MORTGAGE MONITOR

BLACK KNIGHT®

AUGUST 2023 REPORT

MORTGAGE MONITOR

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AUGUST 2023 OVERVIEW

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

We begin with a review of some of the high-level mortgage performance statistics reported in our most recent First Look report, with an extra emphasis on delinquencies. From there we dive deeper into interest rate trends, recent developments in the origination pipeline and credit quality for insights into how current market conditions are affecting home sales.

Finally, we take a closer look at the latest data on home prices and inventory levels and which markets are setting new record highs. We also examine how the reheating housing market has impacted homeowner equity.

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

FIRST LOOK

Black Knight's June First Look at mortgage performance provides a high-level overview compiled from the Black Knight McDash loan-level database. Click on the chart to view in high resolution.

MORTGAGE PERFORMANCE OVERVIEW

+2 BPS

DELINQUENCY RATE

June delinquency rate inched up but remains near record lows

Serious delinquencies (90+ days past due) dropped to 471K, the lowest level since August 2006, and are down 27% from the same month a year ago

+10.3%

FORECLOSURE STARTS

June starts increased to 28K, but remain 38% below pre-pandemic levels

Foreclosure actions began on 5.8% of serious delinquencies in June

+4.5%

PREPAYMENT ACTIVITY

Prepayment activity rose in June

At 0.57% single month mortality (SMM), prepayment activity is down 33% from the same time last year

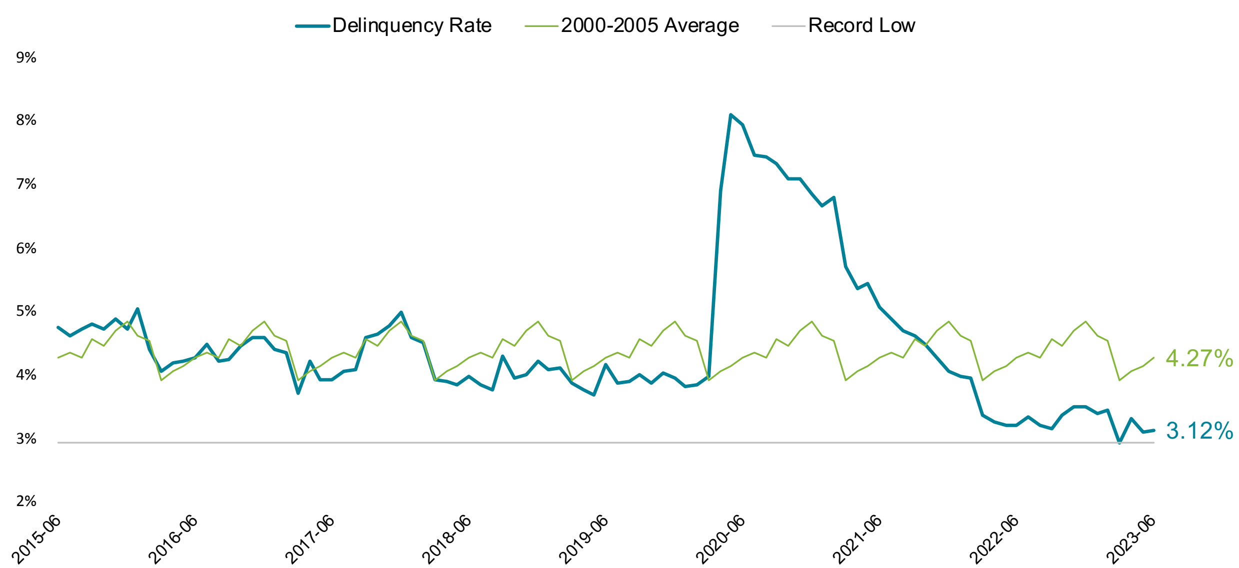
Housing-turnover related prepayments are nearing their seasonal highs and will be running into a firm seasonal headwind as we move towards the end of 2023

MORTGAGE MONITOR

MORTGAGE PERFORMANCE HIGHLIGHTS

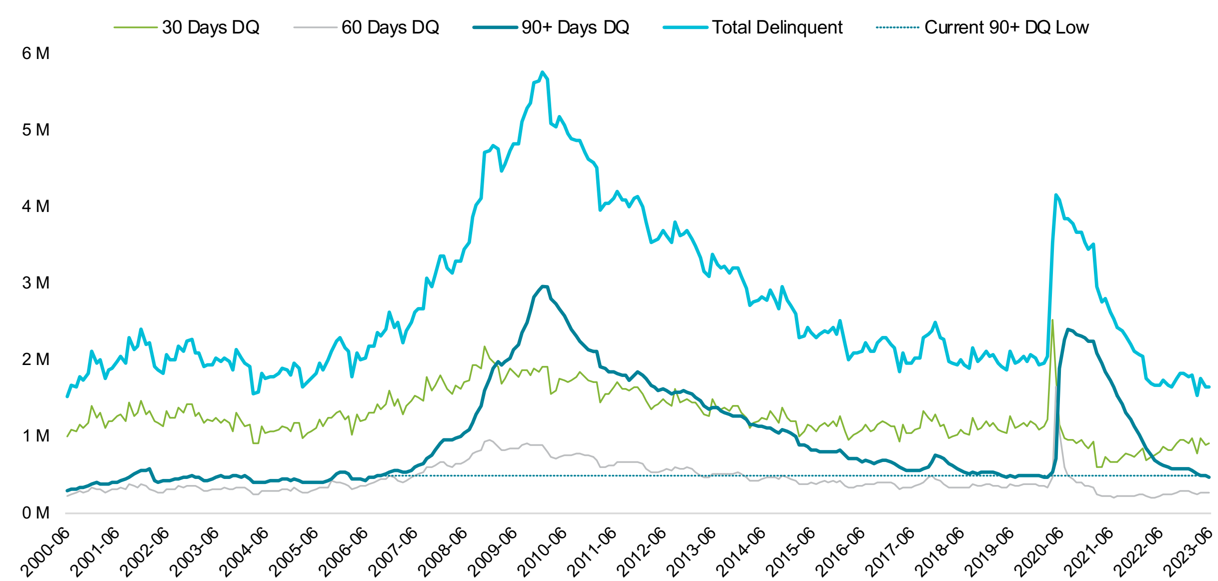
The Black Knight McDash loan-level mortgage performance database provides key performance metrics for a clearer picture of the delinquency landscape, including new inflow and roll rates. Click on each chart to view its contents in high resolution.

NATIONAL DELINQUENCY RATE – FIRST LIEN MORTGAGES



Source: Black Knight, McDash
Data through June 30, 2023

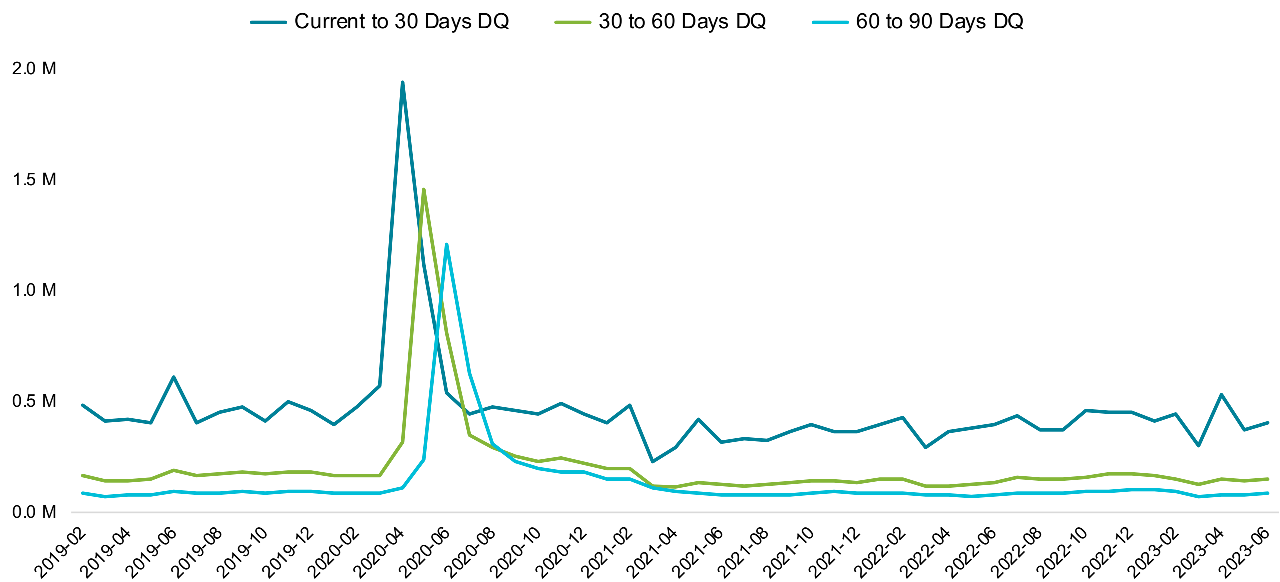
MORTGAGE DELINQUENCIES BY SEVERITY



Source: Black Knight, McDash
Data through June 30, 2023

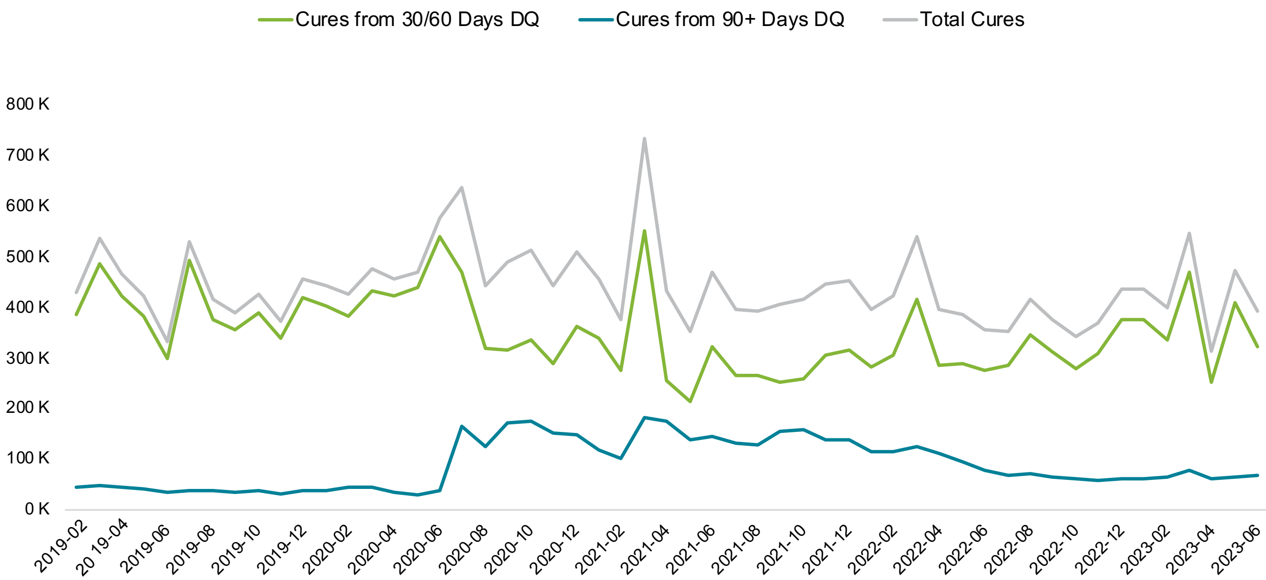
- The national delinquency rate inched up 2 basis points (bps) in June to 3.12%, remaining near record lows
- Borrowers a single payment past due increased by 19K (2.2%), while borrowers who have missed two payments ticked up by 5K (1.7%)
- Serious delinquencies – those 90+ days past due – dropped 13K to 471K, the lowest they've been since August 2006, and a 177K improvement from June 2022
- Overall, the national delinquency rate remains 1.15% below its 2000-2005 pre-Great Financial Crisis seasonal average

LOANS ROLLING TO A MORE DELINQUENT STATUS



Source: Black Knight, McDash
Data through June 30, 2023

CURES TO CURRENT BY PREVIOUS DQ BUCKET

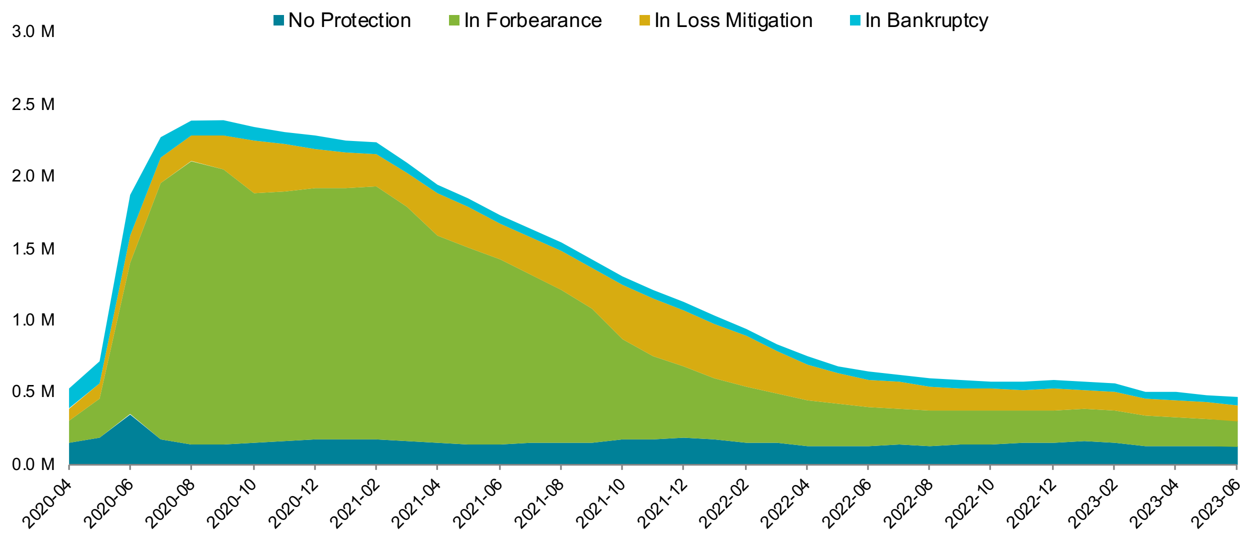


Source: Black Knight, McDash
Data through June 30, 2023

- June new delinquency inflows – those rolling from current to 30-days delinquent – increased 28K from May (+7.5%) to 405K
- New 60- and 90-day delinquency inflows both increased as well, but remained below their 12-month moving average, with 30-to-60-day rolls up 5.4K (+3.7%) and 60-to-90K rolls up 7.3K (+9.2%) in the month

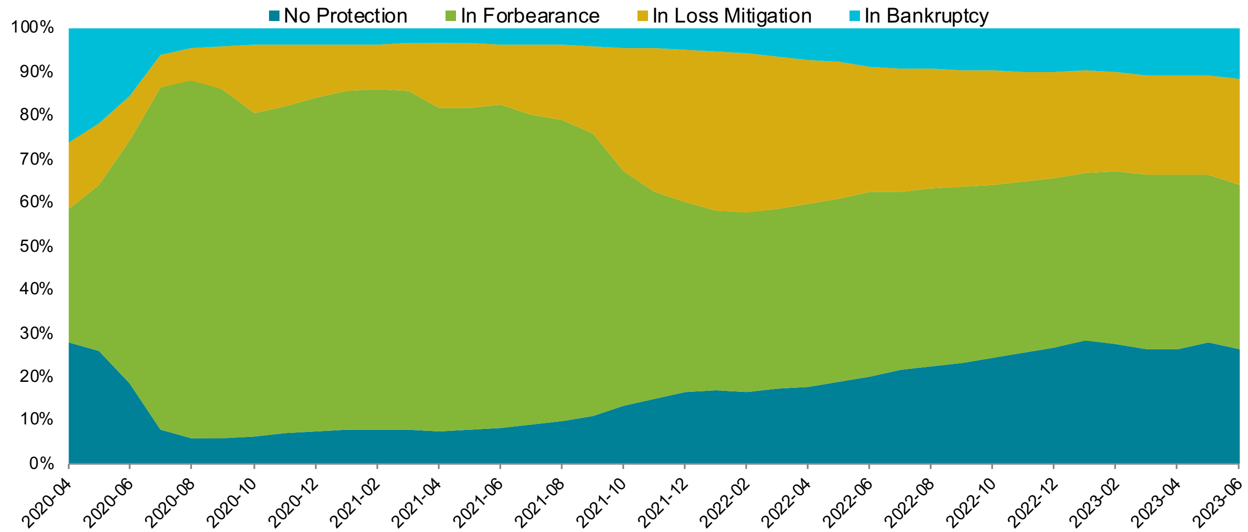
- Cure activity fell by volume in June, but continues to remain strong as a share of remaining past due mortgages, with 21% of non-current mortgages curing in June
- Cures among seriously delinquent mortgages remain strong as well, with 15% of serious delinquencies (SDQs) curing from May

FORECLOSURE PROTECTIONS ON SERIOUSLY DELINQUENT (90+ SDQ) MORTGAGES



Source: Black Knight, McDash, McDash Flash
Data through June 30, 2023

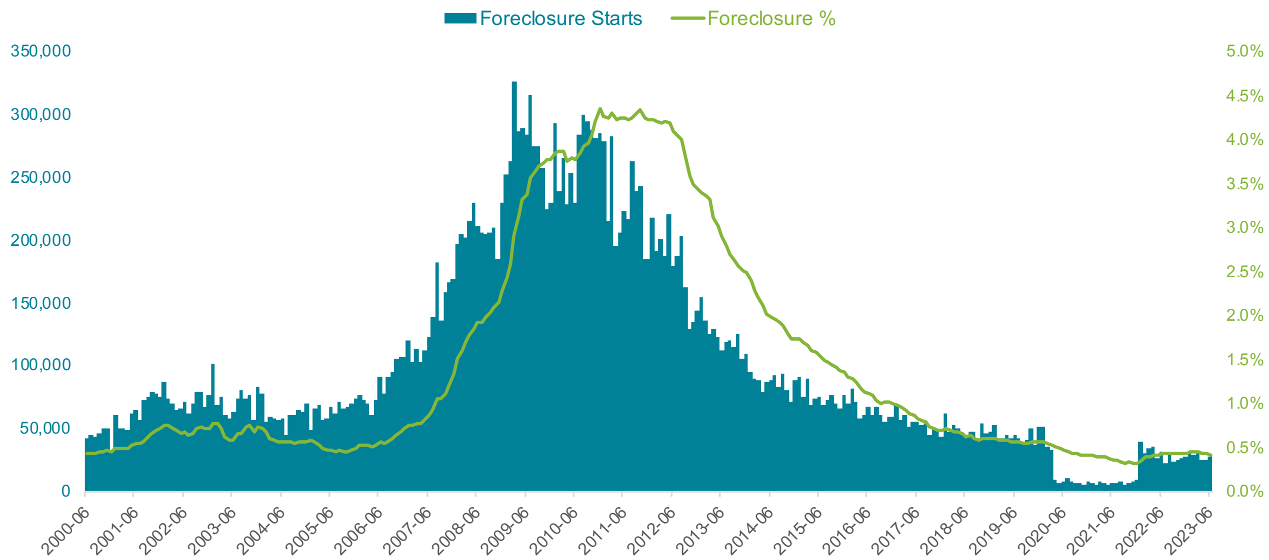
FORECLOSURE PROTECTIONS ON SERIOUSLY DELINQUENT (90+ SDQ) MORTGAGES



Source: Black Knight, McDash, McDash Flash
Data through June 30, 2023

- The number of seriously delinquent mortgages has fallen to its lowest level in nearly 17 years and the share unprotected from foreclosure has begun to plateau
- After seeing the share of serious delinquencies without foreclosure protection (in the form of forbearance, other loss mitigation, or bankruptcy) rise from 6% early in the pandemic to 28% by January 2023, that share has held relatively flat in recent months, sitting at 26% of all SDQs as of June
- By count, the number of unprotected serious delinquencies currently sits at 124K, the lowest it's been since the onset of the pandemic, limiting near-term foreclosure risk
- As of June, 38% of 90+ day delinquencies remain in active forbearance, with 24% in other forms of loss mitigation and 12% in bankruptcy

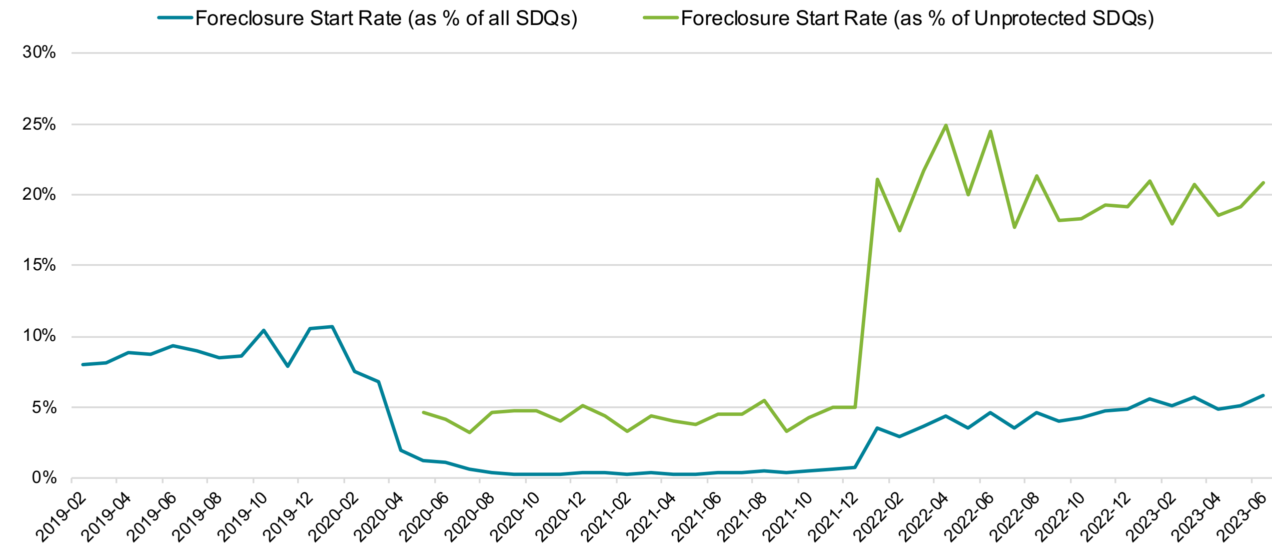
FORECLOSURE



Source: Black Knight, McDash
Data through June 30, 2023

FORECLOSURE START RATES

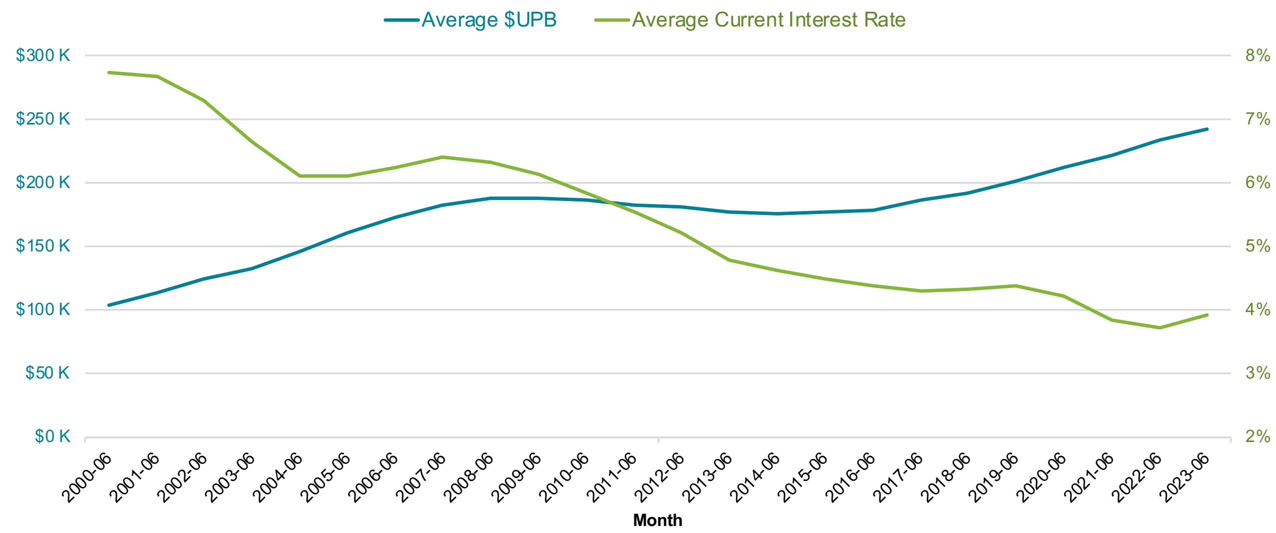
(FC STARTS AS % OF 90+ DAY DELINQUENT MORTGAGES)



Source: Black Knight, McDash, McDash Flash
Data through June 30, 2023

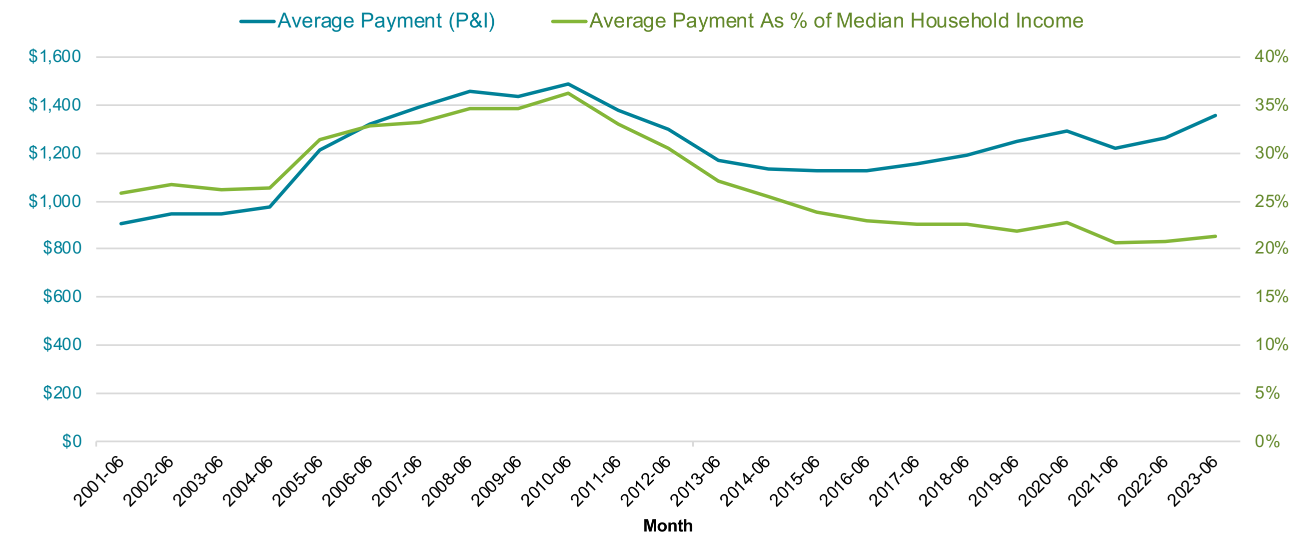
- » With nearly three quarters of all serious delinquencies protected from foreclosure, and foreclosure rates among seriously delinquent loans historically low, foreclosure activity remains muted
- » While the foreclosure start rate among all SDQs has been trending higher, it's still roughly a third lower than it was before the pandemic
- » The foreclosure start rate among unprotected SDQs has remained relatively stable, albeit historically low as well, at just under 20% on average in recent months
- » Despite the month-to-month rise in foreclosure starts in June, prospects for any kind of near-term surge in foreclosure activity remains low, with start volumes still nearly 40% below pre-pandemic levels and expected to remain low for the remainder of the year

$UPB & CURRENT INTEREST RATES ON OUTSTANDING MORTGAGES



Source: Black Knight, McDash, McDash Flash
Data through June 30, 2023

PRINCIPAL & INTEREST PAYMENTS ON OUTSTANDING MORTGAGES



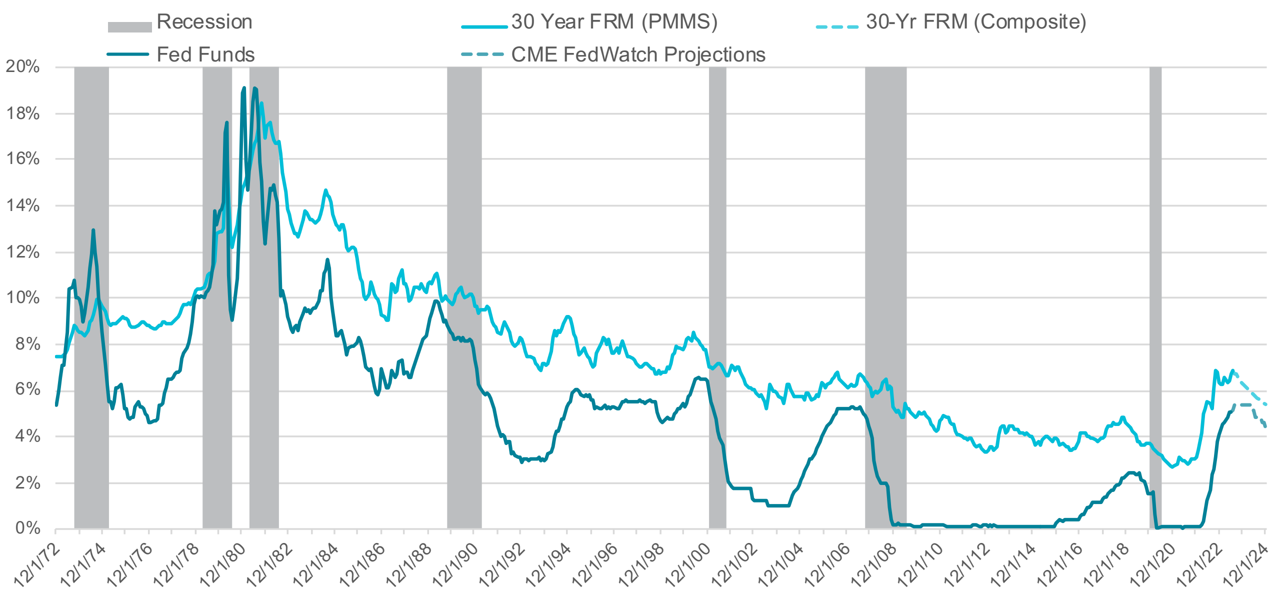
Source: Black Knight, McDash, McDash Flash
Data through June 30, 2023

- While affordability for new prospective home buyers remains near 37-year lows, low interest rates locked in during the pandemic and preceding years are holding mortgage payments low for existing homeowners and contributing to low delinquency levels
- Despite the average unpaid balance of existing mortgages hitting all-time highs in June at $242K, the average interest rate on outstanding mortgages remains below 4%, currently sitting at 3.94%
- As a result, the average principal and interest payment among active mortgages is $1,355, up from less than $1,220 in 2021, but still below the levels seen from 2007-2011, prior to the refinance boom
- Homeowners who have benefitted from $42B in cumulative savings through refinance in just the past three years have also experienced strong income growth
- The average mortgage payment of existing homeowners as a share of the median household income is just 21% (near record lows)
- This relatively low share of income required to service mortgage obligations, along with strong credit quality and an acute focus on loss mitigation, are all contributing to a 16-year low in seriously delinquent mortgages

INTEREST RATES & RATE LOCK INSIGHTS

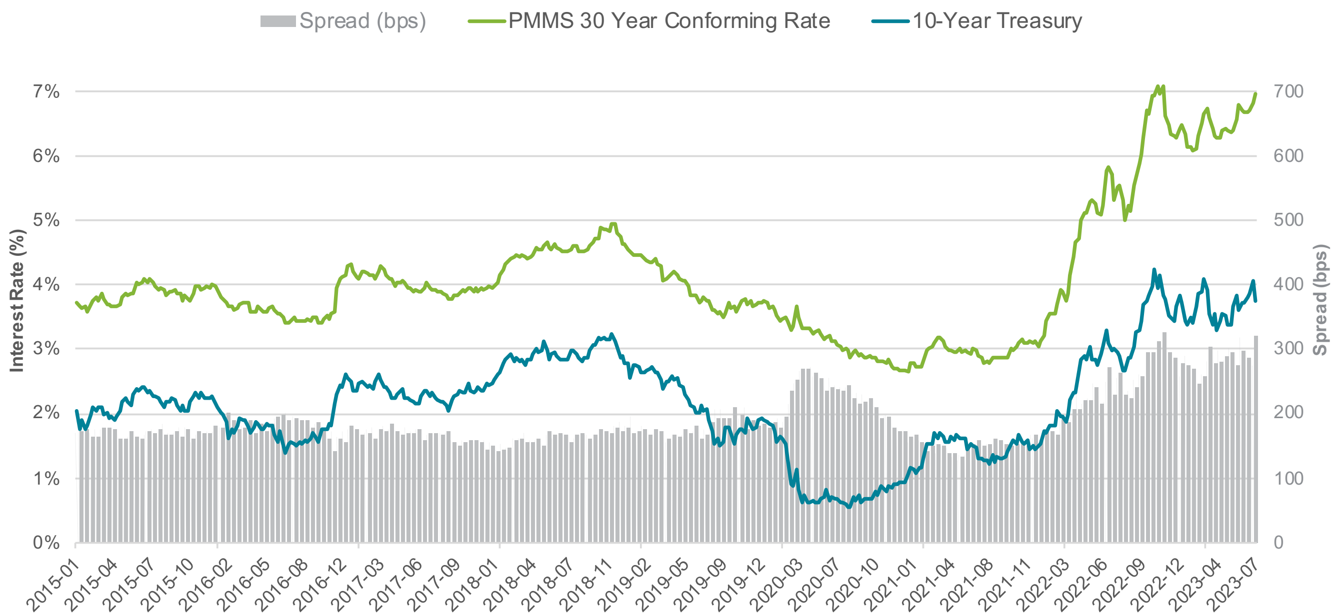
Here we look at recent developments in interest rates, origination activity, and credit quality. Click on each chart to view its contents in high resolution.

FED FUNDS VS. 30-YEAR FIXED MORTGAGE RATE



Source: Black Knight, Freddie Mac PMMS, Federal Reserve Bank of St. Louis (FRED)
CME FedWatch Projections as of 7/27/2023;
Fannie Mae Housing Forecast July 2023; MBA Mortgage Forecast July 20, 2023

30-YEAR MORTGAGE TO 10-YEAR TREASURY SPREAD

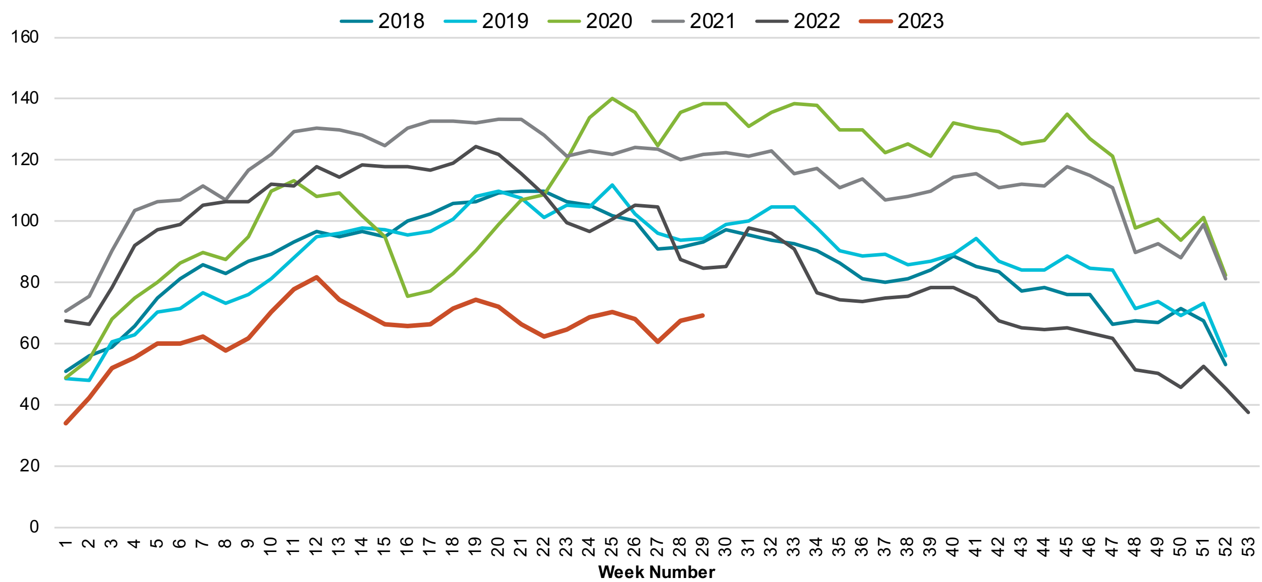


Source: Black Knight, Optimal Blue, Federal Reserve Bank of St. Louis (FRED)
Data through 7/20/2023

- As expected, the Federal Open Market Committee (FOMC) increased the Fed Funds rate by 25 bps at their July 26 meeting, reiterating their 2% inflation target, and signaling a data-dependent path as they weigh further rate increases this year
- As of late July, the market is currently pricing in a less than 33% chance of another 25 bps hike later this year, but sentiment has been shifting towards a higher for longer scenario in recent months
- Composite forecasts for 30-year rates have trended higher in recent months as well, with the composite 30-year forecast for end-of-year 2023 rising from 5.6% less than 90 days ago to 6.25% by the end of July
- Rate forecasts for end-of-year 2024 have pressed higher (to 5.4%) as well, with increased variance among industry forecasts
- 10-year yield vs. 30-year mortgage rate spreads remain historically wide, fueled by a combination of continued rate volatility and prepayment risk of current originations, among other factors

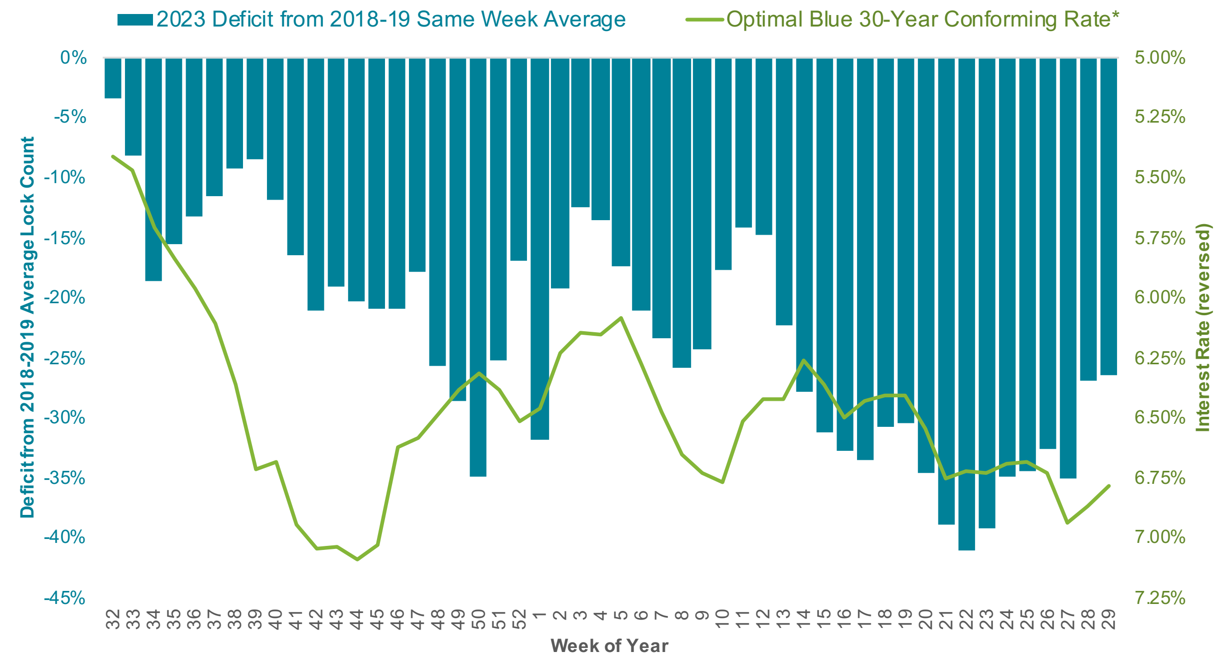
PURCHASE RATE LOCK COUNTS BY YEAR & WEEK

(TRAILING 3-WEEK MOVING AVERAGE)



Source: Black Knight, Optimal Blue
Data through week ending 7/22/2023
Total lock count indexed to 100 in week ending 1/13/2018

PURCHASE LOCK COUNT DEFICIT VS. INTEREST RATE

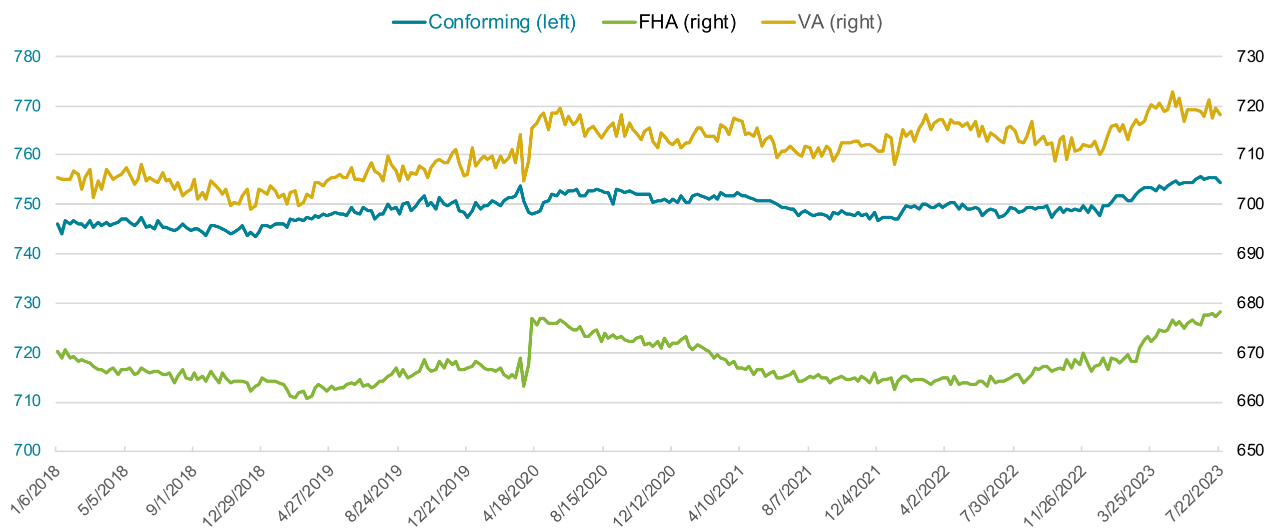


Source: Black Knight, Optimal Blue;
Data through week ending 7/22/2023
* Interest rates are weekly averages (Optimal Blue)

- Purchase rate locks have seen a modest rebound in recent weeks as rates have fallen back from their 2022 peak of just over 7%
- The modest improvement in rates pulled rate locks to within 26% of their 2018/2019 pre-pandemic levels, the closest they've been since late March/early April 2023
- That said, there has been a significant demand suppression due to a persistent lack of both affordability and inventory
- Refinance locks remain extremely muted as well, accounting for 15% of all lock activity in recent weeks

AVG. CREDIT SCORE OF PURCHASE LOCKS BY INVESTOR

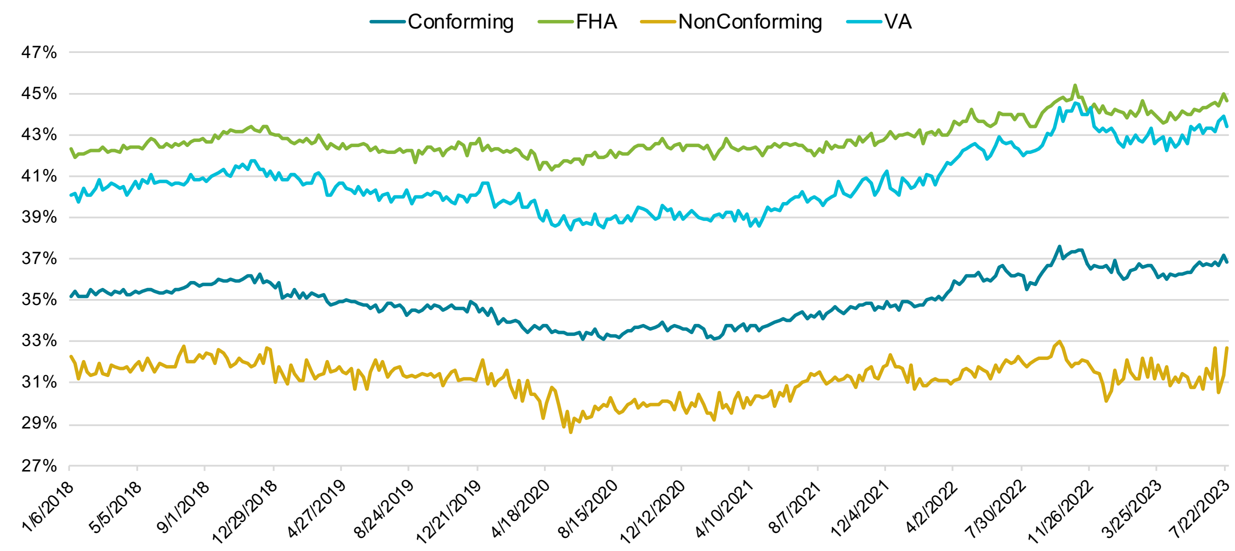
(PRIMARY RESIDENCE PURCHASES)



Source: Black Knight, Optimal Blue
Data through week ending 7/22/2023

AVERAGE DTI OF PURCHASE RATE LOCKS

(PRIMARY RESIDENCE PURCHASES)

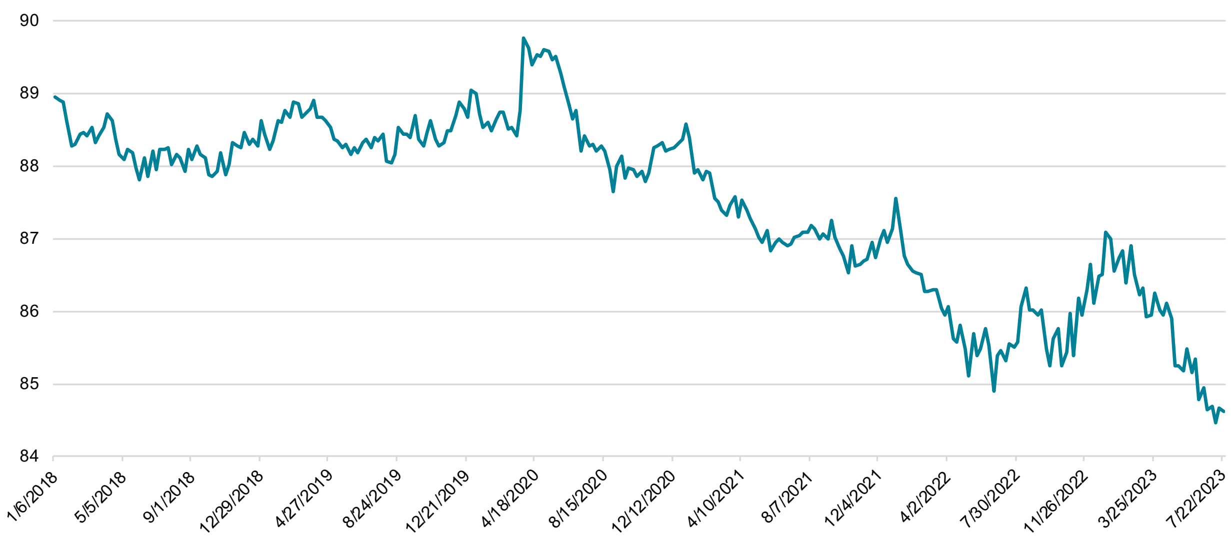


Source: Black Knight, Optimal Blue
Data through week ending 7/22/2023

- Credit continues to remain tight, with the average credit score among primary residence purchase locks hitting a record high in the first week of July before edging modestly lower in recent weeks
- Credit scores among conforming and FHA loan products have both reached series highs in the same period, with average credit scores among VA locks remaining elevated as well
- Debt-to-income ratios are on the rise as well, and while they remain below October/ November 2022 levels – much like affordability as a whole – they are nearing their post Great Financial Crisis highs among both purchase and refinance transactions
- Non-conforming loans haven't seen the same pressures, but primary purchase DTIs have risen sharply in recent weeks among FHA, VA and conforming loans, with FHA DTIs hitting 45% on average

AVGERAGE LTV OF PURCHASE RATE LOCKS

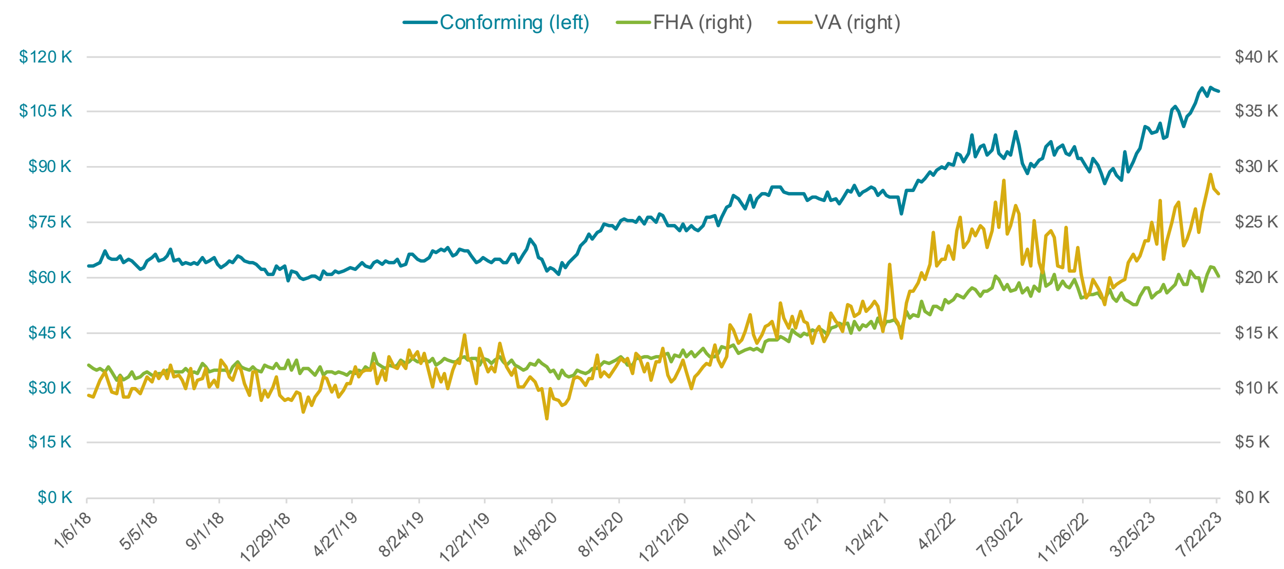
(PRIMARY RESIDENCE PURCHASES)



Source: Black Knight, Optimal Blue
Data through week ending 7/22/2023

AVG. DOWN PAYMENT ON PURCHASE LOCKS BY INVESTOR

(PRIMARY RESIDENCE PURCHASES)



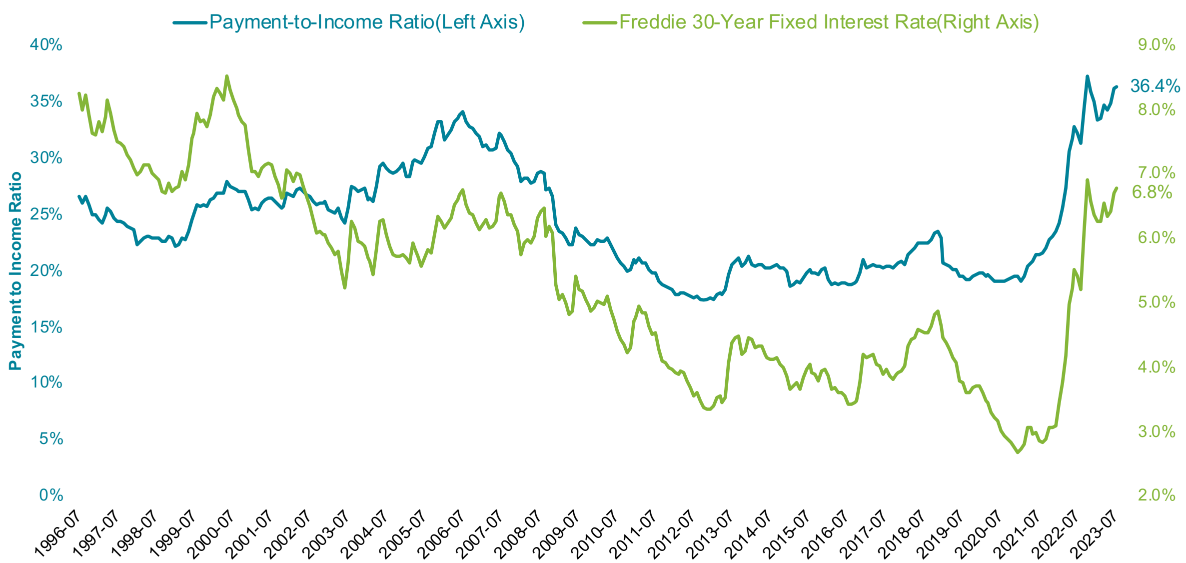
Source: Black Knight, Optimal Blue
Data through week ending 7/22/2023

- Credit tightening – along with a shift in borrower profiles – can also be seen in recent loan-to-value (LTV) metrics as well, with the average LTV among primary residence purchase locks falling below 85% in recent weeks
- The combination of lower LTVs and rising home prices is resulting in larger down payments, with the average down payment on primary residence purchases hitting a record high of $90,200 in early July
- In fact, down payment amounts have reached record highs across all loan types in recent weeks with the average down payment on conforming loans surpassing $110K on average
- Among FHA loans, the average down payment hit nearly $21K in early July, while the average down payment on primary home purchases using VA loans was $29.4K

HOUSING MARKET & EQUITY TRENDS

Here we examine recent changes in home prices, affordability and inventory levels across the country, with a closer look at which markets have seen the strongest reaction to the rising interest rate environment. This information has been compiled from the Black Knight Home Price Index, Collateral Analytics data, the McDash loan-level mortgage performance database and other public and proprietary data sets. Click on each chart to view its contents in high resolution.

NATIONAL PAYMENT-TO-INCOME RATIO*



Source: Black Knight Home Price Index, FHLMC PMMS, Census Bureau
*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 average-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 Avg	Difference
1	Cleveland, OH	22.9%	21.9%	**+1.0%**
2	Pittsburgh, PA	25.0%	22.0%	**+3.0%**
3	Oklahoma City, OK	25.2%	21.6%	**+3.5%**
4	Hartford, CT	25.3%	19.7%	**+5.6%**
5	St. Louis, MO	25.3%	19.8%	**+5.5%**
6	Cincinnati, OH	25.5%	21.2%	**+4.3%**
7	Detroit, MI	25.6%	22.3%	**+3.3%**
8	Indianapolis, IN	25.8%	19.5%	**+6.3%**
9	Chicago, IL	26.5%	24.0%	**+2.5%**
10	Minneapolis, MN	26.7%	20.8%	**+5.8%**

LEAST AFFORDABLE MARKETS

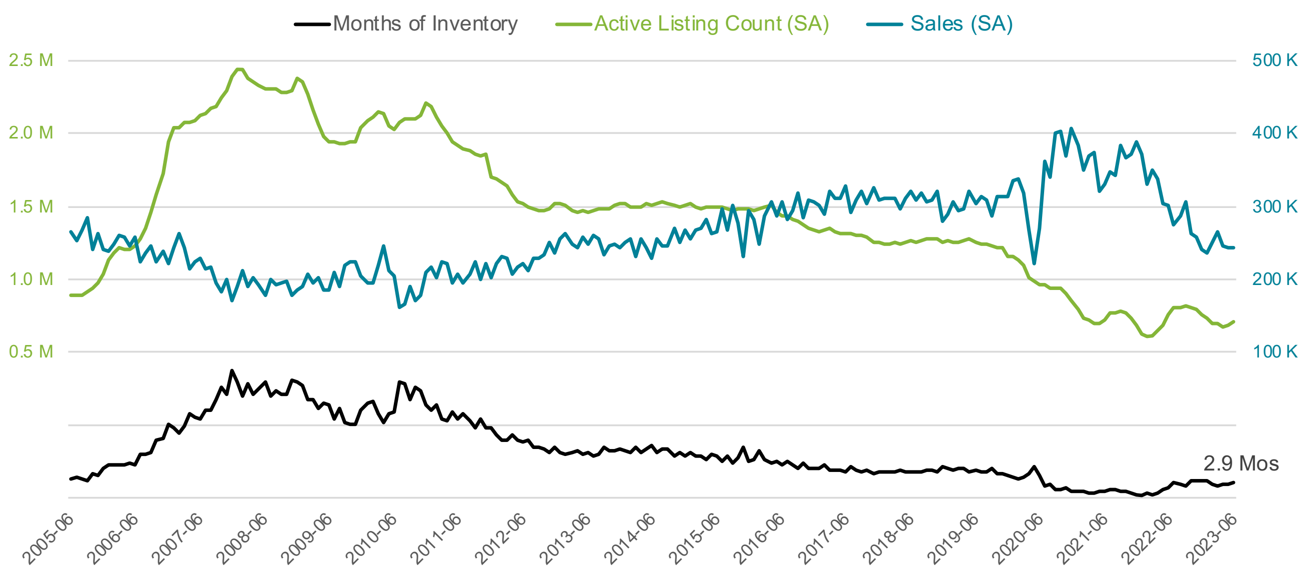
Rank	Geography (CBSA)	Payment-to-Income Ratio	Payment-to-Income 1995-2003 Avg	Difference
41	Nashville, TN	40.6%	23.2%	**+17.4%**
42	Sacramento, CA	40.7%	27.6%	**+13.1%**
43	Riverside, CA	43.3%	26.0%	**+17.3%**
44	Seattle, WA	44.0%	27.6%	**+16.4%**
45	New York-Newark, NY-NJ	47.3%	28.6%	**+18.7%**
46	Miami, FL	48.4%	24.6%	**+23.8%**
47	San Francisco, CA	56.2%	35.5%	**+20.7%**
48	San Jose, CA	58.4%	34.7%	**+23.7%**
49	San Diego, CA	60.4%	34.6%	**+25.8%**
50	Los Angeles, CA	68.9%	35.9%	**+33.0%**

Source: Black Knight Home Price Index, FHLMC PMMS, Census Bureau

- The mortgage payment required to purchase an average priced home hit a record high of $2,308 in July, some $70 per month more than last October when rates first hit 7%
- It currently requires 36.4% of the median household income (MHI) to purchase a median-priced home, the second highest mark in the past 37 years, with July 2023 coming in just below October's 36.8%
- It currently requires 12.6 percentage points more of the MHI to purchase the average priced home than it has on average over the past 25 years, and 11.5% more than the relatively stable period from 1995-2003 prior to the Great Financial Crisis
- All 100 of the largest markets in the U.S. are less affordable than their 1995-2003 average, although that varies significantly by market
- In Cleveland it requires just 1% more of the MHI to make payments on a median priced home, whereas in Los Angeles it requires 33% more.

SALES, ACTIVE LISTINGS & MONTHS OF INVENTORY

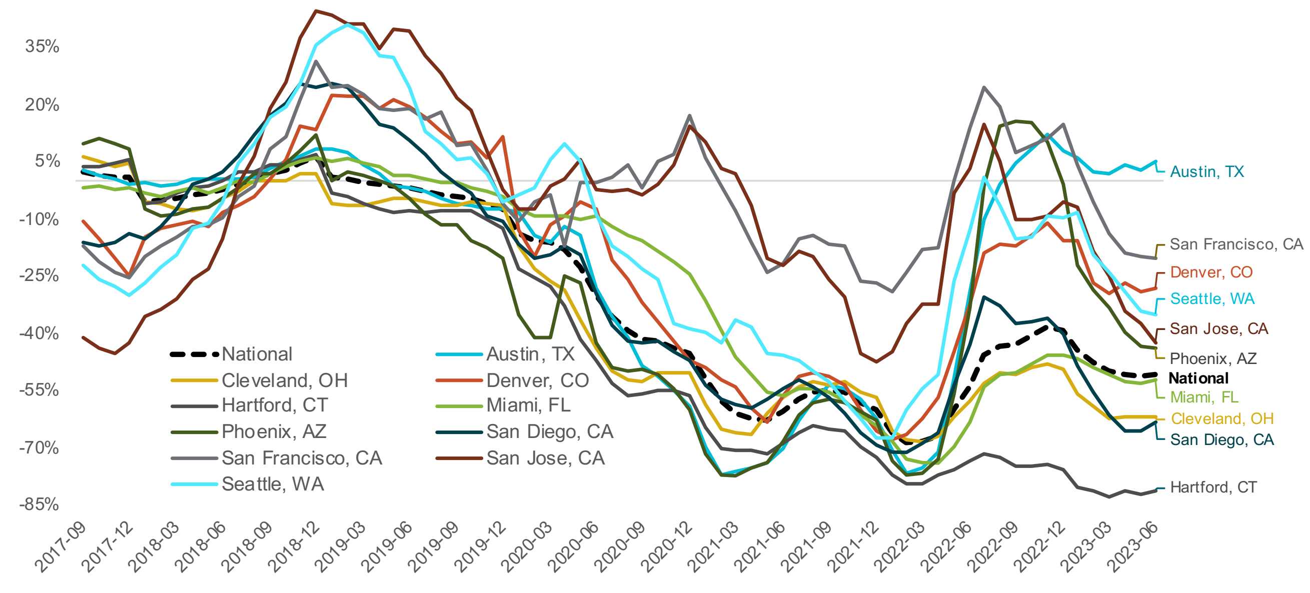
(SEASONALLY ADJUSTED – SINGLE FAMILY RESIDENCES AND CONDOS)



Source: Black Knight, Collateral Analytics
Data through June 30, 2023

INVENTORY OF HOMES LISTED FOR SALE

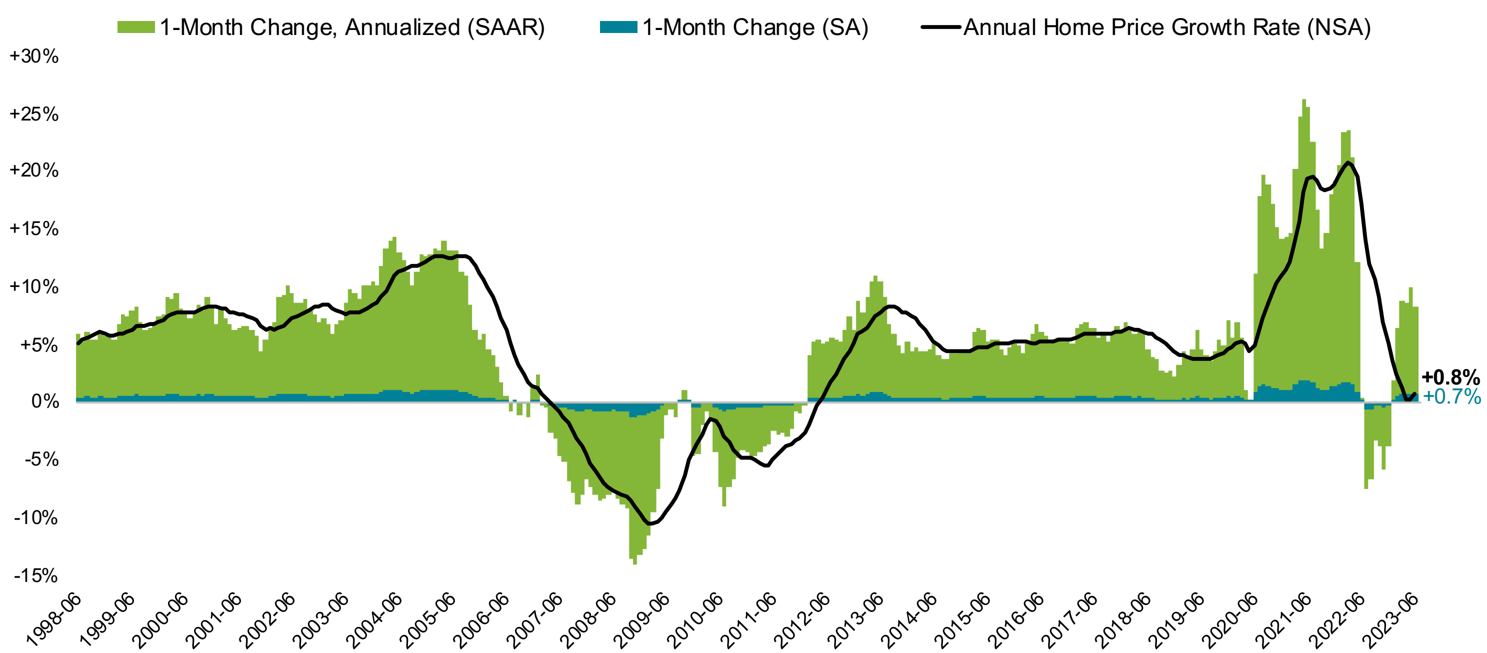
(% CHANGE FROM 2017-2019 SAME MONTH AVERAGE)



Source: Black Knight, Realtor.com
Data through June 30, 2023

- Home sales declined modestly in June, falling to within 3% of January's lows as affordability and inventory challenges continue to drag on transaction volumes
- That said, separate data from both Black Knight's Collateral Analytics and Realtor.com showed a modest improvement in inventory for June, the second consecutive month, according to Black Knight
- Despite the improvement, inventory remains 51% below pre-pandemic levels nationally, with over half of major markets facing deficits of more than 50%
- While more than 90% of markets are still seeing inventory deficits that have grown year to date – most significantly in Phoenix (-43%) – more than two thirds of markets saw modest improvements in June
- It's also worth noting that, in the post-pandemic world, inventories have peaked later in the year, which could provide some potential good news for those looking for more options over the next few months
- Connecticut continues to be the poster child for lack of inventory, with Hartford (-81%), Bridgeport (-78%) and New Haven (-77%) facing the largest deficits, while Austin (+5%) and Las Vegas (+9%) remain the only two markets with inventory levels above their pre-pandemic same-month averages
- With sales modestly down and inventory modestly up, seasonally adjusted months of supply now stands at 2.9 months, up from 2.6 months In March

BLACK KNIGHT HOME PRICE INDEX



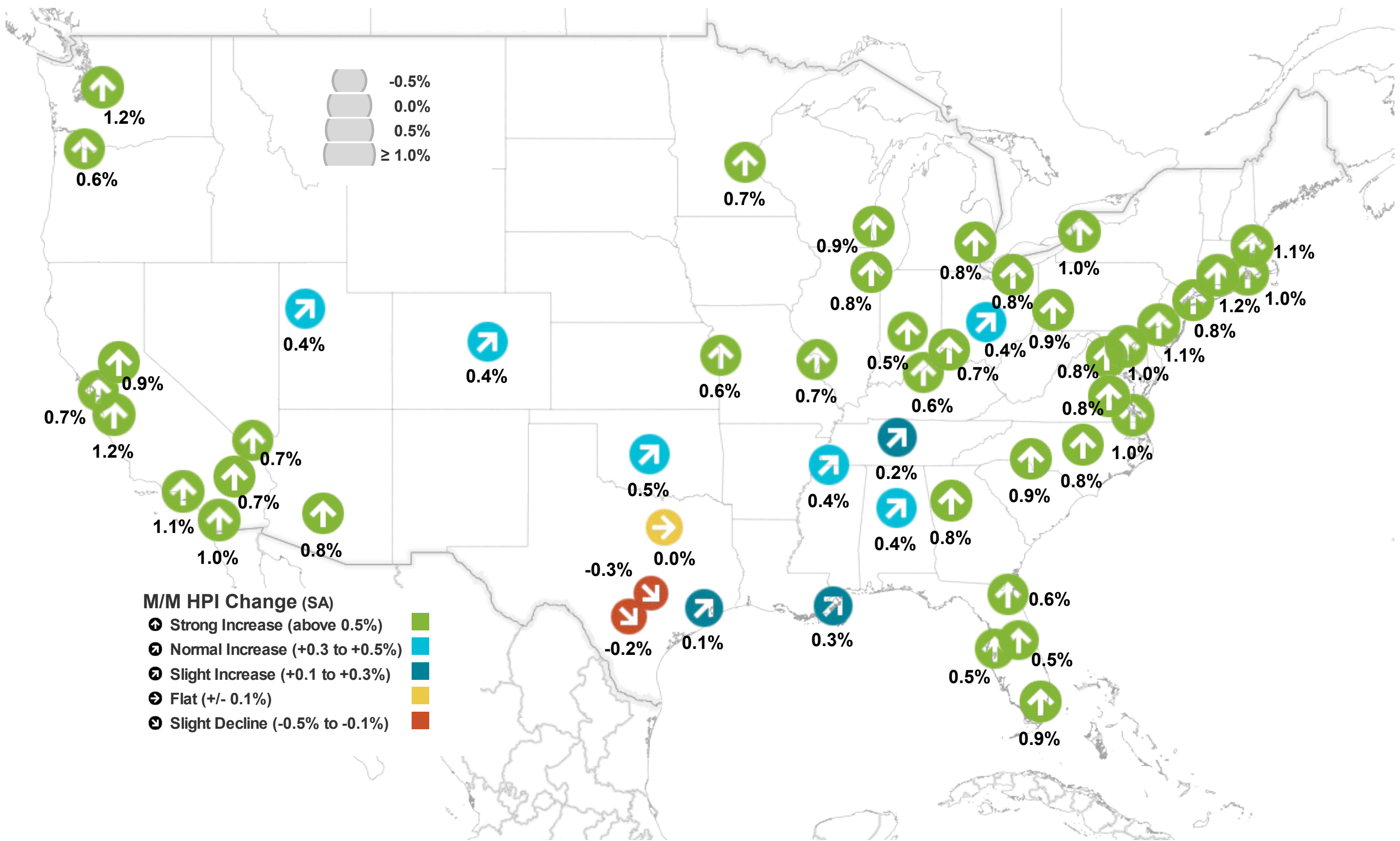
Source: Black Knight Home Price Index (HPI)
Data through June 30, 2023

After slowing for 14 consecutive months, the annual home price growth rate inflected higher in June to 0.8%, up from a revised +0.2% in May

- Home prices grew by a seasonally adjusted +0.67% in the month, slightly cooler than the +0.8% seen in May, but on par with the +0.7 and +0.69% seasonally adjusted growth in March and April
- Recent monthly gains suggest that further acceleration of annual home price growth rates are likely on the horizon
- A continuation of gains seen over the past six months (+0.6% month over month, seasonally adjusted, on average) would result in the annual home price growth rate accelerating to 2% or higher in July with further acceleration in subsequent months
- A later-than-normal peak in inventory levels, as noted on the previous page, could ease price pressures later this year, although if interest rates begin to ease, prices could heat up on what would still be chronically low inventory

MONTH-OVER-MONTH CHANGE IN HPI

(SEASONALLY ADJUSTED)

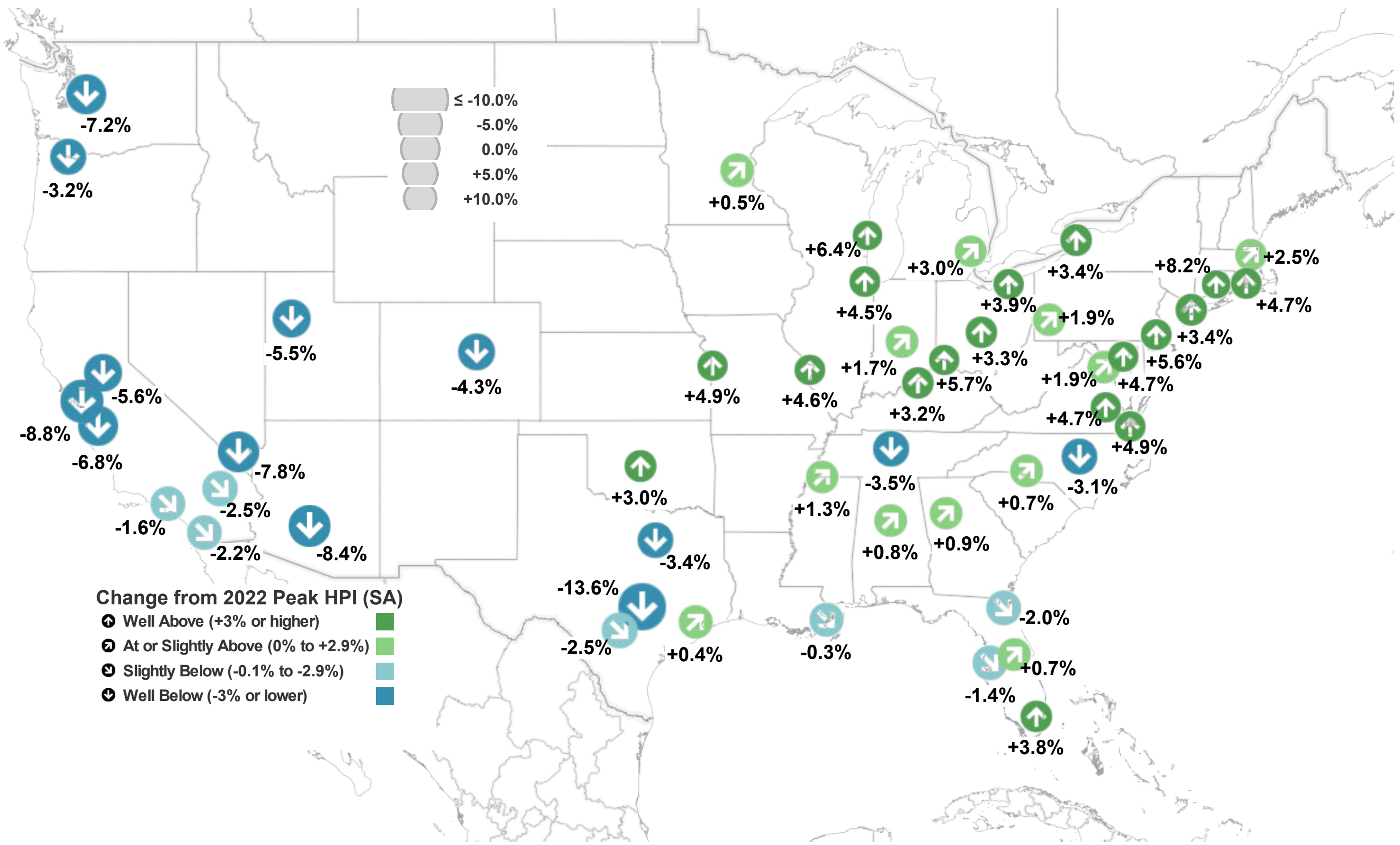


Source: Black Knight Home Price Index (HPI)
June 2023

Nearly every major market saw seasonally adjusted price growth in June

- Austin and San Antonio were the only markets to see prices decline month to month in June on a seasonally adjusted basis, with prices effectively flat in Dallas and up only 0.1% in Houston
- The strongest price growth came in Hartford (+1.2%), Seattle (+1.2%) and San Jose (+1.2%)
- While Hartford's continued price growth has been fueled by relative affordability and a dearth of inventory, Seattle and San Jose have done a complete 360
- The two West Coast markets had fallen quickly from the top 10% of early 2022 growth markets to lead the country in price corrections before coming full circle in June to rank #2 and #3 in seasonally adjusted price growth
- Other West Coast markets like Los Angeles (+1.1%), San Diego (+1%), and Sacramento (+0.9%) are following a similar, if less pronounced, pattern
- East Coast markets, including Philadelphia, Boston, Providence, Buffalo and Baltimore, round out the list of June's largest price gains

CHANGE IN MEDIAN HOME PRICE (SA) FROM 2022 PEAK



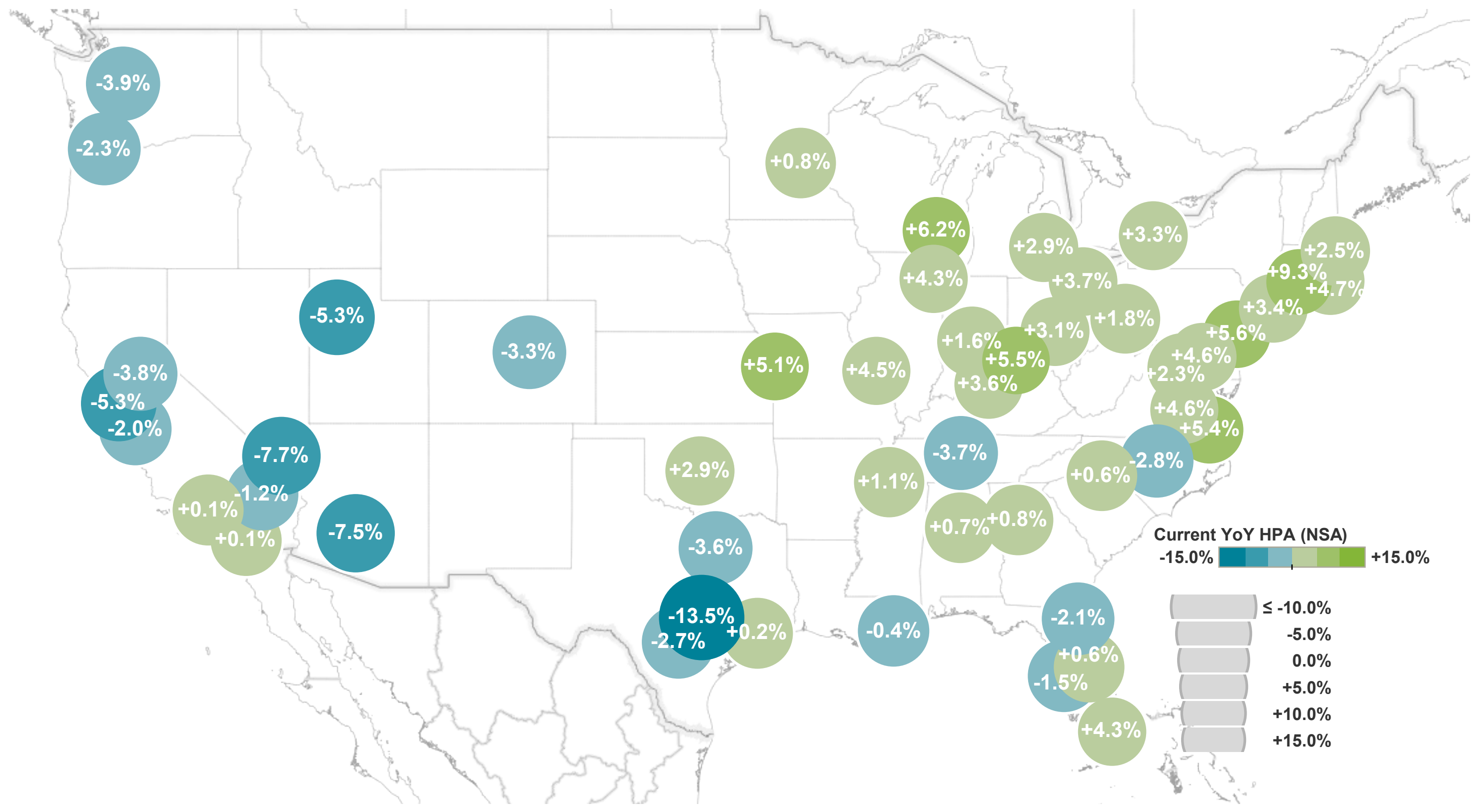
Source: Black Knight Home Price Index (HPI)
June 2023

- At the national level, home prices have now fully erased their 2022 corrections hitting new all-time highs in June on both seasonally adjusted and non-seasonally adjusted bases
- In fact, 60% of markets are now seeing prices above 2022 levels, with Hartford topping that list at 8.2% above 2022 peaks on a seasonally adjusted basis
- Milwaukee (+6.4%), Cincinnati (+5.7%), and Philadelphia (+5.6%) are also more than 5% above last year's price peaks, with a handful of Midwest and Northeast markets, including Kansas City, Virginia Beach, Richmond, Baltimore, Providence, St Louis and Chicago up more than 4%
- Home prices in Austin (-13.6%) remain the furthest below their 2022 peaks, with San Francisco, Phoenix, Las Vegas and Seattle down more than 7%

CHANGE IN MEDIAN HOME PRICE (SA) FROM 2022 PEAK

Source: Black Knight Home Price Index (HPI)
June 2023

ANNUAL HOME PRICE GROWTH RATES BY CBSA



MARKETS WITH HIGHEST HOME PRICE GROWTH RATES		
Rank	**Geography (CBSA)**	**Annual Home Price Growth Rate**
1	Hartford, CT	+9.3%
2	Milwaukee, WI	+6.2%
3	Philadelphia, PA	+5.6%
4	Cincinnati, OH	+5.5%
5	Virginia Beach, VA	+5.4%
6	Kansas City, MO	+5.1%
7	Providence, RI	+4.7%
8	Baltimore, MD	+4.6%
9	Richmond, VA	+4.6%
10	St. Louis, MO	+4.5%

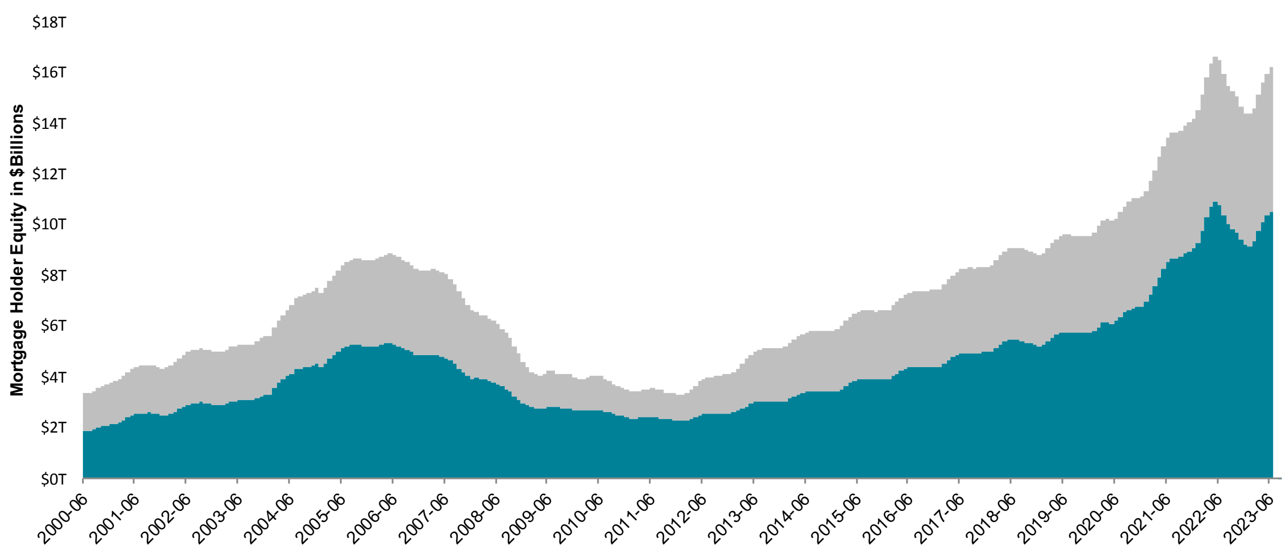
MARKETS WITH LOWEST HOME PRICE GROWTH RATES		
Rank	**Geography (CBSA)**	**Annual Home Price Growth Rate**
41	Denver, CO	-3.3%
42	Dallas, TX	-3.6%
43	Nashville, TN	-3.7%
44	Sacramento, CA	-3.8%
45	Seattle, WA	-3.9%
46	San Francisco, CA	-5.3%
47	Salt Lake City, UT	-5.3%
48	Phoenix, AZ	-7.5%
49	Las Vegas, NV	-7.7%
50	Austin, TX	-13.5%

42 markets saw annual home price growth rate increases in June, just four months after every market experienced growth rate slowing in February 2023

- 18 markets, primarily in the western U.S. and Texas, remain down year over year
- The backward-looking annual growth rate is shaking off the weakness of late-2022 by way of strong price gains this spring and summer, and so that number is likely to improve in coming months
- Hartford continues to lead all markets with prices up 9.3% year over year, with Milwaukee, Philadelphia, Cincinnati and Virginia Beach all moving up to fill out the top five spots
- Miami has now fallen out of the top 10 (to #12) after leading all markets in price growth for eight straight months in late 2022 and early 2023
- Austin, which led all markets for the entirety of 2021 and into early 2022, is seeing the largest year-over-year price decline at -13.5%
- Broadly speaking, Midwest and Northeast markets are seeing the highest year-over-year price gains, while West Coast and pandemic boom markets continue to see prices run below last year’s levels
- Based on recent monthly trends, those West Coast markets are likely to begin climbing the ladder again in coming months

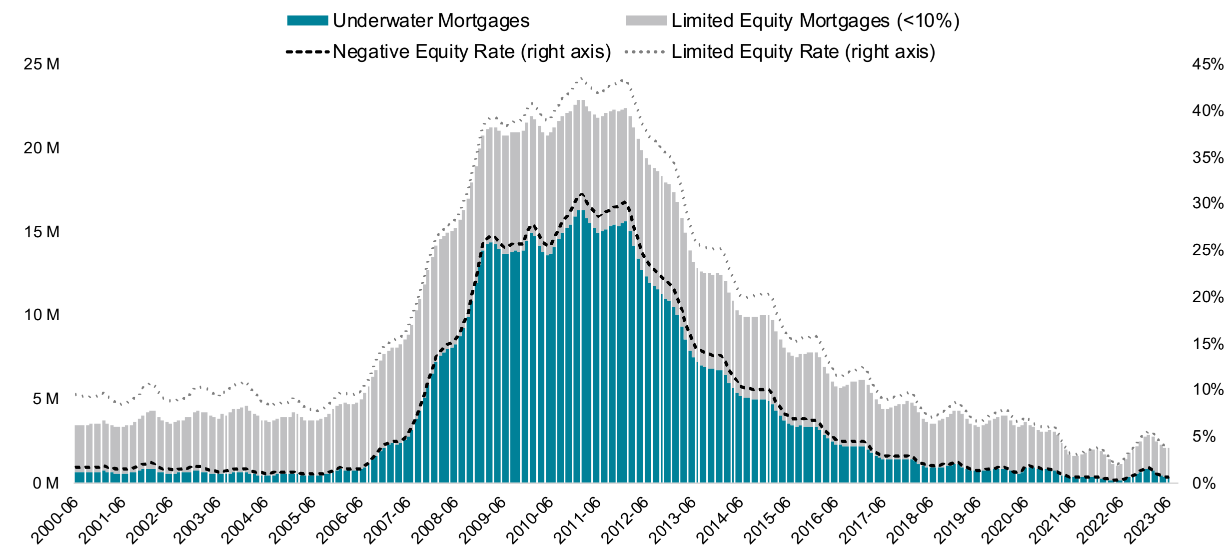
Source: Black Knight Home Price Index (HPI)
June 2023

EQUITY ON MORTGAGED RESIDENTIAL PROPERTIES



Source: Black Knight, McDash Property Module
*Tappable equity is equity that could be withdrawn while still maintaining an 80% or lower loan to value ratio
Data through June 30, 2023

NEGATIVE EQUITY RATES & VOLUMES



Source: Black Knight, McDash Property Module
Data through June 30, 2023

- Despite outstanding mortgage debt pushing above $13T for the first time on record, equity levels improved on rising home prices in June
- Total mortgage holder equity crossed the $16T threshold again in June and is back to within $450B (3%) of the peaks reached last summer
- Likewise, tappable equity – the amount that can be accessed while still leaving a 20% equity cushion – climbed to $10.5T in June and is within $434B (4%) of its 2022 peaks
- The average mortgage holder now has $199K in equity, up from $185K in Q1, but down from $207K at the same time last year
- Total mortgage debt makes up 44.8% of underlying home values, significantly less than the pre-pandemic 52.5% total market combined loan to value (CLTV) seen back in June 2019 but weaker than the 43% rate at the same time last year

- Negative equity rates also improved in June, with only 0.65% of all first lien mortgages underwater, down from 0.71% in May
- While the number of underwater borrowers is up nearly 70% from the same time last year, it's also down 52% from 2019, and only 344K mortgage holders currently owe more than their home is worth
- Contrast that to the height of the Great Financial Crisis, when over 16M homeowners were underwater, representing more than 30% of all borrowers
- The highest negative equity rates are currently in Las Vegas (2.7%), Austin (2.6%) and Phoenix (2.3%), while almost nonexistent in markets like San Jose (0.1%), Los Angeles (0.2%), Boston, (0.3%) and Miami (0.3%)
- Likewise, the share of mortgage holders with limited equity (<10%) remains historically low as well, at 3.9% as of June

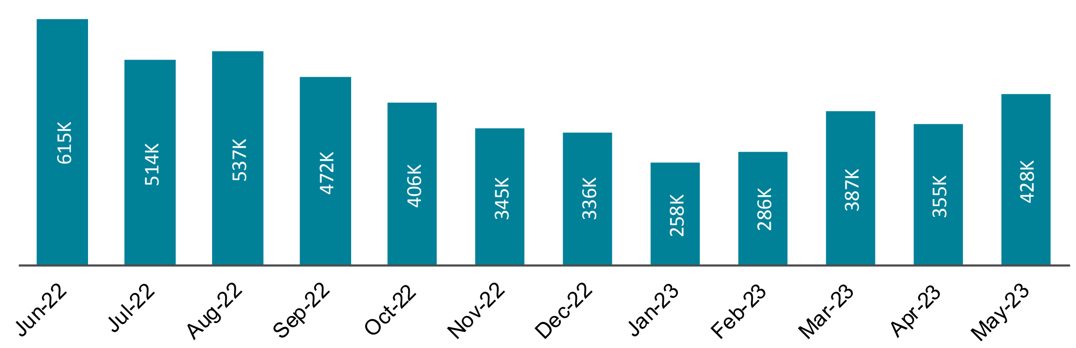
DATA SUMMARY

	Jun-23	Monthly Change	YTD Change	Yearly Change
Delinquencies	3.12%	0.55%	-7.68%	-2.80%
Foreclosure	0.42%	-2.51%	-6.41%	-3.63%
Foreclosure Starts	28,000	10.24%	-13.85%	-11.11%
Seriously Delinquent (90+) or in Foreclosure	1.31%	-2.67%	-15.57%	-21.87%
New Originations (data as of May-23)	428K	20.6%	27.4%	-32.5%

	Jun-23	May-23	Apr-23	Mar-23	Feb-23	Jan-23	Dec-22	Nov-22	Oct-22	Sep-22	Aug-22	Jul-22	Jun-22
Delinquencies	3.12%	3.10%	3.31%	2.92%	3.45%	3.38%	3.48%	3.49%	3.35%	3.16%	3.20%	3.33%	3.21%
Foreclosure	0.42%	0.43%	0.44%	0.46%	0.46%	0.45%	0.44%	0.44%	0.43%	0.43%	0.44%	0.43%	0.44%
Foreclosure Starts	28,000	25,400	24,800	32,200	29,500	32,500	28,200	27,300	24,900	24,200	28,800	22,900	31,500
Seriously Delinquent (90+) or in Foreclosure	1.31%	1.35%	1.40%	1.43%	1.53%	1.56%	1.55%	1.55%	1.55%	1.56%	1.58%	1.63%	1.68%
New Originations		428K	355K	387K	286K	258K	336K	345K	406K	472K	537K	514K	615K

TOTAL DELINQUENCIES

NEW ORIGINATIONS



LOAN COUNTS AND AVERAGE DAYS DELINQUENT

Month	Total Active Count	30 Days	60 Days	90+ Days	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	41,340,000	1,403,000	332,000	378,000	190,000	2,302,000	32,800	16,200	210	305	5.1%	15.6%		0.5%	-2.7%	
12/31/01	42,676,000	1,471,000	373,000	548,000	309,000	2,701,000	76,100	21,400	211	282	5.6%	10.3%	9.7%	0.7%	3.7%	58.1%
12/31/02	43,421,000	1,425,000	364,000	483,000	317,000	2,587,000	76,400	23,200	237	298	5.2%	0.8%	-6.7%	0.7%	0.1%	0.5%
12/31/03	43,833,000	1,204,000	336,000	474,000	321,000	2,335,000	83,100	24,300	275	345	4.6%	-6.0%	-12.1%	0.7%	6.7%	0.4%
12/31/04	46,586,000	1,077,000	300,000	424,000	268,000	2,070,000	70,000	23,200	248	340	3.9%	-3.4%	-15.8%	0.6%	0.0%	-21.3%
12/31/05	49,764,000	1,332,000	412,000	538,000	247,000	2,528,000	74,700	21,600	202	306	4.6%	1.7%	18.5%	0.5%	6.1%	-13.7%
12/31/06	52,667,000	1,602,000	483,000	538,000	383,000	3,006,000	106,800	32,300	203	272	5.0%	9.1%	8.6%	0.7%	6.4%	46.3%
12/31/07	54,156,000	1,792,000	663,000	904,000	729,000	4,088,000	168,800	51,500	188	258	6.2%	8.3%	24.6%	1.3%	10.8%	85.3%
12/31/08	54,448,000	2,032,000	953,000	1,755,000	1,242,000	5,982,000	229,800	59,600	192	318	8.7%	0.6%	40.3%	2.3%	5.9%	69.5%
12/31/09	54,131,000	1,840,000	896,000	2,909,000	2,043,000	7,689,000	230,000	99,400	247	415	10.4%	0.7%	19.8%	3.8%	0.0%	65.4%
12/31/10	53,070,000	1,739,000	753,000	2,136,000	2,314,000	6,943,000	285,400	79,600	331	520	8.7%	-1.7%	-16.4%	4.4%	3.2%	15.5%
12/31/11	51,973,000	1,639,000	660,000	1,834,000	2,204,000	6,337,000	185,100	76,200	394	667	8.0%	0.8%	-8.8%	4.2%	-0.1%	-2.7%
12/31/12	50,867,000	1,500,000	594,000	1,587,000	1,751,000	5,433,000	144,300	58,700	463	802	7.2%	1.3%	-9.0%	3.4%	-1.5%	-18.8%
12/31/13	49,779,000	1,393,000	534,000	1,260,000	1,246,000	4,433,000	110,000	43,600	498	908	6.4%	-0.1%	-11.5%	2.5%	-0.7%	-27.3%
12/31/14	49,618,000	1,235,000	466,000	1,066,000	863,000	3,631,000	88,500	28,700	507	1,026	5.6%	-6.7%	-12.9%	1.7%	-0.5%	-30.6%
12/31/15	49,662,000	1,138,000	412,000	793,000	676,000	3,019,000	76,800	27,600	493	1,055	4.7%	-3.2%	-15.4%	1.4%	-1.1%	-21.7%
12/31/16	49,796,000	1,186,000	403,000	689,000	497,000	2,774,000	59,400	20,700	449	1,024	4.6%	-0.1%	-3.1%	1.0%	-2.5%	-26.7%
12/31/17	50,091,000	1,297,000	451,000	750,000	354,000	2,853,000	44,500	13,000	351	923	5.0%	4.8%	9.1%	0.7%	-0.1%	-29.1%
12/31/18	50,458,000	1,202,000	384,000	536,000	308,000	2,430,000	48,300	12,200	398	829	4.2%	5.2%	-15.7%	0.6%	1.4%	-13.6%
12/31/19	51,144,000	1,158,000	378,000	480,000	288,000	2,304,000	51,800	11,400	348	764	3.9%	-2.1%	-6.2%	0.6%	-0.3%	-7.9%
12/31/20	51,663,000	888,000	366,000	2,283,000	214,000	3,751,000	8,200	2,900	260	1,169	6.8%	-3.4%	73.6%	0.4%	0.2%	-26.4%
12/31/21	51,822,000	745,000	225,000	1,132,000	167,000	2,270,000	9,000	4,800	414	1,560	4.1%	-4.9%	-40.7%	0.3%	-1.7%	-22.1%
12/31/22	52,450,000	954,000	290,000	583,000	232,000	2,058,000	28,200	6,100	353	1,112	3.5%	-0.1%	-14.2%	0.4%	-0.2%	36.9%
1/31/23	52,492,000	908,000	288,000	579,000	238,000	2,012,000	32,500	7,000	348	1,075	3.4%	-2.9%	-15.1%	0.5%	2.4%	23.3%
2/28/23	52,522,000	973,000	276,000	562,000	240,000	2,050,000	29,500	7,100	345	1,057	3.4%	2.0%	-12.6%	0.5%	0.8%	15.2%
3/31/23	52,657,000	786,000	242,000	511,000	240,000	1,779,000	32,200	7,500	356	1,045	2.9%	-15.2%	-13.2%	0.5%	-0.2%	13.2%
4/30/23	52,728,000	986,000	259,000	502,000	234,000	1,980,000	24,800	6,400	358	1,034	3.3%	13.3%	2.1%	0.4%	-2.6%	4.9%
5/31/23	52,789,000	892,000	264,000	483,000	229,000	1,868,000	25,400	6,800	363	1,035	3.1%	-6.3%	-2.6%	0.4%	-2.0%	2.0%
6/30/23	52,866,000	911,000	268,000	471,000	224,000	1,874,000	28,000	6,900	362	1,029	3.1%	0.5%	-2.8%	0.4%	-2.5%	-3.6%

LOAN COUNTS AND AVERAGE DAYS DELINQUENT – RECENT YEARS

Month	Total Active Count	30 Days	60 Days	90+ Days	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
6/30/21	51,766,000	672,000	216,000	1,733,000	190,000	2,811,000	6,500	3,400	361	1,403	5.1%	-6.8%	-36.2%	0.4%	-3.6%	-21.6%
7/31/21	51,768,000	673,000	210,000	1,642,000	185,000	2,709,000	6,500	4,000	377	1,436	4.9%	-3.7%	-34.6%	0.4%	-2.7%	-22.0%
8/31/21	51,762,000	675,000	215,000	1,541,000	181,000	2,613,000	8,200	4,200	389	1,477	4.7%	-3.7%	-36.9%	0.4%	-1.8%	-21.4%
9/30/21	51,785,000	728,000	221,000	1,431,000	172,000	2,552,000	5,000	5,300	402	1,523	4.6%	-2.1%	-37.2%	0.3%	-5.1%	-23.8%
10/31/21	51,796,000	775,000	232,000	1,305,000	173,000	2,486,000	6,700	4,900	408	1,533	4.5%	-2.8%	-36.9%	0.3%	0.7%	-20.8%
11/30/21	51,787,000	765,000	230,000	1,216,000	170,000	2,380,000	8,600	4,500	410	1,547	4.3%	-4.4%	-39.8%	0.3%	-1.9%	-20.6%
12/31/21	51,822,000	745,000	225,000	1,132,000	167,000	2,270,000	9,000	4,800	414	1,560	4.1%	-4.9%	-40.7%	0.3%	-1.7%	-22.1%
1/31/22	51,843,000	792,000	237,000	1,034,000	190,000	2,254,000	39,300	5,500	414	1,396	4.0%	-1.9%	-40.1%	0.4%	13.7%	-11.5%
2/28/22	51,872,000	856,000	244,000	945,000	205,000	2,251,000	30,800	5,000	409	1,322	3.9%	-0.9%	-41.9%	0.4%	7.9%	-2.7%
3/31/22	51,905,000	691,000	215,000	842,000	209,000	1,957,000	34,100	6,000	409	1,282	3.4%	-14.6%	-41.0%	0.4%	1.5%	-0.4%
4/30/22	51,970,000	731,000	202,000	752,000	220,000	1,905,000	36,600	5,600	408	1,238	3.2%	-3.7%	-39.4%	0.4%	5.2%	8.1%
5/31/22	52,042,000	760,000	213,000	686,000	222,000	1,881,000	26,500	5,700	408	1,213	3.2%	-1.7%	-41.3%	0.4%	0.7%	12.0%
6/30/22	52,128,000	800,000	227,000	648,000	229,000	1,903,000	31,500	6,000	407	1,175	3.2%	0.7%	-36.6%	0.4%	3.2%	19.9%
7/31/22	52,190,000	862,000	247,000	629,000	224,000	1,962,000	22,900	7,500	390	1,171	3.3%	3.7%	-31.7%	0.4%	-2.4%	20.2%
8/31/22	52,281,000	825,000	249,000	598,000	229,000	1,901,000	28,800	6,700	396	1,172	3.2%	-4.0%	-31.9%	0.4%	2.0%	24.8%
9/30/22	52,356,000	816,000	249,000	587,000	228,000	1,880,000	24,200	6,900	388	1,158	3.2%	-1.3%	-31.3%	0.4%	-0.7%	30.7%
10/31/22	52,359,000	910,000	264,000	582,000	228,000	1,983,000	24,900	6,400	379	1,148	3.4%	6.2%	-24.9%	0.4%	0.0%	29.9%
11/30/22	52,399,000	958,000	288,000	582,000	232,000	2,059,000	27,300	6,300	371	1,129	3.5%	4.0%	-18.3%	0.4%	1.8%	34.8%
12/31/22	52,450,000	954,000	290,000	583,000	232,000	2,058,000	28,200	6,100	353	1,112	3.5%	-0.1%	-14.2%	0.4%	-0.2%	36.9%
1/31/23	52,492,000	908,000	288,000	579,000	238,000	2,012,000	32,500	7,000	348	1,075	3.4%	-2.9%	-15.1%	0.5%	2.4%	23.3%
2/28/23	52,522,000	973,000	276,000	562,000	240,000	2,050,000	29,500	7,100	345	1,057	3.4%	2.0%	-12.6%	0.5%	0.8%	15.2%
3/31/23	52,657,000	786,000	242,000	511,000	240,000	1,779,000	32,200	7,500	356	1,045	2.9%	-15.2%	-13.2%	0.5%	-0.2%	13.2%
4/30/23	52,728,000	986,000	259,000	502,000	234,000	1,980,000	24,800	6,400	358	1,034	3.3%	13.3%	2.1%	0.4%	-2.6%	4.9%
5/31/23	52,789,000	892,000	264,000	483,000	229,000	1,868,000	25,400	6,800	363	1,035	3.1%	-6.3%	-2.6%	0.4%	-2.0%	2.0%
6/30/23	52,866,000	911,000	268,000	471,000	224,000	1,874,000	28,000	6,900	362	1,029	3.1%	0.5%	-2.8%	0.4%	-2.5%	-3.6%

DELINQUENCY & FORECLOSURE FIGURES BY STATE

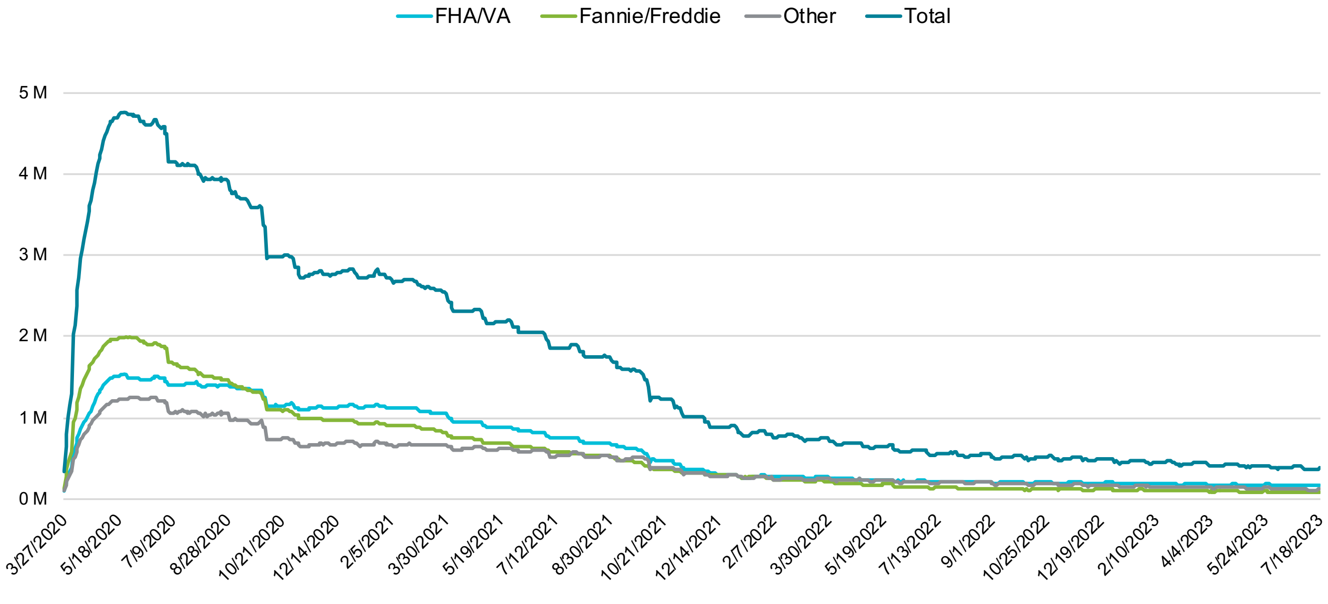
State		Del %	FC %	NC %	Yr/Yr Change in NC%
National		3.1%	0.4%	3.5%	-2.9%
MS		6.8%	0.6%	7.4%	-0.2%
LA	*	6.0%	0.8%	6.8%	1.2%
AL		5.0%	0.3%	5.3%	-3.7%
PA	*	4.1%	0.8%	4.8%	-0.8%
WV		4.3%	0.5%	4.8%	-7.0%
IN	*	4.2%	0.5%	4.8%	-2.1%
AR		4.2%	0.4%	4.6%	-6.7%
OH	*	3.8%	0.7%	4.5%	-3.9%
OK	*	3.8%	0.7%	4.5%	-8.2%
TX		4.0%	0.3%	4.4%	1.5%
IL	*	3.6%	0.7%	4.4%	-5.2%
GA		4.1%	0.3%	4.4%	1.7%
DE	*	3.8%	0.5%	4.3%	3.0%
KY	*	3.6%	0.6%	4.2%	-3.0%
MD	*	3.7%	0.5%	4.2%	-3.1%
NY	*	2.9%	1.3%	4.2%	-10.7%
SC	*	3.6%	0.4%	4.0%	-5.7%

State		Del %	FC %	NC %	Yr/Yr Change in NC%
National		3.1%	0.4%	3.5%	-2.9%
CT	*	3.2%	0.6%	3.8%	-13.3%
FL	*	3.2%	0.5%	3.8%	3.1%
MI		3.5%	0.2%	3.8%	2.6%
IA	*	3.2%	0.5%	3.7%	-2.6%
MO		3.4%	0.3%	3.7%	-4.7%
WI	*	3.2%	0.4%	3.6%	0.7%
NJ	*	2.9%	0.6%	3.5%	-10.4%
RI		3.1%	0.5%	3.5%	-10.3%
KS	*	3.1%	0.3%	3.4%	-6.8%
ME	*	2.6%	0.8%	3.4%	-6.9%
TN		3.2%	0.2%	3.4%	-9.3%
NM	*	2.6%	0.6%	3.2%	-11.7%
NE	*	3.0%	0.2%	3.2%	-4.7%
NC		2.9%	0.3%	3.1%	-10.3%
VA		2.8%	0.2%	3.1%	-7.9%
VT	*	2.5%	0.6%	3.1%	-13.4%
AK		2.6%	0.5%	3.0%	-24.0%

State		Del %	FC %	NC %	Yr/Yr Change in NC%
National		3.1%	0.4%	3.5%	-2.9%
MN		2.7%	0.2%	2.9%	-4.7%
MA		2.6%	0.3%	2.9%	-4.9%
NV		2.5%	0.3%	2.8%	1.7%
ND	*	2.2%	0.6%	2.8%	-12.2%
WY		2.5%	0.2%	2.8%	-3.9%
DC		2.0%	0.7%	2.7%	-7.6%
NH		2.5%	0.2%	2.7%	-4.6%
UT		2.5%	0.2%	2.7%	6.1%
SD	*	2.3%	0.4%	2.7%	-0.3%
AZ		2.4%	0.1%	2.5%	5.0%
HI	*	1.6%	0.9%	2.5%	-6.5%
CA		2.0%	0.1%	2.2%	1.5%
MT		1.9%	0.2%	2.1%	-1.9%
OR		1.8%	0.3%	2.1%	-2.4%
ID		1.9%	0.2%	2.0%	15.2%
CO		1.8%	0.1%	1.9%	-0.7%
WA		1.7%	0.2%	1.9%	-1.8%

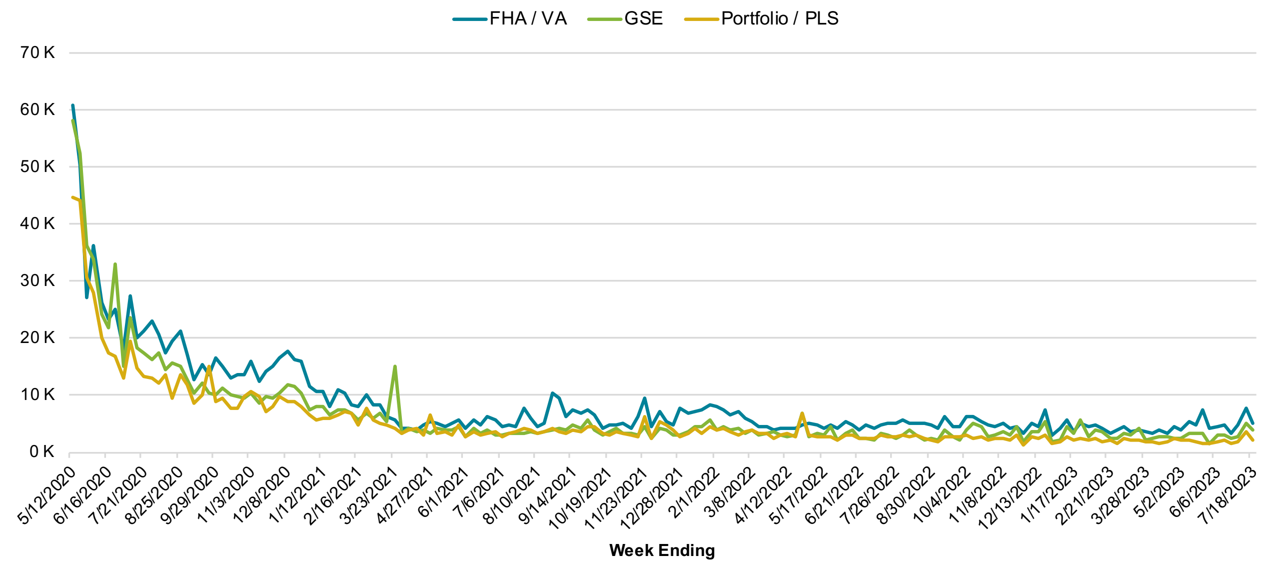
* Indicates Judicial State
Data through June 30, 2023

ACTIVE FORBEARANCE PLANS



Source: McDash Flash
Data as of July 18, 2023

NEW FORBEARANCE PLAN STARTS BY INVESTOR

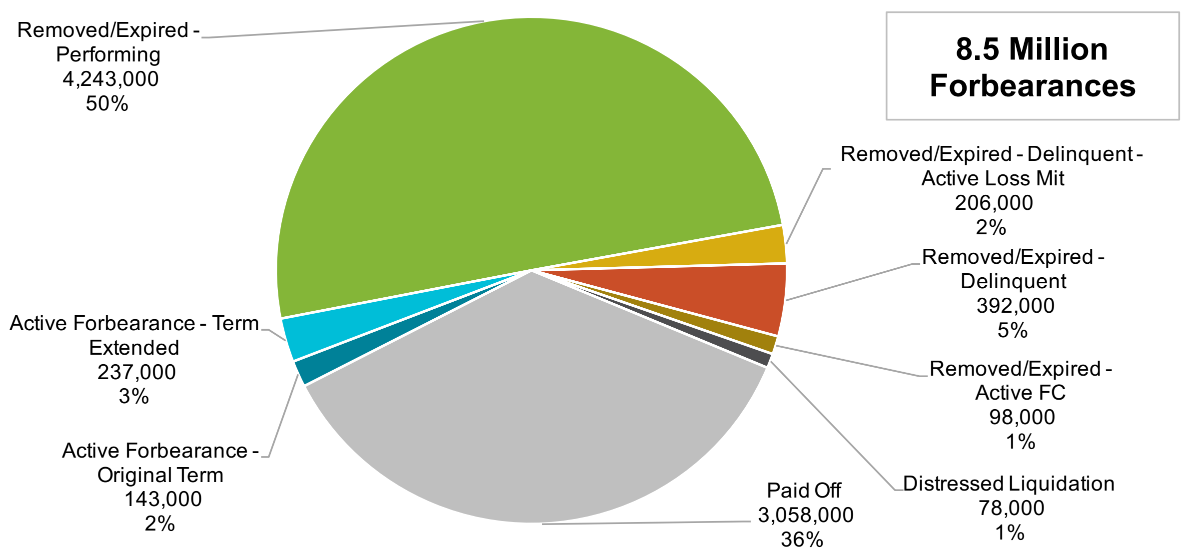


Source: McDash Flash
Data as of July 18, 2023

	Fannie & Freddie	FHA & VA	Other**	Total
Loans in Forbearance*	90,000	172,000	119,000	380,000
UPB of Loans in Forbearance ($Bil)*	$19	$33	$20	$72
Share of Loans in Forbearance*	0.3%	1.4%	0.9%	0.7%

Source: McDash Flash
Data as of July 18, 2023

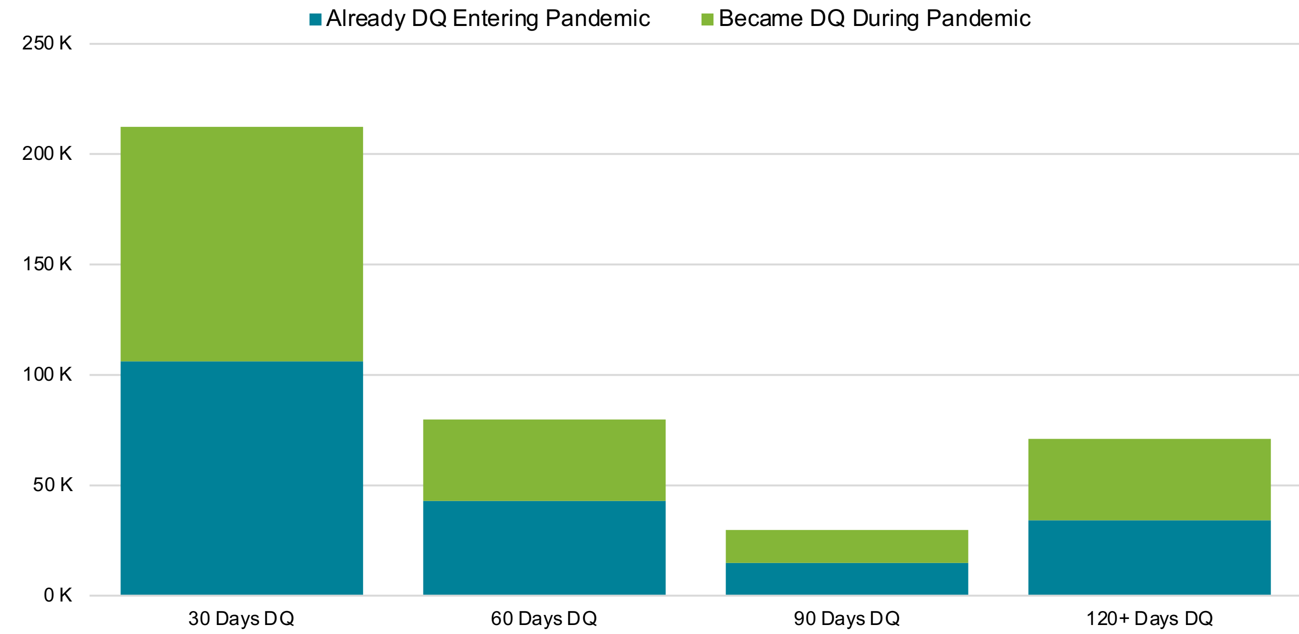
CURRENT STATUS OF COVID-19 RELATED FORBEARANCES



Source: McDash Flash
Data as of July 18, 2023

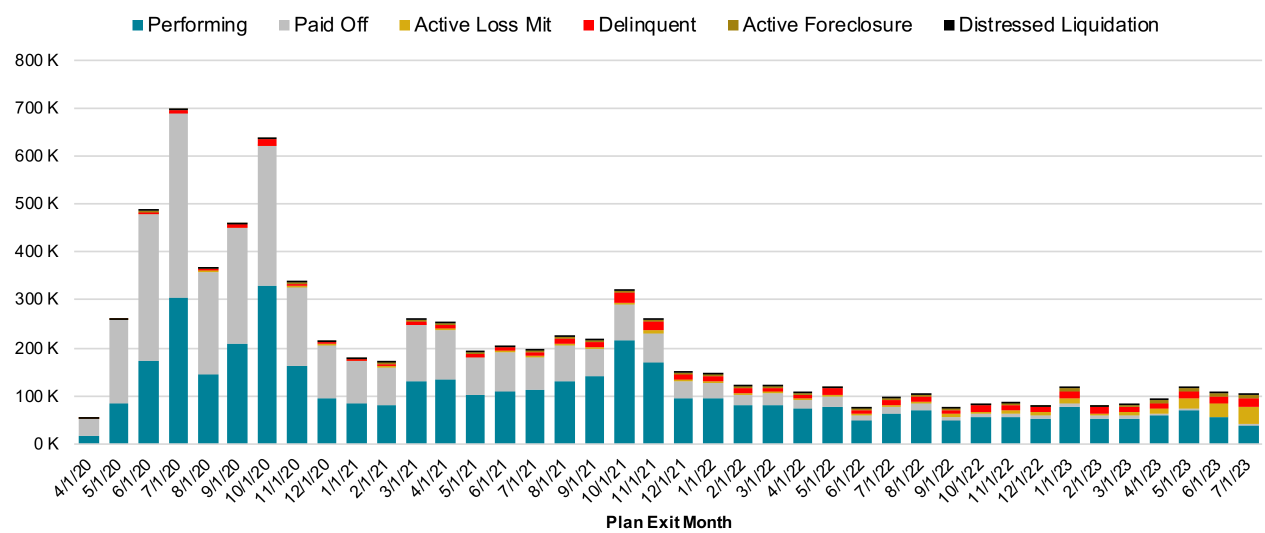
BREAKDOWN OF LOANS THAT REMAIN DELINQUENT FOLLOWING FORBEARANCE PLAN EXIT

(EXCLUDING LOANS IN ACTIVE LOSS MITIGATION OR FORECLOSURE)



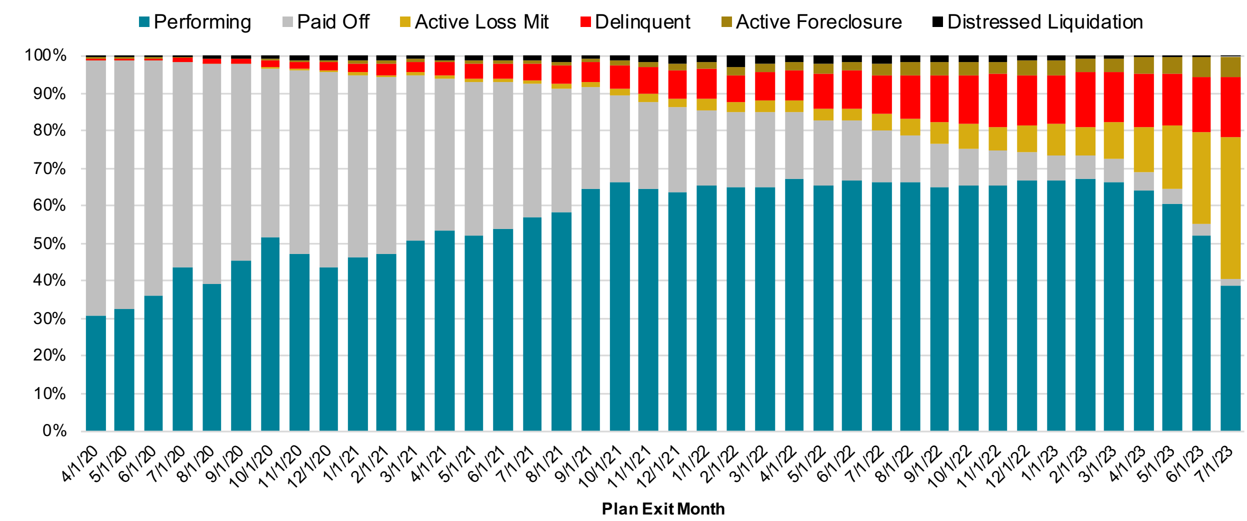
Source: McDash Flash
As of July 18th, 2023

CURRENT STATUS OF LOANS THAT HAVE LEFT COVID-19 FORBEARANCE PLANS



Source: McDash Flash
July 2023 represents partial data through the 18th of the month

CURRENT STATUS OF LOANS THAT HAVE LEFT COVID-19 FORBEARANCE PLANS



Source: McDash Flash
July 2023 represents partial data through the 18th of the month

Mortgage Monitor Disclosures

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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.