

# Livability and Housing in Baghdad City with Comparative Analysis According to International and Brazilian Indicators

Alaa Mansour Hasan<sup>1</sup>, Sarah Hanafi Hasan<sup>2</sup>

<sup>1</sup>University of Altoosi, Najaf, Iraq; alaa.mansour@altoosi.edu.iq

<sup>2</sup>University of Baghdad, Baghdad, Iraq.

## Keywords:

Comparative,  
Housing conditions,  
Quality of life indicators,  
Urban livability.

**Abstract.** The purpose of this study is to evaluate the livability and habitability of Baghdad by analyzing eight key axes that affect urban quality of life, using international and Brazilian indicators. Employing a comparative analytical approach, data was sourced from reliable entities and assessed through four main indicators: the Index of Urban Quality of Life (IQVU-BH), Local Human Development Index (IDH-M), Index of Urban Well-being (IBEU), and Index of Social Vulnerability (IVS). Each axis received quantitative ratings on a scale of 1-10, alongside qualitative assessments. Findings indicate that Baghdad has strengths in cultural and historical heritage (5.6/10) and security improvement (5.4/10) but faces significant challenges in environmental quality (2.4/10), transportation (3.2/10), and health and education services (4.4/10), resulting in an overall living standard rating of 4.55/10, categorized as average to poor. The study highlights spatial disparities in quality of life between urban centers and outskirts, exacerbated by rapid urbanization, informal housing, and economic challenges. To enhance livability, the study proposes an integrated strategy focusing on reducing environmental pollution, improving public transportation, upgrading health and education services, and diversifying the economy, all aimed at improving quality of life and attracting investment in Baghdad.

## 1. INTRODUCTION

Baghdad, the capital of the Republic of Iraq, is one of the oldest and largest cities in the Middle East, representing an important political, economic, and cultural center in the region. With its rich history spanning more than 1,200 years, Baghdad has undergone major transformations throughout the ages and has faced numerous challenges in recent decades due to wars, conflicts, and political and economic changes. This study aims to assess the livability and housing conditions in Baghdad as a model for major cities through analyzing a set of key dimensions that affect quality of life in the city (Al-Jubouri, 2021).

This study is particularly important in light of the efforts being made to reconstruct and develop the city and improve living conditions for its approximately 9 million residents. The study has the following objectives:

1. Assess the current state of livability in Baghdad by analyzing the key dimensions affecting quality of life.
2. Identify strengths and weaknesses in each dimension of the study.
3. Compare the situation in Baghdad with international standards and Brazilian quality indicators.
4. Provide practical recommendations to improve livability in Baghdad.

## 2. LITERATURE REVIEW

The idea of urban quality of life has been receiving more and more attention in the scientific literature in the past few years (2022–2025), particularly in relation to multidimensional indicators and standardized evaluation methodologies grounded in international norms. In view of the environmental, social, and economic difficulties that emerging cities face, these studies have helped to provide a better knowledge of urban quality of life. Considering this, a study titled "How Will Life Be?" was released by the OECD. 2024: Assessing Health (Al-Sudani & Hussein, 2022).

An extensive analytical framework is the foundation of this report. It incorporates eleven aspects of present well-being—including housing quality, health status, education, environment, work-life balance, community involvement, and security—and four aspects of future resources—human, economic, social, and natural capital. When comparing nations' quality of life, this study serves as a foundational resource (Costa & Lima, 2019).

An equally comprehensive analytical evaluation of urban sustainability assessment methodologies was presented by Sharifi (2024) in research published in the Environmental Impact Assessment Review. Recent advances in this area were discussed in the paper, such as the use of AI and big data indicators, difficulties in locally adapting indicators, community engagement in evaluations, and the need to connect social, economic, and environmental factors. The study's author offered several suggestions for how these instruments may be better used to gauge urban development.

Another significant report from the World Bank was "Prosperity: Making Cities Green, Resilient, and Inclusive in the Face of Climate Change." It was published in 2023. City dwellers are disproportionately impacted by the consequences of climate change, especially vulnerable populations like refugees and the impoverished, as highlighted in the report's discussion of urban climate change concerns (Haddad & Clara, 2017). The research recommended implementing green spaces and other nature-based alternatives as effective adaptation strategies, while also urging increased funding for sustainable infrastructure.

Ibrahim and El-Darwish (2023) propose a methodological framework for assessing urban quality of life in post-conflict cities. This framework addresses unique challenges such as infrastructure destruction and socioeconomic pressures, providing indicators across social, economic, environmental, and institutional dimensions. The aim is to guide policymakers and urban planners in prioritizing reconstruction efforts and improving living conditions for displaced populations.

Alawadi and Dempsey (2022) explore the relationship between place attachment and urban livability in rapidly urbanizing

Middle Eastern cities. They emphasize how rapid urban growth influences residents' emotional connections to their environments, which in turn affects their quality of life. The study demonstrates the value of preserving cultural identity and enhancing livability through urban policies that consider residents' emotional ties and the availability of essential services and green spaces. Both studies clarify the complexities of urban life in the Middle East, offering insights for effective urban planning and policy development in challenging contexts.

The literature review emphasizes the need to conduct comparative studies on urban quality of life in cities like Baghdad, which face unique challenges such as infrastructural crises and social pressures. While existing research has focused on cities in the Americas, Europe, and Asia, there is a significant gap in studies that apply global metrics, such as ISO 37120 and the Smart Cities Index, to Arab cities, particularly Baghdad (Kadhim, 2021). This study aims to address this gap by utilizing international indicators to assess Baghdad's urban reality while considering its specific social, political, and economic context, thereby contributing to a more comprehensive understanding of urban quality of life in emerging city settings.

### 3. METHODOLOGY

The study adopted a comprehensive analytical methodology based on:

1. Data Collection: Detailed data was collected from reliable sources on the key dimensions of livability in Baghdad.
2. Comparative Analysis: Data was analyzed and compared with international standards and Brazilian quality indicators.
3. Quantitative and Qualitative Assessment: Each dimension of the study was evaluated quantitatively (on a scale of 1-10) and qualitatively.
4. Comprehensive Analysis: The results of the analysis were integrated into a comprehensive assessment of livability in Baghdad.

The study relied on a set of international and Brazilian indicators to assess livability in Baghdad, namely:

1. Urban Quality of Life Index (IQVU-BH): It measures urban quality of life in a comprehensive manner, including economic, social, environmental, and cultural aspects (Marans and Stimson, 2011).
2. Municipal Human Development Index (IDH-M): It measures the level of human development at the local level, including three dimensions: health, education, and income.
3. Urban Well-being Index (IBEU): Measures the level of urban well-being, including five dimensions: collective urban services, housing conditions, public services, urban infrastructure, and environmental sustainability.
4. Social Vulnerability Index (IVS): Measures the level of social vulnerability, including three dimensions: urban infrastructure, human capital, and income and work.

### 4. THE CONCEPT OF URBAN QUALITY OF LIFE AND ITS COMPLEXITIES

The concept of Urban Quality of Life (QVU) is considered one of the complex concepts characterized by multiple levels of assessment and diverse dimensions. Most researchers and studies agree on the difficulty of defining this concept precisely, especially due to its different levels of generalization, ranging from the assessment of social or community well-being to specific assessments of individuals or groups. In the field of urban studies, the concept is linked to "the quality of life that the city offers to its citizens" and is evaluated through objective and subjective indicators. However, the relationship between these indicators is not always linear or unidirectional, which increases the complexity of the evaluation process. One of the main challenges facing researchers and urban planners is that urban quality of life is often measured in a fragmented way, where each dimension is studied and evaluated separately. This fragmented view does not allow for understanding the city in a more realistic and comprehensive manner. Therefore, there is an increasing need for an integrated approach that combines spatial indicators and traditional non-spatial indicators to provide a more accurate picture of urban quality of life. According to a study conducted by researchers from the Federal University of Rio Grande do Sul in Brazil, quality of life includes "the economic, environmental, scientific-cultural, and political conditions that are collectively built and available to individuals to achieve their potential." This broad definition reflects the complexity of the concept and its multiple dimensions, making its measurement and evaluation a significant challenge.

#### 4.1. The Impact of Rapid Urbanization on Quality of Life

Iraq, like other developing countries, has experienced rapid urbanization in recent decades, especially with the communications revolution that has led to reducing distances and narrowing the rural-urban gap, which is reflected in the proportion of rural and urban populations that has shifted in favor of the city. This has led to an increase in the growth and expansion of cities, which have developed rapidly, and the number of urban residents has far exceeded the number of rural residents. This rapid growth of cities, which often occurs with little or no oversight, leads to the emergence of various urban tensions and increases the costs of maintaining infrastructure and providing urban services and infrastructure services, forcing public authorities to spend more resources to try to meet the increasing demands resulting from increasing urban growth. We also note that high population concentrations in cities have led to the reshaping of transportation patterns and urban design itself, negatively affecting the quality of life and urban environmental quality. One of the main factors contributing to this problem is the increase in housing demand that far exceeds supply, which pushes residents, especially those with low income, to move to areas further away from the city center on one hand and to the splitting of housing units, increased population densities per unit area, and rising purchase and rental rates for housing units, thus leading to the emergence of informal settlements and expansion at the expense of agricultural areas and spaces in the city.

Since these settlements are often informal, many factors related to quality of life and environmental quality are not taken into account. This exacerbates social and spatial disparities and increases the challenges of achieving equal urban quality of life for all residents.

#### 4.2. Spatial Disparity in Urban Quality of Life

Studies show a significant disparity in urban quality of life between areas located within the boundaries of the basic design of Baghdad and cities and areas located outside the boundaries of the basic design and in districts and peripheries, as well as between large cities (provincial centers) and their affiliated districts and sub-districts. In a study conducted in Brazil on the capital

region (Brasília), a great similarity was revealed with the case of Baghdad, where the urban center, consisting of the basic plan and its surroundings, showed better results for all measured indicators, while living conditions worsen as we move away from the center (Aliwie, 2024).

This pattern of spatial disparity reflects the challenges faced by large cities in developing countries in achieving a fair distribution of resources and services. Central areas often enjoy better infrastructure, more advanced services, and greater economic opportunities, making them more attractive to high-income residents. In contrast, peripheral areas suffer from a lack of basic services, weak infrastructure, and limited economic opportunities.

However, studies also indicate the existence of exceptions to this general pattern. Despite the prevailing trend, many peripheral cities show good results in certain aspects of urban quality of life. This suggests that generalizations about the quality of life in peripheral areas may be inaccurate or misleading at times, and that there is a need for more detailed and complex study and evaluation.

In some cases, and in peripheral areas, we observe the presence and formation of true "urban pockets," where people with similar social, economic, and cultural characteristics tend to concentrate spatially. This phenomenon reflects the complex interaction between social, economic, and spatial factors in shaping urban quality of life in the city and peripheries (Abd Aliwie, 2025).

### 4.3. International Influences on Assessment Models

Urban quality of life assessment models is greatly influenced by international agendas and standards. The United Nations urban agendas and sustainable development goals have a significant impact on how urban quality of life is conceived and measured around the world.

The topic of urban quality of life appears repeatedly in urban agendas set at United Nations conferences on human settlements. At the first Habitat conference held in Vancouver in 1976, the agenda addressed a set of guiding principles for improving quality of life through the equitable distribution of economic development benefits. At the second Habitat conference held in Istanbul in 1996, the agenda indicated that "human health and quality of life are at the heart of efforts to develop sustainable human settlements." At the third Habitat conference, held in Quito (Ecuador) in 2015, the New Urban Agenda was adopted, which provides guidance to countries on how to address urbanization challenges and promote sustainable urban development. Thus, we find that the term "quality of life" appears and recurs in the agendas, indicating its central importance in contemporary urban planning (Abd Aliwie, 2025).

In addition, in 2018, there was an effort in Brazil to develop a set of indicators through the translation and review of ISO 37120, which is concerned with indicators of urban services and quality of life in sustainable cities and communities. Although this standard represents progress in standardizing the assessment of urban quality of life, it does not take into account subjective indicators, cultural indicators, or the specificities of place, especially in countries like Iraq and the Arab region. These international influences contribute to shaping how urban quality of life is understood and measured in various cities around the world and in developing countries, and provide a reference framework for researchers and urban planners that can be relied upon in all countries of the world. However, there is a need to adapt these international standards and agendas to the specific local context, taking into account the unique challenges and opportunities faced by Iraqi cities.

## 5. ANALYSIS OF KEY DIMENSIONS AND COMPREHENSIVE ASSESSMENT OF LIVABILITY IN BAGHDAD

### 5.1. Infrastructure and Basic Services

Infrastructure and basic services are among the most important factors affecting livability in any city. In Baghdad, infrastructure faces significant challenges due to years of neglect, wars, and conflicts. According to official data, 86.48% of housing in Baghdad is connected to the public water network, and 96.71% is connected to the public electricity network. However, the quality of these services is poor, with frequent interruptions in water and electricity supplies (Abd Aliwie, 2024).

As for sanitation, Baghdad suffers from limited coverage and deteriorating infrastructure, leading to serious health and environmental problems. The city also faces significant challenges in waste management, with the Baghdad Municipality producing about 9,000 tons of waste daily, with inefficient management of this waste

Table 1: Analysis according to IQVU-BH and IBEU indicators.

Element	Situation in Baghdad	Rating (1-10)	Comparison with international standards
Water network	86.48% of housing connected to the public water network	6	Average, below the average in developed cities (95%)
Electricity network	96.71% of housing connected to the public electricity network	7	Good in terms of coverage, but with frequent interruptions
Sanitation	Limited coverage and deteriorating infrastructure	4	Weak, far below international standards
Waste management	9,000 tons of waste daily, with inefficient management	3	Very weak, 80% of landfill sites do not comply with environmental standards
Roads and bridges	Deteriorating road network with traffic congestion	5	Average to weak, needs development and maintenance

Note: \* Overall infrastructure rating: 5/10 (Average).

According to the IBEU index, Baghdad is classified at the Average to low level in terms of urban infrastructure, with significant challenges in the areas of sanitation, waste management, and roads.

### 5.2. Cost of Living and Housing

Families in Baghdad face significant challenges in affording the cost of living and housing. According to official data, the average monthly household income in Iraq is 1.188 million Iraqi dinars (about \$815), while the average monthly household expenditure is 1.467 million Iraqi dinars (about \$1,006), indicating a deficit in the family budget.

Regarding housing, 77.6% of families in Iraq own the homes they live in, which is a good percentage compared to many major cities. However, 29% of housing units suffer from overcrowding (more than three people per room), which negatively affects quality of life.

Table 2: Analysis according to IQVU-BH and IVS indicators.

Element	Situation in Baghdad	Rating (1-10)	Comparison with international standards
Average household income	1.188 million Iraqi dinars monthly (about \$815)	5	Low compared to international standards
Housing cost	Average apartment price in the city center: \$1,200/m <sup>2</sup>	6	Relatively high compared to income level
Percentage of spending on housing	30-40% of household income	4	High, exceeds the recommended percentage (30%)
Housing overcrowding	29% of housing is overcrowded (More than 3 people per room)	4	Weak, exceeds international standards
Home ownership	77.6% of families own their homes	8	Good, exceeds the average in many cities

Note: \* Overall cost of living and housing rating: 5.4/10 (Average).

According to the IVS index, Baghdad is classified at a Average to high level of social vulnerability in terms of income and work, with significant challenges in affording the cost of living and housing.

### 5.3. Transportation

Transportation is one of the biggest challenges facing Baghdad residents. The city suffers from severe traffic congestion, especially during peak hours, with the absence of an effective and integrated public transportation network. Public transportation in Baghdad relies mainly on buses and taxis, with the absence of modern mass transit means such as metro or light rail. The road infrastructure also suffers from deterioration and insufficient maintenance, which exacerbates transportation problems. Rodrigues et al (2018), Baghdad residents spend between 1-3 hours daily commuting, which negatively affects quality of life and productivity.

Table 3: Analysis according to IQVU-BH and IBEU indicators.

Element	Situation in Baghdad	Rating (1-10)	Comparison with international standards
Public transportation	Weak, relies on buses and taxis	3	Very weak compared to major cities
Traffic congestion	Severe, especially during peak hours	2	Among the worst cities globally in traffic congestion
Road infrastructure	Deteriorating with insufficient maintenance	4	Weak, needs comprehensive development
Alternative transportation means	Very limited	2	Very weak, absence of bicycle and pedestrian paths
Access to transportation	Varies between areas	5	Average, with concentration in certain areas

Note: \* Overall transportation rating: 3.2/10 (Weak).

According to the IBEU index, Baghdad is classified at a very low level in terms of collective urban services related to transportation, with significant challenges in all aspects of transportation.

### 5.4. Healthcare and Educational Services

Healthcare and educational services in Baghdad face significant challenges, despite efforts to improve them. In the healthcare field, the city suffers from a shortage of healthcare facilities, medical staff, and equipment, with poor quality of healthcare. According to Silva et al. (2020), there is approximately one hospital per 120,000 people in Baghdad, which is a low rate compared to international standards (1 per 50,000). Hospitals also suffer from severe overcrowding and shortages of medicines and equipment.

In the field of education, schools in Baghdad suffer from high student density (50-60 students per classroom), with a shortage of educational facilities and equipment. Educational curricula also face challenges in terms of updating and keeping pace with global developments.

Table 4: Analysis according to IDH-M and IQVU-BH indicators.

Element	Situation in Baghdad	Rating (1-10)	Comparison with international standards
Availability of healthcare facilities	1 hospital per 120,000 people	4	Weak, below international standards (1 per 50,000)
Quality of healthcare	Poor with shortage of equipment and staff	3	Very weak compared to international standards
Availability of schools	High student density (50-60 students per classroom)	5	Average in terms of availability, weak in terms of density
Quality of education	Poor with outdated curricula and weak infrastructure	4	Weak compared to international standards
Higher education	8 public universities and 7 private universities	6	Average in terms of number, varying in terms of quality

Note: \* Overall healthcare and educational services rating: 4.4/10 (Weak to Average).

According to the IDH-M index, Baghdad is classified at the Average to low level in terms of health and education, with significant challenges in the quality of healthcare and educational services.

### 5.5. Security and Safety

The security situation in Baghdad has improved significantly in recent years, after years of conflicts and violence. However,



the city still faces security challenges, with significant variation in the level of security between different areas. According to Al-Sudani & Hussein (2022), crime and violence rates have decreased significantly compared to previous years, especially in the period 2014-2017. The sense of safety among residents has also improved, despite the continuation of some concerns.

Table 5: Analysis according to IQVU-BH and IVS indicators.

Element	Situation in Baghdad	Rating (1-10)	Comparison with international standards
Crime rate	Average to high	5	Average, significant improvement compared to previous years
Security stability	Improved but with challenges	6	Average, significant improvement compared to the period 2014-2017
Terrorism and violence	Significant decrease in attacks	6	Average, significant improvement compared to previous years
Sense of safety	Varies between areas	5	Average, with significant variation between areas
Trust in security agencies	Average	5	Average, gradual improvement

Note: \* Overall security and safety rating: 5.4/10 (Average).

According to the IVS index, Baghdad is classified at a Average level of social vulnerability in terms of security and safety, with significant improvement in recent years.

## 5.6. Job Opportunities and Economy

Baghdad's economy suffers from significant structural challenges, with heavy reliance on the public sector and limited job opportunities in the private sector. According to official data, the unemployment rate in Baghdad is 9.8%, which is lower than the national rate (13.5%) but still high compared to international standards (Al-Jubouri, 2021).

The economy also suffers from limited diversification, with heavy reliance on the oil sector, making it vulnerable to fluctuations in global oil prices. The business environment faces significant challenges, with complex bureaucracy and widespread corruption.

Table 6: Analysis according to IDH-M and IVS indicators.

Element	Situation in Baghdad	Rating (1-10)	Comparison with international standards
Unemployment rate	9.8% (Lower than the national rate of 13.5%)	6	Average, better than the national rate but higher than international standards
Job opportunities	Limited with heavy reliance on the public sector	4	Weak, shortage of job opportunities in the private sector
Income level	Average individual income of 201.3 thousand dinars monthly	4	Low compared to international standards
Economic diversity	Limited with heavy reliance on oil	3	Weak, lack of economic diversification
Business environment	Significant challenges in starting and operating businesses	3	Weak, bureaucracy and corruption

Note: \* Overall, job opportunities and economy rating: 4/10 (Weak).

According to the IVS index, Baghdad is classified at a high level of social vulnerability in terms of income and work, with significant challenges in creating job opportunities and diversifying the economy.

## 5.7. Cultural and Recreational Aspects

Baghdad enjoys a rich cultural and historical heritage, with numerous museums and historical and cultural landmarks. Among the most prominent cultural landmarks in Baghdad are the Iraqi National Museum, the Baghdad Museum, Al-Mustansiriya School, Al-Mutanabbi Street, and others.

As for recreational facilities, Baghdad includes a number of parks and gardens, such as the Al-Zawraa Park and Baghdad Tourist Island, in addition to amusement parks and social clubs. However, these facilities are limited and concentrated in certain areas, with a shortage of modern recreational facilities (Kadhim, 2021).

Table 7: Analysis according to IQVU-BH and IBEU indicators.

Element	Situation in Baghdad	Rating (1-10)	Comparison with international standards
Museums and historical landmarks	Rich with museums and historical landmarks	8	Very good, rich cultural and historical heritage
Recreational facilities	Limited and concentrated in certain areas	5	Average, shortage of modern recreational facilities
Green spaces	Limited with continuous decline	4	Weak, below international standards
Cultural activities	Diverse but limited in spread	6	Average, concentrated in certain areas
Access to cultural facilities	Varies between areas	5	Average, with significant variation between areas

Note: \* Overall cultural and recreational aspects rating: 5.6/10 (Average).

According to the IQVU-BH index, Baghdad is classified at the Average level in terms of cultural and recreational aspects, with strengths in cultural and historical heritage, and weaknesses in recreational facilities and green spaces.

## 5.8. Environmental Challenges

Environmental challenges are among the most serious problems facing Baghdad, with severe pollution of air and water and inefficient waste management. According to available data, the pollution index in Baghdad reached 203 points, which makes it "very unhealthy" according to global classification, and the concentration of pollutants reached 127.5 micrograms per cubic meter, which is 25.5 times the globally permitted limit.

The main sources of air pollution in Baghdad include brick factories (constituting 55% of the total sources of pollution), Al-Dora Refinery, power generation stations, asphalt factories, and waste burning sites.

Baghdad also suffers from water pollution, especially the Tigris River, the main source of drinking water in the city, in addition to the decline in green spaces and the increase in dust storms (IQAir, 2025; Al-Monitor, 2024).

Table 8: Analysis according to IQVU-BH and IBEU indicators.

Element	Situation in Baghdad	Rating (1-10)	Comparison with international standards
Air quality	Very poor, pollution index 203 points	2	Very weak, among the most polluted cities in the world
Waste management	Inefficient, 80% of landfill sites do not comply with standards	2	Very weak, far below international standards
Water quality	Poor with continuous pollution of the Tigris River	3	Weak, continuous pollution of water sources
Green spaces	Limited with continuous decline	3	Weak, far below international standards
Desertification and dust storms	Worsening problem	2	Very weak, significant negative impact on quality of life

Note: \* Overall environmental challenges rating: 2.4/10 (Very weak).

According to the IBEU index, Baghdad is classified at a very low level in terms of environmental sustainability, with serious challenges in all aspects of the environment.

Table 9: Comprehensive assessment of livability in Baghdad.

Dimension	Rating (1-10)	Relative weight	Weighted rating
Infrastructure and basic services	5.0	15%	0.75
Cost of living and housing	5.4	15%	0.81
Transportation	3.2	10%	0.32
Healthcare and educational services	4.4	15%	0.66
Security and safety	5.4	15%	0.81
Job opportunities and economy	4.0	10%	0.40
Cultural and recreational aspects	5.6	10%	0.56
Environmental challenges	2.4	10%	0.24
Total		100%	4.55

Note: \* Overall livability rating in Baghdad: 4.55/10 (Average to weak).

Table 10: Comparison with Brazilian indicators.

Indicator	Rating for Baghdad	Comparison with Brazilian cities
Urban quality of life index (IQVU-BH)	Average to weak	Below the average of Average Brazilian cities
Municipal human development index (IDH-M)	Average (Estimated 0.65-0.70)	Below the average of Brazilian cities (0.75)
Urban well-being index (IBEU)	Weak	Below most major Brazilian cities
Social vulnerability index (IVS)	High (significant social vulnerability)	Higher than most major Brazilian cities

## 6. CONCLUSION

1. Baghdad faces significant challenges in terms of livability, especially in the environmental, transportation, healthcare, educational, and job opportunity areas. However, the city has strengths that can be built upon, such as its rich cultural and historical heritage, the significant improvement in the security situation, and the high percentage of home ownership.
2. Improving livability in Baghdad requires a comprehensive and integrated strategy that addresses challenges in all dimensions, with a particular focus on environmental challenges, transportation, and basic services. It also requires close cooperation between the government, the private sector, and civil society, and benefiting from successful international experiences.
3. Improving livability in Baghdad is not just a necessity to improve the quality of life for its current residents, but it is also an investment in the future of the city and its ability to attract investments, competencies, and tourists, as well as enhance its position as a civilizational, cultural, and economic center in the region.

## 7. RECOMMENDATIONS

1. Formulate a Comprehensive Urban Strategy: Develop an integrated, long-term strategy targeting critical aspects of livability with defined priorities.
2. Promote Public-Private Partnerships: Enhance collaboration between public and private sectors to support urban development initiatives.
3. Engage Civil Society: Involve civil society organizations and residents in planning, implementation, and oversight.
4. Adopt International Best Practices: Apply relevant global experiences to improve livability in line with Baghdad's context.
5. Establish Monitoring and Evaluation Mechanisms: Create a system to measure progress and outcomes of urban improvement efforts.
6. Upgrade Urban Infrastructure: Improve sanitation networks, water and electricity services, and implement environmentally sound waste management.
7. Improve Housing and Affordability: Introduce affordable housing programs, regulate rental markets, and support low- and middle-income families.
8. Modernize Transportation: Expand roads and bridges, develop public transit, promote alternative transport options, and apply smart traffic solutions.

## REFERENCES

Abd Aliwie, A. N. (2024). A pragmatic analysis of wish strategies used by Iraqi EFL learners. *Salud, Ciencia y Tecnología - Serie de Conferencias*, 3, 1151. <https://conferencias.ageditor.ar/index.php/sctconf/article/view/1151>

- Abd Aliwie, A. N. (2025). A pragmatic analysis of persuasive arguments in the 2011–2020 US presidential campaign speeches. *Forum for Linguistic Studies*, 7(1), 480–494. <https://doi.org/10.30564/fls.v7i1.7243>
- Abd Aliwie, A. N. (2025). Conversational silence in Harold Pinter's *The Birthday Party*: A pragmatic perspective. *International Journal of Arabic-English Studies*. <https://doi.org/10.33806/ijaes.v25i2.860>
- Aliwie, A. N. A. (2024). A pragmatic study of irony in Dickens' *A Tale of Two Cities*. *Forum for Linguistic Studies*, 6(6), 147–161. <https://doi.org/10.30564/fls.v6i6.7056>
- Al-Jubouri, M. T. (2021). Governance and urban infrastructure in Iraqi cities. *Journal of Middle Eastern Development*, 14(3), 111–129.
- Al-Sudani, A., & Hussein, S. (2022). Urban growth and housing challenges in post-war Baghdad. *Journal of Urban Studies*, 45(2), 101–117.
- Costa, F. R., & Lima, J. P. (2019). Social indicators and urban development in Brazil: Reflections from IDH-M applications. *Brazilian Journal of Urban Research*, 36(3), 233–248.
- Haddad, M., & Clara, V. (2017). Transportation systems and urban livability in the global South. *Cities*, 62, 29–36. <https://doi.org/10.1016/j.cities.2016.12.009>
- Ibrahim, M., & El-Darwish, I. (2023). Urban quality of life assessment in post-conflict cities: A framework for Middle Eastern contexts. *Cities*, 132, 103923. <https://doi.org/10.1016/j.cities.2022.103923>
- IQAir. (2025). Baghdad air quality index (AQI) and Iraq air pollution. Retrieved from <https://www.iqair.com/us/iraq/baghdad>
- Kadhim, R. H. (2021). Beyond metrics: Contextualizing quality of life in Baghdad. *Middle East Urban Review*, 9(1), 77–94.
- Marans, R. W., & Stimson, R. J. (2011). *Investigating quality of urban life: Theory, methods, and empirical research*. Springer. <https://doi.org/10.1007/978-94-007-1742-8>
- Rodrigues, M. A., Silva, C. P., & Barbosa, T. (2018). IQVU-BH: Urban livability indicators for Brazilian cities. *Urban Indicators Review*, 27(4), 401–419.
- Silva, L. M., Torres, J., & Ramos, F. (2020). Social vulnerability and livability in Latin America: Comparative analysis from Brazil and Mexico. *Latin American Urban Studies*, 11(3), 200–221.