

# Mortgage Monitor report November 2023

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### **Overview – November 2023**

Each month, the ICE Mortgage Monitor looks at a variety of issues related to the mortgage-finance and housing industries.

In this report, we recap the high-level statistics reported in our <u>most recent First Look report</u>, with acrossthe-board increases in delinquencies indicating mortgage-performance improvements may have plateaued. While increased delinquencies may raise the specter of the Great Financial Crisis, we explain how high equity levels, locked-in low rates and overarching loss-mitigation protections are combining to keep foreclosures historically low.

Affordability, specifically how a lack of available homes for sale has kept home prices rising despite climbing interest rates and falling demand, is the story of the year. We look at how inventories have begun to recover and what that may mean for home prices in the months to come. Finally, with mortgage-holder equity reapproaching the record levels of last year, we examine retention rates among refinancing borrowers and discuss how shifting market dynamics have driven customer retention to multi-decade lows.

In producing the Mortgage Monitor, the ICE Data & Analytics division aggregates, analyzes and reports on the most-recently available data from the company's <u>vast mortgage and housing-related data assets</u>. Information is gathered from the McDash and McDash Flash loan-level mortgage-performance data sets, Collateral Analytics home price and sales-trends data, eMBS agency securities data, the ICE Home Price Index, and the company's robust public records database covering 99.99% of the U.S. population. For more information on gaining access to ICE data assets, please call 844-474-2537 or email Mortgage.Monitor@bkfs.com.



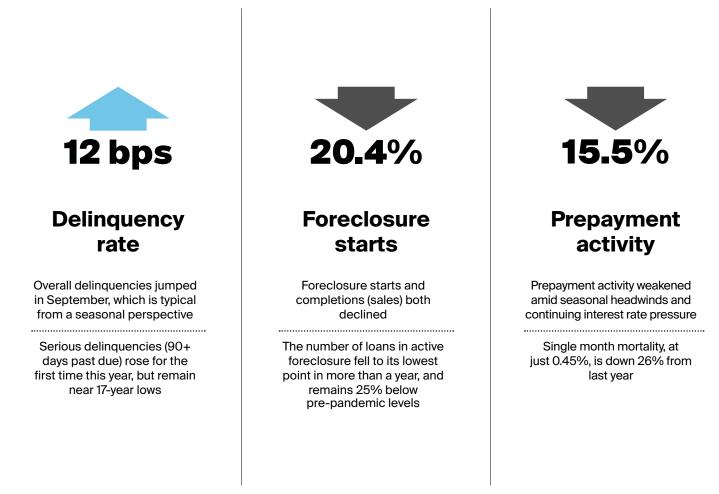
### First Look at mortgage performance

The ICE <u>First Look at mortgage performance</u> provides a high-level overview compiled from the ICE <u>McDash</u> loan-level database. Click on the chart to view in high resolution.

### **Mortgage-performance overview**



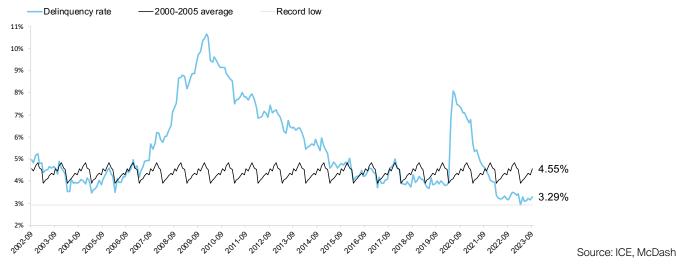
Near-record equity provides delinquent mortgage holders options other than foreclosure



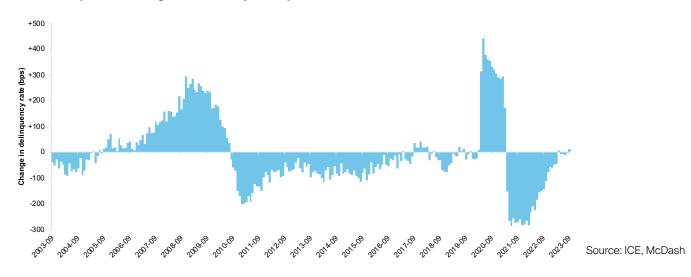
The ICE <u>McDash</u> loan-level database provides key performance metrics for a clearer picture of the delinquency landscape. In this section, we take an in-depth look at mortgage performance for September, including a breakdown of recent delinquency numbers, foreclosure risks and prepayment trends. Click on each chart to view its contents in high resolution.

- The national delinquency rate rose 12 basis points (bps) to 3.29% in September and is up 13 bps year-over-year the second and largest annual rise in more than two years
- The population of loans 30-days past due climbed 48.8K (+5.1%) in September its fourth consecutive rise while 60-day delinquencies increased for a sixth month, adding 8.7K (+3.0%)
- Despite the rise, the national delinquency rate is still 71 bps below pre-pandemic levels and 126 bps below the same-month average from 2000-2005, before the Great Financial Crisis
- While mortgage delinquencies remain near record lows, year-over-year increases in recent months suggest delinquencies may have reached their cycle floor and may begin to trend higher on a seasonally adjusted basis in coming months

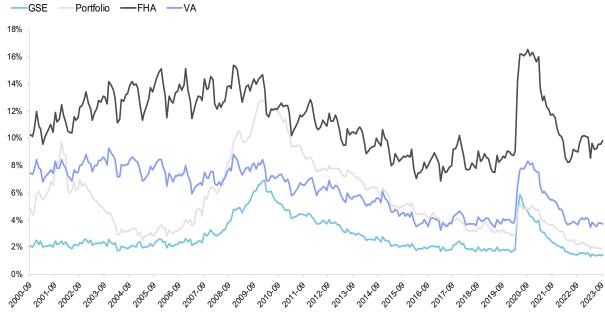
#### National delinquency rate of first-lien mortgages







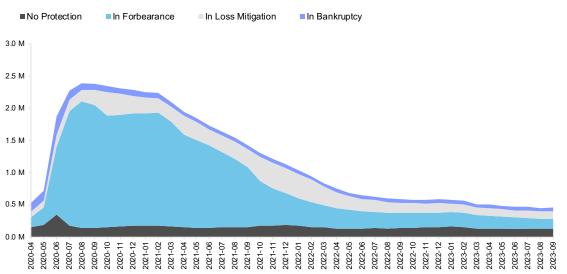
- The largest rise in delinquency rates is being seen among FHA loans, which are up 82 bps from the same time last year
- Given the relatively small size of the privately securitized mortgage market (PLS), FHA loans are the go-to indicator for early signs of mortgage performance stress
- FHA loans are the only product / investor class where delinquency rates are above their pandemic entry point, currently sitting 109 bps above September 2019 levels
- Delinquency rates among portfolio-held mortgages remain within 6 bps of their record lows and 130 bps below pre-pandemic levels
- GSE mortgage performance remains strong as well, with delinquency rates 36 bps below pre-pandemic levels and only 17 bps off their March record low



#### Delinquency rate of first-lien mortgages by product / investor

Source: ICE, McDash

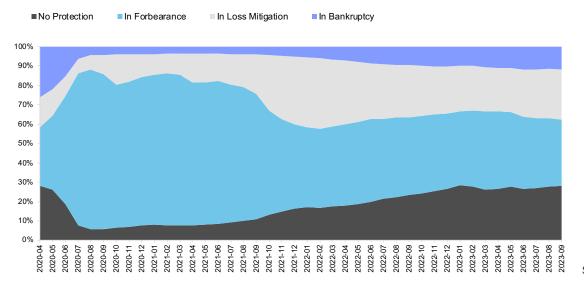
- While the number of serious delinquencies rose in September (7K), it was only the second rise in three years, with volumes remaining near their lowest levels since 2006
- What's more, 70% of those serious delinquencies remain protected from foreclosure by forbearance, bankruptcy, or other loss mitigation
- The unprotected share of serious delinquencies which dipped to 6% early in the pandemic when the overwhelming majority of such loans entered pandemic-related forbearance plans appears to have plateaued, ranging from 26% to 30% this year
- With serious-delinquency volume historically low, and foreclosure protections still widespread, near-term foreclosure risk remains muted, no doubt contributing to the 20.4% decline in September starts (to 25.4K), with completed sales falling 8% from the prior month
- Starts remain nearly 40% below pre-pandemic levels, while completed sales are roughly half what they were back then



#### Foreclosure protections on 90+ day delinquent mortgages

Source: ICE, McDash

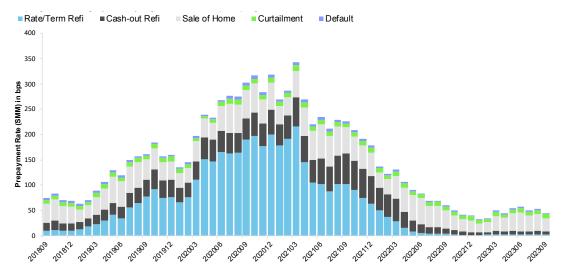
#### Foreclosure protections on 90+ day delinquent mortgages



Source: ICE. McDash

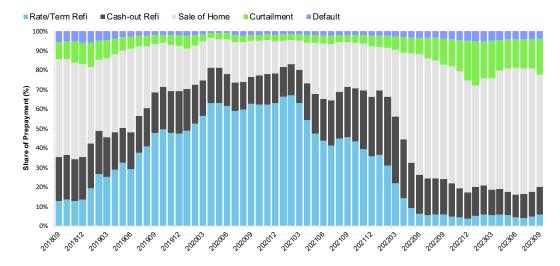
- Prepayments fell 16% in September, with only 45 bps of single-month mortality (SMM) in the month
- September's decline was driven almost entirely by a month-over-month drop in prepayments associated with home sales
- Cash-out related prepays, which currently account for only 14% of all activity, also saw a modest decline (-6%) from the previous month
- Curtailments (partial prepayments) drove 8 bps (19%) of September SMM; somewhat surprising given that half of active mortgages have interest rates below 3.5%, less than the current yield on many money-market or high-yield savings accounts
- Sale-related prepayments typically dip by 15 bps from September through January, enough to push prepayment speeds back to record lows in coming months even before factoring in the 75 bps rise in rates over the past three months

#### Prepay activity (SMM) by cause of prepayment



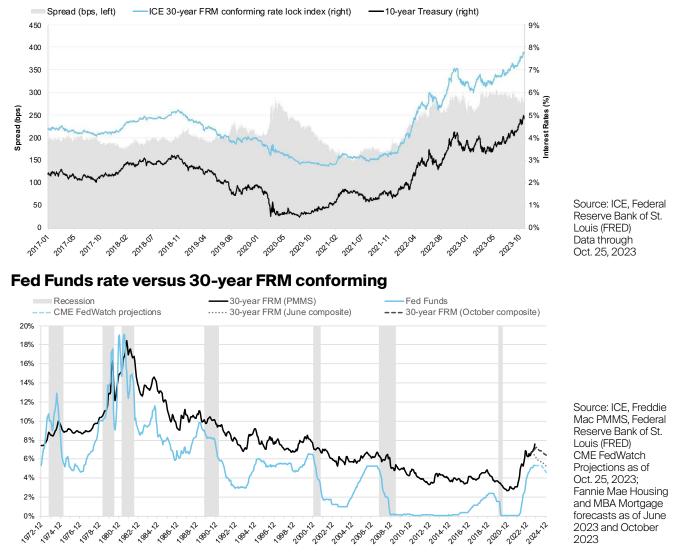
Source: ICE, McDash +Property

#### Distribution of prepay activity by reason



As rate pressures continue unabated, we explore what this means for affordability, home sales and inventories, and take a closer look at how home prices are responding. This information comes from the ICE Home Price Index, Collateral Analytics data, the <u>McDash</u> loan-level mortgage performance database and other public and proprietary data sets. Click on each chart to view its contents in high resolution.

- The ICE U.S. Conforming 30-Year Fixed Mortgage Rate Lock Index hit 7.80% on Oct. 25, spending all but one day in October at 7.5% or above, as mortgage rates hit their highest levels in the past 23 years
- 10-year Treasury yields averaged more than 4.75% in October, peaking at 4.98% on Oct. 19, with the spread to 30-year mortgage rates remaining wide at around 280 bps
- Composite rate forecasts have risen more than a percentage point in recent months, with October projections calling for 30-year rates to end 2023 at 7.25% and 2024 at 6.40% (versus June projections of 6.09% and 5.25%, respectively)
- CME FedWatch projections have not changed appreciably, with the probability of additional federal funds rate hikes remaining low at below 35% and the most likely dates for future cuts still projected for June 2024, with two additional cuts projected in September and December



#### 30-year mortgage to 10-year Treasury spread



## Rising interest rates and home prices continue to put pressure on home affordability

- With 30-year fixed rates at 7.79% as of Oct. 26 according to Freddie Mac, it now requires a monthly principal and interest (P&I) payment of \$2,567 to purchase the median-priced home, up \$144 from September and up \$1,240 (+94%) over the past two years
- This is the first time the median monthly payment has crossed over \$2,500, and that's before taxes, insurance and any applicable HOA fees are factored in
- It now requires 40.6% of the median household income to make the monthly P&I payment on the median-priced home purchase, making housing the least affordable it's been since 1984
- Over the past 35 years that payment-to-income percentage has averaged just under 25%
- To get back to long-run affordability levels would require some combination of a 4.4 percentage point decline in 30-year rates, a 62% rise in median household income, or a 38% decline in the median home price, none of which are likely to fully solve today's challenges alone, and none of which tend to move independently of one another



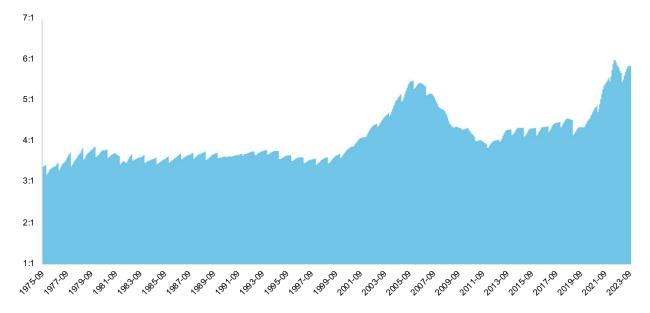
#### National payment-to-income ratio\*

Source: ICE Home Price Index, FHLMC PMMS, Census Bureau October 2023 reading is based on Oct. 27 FHLMC PMMS of 7.79%

\*The national payment-to-income ratio is the share of median income needed to make the monthly principal and interest payment on the purchase of the averaged-priced home using a 20% down 30-year fixed-rate mortgage at the prevailing interest rate

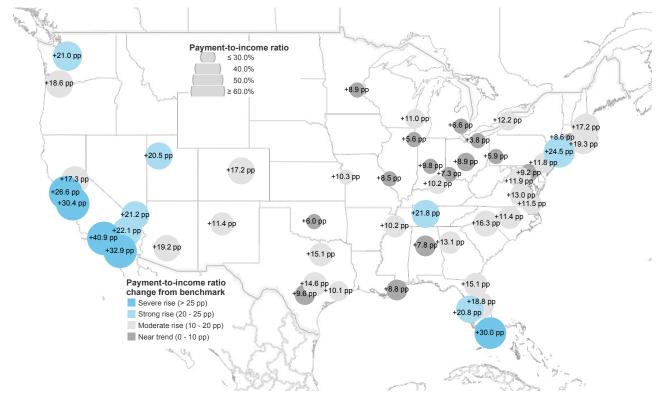
- While 30-year rates today (7.79% as of Oct. 26) are roughly on par with their 50-year average (7.61%), the last time rates were consistently in this range was from 1995 through 2000
- During that span, the median home price was 3.6 times the median household income, a ratio that remained fairly steady from the 1970s through the 1990s
- The first time that ratio became stretched in recent history was in the lead-up to the Great Financial Crisis (GFC), as falling rates and exotic mortgage products allowed homebuyers to purchase more home than their incomes would traditionally support
- This excess buying power drove the median home price to 5.5 times median income, peaking just before the collapse of the housing market
- Price-to-income ratios averaged 4.3 to 1 from 2013 through 2018 before spiking to a record 6 to 1 in 2022, as prices rose 47% in the wake of the pandemic, fueled by record-low interest rates coupled with record-low inventory
- Such elevated ratios suggest easing interest rates alone won't be enough to return the housing market to balance; this time the return to normalcy will likely take a different path than both the 1980s (when falling rates alone were enough to restore affordability) and the GFC era (when mortgage failure contagion spiked distressed inventory and led to widespread price corrections)

#### Median home price to median household income ratio



Source: ICE Home Price Index, Census Bureau

- Home affordability remains a challenge across every major market
- The most affordable market nationwide is Cleveland, Ohio, where it only requires 4 percentage points more of the local market income to afford a median-priced home compared to the market's long-run average
- On the other end of the spectrum, Los Angeles remains both the least-affordable and the most-stretched market from, requiring 76.5% of the median household income to afford the median home purchase, some 41 percentage points more than normal
- Nearly three-quarters of all markets now require at least 10 percentage points more of the local market income to afford the local market median home, with one in five requiring at least 20 percentage points more
- The least affordable markets continue to be in coastal areas, primarily California and Florida, with New York, Nashville, Las Vegas, Seattle, and Salt Lake City rounding out the list of markets most-stretched from their long-run averages



#### Payment-to-income ratio change by CBSA

Source: ICE Home Price Index (September 2023), FHLMC PMMS, Census Bureau

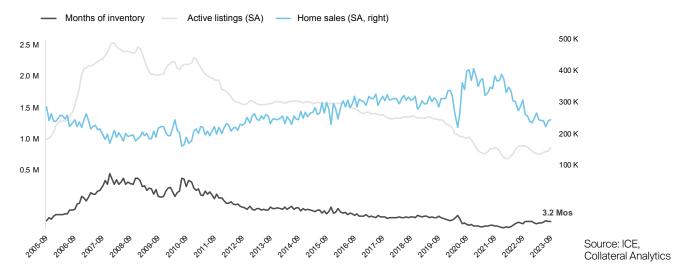
The payment-to-income ratio is the share of median income needed to make the monthly principal and interest payment on the purchase of the averaged priced home using a 20% down 30-year fixed rate mortgage at the prevailing interest rate

	Most affordable markets								
Rank	Geography (CBSA)	Payment-to- income ratio	Payment-to-income 1995-2003 average	Difference					
1	Cleveland, OH	25.5%	21.6%	+3.8 pp					
2	Oklahoma City, OK	27.4%	21.3%	+6.0 pp					
3	Pittsburgh, PA	27.6%	21.7%	+5.9 pp					
4	Hartford, CT	28.1%	19.5%	+8.6 pp					
5	St. Louis, MO	28.3%	19.7%	+8.5 pp					
6	Detroit, MI	28.4%	21.8%	+6.6 pp					
7	Cincinnati, OH	28.6%	21.3%	+7.3 pp					
8	Indianapolis, IN	28.9%	19.1%	+9.8 pp					
9	Minneapolis, MN	29.2%	20.4%	+8.9 pp					
10	Chicago, IL	29.2%	23.7%	+5.6 pp					

	Least affordable markets									
Rank	Geography (CBSA)	Payment-to- income ratio	Payment-to-income 1995-2003 average	Difference						
41	Nashville, TN	44.8%	22.9%	+21.8 pp						
42	Las Vegas, NV	44.9%	23.7%	+21.2 pp						
43	Riverside, CA	48.0%	25.8%	+22.1 pp						
44	Seattle, WA	48.3%	27.3%	+21.0 pp						
45	New York-Newark, NY-NJ	52.7%	28.2%	+24.5 pp						
46	Miami, FL	54.3%	24.4%	+30.0 pp						
47	San Francisco, CA	61.7%	35.1%	+26.6 pp						
48	San Jose, CA	64.8%	34.4%	+30.4 pp						
49	San Diego, CA	67.1%	34.2%	+32.9 pp						
50	Los Angeles, CA	76.5%	35.6%	+40.9 pp						

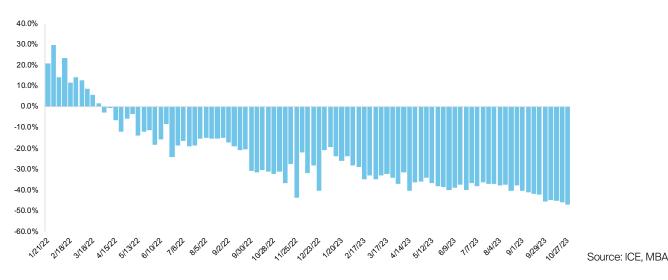
- According to ICE's Collateral Analytics data, home sales inched up 1.6% in September on a seasonally adjusted basis, following an August rebound, but remain near 2013/2014 levels
- Purchase-mortgage applications fell to 47% below pre-pandemic levels the week of Oct. 26, the weakest comparative volumes since rates began to rise, suggesting further constraint in home sales and purchase originations in coming months
- Active listings have begun to rise modestly in recent months and, while still down 45% from pre-pandemic benchmarks, are nearing levels of last year when prices began to weaken
- September inventory was equivalent to 3.17 months of seasonally adjusted sales, which, though higher than the spring low of 2.61, is lower than any pre-pandemic month going as far back as 2005
- With demand falling and supply improving entering Q4, the net result is likely to be slowing sales volumes and softening prices as we move through the remainder of 2023

#### Home sales, active listings and months of inventory Single-family residences and condos – seasonally adjusted



Mortgage applications to purchase a home

Change from 2018-2019 same-week average

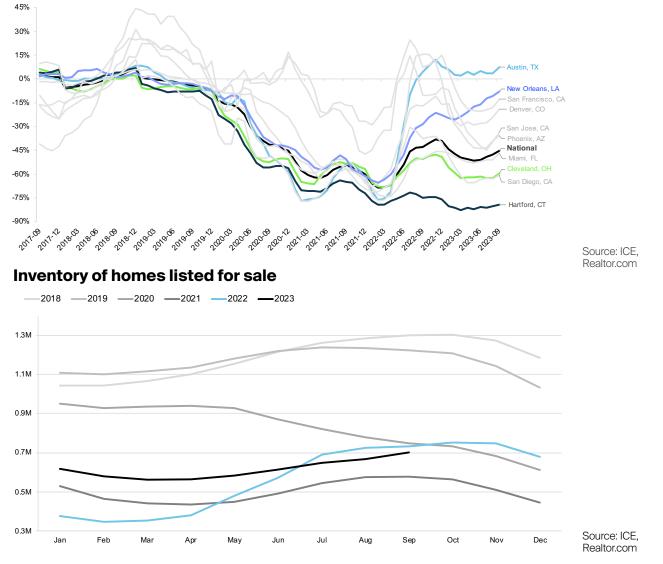


### Housing market and affordability insights

- Seasonally adjusted inventory has begun to show modest improvements in recent months, as home-sale volumes remain low
- Some 92% of markets have shown inventory increases over the last three months, with the remainder experiencing only marginal declines
- At the upper extreme, Austin's inventory is 7.5% above its pre-pandemic average, the highest comparative inventory level of any major market
- On the other end of the spectrum, Hartford still faces a 79% inventory shortage and, while better than its 87% deficit in March, it's the worst among the 50 largest U.S. markets
- New Orleans stands out as a market where inventory is quickly filling the void, from a 29% deficit a year ago, to only 8% as of September a more than 20 pp climb
- San Francisco, Denver, San Jose and Phoenix have also improved, outpacing the national average
- Topping the list of the nation's most affordable markets, inventories in Cleveland remain relatively flat, with 60% fewer homes listed for sale than is typical for this time of year

#### Inventory of homes listed for sale

Percentage change from 2017-2019 same-month average



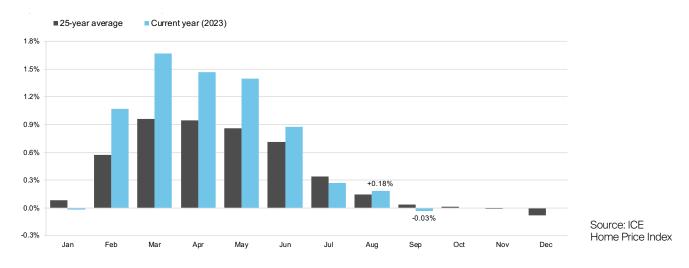
ice.com

- Home prices were a mixed bag in September
- On one hand, prices rose 0.39% to yet another all-time high on a seasonally adjusted basis, further accelerating the annual home price growth rate to +4.3%, up from a revised +3.7% in August, a big difference from May, when the annual growth rate was almost flat (+0.25%)
- On the other hand, September's seasonally adjusted rise was the weakest since January and a noticeable downshift from August
- Non-seasonally adusted, prices eased by -0.03% in the month, slightly weaker than the 25-year September average, after what had been an exceptionally strong spring and summer
- While the +0.39% adjusted monthly gain would be equivalent to a +4.8% annualized rate if sustained over 12 months, it's a noticeable slowdown from the 10.3% annualized rate in May
- With 30-year rates threatening 8%, affordability at a 38-year low, and purchase applications waning, it's fair to expect prices to weaken as we move into late 2023



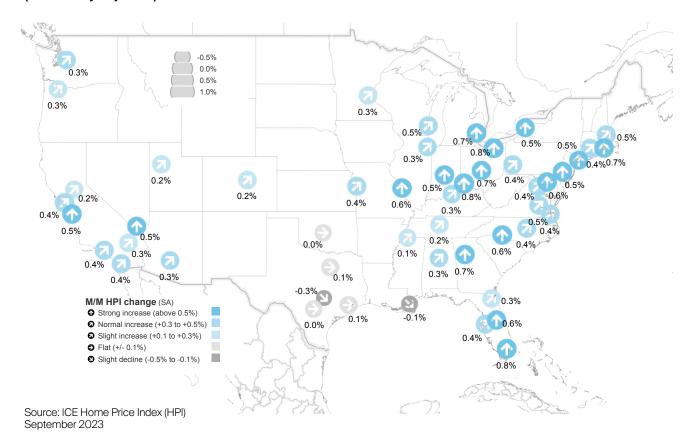
#### **ICE Home Price Index (HPI)**





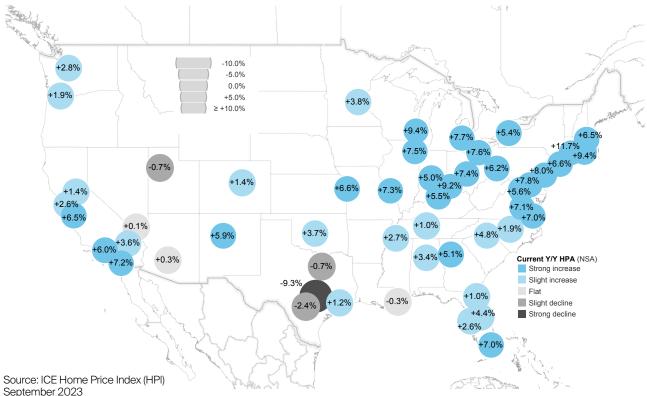
- While price growth cooled in 49 of the 50 largest U.S. markets in September (Cleveland the sole exception), seasonally adjusted prices declined in just two Austin (-0.31%) and New Orleans (-0.14%) with prices holding flat in much of Texas and Oklahoma
- Ohio, benefiting from comparatively strong home affordability, continues to see some of the highest home price growth rates in the nation
- Cincinnati led all markets with prices rising +0.83% in the month, followed by Cleveland at +0.79% and Columbus at +0.72%
- Miami, while one of the least affordable markets in the U.S., saw the third-strongest monthly growth in September at +0.75%, with inventory still 47% below pre-pandemic averages
- Other strong markets included: Atlanta, Detroit, Providence, Charlotte, and Orlando
- Houston, Dallas, Memphis, Sacramento, Denver, and Nashville ranked near the bottom

### Month-over-month change in home prices (Seasonally adjusted)



- Annual home price growth rates rose in roughly 90% of U.S. markets, despite slower month-over-month growth in September
- Such juxtaposition highlights the need to track seasonally adjusted monthly gains in today's market as a leading indicator of future shifts in annual growth rates, because annual gains are still accelerating in many markets on the heels of a strong spring and summer along with falling prices at this time last year
- Hartford continues to see the strongest year-over-year price gains at 11.7%, followed by Milwaukee, Providence, Cincinnati, and Philadelphia
- Recent strong monthly gains in Ohio markets suggest Cincinnati, Cleveland and Columbus are all likely to finish 2023 even higher on our top growth list
- Hartford interestingly saw weaker September single-month gains despite extremely low inventory levels, which is a change of pace worth watching in coming months
- Only five markets, led by Austin (-9.3%), saw prices fall from September 2022

#### Annual home-price growth rates by CBSA



Source. ICE Home Price Index (HPI)
September 2023

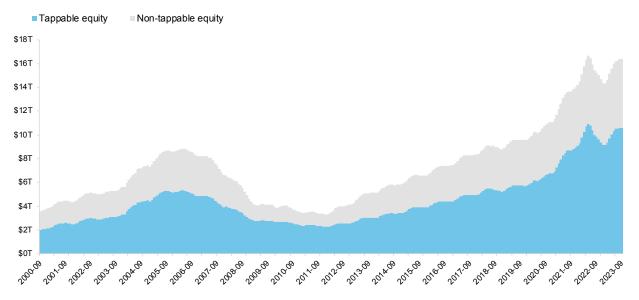
	Highest home-price	growth rates					
Rank	Geography (CBSA)	Annual home-price growth rate					
1	Hartford, CT	+11.7%					
2	Milwaukee, WI	+9.4%					
3	Providence, RI	+9.4%					
4	Cincinnati, OH	+9.2%					
5	Philadelphia, PA	+8.0%					
6	Baltimore, MD	+7.8%					
7	Detroit, MI	+7.7%					
8	Cleveland, OH	+7.6%					
9	Chicago, IL	+7.5%					
10	Columbus, OH	+7.4%					

	Lowest home-price growth rates									
Rank	Geography (CBSA)	Annual home-price growth rate								
41	Houston, TX	+1.2%								
42	Jacksonville, FL	+1.0%								
43	Nashville, TN	+1.0%								
44	Phoenix, AZ	+0.3%								
45	Las Vegas, NV	+0.1%								
46	New Orleans, LA	-0.3%								
47	Dallas, TX	-0.7%								
48	Salt Lake City, UT	-0.7%								
49	San Antonio, TX	-2.4%								
50	Austin, TX	-9.3%								

With mortgage-holder equity reapproaching last year's record high, we look at how recent price moves are affecting homeowner equity how lenders are responding to refinance-lending opportunities, and the latest borrower retention numbers. This information has been compiled from the ICE Home Price Index and the <u>McDash</u> loan-level mortgage-performance database. Click on each chart to view its contents in high resolution.

- After dipping 14% in late 2022 as home prices began to fall across much of the country, mortgage-holder equity has rebounded throughout 2023
- Total mortgage-holder equity stands at \$16.4T as of September, within 2% of last year's record high
- Likewise, tappable equity, the amount available to borrow against while still retaining at least a 20% equity cushion, now stands at \$10.6T, only 3% off last year's high
- While many of last year's boomtowns have seen tappable equity levels drop 15% or more including Austin (-34%), Seattle (-23%), San Francisco (-20%), Phoenix (-18%), San Jose (-17), Denver (-16%) and Las Vegas (-15%) a little over half of all markets are seeing tappable equity hit new highs in 2023
- In cases such as Hartford (+22%), New Haven (+22%), Bridgeport (+17%), Harrisburg (+16%) and Youngstown (+15%), equity levels are considerably higher than they were last year
- The average mortgage holder now has \$200,000 in tappable equity, up from \$174K at the start of the year, but not quite back to the \$210K peak reached in the spring of 2022



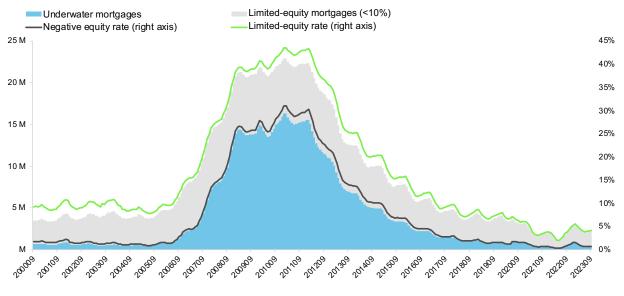


Source: ICE, McDash + Property

Tappable equity is equity that could be withdrawn while still maintaining an 80% or lower loan-to-value ratio

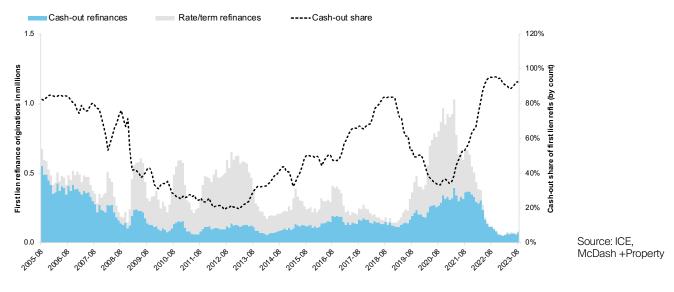
- As of September, 383K (0.7% of) mortgage holders were underwater on their homes less than half the share prior to the pandemic and in the early 2000s before the Global Financial Crisis
- Likewise, the number of borrowers in limited-equity positions remains historically low, with 1.9M (4.2% of) mortgage holders having less than 10% equity in their homes
- Austin where home prices remain more than 14% off 2022 peaks is in the worst position of all markets, with 2.1% of mortgage holders underwater, followed by Las Vegas (1.7%) and Phoenix (1.6%)
- San Jose despite its home-price struggles last year and Los Angeles have the lowest negative equity rates at 0.1%
- Overall, the weighted-average combined loan-to-value ratio for all mortgaged homes in the U.S. is 45%, among the strongest we've seen, dating back more than 20 years, outside of Feb.-Aug. 2022 at the peak of home prices

#### Negative equity rates among mortgaged residential properties

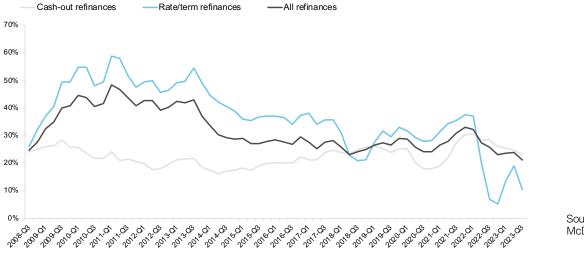


- Maintaining refinance volumes and attracting and retaining potential refinance candidates continue to be significant challenges for lenders and servicers in today's market
- Traditional rate/term refinances are effectively nonexistent, with only 5.5K originated a month, on average, industrywide, over the past year
- Cash-out lending continues to dominate what's left, accounting for more than 90% of all refis, but that's just a trickle compared with recent years
- As we discussed in <u>October's ICE Mortgage Monitor</u>, the profile of borrowers completing cash-out refis has shifted dramatically and lenders appear to be slow in understanding that shift
- As a result, the retention rate of refinances fell to just 21% in Q3, the lowest such level in the past 17 years
- Only 10% of rate/term refinances which are primarily coming from legacy vintages were retained in the quarter, with fewer than 25% of cash-out refinances retained

#### **First lien refinance activity**

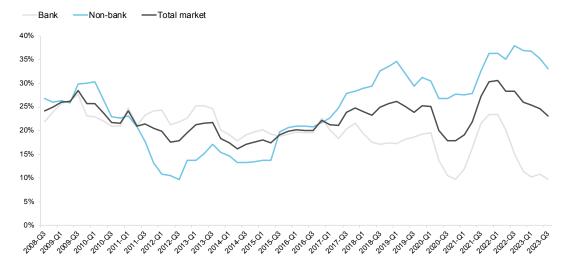


#### Servicer retention rate of refinance transactions



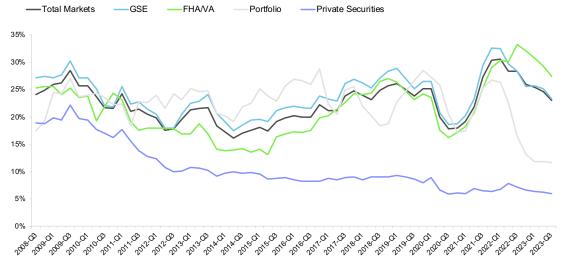
- There are stark differences in retention rates between banks and non-banks as well as across mortgage product and investor types
- Non-banks are dramatically outperforming banks in terms of identifying and retaining cash-out refinancers, with non-banks retaining one in three while bank servicers retain one in 10
- That likely explains, at least in part, the dramatic difference in retention rates across product and investor types with portfolio-held mortgages (typically held by banks) being retained at only a 12% clip, while FHA/VA loans (heavily serviced by non-banks) are being retained at a 27% rate
- GSE retention has trended right along with the market average in recent quarters
- Since the Great Financial Crisis, retention rates among legacy private label security loans has dwindled as servicers have allowed such loans to roll off their books

#### Servicer retention rate of cash-out refinance transactions



Source: ICE, McDash +Property

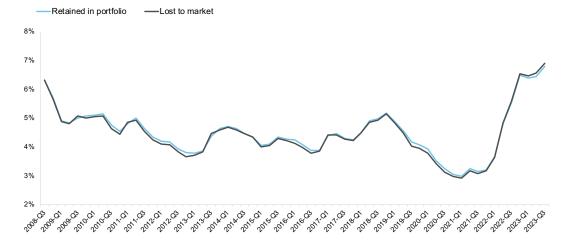
#### Servicer retention rate of cash-out refinances by investor



- Tracking interest rates received by borrowers retained in portfolio versus those lost to competitors tells a deeper story
- Such data suggests borrowers lost to competitors aren't leaving for a better rate elsewhere, but rather due to a lender's failure to identify and market effectively to potential refi candidates already on their books
- In fact, when we looked at borrowers with 720+ credit scores extracting equity through refinances (again they account for 90% of today's refi lending) using a 30-year fixed GSE mortgage, we see that borrowers lost to competitors actually received rates nearly 0.125 percentage points worse than the rates offered to retained customers
- That's historically unusual, both among rate/term and cash-out refinances, and suggests lenders would benefit from additional focus on learning who is transacting in today's market, and why they're transacting, to accurately identify prepayment risk and origination opportunities in their servicing portfolios

#### Average interest rate post cash-out refinance

30-year fixed, GSE, cash-out refi, 720+ credit score mortgages



Source: ICE, McDash +Property



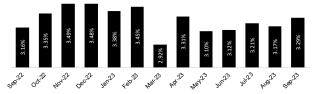


#### **Summary statistics**

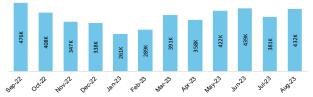
	Sep-23	Monthly change	YTD change	Yearly change
Delinquencies	3.29%	3.67%	-2.67%	4.27%
Foreclosure	0.40%	-0.41%	-10.86%	-7.18%
Foreclosure starts	25,400	-20.38%	-21.85%	4.96%
Seriously delinquent (90+) or in foreclosure	1.26%	0.82%	-19.06%	-19.02%
New originations (data as of Aug-23)	432K	13.6%	28.0%	-20.2%

	Sep-23	Aua-23	Jul-23	Jun-23	Mav-23	Apr-23	Mar-23	Feb-23	Jan-23	Dec-22	Nov-22	Oct-22	Sep-22
Delinquencies	3.29%	3.17%	3.21%	3.12%	3.10%	3.31%	2.92%	3.45%	3.38%	3.48%	3.49%	3.35%	3.16%
Foreclosure	0.40%	0.41%	0.42%	0.42%	0.43%	0.44%	0.46%	0.46%	0.45%	0.44%	0.44%	0.43%	0.43%
Foreclosure starts	25,400	31,900	26,300	28,000	25,400	24,800	32,200	29,500	32,500	28,200	27,300	24,900	24,200
Seriously delinquent (90+) or in foreclosure	1.26%	1.25%	1.30%	1.31%	1.35%	1.40%	1.43%	1.53%	1.56%	1.55%	1.55%	1.55%	1.56%
New originations		432K	381K	439K	422K	358K	391K	289K	261K	338K	347K	408K	476K

Total delinquencies



New originations



#### Non-current loans by state

State	DQ %	FC %	NC %	Yr/yr change in NC%	State	DQ %	FC %	NC %	Yr/yr change in NC%	State	DQ %	FC %	NC %	Yr/yr change in NC%
National	3.3%	0.4%	3.7%	2.9%	National	3.3%	0.4%	3.7%	2.9%	National	3.3%	0.4%	3.7%	2.9%
MS	7.3%	0.6%	7.9%	6.3%	IA *	3.4%	0.5%	3.9%	1.5%	SD *	2.7%	0.4%	3.0%	13.2%
LA *	6.6%	0.8%	7.4%	10.5%	CT *	3.4%	0.6%	3.9%	-4.3%	MA	2.7%	0.3%	3.0%	1.1%
AL	5.3%	0.3%	5.6%	6.0%	FL *	3.4%	0.5%	3.9%	5.0%	ND *	2.4%	0.6%	3.0%	-2.4%
IN *	4.6%	0.5%	5.1%	5.3%	MO	3.6%	0.3%	3.9%	1.1%	AK	2.5%	0.4%	2.9%	-6.7%
PA *	4.3%	0.7%	5.0%	4.7%	MI	3.6%	0.2%	3.8%	3.5%	NV	2.6%	0.3%	2.9%	7.3%
WV	4.5%	0.5%	5.0%	-1.0%	WI *	3.3%	0.4%	3.7%	4.3%	HI *	2.1%	0.8%	2.9%	13.0%
AR	4.6%	0.4%	5.0%	0.7%	KS *	3.4%	0.3%	3.7%	2.3%	UT	2.6%	0.2%	2.8%	7.0%
OH *	4.1%	0.6%	4.7%	1.5%	RI	3.3%	0.4%	3.7%	-9.4%	NH	2.5%	0.2%	2.7%	-1.6%
OK *	4.0%	0.6%	4.7%	-1.2%	NJ *	3.1%	0.5%	3.7%	-2.7%	DC	2.0%	0.7%	2.7%	-4.2%
GA	4.3%	0.3%	4.6%	8.2%	TN	3.3%	0.2%	3.5%	0.1%	WY	2.5%	0.2%	2.7%	-2.3%
тх	4.3%	0.3%	4.6%	7.4%	ME *	2.7%	0.7%	3.4%	-2.1%	AZ	2.6%	0.1%	2.7%	9.1%
DE *	4.1%	0.5%	4.6%	9.0%	NE *	3.2%	0.2%	3.4%	1.6%	OR	1.9%	0.2%	2.2%	5.4%
IL *	3.9%	0.6%	4.5%	-0.8%	NM *	2.8%	0.6%	3.4%	-3.9%	CA	2.0%	0.2%	2.1%	3.7%
MD *	4.0%	0.4%	4.4%	3.6%	NC	3.1%	0.3%	3.3%	-1.5%	ID	2.0%	0.2%	2.1%	16.6%
NY *	3.1%	1.3%	4.3%	-4.0%	VA	3.1%	0.2%	3.3%	1.4%	MT	1.8%	0.2%	2.0%	-1.6%
KY *	3.7%	0.6%	4.3%	-1.2%	VT *	2.7%	0.5%	3.2%	-3.9%	WA	1.8%	0.2%	2.0%	7.0%
SC *	3.7%	0.4%	4.2%	-0.9%	MN	2.9%	0.2%	3.1%	1.1%	CO	1.8%	0.1%	1.9%	5.6%

\* Indicates judicial state

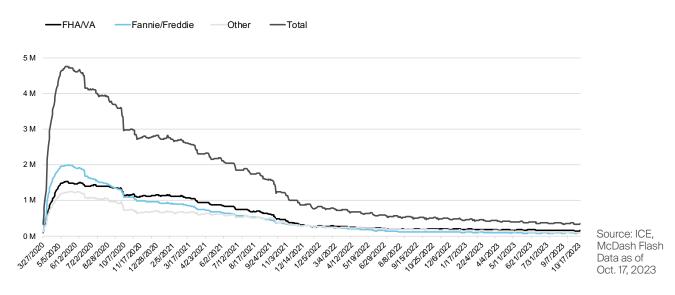
#### Loan counts and average days delinquent - recent years

Month	Total active count	30 days	60 days	90+ days	Foreclosure (FC)	Total non- current	FC starts	FC sales (completions)	Average days delinquent for 90+	Average days delinquent for FC	DQ%	Monthly change	Yearly change	FC%	Monthly change	Yearly change
9/30/21	51,784,715	728,413	221,089	1,430,568	172,145	2,552,215	4,964	5,299	402	1,523	4.6%	-2.1%	-37.2%	0.3%	-5.1%	-23.8%
10/31/21	51,795,970	775,491	232,233	1,305,121	173,350	2,486,195	6,711	4,939	408	1,533	4.5%	-2.8%	-36.9%	0.3%	0.7%	-20.8%
11/30/21	51,786,737	764,501	229,841	1,215,611	170,018	2,379,972	8,623	4,497	410	1,547	4.3%	-4.4%	-39.8%	0.3%	-1.9%	-20.6%
12/31/21	51,822,244	745,449	225,034	1,132,122	167,230	2,269,835	9,040	4,781	414	1,560	4.1%	-4.9%	-40.7%	0.3%	-1.7%	-22.1%
1/31/22	51,843,448	792,303	237,375	1,033,824	190,267	2,253,770	39,264	5,506	414	1,396	4.0%	-1.9%	-40.1%	0.4%	13.7%	-11.5%
2/28/22	51,872,207	855,985	244,126	945,107	205,460	2,250,678	30,777	5,038	409	1,322	3.9%	-0.9%	-41.9%	0.4%	7.9%	-2.7%
3/31/22	51,905,011	691,271	214,952	841,930	208,664	1,956,818	34,104	5,982	409	1,282	3.4%	-14.6%	-41.0%	0.4%	1.5%	-0.4%
4/30/22	51,969,716	731,307	201,875	752,311	219,696	1,905,189	36,599	5,609	408	1,238	3.2%	-3.7%	-39.4%	0.4%	5.2%	8.1%
5/31/22	52,041,939	760,264	212,555	686,345	221,613	1,880,777	26,531	5,689	408	1,213	3.2%	-1.7%	-41.3%	0.4%	0.7%	12.0%
6/30/22		799,889	226,726	647,543	229,102	1,903,260	31,527	6,019	407	1,175	3.2%	0.7%	-36.6%	0.4%	3.2%	19.9%
7/31/22	52,190,234	862,077	246,846	629,325	223,904	1,962,151	22,875	7,504	390	1,171	3.3%	3.7%	-31.7%	0.4%	-2.4%	20.2%
8/31/22	52,280,910	825,017	248,903	598,464	228,710	1,901,094	28,829	6,655	396	1,172	3.2%	-4.0%	-31.9%	0.4%	2.0%	24.8%
9/30/22		816,219	249,174	586,923	227,541	1,879,857	24,232	6,856	388	1,158	3.2%	-1.3%	-31.3%	0.4%	-0.7%	30.7%
10/31/22	52,358,531	909,663	263,642	581,907	227,650	1,982,863	24,935	6,398	379	1,148	3.4%		-24.9%	0.4%	0.0%	29.9%
11/30/22	52,398,939	957,849	287,636	581,866	231,962	2,059,313	27,262	6,254	371	1,129	3.5%	4.0%	-18.3%	0.4%	1.8%	34.8%
12/31/22	52,450,245	953,775	289,825	583,112	231,755	2,058,468	28,239	6,076	353		3.5%		-14.2%	0.4%	-0.2%	36.9%
1/31/23	52,491,830	907,996	287,515	579,344	237,554	2,012,409	32,542	6,958	348	1,075	3.4%	-2.9%	-15.1%	0.5%	2.4%	23.3%
2/28/23		972,535	276,009	562,116	239,621	2,050,281	29,499	7,129	345	1,057	3.4%		-12.6%	0.5%	0.8%	15.2%
3/31/23	52,656,610	785,855	241,683	511,351	239,723	1,778,612	32,164	7,457	356	1,045	2.9%	-15.2%	-13.2%	0.5%	-0.2%	13.2%
4/30/23		985,839	258,559	501,805	233,817	1,980,021	24,829	6,414	358	1,034	3.3%	13.3%	2.1%	0.4%	-2.6%	4.9%
5/31/23	52,788,510	891,889	263,642	483,312	229,336	1,868,178	25,365	6,766	363	1,035	3.1%	-6.3%	-2.6%	0.4%	-2.0%	2.0%
6/30/23		911,246	268,255	470,719	223,899	1,874,118	27,980	6,864	362	1,029	3.1%	0.5%	-2.8%	0.4%	-2.5%	-3.6%
7/31/23	52,913,905	946,107	285,453	467,964	219,695	1,919,219	26,313	6,127	359	1,025	3.2%	2.9%	-3.6%	0.4%	-2.0%	-3.2%
8/31/23	53,055,797	948,375	287,769	447,958	214,915	1,899,016	31,925	6,938	358	1,013	3.2%	-1.2%	-0.8%	0.4%	-2.4%	-7.4%
9/30/23	53,135,417	997,148	296,436	454,986	214,354	1,962,924	25,398	6,417	353	1,014	3.3%	3.7%	4.3%	0.4%	-0.4%	-7.2%

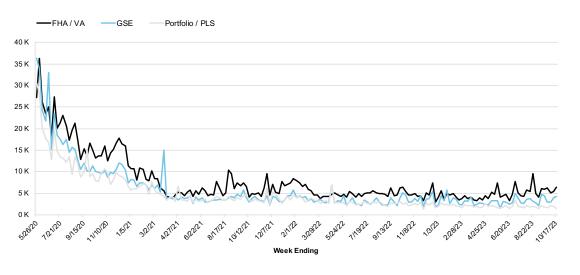
#### Loan counts and average days delinquent - historical

Month	Total active count	30 days	60 days	90+ days	Foreclosure (FC)	Total non- current	FC starts	FC sales (completions)	Average days delinquent for 90+	Average days delinquent for FC	DQ%	Monthly change	Yearly change	FC%	Monthly change	Yearly change
12/31/00	41,339,841	1,402,527	331,808	378,116	189,537	2,301,987	32,769	16,232	210	305	5.1%	15.6%		0.5%	-2.7%	
12/31/01	42,675,903	1,471,040	372,619	547,576	309,393	2,700,628	76,086	21,421	211	282	5.6%	10.3%	9.7%	0.7%	3.7%	58.1%
12/31/02	43,421,435	1,424,648	363,595	482,508	316,519	2,587,271	76,352	23,173	237	298	5.2%	0.8%	-6.7%	0.7%	0.1%	0.5%
12/31/03	43,833,106	1,203,962	336,280	473,781	320,864	2,334,887	83,136	24,307	275		4.6%	-6.0%	-12.1%	0.7%	6.7%	0.4%
12/31/04	46,585,517	1,077,171	300,217	424,055	268,256	2,069,700	69,967	23,201	248	340	3.9%	-3.4%	-15.8%	0.6%	0.0%	-21.3%
12/31/05	49,763,823	1,331,648	412,029	537,611	247,188	2,528,477	74,714	21,605	202	306	4.6%	1.7%	18.5%	0.5%	6.1%	-13.7%
12/31/06	52,667,353	1,602,366	482,919	537,651	382,789	3,005,725	106,817	32,322	203		5.0%	9.1%	8.6%	0.7%	6.4%	46.3%
12/31/07	54,155,598	1,791,773	663,414	903,997	729,210	4,088,395	168,774	51,454	188		6.2%	8.3%	24.6%	1.3%	10.8%	85.3%
12/31/08	54,447,763	2,031,553	952,885	1,755,214	1,242,378	5,982,029	229,817	59,601	192		8.7%	0.6%	40.3%	2.3%	5.9%	69.5%
12/31/09	54,131,171	1,840,304	896,008	2,909,436	2,043,443	7,689,190	229,997	99,393	247		10.4%	0.7%	19.8%	3.8%	0.0%	65.4%
12/31/10	53,069,898	1,739,100	753,216	2,136,381	2,313,990	6,942,687	285,396	79,557	331		8.7%	-1.7%	-16.4%	4.4%	3.2%	15.5%
12/31/11	51,973,151	1,639,038	660,408	1,833,694	2,204,283	6,337,423	185,099	76,228	394		8.0%	0.8%	-8.8%	4.2%	-0.1%	-2.7%
12/31/12	50,866,763	1,500,197	593,920	1,587,348	1,751,341	5,432,806	144,261	58,706	463		7.2%	1.3%	-9.0%	3.4%	-1.5%	-18.8%
12/31/13	49,778,783	1,392,900	533,854	1,260,209	1,246,302	4,433,265	110,038	43,638	498		6.4%	-0.1%	-11.5%	2.5%	-0.7%	-27.3%
12/31/14	49,617,696	1,235,186	466,496	1,066,446	862,529	3,630,657	88,542	28,727	507		5.6%	-6.7%	-12.9%	1.7%	-0.5%	-30.6%
12/31/15	49,661,542	1,138,462	411,732	793,162	675,629	3,018,985	76,754	27,630	493		4.7%	-3.2%	-15.4%	1.4%	-1.1%	-21.7%
12/31/16	49,795,854	1,185,870	402,998	688,729	496,641	2,774,237	59,424	20,656	449		4.6%	-0.1%	-3.1%	1.0%	-2.5%	-26.7%
12/31/17	50,091,200	1,297,364	451,279	750,066	353,971	2,852,679	44,474	12,982	351		5.0%	4.8%	9.1%	0.7%	-0.1%	-29.1%
12/31/18	50,458,378	1,201,637	384,412	535,627	307,977	2,429,653	48,340	12,168	398		4.2%	5.2%	-15.7%	0.6%	1.4%	-13.6%
12/31/19	51,144,421	1,158,280	377,817	480,447	287,639	2,304,182	51,761	11,375	348		3.9%	-2.1%	-6.2%	0.6%	-0.3%	-7.9%
12/31/20	51,662,791	888,052	366,364	2,282,788	213,984	3,751,187	8,164	2,919	260		6.8%	-3.4%	73.6%	0.4%	0.2%	-26.4%
12/31/21	51,822,244	745,449	225,034	1,132,122	167,230	2,269,835	9,040	4,781	414		4.1%	-4.9%	-40.7%	0.3%	-1.7%	-22.1%
12/31/22	52,450,245	953,775	289,825	583,112	231,755	2,058,468	28,239	6,076	353		3.5%	-0.1%	-14.2%	0.4%	-0.2%	36.9%
1/31/23	52,491,830	907,996	287,515	579,344	237,554	2,012,409	32,542	6,958	348		3.4%	-2.9%	-15.1%	0.5%	2.4%	23.3%
2/28/23	52,522,150	972,535	276,009	562,116	239,621	2,050,281	29,499	7,129	345		3.4%	2.0%	-12.6%	0.5%	0.8%	15.2%
3/31/23	52,656,610	785,855	241,683	511,351	239,723	1,778,612	32,164	7,457	356		2.9%	-15.2%	-13.2%	0.5%	-0.2%	13.2%
4/30/23	52,728,499	985,839	258,559	501,805	233,817	1,980,021	24,829	6,414	358		3.3%	13.3%	2.1%	0.4%	-2.6%	4.9%
5/31/23	52,788,510	891,889	263,642	483,312	229,336	1,868,178	25,365	6,766	363		3.1%	-6.3%	-2.6%	0.4%	-2.0%	2.0%
6/30/23	52,865,548	911,246	268,255	470,719	223,899	1,874,118	27,980	6,864	362		3.1%	0.5%	-2.8%	0.4%	-2.5%	-3.6%
7/31/23	52,913,905	946,107	285,453	467,964	219,695	1,919,219	26,313	6,127	359		3.2%	2.9%	-3.6%	0.4%	-2.0%	-3.2%
8/31/23	53,055,797	948,375	287,769	447,958	214,915	1,899,016	31,925	6,938	358		3.2%	-1.2%	-0.8%	0.4%	-2.4%	-7.4%
9/30/23	53,135,417	997,148	296,436	454,986	214,354	1,962,924	25,398	6,417	353	1,014	3.3%	3.7%	4.3%	0.4%	-0.4%	-7.2%

#### Active forbearance plans



New forbearance plan starts by investor



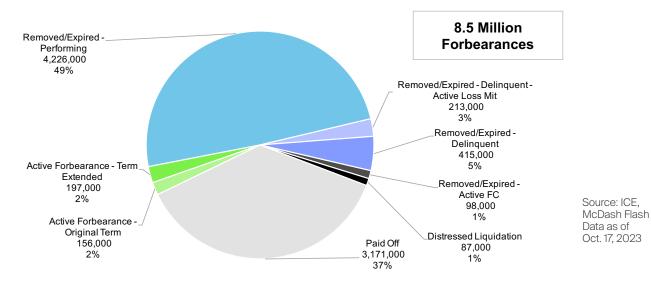


	Fannie & Freddie	FHA & VA	Other**	Total
Loans in forbearance*	94,000	154,000	105,000	353,000
UPB of loans in forbearance (\$B)*	\$21	\$30	\$17	\$67
Share of loans in forbearance*	0.3%	1.3%	0.8%	0.7%

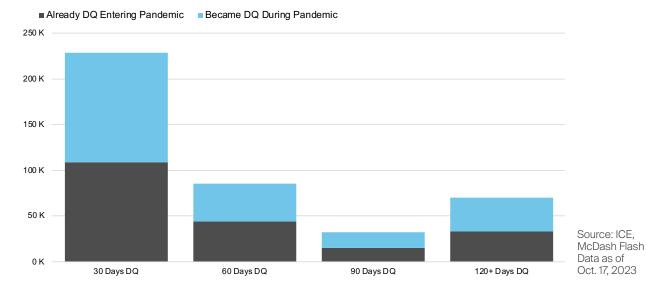
Source: ICE, McDash Flash Data as of Oct. 17, 2023

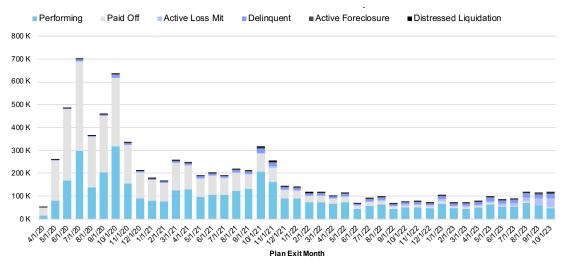
\*Figures in this report are based on observations from ICE's McDash Flash data set and are extrapolated to estimate the full mortgage market \*\*Other category includes held in portfolios, private labeled securities, or by other entities

#### **Current status of COVID-19 related forbearances**



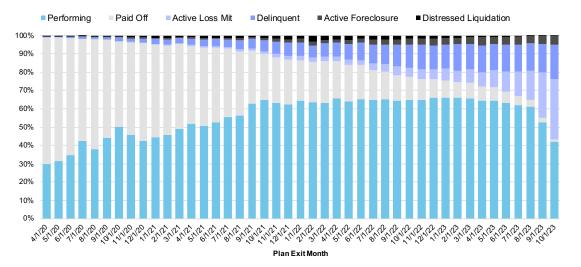
### Breakdown of loans that remain delinquent following forbearance plan exit (Excluding loans in active loss mitigation or foreclosure)





#### Current status of loans that have left COVID-19 forbearance plans

Source: ICE, McDash Flash Data through Oct. 17, 2023



#### Current status of loans that have left COVID-19 forbearance plans

Source: ICE, McDash Flash Data through Oct. 17, 2023

### Definitions

Total active count	All active loans as of month-end, including loans in any state of delinquency or foreclosure. Post-sale loans and loans in REO are excluded from the total active count.
Delinquency statuses (30, 60, 90+, etc.)	All delinquency statuses are calculated using the MBA methodology based on the payment due date provided by the servicer. Loans in foreclosure are reported separately and are not included in the MBA days delinquent.
90-day defaults	Loans that were less than 90 days delinquent in the prior month and were 90 days delinquent, but not in foreclosure, in the current month.
Foreclosure inventory	The servicer has referred the loan to an attorney for foreclosure. Loans remain in foreclosure inventory from referral to sale.
Foreclosure starts	Any active loan that was not in foreclosure in the prior month that moves into foreclosure inventory in the current month.
Non-current	Loans in any stage of delinquency or foreclosure.
Foreclosure sale / new REO	Any loan that was in foreclosure in the prior month that moves into post-sale status or is flagged as a foreclosure liquidation.
REO	The loan is in post-sale foreclosure status. Listing status is not a consideration; this includes all properties on and off the market.
Deterioration ratio	The ratio of the percentage of loans deteriorating in delinquency status vs. those improving.

**Extrapolation methodology:** Mortgage statistics are scaled to estimate the total market performance based on coverage within the McDash database.

#### **Disclosures**



You can reach us by email at mortgage.monitor@BKFS.com



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