

Mykyta Kravchenko*Private High Education Institution**"Zaporizhzhia Institute of Economics and Information Technologies", Zaporizhzhia, Ukraine**E-mail: thaxicshhh@ukr.net**ORCID: <https://orcid.org/0009-0000-0200-269X>*

Minnesota Rental Market: Distorted Demand and a Shortage of Middle-Income Housing

Abstract

The article aimed to study structural imbalances in Minnesota's rental housing market, with a focus on the shortage of affordable housing for middle-income populations. Methods employed included comparative analysis and the examination of statistical reports and housing affordability indicators. The results demonstrate a systemic distortion of demand: higher-income households are displacing lower-income households from the affordable housing market, and the pace of construction of middle-class housing significantly lags behind that of upscale projects. Particular attention is paid to the Twin Cities agglomeration, where the supply crisis has been exacerbated by a decrease in the number of building permits. The problem of the Minnesota housing market was found to lie in an acute shortage of housing for those with incomes below 30% of the state average, which is associated with a decrease in construction volumes. Despite the growth of real median incomes in the state, middle-income households are provided with housing. By contrast, very low-income households are being priced out of the rental market because it is so affordable for the middle classes. Rising rents are exacerbating the problem of rental affordability for the state's poorest residents. Overall, Minnesota's rental market is experiencing a systemic shortage of affordable housing, with households at all income levels spending a growing proportion of their income on rent as real incomes fall. Further research should examine the effectiveness of local housing support policies and the impact of institutional investors on the rental market structure.

DOI: <https://doi.org/10.30525/2500-946X/2025-4-5>

1 Introduction

Housing affordability for low-income families is a key housing policy issue in all countries and has been an important reason for government intervention in the housing market over the past century, with the aim of ensuring greater affordability for disadvantaged households (Lee, Kemp & Reina, 2022). The new housing affordability crisis has not only affected poor and low-income families, but also middle-income households, particularly in large cities and areas of high demand (Organisation for Economic, n.d.). In OECD countries, residential property prices have exhibited a decline since the onset of the Coronavirus pandemic. However, elevated borrowing costs have precipitated an escalation in housing unaffordability, encompassing both owner-occupiers and renters (Organisation for Economic, n.d.). In 2022, the proportion of low-income private renters in the United States who expended more than 40% of their income on rent was 49.23%, in comparison to 35.41% in Canada, 31.61% in France, 28.23% in Italy, 21.08% in Austria, and 16.97% in Germany. In the year 2022, the proportion

of US households' expenditure on rent as a percentage of their net income was 24%. In the United States, the median rent burden (in the private and subsidised rental markets) was 40.8% for low-income households and 20.8% for middle-income households in 2022. The proportion of the population residing in the lowest income quartile who allocate more than 40% of their net income to housing expenses was 49.2% in 2022 (in comparison to 20.2% for the overall US population).

The US rental housing market is characterised by growing structural imbalances between the available housing supply and the real needs of the low- and middle-income population. In Minnesota, particularly within the Twin Cities metropolitan area (Minneapolis-Saint Paul), the discrepancy between the incomes of renters and the cost of rental housing is increasing, resulting in a distortion of demand, the displacement of vulnerable groups from the market, and the exacerbation of social inequality.

The objective of the article was to examine structural disparities in the rental housing market in Minnesota, with a particular focus on the shortage of affordable housing for the middle-income population.

Keywords

rental market, housing affordability, housing vacancy rate, deformed demand, housing shortage, affordable housing shortage

JEL: R31, R21, R38



This is an Open Access article, distributed under the terms of the Creative Commons Attribution CC BY 4.0

2 Literature Review

The majority of academic publications highlight the issue of housing affordability in the United States in connection with income inequality amongst different population groups (Lee, Kemp & Reina, 2022; Matlack & Vigdor, 2008; Dong, 2018). From 1970 to 2000, within US megacities characterised by low vacancy rates and inelastic supply, an increase in the Gini coefficient was observed to be associated with higher rents and a greater degree of concentration of residents renting rooms (Matlack & Vigdor, 2008). A study of 100 major US metropolitan areas at the county level during the period 2000-2012 has revealed the impact of income inequality on the affordability of rental housing for low-income households. The study found a positive correlation between an increase in the Gini coefficient by 0.1% and an increase in the proportion of low-income households who allocate a significant share of their income to rent, as well as a corresponding increase in their overall number by 2.9% (Dong, 2018).

A review of recent publications on the issue of structural disparities in the rental housing market indicates that this problem still exists in the United States. For instance, D. Myers and J. Park (Myers, D., Park, J.) identified a rising trend in the discrepancy between the dynamics of rents and incomes across distinct quartiles (income distribution 25%, 50% and 75%), as well as segments of consumers whose incomes significantly lag behind or, conversely, exceed housing costs in the United States. Changes in rents and incomes lead to anomalies: areas of San Francisco or Washington, D.C., are rated as more affordable to live in than other areas of the United States on average. During 2000-2016, the burden on tenants due to the discrepancy between rent costs and incomes has increased (Myers & Park, 2019). Other studies (Anthony, J.) argue about the problem of affordable housing shortage, as in 2015 more than 35% of US households paid more than 30% of their income to cover housing costs (Anthony, 2018; Anthony, 2023).

Research by Kang, S., Chon, Kang, S., Jeon, J. S. and Airgood-Obrycki, W. demonstrates that certain areas of US metropolises have a surplus of rental apartments available to a specific low-income group, and that the number of such apartments has significantly decreased (Kang, Jeon & Airgood-Obrycki, 2024).

In summary, the issue of housing affordability for low-income households in the United States highlights the impact of income inequality on rental affordability for low-income renters. There is a growing mismatch between rent and income dynamics.

3 Research Methods

The study utilised statistical analysis methodologies to evaluate rental housing market indicators

within the state of Minnesota and the Minneapolis metropolitan area. These indicators encompass the assessment of housing affordability across diverse population categories, alongside the cost of housing. The study also encompassed an analysis of rental housing shortages, defined as the ratio of houses and apartments to the population. Furthermore, the study examined the availability of affordable rental housing, measured as the number of such properties per 100 households, across various income categories relative to the Area Median Income (AMI). Additionally, the study assessed the household expenditure burden as a proportion of rental costs, relative to income, across different population categories. The selection of AMI as the primary indicator for assessing housing affordability was a deliberate and considered decision.

The National Coalition for Low-Income Housing's reports for 2023-24 served as the basis for studying the state of, and demand dynamics in, the rental housing market. The Zillow Rental Rate Index (ZORI) was used to assess housing rental dynamics in the state. ZORI is a smoothed indicator of market rents in a given region, weighted by the rental housing stock to ensure representativeness of the entire market. The index is calculated in dollars by calculating the average rent in the range of 35-65% for all apartments and houses in the region, weighted by the rental housing stock. Furthermore, an analysis of data from the Federal Reserve Bank of Minneapolis was conducted using the Rental Vacancy Rate for Minnesota (MNRVAC)-defined as the rate of unused rental units (i.e., apartments and houses), as a percentage and not adjusted for seasonal fluctuations-to reflect the availability of rental housing and the housing vacancy rate in the state of Minnesota.

4 Results

The lowest-income renters in the United States have historically encountered a significant shortage of affordable housing, a problem that has intensified in recent years, driven by high inflation and the loss of affordable housing. The National Low Income Housing Coalition (NLIHC) is an organisation that annually measures the availability of affordable housing, focusing on the needs of very low-income households. The NLIHC estimates that 11 million people (25% of the 44.1 million renters in the United States in 2023) were extremely low-income households. These households encounter considerable financial and housing instability. The term "extremely low income" is defined as income at or below the federal poverty level or 30% of the area median income (AMI), depending on the measure.

The area median income (AMI) is typically based on assumptions about the income of a family

of four. However, it should be noted that not all households earn the median income, and most households are of varying sizes (ranging from one to two people, or more than five people per household). Indeed, a mere 13.6% of households in the Minneapolis metropolitan area meet HUD's definition of a family of four. This area, however, has the largest share of households with incomes at or above 80% of the Area Median Income (65.1% of households earn incomes at or above 100% of the AMI).

The Metropolitan Council's Housing Policy Plan 2040 defines affordable housing as housing that is available to families on low and moderate incomes. These limits are based on median income (AMI) calculations by the U.S. Department of Housing and Urban Development (HUD) (Metropolitan Council, n.d.).

Prior to 2010, the Council set a price ceiling for affordable rental housing, based on the maximum monthly rent that a family of four could afford at or below 50% of the Area Median Income (AMI) at current interest rates. For the period from 2011 to 2024, the income ceiling was used as an affordability indicator for rental housing at 60% of the AMI. The median income for a family of four in the Minneapolis-St. Paul-Bloomington area was set at 124,900 USD in 2023, 124,200 USD in 2024 and 132,400 USD in 2025 (Metropolitan Council, n.d.).

According to the NLIHC's 2023 report on the income gap and affordable housing needs, the shortage of affordable rental housing primarily affects extremely low-income renters. It is estimated that there is a shortage of 7.3 million affordable rental units for extremely low-income renters in the United States in 2023. Consequently, for every 100 households renting and earning less than 30% of the median income, only 33 affordable homes were available across the region. The shortage of affordable housing only worsened between 2019 and 2021, with the number of affordable housing units decreasing by 8%, or 500,000 (National Low Income Housing Coalition, 2023).

Approximately 6.8 million households renting property have very low incomes, defined as being between 30% and 50% of the median income. At the same time, these households can afford to rent 7.0 million housing units available to families with very low incomes, as well as an additional 9.2 million higher-cost rental units. Therefore, a total of 16.2 million rental housing units are available for the 6.8 million households with critically low incomes in the United States in 2023 (National Low Income Housing Coalition, 2023).

In the United States, approximately 4.6 million renters earn middle incomes (ranging from 81% to 100% of the median income). Those in this income bracket can rent housing intended for extremely low- and very low-income households. The total supply of affordable rental housing for this group is estimated

to be 41.0 million units in 2023 (National Low Income Housing Coalition, 2023).

The shortage of available affordable housing is estimated at 103,626 thousand units for households with incomes less than 30% of the median income level, and 80,913 thousand units for households with incomes below 50% of the median income level in the metro area in 2023 (National Low Income Housing Coalition, 2023).

According to the National Low Income Housing Coalition (NLIHC), in 2023, Minnesota will have only 38 affordable and habitable housing units for every 100 very low-income households (with incomes below 30% of the area median income, AMI); 71 affordable and habitable housing units for every 100 low-income households (with incomes below 50% of AMI); 103 affordable and habitable housing units for every 100 households with incomes below 80% of AMI; and 104 affordable and habitable housing units for every 100 households with incomes below 100% of AMI.

In 2023, the proportion of households in Minnesota experiencing excessive housing cost burdens was as follows: 66% of very low-income households, 20% of low-income households, 3% of households with incomes below 80% of the Area Median Income (AMI), and 1% of households with incomes below 100% of the AMI. In 2024, the situation worsened, and the financial burden on households of different income categories began to increase (National Low Income Housing Coalition, 2023; National Low Income Housing Coalition, 2024).

In the Minneapolis metropolitan area, which includes the Twin Cities of Minneapolis and St. Paul, as well as Bloomington in Minnesota and Wisconsin, the estimated number of rental units available per 100 households was 36 in 2023. The metro area was therefore classified as having the lowest level of housing shortage (see Table 1). However, this changed in 2024 when the area was categorised as experiencing rental shortages, including for middle-income households, who faced increased cost burdens.

In Minnesota, a full-time worker must earn 27.27 USD per hour to afford a two-bedroom apartment with a fair market rent of 1,418 USD per month. Therefore, the minimum annual income required to rent housing should be 56,728 USD (with no more than 30% of this being spent on rent). For most blue-collar occupations (e.g., service personnel, medical workers and technicians), real incomes do not exceed \$20 per hour worked (National Low Income Housing Coalition, State housing profile, 2024). This makes it impossible to access housing without exceeding the affordability threshold of spending more than 30% of one's income on rental costs.

Consequently, households with middle incomes (50%-80% of the AMI) are forced to rent more expensive properties or compete with poorer households for limited rental properties. This creates a situation of "distorted demand", whereby the middle-

TABLE 1 Affordable Rental Housing Shortage, Affordable Rental Housing Per 100 Households, Household Cost Burden in Minnesota and Minneapolis by Income Category, 2023-2024

Indicator	Shortage of rental housing		Affordable rental housing for 100 households				Household spending burden			
	Below 30% AMI	Below 50% AMI	Below 30% AMI	Below 50% AMI	Below 80% AMI	Below 100% AMI	Below 30% AMI	Below 50% AMI	Below 80% AMI	Below 100% AMI
Minnesota, 2023	103,626	80,913	38	71	103	104	66%	20%	3%	1%
Minneapolis, 2023	71,491	63,113	36	67	103	104	65%	23%	3%	1%
Minnesota, 2024	114,131	93,719	34	68	97	100	69%	29%	5%	2%
Minneapolis, 2024	79,282	73,248	28	61	96	101	73%	33%	4%	2%

Source: (National Low Income Housing Coalition, 2023; National Low Income Housing Coalition, 2024).

income group displaces the low-income group from their housing segment.

In Minnesota's most urbanised area, the Minneapolis metropolitan area, Zillow (2024) projects rent growth of 3.35% in 2023 and 2025, and 2.6% in 2024. During this period, the number of permits for new housing construction has decreased from 3,487 units in 2020 to 817 units in 2024 (3,125 units in 2021, 2,678 units in 2022, and 1,395 units in 2023). Therefore, developers mainly focus on the more affluent members of society, ignoring middle-income groups. This exacerbates the structural imbalance in the housing market (University of Minnesota, 2021).

ZORI dynamics in the Minneapolis metropolitan area indicate significant rental growth rates that exceed the average income growth rates of the middle-income population. This deepens the problem of the middle class being priced out of the affordable rental housing market, given the lag in real wages.

The ORI Rent Index and the median income level in the AMI regions facilitate the identification of the actual financial burden on households with differing income levels. A recent study has revealed that the median rental price in Minneapolis was 1,713.6 USD in May 2025, representing an increase from 1,656.5 USD in January 2025. This equates to an annual rental cost of 20,653.2 USD. According to NLIHC recommendations, rental costs should not exceed 30% of annual income.

Rent will be affordable for a population with an annual income of at least 68,544 USD. Meanwhile, the official median income level for a family of four in Minneapolis is set at 132,400 USD (U.S. Department of Housing, 2025). The median household income in Minnesota was 90,340 USD in 2023, compared to 93,980 USD in 2022, 90,080 USD in 2021 and 92,130 USD in 2020 (U.S. Census Bureau, 2024). With a rental affordability target of 60% of the median income in 2025 – equivalent to 79,440 USD – the Rent Index is affordable for middle-income households. The rent-to-income ratio for a family of four is 15.53%, meaning that rent costs do not exceed 30% of annual income for middle-income families. Additionally, the rent-to-income ratio in Minnesota is 22.76%.

An important indicator of the dynamics of the rental housing market in Minnesota is the state's Rental Vacancy Rate (MNRVAC), a housing vacancy index showing the proportion of vacant apartments and houses available for rent as a percentage of the total housing stock. As of January 1, 2024, the rate stood at 5.4%, marking a 1.9% decrease since 2022 (U.S. Census Bureau, 2024). The state has a tight rental market, with demand exceeding supply and construction slowing down (see Figure 2).

The Minnesota housing market is experiencing an acute shortage of housing for people earning less than 30% of the state's median income. This is associated

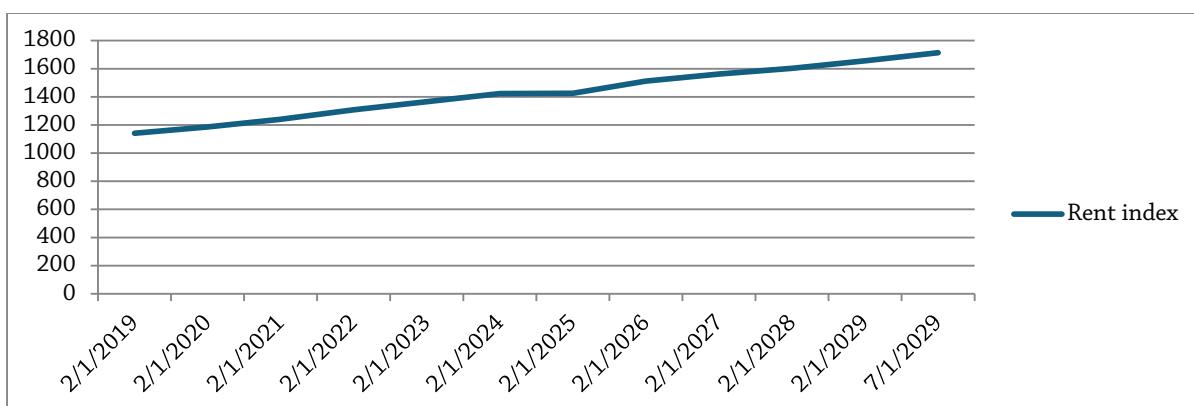


FIGURE 1 Minneapolis rent index in 2015-2025 (as of January 31 of each year and June 30, 2025), USD
Source: (Zillow, 2024)

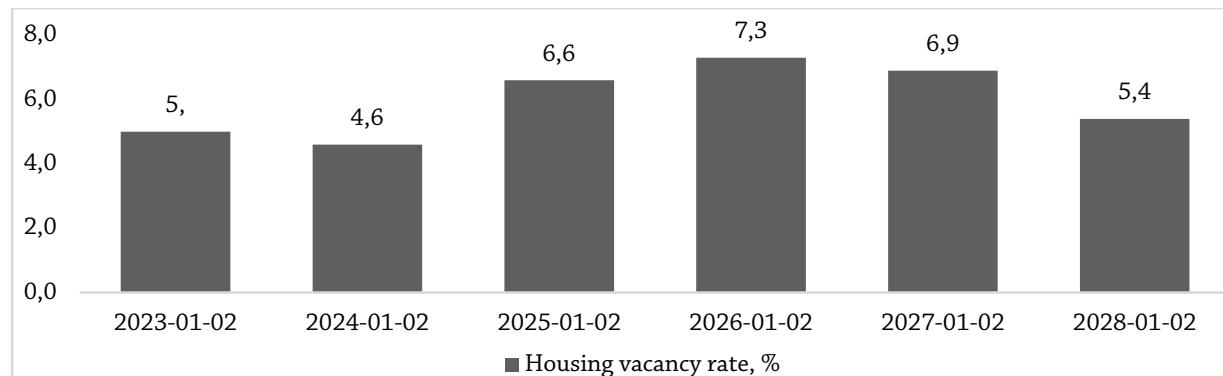


FIGURE 2 Housing vacancy rate in Minnesota, 2019-2024, %

Source: (Federal Reserve Bank of St. Louis, n.d.)

with decreased construction and a loss of affordable rental properties. For every 100 households with extremely low incomes, there are only 33 affordable apartments or houses in the state. By contrast, for households with average incomes, there are 97–100 affordable apartments or houses in the state. This has led to households with very low incomes being displaced from the rental market due to its high availability to the middle classes. The increase in rents exacerbates the affordability problem for the poorest members of society. In general, the rental market in Minnesota shows a consistent shortage of affordable housing. Households at all income levels are spending a larger proportion of their income on rent, while their real incomes are falling.

5 Conclusions

The rental housing market in Minnesota, including the Minneapolis metropolitan area, is showing signs

of structural deformation due to “distorted” demand. The state has an imbalance in the supply of rental housing for households with incomes below the median, as well as a mismatch between housing prices and incomes. The slow pace of construction is exacerbating these problems. The most vulnerable segments of the population are not only low-income households, but also those whose incomes are at the level of 50%–80% of the median level in the state, as the market is mainly focused on the high-income population. The growth of the rental index in the Minneapolis metropolitan area is indicative of an increase in pressure on rental costs in the central agglomeration of the state, a mismatch between incomes and rental prices, and as a result, structural inequality between different segments of the population. It is recommended that future research be directed towards the analysis of the efficacy of local policies that facilitate housing construction, and the evaluation of the influence of institutional investors on the composition of the rental market.

References:

- [1] Lee, Y., Kemp, P. A., & Reina, V. J. (2022). Drivers of housing (un) affordability in the advanced economies: A review and new evidence. *Housing Studies*, 37(10), 1739–1752.
- [2] Organisation for Economic Co-operation and Development (n.d.). OECD affordable housing database. OECD. Available at: <https://www.oecd.org/en/data/datasets/oecd-affordable-housing-database.html>
- [3] Matlack, J. L. & Vigdor, J. L. (2008) Do rising tides lift all prices? Income inequality and housing affordability. *Journal of Housing Economics*, 17, pp. 212–224. DOI: <https://doi.org/10.1016/j.jhe.2008.06.004>
- [4] Dong, H. (2018). The impact of income inequality on rental affordability: An empirical study in large American metropolitan areas. *Urban Studies*, 55(10), 2106–2122.
- [5] Myers, D., & Park, J. (2019). A constant quartile mismatch indicator of changing rental affordability in US metropolitan areas, 2000 to 2016. *Cityscape*, 21(1), 163–200.
- [6] Anthony, J. (2018). Economic prosperity and housing affordability in the United States: lessons from the booming 1990s. *Housing Policy Debate*, 28(3), 325–341.
- [7] Anthony, J. (2023). Housing affordability and economic growth. *Housing policy debate*, 33(5), 1187–1205.
- [8] Kang, S., Jeon, J. S., & Airgood-Obrycki, W. (2024). Exploring mismatch in within-metropolitan affordable housing in the United States. *Urban Studies*, 61(2), 231–253.
- [9] Metropolitan Council (n.d.). Ownership and rent affordability limits. Available at: <https://metrocouncil.org/Housing/Planning/Affordable-Housing-Measures/Ownership-and-Rent-Affordability-Limits.aspx>

- [10] Metropolitan Council (n.d.). Ownership and rent affordability limits: History. Available at: <https://metrocouncil.org/Housing/Planning/Affordable-Housing-Measures/Ownership-and-Rent-Affordability-Limits.aspx#History>
- [11] National Low Income Housing Coalition (2023). The Gap: A shortage of affordable homes. Available at: https://nlihc.org/sites/default/files/gap/Gap-Report_2023.pdf
- [12] National Low Income Housing Coalition (2024). The Gap: A shortage of affordable homes. Available at: https://nlihc.org/sites/default/files/gap/2024/Gap-Report_2024.pdf
- [13] National Low Income Housing Coalition (2024). State housing profile: Minnesota. Available at: https://nlihc.org/sites/default/files/SHP_MN.pdf
- [14] Zillow. (2024). Zillow Observed Rent Index (ZORI) – Minneapolis-St. Paul Metro. Available at: <https://www.zillow.com/research/data/>
- [15] University of Minnesota Center for Urban and Regional Affairs (2021). Minneapolis Rent Stabilization Study. Available at: <https://www.curra.umn.edu/sites/cura.umn.edu/files/2021-08/Minneapolis-Rent-Stabilization-Study-web.pdf>
- [16] U.S. Department of Housing and Urban Development (2025). FY 2025 HOME income limits – Minnesota. Available at: https://www.huduser.gov/portal/datasets/home-datasets/files/HOME_IncomeLmts_State_MN_2025.pdf
- [17] U.S. Census Bureau (2024). Real median household income in Minnesota [MEHOINUSMNA672N]. FRED, Federal Reserve Bank of St. Louis. Available at: <https://fred.stlouisfed.org/series/MEHOINUSMNA672N>
- [18] Federal Reserve Bank of St. Louis (n.d.). Rental vacancy rate for Minnesota (MNRVAC). FRED, Federal Reserve Bank of St. Louis. Available at: <https://fred.stlouisfed.org/series/MNRVAC>

Received on: 22th of October, 2025

Accepted on: 27th of November, 2025

Published on: 26th of December, 2025