

# The Impacts of Central Business District on the Rental Values of Commercial Land Use Properties in Port Harcourt Metropolitan City

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**Abstract:** *The urban area is traditionally designed to accommodate different land uses. These uses range from residential, industrial, recreational, agricultural to commercial etc. Commercial development is the use of land or any building on the land for the purpose of shop, office, hotel, store or combination of these. The commercial land use occupies the centrality of every city as it determines and links central business district. Commercial land uses are unevenly located in different parts of Port Harcourt and some converted from other uses without due planning process especially along major transportation distributors. This study aims at investigating relationship between distance and value of commercial properties from the central business district. 84 questionnaires representing 10% of 836 identified commercial properties on the sampled locations of the study area were administered. Findings revealed that majority of the operations were retail businesses. Monthly values of properties were directly proportional to the distance from the central business district. There should be direct linkages of commercial businesses activities to the CBD to enhance values of properties.*

**Keywords:** *Location, Office space, Commercial land use, Rental values, City centre, Business*

## 1. Introduction

Urbanization is generally referred to increase in the urban population in relation to overall national population. It plays pivotal roles in regional and national development resulting in urban communities especially in developing nations. Urban community is defined in a number of ways to include population size, population density, administration/ political boundaries, or economic functions of the communities/ cities. Cities are noted to be the focal points for economic growth, innovation and employment. Many cities historically grew out of some natural advantage in transport or raw material supply. Cities especially capital cities, are where the vast majority of modern productive activities are concentrated and where the vast majority of paid employment opportunities are located (Ades and Glaeser, 1995). Centralization of activities is enhanced through effective land use management. Different types of land uses are found within the urban centres. These include residential, industrial, agricultural, recreational, institutional and commercial uses. Thus commercial land use is a section of the enlarged urban land use where large volume of the economic activity of the city which concerned with dispensing of goods and services

is carried out (Onokerhoraye and Omuta, 1994). Enhancement and functionality of these uses is made effective through proper development.

The Nigerian Urban and Regional Planning Decree No. 88 of 1992 defines Commercial Development as any development or use of land or any building on the land for any of the following purpose a shop; office; hotel, guest house, night club, restaurant and wayside stall; warehouse and other similar storage facilities; cinema, theatre, sport, stadium and a building providing indoor recreational and leisure facilities for a charge; market; and any development or use of land or building on the land for any purpose incidental to any of the above purposes. This is further revealed in detail by Town and Country Planning (Building Plan) Regulations, 1986, a subsidiary of the Town and Country Planning Edict No. 1 of 1986, Lagos state, defines commercial building as any building use as an office, store, hotel, shop or combination of these. Commercial buildings are found within the sub-units of commercial areas such as shopping centres, shopping districts, commercial and business centres, which may be principally located within the planned central retail shopping districts; secondary central shopping areas, local neighbourhood shopping areas, ribbon-type business development and modern-planned integrated shopping centre (Lawal, 2000). There could be one or more shopping centres or none at all in a shopping area, district or business centre. Thus Willard (1960) in Real Estate Encyclopedia defines shopping centre as a group of retail stores constructed as one unit, owned by a single landlord, with free customer parking contiguous to the store buildings.

Traditionally, commercial activities are located within the unit point of city's central business district (CBD). However, sequel to rapid urbanization, different commercial points and sub units are found especially along different major transportation routes in cities resulting in the development of sub central business districts. These commercial sub-units are still located within the urban area in which the central business district CBD becomes the focal point of business activities while consideration of some factors are responsible for the location of central business districts. Chapin (1978) reveals that work areas should be located in convenient proximity to living areas where there are nearby interconnecting transit and thoroughfare routes to insure easy access back and forth, and should be in convenient proximity to other work areas where uses access to one another and access to interconnecting truck routes. Some work areas should be in locations accessible to heavy transportation facilities and large capacity utility lines. Work area location should provide sites adequate in size, economic to develop, and attractively situated for the particular uses intended. Chapin (1978) maintains that central business district should be located close to peak flow of traffic and pedestrians where retail, professional, financial, and related services can be conveniently accommodated and made easily accessible to adequate parking, transit and regional transportation services for clientele and employee groups patronizing or working in CBD.

Different researchers within the built environment summarized general requirements and conditions for successful sitting and layout of shopping groups as following.

- (a) The site should be a focal point such that main roads and footpaths lead to it (Lawal, 2000).
- (b) One or more bus stops should be sited at convenient points giving access to the shopping pavements (Nsofor and Associates, 1994).
- (c) Segregation of vehicular traffic from pedestrians (Emina, 2006).

- (d) Canopies continuously protecting terraces of shops give protection from sun and rain, and also intend to draw shops together (Randolph, 2012).
- (e) Public lavatories should be discreetly, yet centrally sited (Lawal, 2000).
- (f) Accessibility to each shop which allow vans and Lorries to load and unload goods (Onokerhoraye and Omuta, 1994).
- (g) Liberally provision with car parks with clear visibility from roads (Stewart, 1979).

Sequel to the homogenous nature of most urban centres including Port Harcourt, which possesses double lane roads, bus stops, car parks and other layout requirements of business centres especially in various districts and neighbourhoods, commercial areas within the cities tend to spread in different forms. Thus Port Harcourt Master Plan (1975) reveals that the position of Port Harcourt as a state capital and an already important manufacturing town with port and railway facilities, will guarantee that apart from continued growth of manufacturing industry, a similar expansion in commercial service and distributive employment connected with retail and wholesale trade, and light industry, is likely to take place. The Port Harcourt Master Plan (1975) maintains that a wide variety of uses, premises and firms are encompassed by the term 'commercial' but at present these appear to be dispersed loosely around the Town. On Liberation Drive Southwards from the stadium, on Yakubu Gowon Drive between Ikwerre Road and Trans Amadi Road, and along Ikwerre Road. However, it asserts that many problems are associated with these areas in terms of the standard of layout, the buildings, and the mixture of uses, access arrangement and the like.

It is significant to note that firms and businesses choose locations that would boost or maximize profit and households settle for locations that offer the greatest utility. These decisions determine land use and shape the built environment which give cities their unique spatial structure. This phenomenon is portrayed in various land use researches such as the concentric zone model, sector model, multi-nuclei model as well as the central place theory.

These models unveil the roles of location in determining the value of rental office spaces. In urban spatial analysis, location refers to the position (latitude and longitude) of a lot on the earth's surface and is commonly referred to a place or site. The relationship between location and rent is well researched right from the classic era to the contemporary times. This is portrayed in the bid rent theory. In his bid rent model, Alonso (1964) unveiled that location is important for a firm in order to achieve the desired level of profit.

In contemporary times, Kiel and Zabel (2007) reaffirmed the common belief amongst real estate sector players that location determines property values. Location therefore plays serious role in the determination of rental values of office spaces. According to Ball, Lizieri and MacGregor (2007) location offers good access to key markets and provide a mix of other benefits. Other elements which supplement location in the determination of rental values of office space include accessibility and agglomeration as well as building characteristics.

Location as one of the determinants of rental values remains relevant factor and is universally acceptable. However the level of determinant varies across commercial property market and the extent of location from the central business district of the city. These property markets are localized and therefore characterized by spatial constraints, extensive product differentiation, market imperfection and fragmentation.

In Port Harcourt, the wetland city in the geographical south east of Nigeria, researches on commercial property values have been conducted in selected areas focusing more on open market spaces, residential property values and projections, motor park valuations and values of building conversions. In the area of spatial location in office rental values, skeletal study has been conducted which never addressed the contemporary relationship and challenges.

This research work therefore is carried out to address the stated gaps in the aspects of spatial distance, location and design standard of commercial areas in relation to the central business district of cities.

Port Harcourt today, is the capital of Rivers State, the administrative head of the oil rich Niger Delta of Nigeria, and the hoist to two local Government Areas-Port Harcourt City and Obio Akpor. Port Harcourt also owns one of the major sea Ports in the Country. It was established in 1913 because its site met the location requirement set by colonial surveyors for a port – terminus deep water near ground which shall be connected to the mainland (Anyanwu, 1979).

In 1914, a total of 7,403 labourers were engaged in railway construction work at Port Harcourt and along the line. Though, most of the workers left and by 1915, the population was estimated to about 500 persons. By 1944, the population grew to about 30,200 persons and according to Anyanwu (1979), it was estimated to 34,000 in 1946. The 1952 – 53 population census of Nigeria revealed the population figure of Port Harcourt to be 179,563 and was estimated to 213, 443 in 1970. The figure rose to 231,532 persons in 1973. According to the national population census of 1991, the Port Harcourt municipality had a population figure of 440,399. The 2006 national census show that the population has risen to 1,005,904 persons. Base on the growth rate as provided by the 2006 national census, by 2010, the population is estimated to 1,140,973 persons.

Spatially, Port Harcourt actually started following certain policies and decisions in 1912 (Port Harcourt master plan, 1975; Anyanwu, 1979; Dar al – handasah, 2008 and Ogionwo, 1979). A piece of land of about 25sq miles in extent was acquired in 1911 from the traditional Ikwerre and Okirika people, sequel to the signing of the Hargrove Agreement between the British government and the representatives of the traditional landlords. The land so acquired was referred to as “Crown Land ” in deference to the British Monarchy.

The town was divided into two distinct residential areas – European and African based on construction procedures which stated in 1913. A green belt of a quarter mile in breath was basically met for recreation separated the two different residential densities. Between 1925 and 1934 the city expanded to the present Azikiwe Road then beach Road. Ogionwo (1979) revealed that in 1928, the then Port Harcourt main market was located close to the railway station. In 1952, Port Harcourt has extended to Diobu and by 1960s; it has covered up Trans Amadi industrial Estate, Rainbow town, Diobu creek layout, Ogbunabali, Obio and the Oroworukwu Commercial Layout. By 1975 Port Harcourt has covered up an estimated built up areas of 39.60km squared. According to Dar – al Handasah (2008), the city expanded by the mid 1990s in which as at then, it had spatial coverage of about 94km squared. Following the satellite image map of Port Harcourt, by 2008, the metropolitan city has covered about 106.77 km squared of land space.

Geographically, Port Harcourt is situated at the southernmost part of Nigeria and lies between longitude 7°00<sup>1</sup> and 7°15<sup>1</sup> of the Greenwich meridian and Latitude 4°30<sup>1</sup> and

4°47' North of the equator. The metropolitan city is bounded on the Eastern and Western parts by the meandering creeks and to the southern part by the first dockyard creek (Bonny River) and mangrove swamps. Toward where there is availability of land, it is bounded by the Ikwerre, Etche Local Government Areas and North-East by Eleme Local Government Area.

In terms of geology and topography, Port Harcourt Principal restraint to development is the Bonny River and the vast deltaic swamp area to the south of the town. The study area lies on a Peninsula, its urban form being governed by natural land constraints which also have strong bearing on the cost of communication (Port Harcourt Master Plan, 1975).

It is found that the low lying coastal plain rarely rises above 60ft (20m). The upper soil layer in the tidal flats consists mainly of very soft mud with a thickness of up to 20ft (6m) with a high content of organic material which makes it unsatisfactory for development. The dry land areas consist mainly of silt and sand which is suitable for most types of constructions.

The flat coastal plain presents practically no landscape of particular merit worthy of protection. The only exceptions as observed are the small river valleys and elevated land overlooking the creeks. Ecologically, different species of mangroves exist within the swamps. To a certain undefined extent the mangroves stabilize the delta area and prevent even greater erosion from taking place (Port Harcourt Master Plan, 1975).

Port Harcourt is situated in the sub-equatorial region. It has a tropical climate with a mean yearly temperature of 30°C (86°F), a relative humidity of 80%-100% and a mean yearly rainfall of about 2,300mm. The relative humidity decreases during the course of the day in the dry season and fluctuates more irregularly during the rainy season. Rainy season winds blow from the southwest and the southeast; while those of the dry season blow from the northeast and northwest. Other than for incidental gusts, the wind velocity is generally moderate, being at its highest in April, July and August and at its lowest point in October and November (Port Harcourt Master Plan, 1975).

It is found that climate and soil determine vegetation, and there is a clear division between salt water swamps, fresh water swamps and high tropical rain forest. The saltwater or mangrove swamps which block Port Harcourt off from the sea and flourish among a 20-30 mile wide coastal strip of rivers and creeks.

The area was named Port Harcourt after the founder of its Port, the then British secretary of state of the colonial Master, Lewis Harcourt.

## **2. Methodology**

This research work reveals methods and strategies of selecting research subjects and analytical techniques of data in order to achieve both internal and external validity. It involves identification of study population, sample size and administration of structured questionnaires to operators of commercial office spaces in Port Harcourt metropolitan city. The study area is made up of two local government areas-Port Harcourt city and Obio/Akpor. Subsequently, nine districts were identified having significant number of office buildings and some commercial activities. These areas are traversed by at least major motor ways (major distributor) with multiple linkages and identified by the major motor ways. These include

- 1) Aba road,
- 2) Olu-Obasanjo road,
- 3) Ikwerre road



- 4) Ada George road
- 5) Air force road
- 6) Trans-Amadi road
- 7) Ken Saro Wiwa road
- 8) Garrison road
- 9) Woji road

However, four representing 44.4% were sampled out for study. These are Ken Saro-Wiwa road, Woji road, Ada George road and Garrison road. A total of 836 offices were counted within the sampled areas. 10% of the total number of offices representing approximately 84 questionnaires was administered while 80 were retrieved.

### 3. Findings and Discussions

The data collected were tabulated and analyzed as follows:

**Table 1: Distribution of Questionnaires to Occupants**

| S/N          | Sampled Road  | Total office identified | Questionnaire Administered | Total Returned | Response Rate (%) |
|--------------|---------------|-------------------------|----------------------------|----------------|-------------------|
| 1            | Ken Saro-Wiwa | 294                     | 30                         | 28             | 35.0              |
| 2            | Road          | 112                     | 11                         | 10             | 12.5              |
| 3            | Woji Road     | 268                     | 27                         | 26             | 32.5              |
|              | Ada George    | 162                     | 16                         | 16             | 20.0              |
|              | Garrison Road |                         |                            |                |                   |
| <b>Total</b> |               | <b>836</b>              | <b>84</b>                  | <b>80</b>      | <b>100.0</b>      |

**Source: Field Survey, 2024**

Table 1 above shows how the structured questionnaires were administered within the sampled locations. The table reveals that 28 representing 35.0% were returned from Ken Saro Wiwa Road while 26 symbolizing 32.5% and 16 signifying 20.0% were respectively retrieved from Ada George and Garrison roads. The table maintains that 10 representing 12.5 were retrieved from Woji road. The table ascertains that despite the administration of 84 questionnaires, 80 were returned for collation and analysis.

**Table 2: Business activity of the respondents**

| S/N          | Business Activity   | Frequency | Percent      |
|--------------|---|-----------|--------------|
| 1            | Professional firm (Law, Accountancy, Clinic)                  | 17        | 21.3         |
| 2            | Retail Businesses   | 45        | 56.3         |
| 3            | Consultancy   | 5         | 6.3          |
| 4            | Others: Banking, Car-Sales, Business Centres, Furniture Shops | 13        | 16.1         |
| <b>Total</b> |   | <b>80</b> | <b>100.0</b> |

**Source: Field Survey, 2024**

Table 2 shows that 45 representing 56.3% of the identified business activities within the sampled areas were retail businesses. The table maintains that 17 out of 80 total respondents symbolizing 21.3% were professional firms such as law, accountancy and clinics etc.

This is followed by others such as banking, car sales, business centres, and furniture shops representing 16.1% while consultancy offices were represented by 6.3%.

**Table 3: Proximity of the Districts to the CBD**

| S/N | District           | Proximity (km) |
|-----|--------------------|----------------|
| 1   | Ken Saro Wiwa Road | 7.1            |
| 2   | Woji Road          | 9.6            |
| 3   | Ada George Road    | 7.9            |
| 4   | Garrison Road      | 3.2            |

**Source: Field Survey, 2024**

Table 3 shows the distance of the various district which constituted sample areas of the study to the central business district of Port Harcourt. The table reveals that Olu-Obasanjo road is located at about 5.7 km to the central business district. This is closely followed by Aba road which is about 6.2km while Ada George road is approximately 7.9km away from the CBD of Port Harcourt.

**Table 4: Average Monthly Rental Values of the District**

| S/N | District           | Average Monthly Value (N) |
|-----|--------------------|---------------------------|
| 1   | Ken Saro Wiwa Road | ₦124,000.00               |
| 2   | Woji Road          | ₦65,500.00                |
| 3   | Ada George Road    | ₦83,000.00                |
| 4   | Garrison Road      | ₦164,000.00               |

**Source: Field Survey, 2024**

Table 4 above portrays average monthly rental values of the sampled transportation districts. The table shows that Garrison district had an average monthly rental value of ₦164, 000.00. This is followed by Ken Saro Wiwa road which had ₦124, 000.00 as its average monthly rental value while Ada George road had about ₦83, 000.00. the table maintains that operators of office on Woji road paid an average monthly rent of N 65, 500.00

**Table 5: Correlation of Distance and Rental Values to CBD**

| S/N | District           | Proximity (km) | Average monthly value (N) |
|-----|--------------------|----------------|---------------------------|
| 1   | Ken Saro Wiwa Road | 7.1            | ₦124,000.00               |
| 2   | Woji Road          | 9.6            | ₦65,589.74                |
| 3   | Ada George Road    | 7.9            | ₦83,000.00                |
| 4   | Garrison Road      | 3.2            | ₦164,000.00               |

**Source: Field Survey, 2024**

Table 5 shows relationship between distance and rental values of office spaces from the central business district. The table reveals that Garrison district is located at about 3.2 km away from the central business district and had the highest average monthly office value of ₦164,000.00. This is followed by Ken Saro Wiwa road with 7.1km away from the CBD having ₦124, 000.00. The table maintains that Ada George road which is located at approximately 7.9km away, had ₦83, 000.00 as the average monthly value of properties. According to table 5 above, Woji road which is located at about 9.6 km had an average monthly rental value of ₦65, 589.74.

#### 4. Conclusion and Recommendations

This research paper has unveiled the roles of location in the determination of office rental values in Port Harcourt. The study took cognizance of the various business districts and viewed their spatial location in relation to the central business district. The study found that rental values of office space vary directly with the distance from the central business district. Thus the more away the locations of business from the central business district of the city, the lesser the rental values.

Therefore, there is significant relationship between distance and values of office spaces. In line with the strategic roles of office spaces such as employment generation, enhancement of commercial land use and urban landscape formation the following are recommended.

- The central business district of the city should be large enough to accommodate present and potential business needs of the city.
- Investment in commercial buildings should be located within the central business district or closer to ensure quick returns of investments.
- Central business districts should be evenly spread during design and planning of cities.

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