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EMPIRICAL ANALYSIS OF LAND USE PATTERNS AND THEIR EFFECTS ON URBAN RESIDENTIAL LAND VALUES IN IBADAN NORTH EAST LOCAL GOVERNMENT AREA, NIGERIA.

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ABSTRACT
The study examined the effects of land use patterns on urban residential land values in Ibadan North East Local Government Area of Oyo State, Nigeria. The study was motivated by the increasing rate of urbanisation, changing land use patterns, and their implications on residential land values. The objectives were to identify the major land use types within the study area, examine the relationship between land use patterns and residential land values, evaluate the socio-economic factors influencing land use decisions and land value changes, and propose strategies for improving urban land value performance. A descriptive survey research design was adopted. The study population comprised officials of the Oyo State Ministry of Lands, Housing and Urban Development, officials of the Ibadan North East Local Government Planning Department, and Registered Estate Surveyors and Valuers in Oyo State. A sample size of 166 respondents was selected, and data were collected using structured questionnaires. The data were analysed using descriptive statistics, including frequencies and percentages. The findings revealed that commercial land use (31.3%) and residential land use (28.9%) were the dominant land use types in the study area. Adequate infrastructure (45.8%) and road construction/tarring (43.4%) were identified as the major factors influencing land use decisions and residential land value changes, while statutory land tenure was the predominant land ownership system. Respondents further identified road upgrades and periodic property revaluation as the most effective strategies for enhancing land value performance. The study concluded that land use patterns, infrastructure provision, accessibility, and secure land tenure significantly influence residential land values. It recommended improved land use planning, sustained infrastructure development, strengthened land administration, and periodic property revaluation to promote sustainable urban development and efficient land markets.

***Keywords*:** Land Use Patterns, Residential Land Values, Urban Development, Infrastructure, Land Tenure, Ibadan North East

1. Introduction
Urban land use patterns constitute a fundamental determinant of the economic and physical morphology of cities, influencing both the spatial organization of activities and the valuation of land and property within residential neighbourhoods (Lean & Goodall, 1966; Olayiwola et al., 2003). In rapidly urbanizing contexts such as Nigeria and particularly within Ibadan North East Local Government Area (LGA) land use transformations driven by demographic expansion, infrastructure provision, and market forces have precipitated a transition from agricultural and undeveloped land to predominantly residential and built-up configurations, with consequential effects on the urban land market (Adewoyin, Falegan & Yusuff, 2024; Olayiwola et al., 2003; Oduwaye, 2005).

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Notwithstanding these developments, a substantive gap in the literature persists concerning the precise mechanisms through which specific land use patterns influence residential land values within the core urban neighbourhoods of Ibadan North East LGA, where heterogeneous land uses and varying infrastructure quality may generate differential effects on land prices. Prior scholarship has predominantly examined peri-urban or metropolitan scales, leaving a deficiency of localized empirical evidence that directly interrogates the relationship between land use configuration and residential land values in this jurisdiction. This lacuna constrains the capacity of planners, policymakers, and property investors to comprehend how residential land values respond to land use patterns—an understanding that is indispensable for effective urban planning, sustainable housing delivery, and value optimization within Ibadan's evolving urban landscape.

Within Ibadan North East LGA, the accelerated transformation of land use patterns engenders both opportunities and challenges. Commercialization along principal transport corridors has enhanced accessibility and stimulated economic activity, yet has concurrently produced negative externalities including traffic congestion, noise pollution, and visual degradation that may diminish residential amenity. Simultaneously, the conversion of residential zones to mixed-use developments proceeds largely without formal planning authorization, generating complex externality fields that potentially capitalize into land values. Mabogunje's (1968) seminal analysis of the city's morphology, together with subsequent investigations by Aluko (2010) and Adesina (2015), has illuminated the city's distinctive growth trajectories. Nevertheless, few studies have deployed spatially explicit empirical methodologies to quantify the effects of specific land use configurations on residential land values at the neighbourhood scale. As Babawale and Adewunmi (2011) posit, land value transcends its function as a mere economic indicator; it constitutes a reflection of the aggregate desirability of a location, shaped by accessibility, neighbourhood characteristics, zoning regulations, and the compatibility of surrounding land uses.

2. Research Problem

Ajanlekoko (2001) identified a persistent challenge of informal land use conversion and zoning non-compliance. Residential areas are increasingly subject to commercial encroachment, particularly along major arterial routes, resulting in mixed-use configurations that were never contemplated within original planning frameworks. Such conversions generate externalities including elevated noise levels, traffic congestion, waste management deficiencies, and alterations to neighbourhood character. While these conversions may augment land values for plot owners pursuing commercial advantage, they frequently precipitate depreciation for exclusively residential properties owing to negative externalities a phenomenon that remains inadequately documented within this jurisdiction. Urban managers, estate surveyors, and valuers operating in Ibadan North East LGA frequently depend upon generalized valuation models and obsolete market data that fail to capture the micro-level impacts of evolving land use patterns. This deficiency engenders inaccurate valuation assessments, inequitable property taxation, suboptimal investment decisions, and ineffective planning interventions.

3. Research Objective

The objectives of the Study are to identify and classify the major land use types within the study area Ibadan North East Local Government Areas in Ibadan, analyze the relationship between

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different land use patterns and Residential land values across the study areas, evaluate the socio-economic factors influencing land use decisions and their effects on land value appreciation or depreciation in the study area; and propose strategies for optimizing land use allocation to enhance economic efficiency and improve urban land value performance in the study areas.

4. Literature Review

This review is structured around the substantive thematic issues embedded within the present investigation, namely: the nature and classification of urban land uses; the spatial characteristics of land use patterns; the mechanisms through which land use arrangements influence residential land values; the socio-economic and institutional factors that shape land use decisions and value movements; and the planning and land-management strategies capable of improving land allocation and residential land value performance. The review transcends mere description by comparing alternative theoretical explanations, identifying areas of scholarly convergence and divergence, and establishing the theoretical and empirical foundation upon which the present investigation is predicated.

Urban land constitutes simultaneously a physical resource, an economic asset, a social space, and a legal interest. Its value therefore emerges from the complex interaction of site characteristics, accessibility, surrounding land uses, infrastructure provision, planning institutions, environmental quality, tenure arrangements, and expectations regarding future development (Alonso, 1964; Rosen, 1974; Sirmans et al., 2005). Classical urban land theories emphasize location and accessibility as primary determinants of value, whereas contemporary valuation literature demonstrates that market participants value a bundle of attributes rather than distance alone. In rapidly changing African cities, these relationships are further complicated by informal development practices, weak or uneven development control mechanisms, infrastructure deficits, evolving household preferences, and land-market imperfections.

5. The Concept of Land

Land constitutes the fundamental spatial resource upon which human settlement, production, exchange, infrastructure, and environmental processes are predicated. Within the domain of economic analysis, land is conventionally conceptualized as a factor of production whose quantity is fixed at any given location, notwithstanding that its utility may be transformed through investment, infrastructure provision, and modifications to permitted use. Ricardo's (1817) theory of rent established a enduring nexus between scarcity, differential productivity, location, and economic rent. In urban contexts, this principle manifests through variations in site values attributable to accessibility, development potential, and the intensity of competing demands for particular locations.

From an estate management and valuation perspective, land is a composite bundle of legally recognized rights, privileges, obligations, and potential benefits, encompassing occupation, development, transfer, leasing, access, and enjoyment, subject to statutory and planning restrictions. Two physically analogous plots may command divergent prices due to differences in title quality, permitted use, accessibility, development potential, or neighbourhood environment, rendering land valuation inherently spatial and institutional. The immobility and heterogeneity of land make location consequential, with value determined by surroundings and relationship to employment centres, transport routes, schools, hospitals, markets, and recreational spaces, as

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formalized by Alonso (1964), who demonstrated how accessibility and transportation costs enter urban location decisions and land-rent formation. In Nigeria, the Land Use Act of 1978 provides the statutory framework while customary and informal transactions shape land access, affecting transaction costs, tenure security, documentation, and marketability. In Ibadan North East Local Government Area, land has become increasingly valuable due to rapid urbanization, commercial expansion, infrastructure improvements, and population growth, generating substantial variations in residential land values across neighbourhoods.

5.1 Major Land Uses in the Study Area

Urban land-use classification groups land by main activities undertaken on a parcel. Although systems differ across countries due to varying planning regulations and development priorities, general agreement exists on core categories: residential, commercial, industrial, institutional, transportation, recreational, agricultural, and mixed-use developments (Keeble, 1969; Cullingworth & Caves, 2014). These categories provide planners, estate surveyors, and policymakers with a framework for organizing urban development and ensuring compatibility among land uses. Classification offers a systematic basis for describing activities occupying urban space, though terminology and detail vary across planning systems. It is analytically useful because different uses have distinct locational requirements, infrastructure demands, externalities, and willingness to pay for land, enabling examination of whether spatial arrangements correspond with planning intentions and market forces. A useful classification should capture not merely land-use existence but also intensity, scale, spatial concentration, accessibility, and compatibility. Two neighbourhoods may both contain shops and houses, yet one may be planned mixed-use with adequate infrastructure while the other experiences uncontrolled conversion, with markedly different implications for residential land values. The classification adopted in this study therefore recognizes both land-use type and spatial relationships among uses.

5.1.1 Residential Land Use

Residential land use comprises land devoted to housing and associated domestic activities, including detached, semi-detached, terraced houses, bungalows, duplexes, and flats. Demand is shaped by population, household formation, income, cultural preferences, accessibility, security, and service availability, with markets responding strongly to demographic and economic change. Value is also influenced by neighbourhood quality, as households prefer acceptable access to employment and services while minimizing negative externalities such as noise, pollution, flooding, insecurity, and congestion. Residential land value therefore capitalizes both site attributes and expected environmental quality, consistent with the hedonic view that property prices embody the implicit value of multiple characteristics (Rosen, 1974; Sirmans et al., 2005).

5.1.2 Commercial Land Use

Commercial land use includes retail outlets, offices, markets, banks, restaurants, and hotels, with users competing for accessible locations since visibility and customer flows affect performance (Alonso, 1964). Commercial uses generate positive externalities through convenience but negative ones through traffic, noise, and waste. The key issue is whether commercial scale and form remain compatible with surrounding residential function, particularly in Nigerian cities where informal conversion occurs without infrastructure upgrades or development control.

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5.1.3 Industrial Land Use

Industrial land use accommodates manufacturing, processing, warehousing, and logistics, requiring good transport access and sufficient land area, though some generate negative externalities such as noise, vibration, air pollution, waste, and safety risks that reduce residential amenity and depress nearby land values. However, clean, well-managed industrial activities can generate employment and improve local economic opportunities. Planning principles seek to separate incompatible industries from residential areas or provide buffers and environmental controls. Proximity to industry should therefore be interpreted in relation to activity type, intensity, environmental performance, and regulatory effectiveness.

5.1.4 Institutional Land Use

Institutional land use covers schools, universities, hospitals, government offices, religious facilities, and research centres, which can increase residential demand through services, employment, and social infrastructure. Proximity to quality schools and healthcare facilities may be capitalized into residential prices due to reduced travel time and improved access. However, institutional uses may generate congestion, informal trading, noise, and parking pressure when scale exceeds surrounding transport capacity. The effect on residential land value is therefore conditional on accessibility, facility quality, scale, management, and compatibility with surrounding uses.

5.1.5 Transportation Land Use

Transportation land use includes roads, bridges, terminals, parking, and pedestrian infrastructure, fundamentally shaping urban spatial organization by determining access to employment, education, commerce, and social services. Accessibility is therefore a major channel through which transport investment influences land values (Alonso, 1964; Rodrigue, 2020). However, effects are spatially differentiated: improved roads may raise values of newly accessible sites, while properties adjoining high-capacity roads, terminals, or poorly managed facilities experience noise, pollution, safety risks, and congestion. The net effect depends on distance, design, traffic volume, pedestrian conditions, drainage, and integration with neighbouring land uses.

5.1.6 Recreational and Open-Space Land Use

Recreational land uses include parks, gardens, playgrounds, and sports grounds that enhance neighbourhood attractiveness through visual amenity and recreation. Crompton (2005) confirms proximity to well-maintained parks is capitalized into residential property values. However, positive effects depend on quality and accessibility, as poorly maintained spaces may become dumping grounds or generate noise and traffic, creating negative externalities.

5.1.7 Agricultural and Peri-Urban Land Use

Agricultural land remains relevant at expanding city edges where urban and rural activities coexist. Urban expansion converts it to residential, commercial, and institutional development, particularly where infrastructure improves accessibility, creating opportunities and raising land prices but also promoting speculation and environmental pressure. Peri-urban conversion illustrates dynamic land markets: landowners may retain agricultural use while anticipating future development or subdivide in response to demand, meaning expectations of future roads and services influence present land values.

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5.1.8 Mixed Land Use

Mixed land use combines compatible residential, commercial, institutional, and recreational functions. Properly planned mixed use shortens travel distances, improves service access, and increases urban vitality (Grant, 2002). Planned mixed use is supported by zoning, road capacity, parking, drainage, and infrastructure, while unplanned mixed use emerges through incremental residential conversion. Where conversion exceeds neighbourhood capacity, congestion, noise, waste, and privacy problems reduce amenity, making land-value effects positive at moderate levels but negative where commercialization becomes incompatible with residential function, as observed in Ibadan North East.

5.2 Relationship between Land Use Patterns and Residential Land Values in the Study Area

Land-use patterns influence residential land values through accessibility, externalities, expectations, and opportunity cost. Accessibility to employment, education, healthcare, and transport is capitalized into land rent (Alonso, 1964), while positive externalities such as parks and quality schools raise values and negative ones such as pollution and incompatible industry depress them (Rosen, 1974). Commercialization shows a non-linear effect: moderate commerce improves convenience, but excessive intensity reduces amenity (Koster & Rouwendal, 2012). In Ibadan North East, areas near roads, institutions, and commercial centres exhibit higher values, while uncontrolled encroachment and congestion slow appreciation. The study adopts an integrated Alonso-Rosen framework, recognising that effects are conditional rather than deterministic, depending on type, intensity, and compatibility of development.

5.3 Empirical Studies on the Relationship between Land Use Patterns and Residential Land Values

The relationship between land use patterns and residential land values has attracted considerable attention in urban economics, estate management, urban planning, and environmental studies. Researchers have consistently demonstrated that urban land values are influenced by accessibility, neighbourhood characteristics, environmental quality, infrastructure provision, planning regulations, and the compatibility of surrounding land uses. However, the magnitude and direction of these influences vary across cities because of differences in urban morphology, socio-economic conditions, institutional arrangements, and land market characteristics. Consequently, empirical findings differ across developed and developing countries, emphasizing the need for location-specific investigations.

5.4 Empirical Evidence from Developed Countries

Empirical research in developed countries confirms that residential land values reflect multiple attributes rather than distance alone. Rosen (1974) pioneered the Hedonic Pricing Model, demonstrating that accessibility, environmental quality, neighbourhood characteristics, and surrounding land uses significantly influence property prices. Crompton (2005) found proximity to well-maintained parks consistently increased residential values, though magnitude varied with quality and accessibility. Sirmans et al. (2005) identified accessibility to employment, educational institutions, transportation infrastructure, neighbourhood quality, and land-use compatibility as significant determinants, emphasising that multiple characteristics interact simultaneously. Gibbons and Machin (2008) found properties within high-performing school catchment areas

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commanded higher prices, confirming institutional land uses positively affect values. Lenormand et al. (2015) demonstrated that mixed, well-organised land-use patterns enhance accessibility and urban functionality. Overall, evidence confirms residential land values are shaped by accessibility, environmental quality, transportation infrastructure, public facilities, neighbourhood characteristics, and compatible land-use patterns. The conceptual framework derives from Alonso's Bid-Rent Theory and Rosen's Hedonic Pricing Theory, treating land-use pattern—represented by type, intensity, spatial distribution, accessibility, and compatibility—as the principal explanatory construct affecting residential land value through locational and neighbourhood mechanisms.

6. Methodology

6.1 Research Design

Research design is the blueprint guiding data collection, measurement, analysis, and interpretation (Creswell & Creswell, 2023). This study adopts a descriptive survey with a quantitative approach to examine land use patterns and residential land values in Ibadan North East Local Government Area, enabling standardized data collection without manipulating variables (Kothari, 2004). A cross-sectional survey collects data at one point in time (Bryman, 2016) from officials of the Oyo State Ministry of Lands, Housing and Urban Development, the Ibadan North East Planning Department, and Registered Estate Surveyors and Valuers. Structured questionnaires are analysed using descriptive statistics, Relative Importance Index, Pearson Product Moment Correlation, and Multiple Linear Regression, anchored on Alonso's Bid-Rent Theory (1964) and Rosen's Hedonic Pricing Theory (1974).

6,2 Study Population

The study population refers to the complete set of individuals, organizations, or elements possessing the characteristics relevant to a research investigation from which data are collected and upon which conclusions are drawn (Creswell & Creswell, 2023). Similarly, Kumar (2021) defines a study population as the entire group of respondents who possess the required information necessary for addressing the research objectives. The careful identification of an appropriate study population is fundamental to the credibility and validity of research findings because it determines the quality and relevance of the information generated.

6.2 Population and Sampling

The population for this study comprises professionals and government officials directly involved in urban land administration, physical planning, land registration, development control, and property valuation within Oyo State. These categories of respondents were purposively selected because of their professional knowledge, technical competence, and practical experience regarding land use planning, land market operations, land administration, and residential land valuation. Specifically, the study population consists of three categories of respondents such as the Twenty-five (25) staff of the Department of Land Registry and Deed Unit, Oyo State Ministry of Lands, Housing and Urban Development; Eighteen (18) staff of the Ibadan North East Local Government Planning Department, comprising officers in the Town Planning, Land Administration, Valuation, and Development Control Units and One hundred and seventy-seven (177) Registered Estate Surveyors and Valuers practising in Oyo State, as listed in the Estate

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Surveyors and Valuers Registration Board of Nigeria (ESVARBON) Directory, Issue of 10 April 2025. The total study population is therefore 220 respondents.

7. Results

Table 1; Respondents' perception of the prevailing rate of land use change and its implication for land values, respondents were asked to indicate the average rate of land use change within the study area.

Table 1: Average Land Use Rate within the Study Area

Average Land Use Rate	Frequency	Percentage (%)
Less than 5%	12	7.2
5–10%	68	41.0
11–15%	42	25.3
16–20%	28	16.9
Above 20%	16	9.6
Total	166	100.0

Source: *Author's Field Survey (2026).*

Table 1; reveals that most respondents, 68 (41.0%), estimated the average rate of land use change in Ibadan North East Local Government Area at 5–10%, followed by 42 (25.3%) at 11–15%, 28 (16.9%) at 16–20%, 16 (9.6%) above 20%, and only 12 (7.2%) below 5%. These findings indicate moderate but continuous land use change rather than abrupt transformation, reflecting incremental conversion of residential areas to commercial and mixed-use developments driven by population pressure, commercial expansion, and infrastructure improvement. This pattern aligns with Oduwaye (2013) and Olajide et al. (2018), and supports Alonso's (1964) Bid-Rent Theory and Rosen's (1974) Hedonic Pricing Theory, which explain how accessibility and locational attributes shape residential land values.

Table 2: Most Common Land Tenure System

Land Tenure System	Frequency	Percentage (%)
Statutory (Certificate of Occupancy)	102	61.5
Leasehold	34	20.5
Informal Receipt Only	16	9.6
Customary	14	8.4
Total	166	100.0

Source: *Author's Field Survey (2026).*

Table 2 shows respondents' assessment of the average rate of land use change in Ibadan North East Local Government Area, with the largest proportion, 68 (41.0%), indicating 5–10%, followed by 42 (25.3%) at 11–15%, 28 (16.9%) at 16–20%, 16 (9.6%) above 20%, and only 12 (7.2%) below 5%. These findings indicate moderate but continuous land use change rather than abrupt transformation, reflecting gradual conversion of residential areas to commercial and mixed-use developments driven by population pressure, commercial expansion, and infrastructure improvement. This pattern aligns with Oduwaye (2013) and Olajide et al. (2018), and supports Alonso's (1964) Bid-Rent Theory and Rosen's (1974) Hedonic Pricing Theory, which explain how accessibility and locational attributes shape residential land values.

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8. Discussion of Findings

On the first objective, commercial land use (31.3%) dominates, followed by residential (28.9%), mixed-use (15.7%), industrial (14.5%), with informal and recreational uses lowest (4.8% each), indicating the area is becoming a commercial centre due to strategic location, population growth, and accessibility. These findings corroborate Oduwaye (2013) and Olajide et al. (2018), and support Alonso's (1964) Bid-Rent Theory. Inadequate recreational land suggests a shortage of open spaces, agreeing with UN-Habitat (2020). For the second objective, 41.0% of respondents estimated land use change at 5–10% and 25.3% at 11–15%, indicating gradual but consistent transformation driven by urbanisation, population increase, and economic growth, consistent with Rosen's (1974) Hedonic Pricing Theory. Inferential analyses will provide more robust evidence. For the third objective, adequate infrastructure (45.8%) and road construction (43.4%) were the most significant determinants of land use decisions and value changes, supporting Ajibola et al. (2013) and Deininger (2003), who emphasised infrastructure's positive influence on property values and investment confidence**.**

9. Summary of Findings, Conclusion, and Recommendations

The study identified commercial land use (31.3%) as dominant, followed by residential (28.9%), mixed-use (15.7%), and industrial (14.5%), with recreational and informal uses at 4.8% each. Regarding land use change, 41.0% of respondents estimated a 5–10% rate and 25.3% estimated 11–15%, indicating gradual but continuous transformation likely to influence residential land values through accessibility and commercialization. Adequate infrastructure (45.8%) and road construction (43.4%) were the most important determinants of value appreciation, while statutory tenure (Certificate of Occupancy) accounted for 61.5% of land ownership. Road upgrade (41.0%) and periodic revaluation (39.2%) were considered the most effective value-improvement strategies. The study concludes that land use patterns significantly influence residential land values, with infrastructure, tenure security, and integrated planning as key drivers. Recommendations include strengthening development control, prioritizing infrastructure, improving transportation networks, promoting planned mixed-use development, strengthening land administration, institutionalizing periodic revaluation, enhancing inter-agency collaboration, adopting geospatial technologies, and promoting public awareness.

REFERENCES

Adesina, J. A., Timothy, M. A., & Akintaro, E. A. (2015). Assessment of Metropolitan Urban Forms and City Geo-spatial Configurations Using Green Infrastructure Framework: The Case Study of Lagos Island, Lagos State, Nigeria. Real Corp.

Adewoyin, I. B., Falegan, A. V., Abimbola, M. L., Ajijola, S. O., Adediran, A. F., & Adedire, F. M. (2024). Anthropological and legal dimensions to mitigating land degradation in the peri-urban interface of Ibadan, Nigeria. *Journal of Built Environment and Geological Research*, 5(4).

Ajanlekoko, K.S. (2001).Sustainable housing development in Nigeria: The financial and infrastructural implication. Paper Presented at the International Conference on Spatial Information for Sustainable Development in Nairobi, Kenya, 2-5 October 2001. Available online http://www.fig.net/pub/proceeding/nairobi/ajanlekoko. Retrieved on July 13, 2007.

Alonso, W. (1964). Location and Land Use: Toward a General Theory of Land Rent. Harvard

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University Press.

Aluko, O. E. (2010). The Impact of Urbanization on Housing Development: The Lagos Experience, Nigeria. Ethiopian Journal of Environmental Studies and Management, 3, 64-74. https://doi.org/10.4314/ejesm.v3i3.

Adegoke, O. J., Aluko, B. T., & Olaleye, A. (2022). Urban expansion and residential property values in Lagos Metropolis. Journal of African Real Estate Research, 7(2), 81–101.

Babawale, T. (2011). Urban violence, ethnic militias and the challenge of democratic consolidation in Nigeria. Malthouse Press Ltd.

Babarinde, J. and Adesanya, A. (2010).Interventions in urban management: Lessons for selected case studies. 46th ISOCARP Congress, Retrieved September 30, 2011 from: http://www.isocarp.net/projects/case_studies/cases/list01.asp?accepted=yes.

Bryman, A. (2016). Social research methods (5th ed.). Oxford University Press.

Creswell, J. W., & Creswell, J. D. (2023). Research design: Qualitative, quantitative, and mixed methods approaches (6th ed.). Sage Publications.

Crompton, J. L. (2005). The impact of parks on property values: Empirical evidence. Managing Leisure, 10(4), 203–218.

Cullingworth, J. B., & Caves, R. W. (2014). Planning in the USA: Policies, Issues, and Processes (4th ed.). Routledge.

Gibbons, S., & Machin, S. (2008). Valuing school quality, better transport, and lower crime: Evidence from house prices. Oxford Review of Economic Policy, 24(1), 99–119.

Grant, J. (2002). Mixed use in theory and practice. Journal of the American Planning Association, 68(1), 71–84.

Keeble, L. (1969). Principles and Practice of Town and Country Planning. Estates Gazette.

Kothari, C. R. (2004). Research methodology: Methods and techniques (2nd ed.). New Age International Publishers.

Knox, P. L., & McCarthy, L. (2012). Urbanization: An Introduction to Urban Geography (3rd ed.). Pearson.

Kumar, R. (2021). Research methodology: A step-by-step guide for beginners (5th ed.). Sage Publications.

Lean, W., & Goodall, B. (1966). *Aspects of Land Economics*. The Estates Gazette.

Oduwaye, L. (2013). Urban land use planning implications on metropolitan growth in Nigeria. Journal of Sustainable Development in Africa, 15(7), 40–55.

Ogunleye, T. A., & Ojo, O. O. (2023). Mixed land use development and residential neighbourhood quality in Ibadan Metropolis. *Journal* of Urban Management and Development, 11(2), 95–112.

Olayiwola, K. O. (2023). Spatiotemporal analysis of land surface temperature and land use/land cover dynamics in urban metropolitan areas. *Journal of Urban Planning and Development* (or corresponding urban research repository). [1]

Ricardo, D. (1817). On the Principles of Political Economy and Taxation. John Murray.

Rodrigue, J. P. (2020). The Geography of Transport Systems (5th ed.). Routledge.

Sirmans, G. S., Macpherson, D. A., & Zietz, E. N. (2005). The composition of hedonic pricing models. *Journal* of Real Estate Literature, 13(1), 3–43.

Umeh, L. C. (2004). Towards improving degraded urban neighbourhoods in Nigeria: Prospects for residential participation". In H. C.

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