

## Low-Income Housing Affordability and Accessibility in the Federal Capital Territory, Nigeria

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### **Abstract:**

Adequate provision of low income housing is a major issue of concern in many parts of the world. This study assessed the affordability and accessibility of low-income housing in the Federal Capital Territory (FCT) of Nigeria, with a view to identifying key constraints and proposing practical strategies for improvement. A survey research design involving 373 respondents selected from low-income civil servants and private housing developers was adopted, using cluster and purposive sampling techniques. Data were collected through structured questionnaires and analysed using descriptive and inferential statistical methods, which include the Housing Price-to-Income Ratio (HPIR), Housing Expenditure-to-Income Ratio (HEIR), Chi-square, and Spearman's rank correlation. The findings revealed a severe housing affordability crisis. The HPIR for the dominant income group (₦70,000–₦100,000), representing 50.7% of respondents, was 10.29 for a 1-bedroom unit, while values reached as high as 20.10 for a 3-bedroom unit, indicating severe unaffordability across all income categories. Similarly, HEIR results showed that households in the same income group spend 61.8% of their income on a 1-bedroom unit, 76.5% on a 2-bedroom unit, and 120.6% on a 3-bedroom unit, far exceeding the 30% affordability threshold. In terms of accessibility, although 69.2% of respondents were aware of housing programmes, 70% had never applied, mainly due to high costs (83.9%), complex procedures (65.9%), and lack of information (60.5%). Among the applicants, only 17% were successful, while 75% were unsuccessful due to low income (81%), inability to meet deposit requirements (73.8%), and lack of mortgage access (69%). Furthermore, 76.4% of respondents were tenants, reflecting limited homeownership. Inferential analysis showed a statistically significant relationship between income and housing accessibility (Spearman's  $\rho = 0.504$ ,  $p < 0.001$ ;  $x^2 = 36.240$ ), indicating that higher-income earners have better access to housing

*opportunities. The study concludes that existing housing delivery mechanisms in the FCT are ineffective in addressing the needs of low-income earners due to structural, financial, and administrative constraints. It recommends the adoption of flexible financing models, simplified allocation processes, and strengthened public-private partnerships to improve housing affordability and accessibility. Implement a National Housing Affordability Guarantee (NHAG), where the FCT Government commits to ensuring that no civil servant spends more than 30% of their income on housing. Adopt the Integrated Affordability and Accessibility Framework for Low-Income Housing Delivery in the FCT (IAAF-FCT).*

**Keywords:** *Accessibility, Affordability, Civil Servants, Housing, Low-Income, Private Developers*

### **1.0 Introduction**

Housing is one of the most significant urban problems in the Federal Capital Territory (FCT) of Nigeria, and it requires continuous policy attention (Lwasa *et al.*, 2014; Adekunle *et al.*, 2016). Given the enormous effect housing has on human well-being and socio-economic development, the problems of urban housing, its delivery process, availability, accessibility, and affordability to low-income earners are of great concern not just to people in the global south but also to the rest of the globe (Del Pero *et al.*, 2016; Zhang, 2016; Adekunle *et al.*, 2016). The National Technical Working Group Report on Housing (2009) remarks that little is understood about the housing sector, and most often, housing is neglected in Nigeria to the extent that little progress has been made in the delivery of housing for the generality of Nigerians and the low-income group in particular.

The gap between income and shelter costs in Nigeria is very wide. Low-income earners are eliminated from the formal housing market. Many find it difficult to cope with regular and prompt rent payments. This makes the aspiration of low-income households to occupy an adequate, well-located rented apartment almost elusive. The income of poor households is too low to support the construction of buildings within a short or even medium time span (Kumije *et al.*, 2022). Housing for low-income families that is sufficient, cheap, and decent is obviously in limited supply. Having acknowledged this, the Nigerian government adopted a more market-oriented approach to close the widening gap between demand and supply

in housing delivery. The current housing policy in Nigeria limits the role of the government to that of an enabler and regulator rather than a provider (Aliyu *et al.*, 2021).

In line with the private sector-driven housing policy in Nigeria, the Federal Capital Territory Administration (FCTA) introduced the mass housing scheme in the year 2000 under its public-private partnership programme (Ibimilua and Ibitoye, 2015). Under this scheme, the government is to provide primary infrastructure and allocate land to private developers. The private developers will, in turn, provide secondary and tertiary infrastructure as well as develop and sell completed houses to members of the general public, which largely constitute the low-income group.

Abuja, the Federal Capital City (FCC), and the Federal Capital Territory (FCT) have experienced housing delivery challenges over the years. Many assessment studies in Nigeria (Ibem and Aduwo 2012; Ibimilua & Ibitoye, 2015; Omolabi and Adebayo, 2017, Aliyu *et al.*, 2021 and Junaid, 2017) have postulated that the housing programmes do not achieve the desired objectives. These concerns and criticisms have, therefore, called for the evaluation of various housing programmes, particularly by formal private developers in the FCT and the entire country, towards improving the delivery process. Finding answers to how and why the initiative had failed would serve as valuable lessons towards improving housing delivery in the FCT and in Nigeria as a whole. The inadequacy and inefficiency of supply, as well as poor maintenance methods and the affordability of housing for low-income earners in the study area, are all major issues.

Another major concern is the poor delivery of housing programmes as targeted. Poor cost of performance in the implementation of low-income housing projects in Abuja and Nigeria is reported to have a negative impact on low-income housing supply in terms of unit output, high sale prices, the affordability of projected target beneficiaries, and poor dwelling conditions (Akinde, 2012; Ogbu and Adindu, 2012). As a result of these effects, many low- and lower-middle-income people have sought refuge in slums and other substandard housing (FMLHUD, 2012; Makinde, 2014; Oyo-Ita, 2017).

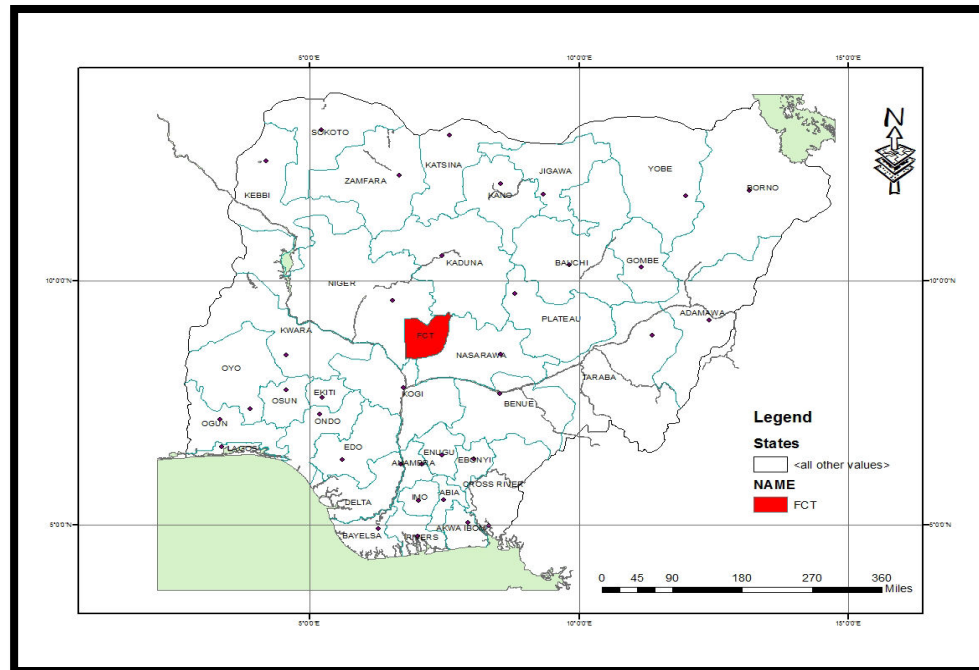
Based on the past literature, there is enough data to suggest that FCT lacks sufficient affordable housing, resulting in an increase in the number of slums and other improvised dwellings (UN-Habitat, 2011). The

magnitude of housing deficit in Nigeria is depicted by the huge expression of housing need by the citizens (Junaid, 2017). One of the reasons for these shortfalls may be the failure to complete many low-income housing programmes in Abuja and Nigeria (Ugonabo and Emoh, 2013; Dachollom, 2016; Oyo-Ita, 2017; Kanayochukwu and Dogo, 2019; Aliyu *et al.*, 2021; Adedeji *et al.*, 2023). The intrinsic issues confronting the low-income housing sector have undoubtedly contributed to the dreadful housing crisis both in the FCT and elsewhere in the country (Kanayochukwu and Dogo, 2019). As a result, poor project cost performance, which is common in the execution of low-income housing projects, is one of the identified issues.

The Federal Government has acknowledged that providing appropriate accommodation is a major concern, particularly in the FCT, which has over 300,000 career civil officials (Siyaka, 2017). The Nigerian government's housing initiative to partner with formal private developers through various programmes with the goal of closing the wide gap between supply and demand in the housing market yielded little or no results, especially in the area of low-income housing delivery (Siyaka, 2017). Therefore, this research is set to examine the problem of housing delivery programmes in the FCT, Nigeria. The aim is to assess the affordability and accessibility of low-income housing in the Federal Capital Territory, Nigeria, with a view to proposing strategies for improving housing provision for low-income earners.

## **2.0 The study area**

The capital of Nigeria, FCT, is strategically positioned in the heart of the country (Figure 1). It is located between latitudes 8° 50' – 9° 20'N and longitudes 7° 00' – 7° 37'E. of the Equator (Federal Capital Territory Administration, 2011). FCT is bordered by Kaduna State on the north, Niger State on the west, Plateau State on the east and south-east, and Kogi State on the south-west.



**Figure 1: Location of federal capital territory in Nigeria Source: Abuja geographic information systems, 2021**

### 3.0 Research methods

This study adopted a survey research design to examine the affordability and accessibility of low-income housing in the Federal Capital Territory (FCT), Nigeria. The design was considered appropriate because it enabled the collection of quantitative data from a large sample of respondents representing low-income earners and private developers directly involved in housing delivery. The study population comprised members of the Amalgamated Union of Public Corporations, Civil Service Technical and Recreational Services Employees (AUPCTRE) working within the FCT, who represented the low-income workforce category (Grade Levels 1–9), as well as private housing developers participating in the mass housing scheme. A combination of cluster and purposive sampling techniques was used. Each Ministry, Department, and Agency (MDA) under AUPCTRE served as a cluster, from which members were purposively selected based on their income levels and residence within the FCT. The total population of AUPCTRE members across 62 MDAs was 13,127. The Kothari (2004) sample size determination formula at a 95% confidence level and a 5% margin of error was applied and it yielded a sample size of 373 respondents. The sample was distributed proportionately across the MDAs

according to their staff population, with the Ministry of Works contributing the highest number of respondents (70), followed by the Ministry of Lands and Housing (39), while smaller agencies such as the Code of Conduct Bureau, Women Affairs, and Transport had one respondent each.

Data were collected through structured questionnaires, which were administered to low-income civil servants. The questionnaire captured information on income levels, rent-to-income ratios, mortgage accessibility, and proximity of housing to essential urban services such as employment centres, schools, markets, healthcare facilities, and transportation networks. In order to examine the affordability and accessibility of low-income housing in the study area, the analysis combined descriptive and inferential statistical techniques to provide a comprehensive understanding. Descriptive analysis offers an initial overview of the data, helping to organize and summarize key aspects of housing affordability and accessibility. Summary statistics, such as the mean, describe household income distributions, housing costs, and the proportion of income spent on housing. Furthermore, multiple complementary affordability indices were calculated to provide a robust assessment and they include:

- I. House Price-to-Income Ratio (HPIR):** This ratio was calculated for each housing development and compared against international benchmarks. The HPIR is given by the formula:

$$HPIR = \frac{\text{Median housing price}}{\text{Median Household annual income}}$$

HPIR < 3.0: Affordable

3.0 ≤ HPIR < 4.0: Moderately Unaffordable

4.0 ≤ HPIR < 5.0: Seriously Unaffordable

HPIR ≥ 5.0: Severely Unaffordable

- II. Housing Expenditure-to-Income Ratio (HEIR):**

$$HEIR = \frac{\text{Monthly housing expenditure}}{\text{Monthly Household Income}} * 100$$

Monthly housing expenditure includes mortgage/rent payments, service charges, and maintenance costs. The interpretation thresholds is given as follows:

HEIR < 30%: Affordable

30% ≤ HEIR < 40%: Moderately Unaffordable

40% ≤ HEIR < 50%: Seriously Unaffordable

HEIR ≥ 50%: Severely Unaffordable

**III. Affordability Gap Analysis:** The gap between actual housing costs and affordable housing costs (based on 30% of income) was calculated across income bands:

$$\text{Affordability Gap} = \text{Actual Housing Cost} - \text{Affordable Housing Cost}$$

For inferential analysis, ANOVA was used to assess differences in housing affordability across various private developers' housing projects. The test of ANOVA provided ample details on how effective each private low-income housing provider responded to the provision of low-income or affordable housing.

#### 4.0 Results and discussions

##### 4.1 Analysis of housing affordability

Housing affordability is a critical dimension of housing policy evaluation, particularly in rapidly urbanising cities of developing economies. This section quantifies the affordability gap in the Federal Capital Territory (FCT) low-income housing market using the Housing Price-to-Income Ratio (HPIR). Table 1 shows the affordability crisis as perceived by the majority of civil servants surveyed through HPIR. For the dominant income group (₦70,000–₦100,000/month, representing 50.7% of respondents), the HPIR for the cheapest 1-bedroom unit is 10.29, placing them in the "severely unaffordable" band. This means that an average earner in this category would need more than 10 years of their entire gross income, without spending a single Naira on any other need, to purchase the least expensive housing unit on offer.

**Table 1:** Housing Price-to-Income Ratio (HPIR) by Income Category and Unit Type

Income Category	Annual Income (₦)	Unit Type	Avg. Price (₦)	Formula: Price ÷ Annual Income	HPIR	Classification
1-Bedroom Flat						

₦70,000 – ₦100,000	₦1,020,000	1-Bedroom Flat	₦10.5M	₦10.5M ÷ ₦1.020M	10.29	Severely Unaffordable
₦101,000 – ₦150,000	₦1,506,000	1-Bedroom Flat	₦10.5M	₦10.5M ÷ ₦1.506M	6.97	Seriously Unaffordable
₦151,000 – ₦200,000	₦2,106,000	1-Bedroom Flat	₦10.5M	₦10.5M ÷ ₦2.106M	4.99	Moderately Unaffordable
₦201,000 – ₦250,000	₦2,706,000	1-Bedroom Flat	₦10.5M	₦10.5M ÷ ₦2.706M	3.88	Moderately Unaffordable
Above ₦250,000	₦3,300,000	1-Bedroom Flat	₦10.5M	₦10.5M ÷ ₦3.300M	3.18	Moderately Unaffordable
<b>2-Bedroom Flat</b>						
₦70,000 – ₦100,000	₦1,020,000	2-Bedroom Flat	₦13.0M	₦13.0M ÷ ₦1.020M	12.75	Severely Unaffordable
₦101,000 – ₦150,000	₦1,506,000	2-Bedroom Flat	₦13.0M	₦13.0M ÷ ₦1.506M	8.63	Seriously Unaffordable
₦151,000 – ₦200,000	₦2,106,000	2-Bedroom Flat	₦13.0M	₦13.0M ÷ ₦2.106M	6.17	Seriously Unaffordable
₦201,000 – ₦250,000	₦2,706,000	2-Bedroom Flat	₦13.0M	₦13.0M ÷ ₦2.706M	4.80	Moderately Unaffordable

Above ₦250,000	₦3,300,000	2-Bedroom Flat	₦13.0M	₦13.0M ÷ ₦3.300M	3.94	Moderately Unaffordable
<b>3-Bedroom Flat</b>						
₦70,000 – ₦100,000	₦1,020,000	3-Bedroom Flat	₦20.5M	₦20.5M ÷ ₦1.020M	20.10	Severely Unaffordable
₦101,000 – ₦150,000	₦1,506,000	3-Bedroom Flat	₦20.5M	₦20.5M ÷ ₦1.506M	13.61	Severely Unaffordable
₦151,000 – ₦200,000	₦2,106,000	3-Bedroom Flat	₦20.5M	₦20.5M ÷ ₦2.106M	9.73	Seriously Unaffordable
₦201,000 – ₦250,000	₦2,706,000	3-Bedroom Flat	₦20.5M	₦20.5M ÷ ₦2.706M	7.58	Seriously Unaffordable
Above ₦250,000	₦3,300,000	3-Bedroom Flat	₦20.5M	₦20.5M ÷ ₦3.300M	6.21	Seriously Unaffordable

Source: Author's computation, (2024)

Even for the next income bracket (₦101,000–₦150,000, representing 36.7% of respondents), the HPIR for a 1-bedroom unit is 6.97. This income group fall into the seriously unaffordable category. Only civil servants who earned above ₦201,000 per month (representing a mere 2.6% of the sample) achieve a HPIR below 5.0 for a 1-bedroom unit, and they fell into moderately unaffordable zone. No income group achieved an HPIR of 3.0 or lower for any unit type. For a 3-bedroom unit, the HPIR reaches 20.10 for the lowest income group, representing an extreme and practically insurmountable affordability gap.

#### 4.2 Analysis of housing expenditure-to-income ratio

The HEIR results presented in Table 2 confirms and extends the HPIR findings. For the majority income group (₦70,000–₦100,000/month), renting a 1-bedroom unit would consume 61.8% of gross annual income, placing these households in the severely burdened category. For a 2-bedroom unit, the burden rose to 76.5%, and for a 3-bedroom unit, it exceeds 100% (120.6%), meaning the rental cost alone surpassed total annual earnings.

Even households in the ₦101,000–₦150,000 bracket, the second-largest group representing 36.7% of the respondents, have HEIR values of 41.8% for a 1-bedroom unit and 81.7% for a 3-bedroom unit, placing them in the moderately to critically burdened categories. Only households earning above ₦151,000 per month (approximately 12.5% of the respondents) could achieve an HEIR below 30% for a 1-bedroom unit, meeting the standard affordability threshold. No income group can afford a 3-bedroom unit within the 30% benchmark.

**Table 2: Housing Expenditure-to-Income Ratio (HEIR) by Income Category and Unit Type**

Income Category	Annual Income (₦)	Unit Type	Annual Housing Cost (6% of Price)	Formula : Housing Cost ÷ Annual Income	HEIR	Classification
1-Bedroom Flat						
₦70,000 – ₦100,000	₦1,020,000	1-Bedroom Flat	₦630,000	₦630,000 ÷ ₦1,020,000	61.8%	Severely Burdened
₦101,000 – ₦150,000	₦1,506,000	1-Bedroom Flat	₦630,000	₦630,000 ÷ ₦1,506,000	41.8%	Moderately Burdened

₦151,000– ₦200,000	₦2,106,000	1- Bedroom Flat	₦630,000	₦630,000 ÷ ₦2,106,000	29.9 %	Affordable
₦201,000– ₦250,000	₦2,706,000	1- Bedroom Flat	₦630,000	₦630,000 ÷ ₦2,706,000	23.3 %	Affordable
Above ₦250,000	₦3,300,000	1- Bedroom Flat	₦630,000	₦630,000 ÷ ₦3,300,000	19.1 %	Affordable
<b>2- Bedroom Flat</b>						
₦70,000– ₦100,000	₦1,020,000	2- Bedroom Flat	₦780,000	₦780,000 ÷ ₦1,020,000	76.5 %	Severely Burdened
₦101,000– ₦150,000	₦1,506,000	2- Bedroom Flat	₦780,000	₦780,000 ÷ ₦1,506,000	51.8 %	Severely Burdened
₦151,000– ₦200,000	₦2,106,000	2- Bedroom Flat	₦780,000	₦780,000 ÷ ₦2,106,000	37.0 %	Moderately Burdened
₦201,000– ₦250,000	₦2,706,000	2- Bedroom Flat	₦780,000	₦780,000 ÷ ₦2,706,000	28.8 %	Affordable
Above ₦250,000	₦3,300,000	2- Bedroom Flat	₦780,000	₦780,000 ÷ ₦3,300,000	23.6 %	Affordable
<b>3- Bedroom Flat</b>						

₦70,000 – ₦100,000	₦1,020,000	3-Bedroom Flat	₦1,230,000	₦1,230,000 ÷ ₦1,020,000	120.6 %	Critically Burdened
₦101,000 – ₦150,000	₦1,506,000	3-Bedroom Flat	₦1,230,000	₦1,230,000 ÷ ₦1,506,000	81.7 %	Critically Burdened
₦151,000 – ₦200,000	₦2,106,000	3-Bedroom Flat	₦1,230,000	₦1,230,000 ÷ ₦2,106,000	58.4 %	Severely Burdened
₦201,000 – ₦250,000	₦2,706,000	3-Bedroom Flat	₦1,230,000	₦1,230,000 ÷ ₦2,706,000	45.5 %	Moderately Burdened
Above ₦250,000	₦3,300,000	3-Bedroom Flat	₦1,230,000	₦1,230,000 ÷ ₦3,300,000	37.3 %	Moderately Burdened

Source: Author's computation, (2024) (Rental yield: 6% p.a.)

### 4.3 Analysis of low-income housing accessibility

The results of civil servants' accessibility to low-income housing in the FCT is presented in Table 3. It shows that while 69.2% of respondents (258 out of 373) were aware of the low-income housing programmes, 70% (261) of the civil servants have never applied, indicating a disconnect between awareness and engagement. The primary barriers to application are economic and procedural in nature as 83.9% of the respondents cited high costs or unaffordability, 65.9% pointed to complex application processes, and 60.5% reported lack of information. These findings suggest that awareness alone is insufficient without simplified, transparent, and income-sensitive mechanisms.

Additionally, out of the 112 applicants, only 17% (19) were successful, while 75% (84) were rejected. The main reasons for rejection, which exacerbated the affordability crisis include low income level (81%), inability to meet the deposit requirements (73.8%), and lack of access to mortgages (69%). This reveals that even those who attempt to access low income housing units were systematically excluded by rigid financial criteria that

do not reflect the realities of civil servants' incomes. The absence of accessible financing, particularly mortgages, renders formal housing programmes inaccessible, despite formal eligibility.

The current housing tenure data shows that 76.4% of civil servants rented their apartment, 14.5% owned the houses while 9.1% lived in inherited homes. The preference for government-subsidised mortgages (83.7%) and cooperative housing finance (77.5%) shows an apparent demand for structured, affordable, and state-backed financial instruments. The popularity of rent-to-own schemes (65.7%) further signals a desire for incremental pathways to ownership, particularly among those unable to access upfront capital. Employer-assisted housing (50.4%) and microfinance (41.8%) are also highly preferred, suggesting that institutional partnerships and community-based models could play vital roles in closing the housing gap.

**Table 3: Accessibility of Low-Income Housing Programmes as Perceived by Civil Servants**

<b>Accessibility Factor</b>	<b>Response</b>	<b>Frequency</b>	<b>Percent (%)</b>
Awareness of Programmes	Yes	258	69.2
	No	115	30.8
Application Status	Applied	112	30
	Never Applied	261	70
Reasons for Not Applying (N=261)	High cost/unaffordable	219	83.9
	Complex application process	172	65.9
	Lack of information	158	60.5
	No guarantee of allocation	146	55.9
	Poor location of housing units	135	51.7
	Lack of trust in the process	128	49
	Others (not qualified, have a house)	47	18

Application Success Rate (N=112)	Successful.	19	17
	Unsuccessful	84	75
	Application still in process	9	8
Reasons for Unsuccessful Application (N=84)	Income level too low to qualify	68	81
	Could not meet deposit requirement	62	73.8
	Could not secure mortgage	58	69
	Limited units available	48	57.1
	Administrative/bureaucratic issues	45	53.6
	Others (corruption)	21	25
Current Housing Tenure	Rental	285	76.4
	Owned	54	14.5
	Inherited/Family house	34	9.1
Most Suitable Financing Option	Government subsidized mortgage	312	83.7
	Cooperative housing finance	289	77.5
	Rent-to-own scheme	245	65.7
	Employer-assisted housing	188	50.4
	Microfinance for housing	156	41.8
	Incremental building loan	142	38.1

Source: Author's computation, (2024)

#### 4.4 Priority factors of low-income housing accessibility in abuja

The results presented in Table 4 reveals that private developers prioritised flexible payment options (70.8%) and location near transport routes (75%) as key factors of low-income housing accessibility, highlighting that affordability hinges on payment flexibility and connectivity, not just price. A majority (62.5%) also supported transparent allocation and simplified

applications (58.3%), acknowledging that bureaucracy undermines uptake. Fewer developers emphasized employer partnerships (41.7%) or targeted marketing (37.5%), suggesting limited focus on institutional outreach. These results shows that developers recognised the structural barriers to housing accessibility in Abuja.

**Table 4:** Measures for increased low-income housing accessibility.

<b>Accessibility Strategy</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Transparent allocation process	15	62.5
Simplified application procedures	14	58.3
Partnerships with employers/unions	10	41.7
Marketing specifically to low-income groups	9	37.5
Flexible payment options	17	70.8
Location near transport routes	18	75

Source: Author's computation, (2024)

#### **4.5 Test of hypothesis**

The relationship between respondents' income and housing accessibility was examined. The hypothesis is stated as:

*H<sub>0</sub>: There is no significant relationship between the income of the respondents and the level of accessibility to low-income housing in the study area.*

This hypothesis examined whether civil servants' monthly income is associated with their perceived level of accessibility to low-income housing in the FCT. Income was measured across five categories ranging from ₦70,000–₦100,000 (n = 189, 50.7%) to above ₦250,000 (n = 2, 0.5%). Accessibility was operationalised as a composite of the six barrier factors assessed including application complexity, waiting periods, allocation corruption, project location, information availability, and unit supply, all collapsed into three ordinal levels. These are: Low (respondents who rated four or more factors as either not important or slightly Important, indicating they face few barriers); Moderate: (mixed barrier profiles); and High: (respondents rating four or more factors as very important or

important, indicating they can navigate barriers effectively relative to peers in their income band). Both variables are ordinal in nature. The primary test used is Spearman's Rank Correlation Coefficient ( $\rho$ ), which is appropriate for ordinal-by-ordinal relationships. A Chi-square test of independence was also computed on a collapsed four-category income grouping to corroborate the direction and significance of the association.

The cross-tabulation results in Table 5 shows a clear, consistent gradient. As monthly income rises, the proportion of respondents reporting low accessibility falls sharply, while the proportion reporting high accessibility rises. Among the ₦70,001–₦100,000 income group, the largest cohort (50.7% of the sample), 59.3% reported low accessibility, and only 10.1% reported high accessibility. This pattern shifts progressively up the income scale. Among respondents who earned above ₦200,000; 60.0% reported high accessibility, compared with just 10.0% in the lowest income group, indicating an almost exact reversal of the lowest income group's profile.

**Table 5: Cross-tabulation of Monthly Income by Level of Housing Accessibility**

<b>Income Group</b>	<b>n</b>	<b>Low Accessibility (f / %)</b>	<b>Moderate Accessibility (f / %)</b>	<b>High Accessibility (f / %)</b>
₦70,001 – ₦100,000	189	112 (59.3%)	58 (30.7%)	19 (10.1%)
₦101,001 – ₦150,000	137	62 (45.3%)	51 (37.2%)	24 (17.5%)
₦151,001 – ₦200,000	37	9 (24.3%)	16 (43.2%)	12 (32.4%)
Above ₦200,000	10	1 (10%)	3 (30%)	6 (60%)
<b>Total</b>	<b>373</b>	<b>184 (49.3%)</b>	<b>128 (34.3%)</b>	<b>61 (16.4%)</b>

Source: Field Survey, (2024).

Low Accessibility = predominantly unable to navigate application, location, and information barriers; Moderate = partial access; High = able to access with manageable barriers. Income groups ₦201,001–₦250,000 and

>₦250,000 collapsed into "Above ₦200,000" for chi-square analysis due to small cell sizes.

The Spearman's rank correlation coefficient,  $\rho = 0.504$  ( $p < 0.001$ ), indicates a moderate-to-strong positive relationship between income level and access to low-income housing as respondents with higher incomes reported substantially better access. The chi-square test (Table 6) corroborates this finding  $\chi^2(6) = 36.240$ , which exceeds the critical value of 12.592 at  $\alpha = 0.05$  ( $p < 0.001$ , Cramér's  $V = 0.220$ ). The null hypothesis is therefore rejected. There is a statistically significant relationship between civil servants' monthly income and their level of access to low-income housing in the FCT. The magnitude of the effect, though moderate (Cramér's  $V = 0.220$ ;  $\rho = 0.504$ ), is meaningful and it suggests that income alone accounts for a substantial share of accessibility differentials, even within a group that, by any external standard, is uniformly low-to-middle income. This finding is consistent with the broader affordability analysis in section 4.1, which showed that Price-to-Income Ratios ranged from 6.97 to 10.29 across the same income bands, each group facing a different, but equally unacceptable, level of housing cost burden. Together, these results confirmed that within the FCT's low-income civil servant population, income stratification generates meaningful differences in who can and cannot realistically access low-income housing delivered by formal private developers.

**Table 6: Chi-Square and Spearman's Rank Correlation Results — Income and Housing Accessibility**

Statistical Test	Statistic	df / N	p-value	Effect Size
Chi-square ( $\chi^2$ )	36.240	df = 6	< <b>0.001</b>	Cramér's $V = 0.220$
Spearman's Rank Correlation ( $\rho$ )	<b>0.504</b>	N = 373	< <b>0.001</b>	Moderate–Strong
Critical value ( $\chi^2$ , $\alpha = 0.05$ )	12.592	df = 6	—	—
<b>Decision</b>	<b>Reject <math>H_0</math> (<math>\chi^2 = 36.240 &gt; 12.592</math>; <math>\rho = 0.504</math>, <math>p &lt; 0.001</math>)</b>			

Source: Author's computation, (2024)

Note: Chi-square computed on  $4 \times 3$  contingency table. 3 of 12 cells (25%) had expected frequencies  $< 5$ ; Spearman's  $\rho$  is therefore treated as the primary test statistic. \*\* Significant at  $p < 0.01$ .

## **5.0 Conclusion and recommendation**

The study established that low-income housing in the Federal Capital Territory is largely unaffordable and inaccessible to the intended beneficiaries. The affordability analysis revealed that housing costs significantly exceed the financial capacity of low-income earners, as demonstrated by extremely high HPIR and HEIR values. These indicators confirmed that even the most basic housing units are beyond the reach of the majority of civil servants. Beyond affordability, accessibility remains a major challenge. While awareness of low-income housing programmes is relatively widespread, actual participation is low, and success rates are minimal. The findings show that rigid financial requirements, high initial deposits, and limited access to mortgage facilities exclude a large proportion of potential beneficiaries. Additionally, procedural complexities and lack of transparency further discourage participation.

The study also confirmed that income plays a critical role in determining access to housing, with higher-income respondents significantly more likely to access available housing opportunities. This highlights the structural inequality embedded within the current housing delivery system. The existing public-private housing approach has not effectively addressed the housing needs of low-income earners in the FCT. Without targeted interventions that address both affordability and accessibility constraints, the housing deficit will continue to widen, pushing more households into informal and substandard housing conditions. The study recommends that government should promote flexible financing options such as rent-to-own schemes, incremental housing loans, and cooperative housing finance to reduce the burden of upfront payment. There is a need to strengthen and expand subsidized mortgage systems tailored specifically to low-income earners, with reduced interest rates and relaxed eligibility criteria.

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