



Kentucky Chamber
Center for Policy & Research

Building a Foundation for **GROWTH**

Meeting Kentucky's Current & Future
Housing Needs



JUNE 2024



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As Kentucky’s leaders seek to grow the state’s economy and workforce, **meeting the Commonwealth’s current and future housing needs must be a priority.**
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Executive Summary

As Kentucky's leaders seek to grow the state's economy and workforce, meeting the Commonwealth's current and future housing needs must be a priority. Communities across Kentucky already face significant housing challenges. One third of the state's housing units were built more than half a century ago or longer. In some of Kentucky's metropolitan areas, median home sale prices have risen from 2.4 times median household incomes in 1992 to as much as 5 times median household incomes 30 years later. Estimates of Kentucky's housing shortage run as high as 206,000 units. In all corners of the Commonwealth, local leaders are raising concerns about how housing challenges are affecting quality of life, economic development, and access to opportunity in their communities.

Kentucky's housing challenges did not emerge overnight. In the aftermath of the 2007-2008 financial crisis, home building activity in Kentucky followed a national downward trend, plummeting 45 percent. As the availability of homes for sale or rent has steadily declined and our population has continued to increase, a market imbalance of limited supply and rising demand has driven housing prices beyond the reach of many Kentucky families and strained household budgets. Meanwhile, more barriers to home building have emerged in the form of opposition from small – yet vocal – groups of local homeowners, overly restrictive land-use and zoning rules, expensive government regulations, limited incentives for low- and middle-income housing, and a growing shortage of skilled construction workers.

As the state continues to attract new business investments and orients public policy to grow our economy and workforce, these housing challenges will intensify, resulting in unsustainable growth and holding back Kentucky's potential. Kentucky's leaders need to act now. Key steps should include collaboration between state government and local governments to reform land-use and zoning rules, a re-examination of government regulations impacting housing and home building, strategically increasing public sector support for low- and middle-income housing through tax policy and targeted funding, helping local communities understand their housing needs, investing in critical housing infrastructure like roads, water, and wastewater, and leveraging our high-schools, post-secondary institutions, and financial aid programs to grow and develop the construction workforce.

It's time to build a literal foundation for growth – and that means more housing and more home building.

Building a Foundation for Growth seeks to elevate housing as a critical economic issue in the Commonwealth and urges state and local leaders to take bold steps to support more home building and ensure healthier housing markets across Kentucky. The report examines a wide range of data and academic research and merges these resources with direct feedback from local Kentucky leaders gathered through live polling at a series of community listening sessions held in six distinct areas of the state.

Key Takeaways Include:

- **Academic research and feedback from community leaders underscore the importance of housing to economic development.** 66.2 percent of local community leaders reported that housing is holding back economic growth and opportunity in their communities, and 89.8 percent said their areas could not meet the housing demands of a major economic development announcement.
- **Kentucky already faces significant housing challenges,** including an aging housing stock, a growing gap between home prices and household incomes, and statewide housing shortages estimated to be as high as 206,000 housing units. 96.6 percent of surveyed local Kentucky leaders reported there is not enough housing in their communities.
- **Housing challenges will intensify in the state as Kentucky leaders seek to accelerate economic development and workforce growth.** The report conservatively estimates that the state may need to build as many as 529,000 new housing units by 2050 to keep pace with population growth and maintain a reasonably healthy housing market.



- **Kentuckians want to see more housing and are looking to state and local leaders for action.** 75.4 percent of surveyed local Kentucky leaders said they would support new housing developments even if it was near where they lived, and 86.4 percent said state and local policymakers should do more to support home building and address housing challenges.
- **Key priorities in building a stronger foundation for growth in Kentucky** should include encouraging local land-use and zoning reforms, being smarter about government regulations, incentivizing more affordable housing, and supporting and growing the home building workforce. State and local leaders can pull policy examples from other states such as Indiana, Montana, Utah, and Nebraska and more effectively leverage existing tools and assets to support home building and housing production.

Building a Foundation for Growth is not an exhaustive review of all the housing challenges facing Kentucky. Nor does it have all the answers. Instead, it offers a framework for state and local leaders to understand housing issues and provides an opportunity for them to consider their role in supporting home building and healthier housing markets. As the report demonstrates, Kentucky families and communities across the

Commonwealth need housing solutions now. Without bold action, this need will intensify as efforts by Kentucky leaders to grow the state's economy and workforce continue to deliver results. Ensuring that growth in Kentucky is sustainable must be a top priority, and home building and housing are the keys to making sure that happens.



Introduction

When most of us think of housing challenges, thoughts of high-priced coastal cities like New York, Seattle, Washington, D.C., and San Francisco often come to mind. Few think of Kentucky communities like Ashland, Hopkinsville, Shepherdsville, or Corbin. These areas thankfully do not face the severe housing crises that coastal American cities face. Nonetheless, our research shows that Kentucky communities like these are struggling with housing challenges of their own. Without action from state and local leaders, those challenges could worsen in the coming years, harming Kentucky's unique quality of life and holding back the Commonwealth's economic potential.

This report seeks to prevent that from happening by shining a light on Kentucky's current and future housing challenges and outlining solutions for state and local leaders to consider. The Commonwealth already faces significant challenges with an aging housing stock, limited housing availability, and prices that are far higher than what most Kentucky families can comfortably afford. These factors are straining household budgets and local communities and causing some to question the state's economic future. As state and local leaders position the Commonwealth for accelerated economic and workforce growth through policy reforms and strategic investments, these challenges could become greater unless bold action is taken.

Action, however, starts with understanding, which is what this report aims to provide. *Building a Foundation for Growth* offers a deep dive into Kentucky's current and future housing needs and an overview of programmatic and public policy proposals in support of healthier housing markets across Kentucky. The report examines a wide range of empirical research and data and combines those resources with feedback and perspective from local community leaders across the state.

Housing Listening Sessions

To gather feedback from local leaders, staff from the Kentucky Chamber Center for Policy and Research held a series of listening sessions in six Kentucky communities, including participants from the counties of Christian and Daviess in the west; Bullitt in central Kentucky; Boone, Kenton, and Campbell in the north; Boyd and Greenup in the northeast; and Laurel, Whitley, and Knox in the south.

More than 150 community members engaged in these small-group conversations from December 2023 through March 2024, with representation from local chambers of commerce, city and county government officials, business leaders, planning professionals, home builders, nonprofit professionals, realtors, economic developers, educators, and the general public. Chamber staff conducted live polling during these listening sessions on key housing issues and questions. The results are included throughout this report to complement and give life to the academic research, data, and scientific surveys that the report analyzes. This allows readers to more fully understand how housing issues are impacting Kentuckians and learn how local community leaders are thinking about these challenges and potential solutions.

The Report is Divided into Four Chapters:

- **Chapter 1. Why Housing Matters** explores the impact of housing on workforce participation and economic development.
- **Chapter 2. Kentucky's Current Housing Landscape** examines data and research on current housing challenges in Kentucky, including the age of the state's housing stock, a growing affordability crisis, and a range of estimates of the state's housing shortage.
- **Chapter 3. Kentucky's Future Housing Needs** considers possible population growth trajectories in the Commonwealth and suggests estimates of how much housing the state may need to build by 2050.
- **Chapter 4. Solutions** provides an overview of programmatic and public policy solutions for the state's housing challenges, drawing examples from other states and identifying assets and tools already available in Kentucky.



WHY HOUSING MATTERS

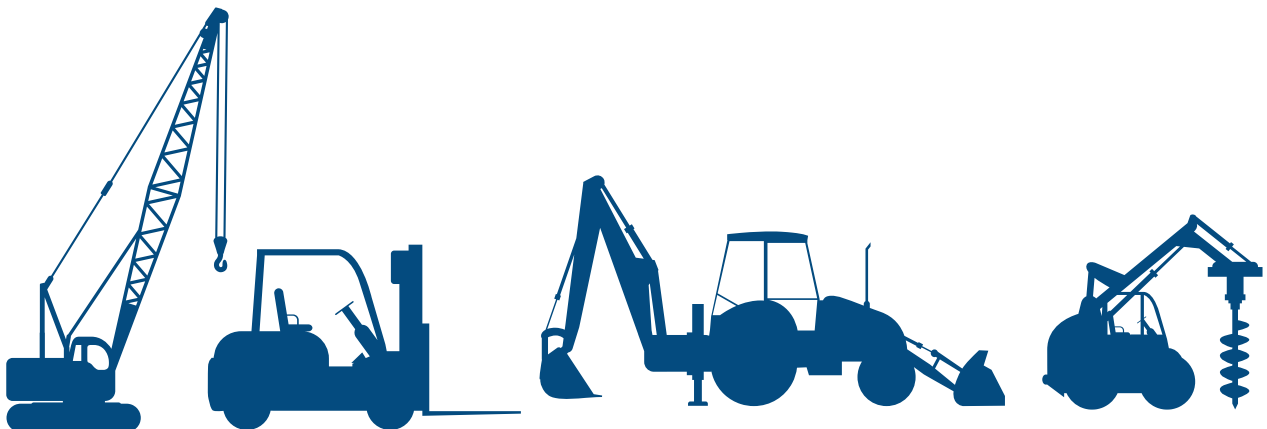
Chapter 1.

Any discussion of housing should start with the foundational question: why does housing matter? This section of the report briefly examines research demonstrating how housing affects workforce participation and economic development.



Key Takeaways:

- As Kentucky continues to struggle with low rates of workforce participation, policymakers should elevate housing as a workforce solution. Academic studies demonstrate that reliable housing helps ensure stable employment, increases worker productivity, and can help connect workers to jobs.
- Kentucky leaders view housing as a major economic development issue. 66.2 percent of local community leaders reported that housing is holding back economic growth and opportunity in their communities, and 89.8 percent said their areas could not meet the housing demands of a major economic development announcement.
- Home building is a significant driver of economic activity and state and local tax revenue, with estimates showing that building 1,000 single-family homes would yield a one-year economic impact of 3,764 full-time jobs and \$57.4 million in tax revenues.
- A study from 2017 concluded that housing shortages in America's metropolitan areas over the past 50 years have caused the U.S. economy to be 9 percent smaller today than it otherwise would be, robbing the average American worker of \$6,775 in higher annual wages.



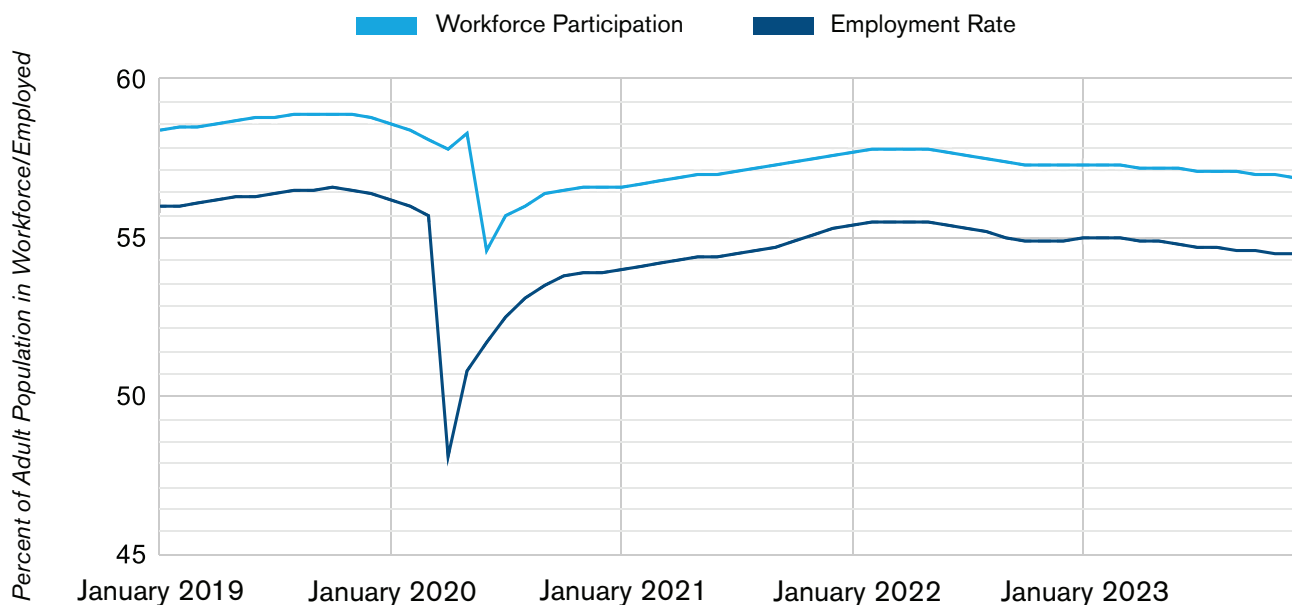
Housing Impacts Employment and Workforce Challenges

Workforce challenges have rightly been a major topic of concern in Kentucky. As demonstrated by a 2021 Kentucky Chamber Foundation report, Kentucky adults participate in the workforce at lower rates than adults in neighboring states and the rest of the nation. Despite important steps forward in public policy and proactive programming, this long-term challenge continues. As of January 2024, Kentucky had an overall workforce participation rate of 56.9 percent, down from 58.6 percent before the pandemic. The state's participation rate among prime-age workers – ages 25 to

54 – was 79.2 percent in 2023. This is 0.3 percentage points lower than before the pandemic and 4.1 percentage points lower than the national average.

Demographic trends such as lower birth rates and immigration tell us that employment and workforce challenges will persist into the future. Policymakers and community leaders will need to think creatively about attracting new workers and optimizing the workforce we already have. Housing should be a big part of this conversation.

Workforce Participation and Employment in Kentucky



Source: Bureau of Labor Statistics



"Policymakers and community leaders will need to think creatively about **attracting new workers** and **optimizing the workforce we already have**. Housing should be a big part of this conversation."

A connection between housing and workforce trends makes sense. Housing insecurity is disruptive and makes it harder to show up to work or devote time to a job search. Not being able to find or afford housing close to employment opportunities means job seekers may not even be able to consider applying for an open position unless they have access to reliable transportation and can make a long-distance daily commute.

Academic research bears this out. In 2016, Harvard researchers showed that workers experiencing housing insecurity were more likely to deliver poor job performances and become unemployed than workers with stable housing arrangements. A paper from 2023 studied the negative impacts of housing insecurity on maternal employment, noting that housing insecurity “creates chaos for families that necessitates more flexibility and support from employers.”

In turn, this dynamic negatively affects these mothers’ employment prospects and stability.

An Urban Institute study from 2019 looked at how the San Francisco area suffers from what the authors called a “spatial mismatch” of a high number of available jobs in the city and a low number of local job seekers who live near those jobs. The study found that job seekers who would be good matches for open jobs in the city lived in the area’s outer suburbs and would have to commute from considerable distances to take these open jobs. This type of job-worker mismatch makes it harder for employers to fill open positions and harder for job seekers to find employment that fits their experience and training. The study concluded that the causes of these mismatches were multifaceted, but San Francisco’s high housing costs were a major factor.

Housing Affects Economic Development

Housing also affects economic development, and we can think about this connection in two ways. First, home building is a major generator of economic activity. The National Association of Home Builders (NAHB) produced a study estimating that building 1,000 single-family homes in Kentucky would have a one-year economic impact of 3,764 full-time jobs and \$316.7 million in income for Kentucky residents. On a recurring basis, building 1,000 single-family homes would have an impact of 757 jobs and \$50.8 million in income for Kentucky residents. These impacts come from the direct activities of home building, indirect effects on other industries, and the positive effects of homeownership and population growth.

These impacts are also meaningful for state and local tax revenues, which fund important services like public safety and education. NAHB estimated \$57.4 million in taxes for local governments and the state as a result of building 1,000 new single-family homes and annually recurring revenues of \$16.6 million.

Second, housing plays an important role in business decisions. When employers study locations for new facilities or expansions (or if they are considering leaving), workforce and housing can be key variables. To fill the new jobs created by business investments, employers need workers; and workers need housing. Organizations like the National League of Cities (NLC) and the National Association of Counties (NACo) understand this dynamic well, informing their members that housing for workers is a driver of business location, relocation, and expansion decisions.

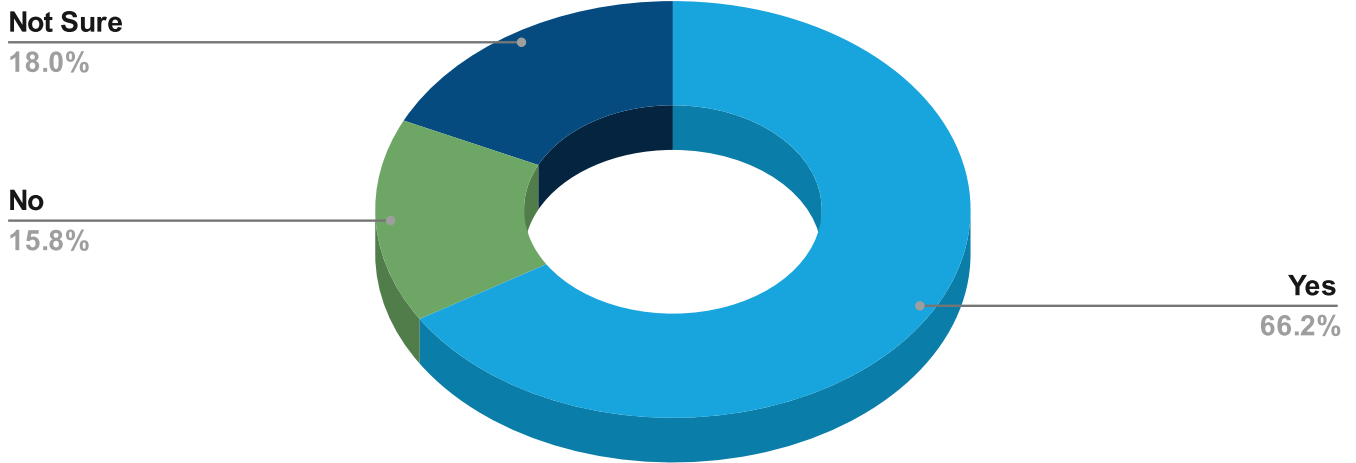


1,000 single-family homes in Kentucky would have a one-year economic impact of 3,764 full-time jobs and \$316.7 million in income.

“Access to affordable housing allows businesses to have access to a reliable workforce. A lack of affordable housing can put pressure on employees with long commutes or financial pressure from unaffordable rents or mortgage payments. A reliable workforce is critical to the financial success of any business of any size. Additionally, housing affordability at all income levels can support a talent attraction strategy.” - NLC

“... businesses are increasingly saying that they are looking at quality of life A key component of that quality of life is housing availability and affordability for workers from the CEO all the way to the line worker or entry level salesperson.” - NACo

Do you think housing challenges are holding back economic growth and opportunity in your community?

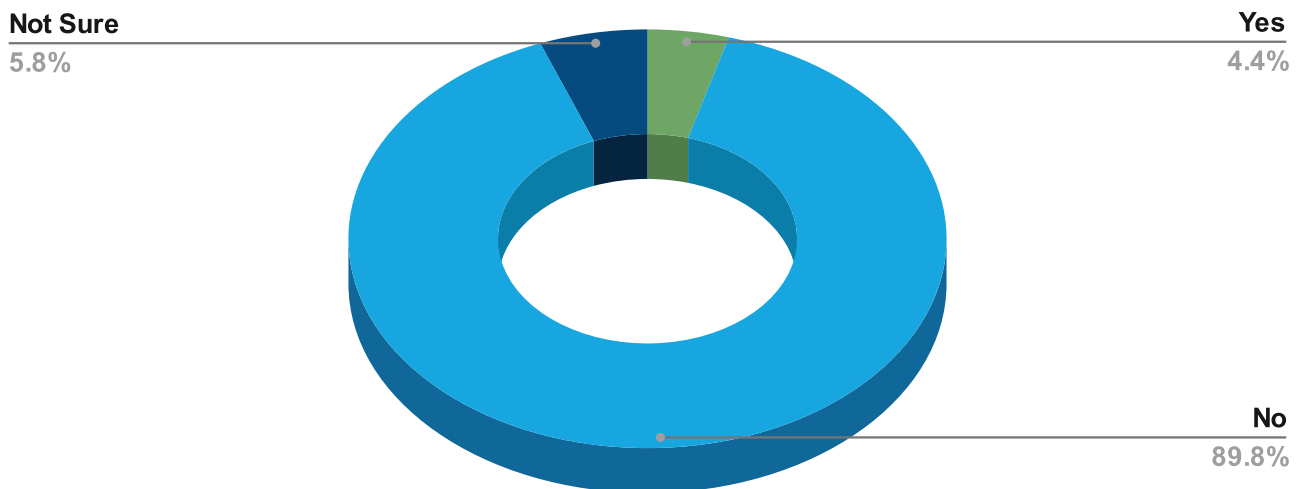


Kentucky Chamber 2024 Housing Tour

Local leaders in Kentucky understand this connection, too. During the Chamber's housing listening sessions, 66.2 percent of participants said housing challenges are holding back economic growth and opportunity in their communities, while 18 percent said they were unsure. When asked if they

thought their community could meet the housing demands to support an unexpected economic development project of 1,000 new jobs, participants were more unified in their response, with 89.8 percent responding "no."

If a major economic investment with 1,000 new jobs was announced in your community tomorrow, do you think your region is currently well-positioned to meet a growing demand for housing?



Kentucky Chamber 2024 Housing Tour

Understanding how housing affects economic development is important because communities that have failed to grasp this concept have paid a price. For example, a study by the Federal Reserve Bank of Boston showed how unsustainable housing prices reduced job growth in California cities. Other studies have shown how housing challenges have affected the U.S. economy. An analysis by researchers at the University

of Chicago and the University of California, Berkeley, concluded that housing shortages in America's metropolitan areas over the past 50 years have caused the U.S. economy to be 9 percent smaller today than it otherwise would be. This has effectively robbed the average American worker of \$6,775 in higher annual wages.



*"Housing shortages in U.S. cities have caused the U.S. economy to be 9 percent smaller today than it otherwise would be. **This has effectively robbed the average American worker of \$6,755 in higher annual wages.**"*

KENTUCKY'S CURRENT HOUSING LANDSCAPE

Chapter 2.

With an understanding of how housing relates to workforce and economic development, let's look at Kentucky's current housing landscape. This section of the report provides an overview of housing facts and statistics and highlights some of Kentucky's current housing challenges, including aging

housing units and affordability. Data resources and feedback from Kentucky leaders reveal significant housing challenges across the state that are already impacting local communities and economic opportunities.

Key Takeaways:

- While a majority of Kentucky's housing units were built between 1970 and 2009, more than 30 percent were built before 1970. Pre-1970 homes tend to be less energy-efficient and more in need of remediation and repairs.
- Rising housing costs are affecting every region of the state, leading 92.7 percent of surveyed local Kentucky leaders to say it would be difficult or very difficult for a middle-income family to find suitable housing in their community.
- Home prices are rapidly outpacing household incomes. In some of the areas of the state, the median sale price for a single-family home is now 5.1 times the median household income, up from 2.4 times the median household income 30 years ago.
- A rising share of Kentucky renters spend more than 30 percent of their monthly income on housing, including 44 percent of renter households in 2022.
- A shortage of housing is at the root of Kentucky's housing challenges, with 96.6 percent of surveyed local Kentucky leaders saying there is not enough housing in their communities.
- Homebuilding activity in Kentucky ground to a halt after the 2007-2008 recession, with average annual new housing permits falling 45 percent.
- Estimates for the national housing shortage range from 1.5 million to 20.1 million, while estimates for Kentucky range from 30,350 to 206,000 depending on the methodology and assumptions used.



The Basics of Kentucky's Housing Landscape

As of 2022, the U.S. Census Bureau estimated 2,023,679 total housing units in Kentucky. 1,828,680 of these units were occupied. Among occupied units, 1,257,737, or 68.8 percent, were owner-occupied and 570,943, or 31.2 percent, were renter-occupied. Kentucky's homeownership rate of 68.8 percent is slightly higher than the rates in the U.S. and Southern region, at 65.2 percent and 66.4 percent, respectively.

An estimated 194,999 housing units were vacant in Kentucky in 2022. Vacant, however, doesn't mean the unit was for sale or for rent or even that it was uninhabitable. In fact, only a small portion of vacant units were for sale or for rent in 2022: 9,237 units for sale and 26,031 available for rent. The remaining vacancy units fall under several different categories, including sold or rented but not yet occupied, for seasonal or recreational use, for migrant workers, or "other," which includes various reasons such as being uninhabitable.

Most Kentucky housing units are single-family detached structures, meaning they are not attached to adjoining structures like other housing units (a townhouse or row

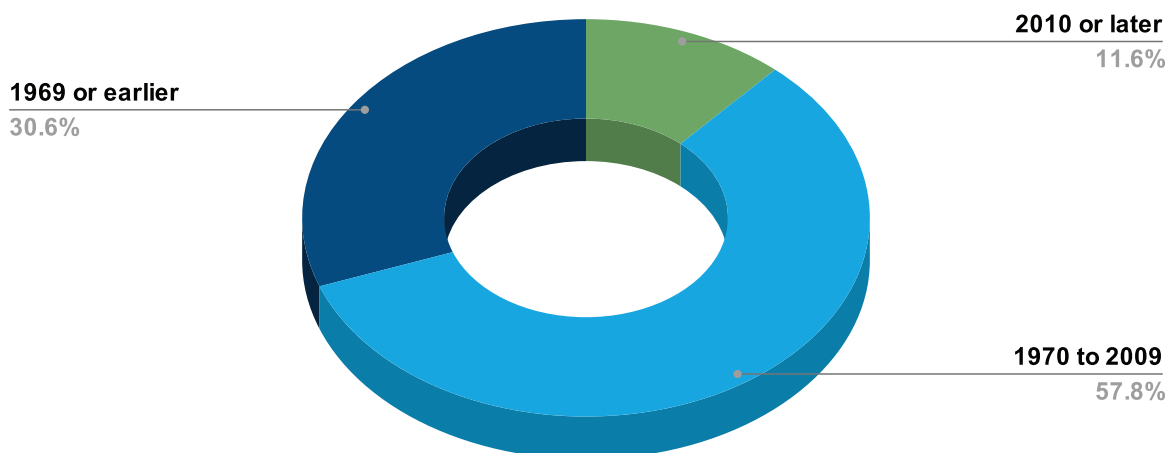
houses, for instance). 67.2 percent of Kentucky housing units met this definition, which is higher than the Southern U.S. region and the country, at 62.8 percent and 61.3 percent respectively. 18.8 percent of Kentucky's housing units are multifamily units (duplexes, triplexes, quadplexes, and apartments). This is lower than the Southern U.S. region (23.2 percent) and the U.S. (26.8 percent). The share of Kentucky housing units in larger multifamily structures is significantly lower than the Southern U.S. region and U.S. Just 3.7 percent of units are in structures with 20 or more units vs. 10.4 percent in the U.S. and 8.9 percent in the Southern U.S.

The majority of Kentucky housing units – 57.8 percent – were built between 1970 and 2009. However, Kentucky has a lot of units that predate the 1970s. A greater share of Kentucky's housing units were built before 1970 than units in the Southern U.S. region. 30.6 percent of Kentucky units predate the 1970s vs. 23.6 percent in the South. Nationwide, 35.3 percent of housing units were built before the 1970s.



"A greater share of Kentucky's housing units were built before 1970 than units in the Southern U.S. region. While older homes can be charming and of historical interest, they can also be less safe, less efficient, and more likely to need renovations."

When Kentucky's Housing Units Were Built



While older homes can be charming and of historical interest, they can also be less safe, less efficient, and more likely to need renovations. As noted by the National Association of Home Builders, “[i]n 1970 there were no codes or standards for energy efficiency, and the resiliency requirements motivated by the experiences with Hurricane Andrew in 1992 and the Northridge earthquake in 1994 were still years off. Many code changes targeting fire safety (such as requirements for smoke alarms, fire separation, fire blocking, draft stopping, emergency escape openings, electrical circuit breakers, and capacity and outlet separation) were also implemented after 1970.” Research by the Pew Research Center has shown that homes as of 2012 were 31 percent more energy efficient than homes in 1970, as measured by energy-usage per square foot.

The age of housing varies across Kentucky counties. In 74 out of Kentucky's 120 counties, 25 percent or more of housing units were built before 1970. In 19 counties, more than 40 percent of housing units were built before 1970, and this includes a mixture of some of the state's most urban counties and most rural counties.

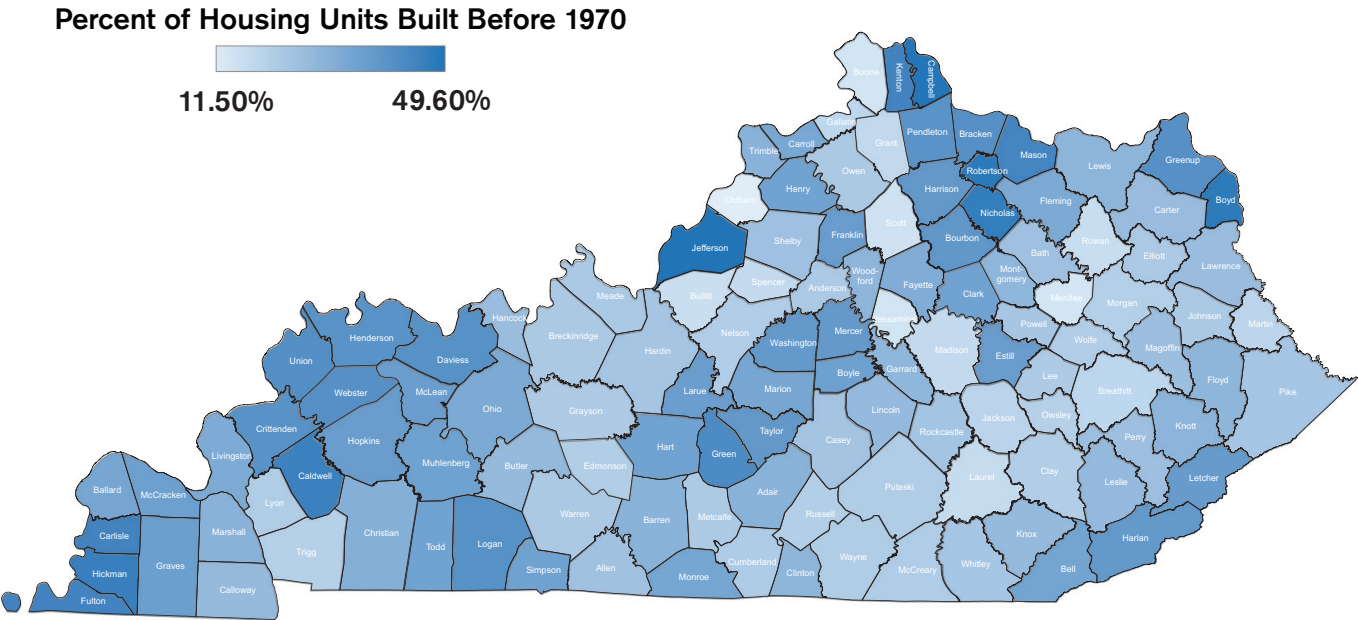
Housing Units Built Before 1970			
Year	Kentucky	South	United States
Built 1960 to 1969	9.7%	8.7%	9.8%
Built 1950 to 1959	8.2%	7.1%	9.5%
Built 1940 to 1949	3.7%	3%	4.4%
Built 1939 or earlier	9%	4.8%	11.6%
Built before 1970	30.6%	23.6%	35.3%

U.S. Census, ACS, 2022 1-Year, DP04



In 74 out of Kentucky's 120 counties, 25 percent or more of housing units were built before 1970.

Portion of Kentucky Housing Units Built Before 1970 by County



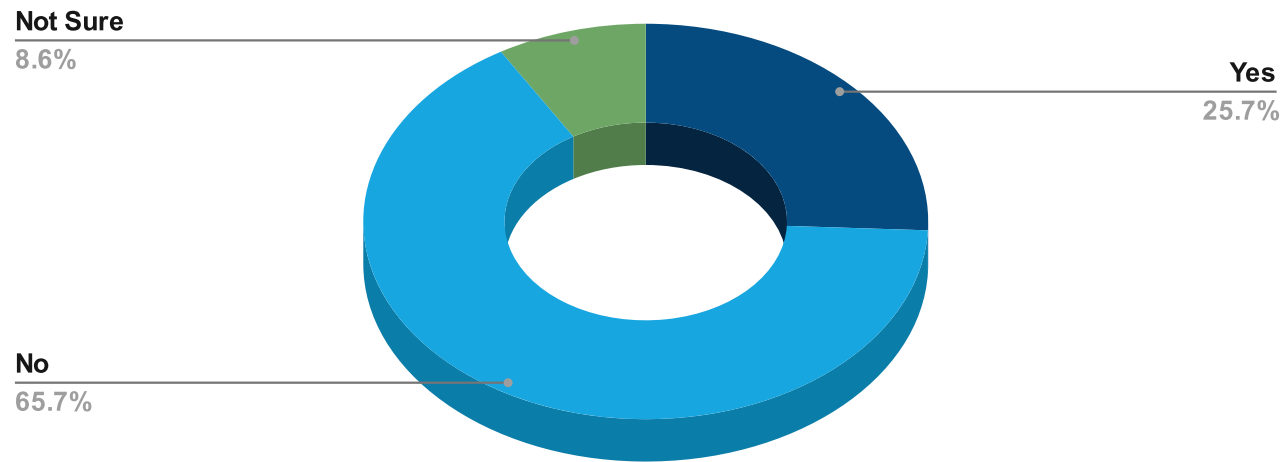
Source: ACS, 2022 5-Year Estimates, DP04, calculations by author

Housing Affordability

Any Kentuckian who has tried to buy a home or find a rental in recent years can tell you that housing has become prohibitively expensive for too many families. When we asked local community leaders if they thought housing in their community was affordable to most working families, 65.7

percent said no and 8.6 percent said they weren't sure. When we asked, "if a middle-income family of four was interested in moving to your community within the next three months, how easily do you think they would find housing that fits their needs," 92.7 percent said difficult or very difficult.

Do you think housing in your community is affordable to most working families?

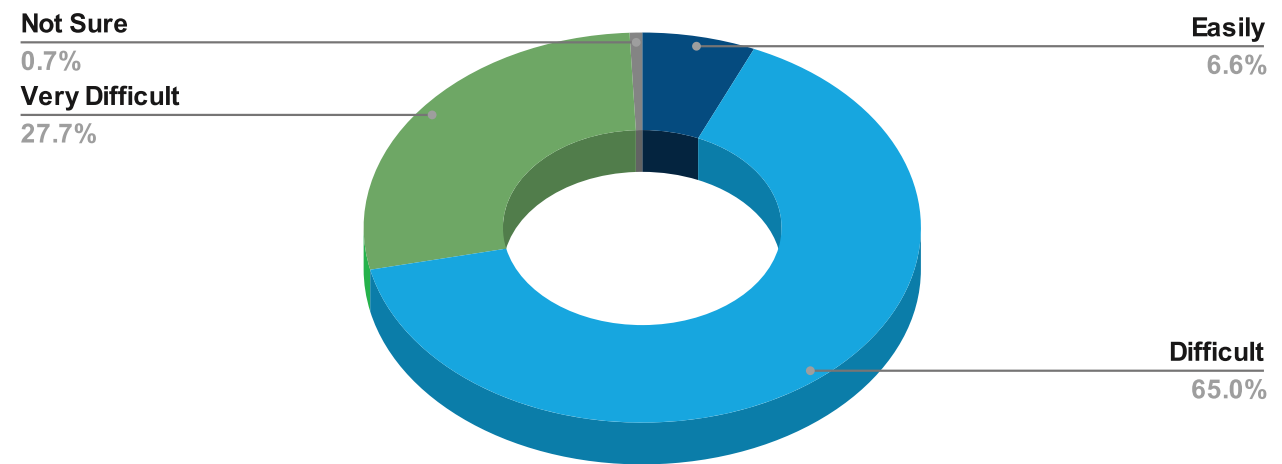


Kentucky Chamber 2024 Housing Tour

Concerns over housing affordability is an issue of national concern. A Pew Research Center survey from 2021 showed that 85 percent of Americans think the availability of affordable housing is a problem in their community, with 49 percent considering it a major problem. Younger Americans view the problem as more severe than older Americans do. For

example, 55 percent of Americans below the age of 50 consider housing affordability to be a major problem while 44 percent of Americans between the ages of 50 and 64 and 39 percent of Americans 65 or older see it as a major problem. A sizable majority of all age groups, however, view affordability as a problem.

If a middle-income family of four was interested in moving to your community within the next three months, how easily do you think they would find housing that fits their needs?



Kentucky Chamber 2024 Housing Tour

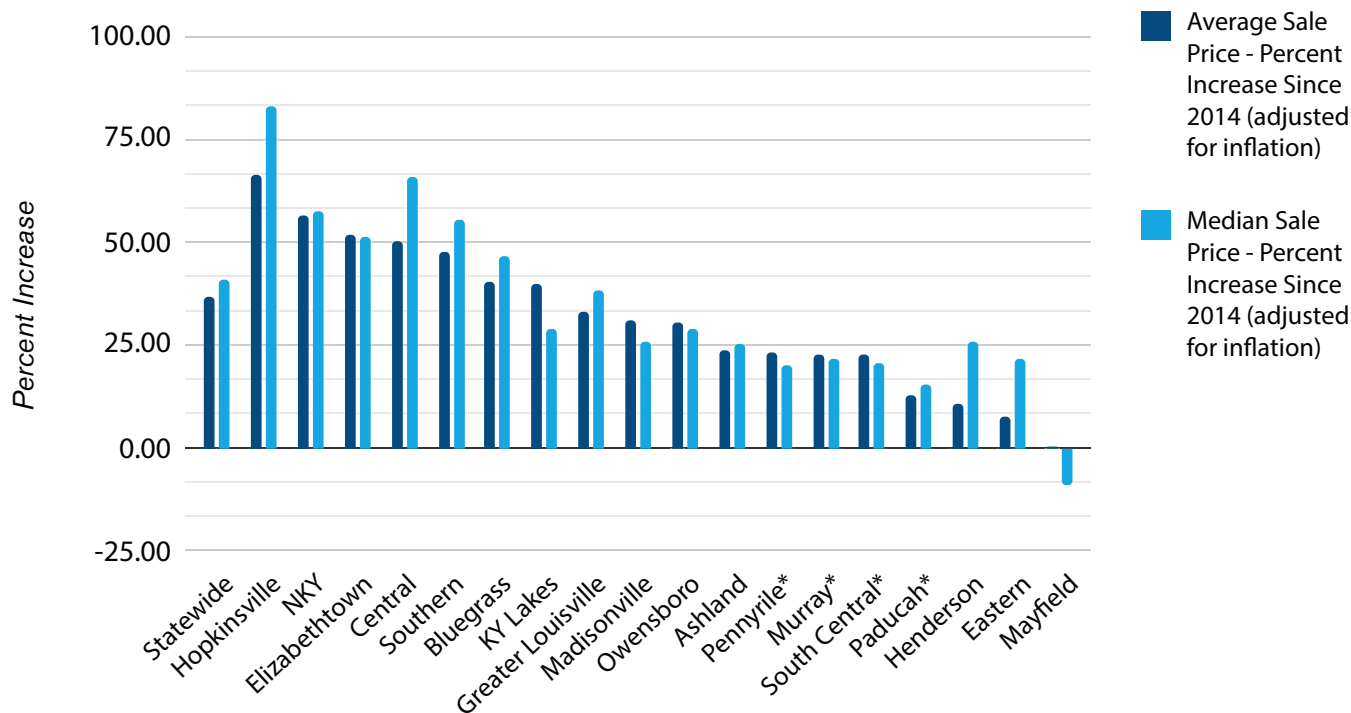
Data from the Kentucky Realtors and other sources underscore how housing costs have risen in the Commonwealth both statewide and regionally. Statewide, the average home sale price in 2023 was \$283,000, while the median sale price was \$245,000. This is a significant increase over where sale prices stood less than a decade prior. Between 2014 and 2023, the average sale price of a home in Kentucky, adjusted for inflation, increased 36.8 percent, based on Kentucky Realtors data. The median sale price increased 41 percent.

Census data shows similar levels of increases. Between 2014 and 2022, the inflation-adjusted median value of owner-occupied housing units increased 28 percent, rising from \$153,000 in 2014 to \$196,000 in 2022. Similarly, the percentage of Kentucky homeowners with total monthly housing costs above \$1,000 has risen. In 2014, 58.3 percent of housing units with a mortgage had total housing costs above \$1,000. In 2022, 73.8 percent were above \$1,000, with 18 percent above \$2,000 (vs. 9.6 percent in 2014).

Kentucky Realtors data shows that rising home sale prices are affecting nearly every region of the state, urban and rural, though sale prices have risen in some areas more quickly than in others. The area around Hopkinsville (which includes a portion of Montgomery County, Tennessee) saw its median home sale price increase by 82.8 percent between 2014 and 2023 and the average sale price increase by 66.4 percent. The median sale price in northern Kentucky increased by 57.3 percent and the average sale price increased by 56.5 percent. The area around Elizabethtown saw its median and average sale prices increase 51 percent. The Mayfield area saw a slight decline in median sale prices from 2014 to 2023. This is likely the result of the December 2021 tornadoes, which destroyed more than 1,000 homes across the state. Median and average sale prices in the area had been steadily rising since 2018. Similarly, flooding that damaged or destroyed nearly 9,000 homes across eastern Kentucky in July 2022 likely slowed rising home sale prices in that area.

Percent Increase in Kentucky Home Sales Prices, 2014-2023

Statewide and by Kentucky Realtors Board Regions, Inflation-Adjusted

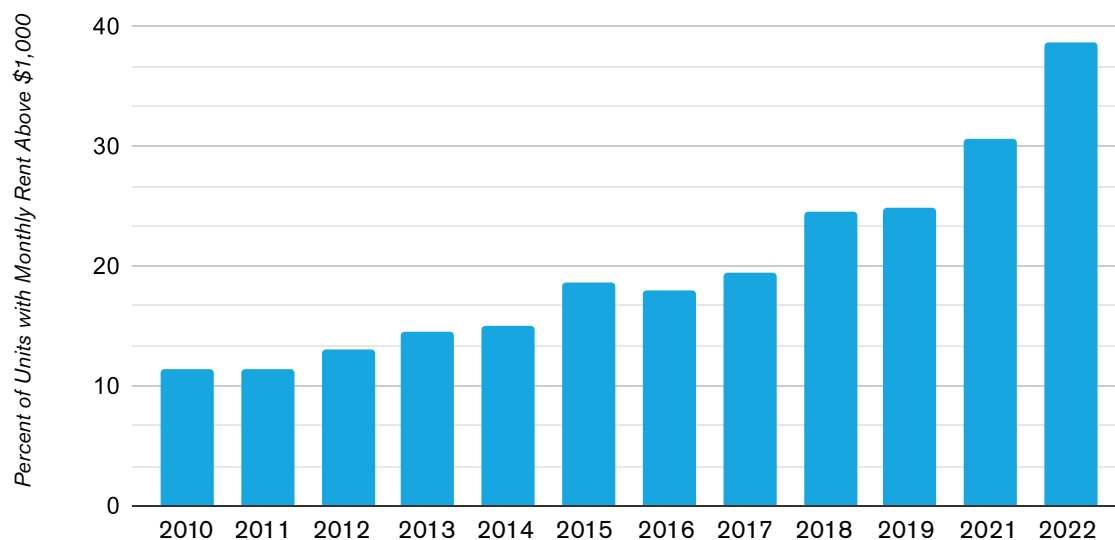


Source: Kentucky Realtors, calculations by author, *indicates data does not go back to 2014



Rental prices have risen steadily over the past decade as well. According to the real estate website Zillow, the median rent for a three-bedroom unit in Kentucky was \$1,600 in February 2024, up \$100 over February 2023. For many Kentucky renters, monthly gross rent above \$1,000 is quickly becoming the norm. Prior to 2014, less than 15 percent of active Kentucky rental units had gross rents above \$1,000. As of 2022, that number had risen to 38.7 percent.

Percent of Occupied Units with Monthly Rent Above \$1,000, Kentucky



Source: ACS, 2022 1-Year Estimates, DP04

Rising wages and household incomes help blunt the rising cost of housing. Hourly median wages have grown steadily in Kentucky's broader Census region since 2014 with accelerated growth coming out of the pandemic. Between 2012 and 2022, inflation-adjusted median household incomes in Kentucky increased 11.5 percent, and median incomes for families increased 12.6 percent.



Wage Growth in Census' East South Central Division (AL, KY, MS, TN)

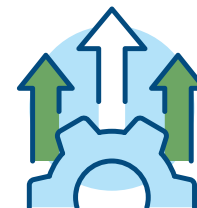
12-Month Moving Average of Median Hourly Wage Growth



Source: Federal Reserve Bank of Atlanta, Wage Growth Tracker

Nonetheless, the cost of housing is out of reach for many Kentuckians. Comparing median home sale prices in 2022 to median household and family incomes helps illustrate this point. **For a buyer to afford a median-priced house in Kentucky in 2022 – \$235,000, based on Kentucky Realtors data – they would need an estimated annual gross income of \$90,494. This is 153 percent of Kentucky’s median household income (\$59,341 as of 2022, the most recent data available) and 118 percent of Kentucky’s median family income (\$76,119).**

A median-priced home in Kentucky would be unaffordable for at least 60.3 percent of households and 49.2 percent of families, using median income data from 2022. In a lower interest rate environment, a new house would still be out of reach for most Kentucky households and families. Using a 5 percent interest rate, a median-priced home in 2022 would require an annual income of \$84,817. This is 142 percent of the median household income and 111 percent of the median family income in Kentucky.



Income in the Past 12 months, 2022	Kentucky Household Estimate (%)	Kentucky Families Estimate (%)
Less than \$10,000	6.8	4.3
\$10,000 to \$14,999	5.8	2.8
\$15,000 to \$24,999	8.9	5.9
\$25,000 to \$34,999	8.9	7.4
\$35,000 to \$49,999	12.4	11.1
\$50,000 to \$74,999	17.5	17.7
Less than \$75,000	60.3	49.2
\$75,000 to \$99,999	12.6	14.7
\$100,000 to \$149,999	14.9	19.5
\$150,000 to \$199,999	6.2	8.4
\$200,000 or more	6	8.2
Median income (dollars)	\$59,341	\$76,119

Source: ACS, 2022 1-Year Estimates, S1901

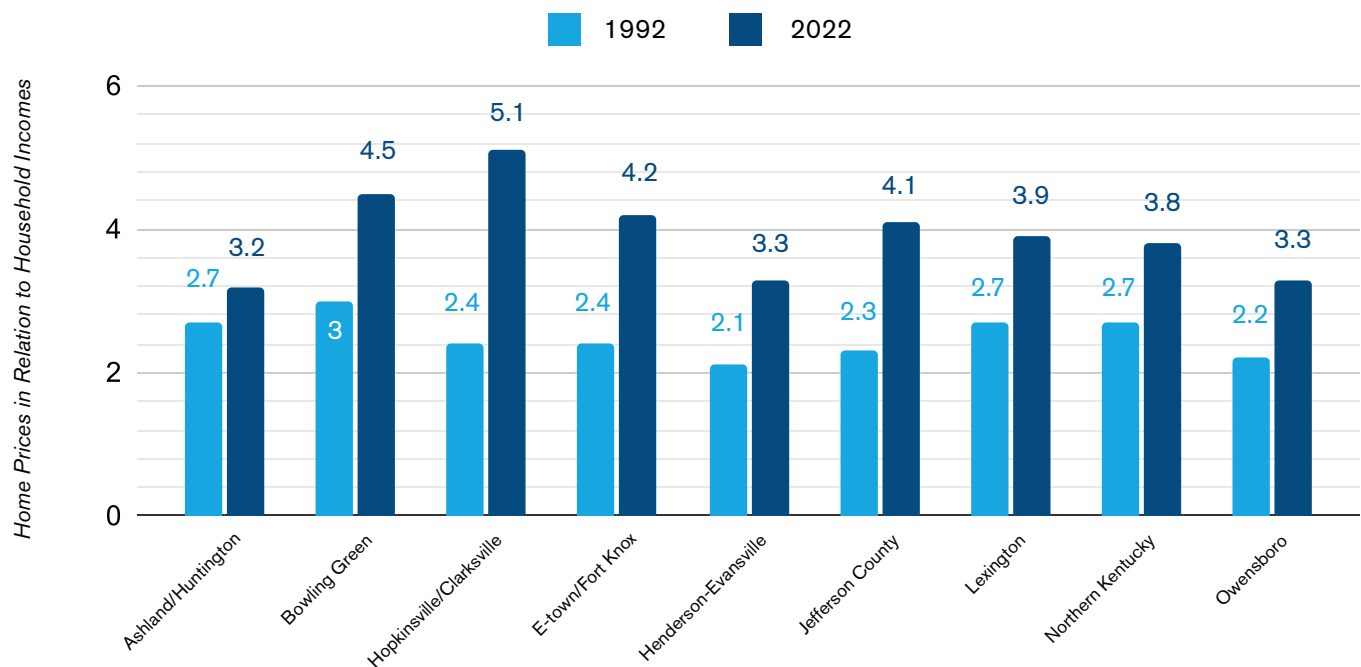
A report by Harvard University’s Joint Center for Housing Studies (JCHS) offers a clear demonstration of how housing prices in Kentucky have begun to outpace incomes by comparing median sale prices for single-family homes to median household incomes in the state’s major metro areas. In the area around Elizabethtown, the median home price in 1992 was 2.4 times the median household income. By 2022, that ratio had risen to 4.2. In Bowling Green, the median home price in 1992 was 3 times the median household income. It was 4.5 in 2022.

The largest increase among these metro areas occurred in the Hopkinsville-Clarksville metro area, where the ratio jumped from 2.4 in 1992 to 5.1 in 2022. Using different data but a similar methodology, we can calculate that the statewide median home price in 2022 was 3.9 times the median household income, roughly in line with what JCHS calculated for areas like Lexington and northern Kentucky. These ratios illustrate a widening gap between how much a single-family home costs in these areas compared to how much households can afford.



The statewide median home price in 2022 was 3.9 times the median household income.

Home Price-to-Income Ratios for Kentucky Metro Areas, 1992-2022



Source: Harvard JCHS

Home Price-to-Income Ratio = median sale price for a single-family home divided by area median household income

As noted earlier, challenges with housing affordability are a nationwide problem and not unique to Kentucky. According to the National Association of Home Builders' "Housing Affordability Pyramid," 64.8 million households out of a total of 132.5 million were unable to afford a \$250,000 home as of 2021. A total of 39 million households were unable to afford a home that costs more than \$150,000.

A consequence of the imbalance between the rising cost of homes and household incomes is that 23 percent of Kentucky homeowners with a mortgage were spending 30 percent or more of their monthly income on housing costs as of 2022. Prior to the pandemic, in 2019, 21.2 percent of Kentucky homeowners with a mortgage were spending 30 percent or more of their monthly income on housing costs. Census and

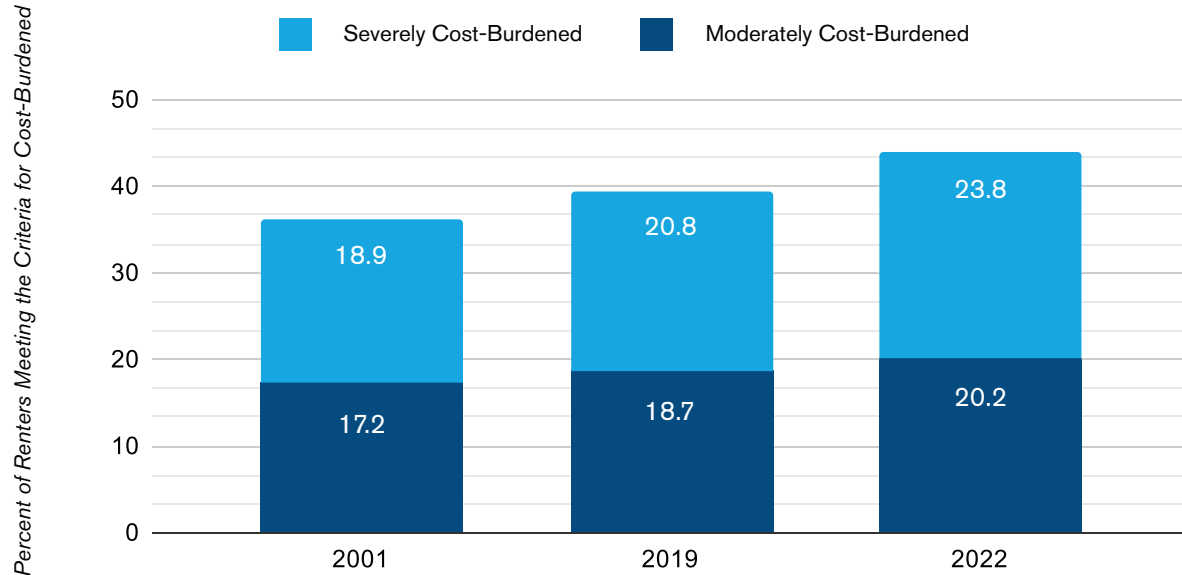
the U.S. Department of Housing and Urban Development consider households that spend more than 30 percent of their monthly income on housing to be "cost-burdened."

Additional research from Harvard's Joint Center for Housing Studies shows how housing prices are affecting renters in Kentucky. In 2022, 44 percent of Kentucky renters were considered cost-burdened by housing. 23.8 percent were considered "severely cost-burdened," spending more than 50 percent of their income on rent and utilities. The share of renters who are cost-burdened has risen since before COVID and since 2001. In 2001, for instance, 36.1 percent of Kentucky renters met the criteria for cost-burdened, and 18.9 percent were severely cost-burdened.



*"A consequence of the imbalance between the rising cost of homes and household incomes is that **23 percent of Kentucky homeowners with a mortgage were spending 30 percent or more of their monthly income on housing costs as of 2022.**"*

Cost-Burdened Renter Households, Kentucky

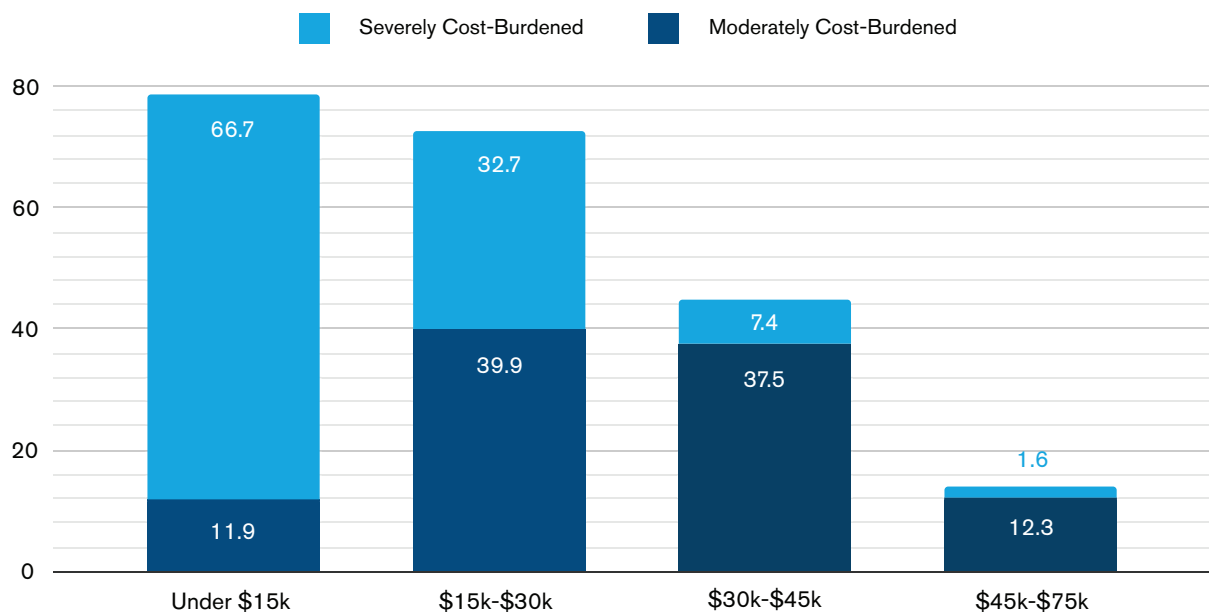


Source: Harvard JCHS

Very low-income households are far more likely to be cost-burdened than other income groups. Among renters with household incomes below \$15,000, 78.6 percent were cost-burdened in 2022 – 66.7 percent were severely cost-burdened. Many middle-income households, however, are

also cost-burdened. Among households with incomes between \$45,000 and \$75,000, 14 percent are cost-burdened. Across all renter households with incomes below \$75,000, the share that meets the criteria for cost-burdened has increased since before the pandemic and since 2001.

Cost-Burdened Renters by Income Groups, 2022



Source: Harvard JCHS



JCHS has also tabulated cost-burdened data on Kentucky renters at the metropolitan and micropolitan area levels. In large and small urban areas across the state, the share of renter households that are cost-burdened ranges from 33 percent to 44 percent.

Metro/Micro Area Name	Renter Cost-Burdened Households (%)	Renter Severely Cost-Burdened Households (%)	Renter Cost-Burdened Households (Count)	Renter Severely Cost-Burdened Households (Count)	Renter Median Household Income (\$)	Renter Median Monthly Housing Costs (\$)
Ashland-Huntington	43.12	28.24	16,484	10,796	26,000	830
Bardstown	35.35	19.61	1,404	779	33,600	666
Bowling Green	48.37	24.71	14,407	7,359	36,000	960
Campbellsville	41.59	20.34	1,552	759	23,000	601.5
Central City	42.14	20.58	1,407	687	31,550	750
Hopkinsville-Clarksville	44.48	23.91	19,948	10,722	45,000	1120
Danville	33.10	25.27	2,021	1,543	40,000	832
Elizabethtown-Fort Knox	39.57	19.53	7,593	3,748	42,000	830
Evansville-Henderson	47.09	26.34	17,941	10,037	33,000	880
Frankfort	41.16	16.93	3,395	1,396	39,000	920
Glasgow	36.73	19.81	2,324	1,254	31,750	726
Lexington	49.81	28.34	43,139	24,540	38,000	987
London	35.28	15.28	5,791	2,509	28,800	632
Jefferson County	47.69	24.77	77,404	40,198	40,000	1020
Madisonville	42.14	20.58	2,066	1,009	31,550	750
Mayfield	36.98	20.93	1,366	773	26,000	750
Maysville	33.53	25.48	677	514	31,000	810
Middlesboro	39.43	21.75	1,147	632	22,500	593
Mount Sterling	33.53	25.48	1,857	1,411	31,000	810
Murray	36.98	20.93	1,383	783	26,000	750
Northern KY	46.59	27.25	130,528	76,362	39,000	1,000
Owensboro	46.05	21.07	6,435	2,944	32,000	760
Paducah	36.26	20.56	3,625	2,055	26,000	735
Richmond-Berea	45.24	17.05	7,589	2,861	35,150	780
Somerset	46.28	29.30	3,768	2,386	24,500	740

Source: Harvard JCHS (Using ACS 2022 1-Year Estimates)

Supply vs. Demand: Kentucky's Housing Shortage

Challenges such as an aging housing stock and rising home prices and rents are familiar problems in communities across the nation. A common denominator is a growing imbalance between housing supply and demand for housing. While this is not the sole cause of housing challenges in Kentucky and elsewhere, it's one of the most significant.

Researchers on both the left and right of the ideological spectrum agree that a shortage of housing is a root cause of today's housing challenges. For example, researchers at the right-of-center American Enterprise Institute state plainly in a January 2024 report:

- "In most of the country, housing supply and demand are imbalanced. Wage and worker growth (demand) has outpaced new additions to the housing stock (supply). The result is worsening affordability."

In July 2022, researchers at the left-of-center Economic Policy Institute wrote:

- "Rising housing costs have made housing largely inaccessible and unaffordable to most Americans, but have acutely impacted communities of color and low- to moderate-income families over the past several decades... A growing housing supply shortage is a key contributor to the housing affordability crisis."

Researchers that fall in the middle of the political spectrum also agree, with analysts at the Bipartisan Policy Center in December 2022 writing:

- "The United States faces an acute shortage of homes both for rent and sale, resulting in increasingly unaffordable housing costs for families across the nation. The current undersupply is largely a result of the failure to build enough new homes over the past couple of decades," wrote researchers at the Bipartisan Policy Center in December 2022.



*"Researchers on both the left and right of the ideological spectrum agree that **a shortage of housing is a root cause of today's housing challenges.**"*

Studies have particularly emphasized a lack of middle-income housing – or “the missing middle.” These are homes that fall between low- and high-income levels on the affordability spectrum and are generally designed to meet the needs of middle-income families or first-time homeowners and renters who earn too much to qualify for subsidies but not enough to afford housing without being cost-burdened. Examples of missing middle housing include duplexes, triplexes, quadplexes, townhomes, carriage houses, and courtyard buildings and also smaller entry-level homes. Local land-use and zoning rules have historically made construction and development of middle income housing options very difficult or impossible, which will be discussed in more detail.

How significant is the country's broader housing shortage? There is a wide range of estimates of the U.S. housing shortage that vary based on methodologies and the specifics of what researchers seek to measure. For example, some estimates look only at the shortage of housing for low-income households, while others look broader but use very specific metrics and variables. This has resulted in national estimates ranging from 1.5 million units to 20 million units.

It is important that policymakers and stakeholders not view housing shortage estimates through the lens of “correct vs. incorrect.” Instead, they should understand that different methodologies yield different results. The most important takeaway is that these estimates, regardless of their methods, all point to a severe nationwide housing shortage.

The Range of Estimates for the U.S. Housing Shortage

- **National Association of Home Builders:** 1.5 million housing units for sale/rent (2021)
- **Freddie Mac:** 3.8 million housing units (2020)
- **National Association of Realtors:** 5.5 million to 6.8 million housing units (2021)
- **Realtor.com:** 2.3 million single-family homes (2023)
- **National Low Income Housing Coalition:** 7.3 million low-income rental units (2022)
- **Kevin Corinth (AEI)/Hugo Dante (George Mason University):** 20.1 million housing units (2022)



*"Policymakers and stakeholders should not view housing shortage estimates through the lens of "correct vs. incorrect." Instead, they should understand that different methodologies yield different results. The most important takeaway is that these estimates, regardless of their methods, **all point to a severe nationwide housing shortage.**"*

What do we know about housing shortages in Kentucky?
Local leaders across Kentucky are almost unanimous in concluding that their communities face a housing shortage.

When we asked, "In general, do you think there is currently an ample supply of housing in your community to meet the needs of families and workers," 96.6 percent of the community leaders we surveyed said no.

In general, do you think there is currently an ample supply of housing in your community to meet the needs of families and workers?

Not Sure

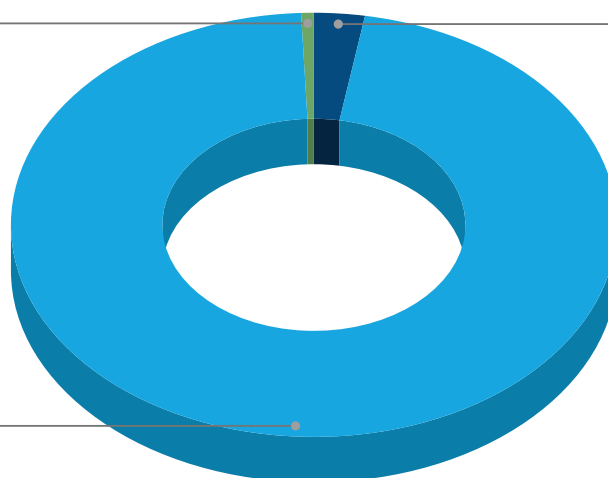
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Yes

2.7%

No

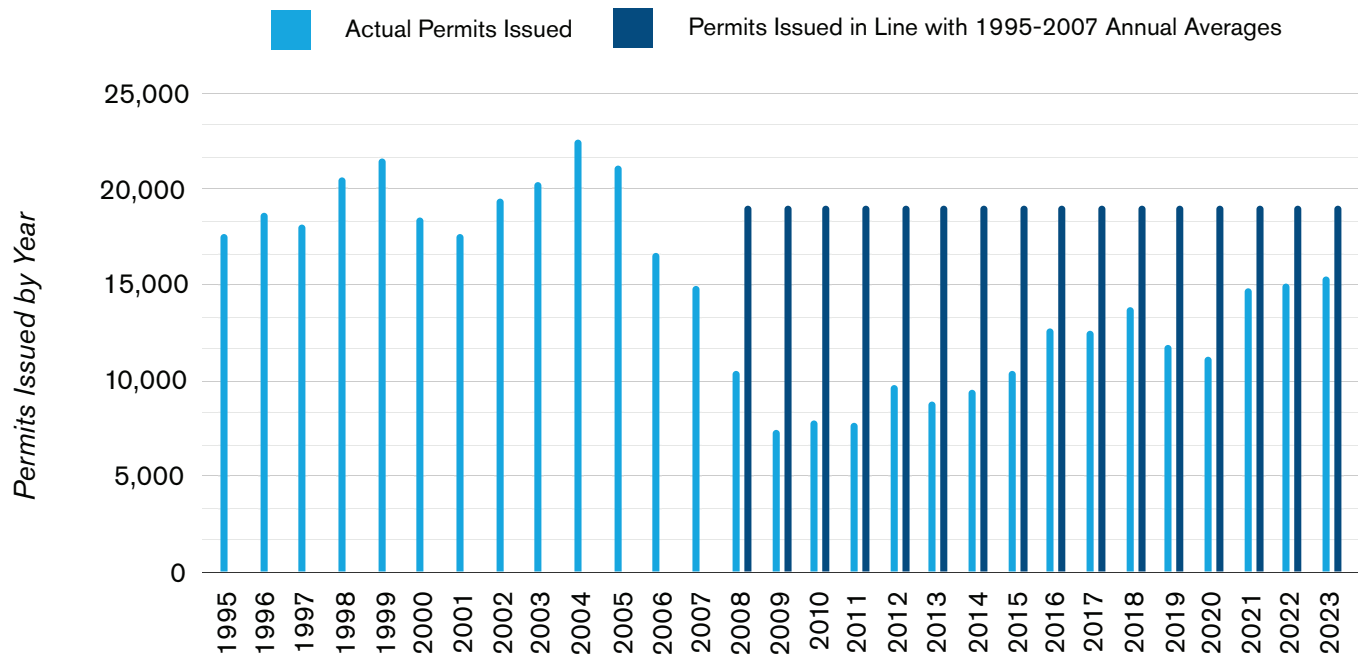
96.6%



Census data and other resources can help us understand why so many local leaders point to housing shortages in their communities and shed further light on the dynamics of this issue in the Commonwealth. Census tracks the number of

building permits issued for new residential construction at the national, state, and local levels. A building permit does not mean a new housing unit is constructed, but it serves as an indicator of residential construction activity.

Building Permits Issued in Kentucky (Single-Family and Multi-Family)



Source: Building Permits Survey, calculations by author

The story that housing permit data tells is that housing construction in Kentucky collapsed following the Great Recession that began in late 2007 and has been slow to recover. From 1995 to 2007, the state averaged 19,084 permits per year, with a peak of 22,623 permitted housing units in 2004. From 2008 to 2020, the state averaged 10,361 permitted housing units per year, a 45 percent decline from the prior period. In 2021, the pace started picking up and that has carried through into 2023. However, permitting from 2021 to 2023 was still lower than it was before the Great Recession and not nearly robust enough to make up for the accumulated deficit the state built up from 2008 to 2020. If Kentucky had issued permits for new housing units from 2008 to 2023 at the same rate it had before the Great Recession, the state would have issued an additional 125,362 permits.

Another way to look at housing shortages is homeowner and rental vacancy rates. These metrics consider the portion of homeowner and rental inventory that is for sale or rent. This metric excludes other types of vacant units like ones for seasonal, recreational, and occasional use or ones that are uninhabitable. An examination of Kentucky's vacancy

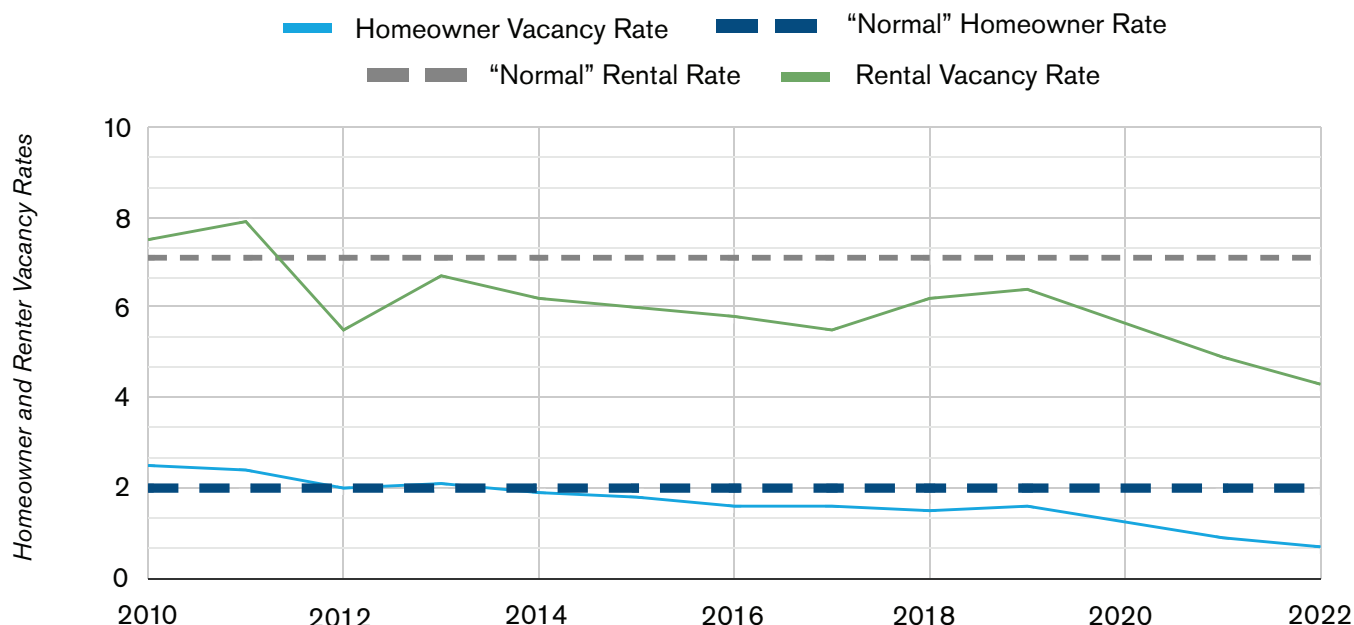
rates shows that individuals looking for new housing in the Commonwealth have fewer options today than they used to.

As of 2022, Kentucky's homeowner vacancy rate was 0.7 percent. Its rental vacancy rate was 4.3 percent. Both metrics have been in a near-steady state of decline for more than a decade. Between 2010 and 2022, Kentucky's homeowner vacancy rate decreased 72 percent and its renter vacancy rate decreased 43 percent. According to economists at the National Association of Home Builders, Kentucky's normal homeowner vacancy rate – based on data going back to 2005 – is 2 percent, while its normal rental vacancy rate is 7.1 percent. This means that Kentucky's normal homeowner vacancy rate is almost three times the state's 2022 rate, and its normal rental vacancy rate is 1.6 times the 2022 rate. As noted by NAHB economists, this is a signal for a housing shortage: "Homeowner and rental vacancy rates are one of the key statistics that are used to judge the health and direction of the housing market. The current low homeowner and rental vacancy rates are typically interpreted as a sign of tight housing markets, with abnormally low vacancy rates signaling a greater housing shortage."



"An examination of Kentucky's vacancy rates shows that individuals looking for new housing in the Commonwealth have fewer options today than they used to."

Homeowner and Renter Vacancy Rates, Kentucky



Source: ACS, 1-Yr Estimates, DP04, NAHB Estimates

Can we quantify Kentucky's housing shortage? The answer to that all depends on what methodology you use. Some of the discussed previously national estimates produced estimates for the states. One estimate by scholars at the American Enterprise Institute and George Mason University suggests a shortage of 53,110 units in Kentucky as of 2021. Their estimate considered "the gap between the current number of homes and the number of homes that would exist absent supply constraining regulations." Another estimate by the National Low Income Housing Coalition suggests a shortage of 88,236 rental units for Kentucky households with incomes at or below 30 percent of the area median income. The National Association of Home Builders, using a methodology based solely on an analysis of vacancy rates, estimated a shortfall of 30,350 units in 2021, including 14,000 homes for sale and 16,350 units for rent.

Recently, the Kentucky Housing Corporation and Bowen National Research (KHC/BNR) produced estimates of

housing supply gaps in Kentucky, which they defined as "the gap between the current housing stock and the housing needs of its residents." KHC/BNR estimates a housing gap of 206,207 new units needed to make up for Kentucky's housing supply gap. This included 101,569 new rental units and 104,638 new for-sale units. KHC/BNR also estimated housing supply gaps for individual counties and area development districts. Their methodology incorporated a range of variables, including affordability, vacancies and unit listings, the need to replace substandard housing and commuter patterns. According to the report, the greatest need for more rental units is among households earning less than 30 percent of their area median income. For single-family homes, the need for more housing is distributed more evenly among all household income ranges. Housing needs vary significantly among individual counties, the report found. Counties with the greatest housing gaps (based on the local housing gap as a percentage of total households) include Boone, Carroll, Franklin, and Marshall.

The other national estimates discussed before do not include state-level estimates, but we can produce rough approximations by adjusting them based on Kentucky's total households as a percentage of total U.S. households (1.4 percent). Note, however, that this approach does not account for differences in regionality or higher concentrations of

housing shortages in certain parts of the country. Combining these estimates with Kentucky-specific estimates results in a housing shortage in the Commonwealth ranging from 30,350 units to 206,207 units, depending on methodologies and focal points.

A Range of Estimates for Kentucky's Housing Shortage

- **National Association of Home Builders:** 30,350 vacant housing units for sale/rent estimated specifically for Kentucky (2021)
- **Realtor.com:** *adjusted for KY population:* 32,200 single-family homes (2023)
- **Kevin Corinth (AEI)/Hugo Dante (George Mason University):** 53,110 housing units estimated specifically for Kentucky (2022)
- **Freddie Mac:** *adjusted for KY population:* 53,200 units (2020)
- **National Low Income Housing Coalition:** 88,236 rental units estimated for very low-income households specifically for Kentucky (2022)
- **National Association of Realtors:** *adjusted for KY population:* 77,000 to 95,200 units
- **Kentucky Housing Corporation/Bowen National Research:** 206,207 units

In addition to these statewide estimates, several Kentucky communities have produced local housing shortage estimates or projections of housing needs, including Jefferson County, northern Kentucky, Bowling Green, and Hardin County, home of the new BlueOval SK Battery Park.

As with the national estimates, these state and local estimates should not be considered through the lens of "correct vs. incorrect." Instead, they reflect different methodologies and approaches to producing a complicated estimate. What matters most is that these estimates all underscore the same point and illustrate the need for more housing opportunities across the state. Kentucky faces a housing shortage no matter what methodology or approach one uses.

- **Jefferson County:** A need for 31,421 new housing units for very low-income residents
- **Northern Kentucky:** 6,650 new housing units across eight counties over the next five years
- **Owensboro:** 7,764 new units by 2028
- **Elizabethtown/Fort Knox MSA:** A need for 8,811 new housing units by 2030
- **Bowling Green and Warren County:** A housing gap of 14,000 units



"What matters most is that these estimates all underscore the same point and illustrate the need for more housing opportunities across the state. Kentucky faces a housing shortage no matter what methodology or approach one uses."

KENTUCKY'S FUTURE HOUSING NEEDS

Chapter 3.

While housing challenges are already impacting local communities across Kentucky, these challenges could become more pressing in the coming years depending on the trajectory of population growth in the Commonwealth. Baseline estimates of Kentucky's future population trends suggest continued modest growth, but other factors could accelerate growth in the state. Under either scenario,

Kentucky will need more housing to accommodate more households and families and will need to increase housing production in order to meet growing demand.

This section of the report looks at Kentucky's past and future population trends and offers estimates of the number of new housing units Kentucky may need to build by 2050 in order to accommodate future growth.

Key Takeaways:

- Kentucky has historically been a moderate population growth state; and current projections expect the state's population to continue growing at an anticipated rate of 6.2 percent through 2050, rising to a population of more than 4.7 million Kentuckians.
- Factors that might reshape Kentucky's trajectory include accelerated population growth trends in the south and southeastern United States and pro-growth public policy supported by the private sector and policymakers.
- Conservative estimates of the amount of housing Kentucky would need to build through 2050 to keep pace with population growth range from 361,000 new housing units to 529,000.
- Meeting estimates for Kentucky's future housing needs would require annual housing construction activity to increase by as much as 78.6 percent compared to the previous 15 years of housing construction activity in the state.



Population Growth and Future Housing Needs in Kentucky

Population growth in Kentucky has historically been moderate in comparison to other states and the rest of the country. Between the 1910 and 2020 censuses, Kentucky's population grew 96.7 percent. The United States population, on the other hand, grew 259.3 percent during this period.

In the most recent census, population growth in the Commonwealth showed signs of slowing, growing just 3.8 percent from about 4.3 million residents to 4.5 million. This was lower than the national rate of 7.4 percent.

Researchers who study population growth expect the United States population to grow more slowly in the coming decades as Americans have fewer children than they used to and as immigration slows. The Congressional Budget Office (CBO) projects that national population growth after 2040 will be dependent on immigration as fertility rates continue to decline. According to CBO, the U.S. population is projected to grow 11.9 percent between 2024 and 2054. By comparison, the U.S. population grew 33.2 percent during the previous 30-year period from 1990 to 2020.

But growth is still growth, and we can anticipate that the United States population will continue growing in the coming decades. Importantly for this study, we can also anticipate that some states will grow faster than others because of interstate migration and some states capturing greater shares of national population growth than others by attracting more immigrants and high-skilled workers.

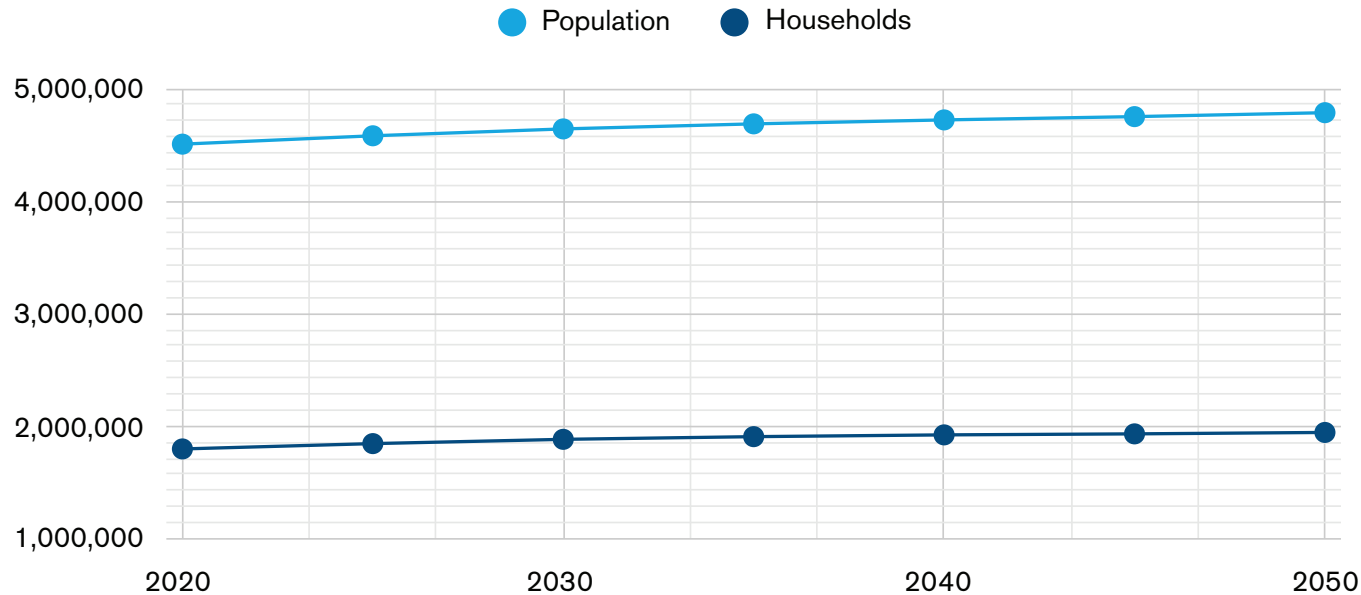
What might we expect for Kentucky's future population growth? The Kentucky State Data Center (KSDC) at the University of Louisville produces statewide population growth projections to help shed light on this question.

Importantly for this study, we can also anticipate that some states will grow much faster than others because of interstate migration and some states capturing greater shares of national population growth than others by attracting more immigrants and high-skilled workers.

In August 2022, KSDC released its most recent projections, suggesting that Kentucky's population would grow 6.2 percent between 2020 and 2050 from 4,505,836 residents to 4,785,233. Households would grow slightly faster at 8.1 percent, rising from 1,797,937 to 1,944,624. This divergence is due to the average household size decreasing during this period.

Kentucky Population and Household Projections, 2020-2050

Population Growth: 6.2 Percent – Household Growth: 8.1 Percent



Source: Kentucky State Data Center

Under KSDC's projections, Kentucky is therefore expected to continue growing through 2050 albeit at a slower pace than previous years and slower than what CBO projects for national population growth during roughly the same period.

KSDC bases its estimates on historical patterns, focusing on historical trends in births, deaths, and net migration.

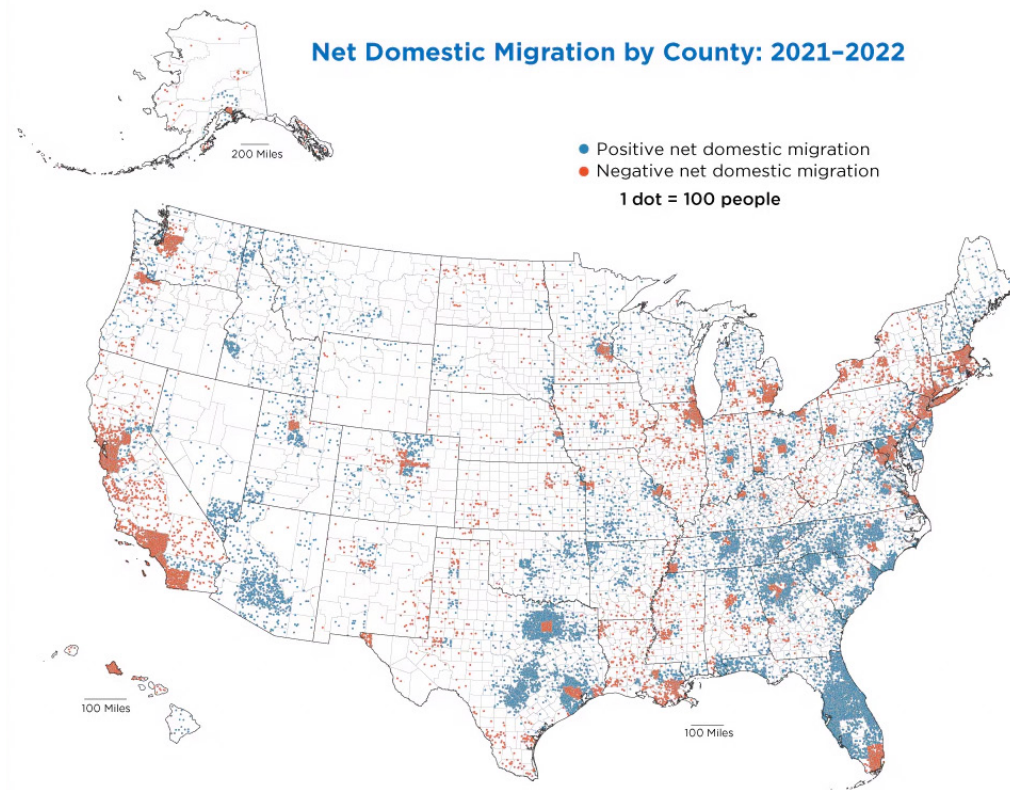
These are high-quality projections that provide valuable insights into demographic trends in Kentucky.

However, they are not intended to be a crystal ball. Kentucky's growth trajectory could diverge significantly from these projections based on a variety of factors. Two such factors will be discussed in more detail.

Population Growth in the South

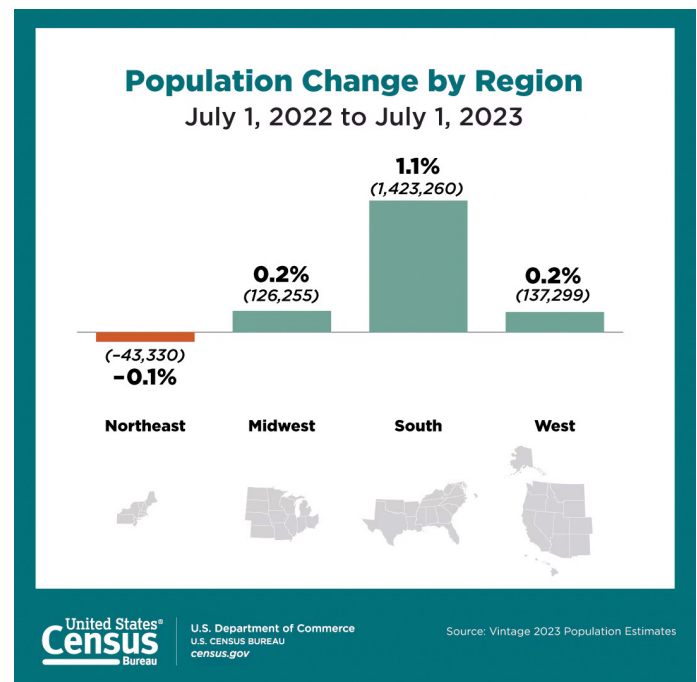
The first factor is a surge in population and economic growth in southern states since the onset of the COVID-19 pandemic. Southern states were growing quickly before the pandemic, but their growth has accelerated since 2020. As noted by the Census Bureau, “the South is the only region to have maintained population growth throughout the COVID-19

pandemic.” In 2023, Census estimates that southern states accounted for 87 percent of the nation’s population growth. In 2021 and 2022, counties in the southeastern states saw some of the largest levels of net domestic migration gains, with heavy concentrations of growth in areas of Tennessee, Georgia, North Carolina, South Carolina, and Florida.



Source: U.S. Census Bureau, Vintage 2022 Population Estimates.

The southeastern economy has outperformed the U.S. economy since the pandemic and may be positioned to continue doing so in the coming years, according to researchers at the Federal Reserve Bank of Atlanta. “Although the southeastern economy has long experienced faster growth than the national average, the region’s lead has significantly widened since 2019 ... The analysis concludes that the Southeast has been on a steady path of growth, outpacing the nation according to a range of major economic indicators. The region is poised to grow if it can rise to the challenge associated with labor supply constraints and infrastructure limitations,” writes Federal Reserve researchers.



Ultimately, only time will tell if the trend of accelerated growth in southern states will become long-term. Population projections suggest that Florida is expected to grow 17.3 percent between 2025 and 2050, welcoming 160,450 new residents per year. That would be equivalent to welcoming two new cities more than twice the size of Bowling Green every year for 25 years. North Carolina is projected to grow 32.7 percent by 2050, adding 3.5 million new residents. Tennessee is projected to grow 16.5 percent, adding 1.1 million new residents.

Kentucky grew 0.9 percent between 2019 and 2022, far lower than the growth rates of Florida (3.5 percent), Tennessee (3.2 percent), and North Carolina (2 percent). Looking geographically at growth since the pandemic, Kentucky finds itself situated between these fast-growing southern states and stagnant midwestern states like Illinois (-0.7 percent), Ohio (0.5 percent), and Michigan (0.5 percent). Will Kentucky follow the population trends of the southeast or the Midwest?

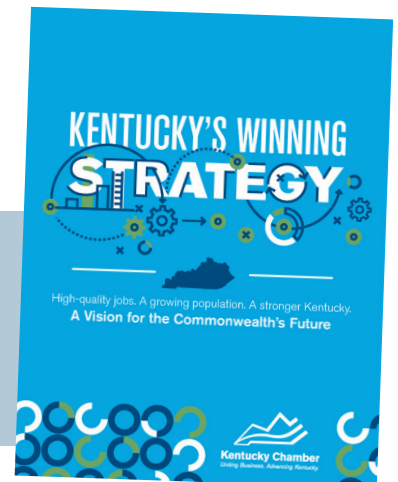


"Looking geographically at growth since the pandemic, Kentucky finds itself situated between these fast-growing southern states and stagnant midwestern states like Illinois (-0.7 percent), Ohio (0.5 percent), and Michigan (0.5 percent). Will Kentucky follow the population trends of the southeast or the Midwest?"

Advocacy and Public Policy

The answer to this question lies with a second factor that could impact Kentucky's growth trajectory, which is the role of advocacy and public policy. Organizations like the Kentucky Chamber of Commerce have made population growth a focal point of their advocacy efforts. In 2023, the Chamber published *Kentucky's Winning Strategy*, which outlines a vision for the state's economic future. Central to this vision is growing the state's population, with the goals of ensuring our population growth surpasses nationwide averages and competitor states and making sure growth includes both urban and rural areas. The Chamber has also called for a bold action plan to accelerate the growth of Kentucky's workforce so that we can fill open jobs and give employers confidence to invest in the state.

Learn More
Visit the Kentucky
Chamber's website,
www.kychamber.com.



This emphasis on population and workforce growth is important because these goals support stronger economies, more economic opportunity, and higher standards of living. A growing population means more new ideas and innovations, which can help spur advancements in areas like technology, education, health care, agriculture, and energy, and increase GDP growth and per-capita incomes.

Population growth also has specific fiscal and political consequences for states. A growing population means more state and local tax revenues to invest in key services like education, public safety, and economic development.

"Population trends are tied to states' economic fortunes and government finances," write researchers at Pew.

"More people usually means more workers and consumers adding to economic activity as they take jobs and buy goods and services, which generates more tax revenue. A growing economy, in turn, can attract even more workers and their families. The reverse is usually true for states with shrinking or slow-growing populaces."

Moreover, a state's population determines its number of seats in the U.S. House of Representatives and its share of electoral college votes. In the 2020 Census, seven states – California, Illinois, Michigan, New York, Ohio, Pennsylvania, and West Virginia – lost seats in the U.S. House and their corresponding electoral votes. Meanwhile six states – Texas, Colorado, Florida, Montana, North Carolina, and Oregon – gained seats and votes.

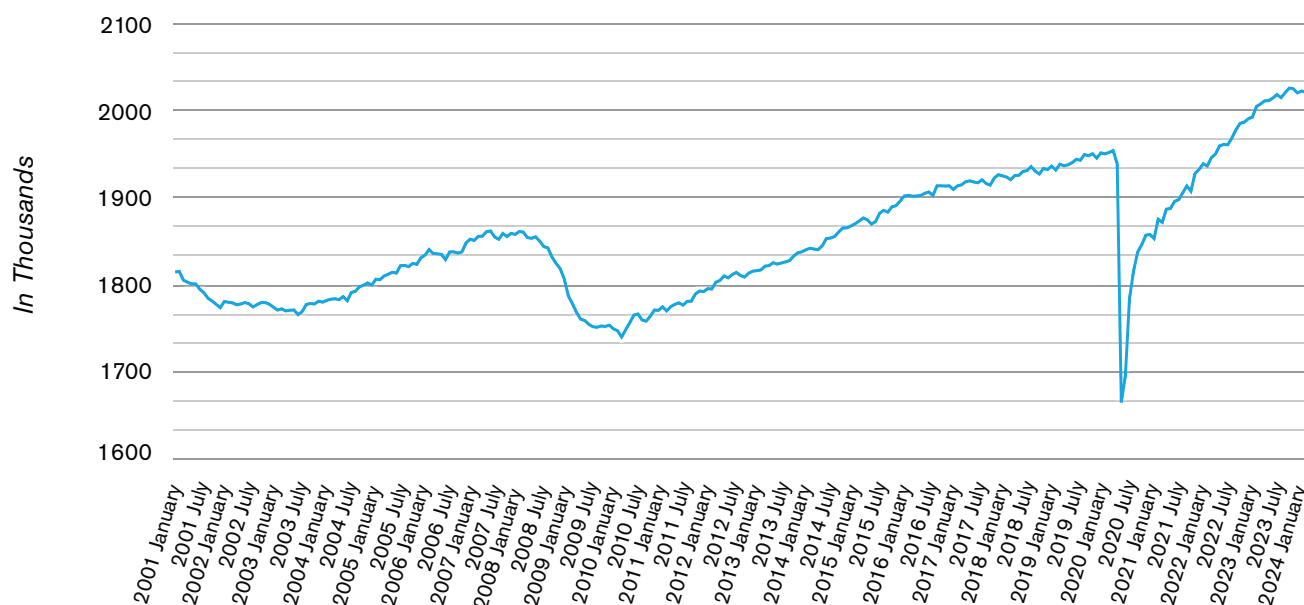
As noted by *The New York Times*, “Having more members of Congress means more political power for the growing states of the South and West. And having more electoral votes will highlight the priorities of these states in presidential contests – especially battlegrounds like Florida and Texas – and draw greater attention from the candidates.”

Recent shifts in economic policy in Kentucky demonstrate that state policymakers share the business community’s growth priorities. With major legislative measures such as right-to-work in 2017, tax reform in 2018, 2019, and 2022,

and increased investments in workforce development, education, and post-secondary financial aid, policymakers are strategically positioning the state for growth.

The state may well already be benefiting from these policy priorities. In January 2023, Kentucky surpassed 2 million nonfarm payroll positions for the first time in its history. Since 2019, the state has announced record levels of private-sector investments, including the announcement of the \$5.8 billion BlueOval SK Battery Park investment in Hardin County in 2021.

Kentucky Nonfarm Payrolls, 2001-2024



Source: Bureau of Labor Statistics

Policymakers have particularly emphasized the importance of population and workforce growth in implementing a flat income tax rate in 2018 and passing legislation to gradually phase out Kentucky’s individual income tax in 2022. Academic research, as well as analysis by nonpartisan organizations like the Tax Foundation, have illustrated strong connections between population and workforce growth and lower taxes on productivity and income.

Returning to the question of whether Kentucky will follow the population trends of our neighbors to the south or neighbors to the north, the answer from state leaders in both the public and private sectors is the former: accelerated and sustainable growth. Kentucky policymakers and the business community alike see the value in growing Kentucky’s population and workforce and are strategically putting in place a public policy framework to help achieve these goals.

With these variables in mind, we should envision at least two different possible growth trajectories for Kentucky over the next 25 years.

Kentucky policymakers and the business community alike see the value in growing Kentucky’s population and workforce and are strategically putting in place a public policy framework to help achieve these goals.

We could see **moderate growth** in line with projections using historical trends and patterns or we might experience more **robust growth** in line with states to our south and accelerated by pro-growth public policy. The question now is, can Kentucky provide the housing necessary to accommodate either of these trajectories?

Estimating Kentucky's Future Housing Needs

Under both a moderate growth trajectory and a robust growth trajectory, Kentucky will need more housing units. To give state and local leaders a sense of how much more housing the state might need by the year 2050, we provide here a conservative statewide estimate of 361,213 new units under

a moderate growth trajectory and 529,378 new units under a robust growth trajectory. The robust growth trajectory imagines a rate of household growth through 2050 that is double the 2020-2050 growth rate projected by the Kentucky State Data Center.

Kentucky Would Need to Build

361,213

New housing units by 2050 to maintain a healthy housing market under a **moderate** rate of household growth

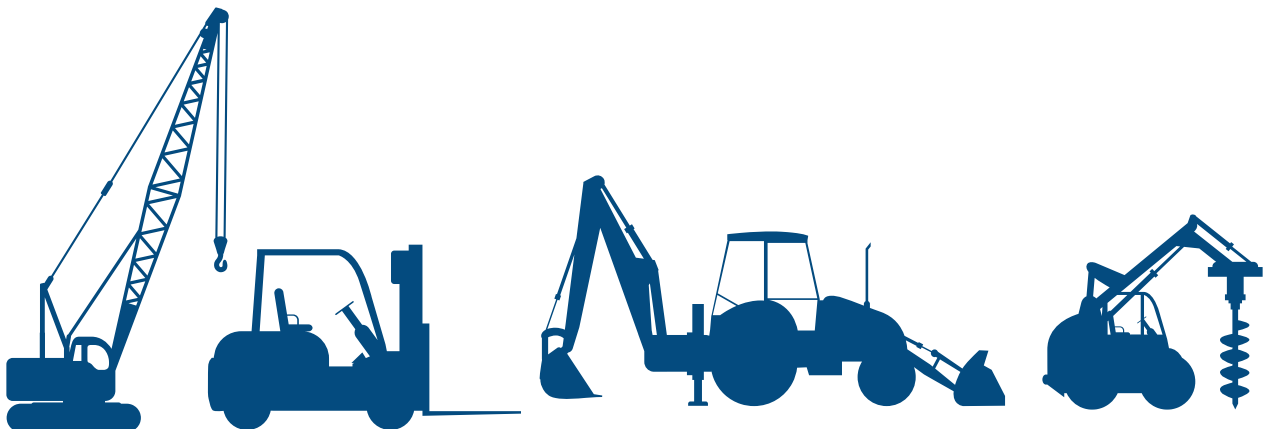
529,378

New housing units by 2050 to maintain a healthy housing market under a **robust** rate of household growth



These are conservative estimates. They consider only a limited range of objective factors and exclude variables such as specific housing affordability needs, how housing availability might affect interstate and intrastate migration, and recent economic development announcements. Instead, they consider the following four factors listed that focus on increasing the state's housing supply to keep pace with population growth while maintaining enough slack in the market to allow for available homes for sale or rent. Read a more detailed description of our methodology and assumptions in the appendix at the end of this report.

- Projections for household growth based on the Kentucky State Data Center;
- New households that would likely form in Kentucky if adequate supply became available;
- Efficient housing vacancy rates that allow for a target level of vacant housing to ensure there is sufficient slack in the market; and
- The loss of older housing units over time due to age, disrepair, and other causes

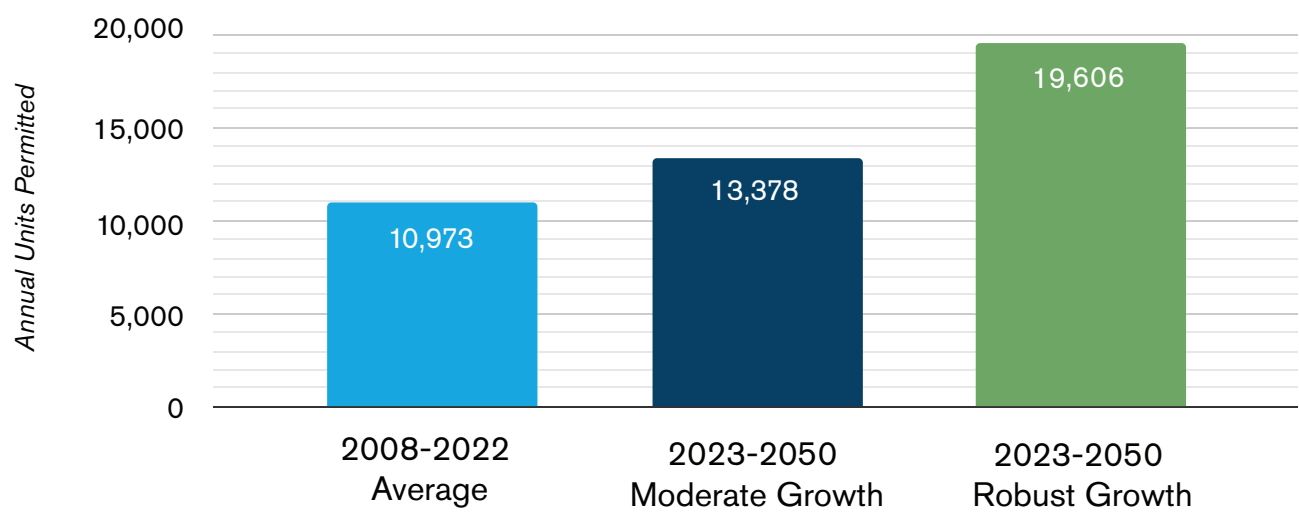


Both estimates would require Kentucky to increase housing production over what it produced from 2008 through 2022 (the post-Great Recession era). Using building permit data as a proxy for home building activity, Kentucky would need to increase its annual housing production between 2023 and

2050 by 22 percent over its average annual production levels from 2008 to 2022 to meet the estimate for moderate growth. To meet the estimate for robust growth, the state would need to increase its annual housing production by 78.6 percent.

Estimates of Annual Home Building Activity in Kentucky

Using Annual Building Permits as a Proxy for Home Building Activity



Source: Building Permits Survey, author's calculations

Accelerating housing construction in Kentucky to meet the levels of these estimates will be more difficult than it might seem at first glance. Ask any home builder or developer operating in Kentucky or elsewhere, and you will hear about significant barriers, such as available land, labyrinths of government regulations, local neighborhood opposition, rising materials costs, supply chain challenges, and workforce shortages.

Home building is getting harder, not easier. As discussed in the next section of the report, if Kentucky wants to solve the housing challenges of today and tomorrow and ensure that the Commonwealth has a strong foundation for growth, state and local leaders will need to take proactive steps to support these important goals.

SOLUTIONS

Chapter 4.

Data and direct feedback from local community leaders illustrate the need to address the Commonwealth's current and future housing challenges. Fortunately, solutions are readily available to help with these efforts. This section of the report outlines a range of potential solutions for policymakers and state and local leaders to consider.

Most of these solutions target the state and local levels, but there are important roles for federal decisionmakers to play as well. As with most complex challenges, solutions to Kentucky's housing challenges should be multifaceted, consensus-driven, and tailored to the unique needs of individual communities.



Key Takeaways:

- Small groups of local activists tend to oppose new housing developments, leading to delays, higher costs, and fewer housing options. But state and local leaders should understand that the broader public supports more home building in their communities and expects them to act to address housing challenges.
- 75.4 percent of surveyed local Kentucky leaders said they would support new housing developments even if it was near where they lived, and 86.4 percent said policymakers should do more to support home building and address housing challenges.
- Key policy recommendations to support home building and increase housing options in Kentucky include:
 - **Land-Use and Zoning Reform.** State policymakers should collaborate with local government to explore and encourage reforms to local land-use and zoning rules that serve to restrict new housing developments and make home building more difficult.
 - **Government Regulations.** Policymakers should evaluate the impacts of government regulations on housing and pursue reforms where appropriate, especially in areas such as labor and employment regulations, building codes, and environmental regulations.
 - **Incentives and Public Funding.** To support more low- and middle-income housing opportunities, policymakers could do a better job of leveraging tax incentives and housing funding programs.

- **Regionalism.** State policy should support regional approaches to solving housing challenges and encourage more collaboration among local jurisdictions.
- **Local Housing Needs.** Because housing challenges and needs are highly localized, more support should be offered to individual communities and regions to assist with housing needs assessments.
- **Infrastructure.** Policymakers must continue investing in infrastructure and supporting local communities, developers, and home builders with infrastructure costs.
- **The Home Building Workforce.** Growing the home building workforce is critical to overcoming housing challenges. Policymakers should build out state financial aid programs to encourage students to pursue training and careers in construction fields; ensure that we are effectively leveraging existing workforce programs; and modernize the Workforce Innovation and Opportunity Act and federal immigration laws.

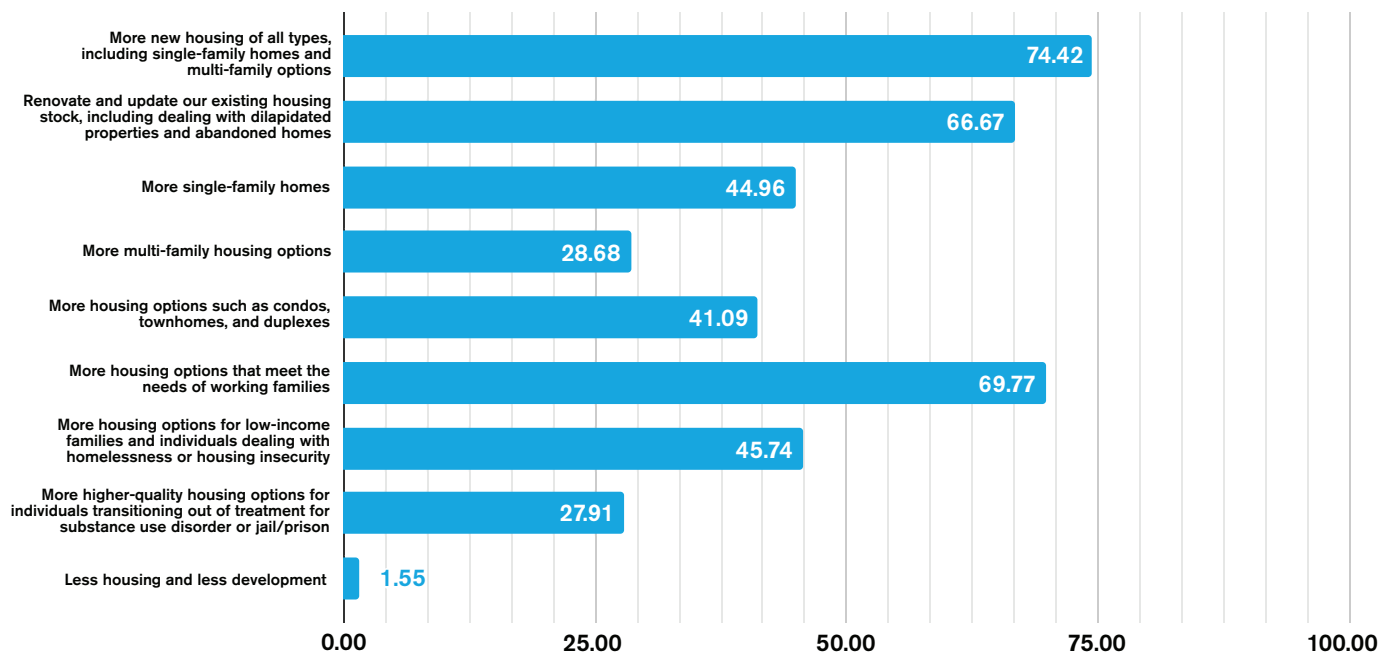
Public Opinion on Housing and Home Building

Before diving into the details of specific housing solutions, we first need to discuss how the public feels about housing and home building and stress the importance of civic engagement on these issues. Survey data shows that the public supports more housing options in their communities as well as policy proposals aiming to achieve this goal. A Pew survey from 2023 showed a majority of Americans voicing support for a range of initiatives seeking to increase access to housing and ensure affordability. For example, 86 percent support making processes for approving building permits quicker and clearer. 62 percent think builders should make decisions on parking for new housing developments instead of the government. A Cato Institute survey from 2022 showed that 72 percent of Americans favor more home building if it would make it easier for young people and young families to afford homes.

A 2021 survey by the Manhattan Institute and Echelon Insights found that 68 percent of Americans living in metropolitan areas would support streamlining approval processes to make it easier to begin building more housing.

Local community leaders in Kentucky appear to share these supportive sentiments. When we asked participants in our listening sessions what they would like to see more of in their communities regarding housing, these leaders favored an “all-of-the-above” approach, with 74.4 percent saying they wanted “more new housing of all types, including single-family homes and multi-family options.” Participants also strongly favored renovating existing homes and providing more options for working families, with nearly 70 percent prioritizing “more housing options that meet the needs of working families.”

What would you like to see in your community regarding housing?



Kentucky Chamber 2024 Housing Tour

Despite broad public support for more housing and home building, local efforts to provide more housing frequently struggle, face delays, or fail due to opposition from resident homeowners leveraging local land use processes and the courts. The 2019 book *Neighborhood Defenders* – written by three Boston University professors and published by Cambridge University Press – examines this phenomenon. It documents several case studies showing how local homeowners use public hearings and lawsuits to delay development projects, force changes to development plans, or even stop these projects from happening.

As one of many examples, the book tells the story of an effort to redevelop the property of St. Aidan's Catholic Church in Brookline, Massachusetts. After the parish relocated, the diocese sought to convert the grounds into a 140-unit multi-family housing structure with 92 affordable housing units and 48 market-rate units. Following an 11-year struggle with nearby homeowners who opposed the project in public hearings and lawsuits that required expensive studies and project alterations, the redevelopment resulted in a 59-unit multi-family structure. As told by the authors:

“In the St. Aidan's case, as in many similar episodes across the country, a developer (in this instance the diocese and its partners) tried to increase the density of housing in a desirable location. A group of motivated neighborhood defenders participated in the development process and raised a variety of concerns about the project. They used every regulatory tool at their disposal to slow down, alter, and stop the development. While they ultimately were unable to stop the development, their participation had a dramatic impact on the housing produced.

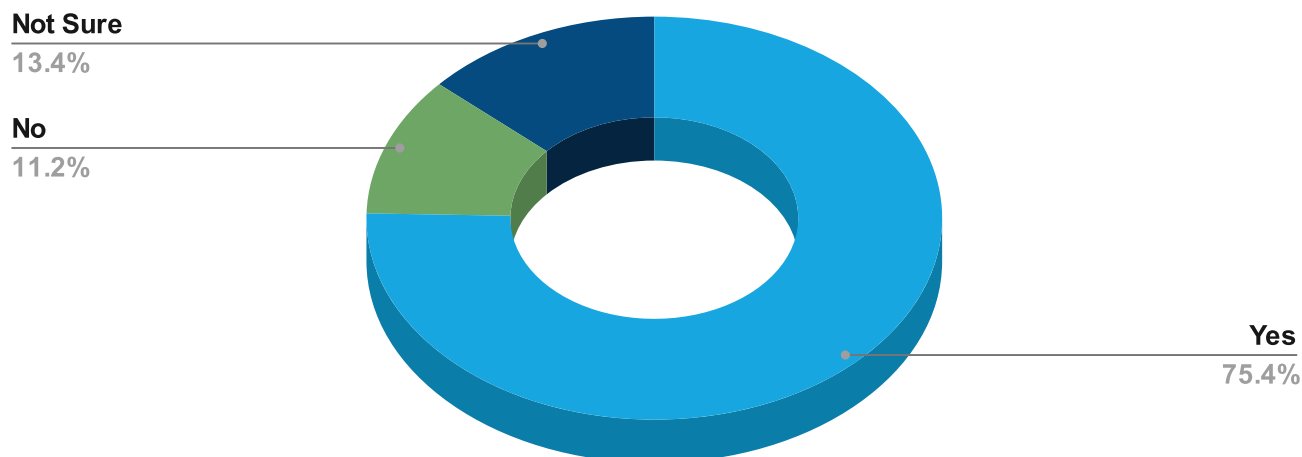
The project ultimately took eleven years to complete, and the final product included nearly 60 percent fewer housing units than the original proposal” (pp. 24-25, *Neighborhood Defenders*).

Similar scenarios have unfolded in Kentucky communities. Dozens of media reports detail them, and numerous participants in the Chamber's listening sessions recounted stories of delayed, watered-down, or failed housing development projects in their communities caused by local homeowner opposition.

State and local leaders should understand that these types of opposition efforts do not reflect broader public attitudes towards housing. The authors of *Neighborhood Defenders* illustrate that residents who tend to oppose new housing developments might be politically active and vocal at public hearings, but they represent a small minority viewpoint within individual communities.

To help drill this point home, we directly asked participants in the Chamber's housing listening sessions if they would support housing developments in their community even if it was near their own home. 75.4 percent responded yes. Among the 13.4 percent who said they were unsure and the 11.2 percent who said no, many of them qualified their responses by saying they would want more information first but would likely be open to most developments if it supported affordability and economic development. Several of the “yes” respondents noted that their own housing arrangements were once opposed by residents who moved into the area before them.

Would you support new housing developments in your community, including if it was near where you live?

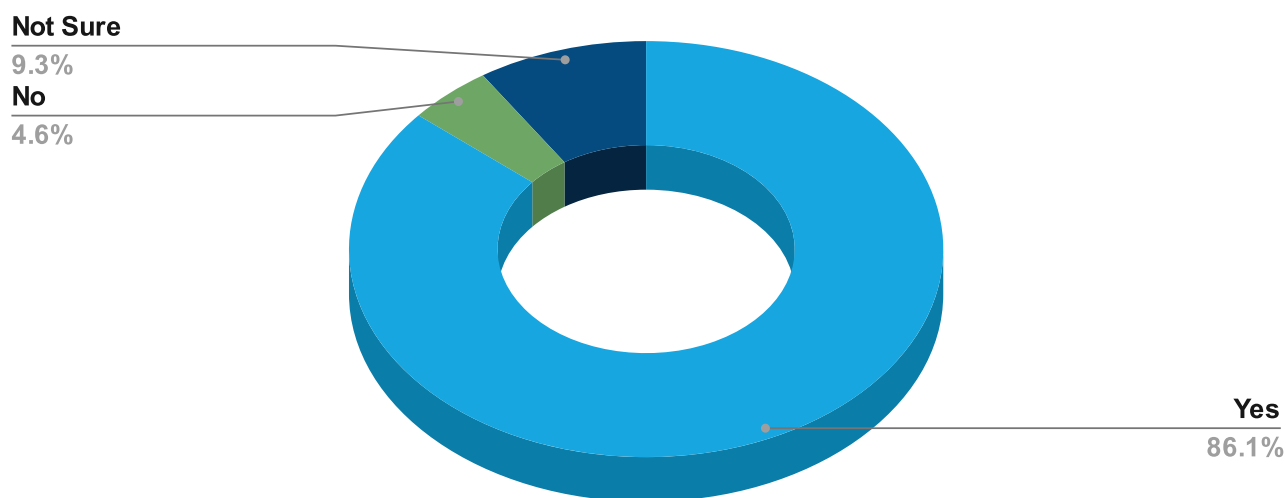


Kentucky Chamber 2024 Housing Tour

As advocates, public officials, and policymakers consider solutions to Kentucky's current and future housing challenges, they should keep in mind that the broader public supports more housing opportunities. This point is especially important for policymakers to understand. The public is looking to them for solutions and expecting engagement on housing issues. When we asked local Kentucky leaders if they thought local, state, and federal policymakers should do more to support

home building and address housing challenges, 86.1 percent of respondents said yes. Only 4.6 percent said no. This outcome aligns with national polling. A 2022 survey by the Bipartisan Policy Center and Morning Consult found that 67 percent of Americans believe that state and local governments have a responsibility to ensure that families have access to housing that they can afford.

In general, do you think local, state, and federal policymakers should do more to support home building and address housing challenges?



Kentucky Chamber 2024 Housing Tour

In conjunction with the policy solutions that will be outlined, supporters of housing and home building should engage more closely and frequently in conversations about housing developments in their communities. This could include speaking at public hearings, voicing support for housing at local community and neighborhood meetings, communicating with public officials

and decision-makers, or making their views known to elected officials and candidates running for office. Even with bold policy solutions in place, decisions around housing will ultimately still be very local decisions tied to the will of individual communities. It is critical that residents who support more housing and home building make their voices heard and advocate for progress.

Explore and Encourage Local Land-Use and Zoning Reforms

A major driver of housing challenges throughout the country is outdated and overly restrictive local land-use and zoning rules. Land-use and zoning rules are important for ensuring safe and sustainable developments that fit a community's wants and needs. But academic studies show that when these rules are poorly designed or not updated, they serve to limit the availability of new housing, drive up prices, and make it harder for home builders and developers to do their jobs. Pro-housing advocates frequently cite land-use and zoning reforms as a key strategy to address housing challenges.

Local land-use and zoning rules emerged in the United States in the early 20th century, first appearing in New York City in 1916. Since then, thousands of jurisdictions throughout the country have created local planning authorities and enacted land-use and zoning ordinances. Operating within the confines of KRS Chapter 100, about 76 percent of Kentucky cities have adopted local land-use and zoning rules and utilize some form of planning units, according to the Kentucky League of Cities. Numerous Kentucky counties also have planning units and land-use and zoning rules, and some operate planning units in coordination with cities. Local land-use and zoning rules serve important purposes, determining what land can be used for in specific zones and what rules apply to these uses, all operating in accordance with long-range plans.

Where land-use and zoning rules go awry is when they are too restrictive or fail to adapt to the changing needs of a community. For example, a jurisdiction might prohibit (or have rules with the effect of prohibiting) townhomes, duplexes, or triplexes in certain areas, prohibit multi-family housing in some areas, or limit the intermingling of residential and commercial areas. Other examples include minimum lot size restrictions, set-back requirements (the distance of a home from its property boundaries), minimum parking requirements, limits on density, requirements for trees and greenery, or specific aesthetic requirements. Such regulations can serve to outright prohibit certain types of housing in certain areas - especially middle-income housing like the "missing middle" homes discussed earlier in this report. Studies have shown that they can also drive up housing costs or make development cost-prohibitive, especially when it comes to low-income and affordable housing.

Based on analysis by the National Association of Home Builders, overly-restrictive land-use and zoning rules contribute, on average, to 22.2 percent of the final cost of a single-family home and 38 percent of the final cost of multi-family housing. Major factors include zoning application fees, required studies, setting aside developable land for government or public purposes, incorporating local-specific standards into the project, adjusting for building code updates, the cost of delay, and affordability mandates.



*"Based on analysis by the National Association of Home Builders, **overly-restrictive land-use and zoning rules contribute, on average, to 22.2 percent of the final cost of a single-family home and 37.9 percent of the final cost of multi-family housing.**"*

Some research has shown that the quantity of land-use and zoning regulations has increased since the 1990s and accelerated in the 21st century. New land-use and zoning regulations are driven by different actors, including property owners, neighborhood associations, environmental advocates, local and state government officials responding to constituent concerns, and other groups.

A Cato Institute study from 2017 created a methodology to rank states based on the restrictiveness of their land-use and zoning rules. It defined land-use regulations as "an umbrella term that includes zoning as well as subdivision regulations;

building codes; and national, state, or regional rules on land development and permitting." Using this definition, the study ranked Kentucky 36th on a list of most-to-least restrictive. Neighboring states Indiana and Tennessee ranked 32nd and 34th, respectively. Note, however, that this analysis was based on land-use rules as of 2010. Jurisdictions throughout Kentucky have enacted more stringent land-use rules since then. Jefferson County, for example, passed legislation in 2020 to impose significant new requirements for trees on new development projects.

Zoning in the Cato Institute study was defined as a “subset of land-use regulation and includes land-use regulation associated with a city or county zoning ordinance.” Kentucky’s zoning rank was 22nd most restrictive in the country, beating out Indiana (25th) and Tennessee (28th). Ohio was the most restrictive state for both land use and zoning, while Oklahoma and Texas were the least restrictive for land use and zoning.

There is a movement across the United States to reform local land-use and zoning rules with the goal of encouraging more housing construction and making development easier. In many instances, local governments in both urban and rural areas are leading the way with consensus-driven reforms that incorporate feedback from all stakeholders. This includes communities in Kentucky. Cities like Louisville, Lexington, and Covington, for example, have recently undertaken intensive

stakeholder engagement processes to pursue local reforms with the goal of removing regulatory barriers to more housing by updating their land-use and zoning ordinances and regulations.

The proper role of state legislatures in pursuing land-use and zoning reform has been a subject of debate. Land-use and zoning have historically fallen under the purview of local governments, with intervention by state legislatures viewed as preempting local control. Recently, state legislatures have become more closely involved with local land-use and zoning issues, as public pressure for reform has intensified. Among the state legislatures that have acted on this issue, there has been considerable variation. The following examples provide a sense of these different approaches.

Recent Land-Use and Zoning Reforms at the State Level

- In 2023, **Montana** passed a series of legislative measures that have collectively become known as the “Montana Miracle,” following the recommendations of a task force created by the governor in 2022. These bills sought to streamline the review processes for subdivisions, clarified the ability of local governments to authorize accessory dwelling units in residential areas, and authorized multifamily housing and mixed-use developments in commercial areas. A key part of the Montana package was Senate Bill 382, the Montana Land Use Planning Act, which was supported by home builders and the Montana League of Cities. The bill requires cities to frontload public input in the development of long-term land-use plans and to forgo additional public input for development proposals that meet these plans’ requirements. It also requires cities to adopt at least five recommended housing strategies from a list of 14 recommendations - for example, allowing for triplexes wherever single-family homes are permitted, eliminating aesthetic requirements, or increasing building height maximums.

- In 2019, **Utah** passed legislation requiring local jurisdictions to submit plans to develop “moderate-income” housing in their communities and to demonstrate progress in implementing land-use and zoning reforms from a broad menu of options. Communities that elect not to comply with the requirement could risk losing eligibility for state transportation funding.

- In 2020, **Nebraska** passed a law requiring local governments to submit biennial reports on zoning requirements and housing challenges in their jurisdictions. The bill required larger cities to develop affordable housing action plans. It also created a new Middle Income Housing Investment Fund to issue matching funds to eligible non-profit organizations.

- In 2023, **Indiana** passed legislation to create a new \$75 million revolving loan program for residential housing infrastructure like water distribution and treatment systems, lift stations, roads, traffic signals, and storm and sewer systems. The program prioritizes jurisdictions that have taken specific steps to support housing and reduce regulations. Examples include investing in a local housing study, eliminating impact fees, allowing for higher density developments, allowing for more flexible setbacks and parking requirements, eliminating lot-size and square footage minimums, and waiving design and aesthetic requirements. This legislation was a priority bill for the Indiana House Majority in the 2023 legislative session and was supported by business organizations, housing advocates, and local government organizations. It originated in a legislative task force that studied the issue in 2022.

State and local leaders in Kentucky should also take note of the federal Yes In My Backyard Act, also known as the YIMBY Act. This bipartisan legislation would require jurisdictions that receive funding through the Community Development Block Grant program to submit reports stating if they have adopted pro-housing reforms to their land-use and zoning rules. As with several of the state laws discussed previously, the Act offers a menu of options such as reducing minimum lot sizes and enacting higher density single-family zoning. The proposal has received support from a diverse group of stakeholders, including the National Association of Home Builders, the National Association of Realtors, the American Planning Institute, Habitat for Humanity, and Americans for Prosperity.

Legislative Task Force

What might work best in Kentucky? A starting point might be a task force led by state lawmakers, similar to what Indiana and Montana recently did. A task force could allow for a broader discussion of housing issues with a range of stakeholders and help the Kentucky General Assembly understand its role in solving housing challenges and supporting local communities. While state statutes created by the General Assembly in KRS Chapter 100 authorize local governments to enact land-use and zoning rules, state lawmakers have generally refrained from being too

prescriptive in saying what those rules should be. A task force could help lawmakers, local officials, and other stakeholders find consensus on where it is appropriate for state law to continue deferring to local authorities and where it should prescribe statewide rules. A task force would also allow lawmakers to identify strategies to support and incentivize local Kentucky communities to implement reforms, as we have seen in other states, and collaborate with stakeholders to identify best practices.

Models in Kentucky

One model for land-use and zoning reform that Kentucky might consider is House Bill 561 from the 2024 legislative session. This bill creates a new Certified Child Care Community designation that local jurisdictions can obtain if they develop and implement reforms to land-use and zoning rules that affect access to child care services. As part of the bill, the Cabinet for Economic Development is instructed to work with stakeholders to craft best practices and recommendations for local governments to use as a guide. A more robust program could be developed for housing wherein

local governments are encouraged to adopt recommended reforms based on best practices and recommendations developed by stakeholders, including housing advocates, city and county government officials, planning professionals, home builders, realtors, and business organizations. To further strengthen such a program and encourage participation, lawmakers could pair it with access to a grant program like the one in Nebraska or offer other financial and economic incentives to participating jurisdictions like Indiana's loan program for residential housing infrastructure.

Objective Rules and Predictable Application

It further helps when land-use and zoning rules and related approval processes are written out clearly and objectively and are administered ministerially, meaning that local planning units administer the rules without personal discretion. This helps provide clarity and predictability for developers and home builders. Kentucky took a positive step in this direction in the 2024 legislative session with passage of House Bill 443. This legislation specifies that local rules for subdivisions and development plans must be “in the form of

objective standards that shall be applied ministerially.” The bill still allows for local discretion when necessary, such as when a developer seeks to deviate from the standards or if substantial evidence shows that the project might pose a threat to public safety. State lawmakers should closely monitor implementation of this bill by seeking feedback from home builders and local governments. Lawmakers might also consider a reporting mechanism for when local discretion is utilized to better understand how the bill is working.

Consider How Government Regulations Impact Housing and Implement Reforms

In addition to land-use and zoning rules, other types of regulations also impact housing and can affect the final purchase price or rent of a housing unit. These regulations include occupational safety and health regulations, labor regulations, and environmental regulations. The National Association of Home Builders estimates that occupational safety and health regulations and other labor regulations account for 1.6 percent of the purchase price of a home, with most of the impact occurring on the construction phase of the unit. In addition to driving up prices, overly restrictive

regulations can also discourage builders from operating in Kentucky and cause them to prefer building in other states. Regulations fall particularly hard on home builders because most home building enterprises are small businesses, according to research by the National Association of Home Builders. This serves as a good reminder for lawmakers and state agencies to ensure that state regulations are straightforward and align with federal standards to the greatest extent possible.

Labor Regulations

Kentucky has made progress on addressing the issue of regulatory misalignment between state and federal rules. In 2021, the General Assembly passed legislation prohibiting the state Labor Cabinet from promulgating occupational safety and health regulations that are more stringent than federal standards. In 2024, legislation was filed to prohibit the Cabinet from enforcing regulations more stringent than

federal standards, though the bill did not pass. In general, lawmakers should carefully review state labor laws and regulations that deviate from federal standards, understanding that such deviations not only raise the cost of doing business in the state and make Kentucky less competitive but also impact the cost of housing.

Housing Impact Statements

An additional step that lawmakers might consider is passing legislation to require housing impact statements for legislation and regulations that might relate to housing or home building. The American Legislative Exchange Council has made available model legislation to accomplish this. The proposal would require the legislature or a state agency to produce an

impact statement for any legislation or regulation related to housing or home building. The statement would detail how the legislation might affect housing affordability or availability, similar to how the Legislative Research Commission already produces local impact and correctional impact statements.

Building Codes

Policymakers and stakeholders should watch carefully for how building-specific regulations can impact housing. New residential energy code updates that the federal Inflation Reduction Act is encouraging state governments to adopt, for example, could drive up the cost of building a new home in Kentucky by as much as \$22,500, according to estimates

by the National Association of Home Builders. The associated energy savings from these updates would likely not be realized for up to 93 years from implementation. Similarly, proposals to limit the use of natural gas and propane in new homes can also drive up costs and restrict energy choices for new homebuyers.

Energy and Environment Regulations

Broader energy and environmental regulations can also affect housing challenges, including efforts to regulate impacts on water, wildlife, and the natural environment. At first glance, one might not always expect such regulations to impact housing, but they do. The definition of “waters of the United States,” or WOTUS, under the federal Clean Water Act, is a prime example. The Biden Administration has prioritized a redefinition of WOTUS to significantly broaden its applicability. As argued by the COO of a small Texas-based real estate development firm before the U.S. House Committee on Small Business in March 2023, the

redefinition of this term has significant implications for home building due to higher litigation costs, permitting fees, and regulatory uncertainty. This small developer noted that the administration’s redefinition of WOTUS would lead to longer delays in permitting, cause less land to be allowable for development, and discourage developers from seeing projects through. Kentucky lawmakers should carefully monitor new energy and environmental proposals at all levels of government and evaluate current regulations to ensure they appropriately balance their intended regulatory goals with their impact on housing affordability and availability.

Leverage Tax Incentives and Taxpayer Funded Support for Low- and Middle-Income Housing

Taxpayer-funded support and tax incentives are well-established and critical pathways to support more housing. These tools are especially important for projects where profit margins are thinner or non-existent, including affordable

housing for low- and middle-income income families as well as supportive housing for individuals transitioning out of recovery from treatment for a substance use disorder, the justice system, or a period of homelessness.

Low-Income Housing Tax Credit

An important pro-housing tax incentive program is the federal Low-Income Housing Tax Credit, or LIHTC. This program was created by the Tax Reform Act of 1986 and focuses on supporting the development and redevelopment of affordable housing for low-income households. In general, LIHTCs support projects that provide housing for households earning less than 80 percent of the area median income (AMI) with a focus on households earning no more than between 50 and 60 percent AMI.

These credits are nonrefundable – meaning they cannot exceed an individual's federal income tax liability – but they are transferable, which allows a recipient to sell or transfer the credit. Qualifying developers of low-income housing units claim the credits over a ten-year period, though most sell the credits to investors in order to obtain the upfront financing needed to build the housing. The credit comes in two types: the so-called “9 percent credit” and the “4 percent credit.” These are based on subsidy amounts. The 4 percent credit is used in conjunction with tax-exempt bonds and is not subject

to the state allocation limits mentioned in this report. However, the amount of bonding for housing projects is limited by state bonding capacity.

In recent years, the program's total cost has amounted to \$13.5 billion annually. Credits are allocated to states based on population, and state housing agencies allocate the credits to developers based on a qualified allocation plan in accordance with federal rules. Kentucky's state agency is the Kentucky Housing Corporation. In 2023, Kentucky's estimated allocation was \$12.5 million for the 9 percent credits. Based on an analysis by the Urban Institute, LIHTCs helped finance 4 percent of all new multifamily housing units in Kentucky between 2000 and 2019. Across the nation, LIHTCs help finance more than 50,000 new multifamily housing units every year. According to the Kentucky Housing Corporation, the state allocated \$22.9 million in 4 percent credits in 2023 in addition to the \$12.5 million in 9 percent credits. These allocations generated \$303.5 million in private equity.

Federal Reforms to LIHTC

LIHTCs help make low-income housing developments financially feasible for developers and builders. As Congress enters a robust tax debate in 2025 with provisions of the 2017 Tax Cuts and Jobs Act set to expire, continuation of LIHTC should be a priority. The program, however, is not perfect and merits improvements as well. This should include increasing state LIHTC allocations to states, especially given the impact of inflation on building materials, and reducing red tape as much as possible to make the program more efficient and easier to use.

Federal legislation has also proposed a complimentary tax credit program called the Workforce Housing Tax Credit Act, which would focus on housing developments for households earning up to 100 percent AMI. These credits could be used in conjunction with LIHTCs to allow developers to create projects serving a wider range of households and provide more incentives for middle-income households and missing middle housing developments.

State-Level Housing Tax Credit Programs

While both programs previously mentioned are predominantly federal matters, Kentucky leaders can intervene to optimize their impact in the state. One option would be to create a state-level LIHTC program. As of 2023, 25 states had some form of state-level housing tax credit programs on the books, including deep blue states like California and New York, as well as deep red states like Texas, Oklahoma, Utah, and South Carolina. Notably, several Kentucky competitor states offer these state-level credits, including Indiana, Ohio, Virginia, Georgia, and Arkansas. Indiana created its program – called the Affordable and Workforce Housing Tax Credit – in 2022, and it went into effect in 2023. The program offers \$6 million per year for five years and is tied to LIHTC credits received by developers under the LIHTC “4 percent” program. The Ohio program is also a recent measure, passed in the state’s 2023 legislative session. It is similar to Indiana’s but with an annual ceiling of \$100 million through 2027.

With multiple surrounding states now offering robust housing tax credit programs, Kentucky lawmakers may want to give

serious consideration to such a proposal. The state could create a program specifically to mirror the federal LIHTC or it could create a broader program like the recently proposed Workforce Housing Tax Credit in Congress to support more middle-income housing.

One objection might be that a new tax credit program would conflict with the state’s plans to phase out the individual income tax. It should be noted that Indiana is pursuing a similar objective and already has a lower individual income tax (3.05 percent in Indiana vs. 4.00 percent in Kentucky in 2024). Nonetheless, the Hoosier state managed to enact a robust housing tax credit program. In addition, Kentucky has a 5 percent corporate income tax rate. Kentucky lawmakers might consider implementing a time-limited housing tax credit program, similar to what Indiana and Ohio lawmakers have done. More than 60 percent of participants in the Chamber’s housing listening sessions listed tax incentives for home building as a top public policy preference.

Affordable Housing Trust Fund

As an alternative to a tax credit program, or in conjunction with it, Kentucky could better leverage its Affordable Housing Trust Fund (AHTF). The program offers competitive grants to nonprofits and local governments to help finance projects for households at or below 60 percent AMI but with a focus on households at or below 30 percent AMI. The General Assembly created the AHTF in 1992 but has not directly funded it through General Fund appropriations since 2005. Instead, a flat \$6 per real estate transaction fee funds the program. In recent years, this fee has averaged between \$4 million and \$6 million in annual receipts, though revenues have been trending downwards along with fewer real estate transactions on the market.

This puts the fund in a backward position, where it generally has fewer resources available when the housing market tightens. To more effectively leverage the AHTF, the General Assembly should consider several updates. This should include conversations about targeted appropriations from the state’s Budget Reserve Trust Fund and modernizing the \$6 per real estate transaction fee to ensure the fund has the necessary revenues to carry out its mission. Other changes should include increased flexibility for communities to build other types of housing, such as workforce and missing-middle housing, and allow actors beyond nonprofits and local governments to compete for project funding.

Rural Housing Trust Fund

In 2023, Kentucky lawmakers created the Rural Housing Trust Fund (RHTF) to support the rebuilding of homes in rural areas impacted by natural disasters in western and eastern Kentucky in 2021 and 2022, respectively. As noted earlier in this report, tornadoes destroyed more than 1,000 homes in rural parts of western Kentucky in December 2021, and flooding impacted nearly 9,000 homes in rural parts of eastern Kentucky in July 2022. In October 2023, the state announced its first round of funding from the RHTF, leveraging \$13.5 million to rebuild 115 new homes and repair 45 damaged homes. While Kentucky policymakers should

continue leveraging RHTF to support rebuilding and housing efforts in impacted areas of eastern and western Kentucky, long-term attention should be given to the unique challenges of housing and home building in rural areas. These areas tend to be sparsely populated and isolated and feature difficult topographies, which can often make home building more expensive than in urban areas. In addition, larger shares of rural residents tend to have lower incomes than urban and suburban residents. For these reasons, policymakers should explore how the state might optimize RHTF to address the unique housing challenges in Kentucky’s rural areas.

Tax Increment Financing

Another tool already available to support housing and home building in Kentucky is tax increment financing, more commonly known as a TIF. A TIF is a public financing program in which a developer uses future tax revenues associated with their project for public infrastructure projects, like road or sidewalk improvements, street lighting, drainage, or utilities. Developers can pursue TIFs at the local and state level or just the local level. TIFs can be used to support a range of different projects, including housing. To ensure Kentucky is optimizing TIFs to address housing challenges, one strategy should be to provide training opportunities for

local government officials who are charged with approving local TIFs. TIFs tend to be complicated and are often mischaracterized as “tax breaks” or “giveaways.” Offering training opportunities through state agencies or the private sector specifically for local government officials can help communities navigate TIFs and make sure they are used successfully. A second strategy might be for state lawmakers to develop a housing-specific TIF program similar to programs in states like Maine and Indiana. Maine, for example, offers an Affordable Housing TIF, which streamlines the use of TIFs for low- and middle-income housing projects.

State Sales and Use Taxes

Also in the area of tax policy, lawmakers should carefully consider the impact of sales tax changes on housing affordability and availability. As noted by a Tax Foundation report on Kentucky’s sales tax in February 2024, a well-designed sales tax should fall exclusively on final personal consumption and avoid intermediate transactions. In the case of home building, builders pay state sales taxes on materials and services during the construction process. These taxes are ultimately passed on to the final purchaser of the home.

By and large, while this process lacks tax transparency, it follows sound sales tax principles since the sale of the home is not subject to sales taxes, thus minimizing the possibility of tax pyramiding. Nonetheless, as lawmakers and stakeholders explore housing affordability challenges, they should closely monitor and consider the role of sales taxes in contributing to the final purchase price or rent of housing units.

Support Regional Approaches to Solving Housing Challenges

Kentucky’s local communities are a source of economic and cultural strength for the Commonwealth, but cooperation across jurisdictional lines can often be complex. Such complexities can, at times, hinder new housing developments. During our listening sessions, we learned that many communities face significant land restrictions in the forms of difficult topography, like lakes, floodplains, hills, and mountains, or large tracts of agricultural land, which can limit housing development. In these types of scenarios, a city may need to coordinate with its county to support housing developments or a county may need to coordinate with a neighboring county or multiple cities and counties may need to coordinate together. Cross-jurisdictional cooperation is often easier said than done. Regional approaches to housing, in which multiple neighboring communities work together collaboratively, can help overcome these challenges.

Several communities across the state – either through Area Development Districts or other cross-jurisdictional partnerships – are already working together to support regional approaches to goals like workforce growth, economic development, and housing. State policymakers might consider incentivizing more regional collaborations in Kentucky to address housing and other challenges by borrowing from a program in Indiana. In 2015, the Hoosier State launched the

Regional Cities Initiative, which incentivized local governments to voluntarily collaborate to pursue state matching grants for quality-of-life projects. Since then, the project has evolved into the Regional Economic Acceleration and Development Initiative, or READI, and 15 regions across the state have formed collaboratives called regional development authorities. This has led to dozens of major housing development projects with support from local, regional, and state partners.

For example, the South Central Indiana Talent Region worked with the city of North Vernon, Indiana – less than 40 minutes north of Trimble County – to secure \$3.1 million in READI funding for public infrastructure for a development of 100 new homes. In Switzerland County, Indiana – directly across the river from Carroll and Gallatin counties – the Southeast Indiana Regional Development Authority successfully secured READI funding to support 70 new single-family homes. In Princeton, Indiana – less than an hour north of Henderson – the Southwest Indiana Regional Development Authority worked to obtain infrastructure funding for a 144-unit middle-income housing apartment complex near the area’s Toyota Motor Manufacturing Plant.

Central to all three of the previously discussed initiatives is that these communities pursued regional approaches to securing necessary funding. Neighboring communities advocated for each other, understanding that a housing

development in the county or city next door would benefit their community as well. Kentucky might consider piloting a similar program to encourage more regional approaches not only to housing but economic development as well.

Help Communities Understand Their Housing Needs and Challenges

This report has focused on the state, but individual Kentucky communities have unique needs that go beyond the scope of this study. Areas like Hardin County and Warren County, for instance, are experiencing intense economic and population growth. Areas in western and eastern Kentucky are still reeling from major natural disasters and major losses of housing and infrastructure. Several Kentucky communities have already managed to conduct sophisticated housing needs assessments to help drive planning processes. Not all communities might find it financially feasible to conduct

these studies, and those who have already conducted them should conduct routine updates. Estimates for housing needs assessments range from \$10,000 to \$75,000 or more depending on scope and details. State policymakers should consider ways to support communities in obtaining high-quality housing needs assessments through matching grants or other incentives. This will help ensure that communities are operating on sound data that speaks to their specific and unique needs.

Continue to Invest in Infrastructure and Support Local Communities, Developers, and Home Builders with Infrastructure Costs

An individual housing unit does not exist in a vacuum. It is connected to complex and expensive networks of pipes, cables, and pavement necessary for water, wastewater, electricity, gas, broadband, and roads. The cost of these infrastructure assets contributes to the cost of housing units on both an immediate and ongoing basis. To help mitigate these costs, both state and federal lawmakers should continually explore ways to fund infrastructure. More than half of the community leaders who participated in our listening sessions selected this priority as one of their top policy preferences to address housing challenges.

Thanks to legislation such as the federal Infrastructure Investment and Jobs Act passed in 2021 and significant investments made by the General Assembly since 2022, Kentucky is currently in a stronger position than in the past to provide the infrastructure necessary to support housing developments. However, more will be needed in the near future, and the state will first have to pull itself out of a deficit.

A 2019 report by the American Society of Civil Engineers gave Kentucky's drinking water infrastructure a C+ and its wastewater infrastructure a C-. It gave Kentucky's roads a C-. According to the National Utility Contractors Association, Kentucky had a need for \$8.2 billion in drinking water funding and \$6.2 billion in wastewater funding, as of 2021. For roads and highways, the Kentucky Transportation Cabinet projects an annual funding gap of \$895 million through 2045.

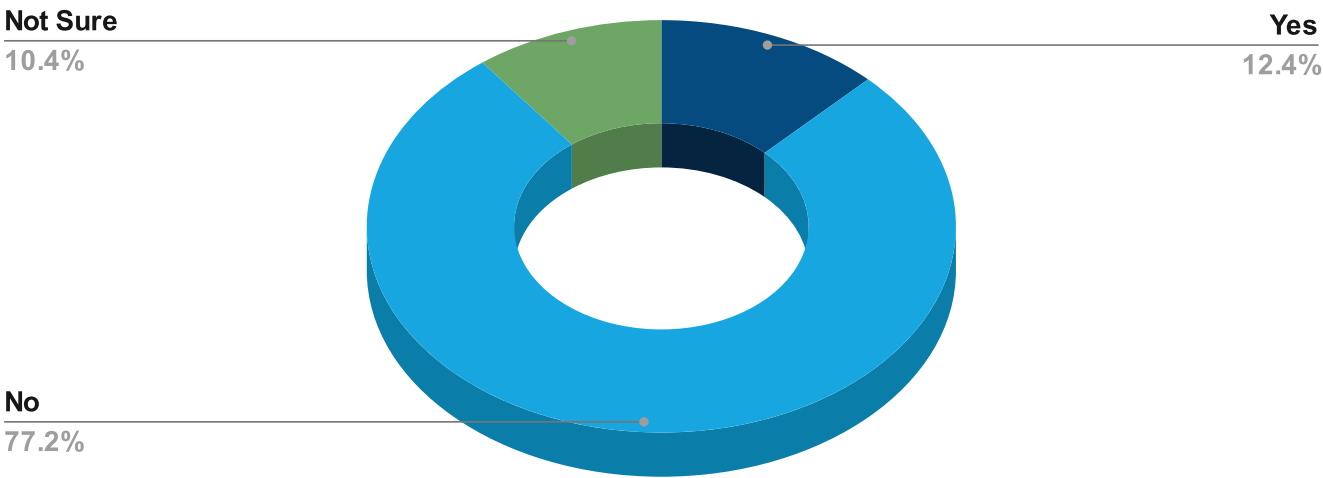
Kentucky policymakers will need to make difficult decisions in the future for long-term infrastructure funding needs. As solutions are considered, state policymakers should also consider creating a dedicated fund for housing-related infrastructure projects. As discussed previously in this report, Indiana recently created a Residential Infrastructure Fund for this purpose and connected access to the fund to local land-use and zoning reform.

Support and Grow the Home Building Workforce

A common theme discussed during the Chamber's listening sessions was the home building workforce. Several communities expressed significant concerns about finding the skilled workers necessary to build new housing units.

In fact, 77 percent of participants in these discussions did not think there was an available home building workforce in their communities to address housing challenges. 10.4 percent were unsure.

Do you think there is an available workforce in your community to help address housing challenges (for example, construction workers, electricians, plumbers, etc.)?



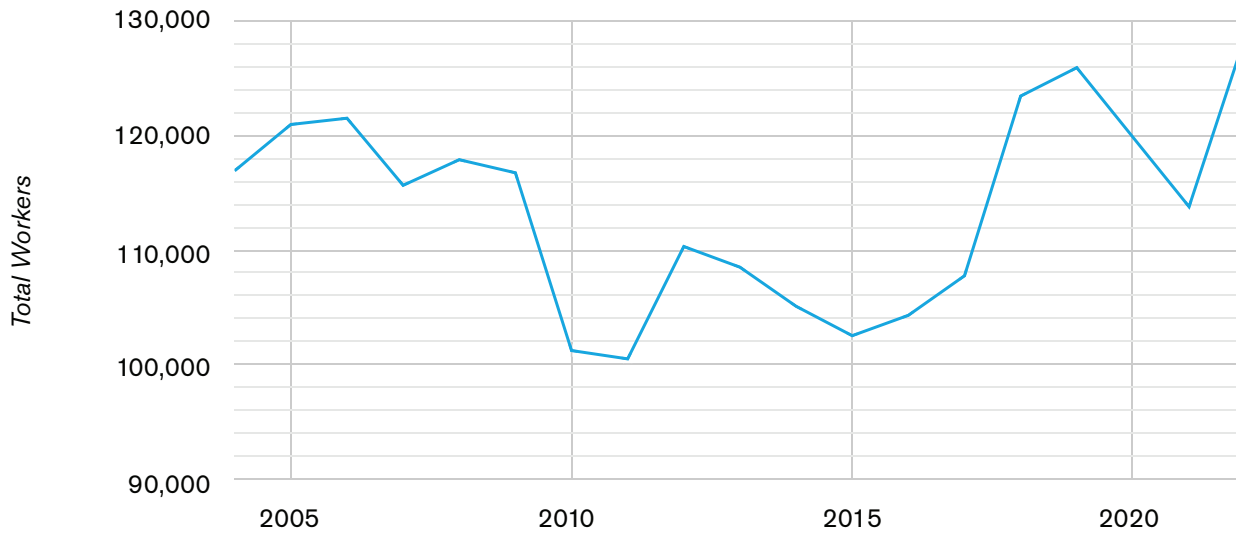
Kentucky Chamber 2024 Housing Tour

Concerns over the home building workforce are well-founded. Kentucky and the nation are experiencing severe labor shortages. This is true across multiple sectors, but the construction industry faces unique challenges. Using a government survey of employers, construction employment in Kentucky today is at nearly the same level it was in 2001 at roughly 89,000 workers, excluding self-employed workers. Since 2001, however, the industry has experienced significant labor volatility, falling from 88,900 workers in June 2001 to a low of 65,900 workers in January 2011. From 2011 to 2019, the sector slowly recovered, reaching 81,700 workers in August 2019. It took another hit in 2020 with the pandemic but has recovered quickly, registering 88,800 workers in January 2024.

When we incorporate self-employed workers, growth in the construction workforce is slightly better but the trends are similar. Using an annual government survey of households that accounts for self-employed workers, Kentucky's total construction workforce in 2022 was only 5.8 percent larger than it was before the 2007-2008 financial crisis. This workforce sector shrunk to a low of 100,400 in 2011. Following a gradual recovery, it fell again during the pandemic. 2022 data showed 128,600 construction workers in Kentucky, employed and self-employed.

Construction Labor Force, Including Self Employed, Kentucky

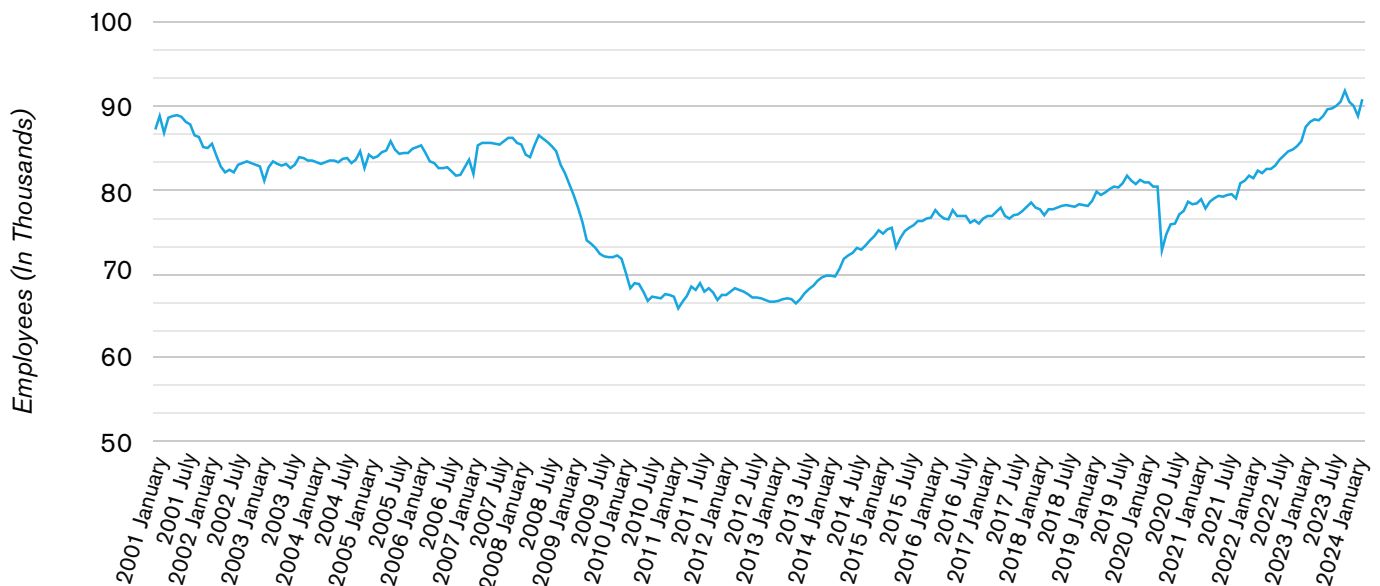
2004-2022



Source: ACS 1-Yr Estimates, PUMS (SOCP, Occupations)

Construction Employment, Excluding Self-Employed, Kentucky

January 2001-February 2024 (Seasonally-adjusted)



Source: Bureau of Labor Statistics

Nationwide, demand for construction workers has been elevated since the economic recovery from the pandemic while labor demand overall has subsided from its peak in 2022. Overall job openings declined from a high of 12.1 million in March 2022 to 8.8 million in February 2024. Construction job openings, on the

other hand, remain persistently higher on average. In March 2022, there were 435,000 construction job openings vs. 456,000 in February 2024. One national estimate suggested that the country needs to add half a million new construction workers to the labor market in order to meet the growing demand for construction.

Challenges in the home building workforce represent a significant threat to any strategy to build more housing in the Commonwealth. Even with pro-housing land-use and zoning reforms, an embrace of public support for housing, regulatory relief, tax incentives, and public funding, more housing will only be possible if the workforce exists to build it in the first place.

A prime example of how this issue is already playing out in Kentucky, workforce shortages in the construction sector are delaying recovery efforts in eastern Kentucky counties impacted by the 2022 floods. In the summer of 2022, the Kentucky Office of Emergency Management found it necessary to allow out-of-state licensed electricians and HVAC professionals to assist with rebuilding projects because they could not find enough qualified in-state workers.

The need for a stronger home building workforce could grow as new public funding for construction projects increases the demand for skilled construction labor.

While federal funding through the Inflation Reduction Act, Bipartisan Infrastructure Act, and CHIPS Act continues to flow to Kentucky and neighboring states, the Kentucky General Assembly has invested billions in excess funds from the state's Budget Reserve Trust Fund for major construction projects in 2025 and 2026. These investments will require a surge in skilled construction labor, which will likely further strain the available home building workforce.

Supporting the home building workforce should be a critical component of Kentucky's broader workforce development and growth strategy. This should include encouraging more carpenters, electricians, HVAC technicians, welders, dry-wall and ceiling installers, masonry professionals, painters, plumbers, and building maintenance technicians. With average salaries ranging from \$47,430 per year to \$65,280, these are quality jobs that Kentucky needs to fill in order to overcome its housing challenges.

Current Workforce Programs and Home Building Institutes in Kentucky

Fortunately, the state already has in place several programs and assets it can leverage to address this challenge. The Kentucky Department of Education's Office of Career and Technical Education supports training and career development in fields like construction and promotes work-based learning opportunities. The Office of Employer and Apprenticeship Services in the Education and Labor Cabinet administers the state's Registered Apprenticeship program. The Kentucky Community and Technical College System and the state's public universities and colleges offer a range of

credentials and degrees in construction and home building fields. In addition, Kentucky is home to an emerging network of proprietary institutions and trade schools like the Enzweiler Building Institute, the Building Institute of Central Kentucky, and the Building Institute of Greater Louisville. Policymakers, education and business leaders should work together to encourage more students to consider these resources and pursue training in fields, like construction and ancillary industries.

Scholarships and Workforce Training Programs

Public dollars support vocational training programs through direct state General Fund appropriations or through lottery-funded scholarship programs or a combination of both. State scholarship programs are of particular importance since students cannot use Pell Grants for short-term certificates. Many construction training programs are offered through short-term certificates. State scholarships can help make up for the lack of access to Pell Grants and can help encourage more students to get training and enter the home building workforce.

The Kentucky Work Ready Scholarship provides funding for eligible Kentucky high school graduates to obtain an industry-recognized certificate, diploma, or an associate of applied science degree. The scholarship only applies to programs in the state's top-five workforce sectors, as determined by the Kentucky Workforce Innovation Board, or KWIB. This includes construction as well as advanced manufacturing, business and information technology, healthcare, and transportation

and logistics. If the state reevaluates Kentucky's top-five workforce sectors, it will be important to keep in mind the importance of the home building workforce to solving Kentucky's housing challenges. Lawmakers might consider codifying in state law construction as an eligible workforce sector under the Work Ready Scholarship. Alternatively, lawmakers could create a specific scholarship program aimed at growing and training the home building workforce or develop a public-private partnership program similar to the Healthcare Workforce Investment Fund created by the General Assembly in 2023.

Also in the area of scholarships, Kentucky lawmakers have taken steps to ensure that vocational training in fields like construction and home building are treated more fairly under the Kentucky Educational Excellence Scholarship, or KEES. Under the KEES program, students can earn scholarship dollars for academic performance.

Until recently, vocational schools and proprietary institutions were excluded from KEES eligibility. Many of these institutions, including dedicated home building schools, offer training and credentials specific to construction trades like welding, HVAC, and electrical maintenance. State law now allows students to utilize their KEES dollars at vocational schools and proprietary schools offering programs in the top-five workforce sectors, though they access KEES through

a reimbursement process instead of having these dollars applied to their tuition upfront as is done at colleges and universities. Lawmakers should monitor the KEES program to see if this reimbursement system functions to disincentivize or exclude students from using their KEES dollars at vocational schools and proprietary institutions.

Kentucky Community and Technical College System

Another step that state policymakers might consider is to more effectively leverage the Kentucky Community and Technical College System. Through its 16 colleges across the state, KCTCS already offers numerous programs in the construction sector, ranging from six-week programs to diplomas and associate degree programs. As noted in a recent study by the Kentucky Council on Postsecondary Education, certificate programs offered by KCTCS have grown in popularity, “accounting for 63 percent of KCTCS credentials in 2021-22.”

These programs, which include a range of construction-related programs, should be routinely evaluated for their effectiveness and promoted. KCTCS might consider working with the Council on Postsecondary Education to develop a rating system for short-term credentials tied to labor force demand, similar to the system used by the Louisiana Community and Technical College System. This could help communicate to students high-need training areas, such as the construction sector.

Workforce Innovation and Opportunity Act

At the federal level, two of the most important policy levers that lawmakers can pull are modernization of the Workforce Innovation and Opportunity Act (WIOA) and immigration reform. WIOA is the primary federal vehicle for workforce development funding and programming, and it is a key resource for state-level workforce development efforts. WIOA, however, is now ten-years old and in need of reauthorization to address current workforce challenges, including challenges with the home building workforce. At the time of writing,

Congress is currently considering the bipartisan Strong Workforce for America Act, which would reauthorize and modernize WIOA. The proposal includes provisions such as allowing states to set aside funds for upskilling workers in priority industries, supporting retraining for displaced workers, establishing greater accountability for state and local workforce development systems, strengthening the Job Corps program, and emphasizing work-based learning opportunities.

Immigration Reform and the H2-B Visa Program

Immigration reform could also help support the home building workforce. According to research by the National Association of Home Builders, immigrants made up 8 percent of Kentucky’s construction labor force in 2018. While broader immigration reform focused on border security and easing legal immigration processes into the United States would help support the home building workforce, federal lawmakers should also focus on strengthening the H2-B visa program,

which allows eligible employers to bring foreign workers to the country on a seasonal basis for non-agricultural work like construction. The program is popular among construction employers struggling to find qualified workers. Efforts to improve the efficiency of the program and increase the annual visas cap would make it more effective and help address housing challenges in states like Kentucky.

CONCLUSION



Kentucky's state and local leaders have taken great strides in recent years to build a stronger Commonwealth, with the goals of growing our economy and workforce. As this important work continues, we need to prioritize home building and housing. As this report has sought to demonstrate, housing is critical for quality of life, economic development, and workforce participation. Communities across the state, however, are dealing with a range of housing challenges, including an aging housing stock, an affordability gap, and housing shortages. As our population and economy continues to grow, these challenges could become more pressing, resulting in unsustainable growth and ultimately harming Kentucky's economic potential and the well-being of its residents. Fortunately, we know what we need to do. Through measures like land-use and zoning reforms, being smart about government regulations, incentivizing low- and middle-income housing, and growing the home building workforce, we can overcome Kentucky's current and future housing challenges. It's time to build a stronger foundation for growth – and that starts with home building and more housing.

APPENDIX

Methodology for Kentucky's Future Housing Needs Estimates

In the baseline scenario, Kentucky will need over 361,000 new housing units by 2050 to keep pace with population growth and align with efficient long-term vacancy rates. Under a high estimate, Kentucky would need over 529,000 new housing units.

Model

The number of new housing units Kentucky needs to build through 2050 = (Number of projected occupied housing units in Kentucky by 2050 + The number of missing households that would have formed if not for inadequate supply) + (The number of vacant housing units needed to reach efficient long-term vacancy rates) + (The number of aging housing units that have fallen out of stock) – (Current number of housing units in Kentucky)

Baseline Scenario:

361,213 new housing units = $(1,944,624 + 20,000) + (287,673) + (132,595) - (2,023,679)$

High Estimate:

529,378 new housing units = $(2,091,311 + 20,000) + (309,151) + (132,595) - (2,023,679)$

Projecting Occupied and Vacant Housing Units

Using estimates developed by the Kentucky State Data Center at the University of Louisville, Kentucky's population will grow to 4,785,233 in 2050, and will be distributed across 1,944,624 households.¹ For the high estimate we assume that household growth will be double KSDC's estimates (8.15 percent increase measuring from 2020 to 2050 vs. 16.31 percent), increasing to 2,091,311 households by 2050. We assume that each of Kentucky's households will occupy one housing unit.

Vacant units include units for rent, units for sale, seasonally vacant units, and other types of vacant units.² High vacancy rates reflect a poor economy, while low vacancy rates signal that demand is outstripping supply, making housing less affordable.³ Research conducted by the National Association of Home Builders (NAHB) estimates that long-run rental and

homeowner vacancy rates of 7.1% and 2%, respectively, are necessary to achieve balance in Kentucky's housing market. Utilizing the definitions of rental and homeowner vacancy rates from the U.S. Census Bureau American Community Survey (ACS), we project the number of vacant units for rent and for sale needed by 2050 to attain these ideal vacancy rates.⁴

We project the number of units in other vacancy categories by 2050 by utilizing ACS estimates from 2013 to 2022. We calculate the 10-year average proportion of vacant units to occupied units in Kentucky for each vacancy category and apply these proportions to our 2050 estimates in both the baseline and high-estimate scenarios to determine the total number of vacant units.

¹ Kentucky State Data Center, "Population and Household Projections", August 2022.
<https://louisville.app.box.com/s/rh39adf5ou0cd0aduxe5dnodanj3ftf0/file/993066674933>

² "Other vacant units" may include units that are only used occasionally, units that need repairs, units that have been foreclosed on, and other categories of vacancy.

³ Siniavskaia, NAHB, The Size of the Housing Shortage: 2021 Data", 2022.
<https://eyeonhousing.org/2022/12/the-size-of-the-housing-shortage-2021-data/>

⁴ American Community Survey Subject Definitions 2022.
https://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2022_ACSSubjectDefinitions.pdf

Missing Households

Research done at the Federal Home Loan Mortgage Corporation (commonly referred to as Freddie Mac) suggests that increases in housing development costs and a shortage of skilled labor have led to a shortage of housing supply. Robust demand, especially among young adults, coupled with weak supply, has driven up housing prices in recent years. These high housing costs have caused household formation

to operate inefficiently, as 25-to-35-year-olds who would have formed their own households are now doubling up in shared living arrangements or moving in with their parents. This research suggests that there are 20,000 “missing” households in Kentucky that would have formed if not for high costs.⁵

Housing Unit Loss

As housing units age, they gradually depreciate and fall out of the market. The U.S. Census Bureau determines loss rates based on unit structure type, age, and region.⁶ We estimate the number of units that will be lost by 2050 by applying these Census loss rates to the current stock of housing units in Kentucky. However, it's important to note that these loss rates are calculated based on the 2022 stock and do not account for the aging of Kentucky's housing stock by 2050. Consequently, this method may lead us to underestimate the number of units that will be lost. Also note that the loss

rates reflect an average for the entire southern region and are not specific to Kentucky. See the following table for more information on loss rates.

Additionally, this analysis assumes that all housing structures are categorized as 'house/apartment or flat' and excludes mobile homes. Given that mobile homes typically have higher loss rates, we are likely underestimating the number of housing units that will be lost by 2050.

Year Housing Structure Built	Kentucky Housing Stock Total	Loss Rate	Units Lost from 2022 to 2050
2010-2022	236,010	0.000%	-
1990-2009	612,324	0.037%	(6,312)
1960-1989	753,047	0.257%	(52,350)
Pre 1960	422,298	0.685%	(73,933)
		Total:	(132,595)

Source: ACS, 2022 1-Year Estimates

Current Housing Stock

We use American Community Survey (ACS) 2022 estimates to measure the current housing stock in Kentucky by age and structure type.

⁵ Freddie Mac, "The Housing Supply Shortage: State of the States", 2020.
⁶ Census Methodology, 2022. <https://www2.census.gov/programs-surveys/popest/technical-documentation/methodology/2020-2022/2022-hu-meth.pdf>

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