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# Effects of Infrastructure on Property Values in Unity Estate, Lagos, Nigeria

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## ABSTRACT

Property is a bundle of rights whose value is determined by the interplay of various factors classified into accessibility, environmental, neighbourhood and property characteristics. This study assessed the effects of infrastructure on property values in Unity Estate in Lagos Metropolis. Questionnaire was administered on all the 510 households in the study area while 204 (40%) was retrieved and used for the study. Presentation and analysis of data was done using frequency tables and percentages. Also relative importance index was adopted in ranking the infrastructure in order of importance attached to them by the respondents. The study revealed that majority of the respondents are tenants who have been living in the study area for a long time and whose opinion about rental issues within the estate can be relied upon. The study also revealed that blocks flats (62.6%) are common in the study area. Furthermore, the study revealed that water (RII = 2.97), electricity (RII = 2.52) and roads (RII = 2.40) are ranked as the most important facilities required in the estate. On the strength of the findings, the study recommends that facilities within the estate need serious upgrade to further enhance the living conditions of the residents.

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## Introduction

The state of infrastructure is an important parameter for assessment and indicator of status of any urban system. The efficiency of any form of human activity system, including urban area, largely depends on the provision of efficient infrastructure and services (Babarinde, 1998). It can therefore be concluded that the significance of infrastructure in the proper functioning of an urban area cannot be over-emphasised. The quality and coverage of infrastructure services have a major impact on living standards and economic growth, yet it is estimated that two billion of the world's poor people lack access to adequate sanitation, two billion lack access to electricity, one billion lack access to clean water (United Nations, 2002).

Food, shelter and clothing constitute the most important needs of man. Shelter, though second in the hierarchical needs of man, implies having a roof over one's head to serve as protection from harsh weather and attack. Shelter is often construed to mean housing but housing has a broader horizon. According to Oyenuga (2006) housing comprises immediate accommodation, environment and facilities like roads, water, electricity and a host of other facilities that make living comfortable to the dwellers. Urban infrastructure, apart from being a major pointer of environmental quality, is a critical agent for the socio-economic development of an urban area (Okusipe, 1999). It plays an important and indispensable role in the economic, social and environmental aspects of life of an urban setting.

Urban infrastructure covers a wide range of services and facilities, such as water, road, waste disposal, drainage, communication, primary health services, schools and housing. Where urban infrastructure is adequately provided and efficiently managed, productive and profitable land uses are usually attracted towards such area. The uses of these infrastructural facilities compete less with productive uses through better rent offers. This competition for locations with good urban infrastructure usually results in an increase in land and housing values, either sales or rentals (Harvey, 1993).

## Concept of infrastructure

Infrastructure network is the very socio-economic climate created by the institutions (public or private) that serve as conduits of trade and investment. The roles of infrastructure in the context of integration are transformative, helping to change resources into outputs or to enhance trade by removing barriers. Therefore, an improvement in a country's infrastructure is one of the key factors affecting the long-term growth of such a country. The linkages between infrastructure and economic growth are varied and complex. Infrastructure does not only affect production and consumption directly, it also creates many direct and indirect externalities. It involves large flows of

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expenditure, thereby creating additional employment. Equally, infrastructure can have a significant impact on output, income, employment, international trade, and quality of life.

Nubi (2002) describes infrastructure as the aggregate of all facilities that allows a city to function effectively. It is also seen as a wide range of economic and social facilities crucial to creating an enabling environment for economic growth and enhances quality of life. They include housing, electricity, pipe-borne water, drainage, waste disposal, roads, sewage, health, education, telecommunications and institutional structures like police station, fire fighting stations, banks and post office. In other words, infrastructure is the large scale public services or systems, services and facilities of a country or region that are necessary for economic activity, including power and water supplies, public transportation, telecommunications, roads and school.

American Heritage Dictionary Editors (2000) also defines the term “infrastructure” as the basic facilities, services, and installations needed for the functioning of a community or society, such as transportation and communications systems, water and power lines, and public institutions including schools, post offices and prisons. Donald (1974) defines infrastructure as the physical structures and facilities that are developed or acquired by public agencies to enhance governmental functions and provide water, power, waste disposal, transportation or similar services to facilitate the achievement of common social and economic objectives. Fox (1994) defines infrastructure as those services derived from a set of public works traditionally by the public sector to enhance the private sector production and to allow for household consumption. It is the facilities with high fixed costs, long economic lives, strong links to economic development, and a tradition of public sector involvement, the services provided forms the underpinnings of the nation’s defense, a strong economy, and our health and safety, which includes: highways, streets, roads, and bridges; airports and airways; public transit; transportation; water supply, waste water treatment, water resources, solid waste, and hazardous waste services.

### Determinants of Property Values

Real estate has no value if it has no utility, if it is not scarce and if it is not effectively demanded. Real estate has significance only as it satisfies man’s needs and desires. It is this man’s collective desire for property that gives rise to value (Olusegun, 2003). Thus, the ability of a property to satisfy man’s needs and desires together with its degree of scarcity and utility compared with others makes man to ascribe value to it. Property value, therefore, according to Millington (2006) is the money obtainable from a person(s) willing and able to purchase property when it is offered for sale by a willing seller, allowing for reasonable time for negotiation and with the full knowledge of the nature and uses which the property is capable of being put.

Real estate is a heterogeneous good that is comprised of a bundle of unique characteristics reflecting not only its location, but equally affected by other amenities such as the quality of neighbourhood and infrastructure. Ge and Du (2007) opine that property value is an essential aspect of property markets worldwide and determined by a variety of factors and the determination of those factors is a significant part of property valuation. Kamali, Hojjat and Rajabi (2008) group the variables determining property values into; environmental variables, neighbourhood variables, accessibility (location) variables and property variables (Fig 1).

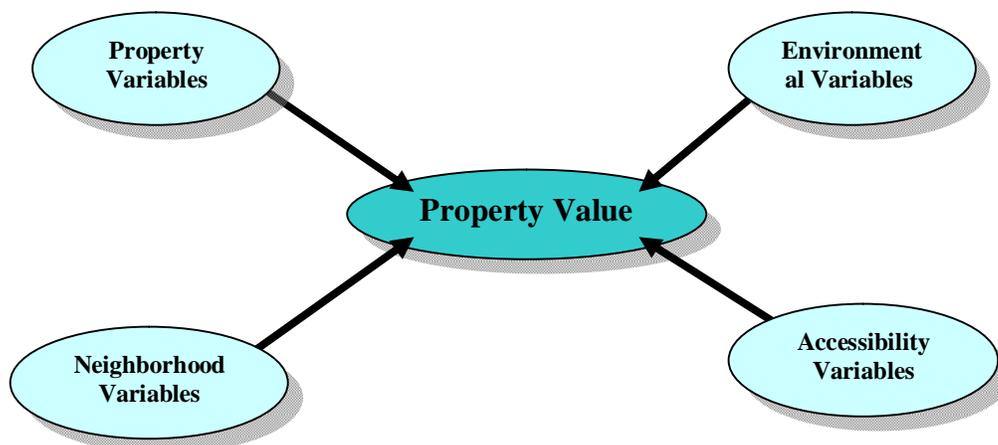


Fig. 1. Factors Determining Property Values Source: Kamali, Hojjat and Rajabi (2008)

Various earlier studies had been conducted on the effect of location on property values. These studies include Burgess (1925), Hoyt (1939), Pred (1966) and Isard (1956) Hendrikse (2003). Their various findings agreed that location is a major determinant of property value. Location is important in relation to proximity to the target market and sources of supplies; conditions and facilities are important in relation to attracting optimal rentals, and security is important in relation to tenant and visitor safety. However these studies ignore the effects of other factors (variables) in the determination of property values.

While McCluskey et al. (2000) measure the effect of location on residential house prices using the Ordinance Survey of Northern Ireland data and conclude that location and structural characteristics are the key determinants of residential property values. Kauko (2003) lists a set of attributes that have been commonly used in property valuation research including accessibility factors, neighbourhood level factors, specific negative externalities, public services, taxes and density factors.

In line with Fig. 1, Tse and Love (2000) identify four categories of attributes namely; structural, physical, neighbourhood and environmental, for measuring residential property values, using hedonic equation in Hong Kong. Similarly, Chau, Wong and Yiu (2004) studied the effect of balconies on the residential property values in Hong Kong and found a positive effect on the value of a property irrespective of the quality of the view.

Oyebanji (2003) identifies seven factors that affect property values. These factors are; population (increase or decrease), changes in fashion and taste, institutional factors (these are factors relating to people's culture, religious belief and government action), technological factors, economic factors, location and complementary uses. Olusegun (2003) also identifies these factors under three major groups as external factors, internal factors and economic factors. The external factors include location and accessibility, internal factors include the individual features of the property such as number of bedrooms, plot size, garage, number of toilet, and so on, economic factors include individual's purchasing power, the level of interest and inflation rates in the country. Kalu (2001) argues that major considerations for property value hinge on the property's ability to produce income, be in demand and have a good location relative to its use. He identifies other determinants of value to include scarcity, prospect of income growth, state of the economy, cost in use, government and political factors, physical attributes and taxation. From the above, it can be said that little or no focus has been given to the effects of infrastructure on property values and that is what the present study is set to do.

### **Urban Infrastructure and Property Values**

Johnson, Davies and Shapiro (2005) opine that one of the determinants of property value is infrastructure, the presence of which leads to appreciation in property values. Its absence affects neighbourhood properties adversely. Hammer, Booth, and Love (2000) state that provision of good and adequate infrastructure is central to property values. Harvey (1993) was of the opinion that a residential user may be prepared to pay a high value for a property depending on his consideration for basic facilities such as accessibility, water and electricity. Litchfield (1974) observes that areas with basic facilities such as access roads, good drainage, electricity, public water supply and telephone attract high property values. Aibangbee (1997) further explains that accessibility which is a direct consequence of a good road network, in turn leads to high rental values of locations with greatest accessibility advantages. In a situation where all properties are accessible via motorable road network, such properties will enjoy high rental values conferred by virtue of accessibility.

Keeble (1969) recognises this when he said that water is indispensable to the household as it is necessary for drinking, cooking, bathing and doing other numerous domestic activities. Hence, properties in areas that are well serviced with pipe-borne water no doubt enjoy higher rental values compared to areas where the service is non-existence. Other important determinants of property values are provision of good communication network, electricity and drainage.

Different scholars have variously stressed the relevance of infrastructure in all spheres of life. McNeil and Dollery (1999) was of the opinion that infrastructure services have taken on a new urgency in part because they have a direct bearing on economic growth. The authors stress further that studies have shown that adequate infrastructure reduces the cost of production, which in turn affects profitability, level of output and employment; particularly in small-scale businesses. McNeil and Dollery (1999) were of the view that when infrastructure works, productivity and labor increase; when it does not work, economic renewal can be postponed or even halted. Unfortunately, the level of availability of infrastructure in most developing countries is drastically low which calls for concern particularly on the part of the government at all levels. It is generally believed that provision of infrastructure in residential property would continue to attract prospective tenants and therefore increase property values.

### **Materials and Methods**

Primary data used for this study was gathered through the use of questionnaire was administered on all the 510 households in the study area out of which 204 (40%) was retrieved and used for the study. Presentation and analysis of data was done using frequency tables and percentages. Also relative importance index was adopted in ranking the infrastructure in order of importance attached to them by the respondents. Data from secondary sources, such as journal materials, other published materials were used for the literature aspect of the study. The result of the analysis is as contained in Tables 1 – 9 below.

Table 1 shows that 63.5% of the respondents are in the age bracket of 21 – 35 years, while 30.4% of are within the age bracket of 36 – 50 years, 6.1% are within the age bracket of 51 – 65 years. Therefore, it can be deduced from the Table that majority of the respondents (93.9%) are still in their active age and whose ability to earn income can influence property values in real estate market in the study area.

**Table 1.** Age Distribution of Respondents

Age(years)	Frequency	Percentage
21 – 35	73	63.5
36 – 50	35	30.4
51 – 65	7	6.1
<b>Total</b>	<b>115</b>	<b>100.0</b>

**Table 2.** Academic Qualification of Respondents

Academic Qualification	Frequency	Percentage
OND/HND	52	45.2
B. Sc	51	44.4
M. Sc	12	10.4
<b>Total</b>	<b>115</b>	<b>100.0</b>

Table 2 reveals that 45.2% of the respondents possess OND/HND degree, while 44.4% possess B. Sc degree, and the remaining 10.4% went on to further their education in order to obtain M. Sc degree. This analysis shows that there are more OND/HND degree holders that reside in Unity Estate. It could be deduced from this table that all the respondents possess academic qualifications, which will enhance their employability and hence improve their level of income.

**Table 3.** Respondent's Occupation

Occupation	Frequency	Percentage
Unemployed	19	16.5
Self Employed	53	46.1
Civil Servant	12	10.4
Private Company	30	26.1
Retired	1	0.9
<b>Total</b>	<b>115</b>	<b>100.0</b>

Table 3 indicates that 16.5% of the respondents are unemployed, while 46.1% are self employed, 10.4% are civil servants, while 26.1% work in private company and 0.9% is retired. It could be deduced from Table 3 that a large proportion (82.6%) of the respondents have good source(s) of income which will enhance their ability to pay rent.

**Table 4.** Ownership Status of Respondents

Ownership status	Frequency	Percentage
Owner	33	28.7
Tenant	82	71.3
<b>Total</b>	<b>115</b>	<b>100.0</b>

Table 4 contains the analysis of the ownership status of respondents in Unity Estate. The table shows that 28.7% are Landlords while 71.3% are tenants. It is evident from the table that majority of the respondents (71.3%) are tenants whose opinion about rental information on the type of residential property they occupy could be relied upon.

**Table 5.** Period of Occupancy

Period(Years)	Frequency	Percentage
1 – 2	13	11.3
3 – 4	35	30.4
5 – 6	23	20.0
7 – 8	6	5.3
9 – 10	12	10.4
10 and above	26	22.6
<b>Total</b>	<b>115</b>	<b>100.0</b>

The analysis of the period of occupancy by the respondents is as shown in Table 5. The Table reveals that 11.3% of respondents have their occupancy period ranging from 1 – 2 years, 30.4% have being in the estate for between 3 and 4years while 20.0% have been living there for a period of 5 – 6 years. Also, 5.3% have been there for 7 – 8 years, 10.4% have lived in the estate for 9 – 10 years and 22.6% have lived there a period of more than 10 years. This implies that a considerable number of the respondents have been living in the study area long enough to give accurate responses as to the events that happened over the timeframe being considered.

Table 6. Type of Property Occupied by Respondents

Type of Property	Frequency	Percentage
Tenement	16	13.9
Blocks of flats	72	62.6
Bungalow	27	23.5
<b>Total</b>	<b>115</b>	<b>100.0</b>

In Table 6, the analysis show that a larger proportion of respondents (62.6%) occupy blocks of flats, 23.5% occupy bungalows while the remaining 13.9% are living in tenement buildings. It could be deduced that with 62.6% living in blocks of flats and 13.9% in tenement buildings, majority of the respondents are tenants whose opinion about rental issues within the estate can be relied upon.

Table 7. Trends in Property Rental Values from 2003-2011

	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Tenement</b>	1,500	2,000	2,500	3,000	3,500	4,000	4,500	5,000	6,000
<b>2BedroomFlat</b>	70,000	80,000	90,000	100,000	100,000	120,000	150,000	150,000	250,000
<b>3BedroomFlat</b>	100,000	120,000	150,000	200,000	200,000	250,000	250,000	300,000	400,000
<b>Bungalow</b>	40,000	60,000	80,000	80,000	100,000	100,000	100,000	150,000	150,000

Table 7 contains trends in rental values of various properties in the estate. The Table reveals that a general increase in rental values of properties in Unity Estate. However, while tenement buildings experience annual rental review, rental values of other properties are reviewed every two years. This is possible due to the prevailing principle of rent review Nigeria as a whole.

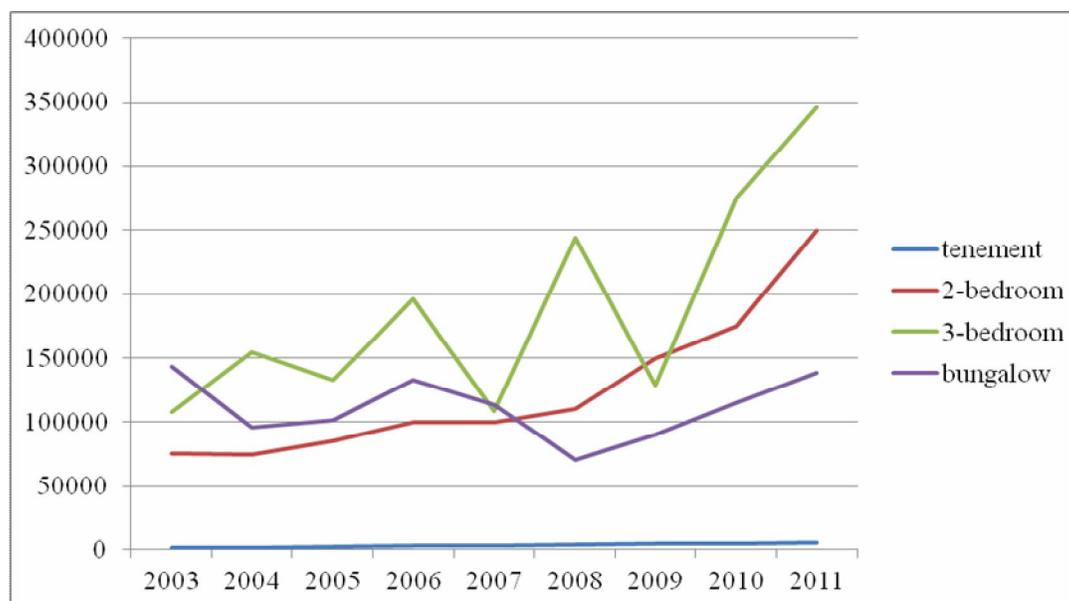


Figure 2. Trends in Property Rental Values from 2003 – 2011

Figure 2 is a graphical presentation of trends in rental values in the study area. It further buttress the point that rental values of tenement buildings are reviewed annually while rental values on flats and bungalows are reviewed on two-yearly basis.

**Table 8.** Type of Infrastructure Available

Infrastructural Facilities	Yes	No
Good Water	102, (88.7%)	13, (11.3%)
Electricity	93, (80.9%)	22, (19.1%)
Good Roads	64, (55.7%)	51, (44.3%)
Drainage System	44, (38.3%)	71, (61.7%)
Waste disposal system	54, (47.0%)	61, (53.0%)
Recreational Facilities	13, (11.3%)	102, (88.7%)
Medical centers	17, (14.8%)	98, (85.2%)

The various infrastructure available in the study area are indicated in Table 8. The table reveals that 88.7% were of the opinion that good water is available while 80.9% posit that electricity is available. Other facilities available albeit in varied proportion include good roads (55.7%), waste disposal (47.0%), drainage system (38.3%), medical centres (14.8%) and recreational facilities (11.3%). It could be concluded, from the Table that required infrastructure for good living environment is available within the estate.

**Table 9.** Ranking of Infrastructure Available in Unity-Estate

Infrastructural Facilities	Very Important 4	Important 3	Not too Important 2	Not Important 1	Total	RII	Ranking
Good Water	44 a <sub>i</sub> n <sub>i</sub> = 176	38 a <sub>i</sub> n <sub>i</sub> = 114	18 a <sub>i</sub> n <sub>i</sub> = 36	15 a <sub>i</sub> n <sub>i</sub> = 15	115 341	2.97	1 <sup>st</sup>
Electricity	5 a <sub>i</sub> n <sub>i</sub> = 20	52 a <sub>i</sub> n <sub>i</sub> = 156	56 a <sub>i</sub> n <sub>i</sub> = 112	2 a <sub>i</sub> n <sub>i</sub> = 2	115 290	2.52	2 <sup>nd</sup>
Good Roads	19 a <sub>i</sub> n <sub>i</sub> = 76	29 a <sub>i</sub> n <sub>i</sub> = 87	46 a <sub>i</sub> n <sub>i</sub> = 92	21 a <sub>i</sub> n <sub>i</sub> = 21	115 276	2.40	3 <sup>rd</sup>
Drainage systems	7 a <sub>i</sub> n <sub>i</sub> = 28	23 a <sub>i</sub> n <sub>i</sub> = 69	32 a <sub>i</sub> n <sub>i</sub> = 64	53 a <sub>i</sub> n <sub>i</sub> = 53	115 214	1.86	5 <sup>th</sup>
Medical centers	3 a <sub>i</sub> n <sub>i</sub> = 12	16 a <sub>i</sub> n <sub>i</sub> = 48	30 a <sub>i</sub> n <sub>i</sub> = 60	66 a <sub>i</sub> n <sub>i</sub> = 66	115 186	1.62	6 <sup>th</sup>
Recreational Facilities	4 a <sub>i</sub> n <sub>i</sub> = 16	17 a <sub>i</sub> n <sub>i</sub> = 51	20 a <sub>i</sub> n <sub>i</sub> = 40	74 a <sub>i</sub> n <sub>i</sub> = 74	115 181	1.57	7 <sup>th</sup>
Waste disposal system	7 a <sub>i</sub> n <sub>i</sub> = 28	36 a <sub>i</sub> n <sub>i</sub> = 108	43 a <sub>i</sub> n <sub>i</sub> = 86	29 a <sub>i</sub> n <sub>i</sub> = 29	115 251	2.18	4 <sup>th</sup>

A further test was conducted on the infrastructure provided in the estate with the aim of determining the importance attached to their availability. Table 9 shows that good water with RII = 2.97 was ranked first and was closely followed by electricity (RII = 2.52) which was ranked second while good roads with RII of 2.40 was ranked third. Ranked fourth was waste disposal systems with RII = 2.18 and coming fifth, sixth and seventh respectively are drainage systems (RII=1.86), medical centers (RII=1.62) and recreational centers (RII=1.57). In other words, electricity and good roads are the most important of the infrastructure within the estate.

## Conclusion and Recommendation

Infrastructure is an important element of a good living environment hence; this study examined the effect of such infrastructure on residential property values in Unity Estate, Lagos State. The study revealed that that a considerable number of the respondents have been living in the study area long enough to give accurate responses concerning the focus of the study. The study also revealed that blocks flats (62.6%) are more common in the study area. Furthermore, the study showed that while rental values on tenement buildings are reviewed annually those of blocks of flats and bungalows are reviewed on two-yearly basis. The study equally revealed that while water (RII = 2.97), electricity (RII = 2.52) and roads (RII = 2.40) are ranked as the most important facilities required in the estate. Other facilities ranked in their order of importance are waste disposal facilities (RII = 2.18), drainage systems (RII = 1.86), medical centres (RII = 1.62) and recreational facilities (RII = 1.57). On the strength of the findings, the study recommends that facilities within the estate need serious upgrade to further enhance the living conditions of the residents.

## References

- Aibangbee, S.S (1997) Functions of Urban Infrastructure in National Development Paper presented at the 27th Annual Conference of the Nigeria Institution of Estate Surveyors and Valuers, at Premier Hotel, Ibadan 1st – 6th April.
- American Heritage Dictionary Editors (2000) The American Heritage Dictionary of the English Language 4th Edition Houghton Mifflin Harcourt Trade & Reference Publishers.
- Babarinde, J.A (1998); Analysis of Industrial Relocation in Relation to Housing and Infrastructural Services in Metropolitan Lagos. The Lagos Journal of Environmental Studies Vol 1, No1, pg : 97-108.
- Burgess, E. W. (1925) The Growth of the City. In Park, R. E. et al. The City. University of Chicago Press.
- Chau, K.W., Wong, K.S.K. and Yiu, E.C.Y. (2004) The Value of the Provision of a Balcony in Apartments in Hong Kong. Property Management Vol. 22, No. 3. pp. 250 – 264.
- Donald, C.S (1974): Professional Education in Public Works / Environmental Engineering Administration 5th ed. Chicago. American Public works and Association.
- Fox, W.F (1994): “Strategic Options for Urban Infrastructure Management”. Urban Management Programme (UMP) Paper 17. The World Bank pp7.
- Ge, X. J. and Du, Y. (2007) Main Variables Influencing Residential Property Values Using the Entropy Method – the Case of Auckland. Paper Presented at the Proceedings of the 5th International Structural Engineering and Construction Conference. Shunan, Japan.
- Hammer L; Booth D. and Love H.E (2000) Poverty and Transport; A Report prepared for the World Bank in collaboration with DFID, Overseas Development Institute.
- Harvey, J. (1993) Urban Land Economics 3rd edition. Macmillan Press Limited London.
- Hendrikse, J. W. (2003) Valuations and CGT. What are Value Drivers? The Accountant April 2003.
- Hoyt, H. (1939) The Structure and Growth of Residential Neighbourhood in American Cities. Federal Housing Administration
- Isard, W. (1956) Location and Space Economy. MIT Press.
- Johnson, T., Davies, K. and Shapiro, E. (2005) Modern Methods of Valuation of Land, Houses and Buildings. Estate Gazette, London.
- Kalu, I. U. (2001) Property Valuation and Appraisal. Bon Publications, Owerri.
- Kamali, K. M., Hojjat, S. A., and Rajabi, . A. (2008) Studying Noise Effect on Property Valuation.
- Kauko, T. (2003) Residential Property Value and Locational Externalities – on the Complementarity and Substitutability of Approaches. Journal of Property Investment and Financ. Vol. 21, No. 3. pp. 250 – 270.
- Keeble, L (1969) Principles and Practice of Town Planning State Gazette Limited London.
- Litchfield, N (1974) Economics of Planning Development. London Estate Gazette.
- McCluskey W.J., Deddis W.G., Lamont I.G., and Borst R.A. (2000) The Application of Surface Generated Interpolation Models for the Prediction of Residential Property Values. Journal of Property Investment and Finance Vol. 18, No. 2, pp. 162 – 176.
- McNeill, J and Dollery, B (1999) A note on the use of development charges in Australian Local Government. Urban Policy and Research 17(1), pp. 61-69
- Millington, A. F. (2005) Introduction to Property Valuation. Fifth Edition. The Estate Gazette. London.
- Nubi, T.O (2003): ‘Procuring, Managing and Financing Urban Infrastructure: Towards an Integrated Approach’ Land Management and Property Tax Reform in Nigeria, in `Omirin et al. (ed.) Department of Estate Management, University of Lagos, Akoka.
- Okusipe, M.O (1999): “Environmental Quality and Urban Planning: A case of Metropolitan Lagos, Nigeria” The Lagos Journal of Environmental Studies Vol.2 No (1):pg53-63.
- Olusegun, G. K. (2003) Principles and Practice of Property Valuation. (Volume One: General Principles). Climax Communications Limited, Lagos.
- Oyebanji, A. O. (2003) Principles of Land Use Economics Centre for Environmental Planning Development and Management. Lagos.
- Oyenuga S.O.(2006) Living Conditions in Public Housing Estate: A Neglected Case in Lagos. Journal of Estate Surveying Research June 2009. A publication of The Department of Estate Management Yaba College of Technology.
- Pred, A.(1966) The Spatial Dynamics of U. S. Urban-Industrial Growth 1800 – 1914. M. I.T. Press.
- Tse, R. Y. C. and Love, P. E. D. (2000) Measuring Residential Property Values in Hong Kong. Property Management. Vol. 18, No. 5, pp. 366 – 374.
- United Nations. (2002). A United Nations Report on Human Settlement: The Changing Shelter Policies in Nigeria. Retrieved from: [www.un-habitat.org](http://www.un-habitat.org).