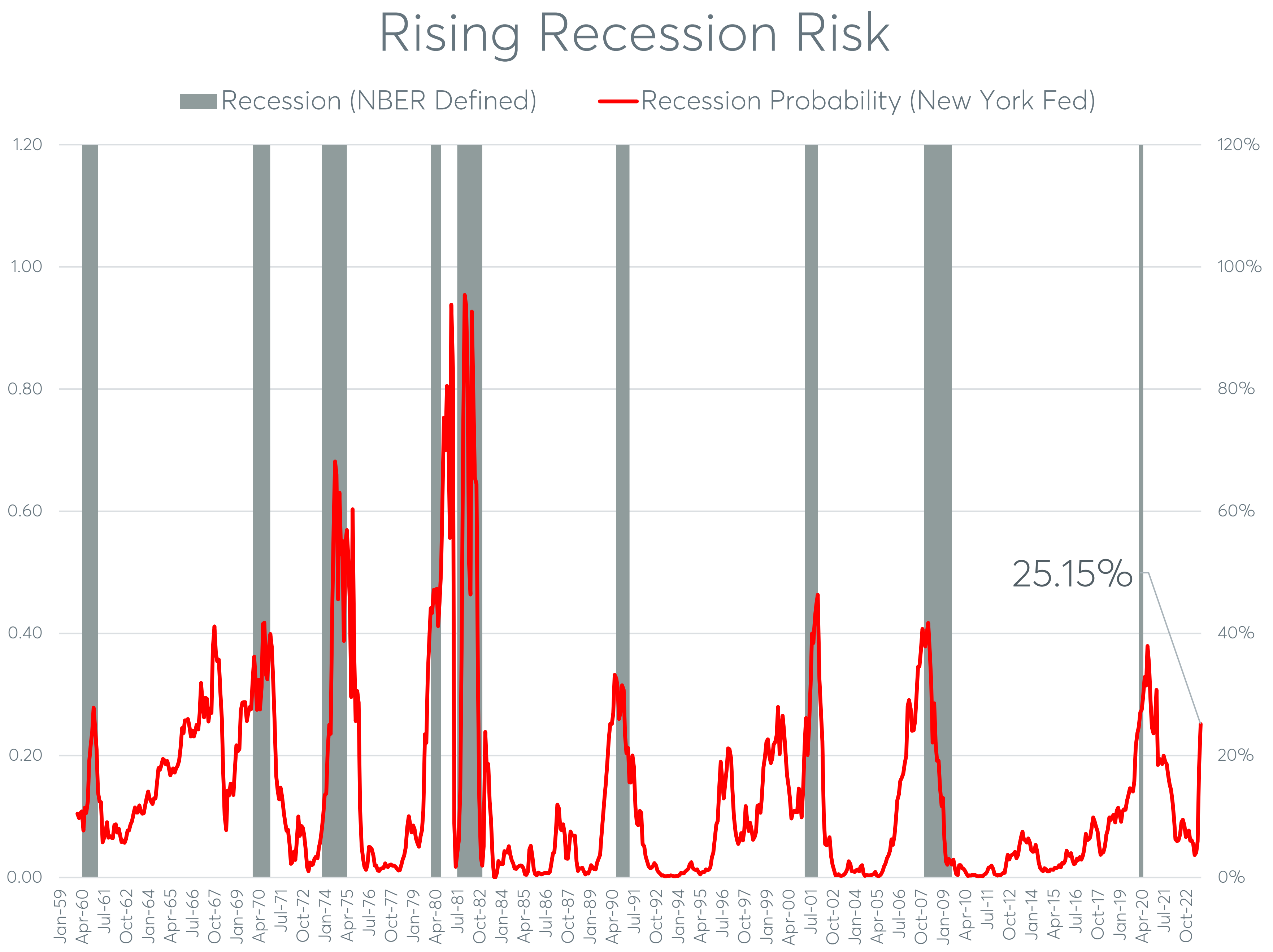
MARKET & INDUSTRY UPDATE

September 21, 2022

AUCTION.COM
MARKET RESEARCH & ANALYSIS

What We'll Cover

- Increasing Risk of Recession
- Housing Correction Starting to Materialize
- Shift in Distressed Demand Trends
- Distressed Supply Plateau
- Pandemic Backlog Still Building
- Deficit of Distress
- Long-Range Forecast: Three Scenarios
- Implications for Default Servicing



- New York Federal Reserve pegs probability of recession at 25% for August 2023 based on model using yield curve
- Highest probability since February 2021. Probability was 28% for April 2020 (predicted 12 months in advance).
- "The yield curve—specifically, the spread between the interest rates on the ten-year Treasury note and the three-month Treasury bill—is a valuable forecasting tool. It is simple to use and *significantly outperforms other financial and macroeconomic indicators in predicting recessions two to six quarters ahead." –* The Federal Reserve Bank of New York

Sources: Federal Reserve Bank of New York, National Bureau of Economic Research

Increasing risk of home price downturn

- New Goldman Sachs forecast published September 1, 2022, has home prices nationwide flat in 2023
- Forecasting mortgage rates to stay above 5 percent in 2023

Housing Forecasts and Key Charts

Exhibit 1: GS housing and mortgage forecasts

	2022				Annual Data		
	Q1	Q2	Q3	Q4	2021	2022	2023
Housing Measures							
Housing Starts (SAAR, Thousands)	1,720	1,655	1,446	1,605	1,605	1,607	1,526
Single Family	1,187	1,088	916	1,119	1,131	1,078	1,022
Multi Family	533	567	530	486	474	529	503
Case-Shiller National House Prices (YoY %Chg)	19.9	16.0	14.7	10.7	18.8	10.7	0.7
Interest Rates							
10-Year Treasury (%)	2.1	2.9	3.3	3.3	1.5	3.3	3.2
PMMS 30-Year Fixed-Rate Mortgage (%)	4.2	5.4	5.5	5.5	3.1	5.5	5.2
Mortgage Originations							
Total 1-4 Family ($Billions)	689	453	456	410	3,991	2,008	1,744
Purchase Originations	381	424	434	387	1,646	1,626	1,601
Refinance Originations	308	29	22	23	2,345	382	143
Gross Issuance of Agency MBS ($Billions)	608	400	402	362	3,460	1,773	1,540
Refinance Share (%)	45	6	5	6	59	19	8

Note 1: Annual data for housing starts are annual averages. Annual data for Case-Shiller national house prices are year-end numbers. Annual data for mortgage originations are the sum of quarterly originations.
Note 2: The Case-Shiller National House Price index is a weighted average of metro-level HPIs for 381 metro cities where the weights are dollar values of housing stock reported in the American Community Survey.
Note 3: Interest rates refer to period end values.
Note 4: Sources for historical data are Census Bureau, NAR, Moody's Analytics, Federal Reserve, Freddie Mac, and MBA.

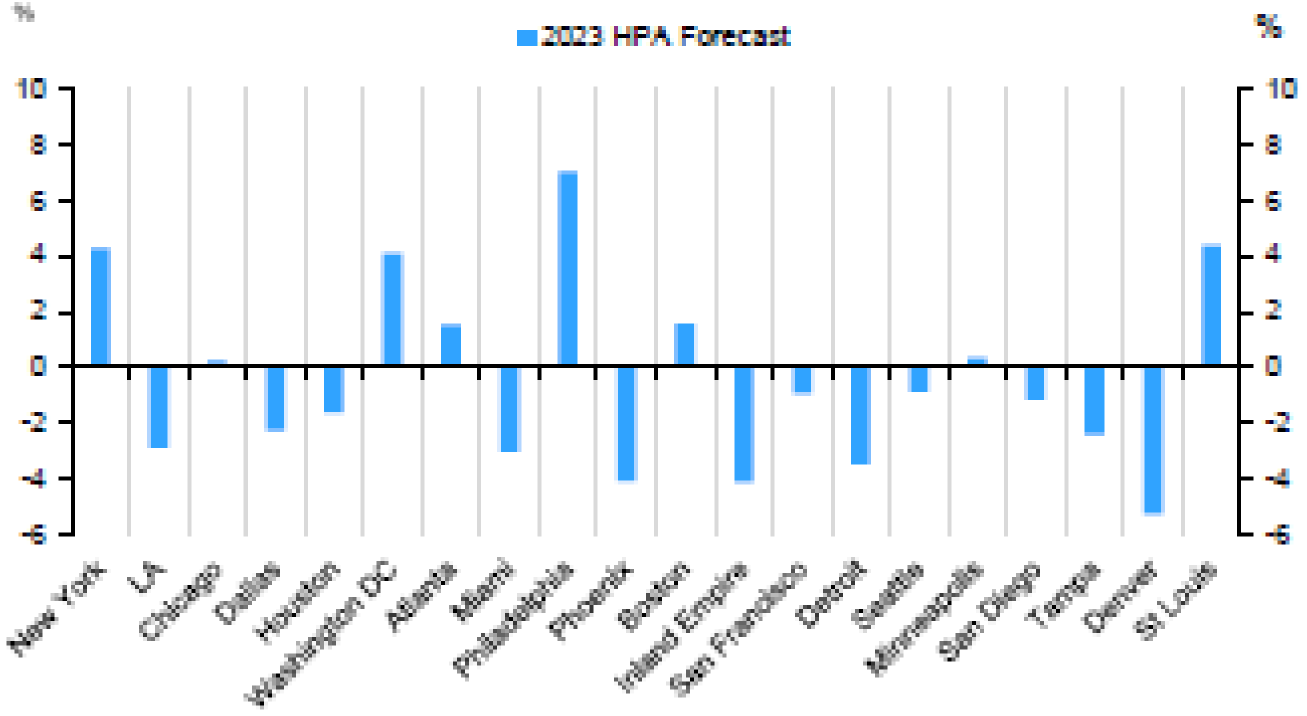
Source: Goldman Sachs Global Investment Research

Sources: Goldman Sachs

Increasing risk of home price downturn

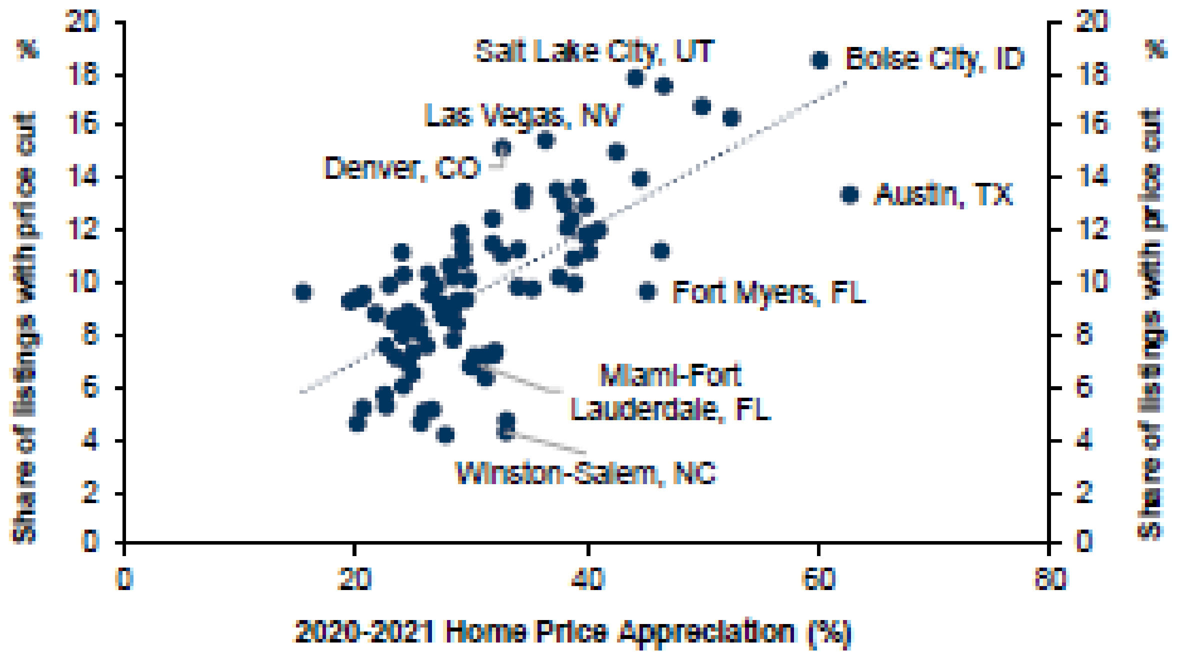
- Goldman forecasting 2023 price declines in 39 percent of U.S. markets, mostly in the West region
- Early signs of this already showing up in higher share of price cuts in Western markets that boomed during pandemic

Exhibit 2: We are expecting price declines in 39% of U.S. metros in 2023, mostly in the West region
2023 MSA-level home price forecasts



Source: Goldman Sachs Global Investment Research

Exhibit 6: Listing price cuts are most common today in metros that saw high price appreciation in 2020 and 2021
2020-2021 (2-year) home price appreciation vs % of listings posting a price cut, for top 100 metros

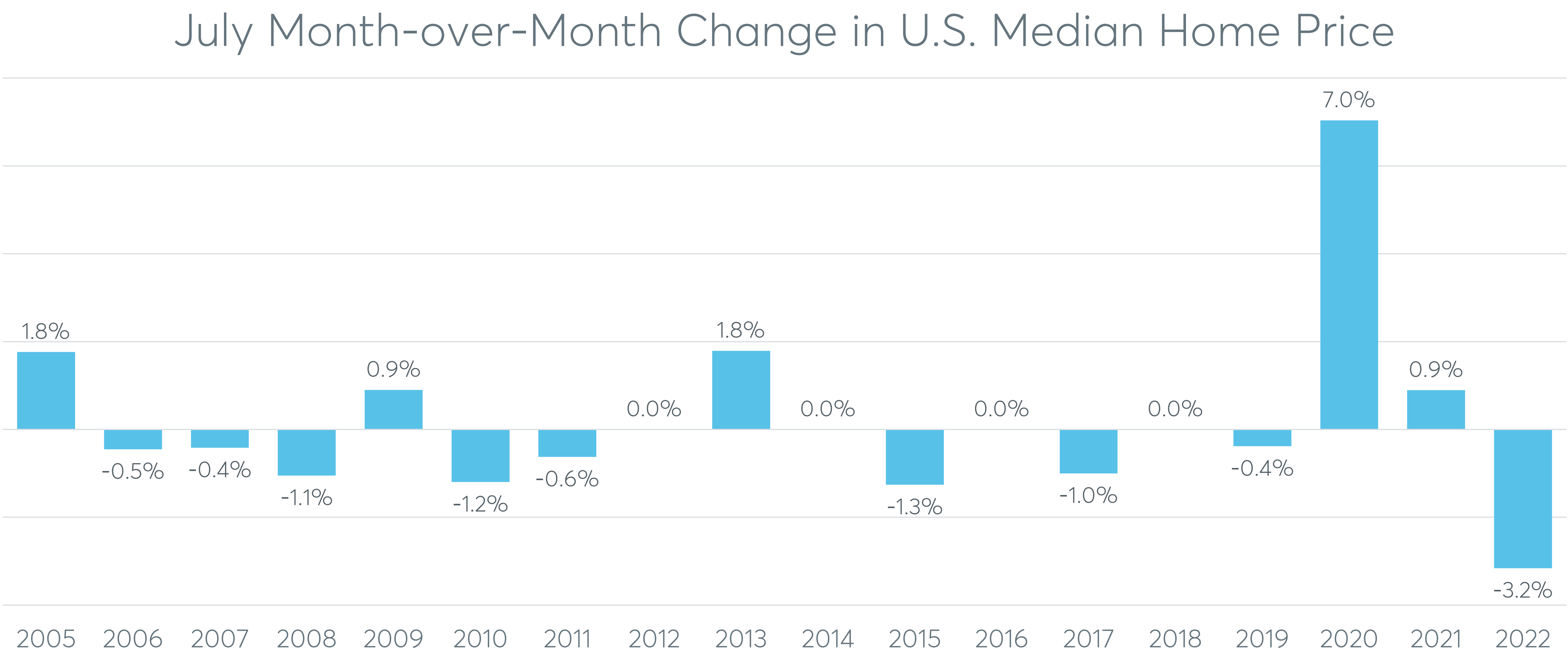


Source: Zillow, Goldman Sachs Global Investment Research

Sources: National Association of Realtors

Home price correction materializing

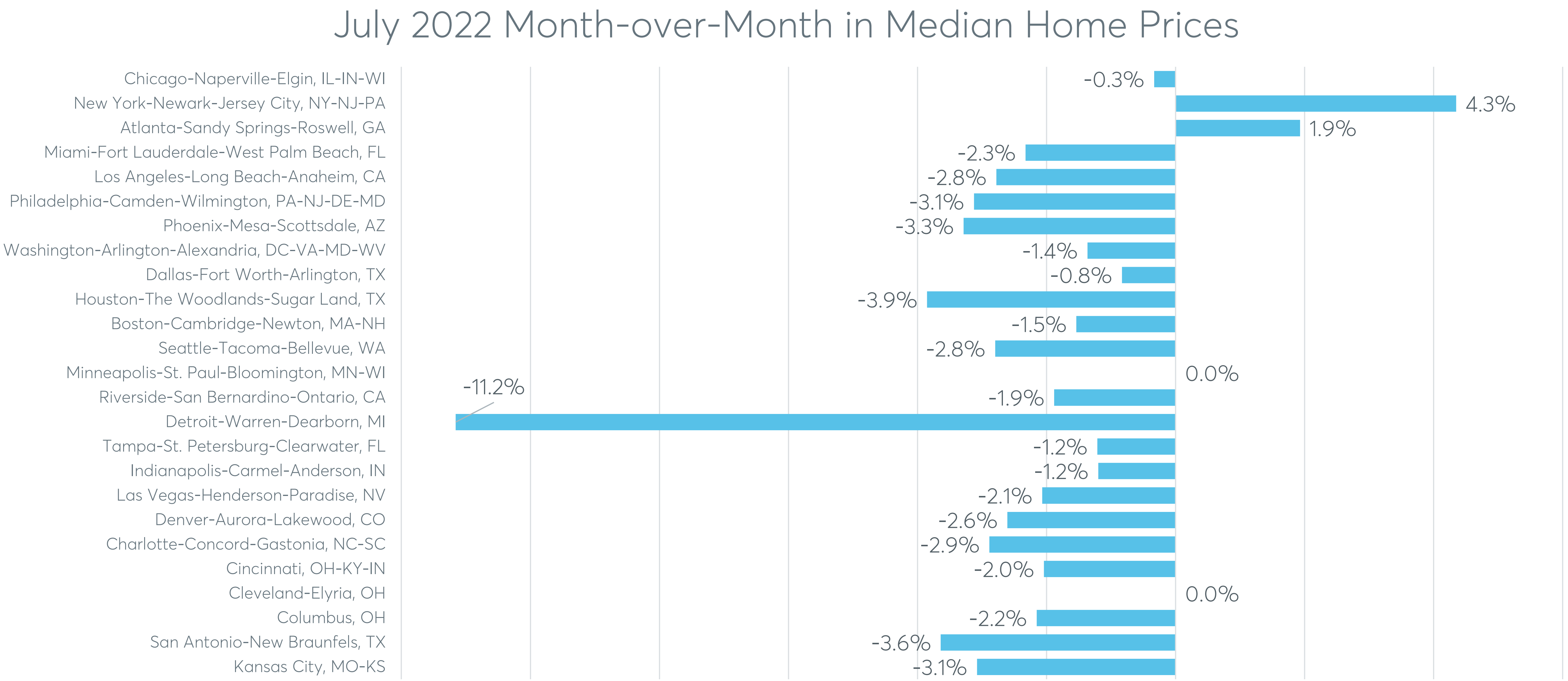
- July 2022 month-over-month price decrease biggest on record, following record high July increase in 2020
- More than twice the decreases seen in July 2008 and July 2010
- Annual home price appreciation nationwide dropped to 7.7 percent in July compared to 13.0 percent in June



Sources: ATTOM Data Solutions

Home price correction materializing

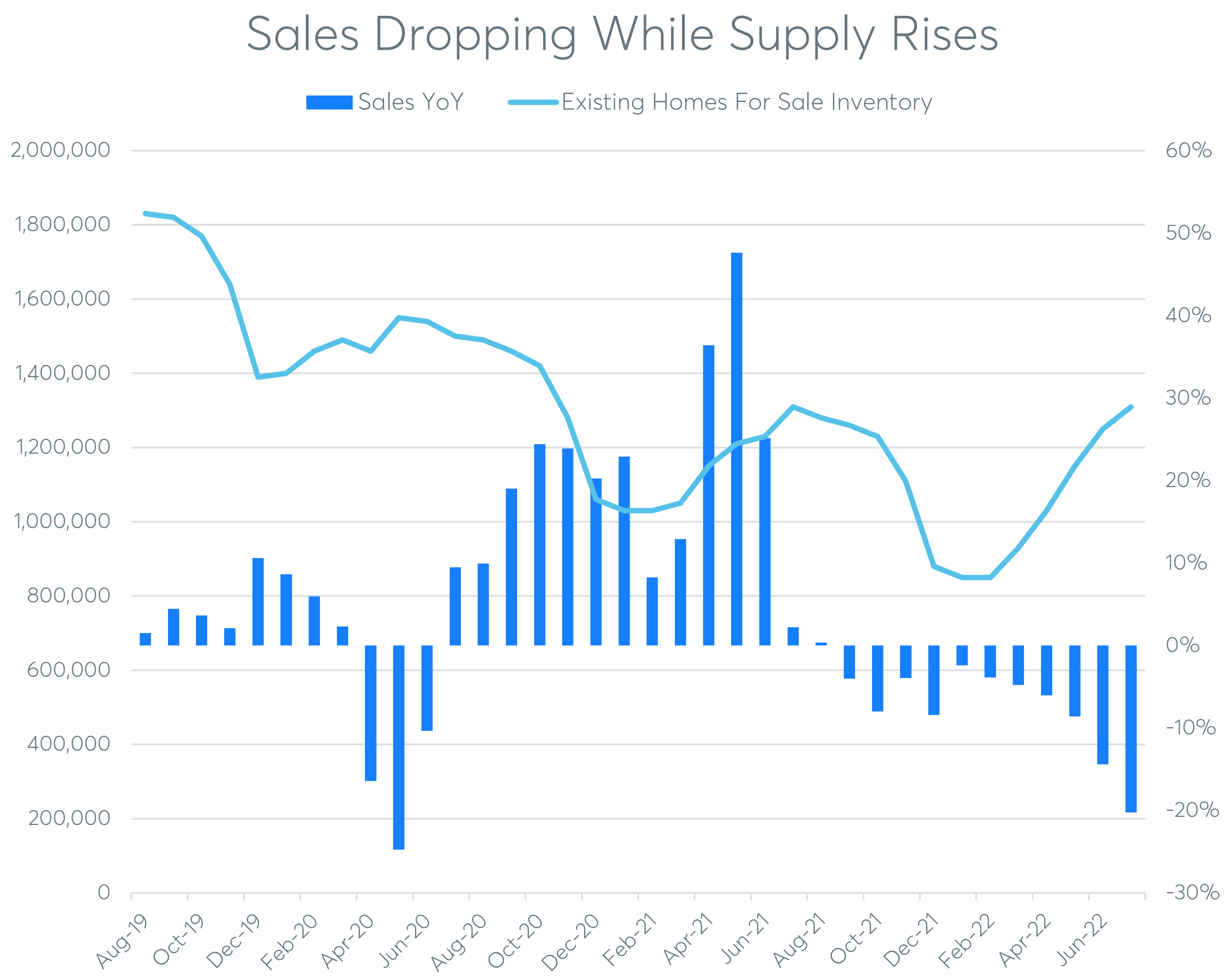
- 132 out of 204 markets with at least 300 sales during the month reported a month-over-month decrease in median home price
- Including 16 of 20 markets with most sales for the month

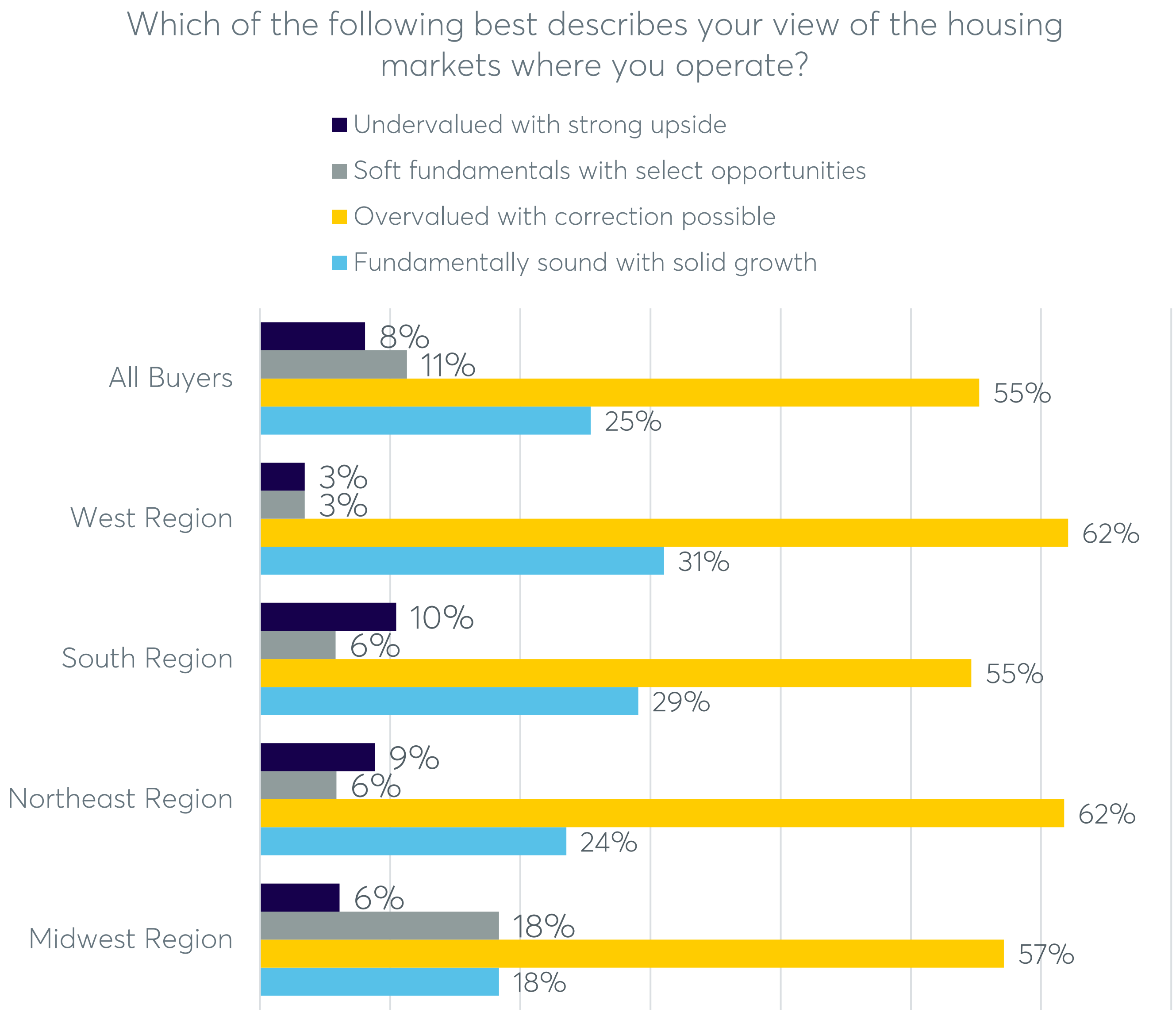


Sources: ATTOM Data Solutions

Auction buyers anticipated slowdown in February 2022 survey

- Auction.com buyers: 55 percent described their market as “overvalued with correction possible”, up from 40 percent a year ago
  - 17 percent expect flat or declining prices in their market in 2022, up from 12 percent a year ago
- NAR data shows home sales down 20% year-over-year in July, even as inventory of homes for sale rose (sixth consecutive month)

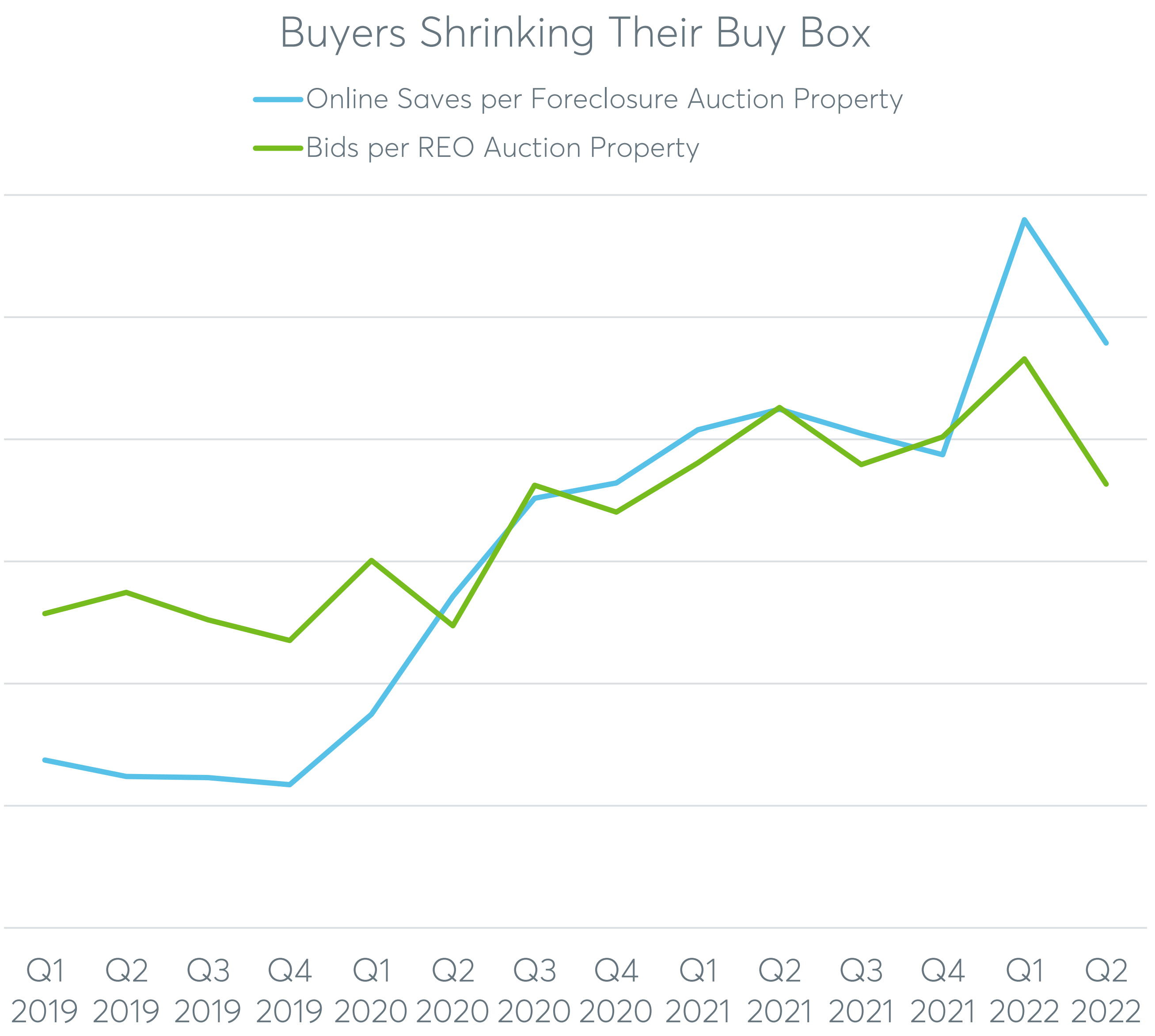


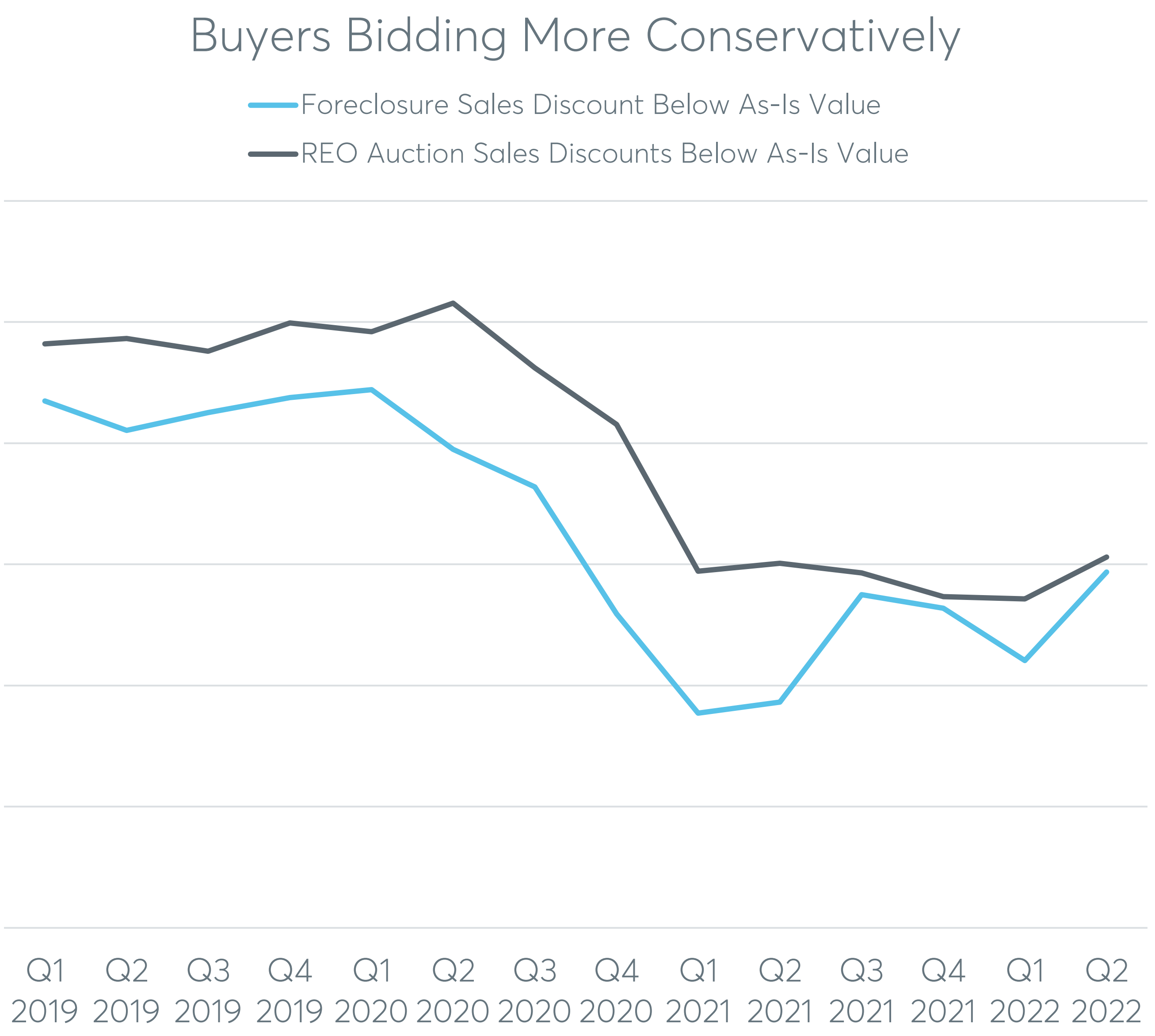


Sources: Auction.com, NAR

Shift in distressed demand trends

- Competition (saves per foreclosure, bids per REO) down in Q2 2022 from record highs in Q1 2022
- Average discount below estimated as-is market value rising after bottoming out in 2021 (foreclosure) and Q1 2022 (REO)

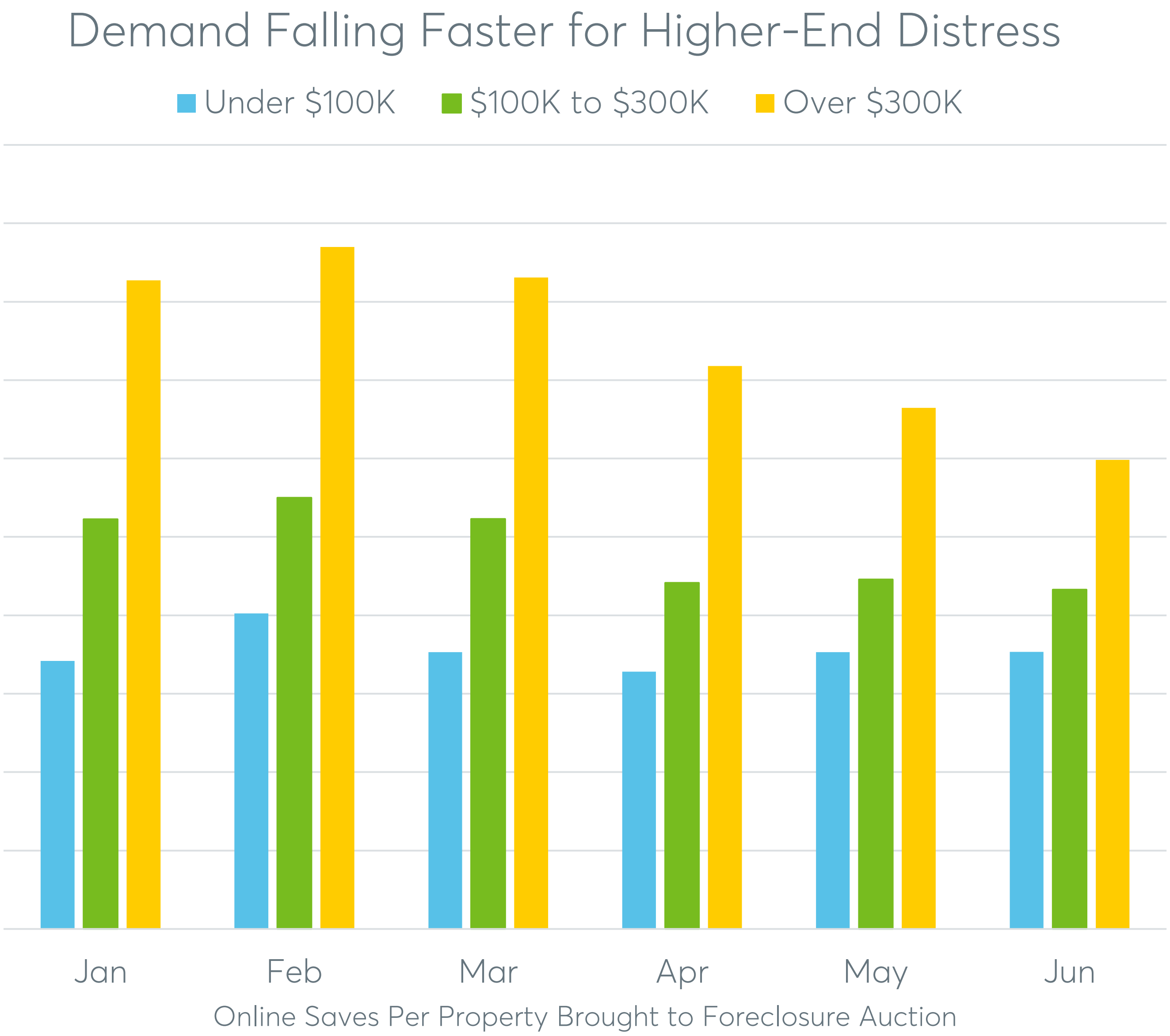


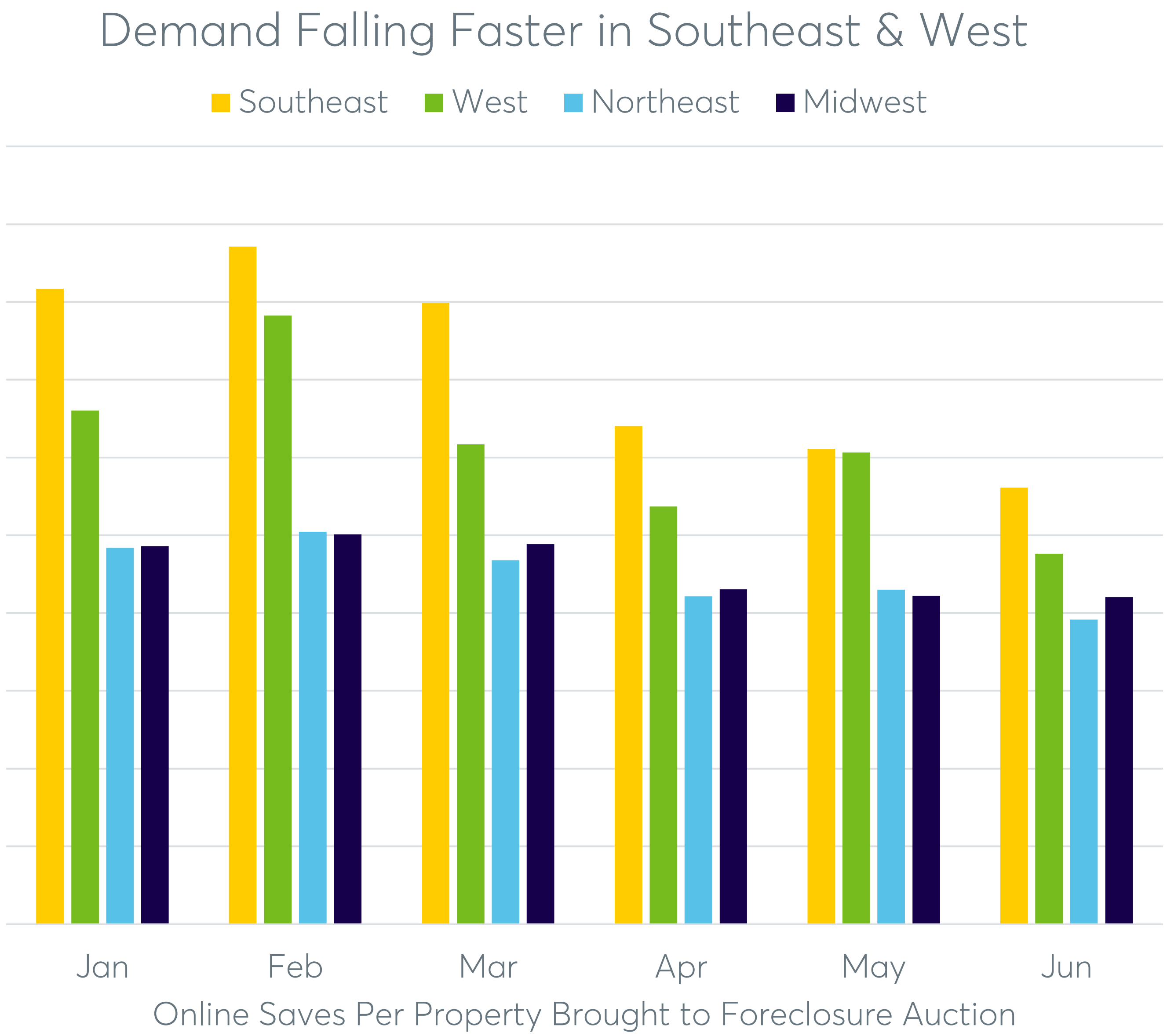


Sources: Auction.com

Shift in distressed demand trends

- Over $300K after-repair value down 31% between February 2022 and June 2022 (versus 21% overall)
- West down 39%, Southeast down 36%

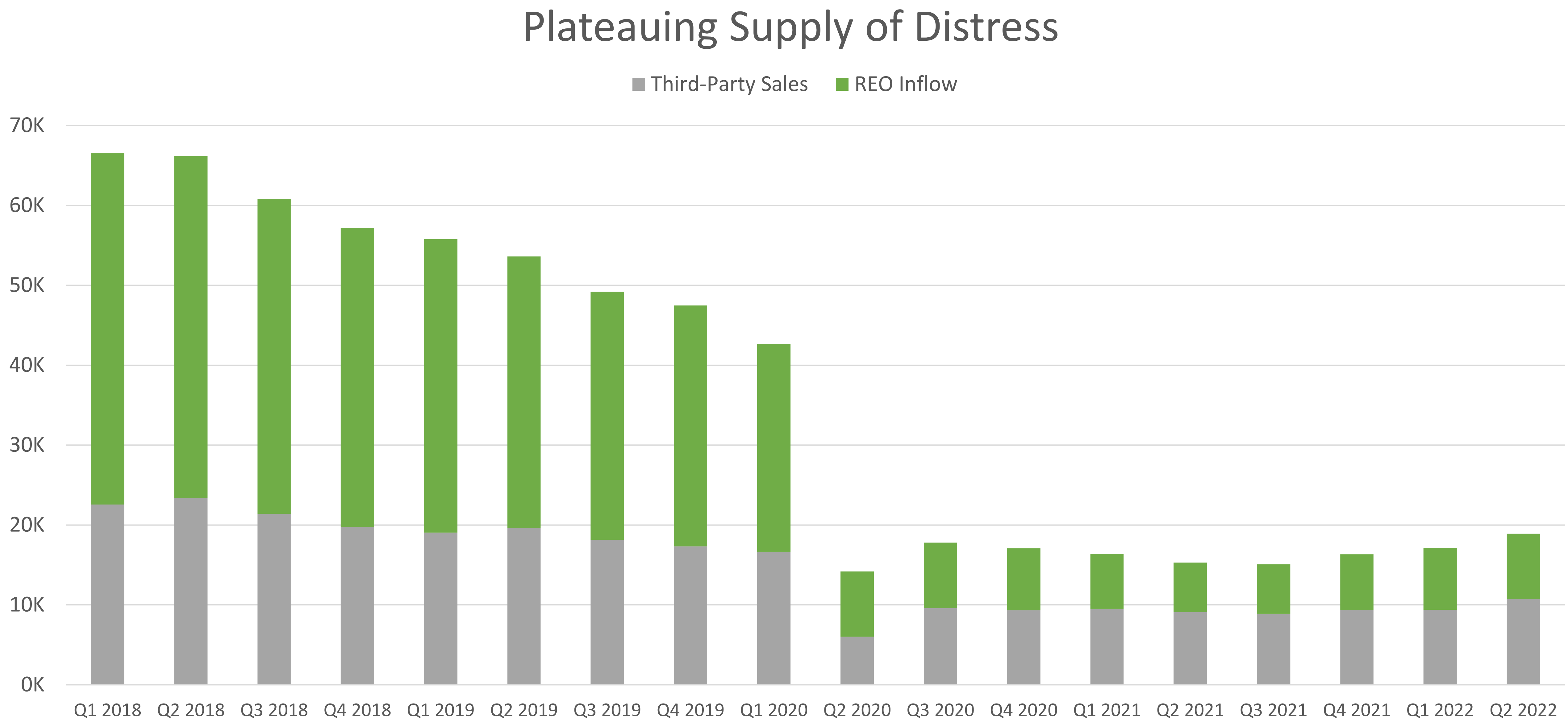




Sources: Auction.com

Distressed supply plateau

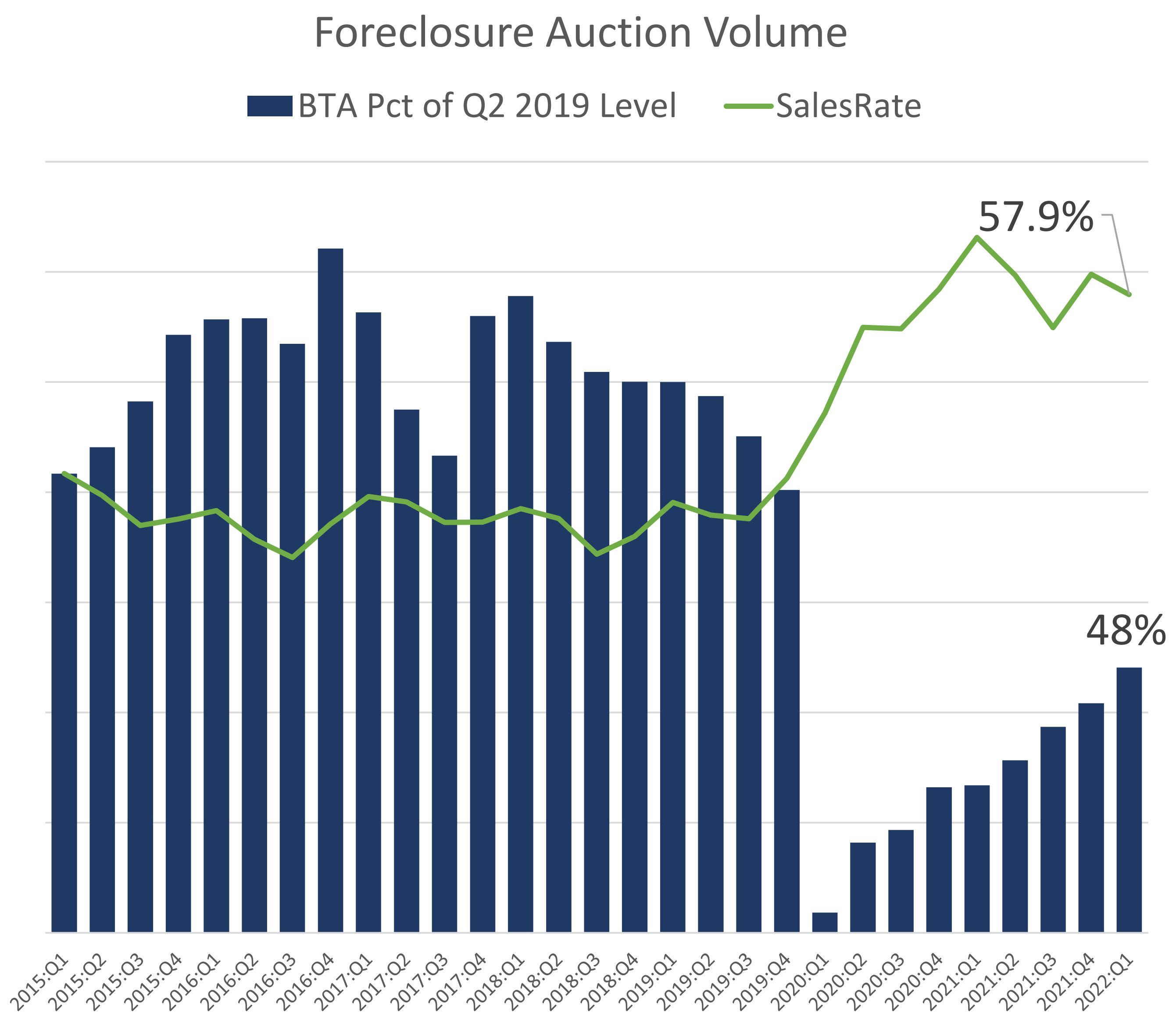
- 11K third-party sales nationwide in Q2, up 18 percent from a year ago but still 35 percent below pre-pandemic level in Q1 2020
- 8K REO inflow nationwide in Q2, up 31 percent from a year ago but still 69 percent below pre-pandemic level in Q1 2020

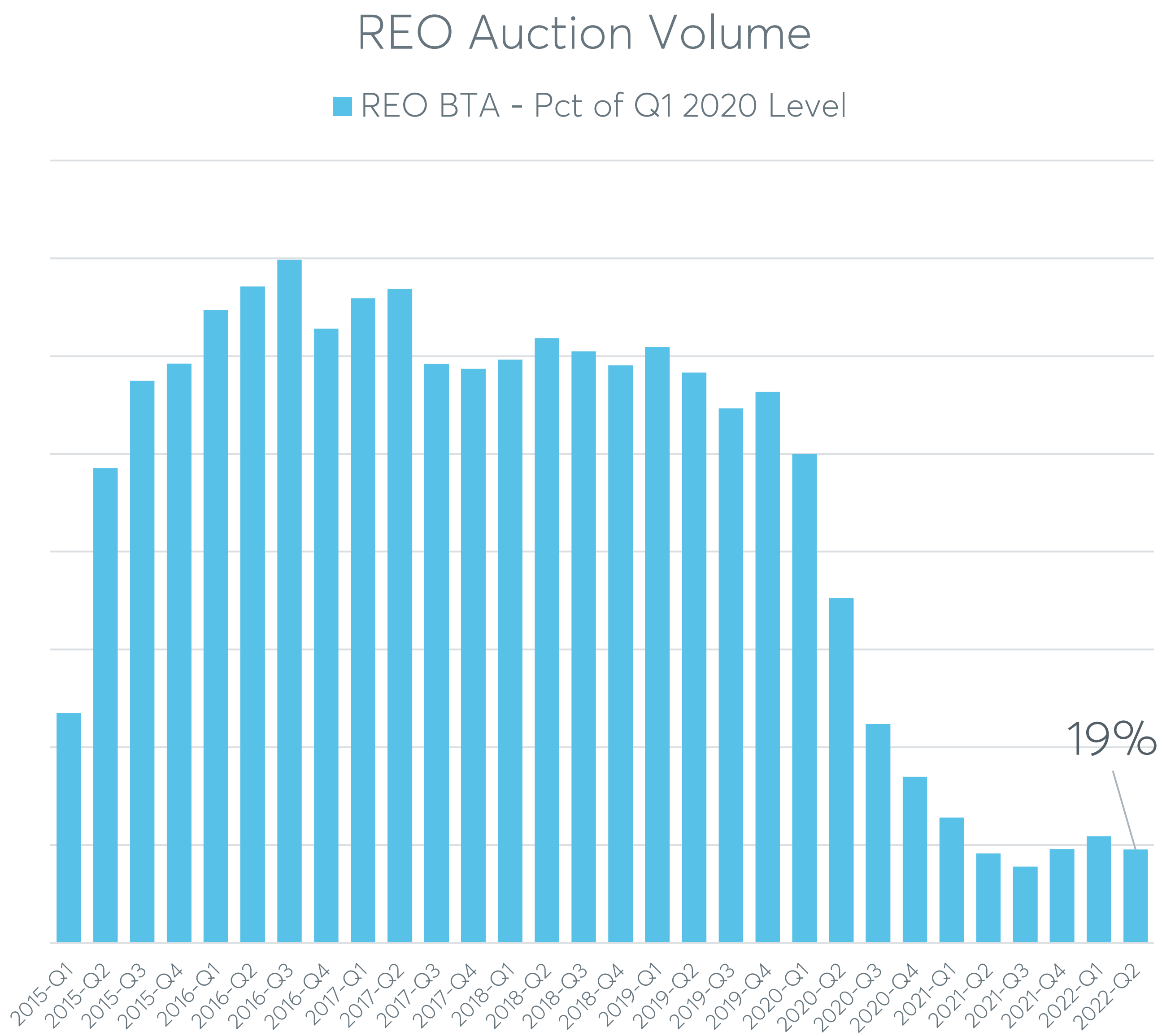


Sources: ATTOM Data Solutions

Distressed supply plateau

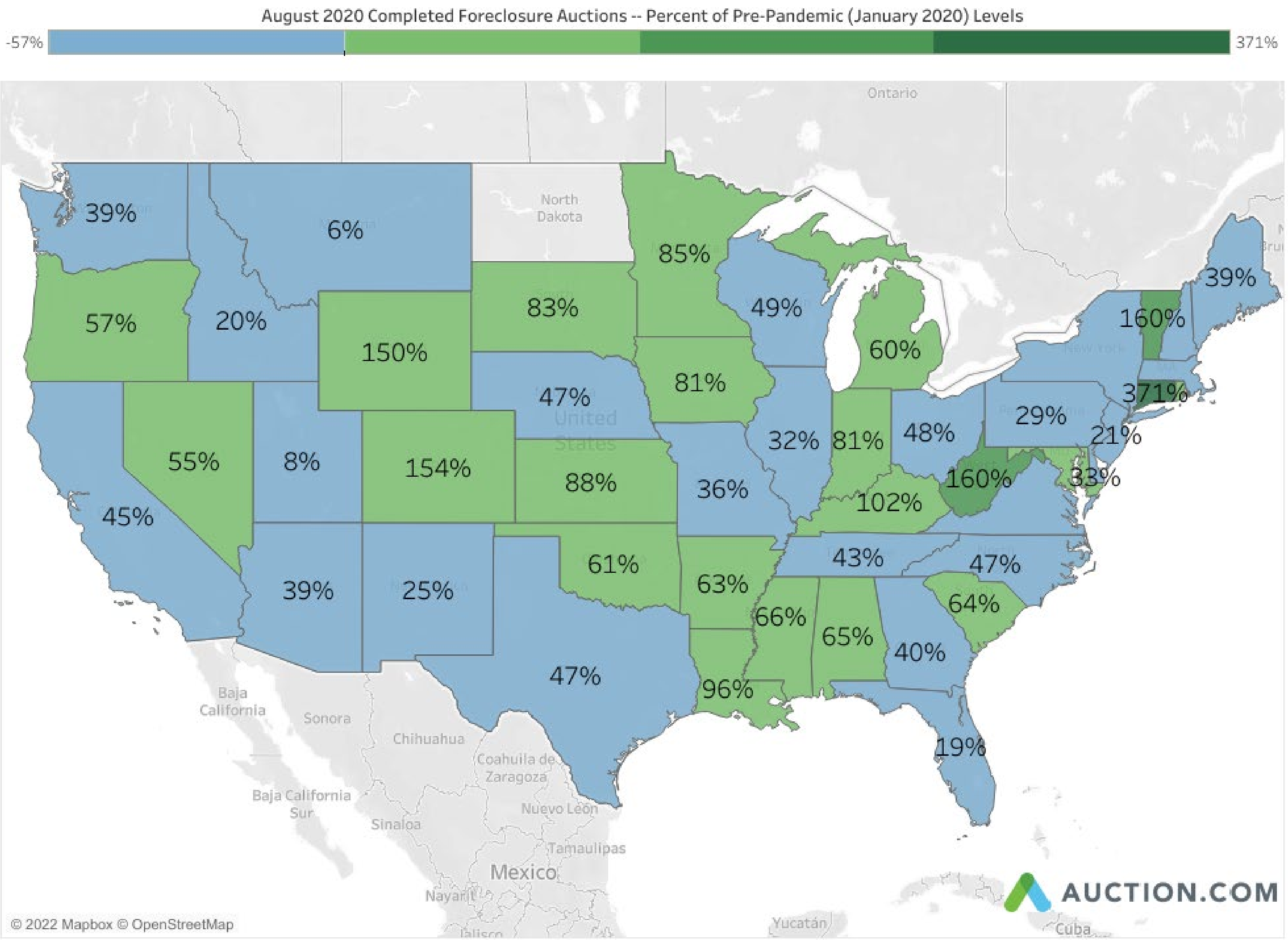
- Foreclosure auction volume slowly rising but still at 48 percent of pre-pandemic levels
- REO volume only at 19 percent of pre-pandemic levels (partly as function of high foreclosure auction sales rate)





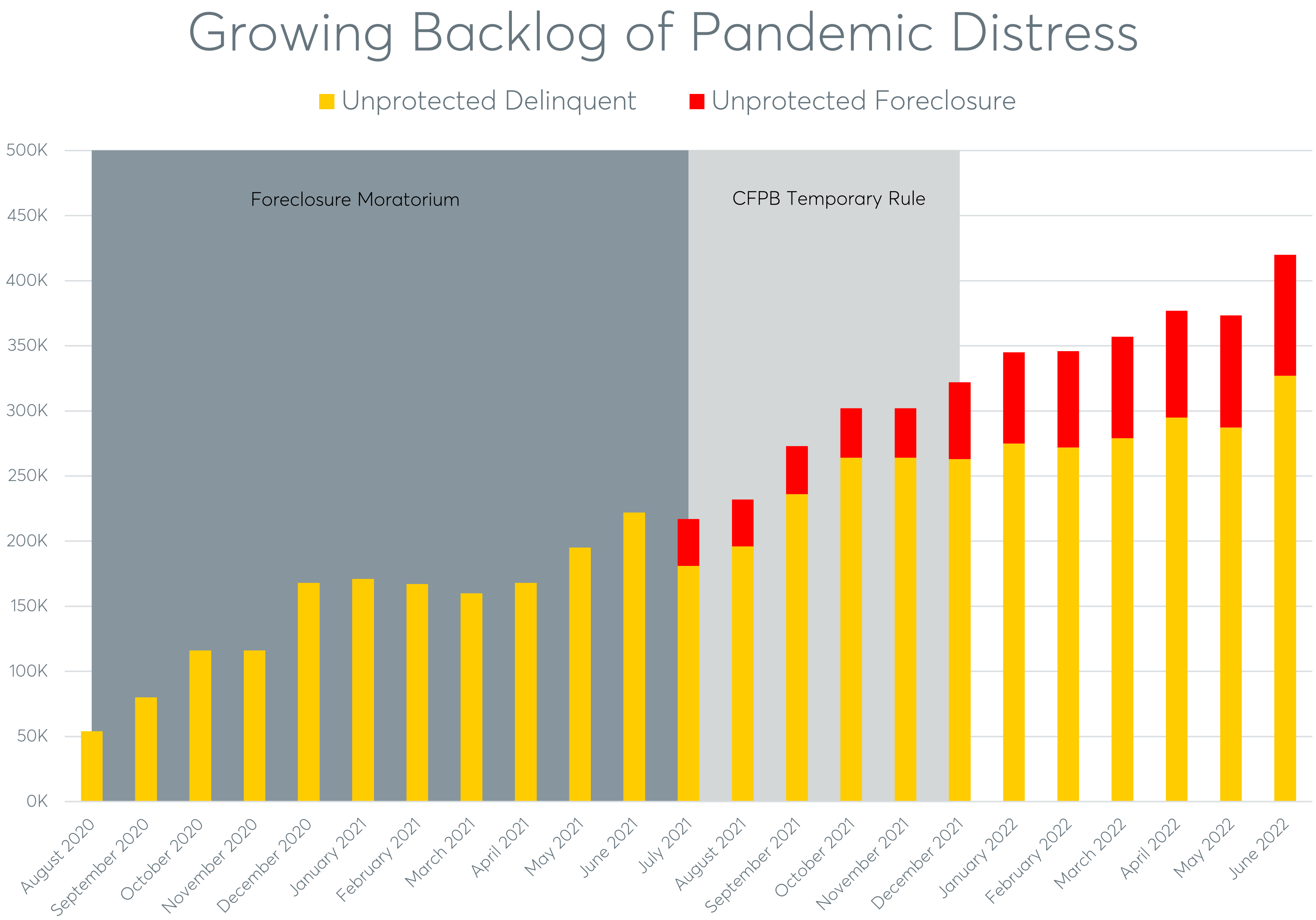
Sources: Auction.com,

August 2022 Completed Foreclosures by State



Sources: Auction.com

Pandemic backlog still building



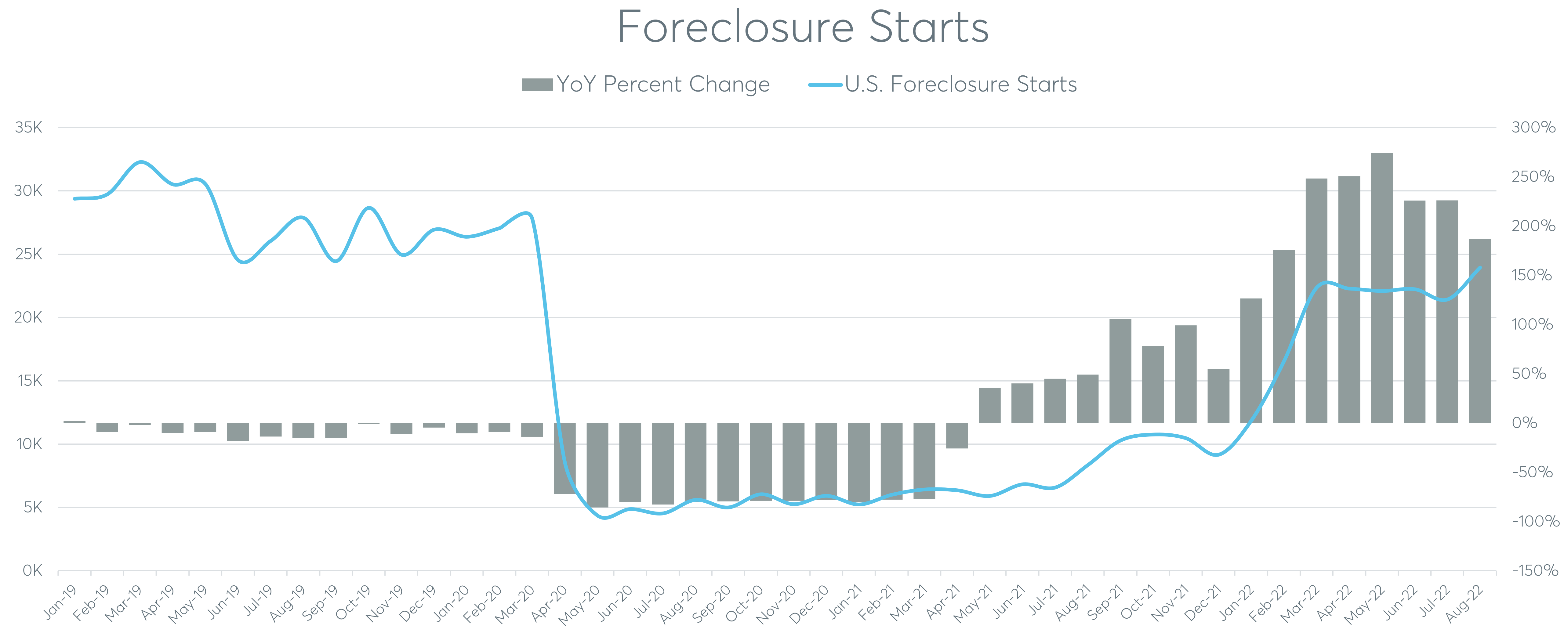
Source: Black Knight. Unprotected refers to mortgages not in forbearance or loss mitigation

- 420K delinquent mortgages not protected by foreclosure moratoria or forbearance or loss mitigation as of the end of June 2022
- Up 46K (12 percent) from previous month and up 189K (89 percent) from 222K in June 2021, right before nationwide foreclosure moratorium was lifted
- Total seriously delinquent mortgages have been trending lower, from recent peak of 2.6 million August 2020 to 769K in May 2022
- SDQ inventory ticked up slightly to 789K in June 2022

Sources: Black Knight

Pandemic backlog still building

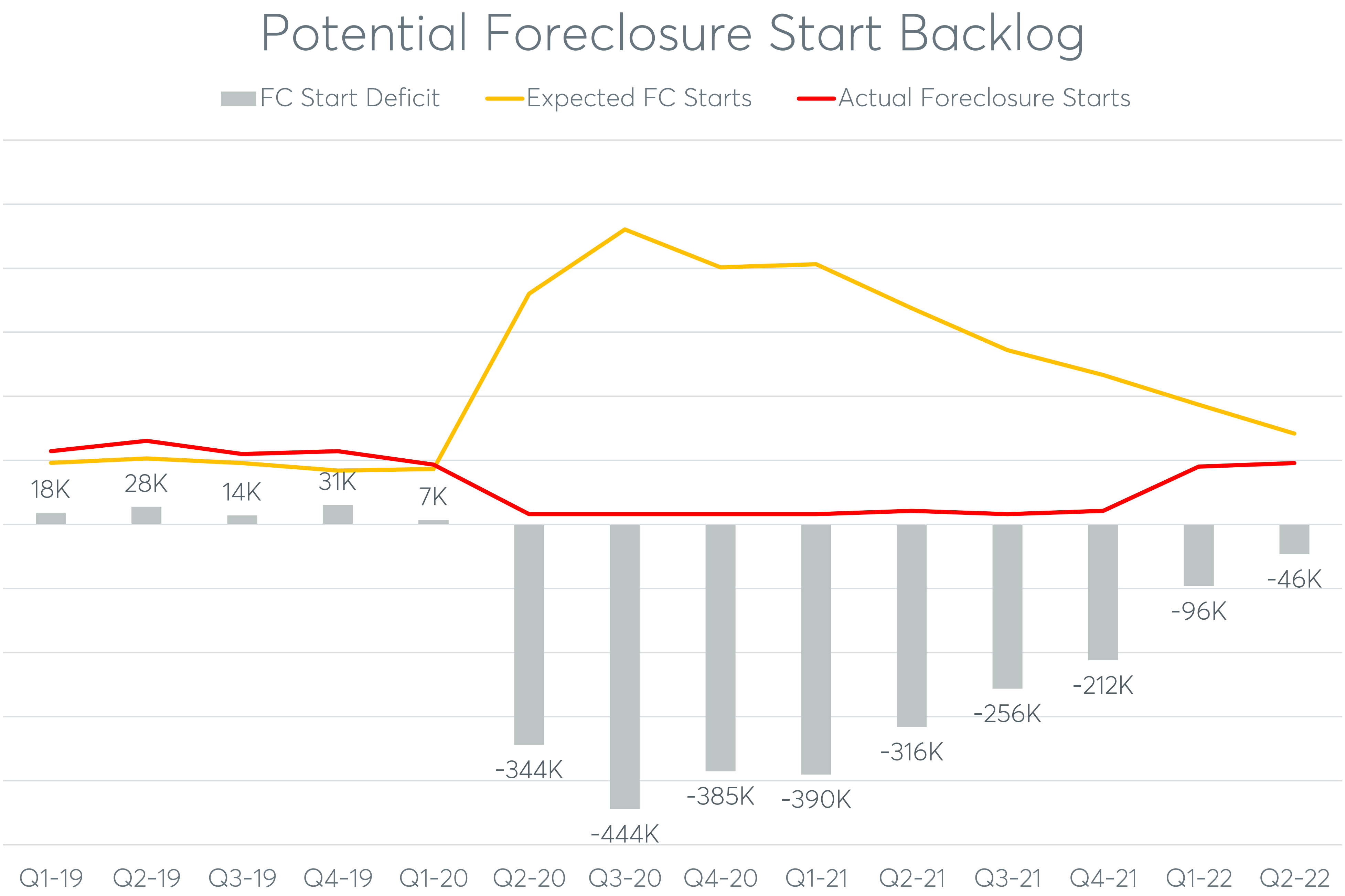
- 24K foreclosure starts nationwide in August 2022, up 187 percent from year ago to highest level since March 2020
- Eighth straight month with triple-digit year-over-year gain (since January)
- Still 9 percent below pre-pandemic level of 26K in January 2020



Source: ATTOM Data Solutions

Sources: ATTOM Data Solutions

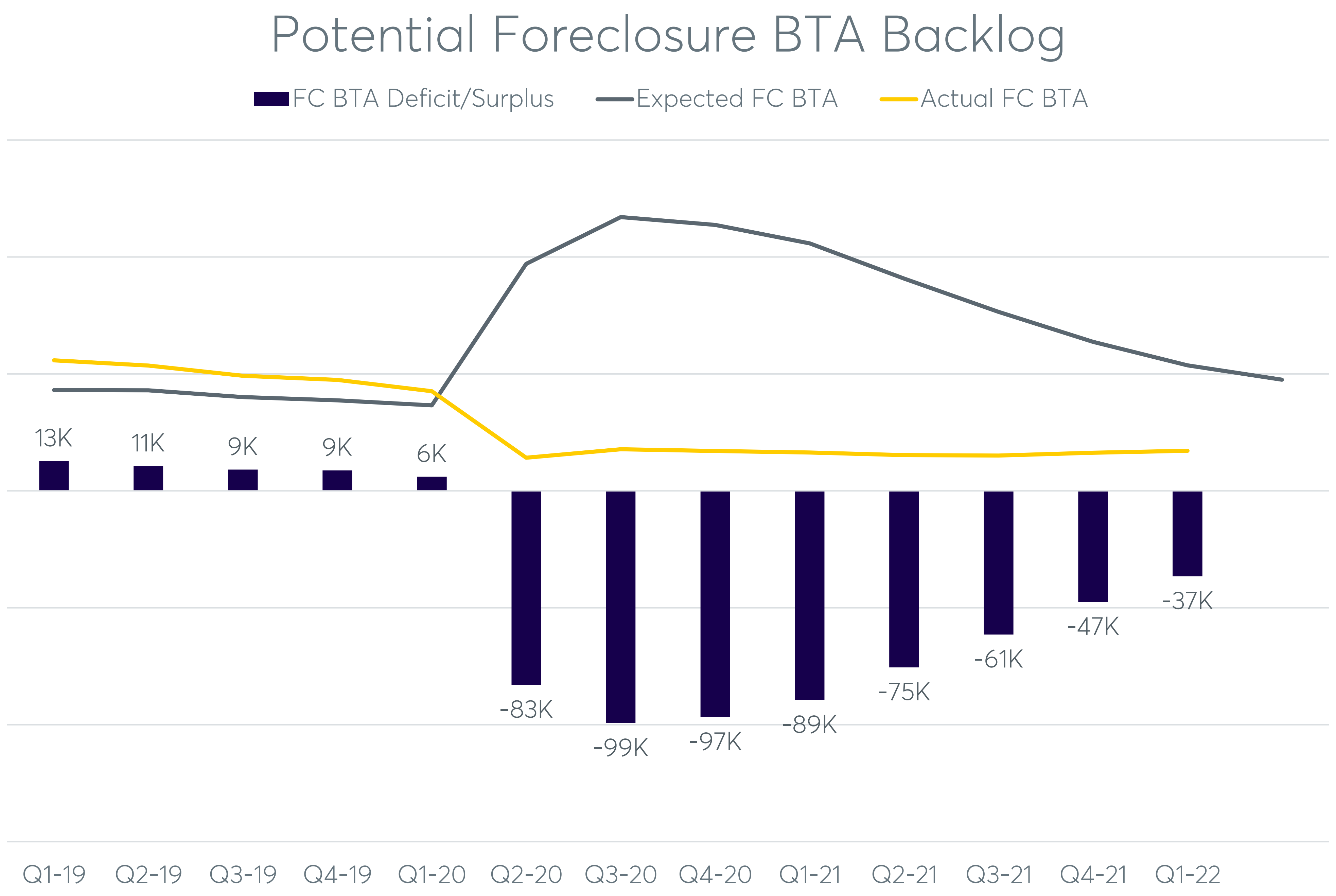
A Deficit of Distress: 2.5 million fewer foreclosure starts than expected



Sources: ATTOM Data Solutions

- Quarterly foreclosure starts have historically represented 17.9% of 90-day+ delinquent inventory in the same quarter
- That relationship broke during the pandemic, with starts representing less than 2% from Q2 2020 to Q3 2021
- Comparing expected foreclosure starts (based on that 17.9%) to actual foreclosure starts yields a deficit of 2.5 million foreclosure starts since Q2 2020
- Relationship is starting to return to normal, with starts representing 12.9% of SDQ inventory in Q2 2022
- Question is how much of 2.5 million deficit will be recouped?

A Deficit of Distress: 589K fewer foreclosure BTA than expected

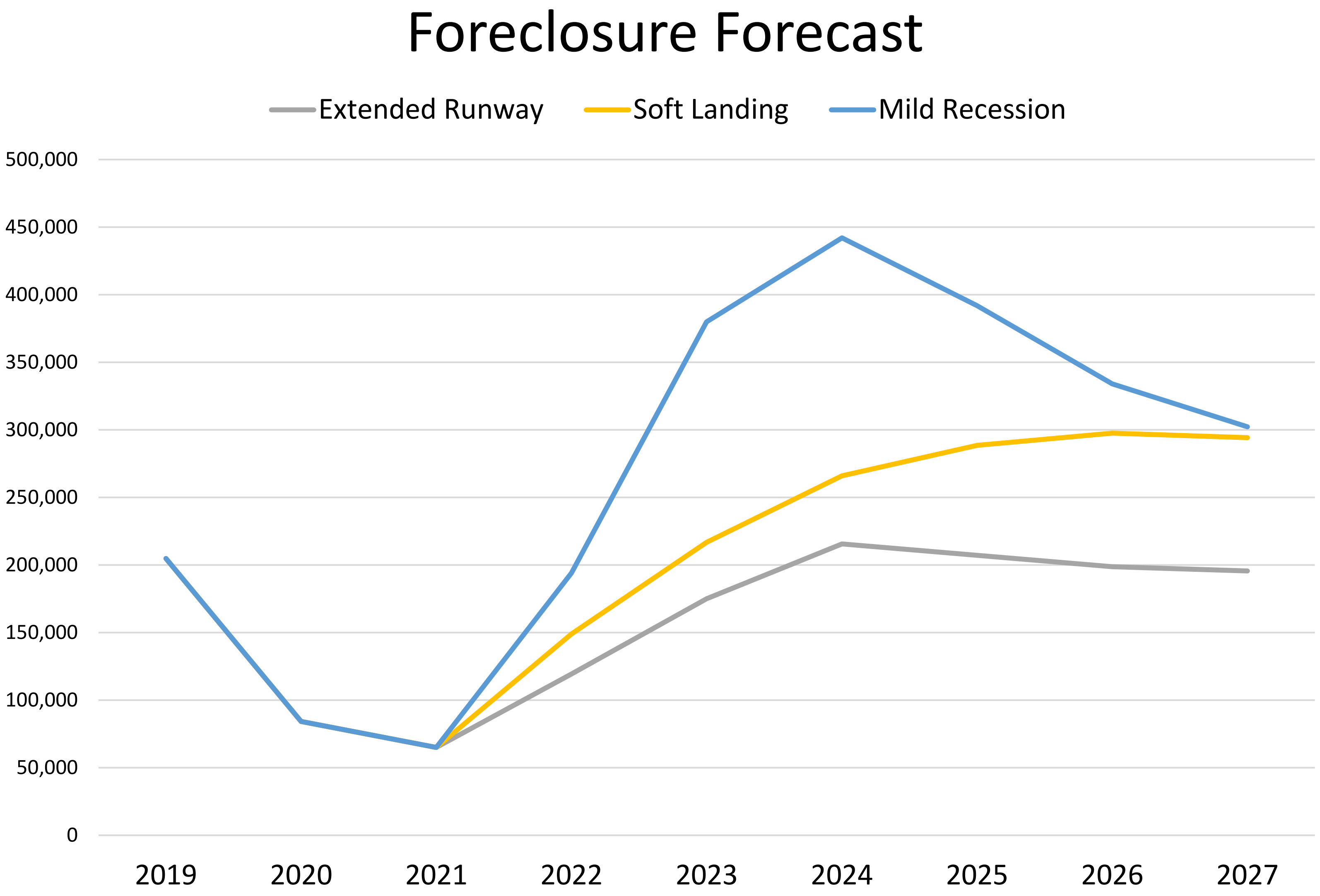


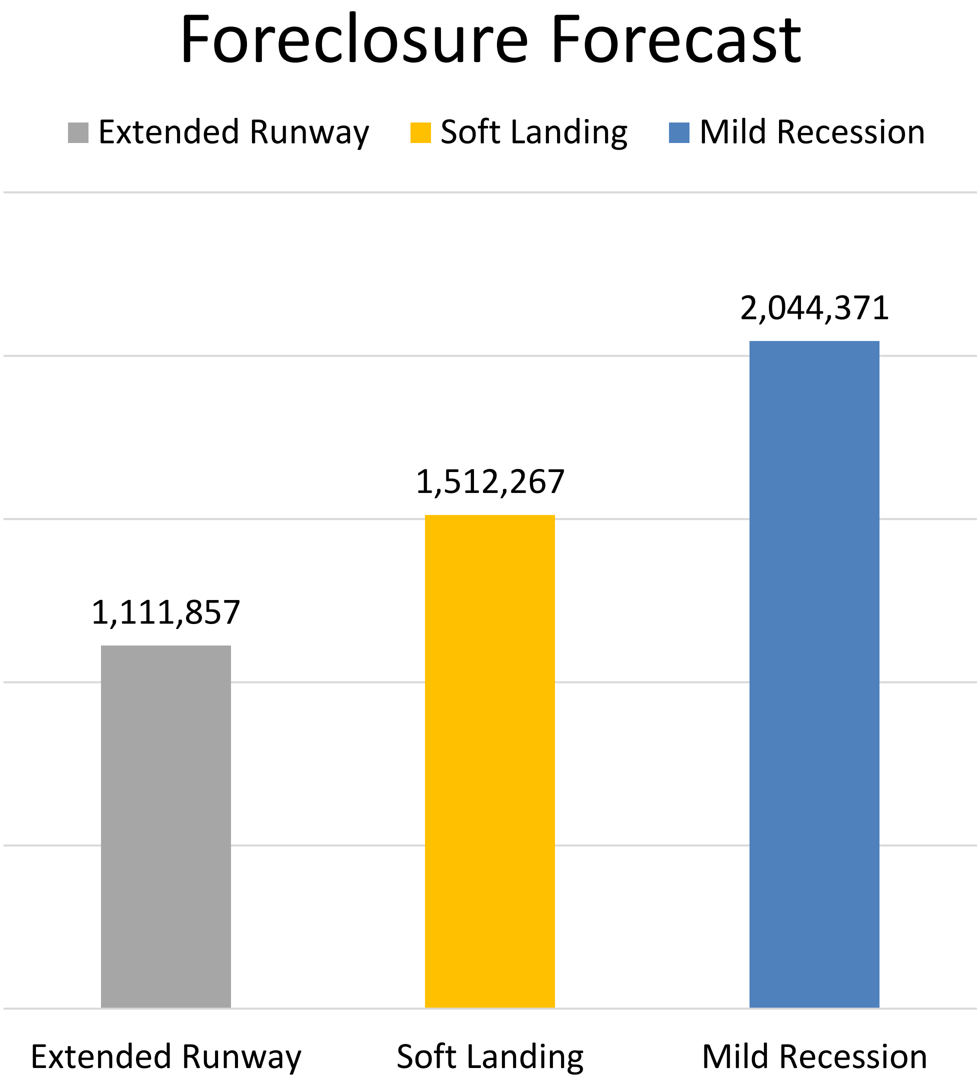
Sources: ATTOM Data Solutions

- Quarterly foreclosure BTA has historically represented 4.2% of seriously delinquent inventory in the same quarter
- That relationship broke during the pandemic, with starts representing less than 1% of SDQ from Q2 2020 to Q3 2021
- Comparing expected foreclosure BTA (based on that 4.2%) to actual foreclosure BTA yields a deficit of 589K foreclosure BTA since Q2 2020
- Relationship is starting to return to normal, with BTA representing 1.7% of SDQ inventory in Q2 2022
- Question is how much of 589K deficit will be recouped?

Long-Range Forecast: Three Scenarios

- Extended runway assumes virtually no pandemic backlog, unemployment rate staying below 4%, temporary jump in mortgage rate, and HPA staying above 5.5 percent
- Soft landing assumes 20% of pandemic backlog returns, unemployment rates gradually rising above 4%, mortgage rates rising to 6%, HPA slowing to 4%
- Mild recession assumes 20% of pandemic backlog returns, GDP negative in 2023, unemployment rates rise as high as 5.4%, mortgage rates rise to 6%, HPA slightly negative





Sources: Auction.com

Implications for Default Servicing

1. Shift in disposition mix back toward pre-pandemic mix

2. HPA shifting from tailwind to headwind

3. Shift in buyers toward more established local community developers

4. Continued push to convert distress to affordable housing for owner-occupants

Sources: Auction.com

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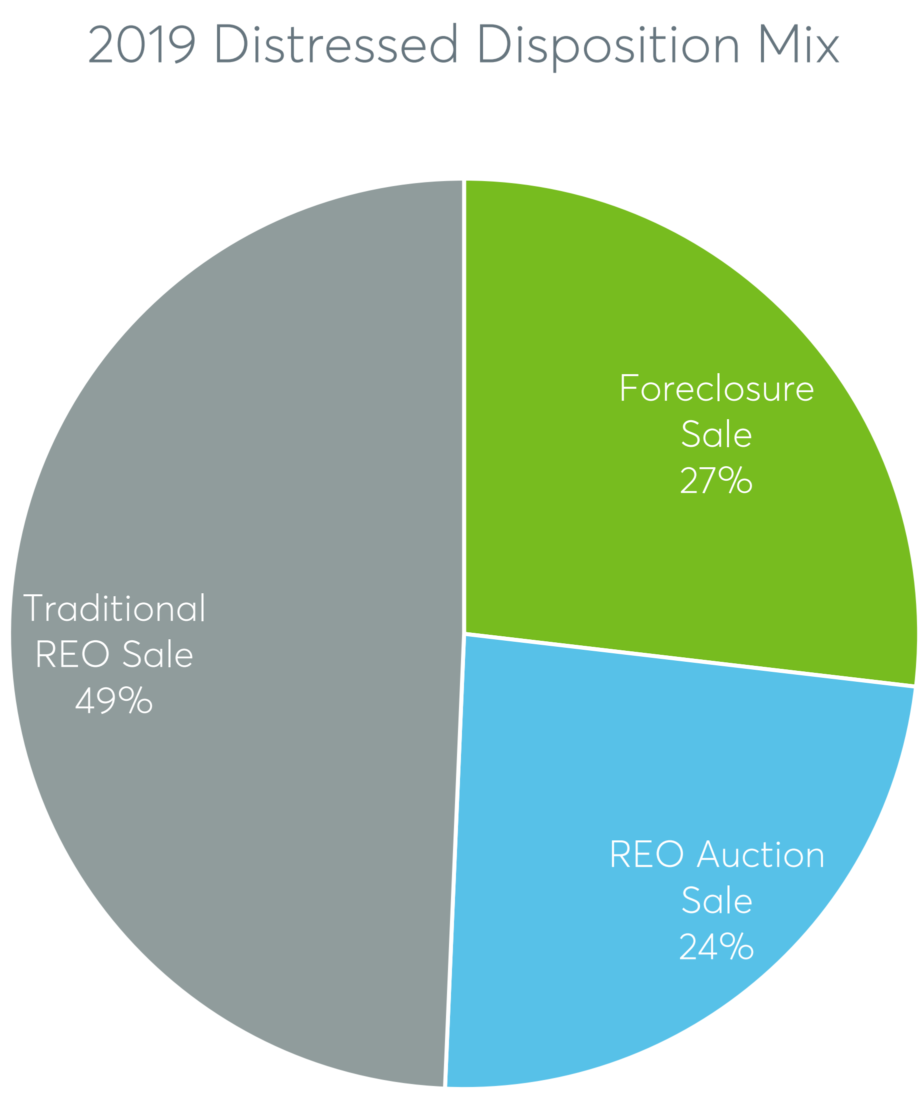
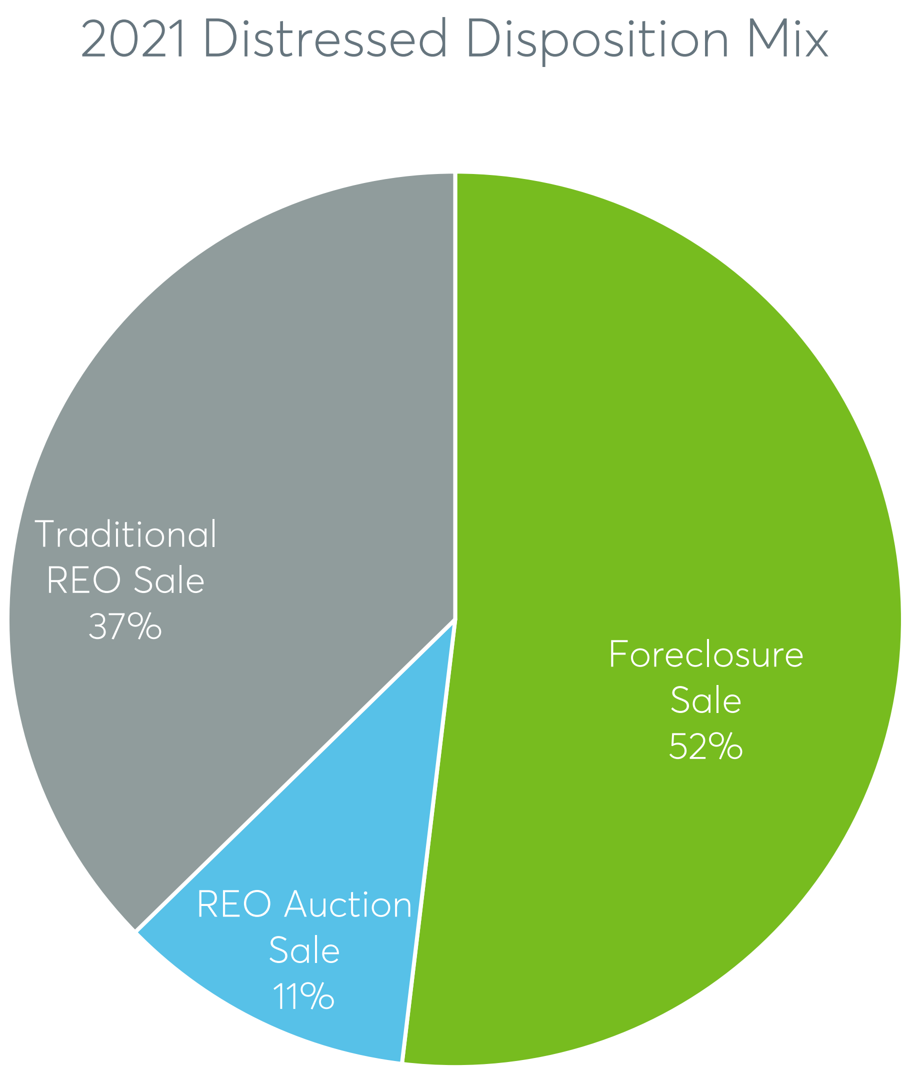
1. Shift in disposition mix back toward pre-pandemic mix

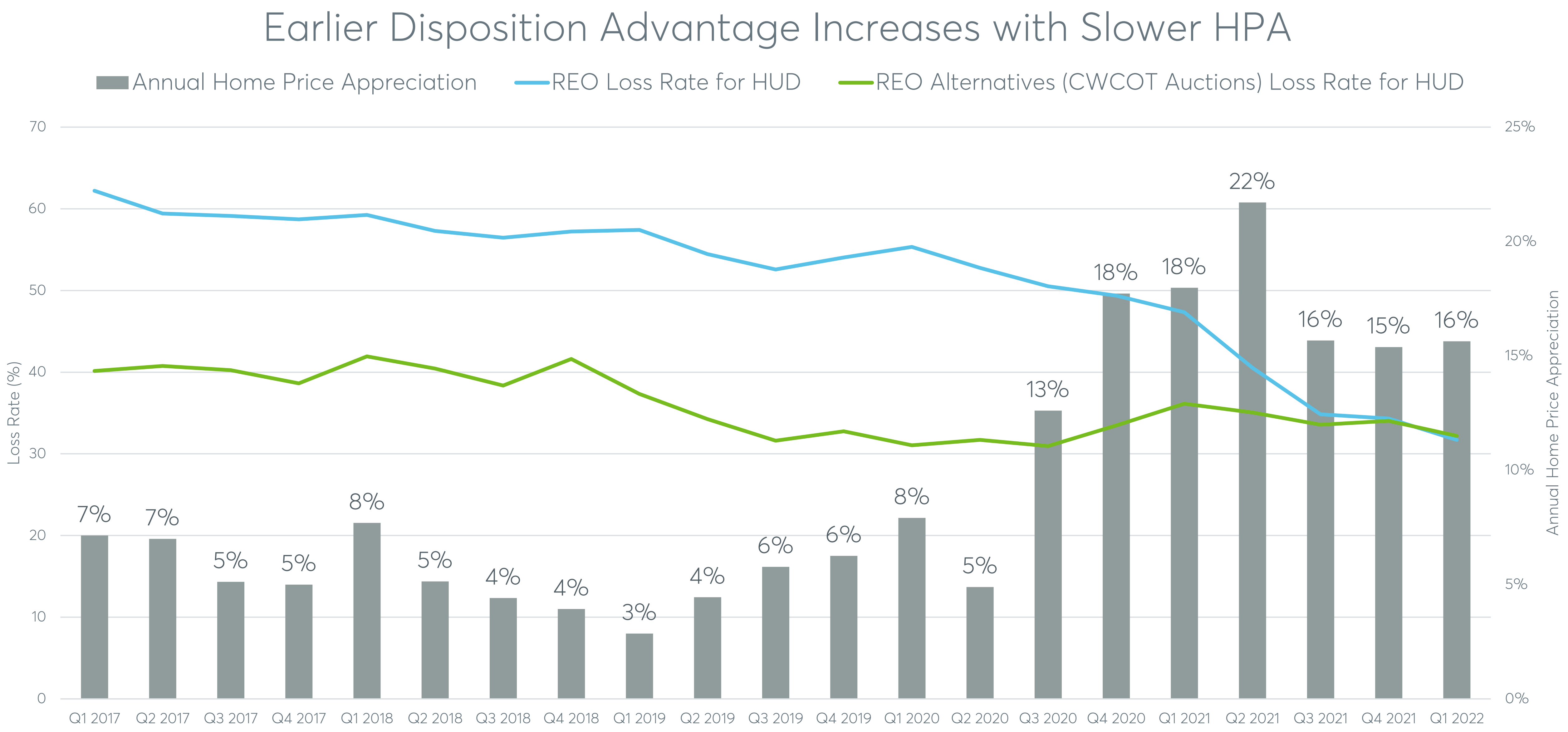




Sources: Auction.com

2. HPA shifting from tailwind to headwind

- Earlier disposition loss severity gap widens in this environment



Sources: HUD, ATTOM Data Solutions

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3. Shift in buyers toward more established local community developers

Auction.com buyer Tony Tritt purchased this Carrollton, Georgia, occupied home at foreclosure auction in January for $258,000. The property burned to the ground before he took possession of it, and the structure has since been bulldozed. He said this has happened about three times during the 25 years he has been buying and rehabbing distressed homes in the Atlanta area. He plans to rebuild, but still expects to lose money on the deal.

"We're uncovering the problems that nobody sees, and it's rewarding for us to do that."

Sources: Auction.com

4. Continued push to convert distress to affordable housing for owner-occupants

- Limited buyer base approach: Case study of SB-1079 in CA
  - Out of 94 with a successful outbid since January 2021 (when law took effect)
  - 25 have been resold/flipped (27%) compares to 28% for all FCL Sales in CA since then
  - 23 are owner-occupied (24%). Compares to 29% for all FCL sales
  - 10 of the 25 resales are owner-occupied (40%). Compares to 53% for entire population
  - Possible abuses emerging: How Nonprofits Use a Legal Loophole to Flip California Homes — for a Profit (KQED)

- Expanded buyer base approach: Electronic Foreclosures paper by Francesco Mazzola
  - Electronic Foreclosure increase foreclosure auction success by 27%
  - Electronic Foreclosure decreases foreclosure discounts by 42%
  - Electronic Foreclosure shifts buyer composition toward "local non-professionals"
  - Benefits lenders with quicker and less costly foreclosure sales
  - Assists borrowers through smaller deficiency judgments
  - Results in fewer vacant bank-owned properties

Sources: Auction.com, SSRN