COMMON SENSE INSTITUTE ARIZONA

APRIL 2024

ARIZONA HOUSING COMPETITIVENESS INDEX

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ABOUT THE AUTHORS

Steven L. Byers, Ph.D. is a Chief Economist for the Common Sense Institute. Steven spent three years working for the Coalition for a Prosperous America, a nonprofit organization. Steven's experience as an economist spans twenty-three years, including work at federal regulatory agencies (SEC, CFTC, PCAOB) and quantitative economic analysis supporting international trade litigation cases brought before the U.S. International Trade Commission. His Ph.D. dissertation topic was based on a computable general equilibrium model (CGE) he developed to evaluate the economic impact of regional tax incentives in a small city (Fort Collins, CO)

Glenn Farley is CSI Arizona's Director of Policy & Research. Glenn has helped CSI provide accurate, timely, and insightful public information on issues ranging from tax and regulatory policy, to Arizona's changing K-12 landscape since the pandemic.

Prior to joining CSI in 2022, Glenn ended his 8 years in the Office of the Arizona Governor as Gov. Doug Ducey's Chief Economist and a policy advisor. In that role, he advised on issues of tax, fiscal, and regulatory policy, and was one of the Governor's lead architects of his two major tax reforms – the 2018 tax overhaul that established the State's first remote sellers sales tax and dedicated the proceeds to a major simplification and overhaul of the individual income tax, followed by the 2021 income tax omnibus which phased in a 2.50% flat tax (the lowest in the country). Mr. Farley has also led the budget team that produced the Executive revenue forecasts and caseload spending numbers that have helped ensure the longest run of conservative, structurally balanced budgets in State history.

ABOUT COMMON SENSE INSTITUTE

Common Sense Institute is a non-partisan research organization dedicated to the protection and promotion of Arizona's economy. CSI is at the forefront of important discussions concerning the future of free enterprise and aims to have an impact on the issues that matter most to Arizonans. CSI's mission is to examine the fiscal impacts of policies, initiatives, and proposed laws so that Arizonans are educated and informed on issues impacting their lives. CSI employs rigorous research techniques and dynamic modeling to evaluate the potential impact of these measures on the economy and individual opportunity.

TEAMS & FELLOWS STATEMENT

CSI is committed to independent, in-depth research that examines the impacts of policies, initiatives, and proposed laws so that Arizonans are educated and informed on issues impacting their lives. CSI's commitment to institutional independence is rooted in the individual independence of our researchers, economists, and fellows. At the core of CSI's mission is a belief in the power of the free enterprise system. Our work explores ideas that protect and promote jobs and the economy, and the CSI team and fellows take part in this pursuit with academic freedom. Our team's work is informed by data-driven research and evidence. The views and opinions of fellows do not reflect the institutional views of CSI. CSI operates independently of any political party and does not take positions.

INTRODUCTION

Housing availability and affordability directly impact Arizona household's financial well-being and play a foundational role in the state's free enterprise system: access to affordable housing is essential to attracting and retaining Arizona's prime-age workforce, while housing of sufficient size and quality is necessary to ensuring family formation and growth. This means the housing market must be dynamic at all ends.

Historically, Arizona – and its greater Phoenix metro area – has had a relatively affordable housing market thanks to a combination of abundant land, low taxes and regulations, and a relatively low cost of doing business. Recently, though, Arizona's position has reversed – housing costs in the Phoenix area rose faster than any other major metro area in the country during the pandemic, and today housing is relatively less affordable here than in the average U.S. state.

KEY FINDINGS

- While Arizona has historically ranked high in housing competitiveness thanks to abundant building and cheap land, that trend has reversed, lowering the state's competitiveness in recent years.
- CSI estimates that Arizona now has a housing deficit of over 129,000 units. As a ratio of the state's population the deficit is -1.76%, compared to an average of -0.7% for all states.
- Housing costs, including rent, have risen dramatically in the last decade, which has made housing in Arizona more unaffordable than the average state. **Home prices in the Phoenix area have risen more than 60% since 2020.**
- ACS data suggests the state is underbuilt, particularly in low-to-mid priced homes (<$300,000).

STATE HOUSING COMPETITIVENESS INDEX

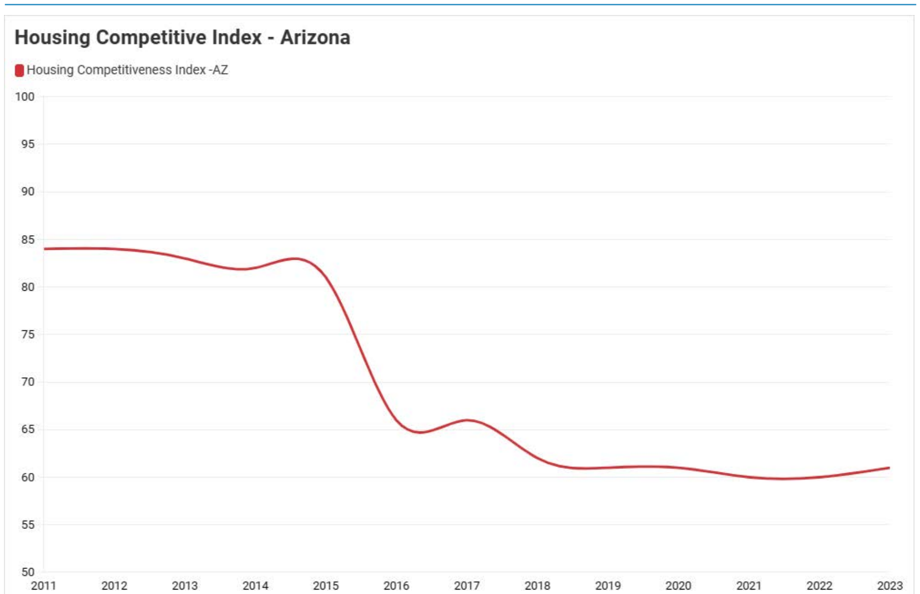
CSI's annual Free Enterprise Report assesses a state's competitiveness relative to its national peers across nine subject areas, including Housing. The goal of this assessment is to indicate how well a state's policy in these areas (and in its overall economy) conforms to free-market principles, and given that conformity, how well the sector itself performs.

A state's Housing sector is a contributor to the strength of its overall economy and the success of its free-enterprise system – access to housing that is affordable and desirable is a key component of growth – and itself is subject to government economic policy that either promotes or restricts freedom and choice. Indeed, due to zoning, permitting, and other local development restrictions, housing is perhaps the sector most impacted by local-level regulatory requirements. This can hinder the ability of the market to quickly provide solutions to a given jurisdictions changing housing needs, but also provides opportunity for state- and local-level reform to promote free-enterprise solutions.

To gauge how well Arizona's housing market is performing, CSI produces a State Housing Competitiveness Index for all 50 states and the District of Columbia consisting of four metrics that capture the supply and affordability of housing. Metrics include the percentage of permits as a share of the housing deficit/surplus, the housing deficit/surplus as a percentage of the population, the hours required (at the average wage) to pay both a typical 30-year mortgage (at prevailing rates) and median market rent.

Each state and D.C. are given a score for each metric, and then Arizona is ranked relative to its peers. The four ranked metrics are equally weighted and summed. This value is ranked again and then normalized to be between 50 and 100 (with 100 being the best) to produce an aggregate measure of housing competitiveness as shown in **Figure 1**.

FIGURE 1

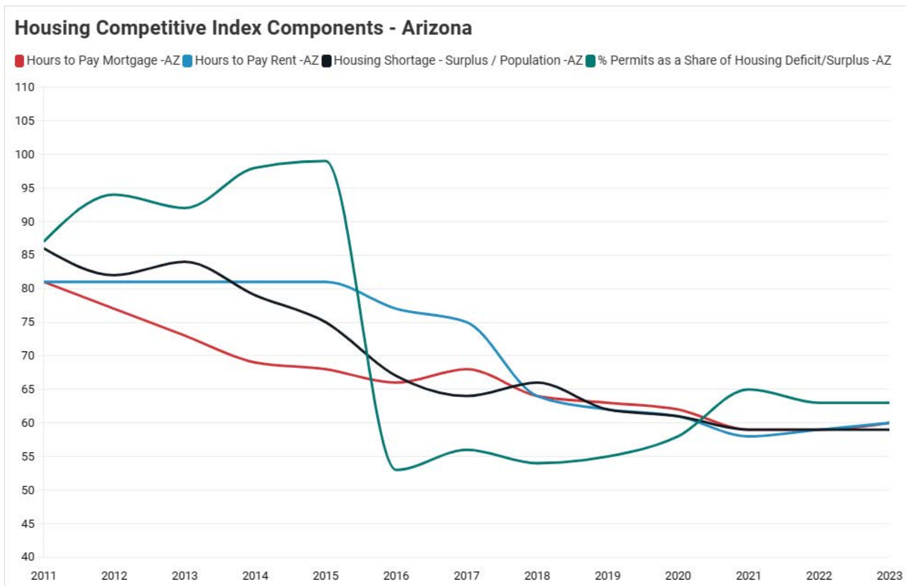


Arizona's Housing Competitiveness Index was 84 in 2011 and then declined to 66 in 2016 and 61 in 2023. This decrease over time reflects the states deteriorating housing conditions relative to its peers – particularly in recent years, due to the rapid rise in costs.

Figure 2 shows the evolution of the four components that are included in the Housing Competitiveness Index. The decline in the Housing Competitiveness Index was the result of declines in each of the four component competitiveness indices, though the component with the largest reported decline was the measure of building permits as a share of the state's housing deficit – which fell from 87 in 2011 to 63 in 2023. The large decline is attributable to the state shifting from an estimated housing surplus in 2015, to a deficit in 2016. Technical issues with the construction of this measure can cause large changes in Index values when states shift from surplus to shortfall.

The Competitiveness Index for Hours Required to Pay the Monthly Mortgage declined from 81 in 2011 to 60 in 2023, as did the index for hours required to service the monthly rent. The Competitiveness Index for the Housing Shortage as a Share of the Population fell from 86 in 2011 to 59 in 2023.

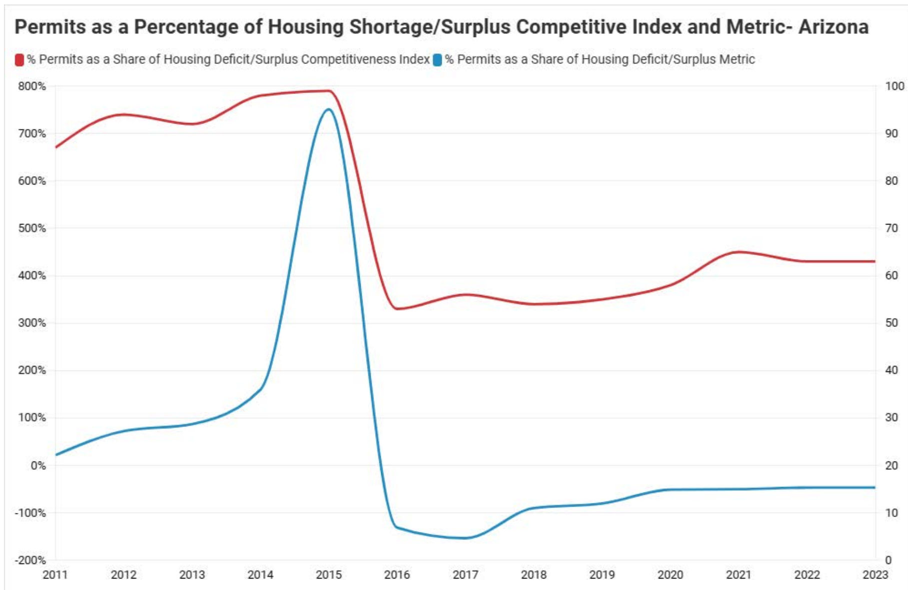
FIGURE 2



Permits as a Share of the Housing Deficit/Surplus Competitiveness Index and State Metric

Figure 3 presents the change in the Permits as a Percentage of Housing Shortage (normalized and ranked) against the change in the underlying metric itself. This enables us to better assess whether the change in Arizona's performance was the result of a change in its own performance, or a change in the performance of its peers (or both).

FIGURE 3

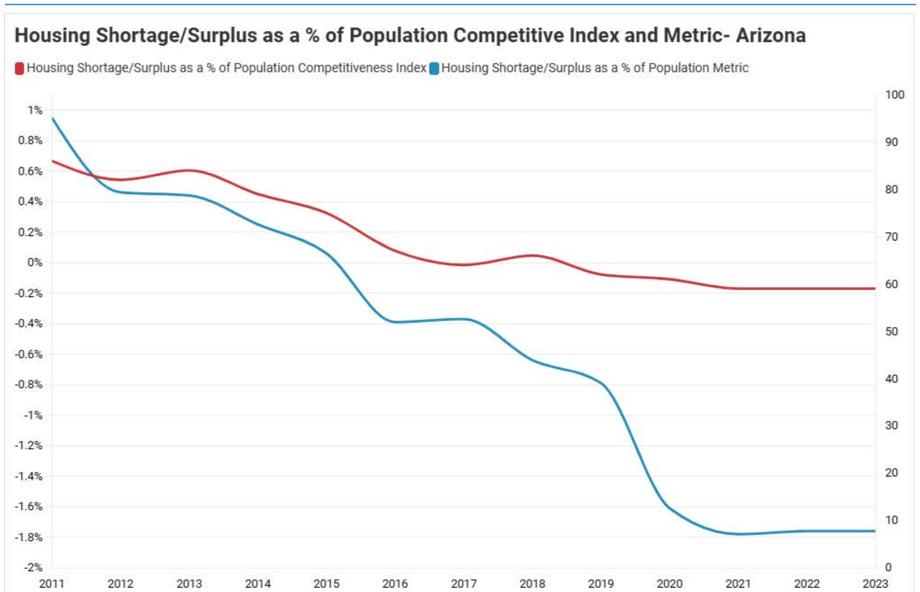


Noting the technical issue with this measure mentioned above, the majority of the change in Arizona's performance in this metric is attributable to its large decline in 2016. This coincides with the state shifting from having a small estimated housing surplus (as measured by Common Sense Institute US, using the methodology it has developed for all fifty states) to having a small estimated housing shortfall. While the state has had a shortfall every year since, it has also increased the number of permits it is issuing (particularly in the last couple of years).

Housing Shortage/Surplus as a Percent of Population – Competitiveness Index and Metric

Figure 4 presents the change in the Housing Shortage as a Percent of Population (normalized and ranked) against the change in the underlying metric itself. This enables us to better assess whether the change in Arizona's performance was the result of a change in its own performance, or a change in the performance of its peers (or both).

FIGURE 4



While the underlying metric has been in a long-term declining trend, there was a significant decline in 2020. This period coincides with the combined impacts of the pandemic on the Arizona housing market: large increases in in-migration increased demand for housing, while supply constraints imposed in 2020 limited the ability of the state's housing market to respond quickly or efficiently. However, many of Arizona's peers experienced similar constraints simultaneously, limiting the translation of this large decline in the underlying metric into movement in the states (normalized and ranked) Index performance.

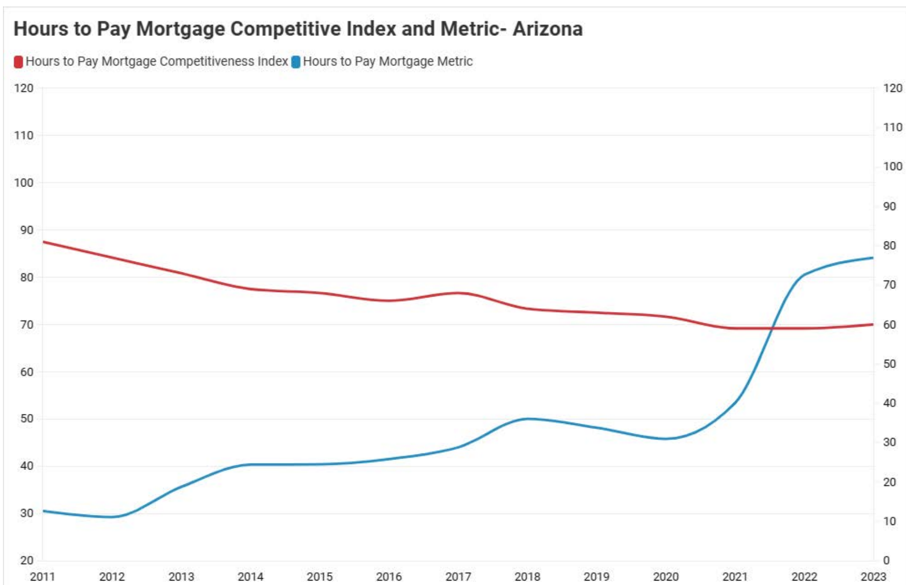
Hours Required to Pay Mortgage – Competitiveness Index and Metric

Figure 5 presents the change in the Hours of Work Required to Pay a Typical 30-year Mortgage (normalized and ranked) against the change in the underlying metric itself. This enables us to better assess whether the change in Arizona's performance was the result of a change in its own performance, or a change in the performance of its peers (or both).

Note again that while the state's performance in this metric has been in long-term decline over the Index measurement period, there was a particularly large spike in the underlying measure in 2020-21. This coincides again with the pandemic period, the associated spike in home prices, and the subsequent rise in interest rates. Again, though, there is no corresponding decline in the Index – implying Arizona's peers experienced similar simultaneous changes.

In Arizona and many other states wages have not kept pace with increased housing and borrowing costs, and this is the largest contributor to recently increasing unaffordability.

FIGURE 5

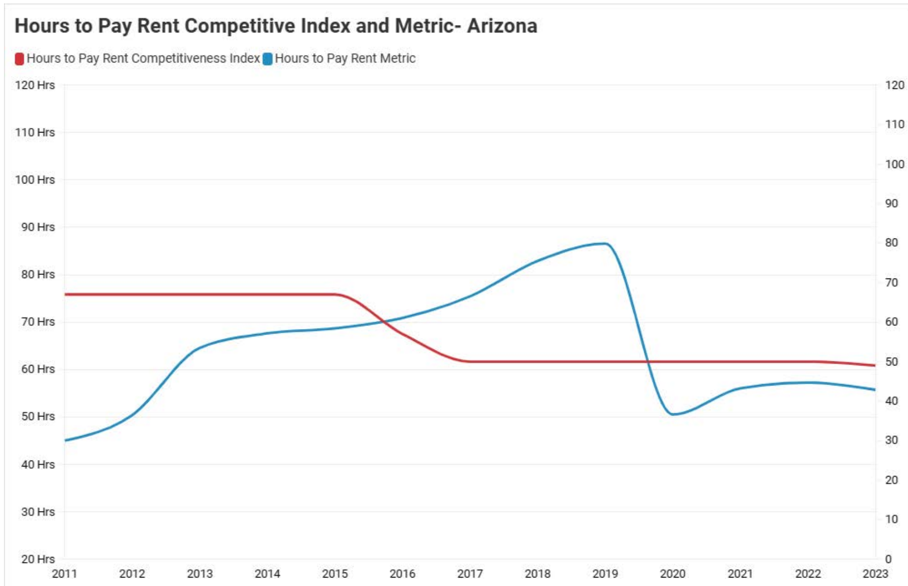


Hours Required to Pay Rent - Competitiveness Index and Metric

Figure 6 presents the change in the Hours of Work Required to Pay the Median Rent (normalized and ranked) against the change in the underlying metric itself. This enables us to better assess whether the change in Arizona's performance was the result of a change in its own performance, or a change in the performance of its peers (or both).

Data for rent was only available starting in 2015 so the years 2011 to 2014 were assumed to be the same as 2015 for all states. The primary driver of the decline in the competitiveness index was the result of a large decline in the underlying metric. In 2011, the metric was 41.9 hours but had risen to 55.7 in 2023. As a result, the competitiveness index declined from 81 in 2011 to 60 in 2023.

FIGURE 6



VALUE OF HOUSING VS. HOUSEHOLD MORTGAGE CAPACITY

Although not directly incorporated into the Housing Competitiveness Index, beyond simply trying to determine whether there is an overall surplus or shortage of housing units within a state, there is also the policy question of whether the supply of housing aligns with what prospective buyers are able to afford.

Rapid increases in interest rates as the Federal Reserve has attempted to reign in persistent inflation have resulted in dramatic increases in mortgage servicing costs, at any given home value. Because incomes have not kept pace, this has resulted in the erosion of overall housing affordability, but home prices have not kept pace.

To try and understand how these changes have impacted the ability of Arizonans to purchase homes, CSI used data from the American Community Survey on housing values and household incomes. The household incomes are translated into mortgage capacity. This comparison does not include households who have a home to sell and use the proceeds to buy a new home. The assumption is that the new home will be 100% financed.

FIGURE 7

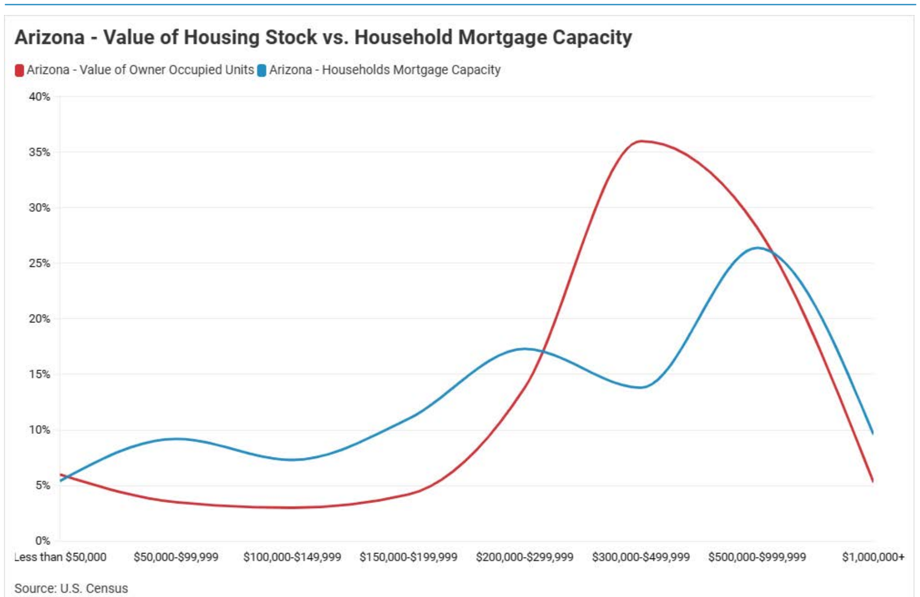


Figure 7 shows the two distributions. There are more households with the capacity to purchase homes under $300,000 than the available supply, indicating that more homes in the price range need to be built. For home values between $300,000 and $1,000,000, there are more homes valued in this range than the number of households with the mortgage capacity to purchase them, indicating that there may be an excess supply of homes in this range. For homes valued above $1,000,000 the supply and mortgage capacity are equally distributed, noting that this is a relatively small share of the total market though.

As we have noted in our Quarterly Housing Updates, this is at least in part a function of local housing regulation: zoning, design, and architectural requirements on new housing limit the ability of developers to build out new affordable-market housing. Historically, this demand would have come from the resale of existing housing units as owners "trade up"; that behavior has largely evaporated as existing owners are reluctant to pay off their lower-rate mortgages in exchange for new (more expensive) loans.

In the appendices, the same comparison is provided for the following Arizona metropolitan statistical areas: Flagstaff, Lake Havasu City-Kingman, Phoenix-Mesa-Chandler, Prescott Valley-Prescott, Sierra Vista-Douglas, Tucson, and Yuma.

THE PUBLIC & PRIVATE SECTOR ROLES IN LOCAL HOUSING MARKETS

The Government's Outsized Role

The American housing market is highly regulated. Nearly 30% of mortgage loans are backed by a Federal agency directly, and approximately 70% of all mortgages are supported or owned by one of the two Congressionally-created corporations (also referred to as Government Sponsored Enterprises, or GSE's) – Fannie Mae and Freddie Mac. Loans in either of these categories are subject to various federal requirements, which limit the type of housing most Americans can buy, and especially the financial conditions of the sale. On the other hand, the sale of conforming loans to the GSE's increases overall mortgage market liquidity, providing banks additional capacity to issue new loans and lowering overall lending costs – which contributes to increased demand for homes and likely supports a higher overall price level.

At the local level, the vast majority of housing in the United States is subject to zoning and permitting requirements. These ordinances limit the type of housing that is available in any given geographic area, and can be significant contributors to the cost and time associated with developing new housing or modifying the existing stock.

State governments play an increasing role in their housing markets, too. States have become increasingly active as regulators of their local city and county governments conduct with respect to zoning and permitting, in response to a perceived supply crisis in the United States.

States are also often utilized by federal or other partners as administrators of subsidy and incentive programs intended to lower the cost of housing or improve accessibility for lower-income households.

Community Development Block Grants (CDBG's) are used to address needs such as infrastructure, economic development projects, public facilities installation, community centers, housing rehabilitation, public services, clearance/acquisition, microenterprise assistance, code enforcement, and homeowner assistance. Low Income Housing Tax Credits (LIHTCs), a major source of funding for new and rehabbed rental homes, are also allocated at the state level. Some states promote housing and community development through state-run housing trust funds or other funding mechanisms.[i]

The federal HOME Investment Partnerships Program provides formula grants to states and localities that communities use - often in partnership with local nonprofit groups – to fund a wide range of activities including building, buying, and/or rehabilitating affordable housing for rent or home ownership or providing direct rental assistance to low-income people. It is the largest Federal block grant to state and local governments designed exclusively to create housing for low-income people.[ii]

The State of Arizona's Department of Housing is the administrator of both the federal Low Income Housing Tax Credit, and the state's new matching program that piggybacks off the state income tax. The Department also administers the Housing Trust Fund, which has provided over $110 million in grant assistance to individual Arizonans for housing.

As CSI Arizona has documented in numerous reports – including its 2022 bipartisan market analysis, *Housing Innovation in Arizona* – local conditions are highly deterministic for both housing availability and affordability in this state. While demand is certainly a factor, the ability of housing developers to obtain local approval for housing (and consumers to obtain affordable financing) has been shown to be highly correlated with where growth in Arizona occurs. A 2019 paper on American housing policy between 1974 and 2009 estimated that local building restrictions in some of the United States' most restrictive and high-demand jurisdictions – like New York City and San Jose – lowered overall growth by 36%.[iii]

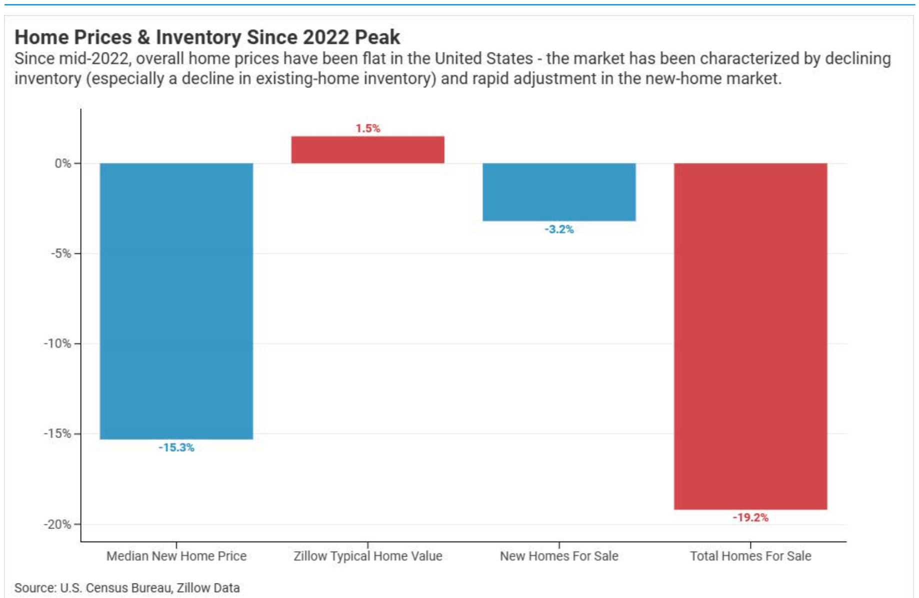
The Role of the Private Sector in Housing

Housing is an exceptional market. While Americans generally understand and agree with the basic principles of "supply and demand", these beliefs seem to fall apart when they are asked to assess their local housing market. A 2022 study, in fact, found that only about 30% of survey respondents believed that additional housing supply would reduce prices and rents in their local area.[iv] This phenomenon is often called "supply skepticism".

Americans are also generally skeptical of developers. They believe that home builders often only build high-cost homes, and that when homes are built, that supply is often "used up" by foreign investors or the short-term-rental market. These beliefs may contribute to local-level resistance to measures that would relax building requirements and encourage additional development, even as evidence suggests these restrictions contribute to high costs and supply shortages.

In reality, evidence suggests home markets are sensitive

FIGURE 8



to the same supply-and-demand functions as other normal goods and services. Home builders and developers appear to be responsive to market pressures. The prices of new homes have fallen faster than those of existing since prices and interest rates peaked in 2022.

This data combines with other Census and survey evidence suggesting homebuilders have been shifting the type of product they are trying to bring to market in response to changing demand conditions. New homes are getting smaller and feature fewer amenities today than two or three years ago. These changes are indicative of developer efforts to respond to price and interest-rate pressure, and the loss of market availability for existing homes, by bringing more affordable products to market. These efforts are inhibited, though, by permitting and zoning requirements that make it both more expensive and more time-intensive to bring new housing to market.

Similarly, we see supply-and-demand responses from developers to the high interest rates that would otherwise dampen demand – as we highlighted in our *Quarter 1 2024 Housing Update*, a large local builder is prominently advertising below-market interest rates (that it subsidizes presumably from operating revenues) to buyers.

All of this suggests both that housing supply is an important element in overall product affordability (alongside demand, stoked relentlessly by public policy for years), and that new housing development can be a partner in alleviating the current housing crisis and lowering costs.

State and local governments in Arizona should carefully consider opportunities to loosen restrictions that would enable the development of more housing and at more affordable price points, to help the current environment. This can and should be done in a way that balances the needs of local communities and existing homeowners.

THE BOTTOM LINE

Housing in Arizona – and especially the greater Phoenix metro area – has never been more unaffordable than it is today. Further, while rising interest rates have tamped down the rampant demand that fueled rapid price increases, they've proven unable to bring existing prices down (so far). Arizona's recent performance in the Housing Competitiveness Index reflects this reality. Further, it is clear that shorter-term changes in the frozen market will require new development, as existing homeowners have powerful financial incentive not to sell given the rapid change in interest rates.

Policies – especially at the local level – that make it easier to permit and then develop new housing are key to resolving these conditions.

APPENDICES

FIGURE 9

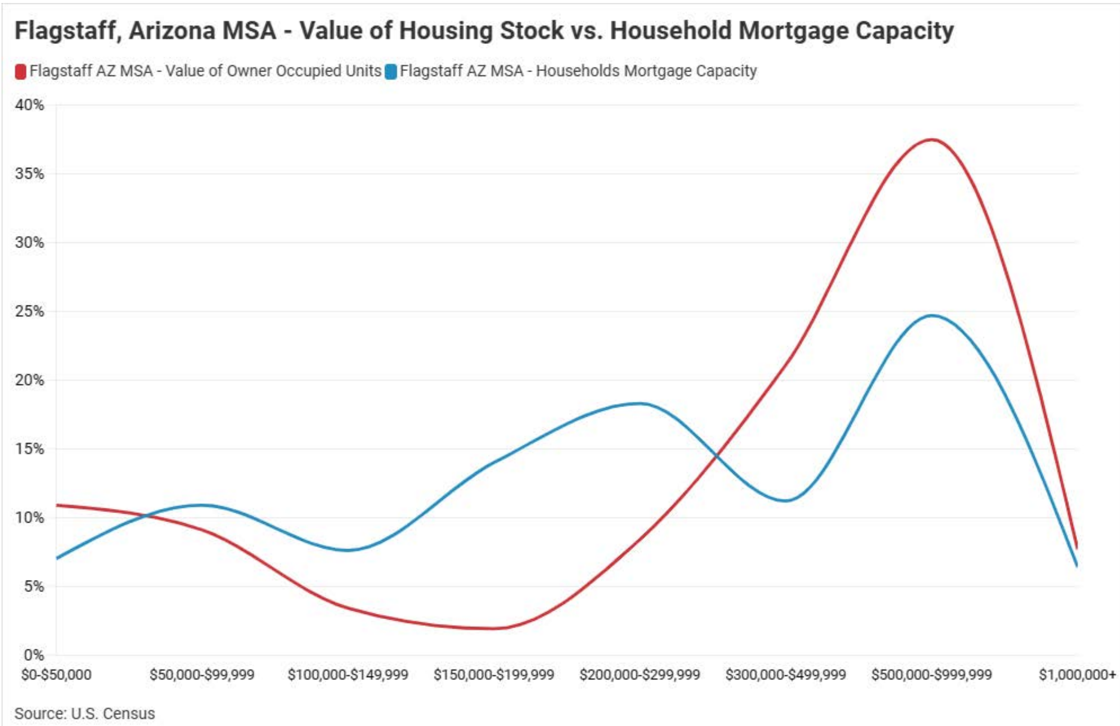


FIGURE 10

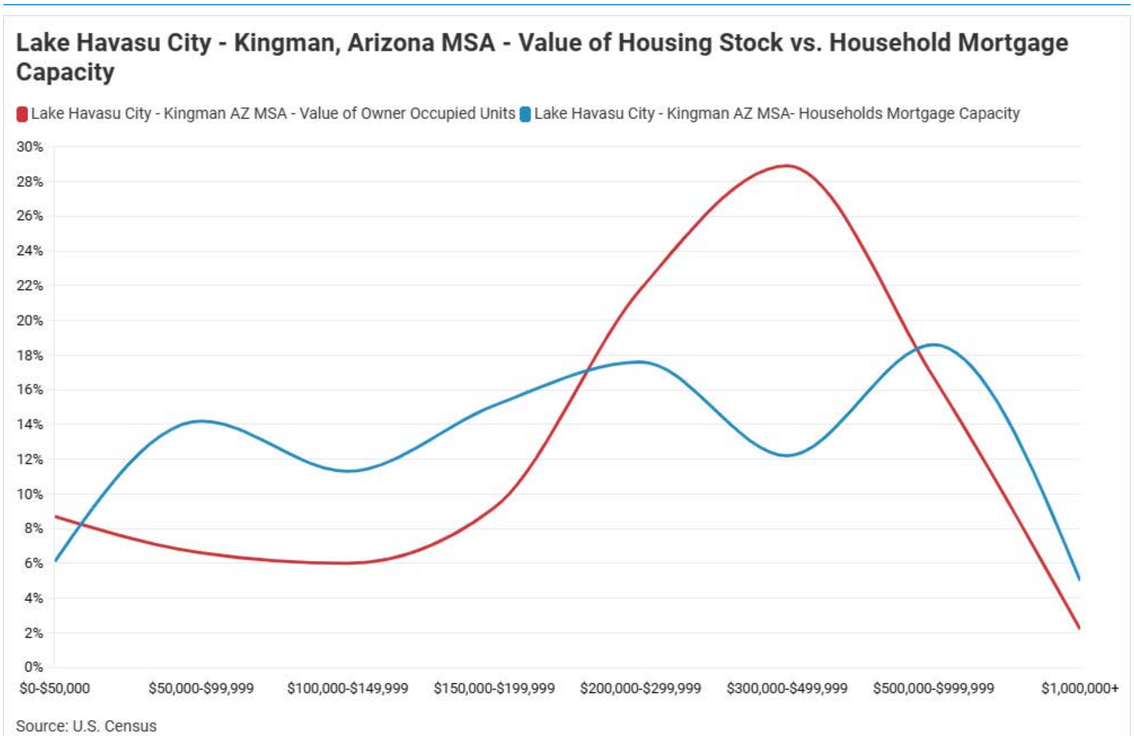


FIGURE 11

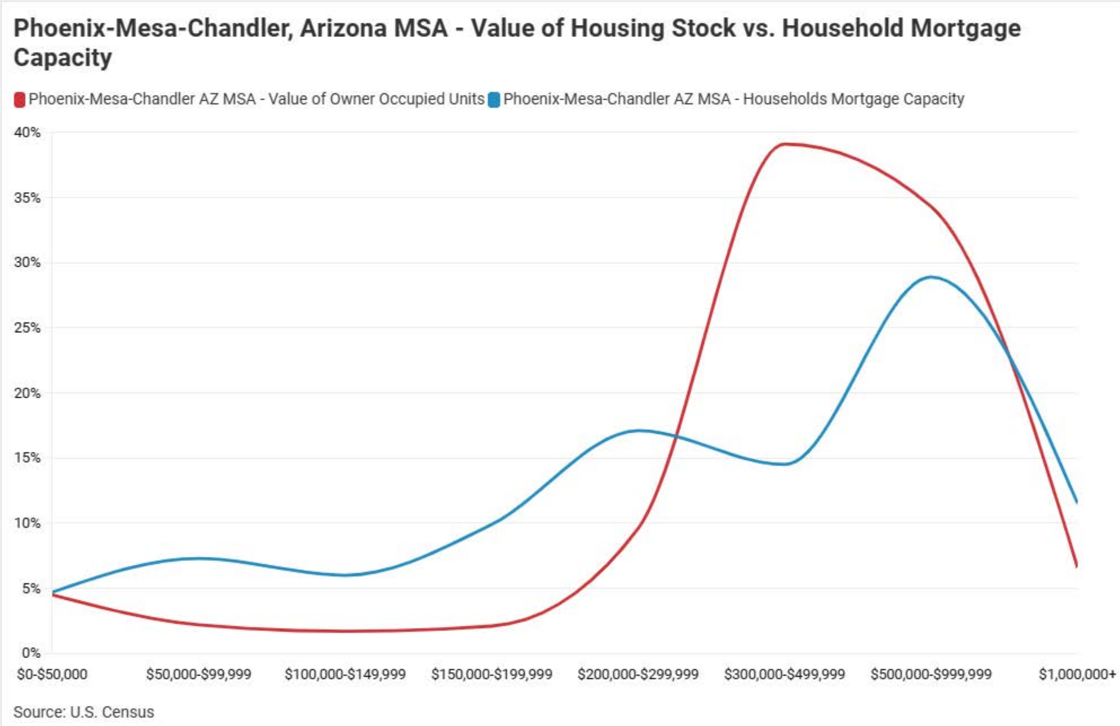


FIGURE 12

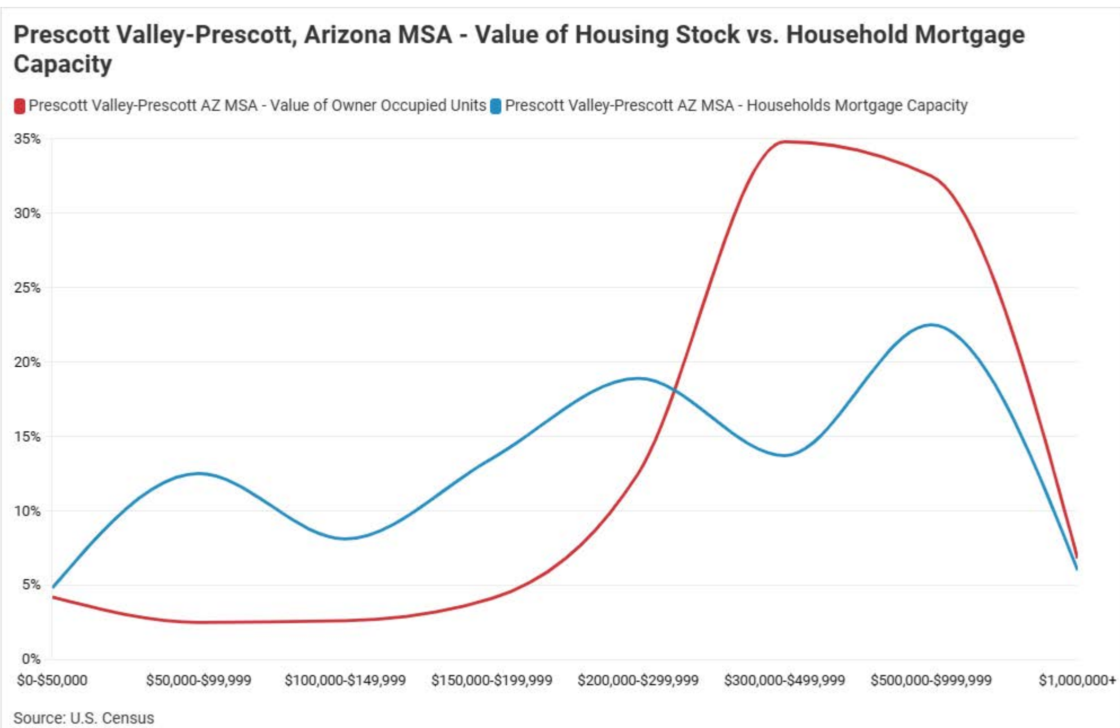


FIGURE 13

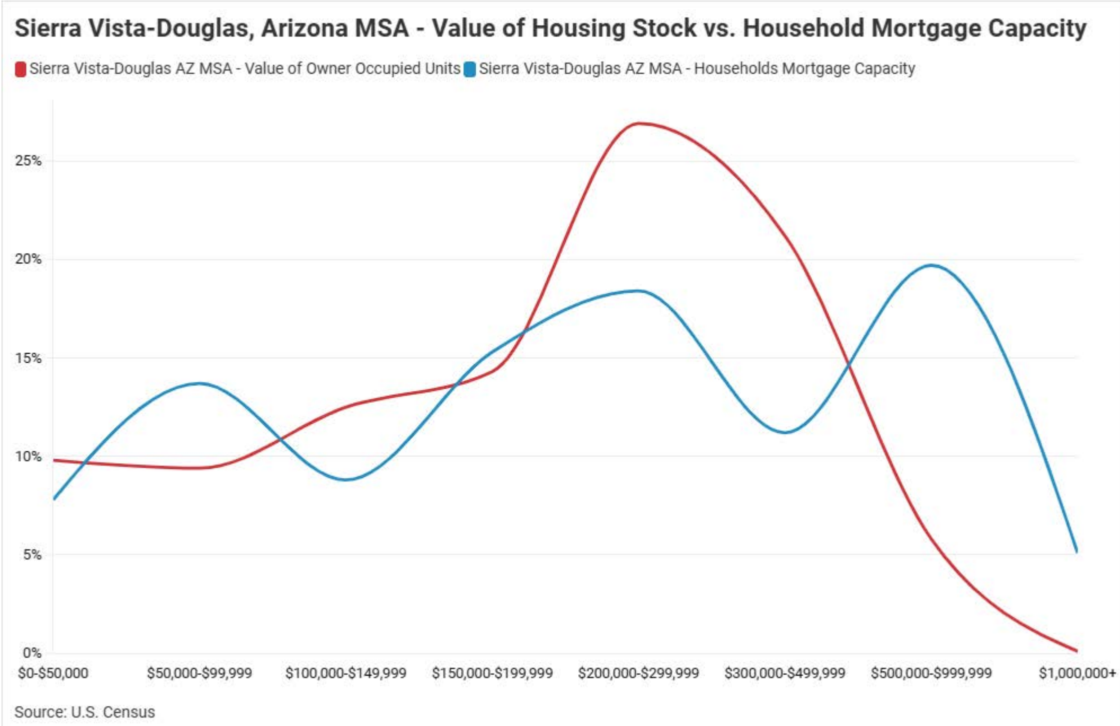


FIGURE 14

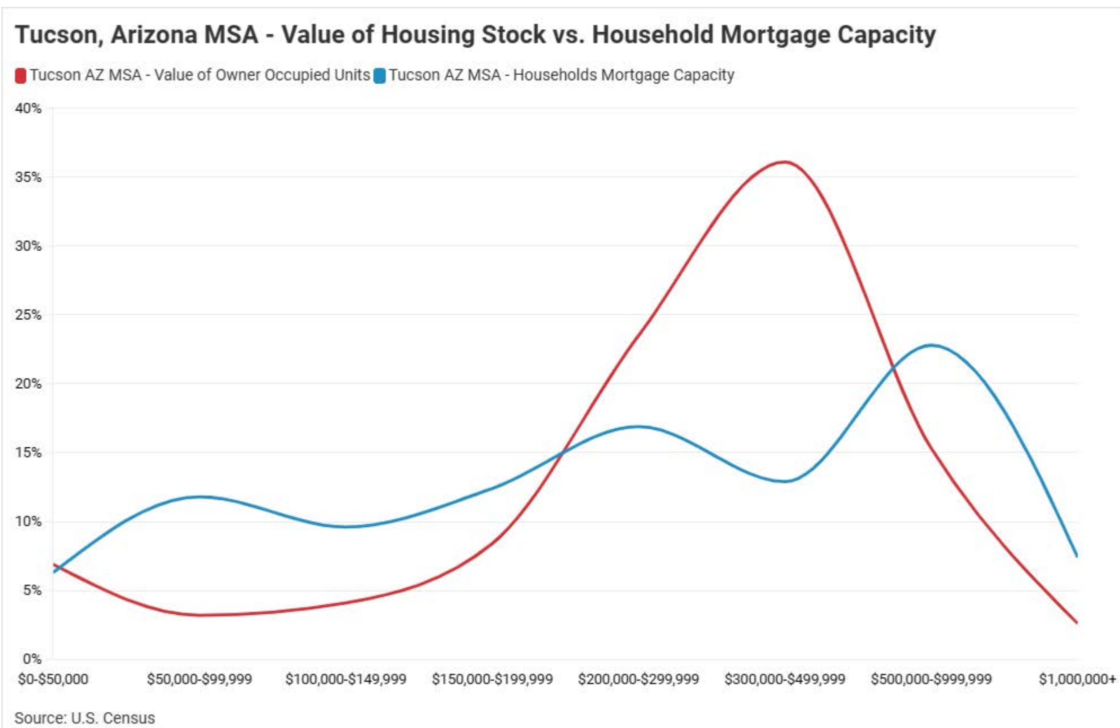
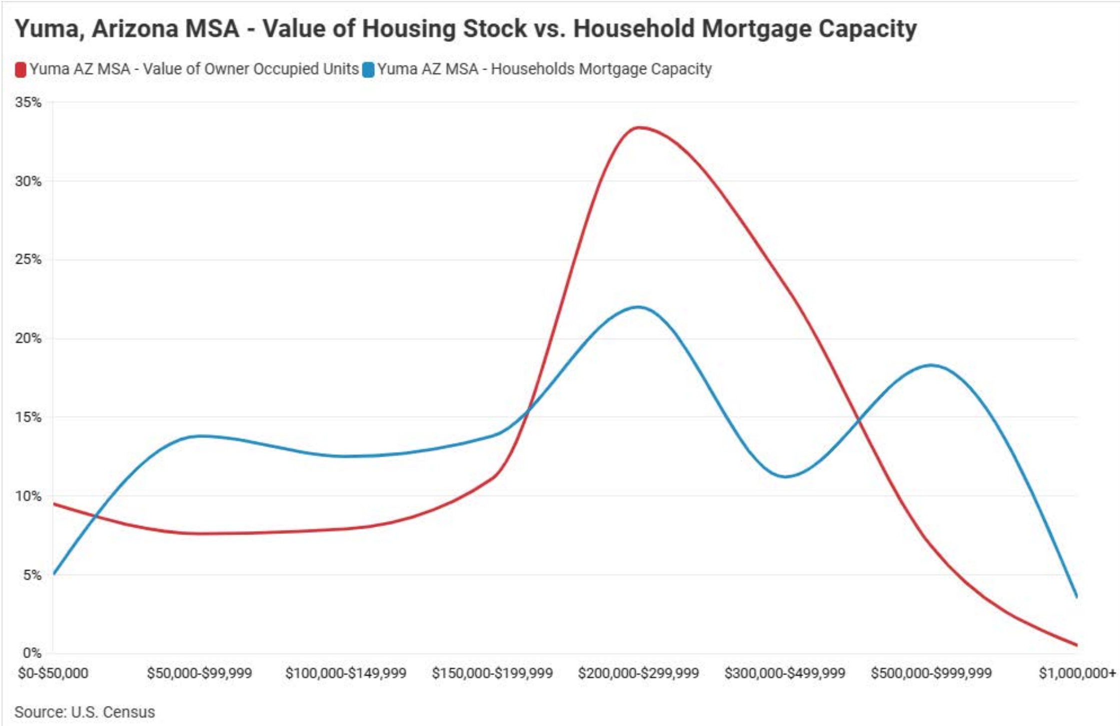


FIGURE 15


Yuma, Arizona MSA - Value of Housing Stock vs. Household Mortgage Capacity
Yuma AZ MSA - Value of Owner Occupied Units
Yuma AZ MSA - Households Mortgage Capacity
35%
30%
25%
20%
15%
10%
5%
0%
$0-$50,000
$50,000-$99,999
$100,000-$149,999
$150,000-$199,999
$200,000-$299,999
$300,000-$499,999
$500,000-$999,999
$1,000,000+
Source: U.S. Census

SOURCES AND NOTES

The competitiveness indices should be interpreted as follows: an increase (decrease) in an index indicates increased (decreased) competitiveness relative to the other forty-nine states and District of Columbia. Arizona's individual performance may improve, for example, its labor force participation rate may increase, however, other states may have seen greater increases, and this will cause Arizona's competitiveness in the labor force participation rate to decline.

i. "Community Development Block Grant", *U.S. Department of Housing and Urban Development*, accessed on April 22, 2024.

ii. "HOME Overview", *U.S. Department of Housing and Urban Development*, accessed on April 22, 2024.

iii. Hsieh, Chang-Tai, and Moretti Enrico, "Housing Constraints and Spatial Misallocation," *American Economic Journal: Macroeconomics*, April 2019.

iv. "Nall, Clayton, Elmendorf, Chris, and Oklobdzija, Stan, "Folk Economics and the Persistence of Political Opposition to New Housing," *University of California, Santa Barbara*, November 2, 2022.