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HOUSING AFFORDABILITY IN ARIZONA QUARTER 1 2024 UPDATE

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INTRODUCTION

The housing market in Arizona – and particularly in the Phoenix area – remains tight. After falling for about six months in late 2022, average home prices in the region have been largely flat. Interest rates have continued rising – reaching highs of 7.6% in late 2023, before settling in a range of 6.5% to 7.0% since. High prices and borrowing costs have combined to make buying conditions more miserable than ever for buyers in the greater Phoenix area.

At the same time, supply remains tight. Existing homeowners have proved reluctant to sell, which is limiting the number of homes available to purchase. Homebuilding is up, and new homes have fallen in price, but overall volume remains muted.

After falling for about six months in late 2022, average home prices in the region have been largely flat.

KEY FINDINGS

- At 102.15 (-3.5% since October 2023), the homebuyers 'Misery Index' remains at all-time highs – despite falling about 10% last year, the Index is being held aloft by persistently high prices. For context, the long-run average of the Index is set to zero, and it peaked at 54.05 prior to the Great Recession.
- Half of all homes for sale today in the United States are new construction. Before 2020, the level was closer to 20%. This continues a shift identified in our last report – existing homeowners have stopped selling homes, leaving builders to try and fill the gap at the lower- and middle-end of the market.
- Given vacancy rates, projected household population growth, and other indicators, CSI Arizona estimates that there is a statewide housing shortfall of approximately 67,000 housing units as of early 2024. This is down from well over 100,000 units in 2020, due to a combination of more construction and reduced demand for housing.
- Over two-thirds of all new residential building permits are being issued in Maricopa County. Four regions of the state are not issuing enough building permits to ever address their existing housing shortfall, based on January data. Despite having more than double its population, jurisdictions in Pima County are issuing about half as many building permits as those in Pinal County.
- As of January, the monthly payment for a 30-year loan on an average-priced home in Arizona was \$2,165; at prevailing hourly wages, this would require the typical household to work about 68 hours to make (versus a long-run average of about 43 hours/month).

HIGH PRICES REMAIN DESPITE PERSISTENTLY HIGH INTEREST RATES

While prices in the greater Phoenix housing market haven't risen in over 18 months (since peaking in June 2022, according to S&P), market conditions remain historically miserable for buyers. This is depressing sellers as well, and there is low supply and demand for housing. The Homebuyers Misery Index declined to 102.15 (-3.5% since October) in December 2023, but remains near the all-time highs set following the pandemic and well above peak levels reached prior to the Great Recession.

More recent data suggests both interest rates and prices have been mostly stable over the first two months of 2024, meaning little has changed and the market remains stagnant despite high costs of ownership.

For context, while Phoenix metro-area home prices have declined about 6% from their all-time peak set mid-2022, 30-year interest rates are up 23% since then (6.8% today, versus 5.5% in June 2022). Because interest on a 30-year loan is approximately half of total cost of ownership, the net effect has been to insulate buyers from any sentiment improvements lower prices might otherwise engender.

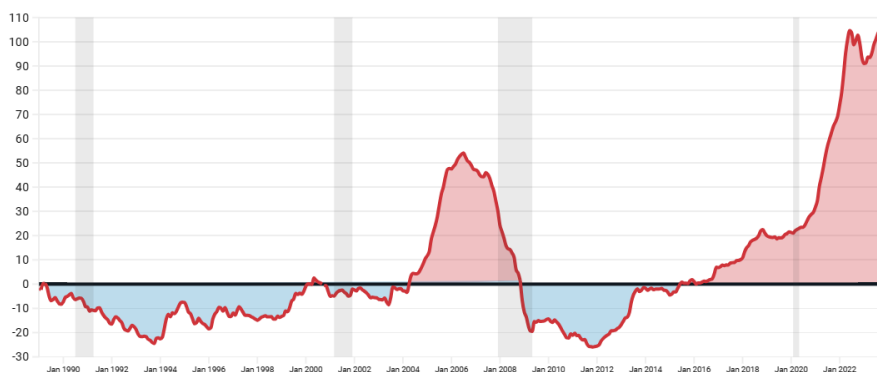
As a reminder, the 'Misery Index' sums normalized and equally weighted home prices and 30-year mortgage rates to measure effective costs of home buying relative to historical levels. The index is set to a long-run average value of 0. Conditions better than the long-run average are represented with negative numbers, and relatively more expensive conditions with positive values. Interestingly, excluding the two high-volatility periods of the 'housing market bubble' in the early 2000s and the current pandemic period, the index is relatively flat – generally rising home prices over time have been offset by an almost equally fast decline in interest rates. During the pandemic and 2020 and 2021, interest rates fell to their lowest levels ever, but rapid price increases dwarfed these changes and elevated homebuying costs well beyond historical norms. Subsequent interest rate hikes have arrested price increases, but levels remain high.

FIGURE 1

Phoenix 'Misery Index' of Mortgage Rates & Home Prices

Although prices in the greater Phoenix housing market haven't risen in 18 months, rapidly rising interest rates continue to keep homebuying conditions here miserable.

■ Home Buyer Misery Index



Source: S&P Dow Jones Indices, Primary Mortgage Market Survey • Shaded areas indicate Recessions. Because the index is normalized to zero, direct percent changes are exaggerated; non-normalized percent changes are cited instead.

THE SUPPLY SIDE OF THE MARKET IS CHANGING

Last year, CSI identified a fascinating trend in the housing market since interest rates began rising in 2022 – because most homebuyers are also home sellers, both sides of the market dried up at roughly the same time, preventing large and rapid price declines from excess supply relative to demand. This is very different from the experience leading into the Great Recession – rising interest rates destroyed demand for housing in 2007, but other factors (adjustable-rated loans, a general deterioration in economic conditions, and rapid homebuilding) came together to keep supply elevated, leading to rapid general price declines.

In March 2018, new construction composed approximately 20% of the total supply of housing for sale in the United States. This is a roughly healthy level. By the end of 2020 (the peak of pandemic-era disruptions and the beginning of the current boom-bust housing cycle), the supply of homes for sale had fallen by more than 40%; nearly a third of those were now new-construction. At the time, 30-year mortgage rates were 2.75%.

FIGURE 2

Home Prices & Inventory Since 2022 Peak

Since mid-2022, overall home prices have been flat in the United States - the market has been characterized by declining inventory (especially a decline in existing-home inventory) and rapid adjustment in the new-home market.

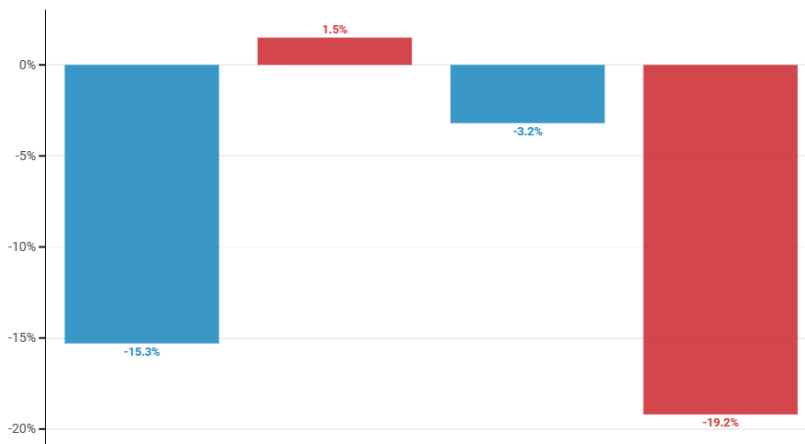


FIGURE 3 — PROMOTIONAL RATES BEING OFFERED BY A LOCAL BUILDER AS OF MARCH 8, 2024.

NEW RATES STARTING AT

5.49% | **5.61%***

30-year fixed mortgage rate | Annual percentage rate

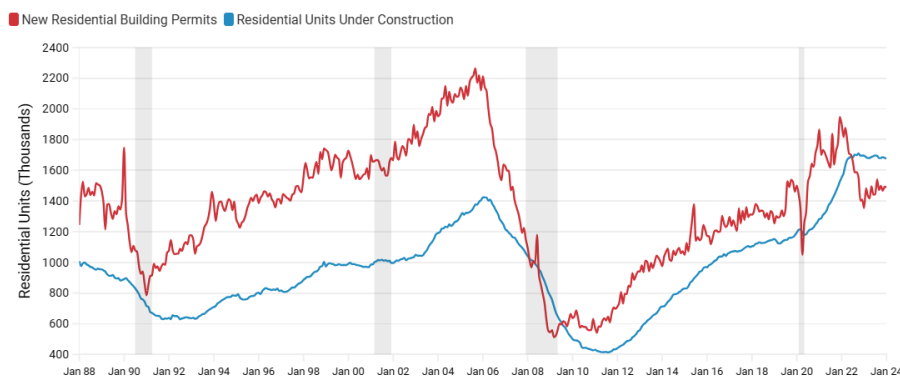
Since then: prices have increased by a third; mortgage rates have risen to about 7% and the number of homes for sale has remained at about half its pre-pandemic level. However, the number of new homes on the market has increased from about 300,000 units in January 2021 to 456,000 units in January 2024 (51% of total supply). At peak in mid-2022, over 55% of all homes for sale in the United States were new construction. In general, we would expect existing homeowners to provide a crucial part of the overall supply of housing for sale and available to buyers at any given time – especially at the lower- and middle-end of the market.

Existing homeowners who might normally sell their starter homes and “trade up” to a more expensive new build are instead staying put to keep their existing low-rate loans. This has dried up supply and created a demand gap at the lower end of the market; homebuilders in response appear to be shifting to providing a lower-end, more affordable product to try and fill this gap. They are also using interest rate subsidies – a tool existing homeowners lack – to try and entice price-conscious buyers, but this is likely costly and may not be tenable in perpetuity.

FIGURE 4

National Builder Interest vs. Homes Already Under Construction

Homebuilder sentiment - measured by building permits - has increased 10% over 2023.



Source: US Census Bureau • Shaded areas indicate Recessions.

NEW SUPPLY & FALLING DEMAND SLOWLY CLOSING THE HOUSING SHORTFALL

After 2020, homebuilding activity – measured by permits, unit count changes, and other indicators – rose rapidly, reflecting rising builder sentiment in the face of rising prices. This new supply has helped close Arizona’s housing gap; the deficit in Arizona has narrowed from an estimated 104,000 units in 2020 to just 67,434 units today.

Since then, permit activity has slowed from all-time highs and there are again fewer homes under construction. This likely reflects the combination of tighter margins associated with building more affordable entry- and mid-level homes, and the high costs associated with offering interest rate subsidies and other incentives to attract buyers.

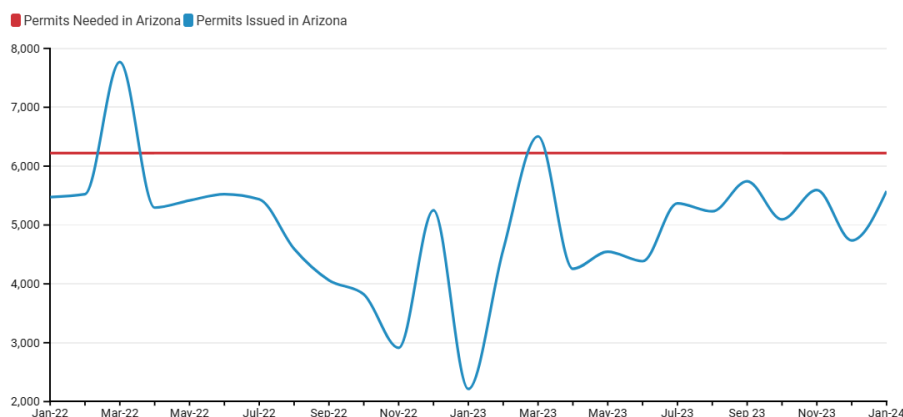
In January, Arizona’s local jurisdictions issued 5,576 residential building permits (-8.2% from January 2022); to close its housing shortfall within five years, CSI estimates that they would need to permit approximately 6,200 units. Nationally, the number of homes under construction has been mostly flat since early 2022, while permits are down more than 25%. More recent declines in the housing shortfall are probably more attributable to falling demand (due to high prices and borrowing costs) than rising supply.

To assess how Arizona’s local jurisdictions are performing in terms of enabling the development and construction of the new housing needed to meet demand, CSI has long [recommended](#) improved and standardized reporting. That has not yet occurred. Recently, the U.S. Census Bureau has begun reporting some information on home building and permitting data for Core Based Statistical Areas (CBSA’s); in Arizona, this data is available for seven cities, and their housing cost and supply details reported in Appendix A at the end of this reportⁱ. However, this new data still does not cover every city, town, and permitting jurisdiction, and is still limited to permits issued and housing units constructed.

FIGURE 5

Average Monthly Building Permits Needed Over 5 Years

Given the housing shortfall and historical population growth, Arizona needs to permit about 6,200 Housing units every month to close the gap in 5 years; in January it permitted 5,576.



Source: U.S Census Bureau, CSI estimates

Therefore, we continue to report supply and building information for the state of Arizona and its fifteen county geographic areas in Figure 6. Based on a combination of an areas housing supply, vacancy rates, permitting rates, and household growth rate, CSI estimates a housing shortfall and how long at its current pace of issuances it will take the area to resolve that shortfall.

As of early 2024, we estimate that there is a statewide housing shortfall of approximately 67,000 housing units in Arizona. This is down from over 100,000 units during the pandemic, and the decline reflects both an increase in housing unit construction and a decline in demand for housing¹. At the current pace of approvals, the state is issuing sufficient new residential building permits to close this shortfall in 6.4 years.

We additionally track what the volume of permit issuances would need to be to resolve the deficit within five years; this value is reported for Arizona statewide in Figure 5 above. At its current pace, the state is issuing just below where it would need to be to resolve the deficit by 2029. Note, though, that the deficit has been falling even as the states permit issuances have been lagging. This is in part because permit activity is a measure of supply, while the shortfall tries to account for changes in both supply and demand (e.g., population and new household growth have been slower than anticipated since 2022).

FIGURE 6

Arizona's Housing Shortage, By County, Since 2021

The decline in the 2023 statewide shortfalls is attributable to both increased homebuilding and reduced housing demand.

County	2021 Deficit	2022 Deficit	2023 Deficit (Est)	2024 Deficit (Est)	Shortfall as % of Existing	2024 Permits (Est)	Years to Close the Deficit
Apache County	(1,093)	(1,039)	(835)	(967)	3.19%	141	4.3
Cochise County	(1,425)	(1,316)	(1,101)	(954)	1.98%	628	2.6
Coconino County	(1,540)	(1,405)	(951)	(338)	0.88%	218	Never
Gila County	(1,173)	(831)	(555)	(847)	2.20%	141	13.6
Graham County	(404)	(216)	(152)	77	0.87%	192	n/a
Greenlee County	(111)	(44)	(18)	(9)	0.10%	13	0.6
La Paz County	(380)	(185)	(75)	(52)	0.91%	154	0.3
Maricopa County	(59,249)	(43,949)	(40,802)	(43,937)	2.18%	49,231	4.8
Mohave County	(4,759)	(4,564)	(3,292)	(4,437)	2.92%	2,333	62.2
Navajo County	(2,230)	(2,138)	(1,746)	(232)	2.14%	449	2.1
Pima County	(13,338)	(6,423)	(6,576)	(3,798)	1.04%	5,372	Never
Pinal County	(5,319)	(5,123)	(3,920)	(5,329)	2.39%	9,115	2.1
Santa Cruz County	(666)	(463)	(349)	258	0.51%	308	n/a
Yavapai County	(5,128)	(4,967)	(3,654)	(4,216)	2.91%	1,872	Never
Yuma County	(3,350)	(3,212)	(2,683)	(2,821)	3.71%	1,321	Never
Arizona Shortage	(98,295)	(74,329)	(65,517)	(67,434)	2.07%	71,487	6.4

Source: US Census Bureau, AZ Office of Economic Opportunity • CSI's estimate of the housing shortfall is a combination of both housing supply and housing demand (as reflected in both household growth and vacancy rates). To assess an areas performance in permitting new units, the estimate of time to close the deficit fixes demand at current levels, grows the number of households by historic avg population growth, and assumes that the geographic areas YTD permitting pace persists in perpetuity. If an area's permitting pace doesn't keep pace with avg population growth, it is assumed to Never close its deficit.

¹ The shortfall values in Arizona's quarterly housing report (Figure 6) reflect a methodology developed by CSI Arizona and based on Arizona data and experience. In its annual Free Enterprise Report, CSI publishes a Housing Market Index, which includes its own estimate of market conditions. That is based on national data to be consistent and replicable in any state. While the two measures differ in magnitude, they tell a very similar story: insufficient housing supply relative to demand, peaking at approximately 110-125 thousand units after the pandemic.

MORTGAGE (UN)AFFORDABILITY

Mortgage costs in Arizona remain high. As of January, the monthly payment on an average-priced home would be \$2,165; at prevailing hourly wages, this would require the typical household to work about 68 hours to afford.

As a point of reference, given typical mortgage underwriting guidelines, this figure cannot exceed approximately 72 hours; at that point the housing cost exceeds lender standards.

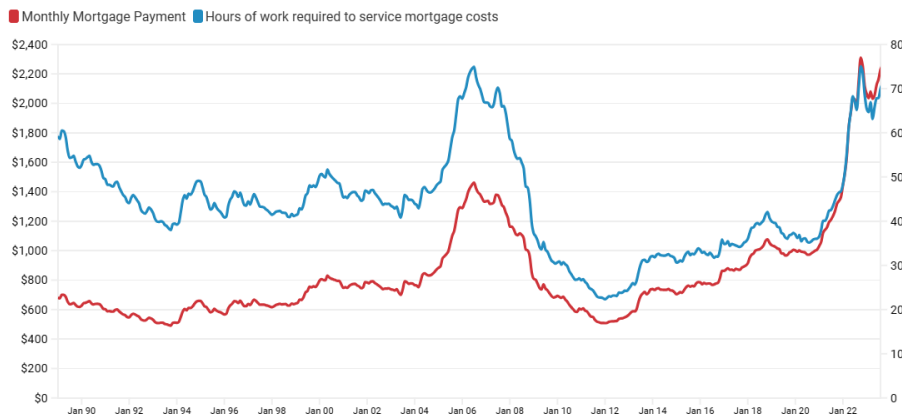
Mortgage costs peaked in October 2022 at \$2,311/month, which would have required about 75 hours of work to afford for a typical household. Improvement since then is due to both declines in 30-year interest rates (down to 6.74% today from 6.90%) and home prices (down to \$421,940 today from \$438,530).

Since 1989, on average in Arizona a household has needed to work about 44 hours/month to meet mortgage service costs at current market wages, interest rates, and housing prices. By this measure, too, housing costs today are significantly higher than their historical norms.

FIGURE 7

Mortgage Affordability in Arizona

Although down from their late-2022 peak, as of December it would take the average Arizona household 69 hours of work to afford a typical 30-year mortgage.



Source: Zillow Home Value Index, US Bureau of Economic Analysis

FIGURE 8

Arizona Home Prices, Mortgage Payments, and Work Requirements

Date	Average Home Price	30-Year Mortgage Rate	Mortgage Payment	Average Wage Rate	Hours of Work Required	Year-Over-Year % Change
12/2015	\$206,773	3.96%	\$786.3	\$23.23	33.85	6.83%
12/2016	\$220,714	4.20%	\$863.26	\$24.07	35.86	5.96%
12/2017	\$236,883	3.95%	\$899.28	\$25.42	35.38	-1.36%
12/2018	\$255,615	4.64%	\$1052.9	\$25.86	40.72	15.09%
12/2019	\$272,300	3.72%	\$1005.15	\$26.92	37.34	-8.29%
12/2020	\$310,912	2.68%	\$1006.74	\$27.92	36.06	-3.43%
12/2021	\$399,081	3.10%	\$1362.97	\$29.16	46.74	29.63%
12/2022	\$424,803	6.36%	\$2116.84	\$30.84	68.64	46.85%
12/2022	\$421,665	6.82%	\$2202.52	\$32.1	68.61	-0.04%

Source: Bureau of Labor Statistics, Freddie Mac, Zillow Data

APPENDIX A

New for the 2024 calendar year, the U.S. Census Bureau now collects and reports certain housing-related data by Core Based Statistical Area (CBSA). While this data is new, CSI identified seven cities and towns in Arizona for which the data was available and applicable to its existing measures. We report the preliminary shortfalls and costs for these CBSAs here.

As of January data, Phoenix-Mesa-Chandler are on track to approve over 58,000 residential building permits – a 23% increase over their three-year average pace. This acceleration may be at least partly attributable to a moratorium on new groundwater-dependent residential building in outer Maricopa County shifting development demand inwards, towards existing cities with other water sources or who are otherwise not subject to the new regulatory actionⁱⁱ. We will monitor and update as new data is released.

FIGURE 9

Arizona's Housing Shortage, By CBSA

Beginning this year, the Census now provides some building permit data by Core Based Statistical Area (CBSA) - providing greater insight into the permitting environment of more Arizona cities.

Cities	2024 Deficit Est.	Shortfall as % of Existing	2024 Permits Est.	Years to Close the Deficit	2022 Median Hk Value
Flagstaff, AZ	(855)	1.18%	218	Never	\$459,300
Lake Havasu City-Kingman, AZ	(5,695)	4.57%	2,333	Never	\$290,800
Phoenix-Mesa-Chandler, AZ	(18,717)	0.87%	58,346	0.7	\$454,000
Prescott Valley-Prescott, AZ	(5,125)	3.94%	1,872	Never	\$434,700
Sierra Vista-Douglas, AZ	(1,092)	1.80%	628	1.6	\$212,900
Tucson, AZ	(7,044)	1.44%	5,372	4.1	\$317,000
Yuma, AZ	(2,431)	2.51%	1,321	Never	\$250,400
Arizona Shortage	(67,434)	2.05%	71,487	6.4	\$402,800

REFERENCES

- i. "Building Permits Survey Announcements", U.S. Census Bureau, January 25th, 2024.
- ii. Greer, Katherine, "EXCLUSIVE: ADWR action on Maricopa County water needs explained", Rose Law Group Reporter, July 3, 2023.