, recreation centre, place of worship, etc. is viewed as vital to the consideration for residential location. Traffic congestion can be as a result of increasing population and increase in vehicular movement in a neighbourhood which is pronounced at peak day time hour and peak night/evening time hour periods thus, undermining the comparative advantage of accessibility in a desired residential location.

In conclusion, it has been affirmed that different category of residential density of the city has distinct set of households' residential preferences peculiar to it so broad generalizations of previous empirical works in different city could be erroneous, hence this study.

## THE STUDY AREA

Ibadan is one of the ancient city not only in Nigeria but in sub-Sahara Africa since the colonial are. Politically, the city has been one of the centre of governance prior to the amalgamation of Northern and Southern Protectorate in 1914.; a regional headquarter of the south-western region till the creation of more states in 1976 and Ibadan becomes capital seat of Oyo State Government. It occupies a land area of 634.3 km<sup>2</sup> and has a population of about 3.5 million (Nigerian National Population Commission in 2006 cited in Coker *et.al*, 2007). The construction and reconstruction of the Ibadan-Lagos expressway has encouraged many Lagos based workers to live in Ibadan where accommodation is cheaper. This new influx has had an important influence on the residential properties to push up rents. The general increase of the property market in the whole city led the urban poor to find rooms in the cheapest areas of Ibadan, the inner city and peripheral slums (Fourchard, 2003) thereby ignoring the neighbourhood features.

Ibadan North Local Government (IBNLG) council is one of the five (5) urban local governments in Ibadan and was established by the Federal Military Government of Nigeria on 27th September, 1991 (Abiola, 2001). The 2006 Population Census as cited by the National Bureau of Statistics (NBS, 2010), estimated the population of IBNLG area as 308,119,

putting male figure as 152,608 and female as 155,511. The local government covers areas between Beere roundabout through Oke-Are, Adeoyo, Yemetu, to Mokola, Sabo, Ago Tapa, Oke Itunu, Ijokodo, Apete and The Polytechnic, Ibadan. Other components are areas from Beere roundabout to Gate, Idi-Ape to Basorun and up to Lagos/Ibadan expressway, State and Federal Secretariats, Ikolaba, Bodija, University of Ibadan and Agbowo Areas (Abiola, 2001). Economic activities and commercial centres are numerous ranging from markets, shopping malls, eateries and relaxation centres, banks, motor parks, hotels, schools, office complexes, state and federal secretariats. It houses six (6) major markets which are Bodija, Sango, Mokola, Sadongeri, Gate and Ijokodo/Gbaremu Markets. Ibadan North Local Government play host to major tourist centres and hotels. These include the Zoological Garden at the University of Ibadan, Premier Hotel at Mokola, Labod Hotel at Sango, Trans Amusement Park, Alma Guest House in Bodija, Bowers Tower at Oke Are, Cultural centre, K.S. Motel and Agodi Gardens located at the Parliament Road, Ibadan (Abiola, 2001).

Three residential neighbourhoods grouped within the scope of this study to represent the high, medium and low residential density zones of this local government area are Mokola, Basorun and Bodija neighbourhoods. According to Laurent (2010) residential zone density classification, Mokola alongside Beere, Oke Aremo, Yemetu and Oje falls within the traditional core high density. While Bashorun is classified under medium density zone, Bodija is categorized as a low density residential zone.

## RESEARCH METHODS

The study is a survey research in which the target population are property occupiers (both landlords and tenants), and the agents managing the residential properties in all the selected neighbourhood. A total of 76,740 residential properties listed under Ibadan North Local Government (IBNLG), in the National Population Commission (NPC) Priority Tables for the distribution of regular households by type of housing unit (2006), forms the sampling frame of residential properties of the study.

Adopting a simplified formula by Yamane (1967) as cited by Israel (2003), reduce the sample size for residential property population to 398. Hence each sampled residential property of 398 were selected using stratified random sampling and a structured questionnaire were designed to elicit relevant data from both the property users of the three residential density zones of High, Medium, and Low, divided as 133, 133 and 132 respectively; and their property agents. For analysis Three Hundred and Forty-Five

(345) were retrieved from respondents. That is 117, 127 and 101 respectively. Direct observation and interview support the data collected.

Stratified random sampling was adopted as it involves the division of the residential property occupants in Ibadan into groups according to their neighbourhood characteristics as low, medium or high density areas. Thereafter, from each neighbourhood, a random sample selection of one occupier per residential property was carried out. This method is adopted because it allows for the consideration of the heterogeneous nature of the study population, ensures a representation of the population frame (Fox, Hunn, and Mathers, 2007) and prevents bias in the sample selection of the sample population

Both descriptive and inferential statistical methods were adopted for the analysis. Descriptive statistics was used for the presentation of population demographic characteristics through the use of frequency distribution tables, Mean, Standard deviation. The inferential statistics adopted involved

the use of Binary Logistics Regression to ascertain the contribution of neighbourhood factors on the choice of location in each residential zone. Thus, model for the contribution of neighbourhood factors on choice of residential location is as follows;

$$\text{logit}(Y) = \text{natural log(odds)} = \ln\left(\frac{\pi}{1 - \pi}\right) = \alpha + \beta x + \mu \text{ ---ii}$$

$\pi$  = probability (Y = outcome of interest / X =x, a specific value of X)

Thus the logistic regression could be further simplified as follows;

$$Y = \alpha + b_1x_1 + b_2x_2 + b_3x_3 + \dots + e \text{ -----ii}$$

Where  $\pi$  is the outcome of interest, Y = Choice of location,  $\alpha$  = Constant,  $\beta$  = regression coefficient, x = neighbourhood factors (i.e. *acroad, secuneig, workdst, noise, rentneig, school, market, elect, medfac, waste, flood, worship, time, police, shop, potwater* as contained in Table 6), e = error term ( $\mu$ ).

Table 6: Operationalization of Variables on the factors that influences choice of residential location and willingness to stay and pay for accommodation

Definition of Variables	Code	Measurement
Choice of residential location (Dependent)	choice	1 (Yes), 0 (Otherwise)
Type of road network	acroad	1 (Tarred), 0 (Otherwise)
Security	secuneig	1 (Secured), 0 (Less secured)
Distance to Work place	workdst	Actual distance in km
Level of Noise	noise	1 (Tolerable), 0 (Less tolerable)
Rent value of Property	rentneig	Actual amount in Naira
Nearness to children's School	school	1 (Very near), 0 (Not near)
Access to Market place	market	1 (Access), 0 (No access)
Access to reasonable Electric Power Supply	elect	1 (Access), 0 (No Access)
Access to Hospital/ Medical Centre	medfac	1 (Access), 0 (No Access)
Waste disposal system	waste	1 (Available), 0 (Not available)
Flood Control (River channelization)	flood	1 (Good), 0 (Bad)
Distance to place of Worship	worship	Actual distance in Km
Nearness to recreation Centre	recreat	Actual distance in Km
Nearness to Police Station	police	1 (Near), 0 (Not near)
Nearness to Shopping Centre	shop	Actual distance in Km
Access to portable water	potwater	1 (Access), 0 (No Access)

## Results and Discussion of Findings

The total number of questionnaires administered was 398 but 345 were retrieved and analysed. Some variables considered are therefore analysed as follows.

Table 9: Background Information of Property Occupiers

Category	Group	High (%)		Medium (%)		Low (%)	
<b>Age</b>	Below 20 Years	7	(6.0)	9	(7.1)	0	(0)
	21 - 30 Years	19	(16.2)	47	(37.0)	19	(18.8)
	31 - 40 Years	34	(29.1)	51	(40.2)	42	(41.6)
	41 - 50 Years	16	(13.7)	11	(8.7)	26	(25.7)
	51 - 60 Years	21	(17.9)	4	(3.1)	12	(11.9)
	Above 60 Years	20	(17.1)	5	(3.9)	2	(2.0)
	<b>Total</b>	<b>117</b>	<b>(100.0)</b>	<b>127</b>	<b>(100.0)</b>	<b>101</b>	<b>(100.0)</b>
<b>Occupation</b>	Civil Service	16	(12.6)	16	(12.6)	15	(14.9)
	Private Employment	56	(44.1)	56	(44.1)	45	(44.6)
	Public Organisation	15	(11.8)	15	(11.8)	14	(13.9)
	Self-Employment	31	(24.4)	31	(24.4)	26	(25.7)
	Unemployment	9	(7.1)	9	(7.1)	1	(1.0)
	<b>Total</b>	<b>127</b>	<b>(100.0)</b>	<b>127</b>	<b>(100.0)</b>	<b>101</b>	<b>(100.0)</b>
<b>Marital Status</b>	Married	94	(80.3)	82	(64.6)	62	(61.4)
	Single	23	(19.7)	45	(35.4)	27	(26.7)
	Divorced	0	(0)	0	(0)	5	(5.0)
	Widow/Widower	0	(0)	0	(0)	7	(6.9)
	<b>Total</b>	<b>117</b>	<b>(100.0)</b>	<b>127</b>	<b>(100.0)</b>	<b>101</b>	<b>(100.0)</b>
<b>Tenure Occupation</b>	Inherited	26	(22.2)	3	(2.4)	10	(9.9)
	Transferred	7	(6.0)	3	(2.4)	1	(1.0)
	Purchased	2	(1.7)	6	(4.7)	18	(17.8)
	Tenant	82	(70.1)	115	(90.6)	72	(71.3)
	<b>Total</b>	<b>117</b>	<b>(100.0)</b>	<b>127</b>	<b>(100.0)</b>	<b>101</b>	<b>(100.0)</b>
<b>Population of Household</b>	1 - 2	17	(14.5)	25	(19.7)	17	(16.8)
	3 - 4	30	(25.6)	59	(46.5)	46	(45.5)
	5 - 6	30	(25.6)	14	(11.0)	33	(32.7)
	Above 6	40	(34.2)	29	(22.8)	5	(5.0)
	<b>Total</b>	<b>117</b>	<b>(100.0)</b>	<b>127</b>	<b>(100.0)</b>	<b>101</b>	<b>(100.0)</b>
<b>Type of Property</b>	Tenement	71	(60.7)	43	(33.9)	8	(7.9)
	2 bedroom	25	(21.4)	41	(32.3)	30	(29.7)
	3 Bedroom	21	(17.9)	38	(29.9)	40	(39.6)
	Duplex	0	(0)	5	(3.9)	23	(22.8)
	<b>Total</b>	<b>117</b>	<b>(100.0)</b>	<b>127</b>	<b>(100.0)</b>	<b>101</b>	<b>(100.0)</b>
<b>Relationship to Neighbourhood</b>	Indigene	50	(42.7)	18	(14.2)	5	(5.0)
	Migrant	67	(57.3)	109	(85.8)	96.0	(95.0)
	<b>Total</b>	<b>117</b>	<b>100.0</b>	<b>127</b>	<b>(100.0)</b>	<b>101</b>	<b>(100.0)</b>

Source: Field Survey, 2015.

## Background Information of Respondents in the Study Area

Table 2 shows the background information of respondents. The age distribution indicated 76.9% of the respondents in High density zone are categorised as the able youths and adults falling within the working class, that is ages 21 - 60. In Medium density zone, 89% are as such while it increased to 98% in Low density zone. This could be inferred that the bulk of responses are from the working class in all the residential zones of Ibadan.

Under the occupational distribution of the respondents within the study area, there were 15.4%, 12.6% and 14.9% civil servants respectively in High, Medium and Low residential zones. Low density zone has the highest percentage of workers as compared to the other zones and the lowest percentage of unemployed. The percentage of unemployed is the highest in High density zone, which is 23.1%.

High density recorded the highest percentage of married respondents (80.3%) as compared to others, followed by the Medium density zone. Divorced and widowed respondents are recorded only in Low density zone with 11.9%.

Most of the respondents are tenants in all the residential zones with High density zone having 22.2% respondents indicating they inherited the property they occupied. 17.8% respondents indicated they purchased their property in Low density zone.

34.2% of respondents show that their Household population is above six (6) in high density zone as compared with Medium (22.8%) and Low (5%) zones. This indicates evidences of overpopulation in high density zone. However average population falls with the 3 – 4 household population bracket in all the zones. 60.7% of the type of residential properties within the High density zone, are tenement, followed by two bedroom properties with no indication of Duplex. However, in Medium density zone, there is a kin competition between tenement, two bedroom and three bedroom types of accommodation. Low density also has a low percentage of tenement property, that 7.9%.

The respondents are categorised as either indigenes or migrants. 57.3% are migrants while 42.7% are indigene in High density zone. This may be inferred to as the increasing rate of urban growth and influx of people into the city, thereby out running the indigenous citizenry. This is similar in the other zones which have 85.8% and 95.0% migrants respectively in Medium and low residential density zones.

## The neighbourhood attributes within the study area.

The succeeding section presents the descriptive analysis of neighbourhood attributes within the study area. These are grouped under high, medium and low residential densities as stated in the scope of study.

Table 10: Characteristics of Neighbourhood attributes within the study area.

Category	Group	High		Medium		Low	
		(%)	Mean/S.D	(%)	Mean/S.D	(%)	Mean/S.D
Type of Residential Property	Tenement only	(48.7)	Mean 2.8421 S.D:2.06593	1.3	Mean 4.3553 S.D: 2.21933	-	Mean 4.3158 S.D: 1.81997
	Flat only	(2.6)		(34.2)		(22.4)	
	Duplex only	-		(11.8)		(27.6)	
	Tenement and Flat	(36.8)		(9.2)		-	
	Tenement and Duplex	-		-		(46.1)	
	Flat and Duplex	-		(10.5)		(3.9)	
	All	(11.8)		(32.9)		(100.0)	
<b>Total</b>	<b>(100.0)</b>		<b>(100.0)</b>		<b>(100.0)</b>	<b>S.D: .00000</b>	
Type of Toilet	Water Closet only	(21.1)	Mean 2.1974 S.D: .76629	(81.6)	Mean 1.3684 S.D: .78046	-	Mean 1.05 S.D: .225
	Pit Latrine & shot-put	(38.2)		-		-	
	Water Closet and others	(40.7)		(18.4)			
	<b>Total</b>	<b>(100.0)</b>				<b>(100.0)</b>	

Category	Group	High		Medium		Low	
		(%)	Mean/S.D	(%)	Mean/S.D	(%)	
Type of Wall Material	Sandcrete Block	(39.5)	Mean 1.92	(80.3)	Mean1.3553	(94.7)	Mean 2.1579
	Mud & Temporal Mats.	(28.9)	S.D: .845	(3.9)	S.D: .74304	(5.3)	S.D: .71279
	Sandcrete & Others	(31.6)		(15.8)		-	
	Total	100.0)		(100.0)		(100.0)	
							Mean 1.9737
Average Elect. Supply	Not Regular	(34.2)	Mean 2.1447	(60.5)	Mean1.5789	(18.4)	S.D: .43124
	Regular	(17.1)	S.D: .90486	(21.1)	S.D: .78762	(47.4)	
	Neutral	(48.7)		(18.4)		(34.2)	
	Total	(100.0)		(100.0)		(100.0)	
Water Supply	Public Tap Only	(17.1)	Mean 2.2778	-	Mean 2.2500	(10.5)	Mean 2.0132
	Well, Borehole, Pump,	(34.2)	S.D: .75475	(75.0)	S.D: .43589	(81.6)	S.D: .34616
	Public Tap & others	(43.4)		(25.0)		(7.9)	
	Total	(100.0)		(100.0)		(100.0)	
Road Network	Bad Road Network	(11.8)	Mean 1.9474	(10.5)	Mean 1.905	(5.3)	Mean 2.0000
	Good Road Network	(81.6)	S.D: .42879	(82.9)	S.D: .41443	(88.2)	S.D: .48990
	Neutral	(6.6)		(6.6)		(6.6)	
	Total	(100.0)		(100.0)		(100.0)	
Noise Level	Noisy	(72.4)	Mean 1.3684	(46.1)	Mean 1.6974	(11.8)	Mean 2.3026
	Quiet	(18.4)	S.D: .64997	(38.2)	S.D: .73066	(76.3)	S.D: .61144
	Neutral	(9.2)		(15.8)		(11.8)	
	Total	(100.0)		(100.0)		(100.0)	
Children's School	Not Present	(1.3)	Mean 2.5789	(13.2)	Mean 2.2105	(7.9)	Mean 2.0000
	Within Neighbourhood	(39.5)	S.D: .52315	(52.6)	S.D: .65961	(53.9)	S.D: .0000
	Neutral	(59.2)		(34.2)		(38.2)	
	Total	(100.0)		(100.0)		(100.0)	
Security	Not Secured	(75.0)	Mean 1.3026	(21.1)	Mean 1.7867	-	Mean 2.026
	Security Post/ Gate	(19.7)	S.D: .56615	(77.6)	S.D: .41242	(100.0)	S.D: .3642
	Neutral	(5.3)		(1.3)		-	
	Total	(100.0)		(100.0)		(100.0)	
Market	Not Available	(2.6)	Mean 2.0395	(2.6)	Mean 2.1184	(5.3)	Mean 2.1579
	Available	(90.8)	S.D: .30291	(82.9)	S.D: .39890	(86.8)	S.D: .46340
	Neutral	(6.6)		(14.5)		(7.9)	
	Total	(100.0)		(100.0)		(100.0)	

Category	Group	High		Medium		Low	
		(%)	Mean/S.D	(%)	Mean/S.D	(%)	
<b>Medical Facilities</b>	<b>Not Available</b>	(2.6)	Mean 2.2632	(5.3)	Mean 2.0921	(3.9)	Mean 2.0000
	<b>Available</b>	(68.4)	S.D: .49982	(80.3)	S.D: .43750	(76.3)	S.D: .36515
	<b>Neutral</b>	(28.9)		(14.5)		(19.7)	
	<b>Total</b>	(100.0)		(100.0)		(100.0)	
<b>Waste Management Disposal System</b>	<b>Not Managed</b>	(46.1)	Mean 1.6447	(14.5)	Mean 1.9605	(6.6)	Mean 1.6842
	<b>Well Managed</b>	(43.4)	S.D: .66741	(75.0)	S.D: .50175	(86.8)	S.D: .67746
	<b>Neutral</b>	(10.5)		(10.5)		(6.6)	
	<b>Total</b>	(100.0)		(100.0)		(100.0)	
<b>Flood Control</b>	<b>Bad Flood Mgt / Control</b>	(43.4)	Mean 1.5789	(15.8)	Mean 1.9079	(2.6)	Mean 2.0658
	<b>Good Flood Mgt/ Control</b>	(44.7)	S.D: .71672	(77.6)	S.D: .46698	(90.8)	S.D: .29824
	<b>Neutral</b>	(11.8)		(6.6)		(6.6)	
	<b>Total</b>	(100.0)		(100.0)		(100.0)	
<b>Worship Centres</b>	<b>Less Available</b>	(1.3)	Mean 2.0789	(11.8)	Mean 2.0000	(1.3)	Mean 2.0658
	<b>Numerous</b>	(89.5)	S.D: .31678	(76.3)	S.D: .48990	(90.8)	S.D: .57354
	<b>Neutral</b>	(9.2)		(11.8)		(7.9)	
	<b>Total</b>	(100.0)		(100.0)		(100.0)	
<b>Recreation Centres</b>	<b>Not Present</b>	(43.4)	Mean 1.8553	(51.3)	Mean 1.6447	(13.2)	Mean 2.2368
	<b>Within Neighbourhood</b>	(27.6)	S.D: .84386	(32.9)	S.D: .74304	(67.1)	S.D: .51299
	<b>Neutral</b>	(28.9)		(15.8)		(19.7)	Mean 2.0658
	<b>Total</b>	(100.0)		(100.0)		(100.0)	S.D: .57354
<b>Police Station</b>	<b>Less Accessible</b>	(9.2)	Mean 2.1579	(3.9)	Mean 2.1184	(1.3)	
	<b>Accessible</b>	(65.8)	S.D: .56692	(80.3)	S.D: .43103	(89.5)	
	<b>Neutral</b>	(25.0)		(15.8)		(9.2)	Mean 2.2368
	<b>Total</b>	(100.0)		(100.0)		(100.0)	S.D: .51299

Source: Field Survey, 2015.

Table 10 shows various characteristics of neighbourhood attributes within the study area, indicating frequency, mean and standard deviation. Neighbourhood attributes are also categorized as neighbourhood factors in this study. Thus, there are seventeen characteristic features considered in this study. These are; type of residential property, type of toilet facilities, type of wall materials used, level of noise, accessibility to road network, average rent passing, presence of children's schools, worship centres and recreation centres, average electricity supply, water supply, proximity to market, accessibility to medical facilities and police station, security, flood control and waste management disposal system. The data was provided by property managers

who were conversant with the rental market of the three residential density zones.

Indications show that most categories of characters are interwoven or present in almost all the zones with some peculiar to certain zones. Flat, a type of residential property is present in all the three zones, with medium density zone have the highest frequency of 34.2% while high density zone has the lowest of 2.6%. However, a combination of tenement and flat which is common in high and medium densities has the highest frequency of 36.8% in high. Also, a combination of flat and duplex which is common in both medium and low residential density zones have the highest frequency in low density (46.1%).

Moreover, Low density zone do not have any other type of toilet except water closet as compared to high density zone which has combinations of all types of toilet ranging from shot-put method, pit latrine to water closet. Medium density residential zone however have 81.6% water closet and 18.4% water closet and others. Sandcrete block wall material is a common feature in all the zones with low having the highest indication of 94.7%. Use of temporal materials is also common in some parts of both medium and high density zones. These could be as a result of illegal or squatter settlements, poverty associated to population increase (Fourchard, 2003). 60.5% of property managers agree that in medium density zones, average electricity supply is not regular as compared to 47.4% which are of the opinion that electricity supply is regular in low density zone per day, with 34.2% neutral on the subject matter. This is not a surprise, which may reflect the busy nature of residents who may be away from residences in the better part of the day to generally access the true nature of the claim. Whereas in high density zone 48.7% respondents were neutral while only 17.1% say electricity supply per day is regular, averagely.

Furthermore, good road network accessibility is a common feature in all the residential zones with low density zone having the highest indication of 88.2%, while 11.8%, 10.5% and 5.3% respondents insist that there is presence of bad road network typifies the characteristic feature/attribute of high, medium and low density zones, respectively. Most high zones are typical of noisy neighbourhood than any other residential zone having 72.4% pass-mark by property managers, while many (76.3%) say a quiet neighbourhood is common in low density zones. A combination of Public water supply and open well, borehole, pump, are common types of water supply in all the residential zones with varying percentages as high density zones has 43.4%. However, other sources of portable water aside public water supply, that is, open well with pump and/or borehole take the lead percentages of 81.6% and 75.0% in low and medium density zones respectively. In high, medium and low residential density zones, 39.5%, 52.6% and 53.9% of the property managers respectively agree that children's schools like play group/ crèche, nursery/ primary schools and secondary schools are present within the neighbourhoods, while only 1.3 %, 13.2 % and 7.9% respectively, do not agree. 75% respondents are of the opinion that high density zones are prone to high crime rates as compared to low residential zones having 100% affirmation of security measures. Also, most streets within the low density residential neighbourhoods have security gates and security officers manning the streets. This is due to the security consciousness of the neighbourhood and

status of the residents as compared to others. 77.6% property managers do agree that medium density zones are provided with security posts and gates.

In addition, all the residential density zones have the presence of markets. 90.8%, 82.9% and 86.8% respondents attest to this respectively from high to low zones. Medical facilities are located within the various neighbourhoods. 80.3% respondents agree to this in medium density zones, while 76.3% and 68.4% affirm this for low and high zones respectively. Waste management disposal system is well managed in virtually all the zones, with low zones having the lead (86.8%) affirmation. Similarly, 90.8% and 77.6% agree that good flood management/ control system is put in place in low and medium zones respectively while only 2.6% and 15% declined respectively. Neighbourhoods within the high density zones, especially those in flood prone zones battle with flooding. This is observed as 43.4% affirm bad flood management and 44.7% affirm good flood control in that order. As the nature of neighbourhood which may be prone to flooding, dumping of refuse wastes along waterways and overcrowding are common features.

Religious worship centres are common in all the residential zones. 89.5%, 76.3% and 90.8% affirm this for high, medium and low density zones respectively. Also, recreation facilities are available mostly in low residential zones (67.1%) than in other zones. Accessibility to police stations within the neighbourhoods increases from low (89.5%) to medium (80.3%) and then to high (65.8%) zones. Average rent passing of properties varies in type of property and residential density zone. There is a wide gap between tenement rent passing in High density (N24,000) and Low density (N135,000). Also, considering rent passing for duplex type of property, the gap between medium and low density is one hundred and fifty two thousand, five hundred naira (N152,500). This is approximately the average rent for 3bedroom property in high density zone. Thus, a tenant who pays for 2bedroom accommodation in Low density zone, would conveniently get a 3bedroom or a duplex accommodation in High density zone, if rent passing is the only factor for this choice.

### **The neighbourhood factors that influence the choice of location in each residential zone.**

It is important to check for high inter-correlations among the independent variables (i.e., Multi-collinearity) and also check for the presence of outliers, or cases that are not well explained by the model. These outlying cases were identified by inspecting the residuals, especially when there were problems with the goodness of fit of the model.

Table 3: Logistic regression for the Null Model output of High Density Residential Zone Choice Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	2.225	.372	35.729	1	.000	9.250
<b>a.Initial -2 Log Likelihood: 52.430</b>							

Source: Field Survey, 2015.

Table 4: Logistic Regression Classification Table for High Density Residential Zone Choice of Location

		Predicted			
Observed		Choice of Location		Percentage Correct	
Step 0		No	Yes		
Step 1	Choice of Location	No	0	8	.0
		Yes	0	74	100.0
Overall Percentage					90.2
Step 1	Choice of Location	No	3	5	
		Yes			
Step 1	Overall Percentage		0	74	
					93.9

Source: Field Survey, 2015.

- a. Constant is included in the model.
- b. The cut value is .500
- c. N = 117

Tables 3 & 4 provide details of the null model, that is, it includes only the intercept (constant). The parameter estimates (log-odds) given as “B” is 2.225 with the column “S.E.” providing the standard errors (0.372) of these estimates. Since effects in terms of log-odds are hard to interpret, they are generally exponentiated to give odds-ratios (Landau and Everitt, 2004) as seen in the column headed “Exp(B)” which is estimated at 9.25. This means that the predicted odds of making a choice of residential location, is 9.25. Since 74 of our respondents choose their residential location and 8 did otherwise, the observed odds are 74/8 = 9.25.

The classification table for the null model in Table 13 indicates an intercept parameter that compares choice of location predictions made on the basis of the fitted model with the true status of occupants, i.e whether they made choices on their residential locations or not. On the basis of the fitted model, occupants are predicted to have made a choice category if their predicted choice probabilities are above 0.5 (Landau and Everitt, 2004). In this result, all occupants are classified to have made location choices by the null model leading to 90.2% being correctly classified.

An intercept-only model serves as a good baseline because it has no predictors (Pallant, 2011). A logistic model provides a better fit to the data if it demonstrates an improvement over the intercept-only

model (i.e., the null model) (Peng, Lee and Iingersoll 2002). All observations according to this model, would be predicted to belong in the largest outcome category which is Choice category. An improvement over this baseline is examined by further testing the likelihood ratio, score and Wald values.

Table 5: Goodness of Fit Test of High Residential Density

			Chi-square	df	Sig.
<b>Omnibus Tests of Model Coefficients</b>	Step 1	Step	21.216	10	.020
		Block	21.216	10	.020
		Model	21.216	10	.020
<b>Hosmer and Lemeshow Test</b>	Step 1		4.184	8	.840

Table 6: Variation on Cox and Snell R-Square and Nagelkerke R-Square

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	31.214 <sup>a</sup>	.228	.483

a. Estimation terminated at iteration number 9 because parameter estimates changed by less than .001.

Source: Field Survey, 2015.

Table 6 presents the Omnibus Tests of Model Coefficients has a high significant value of 0.02 on 10 degree of freedom (df) where  $p < 0.05$ . Since the initial odd-log (B) of 2.225 and Wald value of 35.729 as indicated in Table 3, were based on the constant only, Hosmer and Lemeshow (2000) assert that if there exists a significant reduction in the -2log likelihood estimate in the second model consisting of constants and predictors, then the goodness-of-fit is adequate. With the difference of 10df, the difference between the -2LLs for both the initial and the second (31.214) models has a chi-square value of 21.216 as shown in Table 5. This statistic measures how poorly the model predicts the choice as the smaller the value, the better the model (Wuensch, 2015). Adding the variables to the model reduced the -2LL statistic by 52.43 – 31.214 (Table 15) = 21.216 (Table 14). The chi-square value for the new block added in second model indicates a reduction in the -2LL of the constant model by 21.216 when all the predictor variables are added which

is also significant at  $p < 0.05$ . Therefore with this significant reduction of  $-2\log$  likelihood as a result of the difference in the two models, the goodness-of-fit of this model is adequate. This increases the predictive power of logistic regression model from 90.2 to 93.9 as indicated in Table 13. Hosmer and Lemeshow (2000) recommend standard of a good model for overall percentage which is between 71% and 99% in which overall percentage of this model falls within.

The chi-square value for the Hosmer-Lemeshow Goodness of Fit Test as shown in Table 14 is 4.184 with a significance level of 0.840 which

is larger than 0.05. Peng, Lee and Ingersoll (2002) asserts that when the Hosmer-Lemeshow test is non-significant, then it indicates that the model fits the data. Hence, since this value is larger than 0.05, it indicates support for the model as worthwhile. Table 15 provides another measure of goodness of fit ( $R^2$ ) defined by Cox and Snell (1989) and Nagelkerke (1991). The values of Cox and Snell (0.228) and Nagelkerke (0.483) suggest that between 22.8% and 48.3% of the variability is explained by this set of variables. Thus, the model is adequate as there appears to be observed slight variation between the two values.

Table 7: Variables in the Equation for High Density Residential Zone

		B	S.E.	Wald	df	Sig.	Exp(B)	95.0% C.I. for EXP(B)	
								Lower	Upper
Step 1 <sup>a</sup>	workdst	-.291	.179	2.637	1	.104	.747	.526	1.062
	noise	7.797	3.247	5.765	1	.016*	2433.382	4.188	1413765.674
	rentppty	.000	.000	3.882	1	.049 *	1.000	1.000	1.000
	school	-13.187	5.451	5.852	1	.016 *	.000	.000	.082
	medfac	1.173	1.419	.684	1	.408	3.232	.200	52.139
	flood	-2.455	2.527	.944	1	.331	.086	.001	12.160
	worship	-.754	.366	4.254	1	.039 *	.470	.230	.963
	police	3.092	2.522	1.503	1	.220	22.012	.157	3086.398
	shop	-.596	.515	1.341	1	.247	.551	.201	1.511
	potwater	-5.138	4.595	1.250	1	.263	.006	.000	47.822
	Constant	13.792	6.501	4.500	1	.034	976454.532		

a. Variable(s) entered on step 1: workdst, noise, rentppty, school, medfac, flood, worship, police, shop, potwater.

\* Significant values at  $p < 0.05$

In Table 7, the variables that contribute significantly to the predictive ability of the model are; noise (.016), rentppty (.049), school (.016) and worship (.039). Therefore, level of noise tolerance, rent of property, nearness to children’s school and distance to place of worship are the major factors influencing the choice of residential location in high density zone of Ibadan. Access to hospital/ medical centre, flood control (river channelization), nearness to police station, nearness to shopping centre and access to portable water did not contribute significantly to the model.

Negative B values indicate that an increase in the independent variable score will result in a decreased probability of the case recording a score of 1 in the dependent variable (indicating the presence of choice in this case). The variables measuring the Nearness to children’s school and distance to place of worship showed negative B values (-13.187 and -.754 respectively). These indicate that the closer the nearness to children’s school and distance to place of worship, the less likely it is that they will report making a choice. For the two other significant categorical variables (level of noise tolerance and rent of property), the B values are positive. This suggests that occupiers saying they considered level of noise and rent of property are more likely to answer yes to the question whether they made a choice.

Thus, equation x represents the model generated by the logistic regression analysis from where coefficients of independent variables were generated as contained in Table 16;

$$\begin{aligned}
 \text{CHOICEH} & Y = \alpha + b_1x_1 + b_2x_2 + b_3x_3 + \dots + e \text{----- iii} \\
 & = 13.792 + 7.797\text{NOISE} + 0.00\text{RENTPPTY} - 13.187\text{SCHOOL} - 0.754\text{WORSHIP} \text{-----iv} \\
 \text{CHOICEM} & Y = \alpha + b_1x_1 + b_2x_2 + b_3x_3 + \dots + e \text{-----v} \\
 & = 12.028 - .486\text{WORKDST} + 0.00\text{RENTPPTY} - 4.013\text{SCHOOL} + 2.509\text{WORSHIP} + 4.110\text{POLICE} + 8.416\text{POTWATER} \text{----vi} \\
 \text{CHOICEL} & Y = \alpha + b_1x_1 + b_2x_2 + b_3x_3 + \dots + e \text{-----vii} \\
 & = 0.172 - 1.134\text{WORKDST} + 0.00\text{RENTPPTY} - 3.408\text{FLOOD} + 2.716\text{SHOP} - 2.389\text{RECREAT} \text{-----viii}
 \end{aligned}$$

Table 18: Comparative Analysis of Significant Variables in the Equation for the Effects of Neighbourhood Factors on Choice for All Density Residential Zones

Variable	High			Medium			Low		
	B	Sig.	Exp(B)	B	Sig.	Exp(B)	B	Sig.	Exp(B)
Step 1a									
workdst	-.291	.104	.747	-.486	.022*	.615	-1.134	.019*	.322
noise	7.797	.016*	2433.382	-21.745	.997	.000	-		-
rentppty	.000	.049 *	1.000	.000	.031*	1.000	.000	.085**	1.000
school	-13.187	.016 *	.000	-4.013	.029*	.018	2.538	.201	12.650
medfac	1.173	.408	3.232	-1.722	.333	.179	1.331	.475	3.786
Flood	-2.455	.331	.086	2.238	.192	9.375	-3.408	.076**	.033
worship	-.754	.039 *	.470	2.509	.047 *	12.296	1.078	.126	2.939
Police	3.092	.220	22.012	4.110	.018 *	60.965	-	-	-
recreat	-	-	-	-	-	-	-2.389	.041*	.092
Shop	-.596	.247	.551	.048	.844	1.050	2.716	.011*	15.121
potwater	-5.138	.263	.006	8.416	.005 *	4518.502	3.706	.111	40.680
Constant	13.792	.034	976454.532	12.028	.998	167337.696	.172	.957	1.188

a. Variable(s) entered on step 1: workdst, noise, rentppty, school, medfac, flood, worship, police, recreat, shop, potwater.

\* Significant values at  $p < 0.05$

\*\* Significant Values at  $p < 0.1$

Source: Field Survey, 2015.

From Table 18, Significant variables for High are – noise(0.016), rentppty(0.049), school(0.016), worship(0.039), for Medium – workdst(0.022), rentppty(0.031), school(0.029), worship(0.047), police(0.018), potwater(0.005), while for Low – workdst(0.019), rentppty(0.085), flood(0.076), recreat(0.041), shop(0.011) with varying levels of positive and negative B values. Constant has positive B values of 13.792, 12.028 and 0.172 in high, medium and low residential density models respectively. Distance to Work place (Workdst) is significant in medium (0.022), as well as in low (0.019). Noise is significant only in high (0.016). Rental value of property (Rentppty) is significant in all the residential densities at  $p < 0.05$  except in Low which is at  $p < 0.1$  i.e., high (0.049), medium (0.031) and low (0.085). Nearness to children’s School (School) is significant in two zones i.e., high (0.016) and medium (0.029). Distance to place of Worship (Worship) is significant in both high (0.039) and medium (0.047). Nearness to Police Station (Police) is significant only in medium (0.018). Nearness to Recreation Centre (Recreat) is significant only in Low (0.041). Flood Control – River channelization – (Flood) is significant only in Low (0.076) at  $p < 0.1$ . Nearness to Shopping Centre (Shop) is significant only in Low (0.011). Access to portable water (Potwater) is significant only in medium (0.005). Significant variable present in all the zones is only Rental value of property (Rentppty) at varying levels of significance. Access to Hospital/ Medical Centre (Medfac) is not significant at all in any of the residential zones. This is further illustrated in Figure 4.

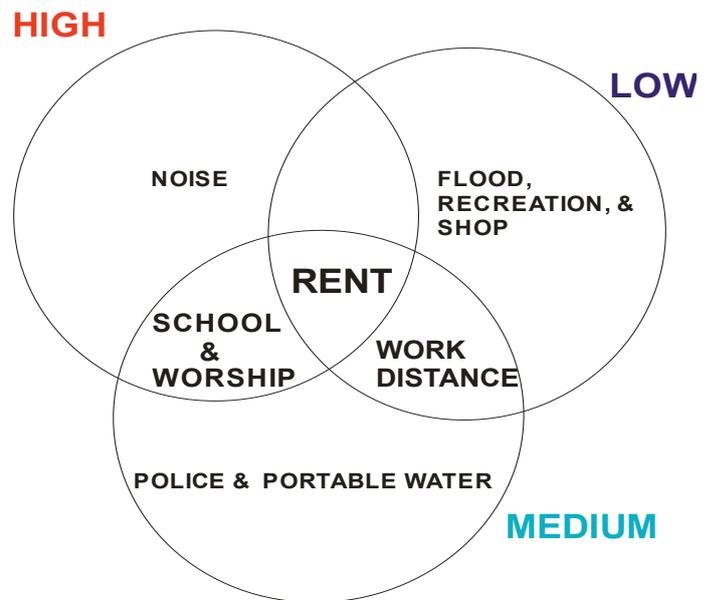


Figure 2: Pie Chart Summary of Comparative Distribution of Significant Variables Influencing Choice of Location among the Residential Density Zones

**CONCLUSION AND RECOMMENDATIONS**

This study has established various factors that propel occupants in making a choice of where to reside. All human actions or behaviour as regards to choices are rooted in satisfying organic needs such as food, water, air, physical comfort, and so on. Therefore, people become predisposed to the choice of residential neighbourhood location, the unending quests for housing notwithstanding. This may be due to the neighbourhood factor considerations which could reveal the reluctance of some occupants in certain

locations to move to other neighbourhoods. The neighbourhood features become major factors to the decision making process aside the price (rent or capital) of property. Human behaviour consequently leads to satisfaction derived from the neighbourhood conditions in which man resides, as many actions including location choices determined values and neighbourhoods into which man develops.

The following recommendations are made towards an enhanced and sustained neighbourhood development.

1. The property Agents /Managers should be involved in the drafting and implementation of urban policies as they interact regularly with the end users more during the execution of policies, property development, lettings and sales of properties, in order to achieve a better end-user friendly neighbourhood.

2. In planning and decision making, developers, landlords and government alike should note that residential density zones have distinct set of neighbourhood features and their provisions should be proportionately distributed among the neighbourhoods.

3. Accessible road that are well tarred and maintained are very important in users' choice of location among the three neighbourhood studied. Hence, government should therefore pay urgent and prompt attention to the provision of good road network and other basic social amenities and infrastructural facilities especially in high density neighbourhood for improved quality of life of their residents.

4. Comprehensive planning should be put in place and policy implemented in order to secure a flood controlled neighbourhood, improve on: minimal noise pollution, clustered, and crime prone zones as

this will improve the quality of the neighbourhood.

5. In order to maintain public health standards, functional portable water should be provided especially in Medium density zone, This affirms the earlier submission that there is significant relationship between water provision and health status (Omole, et. al., 2003; Nwaka, 2005; & Olutoge, 2006).

6. Regular update of knowledge passed through the Mandatory Continuing Professional Development (MCPD) program organized by the Nigeria Institution of Estate Surveyors and Valuers (NIESV) and its registration board (ESVARBON) should be ensured as this will further aid Estate Surveyors and Valuers in Nigeria the opportunity to educate them well in incorporating neighbourhood factor-consideration into their valuation exercise.

7. Property Managers should continue to assist and facilitate wise choices on which the client's property development depends and their value determine process should incorporate the entire neighbourhood attributes so that the end users could prudently choose his location.

8. Government, as a major stakeholder in neighbourhood development need to provide beneficial neighbourhood characters for its citizenry. This also affirms the positions of Bajari and Kahn (2005) and Omole, Eke, Olorunfemi, and Bako, (2013), that the quality of neighbourhoods affects the well-being and human capital accumulation. Above all, there is need for the holistic mobilization of resources, demonstration of political will, socio-economic interventions, regional planning and other essential elements of urban maintenance and growth, which must be incorporated into urban residential neighbourhood development.

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