

# TRANSITION IN CENTRAL BUSINESS DISTRICT OF TRADITIONAL CITIES: A FOCUS ON BENIN CITY, NIGERIA

***Daniel Nosakhare Onaiwu***

***Department of Geography and Regional Planning,  
Faculty of Social Sciences, University of Benin,  
Benin City, Edo State, Nigeria.***

and

***Prof. Monday Ohi Asikhia***

***Department of Geography and Regional Planning,  
Faculty of Social Sciences, University of Benin,  
Benin City, Edo State, Nigeria.***

## **Abstract**

*The Central Business District (CBD) of an urban settlement is the nerve-centre of economic, social and political activities. This study is on the CBD of Benin City, a traditional urban settlement in Nigeria that is in transition. The delimitation of the CBD of Benin City is based on the adaptation of Vance and Murphy techniques, questionnaire survey and perception of the residents. The study reveals a transition in the CBD of Benin City based on the growing number of new constructions, high demand and sale of old buildings, traffic congestion and high level of commerce. It is recommended that land use regulations need to be enforced by Town Planning Department on spatial coverage of buildings of different floors; and retail areas and transport terminals are to be properly designated to reduce the level of congestion and inaccessibility of the CBD of Benin City that hinder the economic and social needs of residents.*

**Keywords: Central Business District, Land use, Transition**

The Central Business District (CBD) of any urban settlement is the nerve-centre of activities in such a settlement. It contains the highest order of economic, social and political functions. It was the CBD that gave visual expression to the growth and dynamics of the industrial city (Knox and McCarthy, 2005). The CBD has been extensively discussed in the literature because of its important role in city growth and development. The spatial organization of land use within the CBD tends to be

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dominated by a high-density core that contains the retail, office, entertainment, and civic zones and a lower-density frame that contains zones of warehousing, educational facilities, hotels, medical services, and an intermixture of specialized shops and services that have neither the functional linkages nor the potential profitability to justify locations within the core (Knox and McCarthy, 2005). Thus the CBD became a symbol of progress, modernity, and affluence over the years.

The CBDs of many traditional cities in Nigeria form the nucleus and the earliest settled parts. These cities date back to the pre-colonial era. With the integration of these cities into modern trade of commerce and transportation, they have been undergoing structural changes in their land use and functions, especially in the CBDs (Onokerhoraye, 1995).

The CBD is however a dynamic zone with many and constant changes in activities which lead to the alteration of land uses growing in particular corridors as zones of assimilation and receding in some others as zones of discard. In less developed countries, the CBDs are usually mixed with other land uses apart from retail and commercial uses. The density of buildings and accompanying high population density often lead to urban slums (Onokerhoraye & Omuta, 1986).

The focus of this study is on the Central Business District of a traditional urban settlement of Benin City, Nigeria which is undergoing a structural change in its land use pattern. This transition is leading to many changes that have implications for the growth and development of the CBD of Benin City. The study is particularly interested in how the unfolding changes in the CBD of Benin City from pre-colonial era and early post-colonial era have metamorphosed into its present form. This study covers the delimitation of the CBD, the physical changes that are taking place, the growth processes, land use pattern, the congestion, and intensity of activities. The purpose of this study is to determine how to make the CBD to become more functional without growing with much of the problems of accessibility, and intensifying densities associated with many CBDs, especially in the developed countries of the Western World.

### **The Study Area**

Benin City is a traditional town dating back from pre-colonial period of 10<sup>th</sup> century A.D. (Egharevba, 1968). It was the headquarters of the Benin Empire headed by a king, often referred to as *The Oba of Benin*. The city was a provincial headquarters before 1963. As from 1963 it became a regional headquarters and when the regions in

Nigeria transformed into Federal States structure it retained its status as headquarters. It is the most urbanised settlement in Edo State of Nigeria providing services of higher status to the other settlements in the state and beyond.

### **Methodology**

To many observers the Benin City has an obvious CBD which is coterminous with the geographic centroid of the city bordering the Ring Road areas (see Figure 1). The Ring Road has so many axial roads leading to the major parts of Benin and other settlements. In spite of the fact that the Ring Road area contains the perceptual limits of the CBD, there is still need to delimit this for proper investigation. Many techniques have been suggested for the delimitation of the CBD (Okoye, 1981; Waugh, 1995). These techniques range from systematic Vance and Murphy method to practical and perceptual methods. None of these techniques when used alone seems to be adequate. Vance and Murphy used Central Business Height Index (CBHI) and Central Business Intensity Index (CBII). Before using these indices, it requires adequate data inputs on floor areas, determination of CBD functions, delimitation of city blocks and actual mapping of these data (Kaneda et al., 2012; Northam, 1975; Okoye, 1981; Waugh, 1995; Mayhew, 1997). Gathering these data to practically map the CBD of any settlement is no mean task. The situation is particularly tasking in the less developed countries where there are paucity of planning data. The peculiar situation of lack of basic data for prosecuting CBHI and CBII indices leads us to improvise some of the indices in inchoate form and combine them with perceptual, qualitative judgement to delimit the CBD of Benin City.

The delimitation of the CBD of Benin City started with a reconnaissance survey of a radius of 1.5 kilometres from a point in the Ring road area of Benin City based on the use of the house for commerce. The survey focused on the age, use, and the floors of buildings. The reconnaissance was complemented by a questionnaire survey of the residents living in the CBD. The total housing units in the area covered by the survey is about 1,460 houses. Twenty percent of these, which is 312 houses, was taken as the sample size. Questionnaire was administered to one household head bringing the total number of households interviewed to 312. The various data collected are presented in tables that formed the basis of analysis and presentation of information.

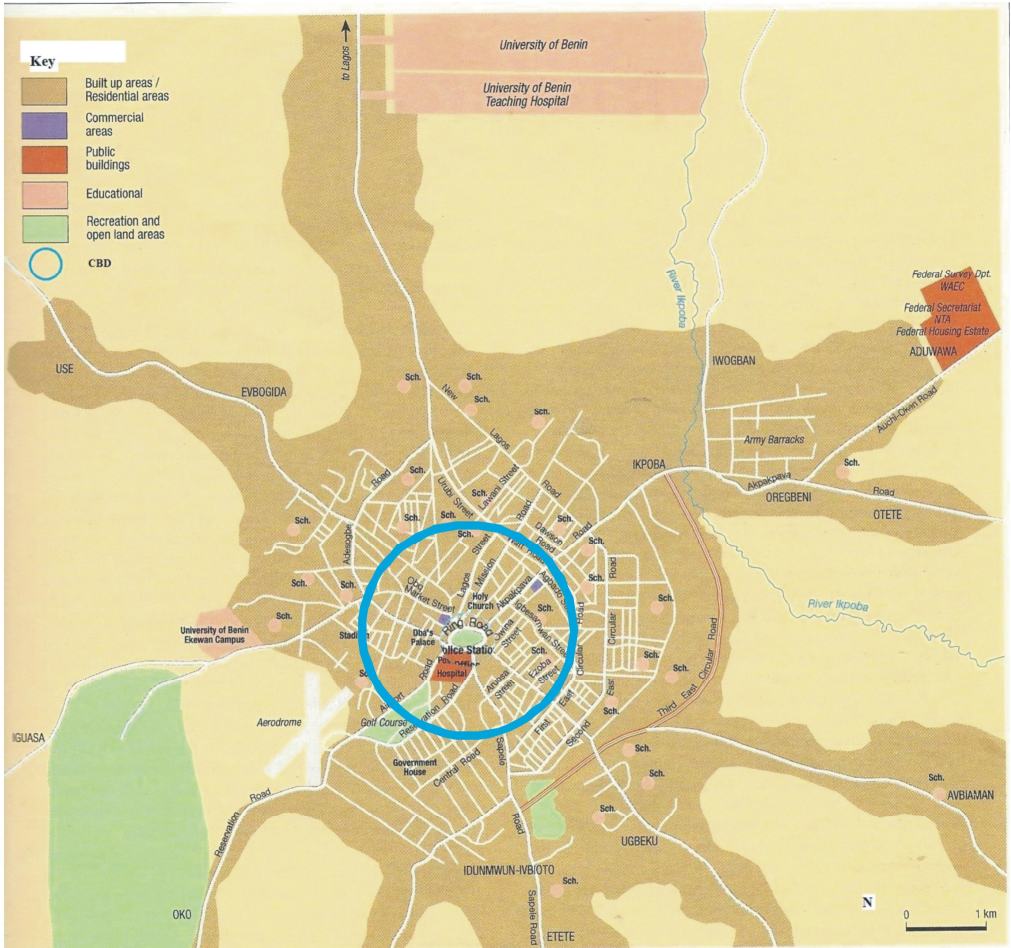


Figure 1. Benin City showing CBD

Source: African Atlases of Nigeria

### Results

The following discussion constitutes the results of the study of the transition in the Central Business District of Benin City:

#### Age of Buildings

The ecological models of land use structure establish the fact that the oldest portions of any settlements are found in the central parts (Onokerhoraye & Omuta, 1986; *Academic Scholarship Journal*, Volume 12 No. 1, November, 2016 – ISSN 2141-3428

Waugh, 1995). Table 1 shows the distribution of buildings in the CBD of Benin City based on their age.

**Table 1. Age of Buildings in the CBD of Benin City**

S/No.	Age of Building (Years)	Number of Buildings	Percentage
1.	1-15	34	10.89
2.	16 - 30	50	16.03
3.	31 - 45	57	18.27
4.	46 - 60	43	13.78
5.	61 and above	128	41.03
<b>Total</b>		<b>312</b>	<b>100.00</b>

*Source: Authors' Field Survey October, 2014.*

About 54.80 percent of the buildings are above 45 years. Most of these buildings are more than 60 years. Their walls are constructed of red, sticky laterites and rendered with cement plastering. If we take a cut-off point of buildings whose age are above 31 years as old buildings, about 73.07 percent of the buildings fall into this category. The rest buildings about 26.93 percent are less than 31 years. Buildings are properties that are expected to last long and not easily replaceable. If 26.93 percent of the buildings are new constructions, the argument that the CBD of Benin City is in transition is founded. This growing trend is more along the major roads and which is gradually filtering to the minor roads.

In the survey of the CBD of Benin City, a visual inscription mostly found on the walls of many old buildings are caveats written in different language styles that such houses are “Not for Sale”. This establishes that the CBD is under pressure of high demand for the erection of new constructions in order to re-organize the land uses for greater value.

#### ***Proportion of Land Covered by Buildings***

Another criterion that has been used in mapping the CBD is the intensity of developments (Kaneda et al., 2012; Waugh, 1995). A crude measure of the intensity of land use is the building coverage of plot. Table 2 shows the building coverage of plots in the CBD of Benin City.

**Table 2. Building Coverage of Plots**

S/No	Percentage of Building Coverage on Plot	Number of Buildings	Percentage
1.	40 - 50	20	6.41
2.	51 - 60	36	11.54
3.	61 - 70	73	23.40
4.	71 - 80	96	30.77
5.	>81	87	27.88
<b>Total</b>		<b>312</b>	<b>100.00</b>

*Source: Author’ Field Survey, October, 2014.*

Edo State Town Planning regulations do not allow more than 60 percent of the plot area to be developed in the CBD of Benin City (Ministry of Housing and Urban Development, Edo State). About 17.95 percent of the buildings of the CBD of Benin City comply with this regulation of building coverage on plot. Thus about 82.05 percent of the developers over-built. And some makeshift buildings have also been added to many buildings that initially observed the planning setbacks. The implication of this is that land use intensity is very high in the CBD of Benin City.

***Number of Floors in Buildings***

The horizontal distribution of a city land uses are also partially reflected in the distribution of activities of land use vertically. Table 3 shows the number of floors in buildings lying within the CBD of Benin City.

**Table 3. Number of Floors in Buildings within the CBD of Benin City**

S/No.	Number of Floors	Number of Buildings	Percentage Number of Buildings
1.	1	136	43.59
2.	2	72	23.08
3.	3	39	12.50
4.	4	27	8.65
5.	5	21	6.73
6.	6	12	3.85
7.	7	5	1.60
<b>Total</b>		<b>312</b>	<b>100.00</b>

*Source: Authors’ Field Survey October, 2014.*

In the pre-colonial and colonial periods, the numbers of buildings in Benin City with at least two floors were very few. The oldest two-floor building in Benin City is

located in Erie Street. This building is a celebrated artefact on the landscape of Benin City (Egharevba, 1968). The development of buildings with more than one floor, especially within the CBD is a feature of post-colonial era. Table 3 indicates that about 43.58 percent of the buildings are still single floor and only 1.60 percent of the buildings are up to seven floors, which is the tallest building category. Thus the CBD of Benin City when compared to a typical CBD, especially in Western Europe and America is lacking in tall buildings. In spite of this height characteristic, the trend of the erection of tall buildings is growing and this makes the CBD to be in transition.

#### ***Initial Building Floors and their New Floors after Replacement***

The residents occupying new constructions in the CBD were asked about the number of floors occupied formerly by their present sites before the new constructions. Thirty cases were observed and compared. The comparison and in addition with their average plot area coverage are shown in Table 4.

**Table 4. Comparison of Number of Floors and Plot Coverage in Initial and New Constructions**

S/No	Initial	Building Floor		New Replacement		Index of Intensity
	Observed Cases (50)	Initial Floor	Average % Coverage of Building on Plot	New Floors	Average % Coverage of Building on Plot	
1.	26	1	88.0	2	80.0	1.88
2.	15	1	83.0	3	76.0	2.75
3.	09	1	80.0	4	72.0	3.60

*Source: Authors' Field Survey October, 2014.*

A case of transition in the CBD of Benin city can be inferred when we compare the number of floors of initial buildings with their new replacements. From Table 4, we discovered that the number of floors occupied by new buildings in the same sites occupied by the old ones increased. The area coverage between old and new constructions does not differ much.

An attempt was made to quantitatively determine the degree of intensification between the initial and new constructions in the CBD of Benin City through an index of intensity. The index is expressed as follows:

$$\text{Index of Intensity} = \frac{\text{No. of new floors x plot coverage area}}{\text{No. of old floors x plot coverage area}}$$

For 26 observed cases the index of intensity (II) is 1.88; for 15 observed cases it is 2.75; and for the last category of cases the index of intensity is 3.60 (see Table 4). If the II is averaged for the three floor categories of the CBD uses sampled, it will amount to 2.74. Thus, there is intensification in floor areas of the CBD uses because of old buildings being replaced by new buildings when compared to a cut-off point of II of 1.50.

### Uses of Floor Areas in CBD of Benin City

The CBD contains Peak Value Land Intersection (PVLII) where the returns to unit area of land are the highest (Floyd and Allen, 2005). Table 5 considers three different floors of buildings in the CBD of Benin City to find the typicality of such uses.

**Table 5. Functional Uses of CBD of Benin City in Floor Areas**

S/No.	Floors	Uses Of Land In Percentage		
		Commerce	Office	Banking/Insurance
1.	Grand floor	92.0	5.8	2.2
2.	1 <sup>st</sup> floor	65.5	25.5	9.0
3.	2 <sup>nd</sup> floor	48.4	45.6	6.0

*Source: Authors' Field Survey, October, 2014.*

Table 5 excludes data for Oba Market, a traditional market rebuilt in modern type architecture, which is mostly devoted for commerce. In the three floor areas that were considered to determine the functional uses of CBD, commerce takes the lead. Commercial activities attract a lot of customers and this makes the day-time population density to be high and the attendant traffic congestion at chaotic levels.

In this study many indicators have been suggested for determining the spatial limits of the CBD of Benin City. None of these indicators seems to be refined enough that will enable us to categorically map the spatial extent of the CBD of Benin City. However, using the suggested criteria and the spatial perception of the residents of Benin city in concert, a circumscribing radius of 1.5 km with bulges at zones of assimilation and compressions at zones of discard have been used (see Figure 1).



***Growth Processes in the CBD of Benin City***

Settlements are like organic entities that can experience growth and decay. The transition in the CBD of Benin City is marked by both horizontal and vertical growth processes. The horizontal growth process involves the spatial expansion of the CBD, especially in the zones of assimilation as indicated in Figure 1. The CBD is extending towards the major thorough-fares of Akpakpava, Mission, Oba Market Road and Sakponba Road. The direction of Oba Palace is a zone of discard. The palace ground has resisted changes in use because of the cherished values the *Binis* have for their culture.

The study reveals that the growth in the CBD is also accomplished vertically. The city's oldest storey building is at Erie Street, and it is about 120 years old (Egharevba, 1968). The development of high-rise buildings is a respond to the need to maximize development plots for CBD uses (Cheshire, 1995; Badcork, 2002). There is a growing trend of replacing the old single-floor mud houses in the core areas of Benin City with tall buildings. The vertical and horizontal growth processes are giving rise to intensification and densification of the land uses in the CBD with their attendant consequences (Cheshire, 1995; Badcork, 2002).

**Discussion and Conclusion**

Although the CBD of Benin City is a centre of axial roads connecting the various parts of the city, yet accessibility is constrained. The indiscriminate constructions going on without the observance of adequate set-backs of buildings, the blocking of roads with wares by traders and construction of illegal structures affect the accessibility of the CBD.

There is real need for the Town planning Authorities in Benin City to properly determine the spatial limits of the CBD, the land uses, bulk area and height requirements, circulation and designation of vehicular parks. The state and local governments must jointly manage the CBD of Benin City for good results. The Central Business District of Benin City is undergoing structural changes and this explains why the Edo State government and Oredo Local government are trying to address some of the challenges facing it. The intensification of activities resulting from the growth processes has led to high density of physical developments. There is hardly any open space except at the Oba Palace and the Benin Museum. Every part of the CBD is either covered by physical structures or wares displayed by retail traders. The radiating roads from the CBD to the various parts of Benin City and other settlements in Edo state are sites of traffic parks and terminals. The manoeuvrings of vehicles are worrisome sights

to pedestrians; and the condition also affects the functionality of the CBD for shopping and other social activities. Another problem associated with the CBD of Benin City is the incidence of solid wastes, especially in Oba Market and its environs. The piling of refuse dumps is clearly an indication that the CBD is turning into slums.

There is compelling need to properly delineate the spatial extent of the CBD of Benin City for special treatment. Transport terminals should be designated by the municipal government to create order in the traffic chaos experienced in the CBD. Bulk control of buildings is needed to forestall the incident of overdevelopment in order to prevent unsightly results from high density. The ever increasing pace of urbanization and the spatial expansion of Benin City points to the direction that some emerging activities nuclei like New Benin, Uselu areas should be considered for development as new CBDs in Benin City. This can lead to balanced growth in spatial activities in Benin City instead of over-concentration of activities in the Ring Road area. A multi-CBD structure can stem the problems of inaccessibility and decay suffered by many CBDs in Europe and America (Waugh, 1995) taking place in Benin City and other CBDs in less developed countries.

### References

- Badcork, B. (2002). *Making Sense of Cities: A Geographical Survey*. New York: Arnold.
- Cheshire, P. (1995). A New Phase of Urban Development in Western Europe? The Evidence for the 1980s. *Urban Studies* 32, 311 – 33.
- Egharevba, J. (1968). *A Short History of Benin (4<sup>th</sup> ed.)*. Ibadan: University Press.
- Floyd, C. F. and Allen, M. T. (2005). *Real Estate Principles (8<sup>th</sup> ed.)*. Chicago: Dearborn Real.
- Haughton, G. (1997). Developing Sustainable Urban Models. *Cities* 14, 189 – 95.
- Knox, P. L. and Mc Carthy, L. (2005). *Urbanization (2<sup>nd</sup> ed.)*. Oxford: Oxford University.
- Kaneda, T., Tomojiko, M. & Sakai, T. (2012). Transition Analysis on Land Use and Land Price in Nagoya CBD during the Deregulation Decade in Proceedings Real CORP 2012 Tagungsband. Eds. M. Schrenk, V.V. Popovich, P. Zeile, & P. Elisei pp. 955 – 962. [www.corp.at/archive/CORP](http://www.corp.at/archive/CORP) Accessed Date: 30<sup>th</sup> September, 2014.

- Mayhew, S. (1997). *Oxford Dictionary of Geography, Oxford*: Oxford University Press.
- Ministry of Housing and Urban Development, Edo State Nigeria (2014). *Edo State Urban Development and Physical Planning Regulations*. Benin City: Government Press.
- Northam, R. M. ( 1975) *Urban Geography*. New York: John Wiley.
- Okoye, T. O. (1981). *The Structure of the Central Business District of Enugu*, in P. O. Sada and J. S. Oguntoyinbo eds, *Urbanization Processes and Problems in Nigeria*. Ibadan: Ibadan University Press, 81 – 97.
- Onokerhoraye, A. G. and Omuta, G. E. D. (1986). *Urban Systems and Planning*. Benin City: The Geography and Planning Series of Study Notes.
- Onokerhoraye, A. G. (1995). *Benin: A Traditional African City in Transition*. Benin City: Benin Social Science Series for Africa.
- Town Planning Department, Ministry of Lands and Surveys, Edo State, Nigeria. (2014). *Development Control Regulations*. Government Press.
- United Nations (1996). *An Urbanizing World: Global Report on Human Settlements, 1996*. Oxford: Oxford University Press for United Nations Centre for Human Settlements (HABITAT).
- Waugh, D. (1995). *Geography: An Integrated Approach (2<sup>nd</sup>. Ed.)*. Surey: Thomas Nelson and Sons Limited.