TWENTY TWENTY TWO



April

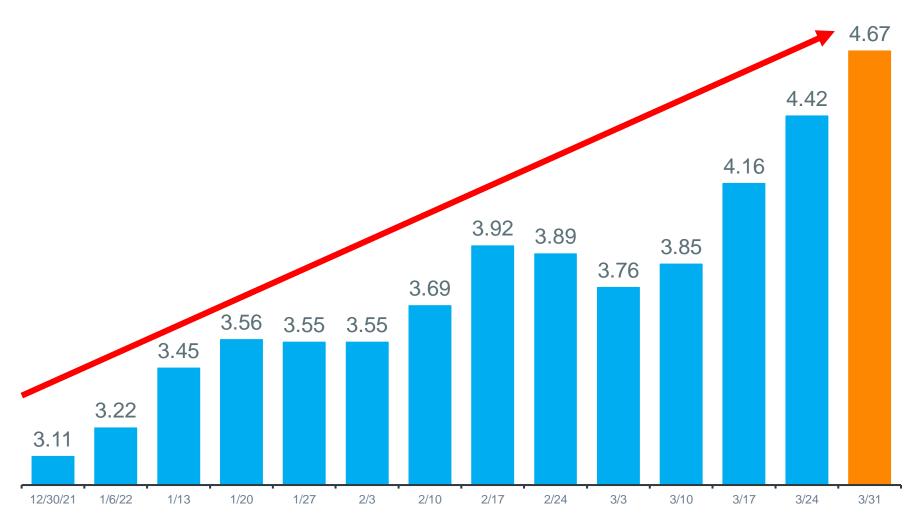
Housing Apolate



Impact of Rising Mortgage Rates on the Housing Market

Mortgage Rates Rising This Year

Freddie Mac Average 30-Year Fixed Rate: January 2022 – Today





Mortgage rates are likely to continue to move higher throughout the balance of 2022, although the pace of rate increases is likely to moderate. . . . Much of the increase in rates in early 2022 is in anticipation of what will happen later this year, especially with Federal Reserve interest rate policy.

- Len Kiefer, Deputy Chief Economist, Freddie Mac

Impact of Rising Rates on Home Prices

Changes when mortgage rates rise by more than 1%

| Start Date | End Date | Months | Increase | Home Prices |
|------------|-----------|--------|----------|-------------|
| Oct 1993 | Dec 1994 | 14 | 2.38% | +3% |
| Jan 1996 | Sept 1996 | 8 | 1.2% | +2% |
| Oct 1998 | May 2000 | 19 | 1.81% | +13% |
| June 2003 | June 2004 | 12 | 1.06% | +13% |
| June 2005 | July 2006 | 13 | 1.18% | +7% |
| Nov 2012 | Dec 2013 | 13 | 1.11% | +11% |
| Aver | Average | | 1.46% | +8% |

Changes when mortgage rates rise by more than 1%

| Start Date | End Date | Months | Increase | Home Prices | Home Sales |
|------------|-----------|--------|----------|-------------|------------|
| Oct 1993 | Dec 1994 | 14 | 2.38% | +3% | -11% |
| Jan 1996 | Sept 1996 | 8 | 1.2% | +2% | -2% |
| Oct 1998 | May 2000 | 19 | 1.81% | +13% | -2% |
| June 2003 | June 2004 | 12 | 1.06% | +13% | 2% |
| June 2005 | July 2006 | 13 | 1.18% | +7% | -14% |
| Nov 2012 | Dec 2013 | 13 | 1.11% | +11% | -2% |
| Average | | 13 | 1.46% | +8% | -5% |

Changes when mortgage rates rise by more than 1%

| Dates | Months | Increase | Final Rate | Home Prices | Home Sales |
|------------------|--------|----------|------------|-------------|------------|
| 10/93- 12/94 | 14 | 2.38% | 9.2% | +3% | -11% |
| 1/96-9/96 | 8 | 1.2% | 8.23% | +2% | -2% |
| 10/98- 5/2020 | 19 | 1.81% | 8.52% | +13% | -2% |
| 6/03-6/04 | 12 | 1.06% | 6.29% | +13% | 2% |
| 6/05-7/06 | 13 | 1.18% | 6.76% | +7% | -14% |
| 11/12-12/13 | 13 | 1.11% | 4.46% | +11% | -2% |
| Average | 13 | 1.46% | 7.24% | +8% | -5% |

Changes when mortgage rates rise by more than 1%

| Dates | Months | Increase | Final Rate | Home Prices | Home Sales |
|-------------|--------|----------|------------|-------------|------------|
| 1/96-9/96 | 8 | 1.2% | 8.23% | +2% | -2% |
| 10/98-5/20 | 19 | 1.81% | 8.52% | +13% | -2% |
| 6/03-6/04 | 12 | 1.06% | 6.29% | +13% | 2% |
| 6/05-7/06 | 13 | 1.18% | 6.76% | +7% | -14% |
| 11/12-12/13 | 13 | 1.11% | 4.46% | +11% | -2% |
| Average | 13 | 1.27% | 6.85% | +9% | -4% |

Changes when mortgage rates rise by more than 1%

| Dates | Months | Increase | Final Rate | Home Prices | Home Sales | Months Inventory |
|-----------------|--------|----------|------------|-------------|---------------|---------------------|
| 1/96-9/96 | 8 | 1.2% | 8.23% | +2% | -2% | N/A |
| 10/98- 5/20 | 19 | 1.81% | 8.52% | +13% | -2% | N/A |
| 6/03-6/04 | 12 | 1.06% | 6.29% | +13% | 2% | 5 |
| 6/05-7/06 | 13 | 1.18% | 6.76% | +7% | -14% | 4.5 |
| 11/12- 12/13 | 13 | 1.11% | 4.46% | +11% | -2% | 4.8 |
| Average | 13 | 1.27% | 6.85% | +9% | -4% | 4.8 |



While higher short-term interest rates will push up mortgage rates, I expect some of this impact to be mitigated eventually through lower inflation. . . . Thus, I expect the 30-year fixed mortgage rate to continue to rise, although we aren't likely to see the big jumps that occurred over the past few weeks.

- Nadia Evangelou, Director of Forecasting, NAR



History suggests that when rates rise, there is an initial bump in home prices as many move quickly to buy a home before rates increase further. But after that period, home prices slow. Freddie Mac analysis shows that a 1% increase in mortgage rates results in home price appreciation that is 4 percentage points lower. For instance, a 1% increase in mortgage rates would change home price growth from 11% to 7%.

- Freddie Mac



With rates rising and expected to rise through 2023, it makes sense to obtain a purchase or refinance mortgage if you are in good standing.

- Len Kiefer, Deputy Chief Economist, Freddie Mac



Spring Housing Market Update





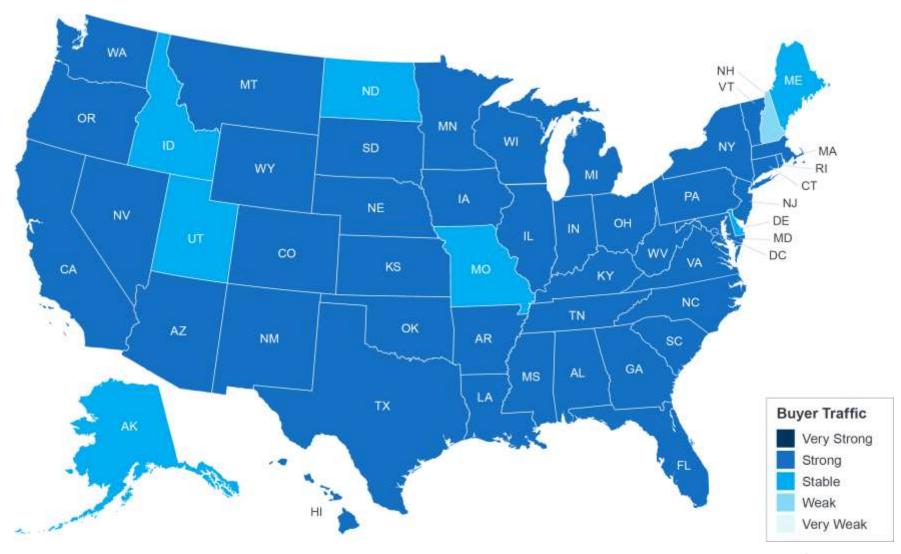


We keep watching for it, . . . but there are absolutely no signs of a market slowdown anywhere in the data. If anything, we're seeing the market continue to heat up.

- Altos Research

Buyer Traffic Index

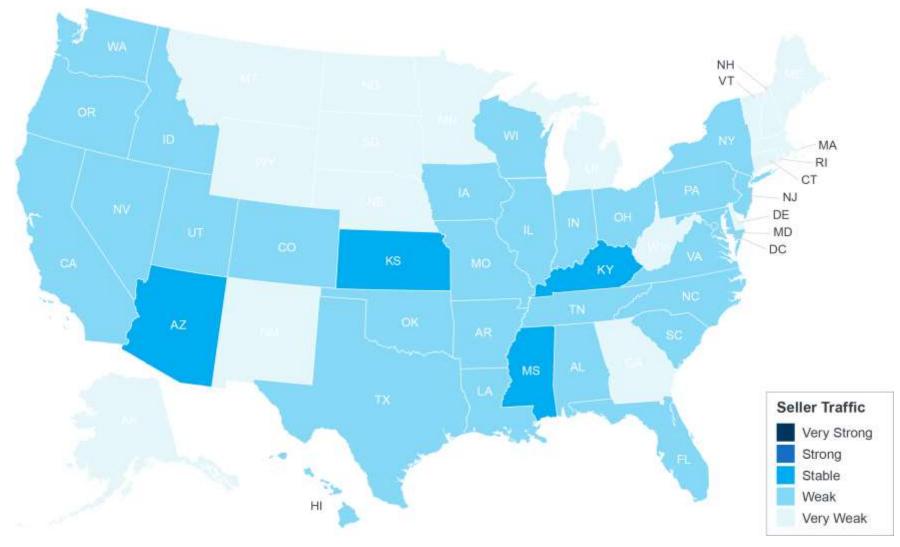
February 2022



Source: NAR

Seller Traffic Index

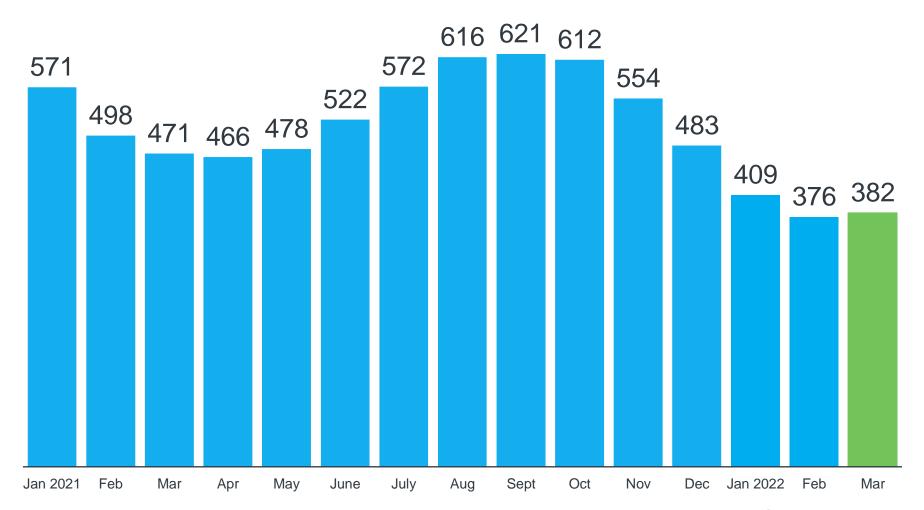
February 2022



Source: NAR

Active Listings Increased for First Time in 6 Months

Active Monthly Listing Counts (in thousands)



Source: realtor.com

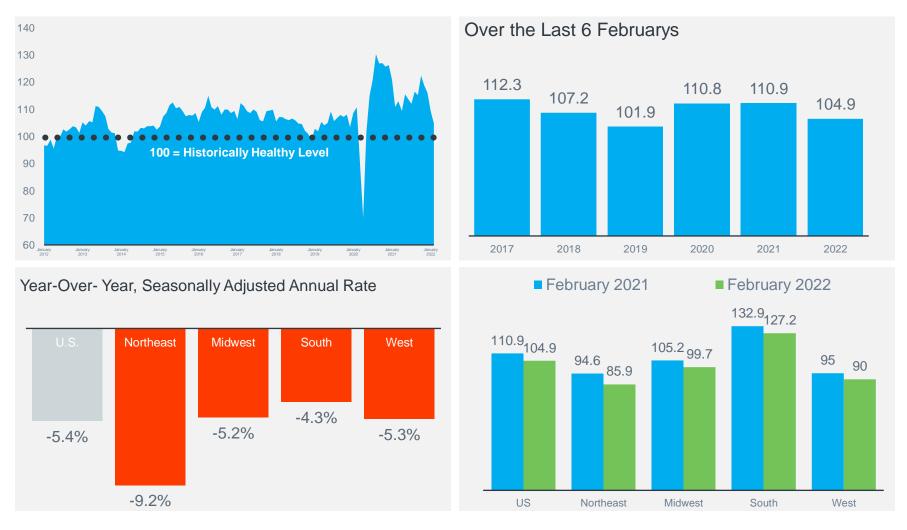


Now, more industry insiders are throwing out their previous forecasts and replacing them with more bullish short-term outlooks. Indeed, some experts say the 2022 spring housing market might go down as one of the most competitive on record.

- Lance Lambert, Editorial Director, Fortune

Pending Home Sales

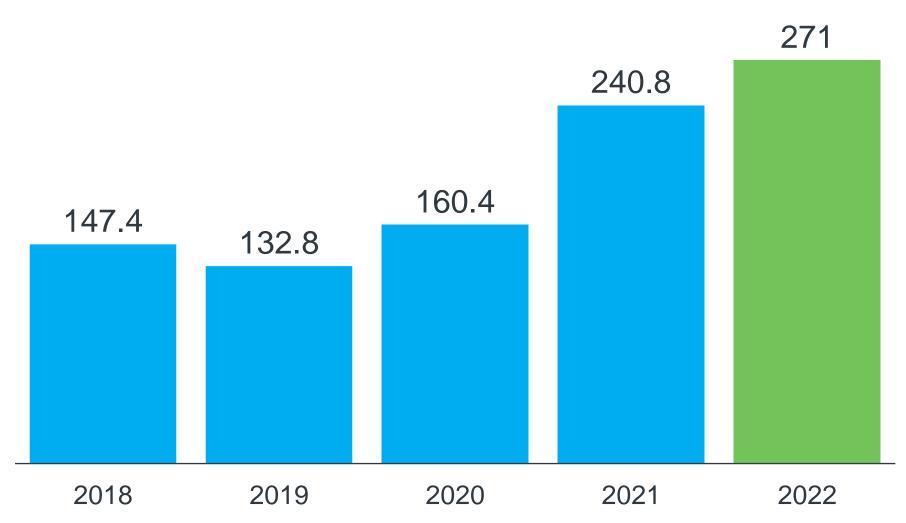
100 = Historically Healthy Level



YupSOLD.com Source: NAR

Showings Exceed Pre-Pandemic Numbers

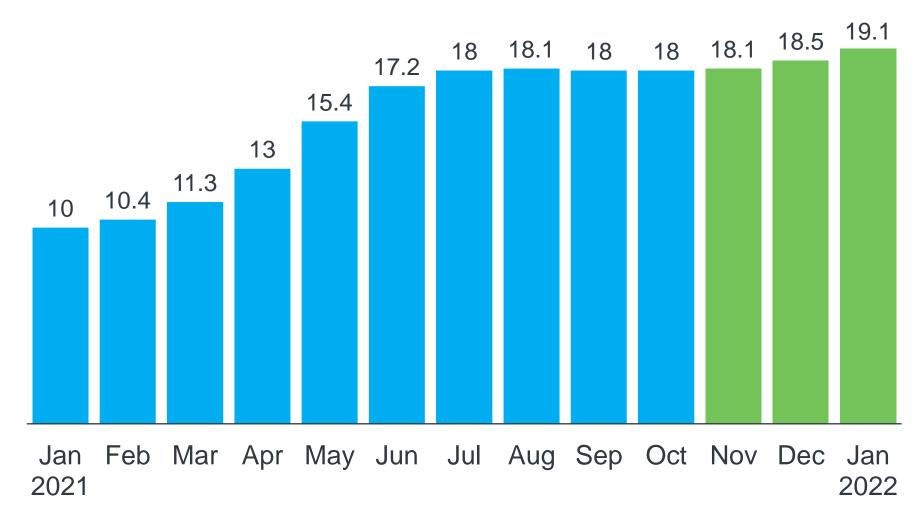
Showing Index over the Last 5 Februarys



Source: ShowingTime

Price Appreciation Accelerating

% Year-Over-Year Price Increases (Monthly)



Source: CoreLogic

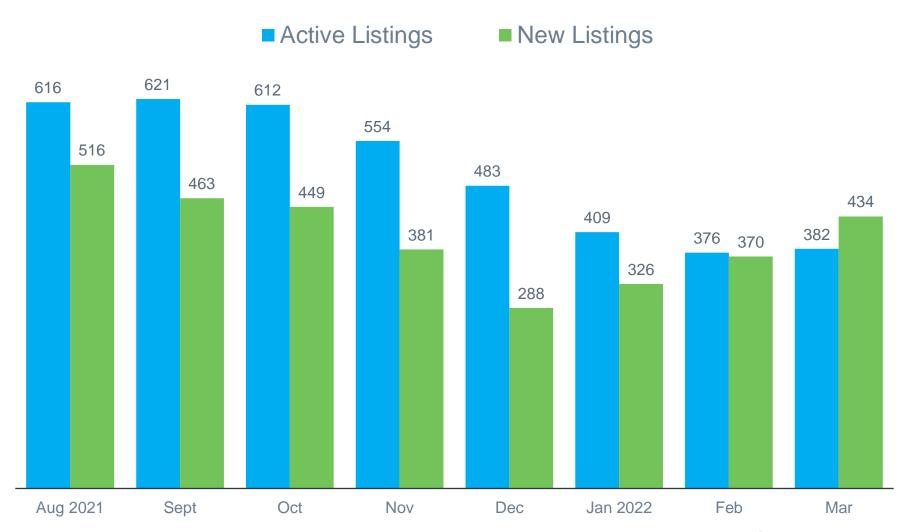


Last fall we observed that home prices, although continuing to rise quite sharply, had begun to decelerate. Even that modest deceleration was on pause in January. The 19.2% year-over-year change for January was the fourth-largest reading in 35 years of history.

- Craig J. Lazzara, Managing Director, S&P DJI

More New Listings than Active Listings

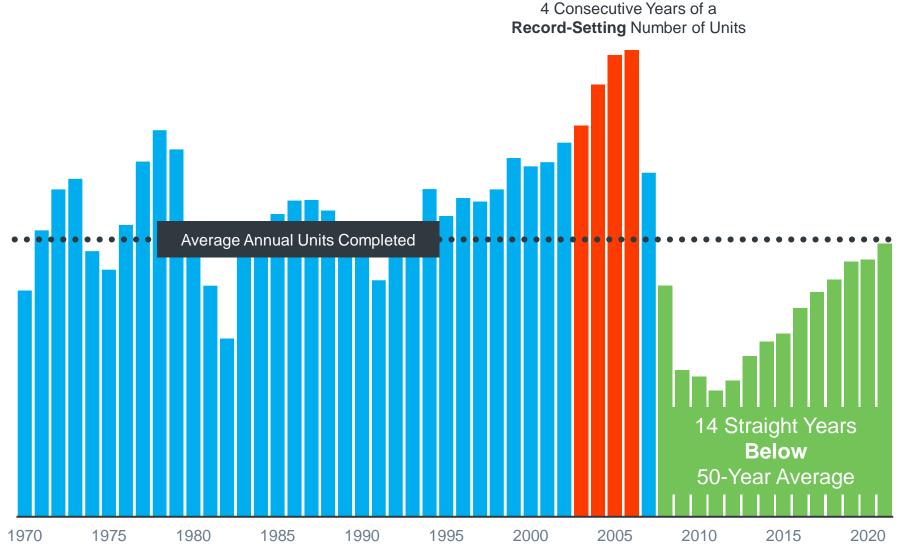
Active and New Listings by Month



Source: realtor.com

Single-Family Housing Units Completed

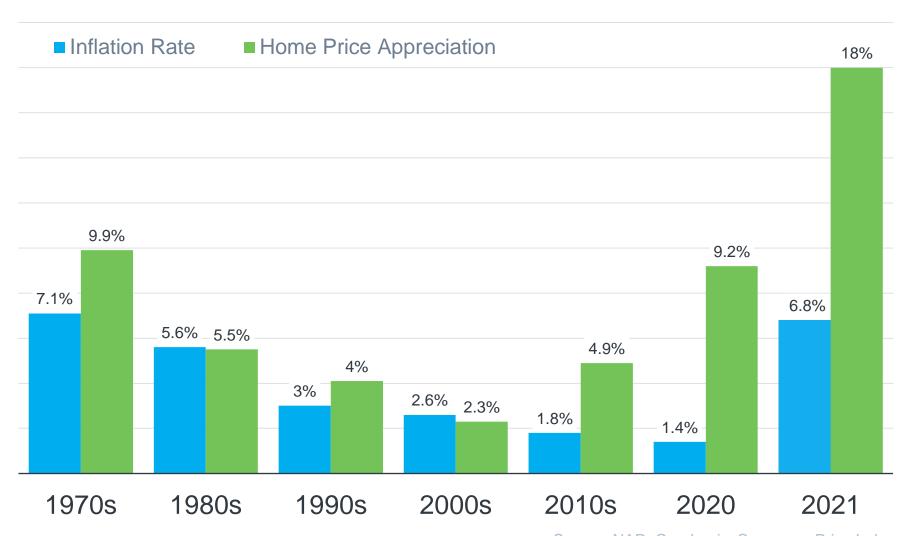
(in thousands)



Source: Census

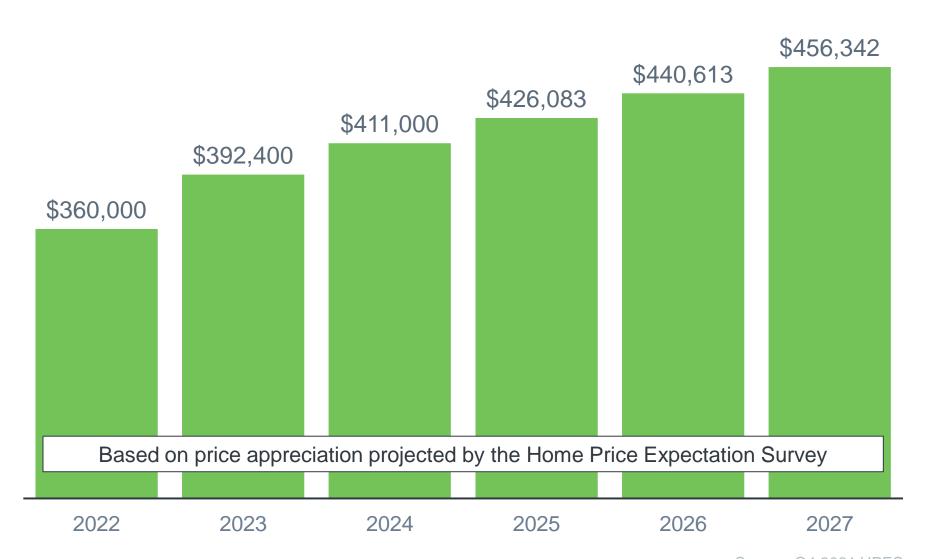
Homeownership: a Hedge Against Inflation

Home Price Appreciation vs. Consumer Price Increases over the Decades



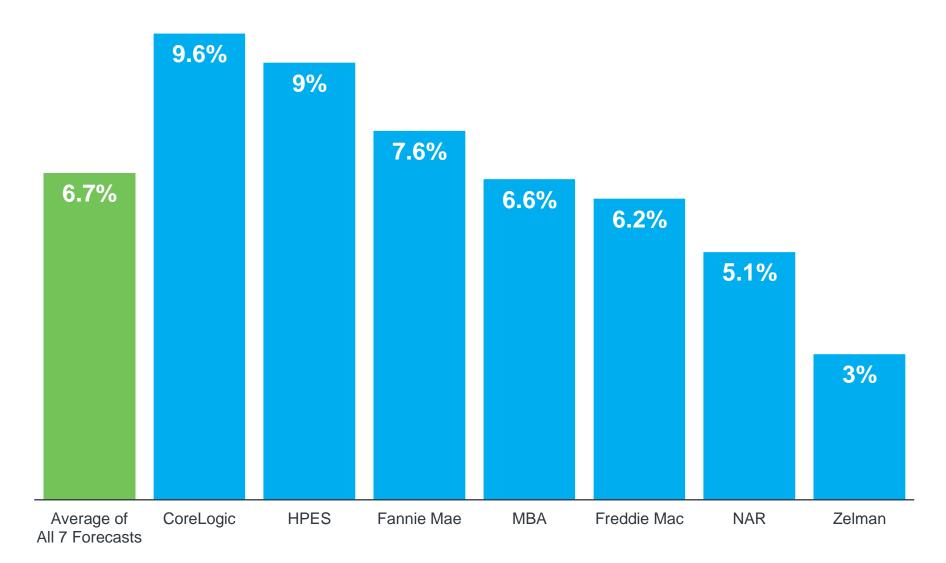
\$96,342

Potential growth in household wealth over the next 5 years based solely on increasing home equity if you purchased a \$360K home in January 2022



Source: Q4 2021 HPES

Home Price Forecasts for 2022



Resources

| Slide(s) | Description | Link(s) |
|----------|------------------------|--|
| 3 | Mortgage Rates Rising | https://freddiemac.gcs-web.com/node/24976/pdf http://www.freddiemac.com/pmms/ |
| 4 | Kiefer Quote | https://www.bankrate.com/mortgages/march-2022- mortgage-rate-outlook/ |
| 5-9 | Impact of Rising Rates | http://www.freddiemac.com/research/insight/20180223_incr easing_mortgage_rates.page |
| 10 | Evangelou Quote | https://www.bankrate.com/mortgages/march-2022- mortgage-rate-outlook/ |
| 11 | Freddie Mac Quote | https://myhome.freddiemac.com/blog/homeownership/what s-driving-home-price-growth-2022 |
| 12 | Kiefer Quote | https://www.bankrate.com/mortgages/march-2022- mortgage-rate-outlook/ |
| 14 | Altos Research Quote | https://twitter.com/AltosResearch/status/149842809410907 7508 |
| 15-16 | Traffic Index Maps | https://www.nar.realtor/research-and-statistics/research-reports/realtors-confidence-index |

Resources

| Slide(s) | Description | Link(s) |
|----------|---------------------------------------|---|
| 17, 24 | Listings | https://www.realtor.com/research/data/ |
| 18 | Lambert Quote | https://fortune.com/2022/02/07/zillow-our-2022-housing-forecast-is-way-off-home-prices-now-set-to-spike/ |
| 19 | Pending Home Sales | https://www.nar.realtor/newsroom/pending-home-sales-dwindle-4-1-in-February https://www.nar.realtor/blogs/economists-outlook/pending-home-sales-weaken-4-1-in-february-2022 |
| 20 | Showings | https://www.showingtime.com/blog/february-2022-showing-index-results/ |
| 21 | Price Appreciation | https://www.corelogic.com/intelligence/u-s-home-price-insights/ |
| 22 | Lazzara Quote | https://www.spglobal.com/spdji/en/documents/indexnews/announcements/20220329-1451063/1451063_cshomepricerelease-0329.pdf |
| 25 | Single-Family Housing Units Completed | www.census.gov/construction/nrc/xls/co_cust.xls |

Resources

| Slide(s) | Description | Link(s) |
|----------|---|---|
| 26 | Homeownership: Hedge Against Inflation | https://cdn.nar.realtor/sites/default/files/documents/2021-11-12-residential-economic-issues-and-trends-lawrence-yun-presentation-slides-11-12-2021.pdf https://www.bls.gov/news.release/archives/cpi_01132021.pdf https://www.corelogic.com/intelligence/find-stories/home-prices-topple-expectations-surging-at-the-end-of-2020/ |
| 27 | Equity Gains (HPES) | https://pulsenomics.com/surveys/#home-price-expectations |
| 28 | Home Price Forecasts for 2022 | https://www.mba.org/news-research-and-resources/research-and-economics/forecasts-and-commentary https://cdn.nar.realtor/sites/default/files/documents/forecast-Q1-2022-us-economic-outlook-01-27-2022.pdf https://www.fanniemae.com/research-and-insights/forecast-http://www.freddiemac.com/research/forecast/20220121_quarterly_economic_forecast.page https://pulsenomics.com/surveys/#home-price-expectationshttps://www.corelogic.com/intelligence/find-stories/corelogic-hpi-posted-record-year-over-year-growth-in-2021/ |