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Housing Affordability and Livability in Baghdad:A Spatial Analysis of Supply–Demand Mismatch

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Abstract

This study investigates the incongruity between housing supply and demand in Baghdad, Iraq, using a combined-methods framework that synthesizes affordability, spatial distribution, and service sufficiency. The study integrates quantitative data from online surveys, qualitative perspectives from GIS-based spatial analysis of residential complexes, and People's opinions from discussions on social media. To outline a more thorough assessment, the study puts forward a composite suitability indicator that evaluates the dual aspects of affordability and, using price classes as a proxy for purchasing power, the adequacy of basic services, measured by a service-availability score (0–5) for schools, mosques, health centers, markets, and green spaces. Projects are classified into three suitability levels—highly suitable, suitable, and not suitable—based on these combined criteria. The findings show a structural imbalance in Baghdad's housing market, with most supply concentrated in high-priced categories and few projects meeting the demand of middle- and low-income households. The spatial analysis shows that attention remains focused on the city's core, while outlying areas receive limited, lower-quality services. The study also points out that high-rise residential buildings are common, though they often don't match residents' preferences—many prefer more adaptable homes that are spread out horizontally. These economic, service-related, and spatial mismatches increase housing exclusion and weaken social equity and urban quality of life. The study concludes by offering policy recommendations to encourage affordable housing through incentives, promote planning that integrates services into projects on the city's outskirts, and support adaptable designs that align with local culture. These steps aim to help make urban development fairer to all.

Keywords: *Affordable Housing, Service Adequacy, Spatial Justice, Residential Complexes, Purchasing Power, Housing Supply–Demand Gap, Housing Typologies, Geographic Information Systems (GIS), Mixed-Methods.*

Introduction

Housing isn't just a basic right—it's key to people's well-being and the strength of cities as a whole. But in fast-growing cities like Baghdad, this foundation is under strain. Rapid expansion, rising land prices, and a lack of coordinated planning are making it harder than ever for people to find decent homes (UN-Habitat, 2016; UN-Habitat, 2020). As a result, the housing market is now divided, making social exclusion and inequality across different areas even worse. Many studies have pointed out that homes are becoming less affordable and that standard designs often don't fit people's social and cultural needs (Stone, 2006; Bramley & Power, 2009; Salama, 2015). In these fast-growing urban centres, the race for market returns often comes at the expense of social and personal needs. Preferably, as international literature suggests, fair housing is achieved through an **integration** of pricing policies, land management, and public engagement (Arnstein, 1969; Forester, 1999; Angel et al., 2011). In Baghdad, there is an evident friction between these established principles and the reality on the ground. Supply does not match demand; developers concentrate on high-cost projects, largely ignoring middle- and low-income households. This creates a structural conflict between the goal of social equity and profit-driven development (Al-Bayati & Mahdi, 2020; Al-Hadithi & Mahdi, 2021). To

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address this, this study fills a gap in housing research by evaluating residential developments in Baghdad through a holistic framework. Instead of analysing price or location in isolation, this research treats housing suitability as a composite circumstance including three key areas Economic Accessibility, Spatial Justice and Service Adequacy and Housing Typology. By integrating these bulks, this study aims to move beyond diagnosing the problem to presenting implementable policy insights. The goal is to support planning practices that balance market realities with social necessities, encouraging inclusive, well-served urban neighbourhoods.

Research Problem:

This research examines the gap between the housing available and what people actually need in Baghdad. Much of the new housing is expensive, basic services are often lacking, and most investment is still focused on the city center. With policies geared toward the market, it's become harder for middle- and low-income families to find decent places to live, deepening social divides and making some areas less equal. Using a mix of methods—including assessing affordability and service quality, and mapping where housing is built—the study explores how these factors combine to make it harder for many people to find suitable homes and to slow efforts to build a fairer and more sustainable city.

Research Objectives

- Assess how well the available housing in Baghdad meets residents' actual needs, taking into account affordability, service quality, and location.
- Examine how the location and types of housing affect social fairness and whether people's needs are being met.
- Suggest planning and design solutions that encourage housing development that fits local culture, is fair, and makes financial sense.

Research Hypothesis

The alignment gap stems from a mismatch between the supply of investment-led residential complexes and residents' purchasing power, as well as their spatial and design preferences. A dual supply–demand analysis helps identify these conflicts and inform policy directions.

Research Question

To what extent do investment-based residential complex projects in Baghdad align with the needs and preferences of middle- and low-income households in terms of affordability, location, housing type, and flexibility?

Methodology

Research Design

This study used a mix of methods—including numbers(quantitative), personal opinions(qualitative), and location data—to look at the gap between available housing and what people need in Baghdad. An online survey provided the numbers, while reviewing social media posts and comments gave more personal perspectives. Information about the locations of housing complexes came from official records. All the data were double-checked in the field to ensure accuracy

Data Collection Mechanisms

Housing Supply Data

Housing supply data were compiled from two primary sources (Figure 2) . **National Investment Commission database**, providing official basic information on approved residential complexes in Baghdad and from **Field-based and secondary sources**, for more detailed information, the researcher collected through site visits and published materials, document planning, and design characteristics such as housing type, average unit size, and the availability of essential services (schools, mosques, health centers, markets, and green spaces).

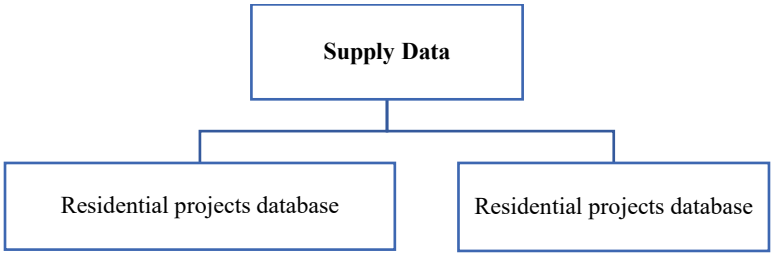


Figure 1: Sources of Supply Data

Housing Demand Data

Housing demand data were collected from two complementary sources (Figure 3) An online survey was conducted with people living in Baghdad, asking about their background, current living situation, desired features in a future home, ability to buy, and what prices they can afford and from Social media posts and comments on platforms like Facebook, Instagram, and TikTok were reviewed to understand how people feel about prices, services, locations, housing types, and financing in residential complexes.

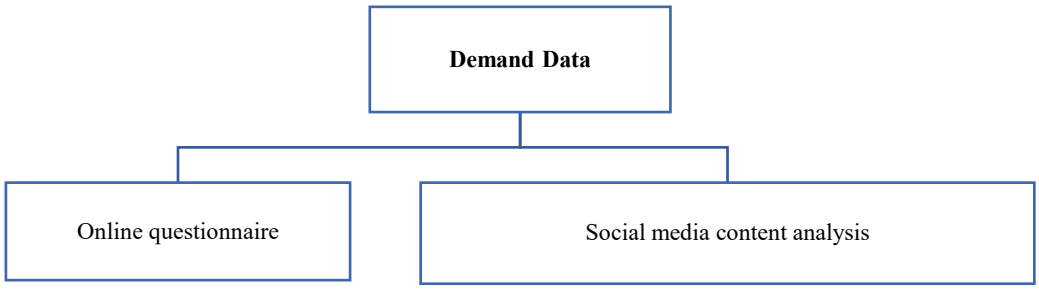


Figure 2: Sources of Demand Data

Data Types and Analytical Tools

To ensure a comprehensive assessment of both supply and demand, the study employed multiple analytical techniques, as summarized in Table 1.

Table 1: Data Types, Analysis Methods, and Software Used

Data Type	Analysis Method	Software Used
Spatial data (GIS)	Suitability analysis, Kernel density, AHP	QGIS, ARC GIS
Quantitative data (survey)	Descriptive and inferential analysis	Excel
Qualitative data (texts)	Thematic analysis and open coding	MAXQDA
Social analysis	Content analysis of posts and interactions	MAXQDA (systematic/manual)

Cross-analysis of supply and demand

A two-sided framework was created to compare what residential projects (supply) offer with what people in Baghdad actually want and need (demand). The analysis looked at three connected points:

- **Economic Accessibility:** Defined by housing prices in relation to residents' purchasing power, reflecting the affordability of residential complexes for middle- and low-income households.
- **Spatial Justice:** Assessed through the spatial distribution of residential complexes across Baghdad, highlighting equity between central and peripheral areas as well as between Karkh and Rusafa.
- **Service Adequacy and Housing Typology:** Reflected in access to essential urban services (schools, health centers, markets, mosques, and green spaces) in relation to the typology and layout of residential complexes, indicating overall housing suitability and quality of living.

To operationalize this comparison, a composite housing suitability indicator was constructed by integrating affordability classification with a service adequacy score (0–5). Based on this integration, residential projects were categorized into three suitability levels: **highly suitable, suitable, and not suitable**. This approach enabled the identification of areas of convergence and conflict between housing supply and demand using both quantitative metrics and qualitative evidence.

Study limitations

The study is geographically limited to Baghdad, covering both Karkh and Rusafa. The temporal scope spans from 2010 to 2025. Ethical approval for the survey was obtained, and no personally identifiable information was collected. Secondary datasets were systematically reviewed and cross-checked with field observations and official records from the National Investment Commission (2010–2025).

Analysis

Housing Supply Analysis:

Economic Accessibility

This analysis uses a reliable database of over 110 investment housing projects approved by the National Investment Authority in Baghdad. To fairly compare how affordable these residential complexes are, housing costs were calculated using a standard monthly payment model that fits local market habits and typical household incomes in Iraq. The calculation is based on a typical unit size of 120 square meters—the standard in most new housing projects—and assumes buyers will pay off their homes over 15 years, or 180 months, which matches common payment plans in Baghdad. The monthly cost was worked out using this formula:

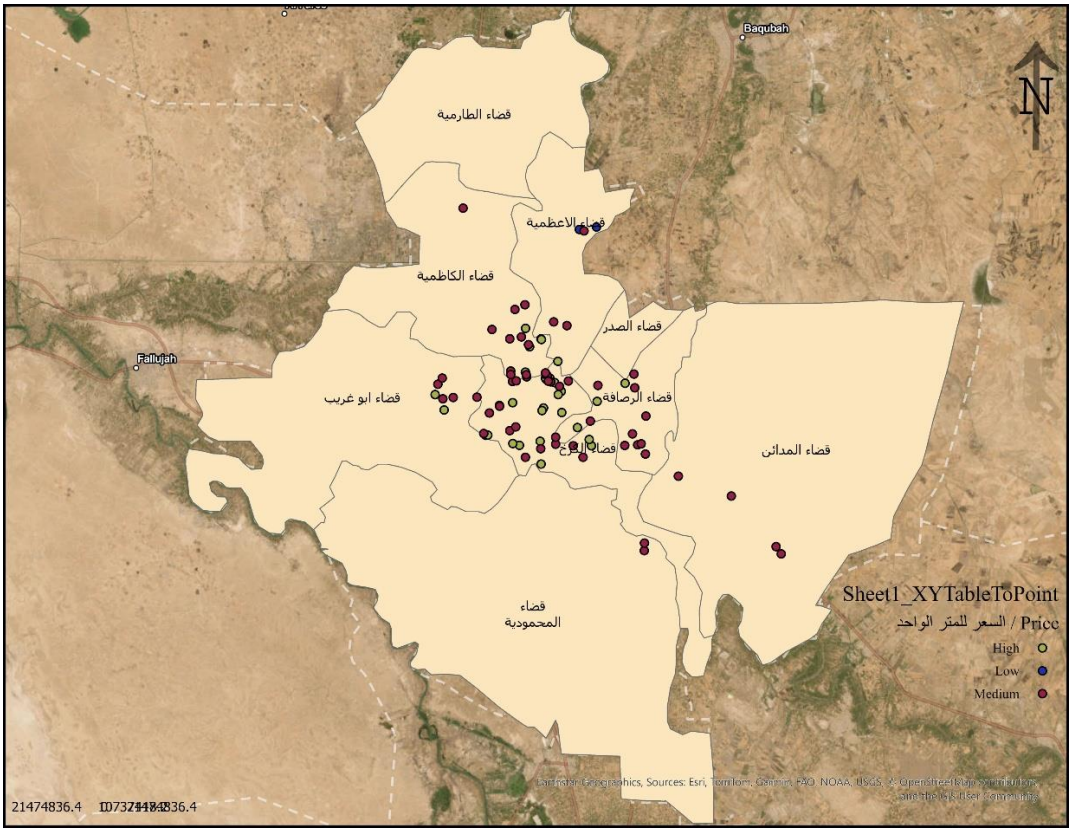
Monthly Installment = (Average Price per Square Meter × 120) ÷ 180

Affordability thresholds were evaluated relative to **prevailing Iraqi household income levels**, as reported in official statistics issued by the **Ministry of Planning/Central Statistical Organization (CSO),** based on recent household income and expenditure indicators. Based on the resulting monthly installment values, projects were classified into four cost categories ranging from low-cost to very high-cost (Table 2).

Table 2: Classification of Projects by Unified Monthly Installment (Housing Cost)

Percentage of Projects	Monthly Installment Range (Iraqi Dinar)	Cost Category
1.8%	Less than 500,000	Low-cost
21.1%	500,000 – 1,000,000	Medium-cost
54.4%	1,000,000 – 2,000,000	High-cost
22.8%	More than 2,000,000	Very high-cost

The results, as shown in Map 1, reveal a clear issue with affordability in the current housing supply. Over 77% of the projects reviewed require monthly payments above one million Iraqi dinars, which is out of reach for most middle- and low-income families. There are hardly any low-cost residential complexes options, suggesting that these projects are built mainly for profit, not for what people can actually afford. This gap makes it harder for many residents to access formal housing, deepens social divides, and keeps informal housing and uneven development widespread across Baghdad.



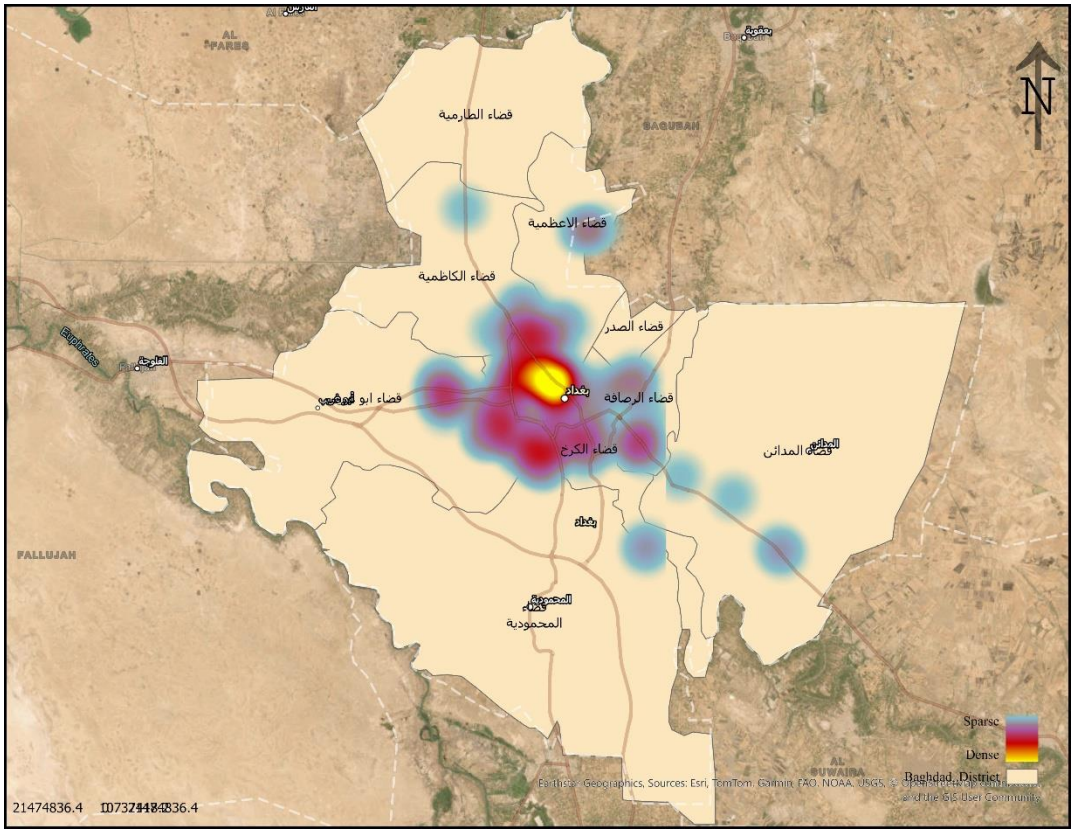
Map 1: Spatial Distribution of Residential Complexes by Price Category in Baghdad

Spatial Justice

Where a housing project is located plays a big role in judging how fair and effective it is—especially in a city like Baghdad, where fast growth and uneven development have widened the gap between downtown and the outskirts. It's not just about how many homes are built, but also where they are placed and how well they connect to roads, services, and other parts of the city. To get a clearer picture, a spatial analysis was conducted to examine how investment residential complexes are distributed across Baghdad. The study examined patterns of clustering and imbalance, first by analyzing differences within smaller city areas and then by comparing the larger districts of Karkh and Rusafa.

Concentration at the Level of Urban Sub-Districts

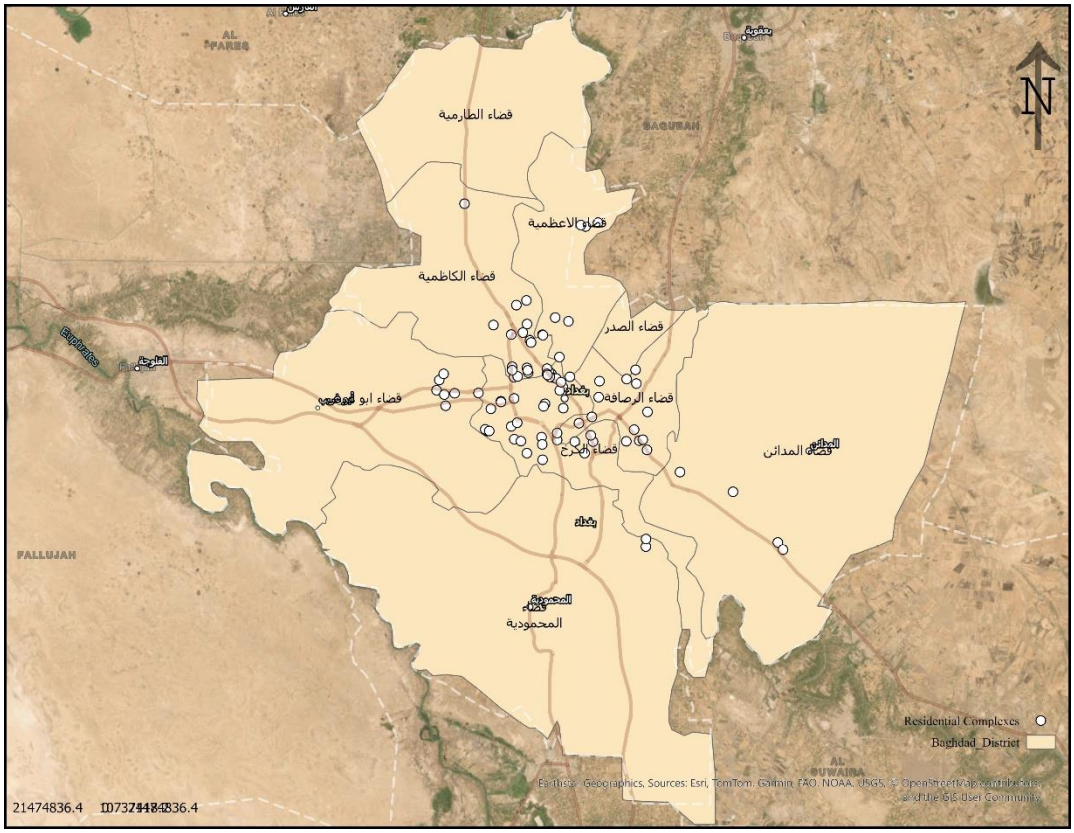
Map (2) shows that around 82% of residential complexes are in central Baghdad, highlighting a strong focus on the city center. This means most new housing is still built in areas with better infrastructure, more expensive land, and higher demand. Meanwhile, outer areas get less attention—not just because they lack infrastructure, but also because developers and residents find them less appealing. Peripherals often have poor transport links and insufficient jobs, schools, shops, or healthcare facilities. Because of this, most families—especially those with lower or middle incomes—aren't interested in moving there, even if homes cost less. This leads to a cycle in which low demand means less investment, which, in turn, worsens social and area inequalities. Meanwhile, the central areas continue to grow more crowded and stressed (Author's Survey, 2025; UN-Habitat, 2020).Only 18% of residential complexes are located in the outer periphery, spread across far-off areas such as Nahrawan, Madain, Khan Bani Saad, and Mahmoudiya. These locations offer fewer services and are less well connected to the city's core, limiting their ability to ease the housing crunch in central Baghdad.



Map2: Spatial concentration of residential complexes across urban sub-districts in Baghdad, based on kernel density analysis.

Distribution at the Level of Districts: Karkh and Rusafa

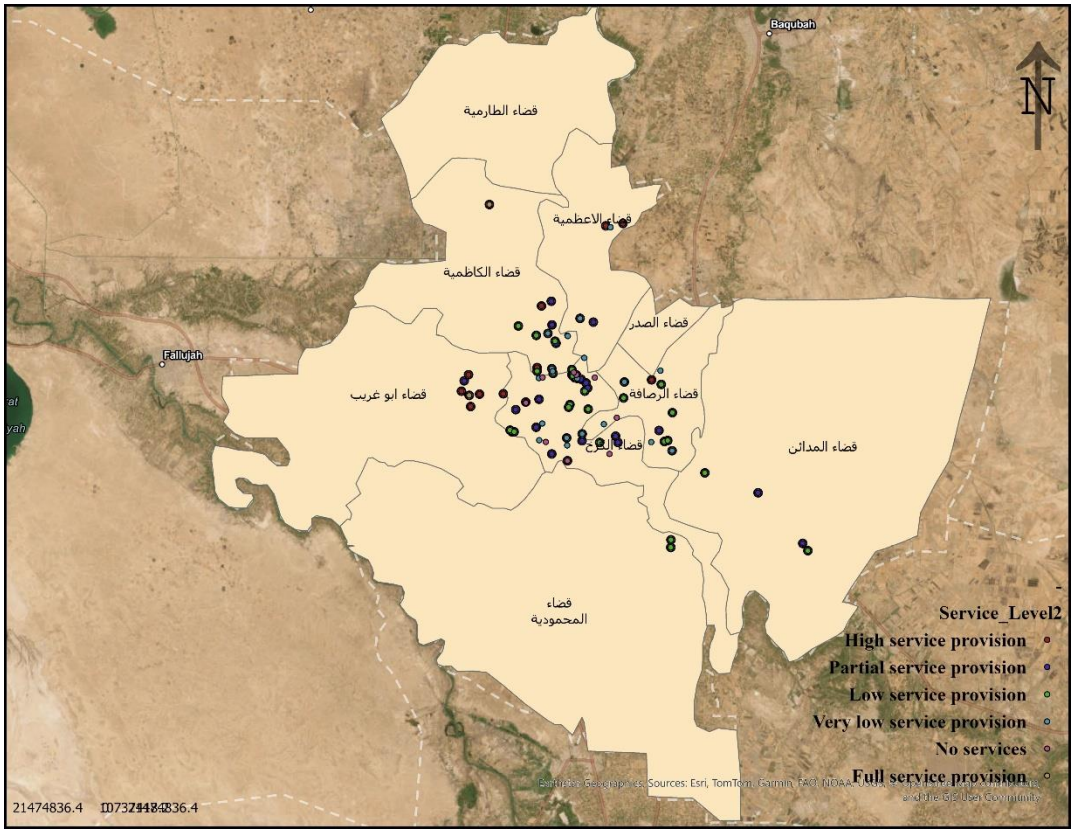
Looking at Map 3 district level, where housing complexes are built, shows a clear imbalance between the two sides of Baghdad. The majority of centrally located projects are concentrated within specific districts on both the Karkh and Rusafa sides, reinforcing existing development hierarchies. Some districts have plenty of new housing projects and better access to services, but many areas on the outskirts are still largely overlooked when it comes to housing development plans.This uneven distribution at the district level reflects broader planning and investment priorities that favor central districts over peripheral ones, thereby limiting the capacity of housing projects in outer districts to function as viable and attractive residential alternatives. As a result, spatial inequities persist not only between the urban core and the outskirts, but also between districts with differing levels of accessibility, service provision, and development intensity.



Map 3: Spatial distribution of residential complexes across Karkh and Rusafa districts in Baghdad.

Service Adequacy and Housing Typology

This analysis examines the level of urban service provision within investment-based residential complexes in Baghdad using a series of spatial maps developed through Geographic Information Systems (GIS). The assessment focuses on five essential urban services—health centers, schools, markets, mosques, and green spaces—as key components influencing residential functionality and spatial efficiency. Map 4 showing the distribution of services highlight clear differences in what's available across different housing complexes. Those in central parts of Baghdad—especially in the main districts of Karkh and Rusafa—have better access to services because they're close to established infrastructure and long-standing service centers. This makes it easier for people to reach what they need and helps these areas connect well with the rest of the city. On the other hand, lots of housing complexes in outer areas don't have good access to basic services. Most of these neighborhoods only have one or two nearby facilities, and some don't have enough services at all. This shows there's a real gap between where new homes are being built and where important services are actually available in Baghdad's outskirts. To make the analysis consistent, a Service Provision Index was created to count how many services each housing complex has. Most complexes ended up in the low or moderate range for available services, while only a few had full service coverage—and these were mostly found in central areas. The analysis also identifies a relationship between residential typology and service accessibility. Vertical housing projects generally show higher levels of service access due to their location near primary transportation corridors and service centers. Horizontal housing projects, although offering greater spatial flexibility and privacy, are more commonly associated with limited-service connectivity, particularly with respect to public transport and social infrastructure. Hybrid residential complexes, while limited in number, exhibit more balanced service conditions resulting from their intermediate density and spatial configuration. Looking at Map 4, the overall results show that services in Baghdad's residential complexes aren't evenly distributed—they depend heavily on the location of the complex and its planning. Good service coverage doesn't just happen with new housing; it comes down to planning choices and how well the area is connected to city services.



Map 4: Distribution of Residential Complexes Inside and Outside the Central Boundaries of Baghdad City

Housing Demand Analysis:

Price limits for the demanders

According to the author's online survey (Field Survey, 2025), most Baghdad families have limited ability to buy a home. Around 38% said the highest monthly payment they could afford for housing was 200,000 IQD. Smaller groups could afford more: 16% could pay 300,000 IQD, 15% could manage 400,000 IQD, 13% could go up to 500,000 IQD, and 11% could handle 600,000 IQD. Less than 7% said their limit was just 100,000 IQD a month . Looking at Figure 3, the survey shows that 60% of families in Baghdad make between 500,000 and 2 million IQD a month. About 25% earn between 2 and 4 million IQD, while only 7% earn above 4 million IQD. Another 8% make less than 500,000 IQD. This means most households are in the middle- or lower-income brackets, which limits how much they can actually spend on housing .When these affordability thresholds are compared with the standardized monthly installments derived from investment housing prices, a substantial mismatch becomes evident. The majority of households can afford monthly payments well below IQD 1 million, whereas most formal investment housing projects require significantly higher installments. This discrepancy highlights a structural gap between market supply and actual purchasing power, indicating that prevailing housing production models insufficiently reflect the income realities of Baghdad's residents (Author's Survey, 2025; Al-Bayati and Mahdi, 2020). Consequently, income distribution must constitute a central consideration in the planning and pricing of any future housing developments.

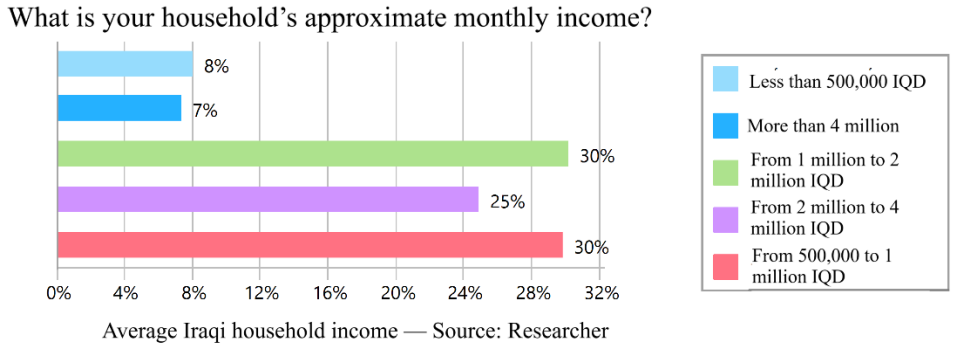


Figure 3: Distribution of Household Monthly Income among Surveyed Households in Baghdad

Location Preferences

The survey shows in Figure 4 that most families in Baghdad prefer to live in or near the city center. About 48% of respondents live in Karkh and 42% in Rusafa, with fewer than 10% in outlying areas. This pattern makes it clear that people would rather stay close to the urban core than move to the outskirts. Future residential intentions reinforce this pattern. Nearly 48% of respondents preferred residing in Karkh, followed by 17% in Rusafa, while only 8% indicated a willingness to move to peripheral zones. These findings suggest that residential complexes' location choices are heavily influenced by the perceived advantages of central areas, including proximity to employment opportunities and daily urban functions, rather than by housing availability alone. All in all, and as shown in Figure 5, the survey indicate that families usually choose to live in central, well-established parts of the city. This is a big reason why so many people continue to cluster in the city's main districts.

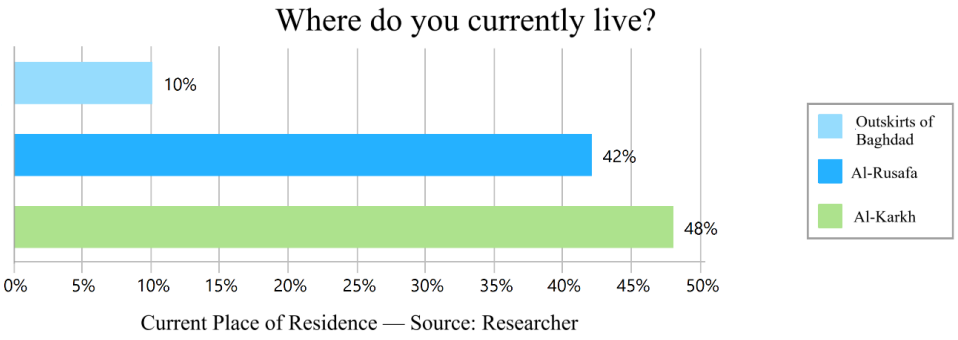


Figure4: Current Residential Location of Surveyed Households in Baghdad

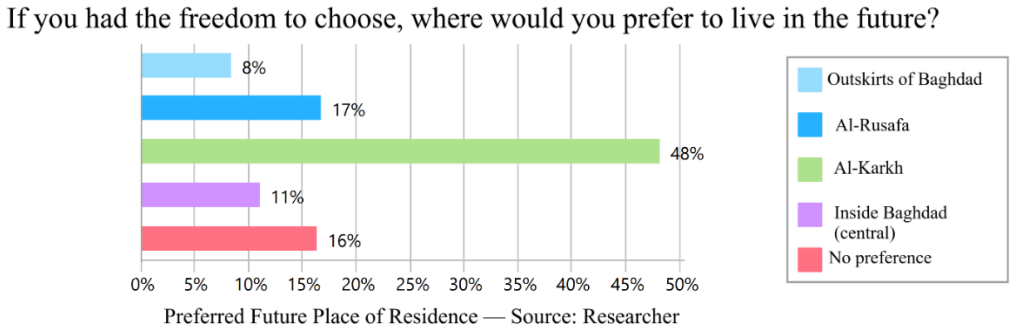


Figure 5: Preferred Future Residential Location of the Same Households

Access to Services and Housing Unit Type

Survey results shown in Figure 6 indicate that access to urban services and infrastructure is a decisive factor shaping both residential location preferences and housing unit choices among Baghdadhouseholds. Being close to everyday services has a big impact on where people want to live. About 32% of those surveyed said markets and shopping areas are most important, 30% chose schools, 28% pointed to healthcare, and 26% valued public transport. This shows that easy access to services matters more to people than other factors when deciding where to live. A clear spatial disparity in service

access is evident between central and peripheral areas. Among respondents residing in peripheral zones, 62–64% reported difficulties in accessing basic services, compared to only 28% of residents in central locations (Survey Data, 2025). This gap highlights how a lack of good services and infrastructure—especially in transport, schools, and healthcare—makes the outskirts less appealing and keeps most people living in the city center (Al-Bayati & Mahdi, 2020; UN-Habitat, 2020).Housing unit type preferences further reflect this relationship between services, spatial context, and residential demand. Most people in the survey prefer living in single-family homes to living in apartments. They like detached houses, gated communities, and open compounds mainly because these options offer more privacy, personal space, and room to expand in the future. People's choices for unit size support this trend, with most wanting medium-sized homes (150–200 m²). Around 25–30% chose this option, indicating that many are looking for houses that offer enough space to be comfortable but still make good use of the land. However, the preference for horizontal housing is closely conditioned by service availability; where access to services and infrastructure is limited, particularly in peripheral locations, the functional viability of such housing types is reduced. Overall, looking at figure X shows demand-side results that access to healthcare, schools, markets, and public transportation is considered highly important by the majority of respondents.

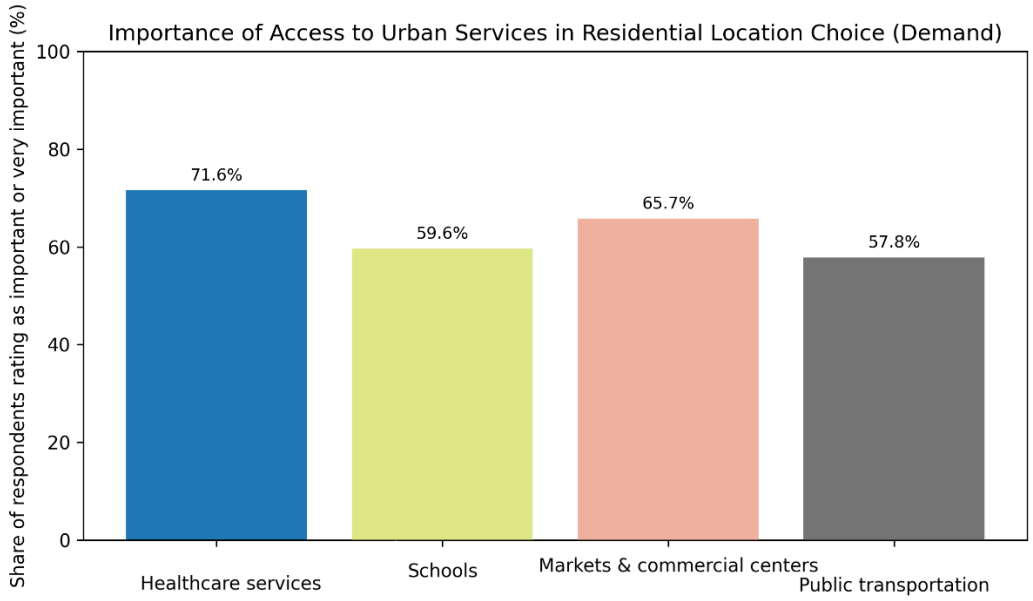


Figure 6: Importance of Access to Urban Services in Residential Location Choice (Demand Perspective)

Cross-analysis between supply and demand

Housing Typology × Price Level

The cross-analysis of housing type and price, as shown in Figure 7, shows that most high- and medium-priced units are found in apartment buildings. These vertical complexes make up most of the homes in the medium price range and nearly all those at the higher end, while single-family homes are less common and usually fall into the medium price category. Low-priced units appear marginal across all typologies, indicating a restricted affordability spectrum within the investment housing supply.

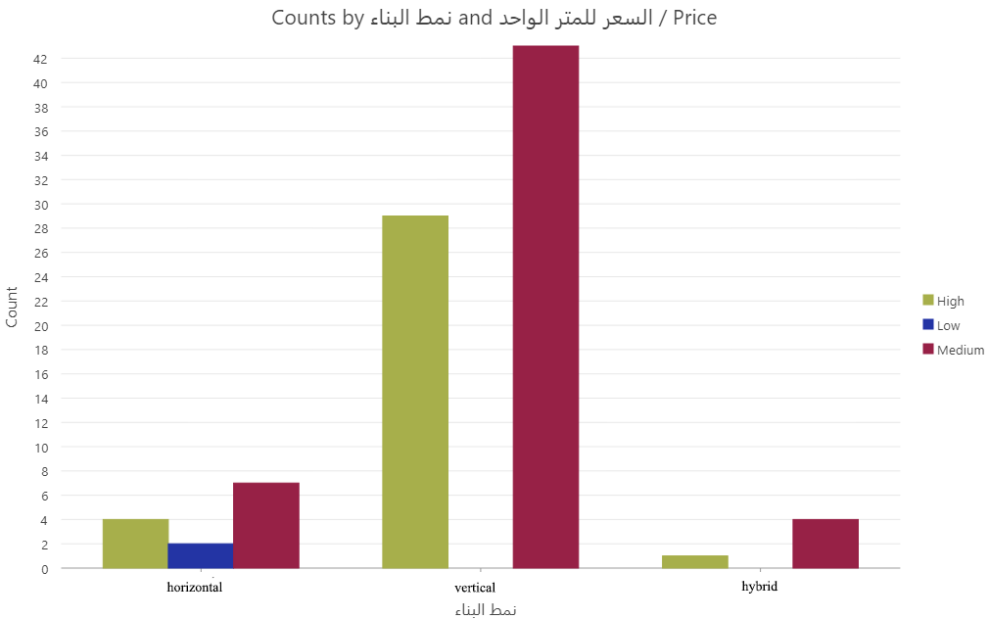


Figure 7: Housing Typology by Price per Square Meter

Housing Typology × Availability of Services

Looking at Figure 8 show that the residential complexes typology is cross-analyzed with service availability, vertical residential complexes are more likely to incorporate internal services than horizontal or hybrid residential complexes. Thus, this internal provision often substitutes rather than complements access to surrounding urban services. Horizontal housing, despite offering greater spatial flexibility and privacy, shows weaker integration with both internal and external service networks.

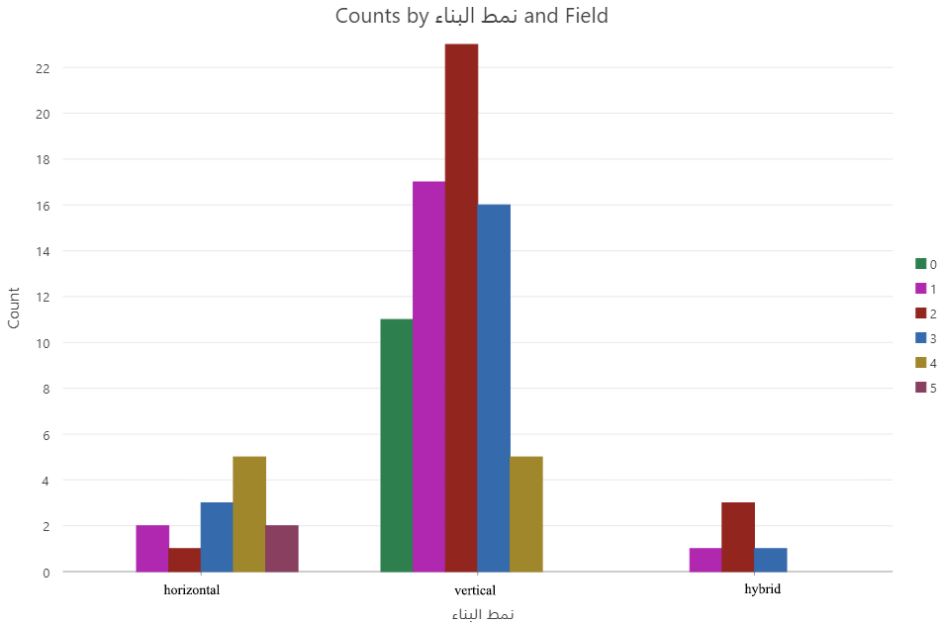


Figure 8. Housing Typology × Availability of Services

Third: Location × Level of Services

Looking at Figure 9 underlined a pronounced imbalance between central and peripheral areas. Residential complexes in or near the city center have much better access to services, both inside the complex and in the surrounding neighborhood. On the other hand, peripheral areas receive limited service provision, reinforcing residents' dependence on distant urban centers and increasing daily mobility burdens.

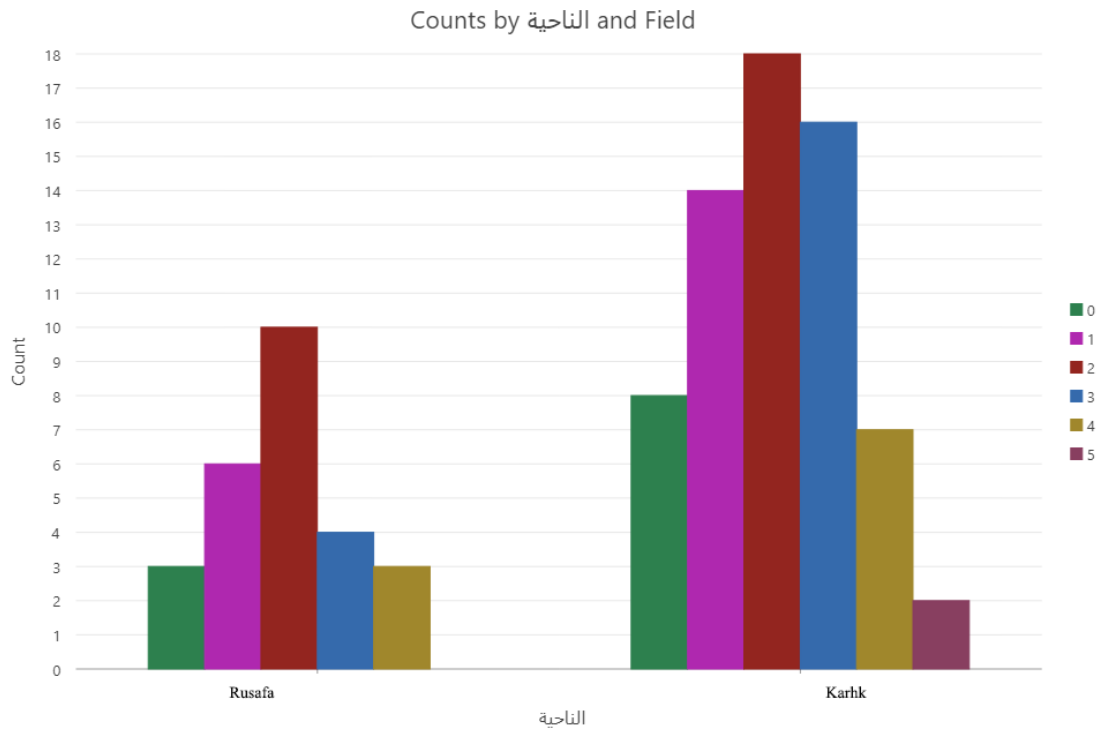


Figure 9: Distribution of Residential Projects by District (Karkh and Rusafa) and Service Availability Level

Supply Characteristics × Demand Preferences

When these supply patterns are compared with demand-side preferences, a structural mismatch becomes evident. Survey responses show that most people care most about being close to services and well-connected areas. But most new housing is made up of pricier apartment buildings in central locations, so there aren't many affordable, well-serviced homes left for middle- and low-income families.

These cross-analytical findings suggest that the observed housing gap in Baghdad is not merely quantitative but fundamentally spatial and structural. The gap comes from a mix of investment-focused development, centralization, limited access to services, and what people can actually afford. Although more residential complexes are being built, most are still pricey apartments in central areas that don't match what middle- and low-income residents really need. This mismatch reinforces centralization, exacerbates service disparities between core and peripheral areas, and restricts equitable access to adequate housing. Consequently, addressing the housing gap requires more than just building more homes; it means moving beyond unit-based delivery toward integrated planning approaches that align housing typology, affordability, service provision, and spatial distribution within a unified urban framework.

Results and Discussion

Price and Purchasing Power: Demand–Supply Alignment

The survey results make it clear that in Baghdad, people's ability to get housing mostly depends on what they can afford. Highlighting the role of price limits in shaping where they can live. This highlights how essential it is to check if new housing projects actually fit the budgets of middle- and low-income groups. On the supply side, the distribution of investment residential complexes across price categories demonstrates a narrow affordability spectrum. The price structure is dominated by medium- to high-priced projects, while low-priced supply appears marginal. When you compare housing types by price, most high-priced homes are in vertical residential complexes. There are some Horizontal residential complexes, but not many in the cheaper price ranges. Hybrid residential complexes are rare and don't really add much to the supply of affordable housing. Overall, these patterns show that most residential complexes are built to maximize profits and pack in more units, leaving fewer options for people with lower incomes. Spatially, price patterns further reflect locational differentiation. Central and semi-central areas host a larger proportion of medium- and high-priced complexes, while peripheral areas have slightly lower prices than the rest of the city. However, even where peripheral projects appear less expensive, their affordability isn't the whole story. Other costs—such as transportation and

access to basic services—also affect whether people can actually live there. These issues are discussed in the next section. Therefore, the observed affordability gap isn't just because there aren't enough low-cost homes—it's also about how different types of housing and their locations are spread out across the city. All in all, comparing what people can afford with what's actually available shows a clear gap. Most new homes are priced out of reach for middle- and low-income families, even though there's a real need for more affordable options. This misalignment establishes the economic dimension of the housing gap and sets the basis for examining how location and service access further condition housing suitability.

Location and Access to Services: Demand–Supply Alignment

Survey results show that when residents choose where to live in Baghdad, they primarily care about being close to services and infrastructure. Most prefer central or nearby neighborhoods because it's easier to reach markets, hospitals, schools, and public transport. The outskirts are seen as less appealing since they lack services and require longer commutes. This shows that people value easy access to daily needs more than just having a place to live. Most of the residential complexes with good service access are found in central or close-in areas, where there's already solid infrastructure and plenty of services. On the other hand, the outskirts have fewer residential complexes, and these usually don't have enough services nearby or within the project. This pattern confirms that service provision remains unevenly embedded within the spatial structure of housing supply. When demand preferences are cross-analyzed with supply patterns, a consistent mismatch becomes evident. Even though families clearly want to live where services are easy to reach, most new residential complexes still end up in central areas that already have good services. Outlying areas may have cheaper homes, but there aren't many well-serviced developments there. So, even if homes are cheaper in some areas, they're not really a good option because the lack of services makes them less suitable for people to live in. The comparison between central versus peripheral locations, supported by district-level differentiation between Karkh and Rusafa, further highlights this imbalance. Central neighborhoods in both districts have better services and are more connected to the city's infrastructure. In contrast, outer areas—no matter which district they're in—tend to lack enough services. This means that these location-based differences are a city-wide issue, not just limited to certain districts. Overall, the results show that people in Baghdad mainly choose where to live based on how easy it is to reach services, but most new housing is built in just a few well-serviced areas. This gap isn't just about people's preferences—it's a deeper issue tied to how housing and services are actually spread out across the city.

Housing Typology and Services: Demand–Supply Alignment

Survey results show that people mostly want homes that give them privacy, their own space, and room to grow in the future. Most prefer Horizontal residential complexes instead of vertical residential complexes , since these homes better fit their lifestyles and family needs—especially having a yard and flexible living space. This means people judge if a house is right for them based on these qualities, not just whether a unit is available. On the supply side, however, investment-based residential development in Baghdad is dominated by vertical housing typologies. Vertical projects constitute the largest share of residential complexes and are primarily concentrated in service-rich central locations. These projects are close to established infrastructure and city services, which helps offset their lack of flexible space. Horizontal residential complexes do exist, but they're usually found on the outskirts and often don't have as many services nearby. As a result, the typology that aligns most closely with residents' spatial preferences is often associated with weaker access to essential services. When comparing residential complexes types with service quality, there's a clear imbalance. Vertical residential complexes usually have better access to services since they're in central areas with lots of city facilities. In contrast, Horizontal residential complexes are more often in spots with only basic or moderate service levels. Hybrid residential complexes are rare, but they tend to strike a better balance by offering decent service access along with moderate housing density. When you compare what people want with what's actually available, there's a clear gap. Most families prefer Horizontal residential complexes, but the majority of well-serviced housing is in Vertical residential complexes. Houses that do offer more space usually don't have enough services nearby. This forces people to choose between living in a place that suits their needs or having easy access to services—rarely both. Overall, the findings indicate that housing typology in Baghdad functions as a mediating factor between residential preferences and service access. The dominance of vertically oriented, service-dependent developments reflects investment-driven priorities, while the limited provision of well-serviced horizontal or hybrid housing restricts the alignment between supply characteristics and actual residential needs.

Discussion

The integrated analysis of housing price, location, typology, and service provision shows that Baghdad's housing problem is more about structure than just numbers. Even though more homes are being built, most don't fit what middle- and low-income families actually need or where they need it. The results make it clear that you can't judge if housing is truly affordable without also considering where it is, what services are nearby, and if the type of housing matches people's needs. From an economic perspective, the dominance of medium- and high-priced residential complexes reflects market-driven investment priorities that limit effective affordability. Even when cheaper housing is available, it's usually in outlying areas with few services, making it harder for people to actually live there. This shows that in Baghdad, what makes a home affordable isn't just the price—it's also about where it's located and what's nearby. When most well-serviced housing is packed into the city center, it only widens the gap between downtown and the outskirts. Central areas have better infrastructure and services, but this also leads to overcrowding and more strain on transport, utilities, and the environment. Meanwhile, outlying neighborhoods lack enough services and aren't well connected, so people aren't as interested in moving there, even if homes are cheaper. All of this shows there isn't enough planning to connect new housing with the services and infrastructure people rely on. The type of housing adds to the problem. Even though most people want horizontal housing for the privacy and flexibility it provides, most of what gets built are vertical buildings designed to fit more people and make better use of land. Vertical buildings usually have better access to services because of where they're built, but they don't always match what people want in a living space. On the other hand, horizontal homes fit people's lifestyles better but often don't have enough services nearby. Hybrid-style projects are rare, but they could offer a good balance between space, service access, and what residents are looking for. Overall, the findings suggest that current housing outcomes in Baghdad are shaped by fragmented decision-making, where investment considerations outweigh integrated spatial and social planning. Fixing the housing gap means looking at housing as a mix of factors—like price, location, type, and access to services—all planned together, instead of treating each one separately.

Conclusion and Policy Implications

This study shows that Baghdad's housing problem isn't mostly about not building enough homes—it's about a mismatch between the kinds of housing being built for investors and what people actually need and where they need it. The analysis shows that most new housing is medium- to high-priced, clustered in central areas with good services, and mainly made up of vertical buildings. But what people actually want are affordable homes, easy access to services, and housing that gives them privacy and room to move. The results make it clear that you can't solve affordability without also thinking about location and access to services. Even though homes on the outskirts might be cheaper, they're often hard to live in because there aren't enough services or good infrastructure. This keeps most people focused on central areas and limits real options for middle- and low-income families. Also, the focus on building apartment towers is more about making investments pay off than meeting people's needs, which only increases the mismatch between what's being built and what residents actually want. From a policy perspective, these results underscore the need for integrated housing strategies that move beyond unit-based delivery. Housing policies need to encourage building well-serviced homes in outlying areas, make sure housing types fit local lifestyles and culture, and judge affordability based on both price and what's available nearby in terms of services and infrastructure. Coordinating housing development with service planning and transportation investment is essential for reducing spatial inequality and achieving more inclusive and sustainable urban growth in Baghdad.

References

[1] Al-Bayati, A. and Mahdi, A. (2020) 'Housing supply and affordability in Baghdad', Iraqi Journal of Architecture, 15(2).
[2] Al-Hadithi, B. and Mahdi, S. (2021) 'Housing affordability in post-conflict Baghdad', Journal of Urban Development, 14(3).
[3] Alnsour, J. (2016) 'Managing urban growth in the Middle East: A case study of Amman', Cities, 50, pp. 93–100.
[4] https://doi.org/10.1016/j.cities.2015.08.002
[5] Angel, S., Parent, J., Civco, D.L. and Blei, A.M. (2011) Making Room for a Planet of Cities. Cambridge, MA: Lincoln Institute of Land Policy.
[6] Arnstein, S.R. (1969) 'A ladder of citizen participation', Journal of the American Institute of Planners, 35(4), pp. 216–224.
[7] https://doi.org/10.1080/01944366908977225

[8] Bramley, G. and Power, S. (2009) 'Urban form and social sustainability: The role of density and housing type', Environment and Planning B: Planning and Design, 36(1), pp. 30–48.
[9] https://doi.org/10.1068/b33129
[10] Fang, Y. and Zhang, X. (2020) 'Urban infrastructure provision and spatial equity in rapidly growing cities', Urban Studies, 57(8), pp. 1630–1649.
[11] https://doi.org/10.1177/0042098019868252
[12] Forester, J. (1999) The Deliberative Practitioner: Encouraging Participatory Planning Processes. Cambridge, MA: MIT Press.
[13] Gulyani, S. and Talukdar, D. (2008) 'Slum real estate: The low-quality high-price puzzle in Nairobi's slum rental market', World Development, 36(10), pp. 1916–1937.
[14] https://doi.org/10.1016/j.worlddev.2008.02.010
[15] Jang, S. and Park, H. (2025) 'Spatial equity in public rental housing based on commuting accessibility', Regional Science Policy & Practice, 17, 100196.
[16] https://doi.org/10.1016/j.rspp.2024.100196
[17] National Investment Commission (Iraq) (2010–2025) Baghdad Residential Projects Database. Researcher-compiled dataset.
[18] Salama, A.M. (2015) 'Spatial design and socio-cultural sustainability: Learning from traditional environments', Open House International, 40(4), pp. 7–14.
[19] Stone, M.E. (2006) 'A housing affordability standard for the UK', Housing Studies, 21(4), pp. 453–476.
[20] https://doi.org/10.1080/02673030600709080
[21] Tibaijuka, A. (2009) Building Prosperity: Housing and Economic Development. London: Earthscan.
[22] Tipple, G. (2000) Extending Themselves: User-Initiated Transformations of Government-Built Housing in Developing Countries. Liverpool: Liverpool University Press.
[23] UN-Habitat (2016) Urbanization and Development: Emerging Futures – World Cities Report. Nairobi: United Nations Human Settlements Programme.
[24] UN-Habitat (2020) The Value of Sustainable Urbanization: World Cities Report. Nairobi: United Nations Human Settlements Programme.
[25] Ministry of Planning – Iraq (2023) Household Income and Expenditure Indicators in Iraq. Central Statistical Organization. Available at:
[26] https://mop.gov.iq/archives/29726 (Accessed: Day Month Year).