Housing and Mortgage Market Review

HaMMR – Fall 2020

IN THIS ISSUE

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COVID-19's Current and Future Impact on Housing

If the housing market had a rock anthem right now, it would be the chorus of AC/DC's "Back in Black."

The recovery in housing has been nothing short of amazing. Home sales have rebounded, listings are at record lows and prices are increasing strongly in many markets. A few illustrative data points:

- Pending home sales were 21% higher in September than a year ago.
- In August, the months' supply of homes for sale hit a record low of 2.7 months for existing homes and 3.6 months for new homes.
- The number of existing homes for sale in September was 19% lower than a year ago, which itself was lower by 5% from the year before.

As you can clearly see in the following chart, there has been a V-shaped recovery in sales, which has pushed the number of homes for sale to record lows. Only 1.2 million existing homes were on the market nationwide at the end of August, vs. an average of 1.5 million in 2019 and 1.6 million in 2018.

A severe shortage of homes for sale prevented sales from being even higher. As Lawrence Yun, Chief Economist for the National Association of Realtors® (NAR), put it, "If 20% more homes were on the market, we would have 20% more sales, because demand is that high."

(continued on page 3)

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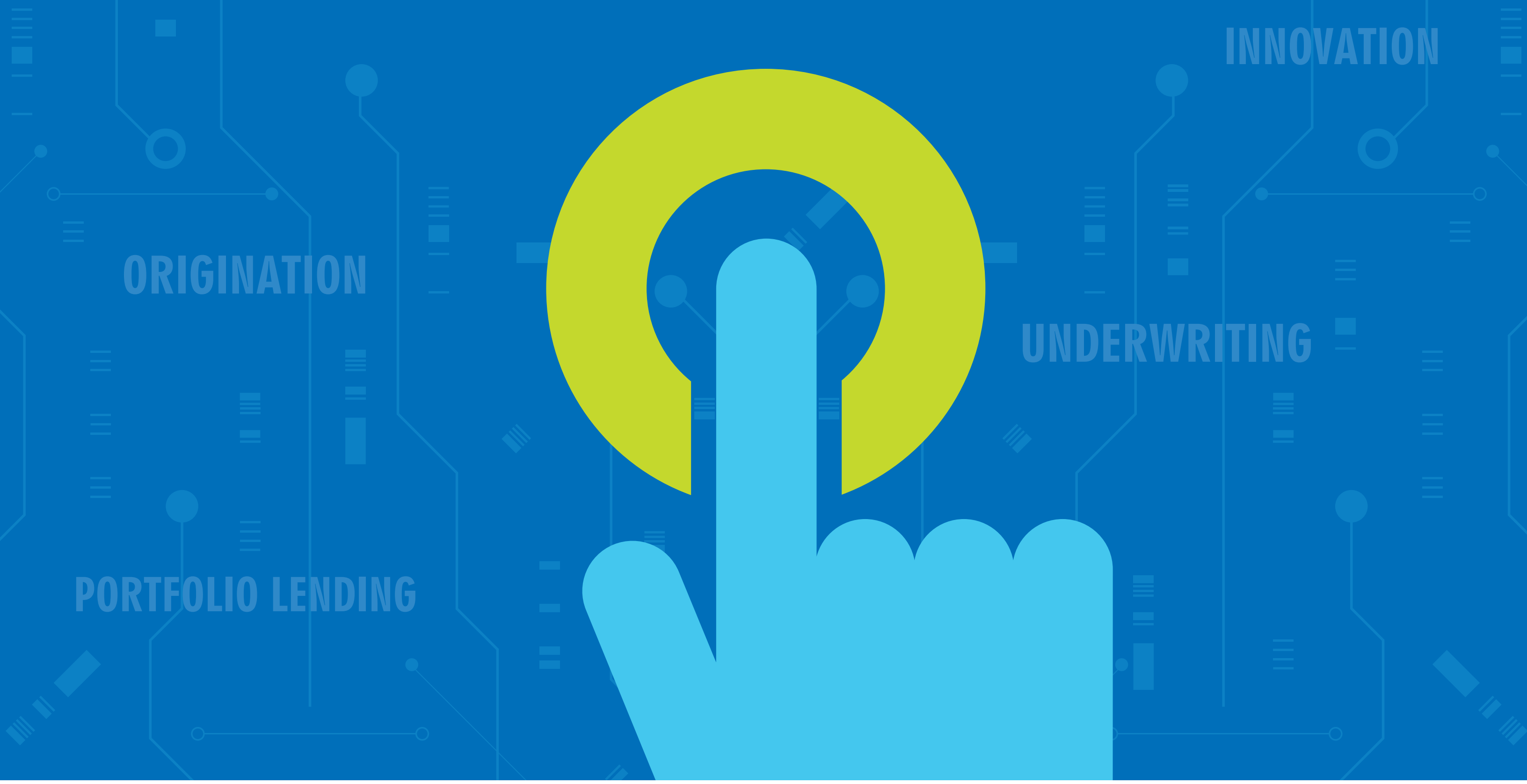

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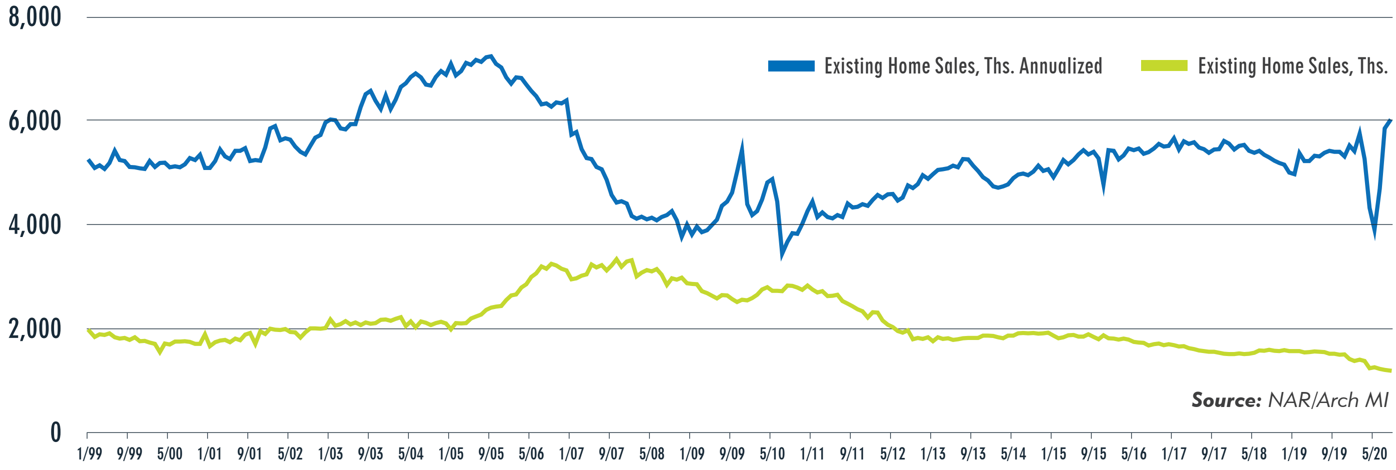
COVID-19's Current and Future Impact on Housing *(continued from page 1)*

Home Sales Have Rebounded; Listings at All-Time Lows



A strong housing market isn't what forecasters expected back in April. After all, many people are suffering terribly as total employment is still down by roughly 10 million jobs this year. So, what is going on here?

What Is Powering the Bump-up in Demand?

We believe there are more important factors at play, other than just a catching-up of delayed home sales from the spring lockdowns. That is evident in the continued strength of purchase applications, which cumulatively are 11% higher than the year before. We believe the increased demand for housing is primarily due to two factors:

1. **The marginal trade-off between housing vs. other uses of money has shifted in favor of housing.**
   This is due to an increased need for better space for home offices, at-home education, exercise equipment, etc. At the same time, many other uses of money — big weddings, live entertainment, cruises and international travel — are on hold. For example, while up substantially from their lows, air travel is still down 65% from a year ago, the number of restaurant diners is down 40% and hotel occupancy is down 30%. A desire for better recreational options is also fueling the extraordinary demand for second homes, at least for homes within a four-hour drive of a major city.

Longer-term, demand for housing should remain higher than it was pre-pandemic as some of the need for workspace moves from offices to residences.

2. **Record-low mortgage rates.**
   With the 30-year fixed-rate mortgage (FRM30) near 2.9%, the monthly payments on a $300,000 home are around $1,600 a month.[1] That is down from $1,700 in February, when the FRM30 was 3.5%. Another way to think about lower rates is that for the same monthly payment you can afford a 6% more expensive home (i.e., afford a $318,000 home instead of a $300,000 home).

   And low mortgage rates are likely to stick around a while. The Federal Reserve has said that it will keep interest rates low for an extended period of time. The FRM30 even has room to fall further since it remains about 0.5% higher than usual relative to the 10-year Treasury rate.

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Housing Sector Is Brighter Than the Overall Economy *(continued from page 3)*

Longer-Term Impacts: Suburbs, Retail-to-Housing and More Remote Work

The most likely scenario is that changes in behavior that were already underway, such as more e-commerce and remote work, will be accelerated by the pandemic. Some of the long-term consequences we anticipate include:

- **Growth of the suburbs.** Office and multifamily construction will focus less on downtown and more on outlying areas. Perhaps neighborhood shopping areas could become more vibrant as restaurants and services support more people working from home.
- **Developers will take advantage of closed retail space to build housing**, accelerating a trend that's already happening.
- There will be an **increase in the number of people working remotely full-time**. More importantly, far more office workers will split their workweek between home and the traditional office.
  - Pre-pandemic, the number of people working remotely full-time was gradually rising, to make up around 5% of all employment. Many observers expect to see a large increase once the pandemic is over. Capital Economics recently estimated that up to 50% of workers will work remotely in some form by the end of 2022, with a little over 20% working at home full-time and 30% doing so for at least one day per week. That sounds high in our view since normal business offices offer many advantages, both for work collaboration and social networking. Even if the percentages end up being half that, it would still represent a major shift in the need for workspace from offices to residences. That will result in more demand for housing than there otherwise would have been.
  - One specific example is that after the pandemic is over, Microsoft plans to allow most employees to work part-time from home — as long as it is less than half of their workweek.[2]

Longer-term, there will be a partial shift in the need for workspace from offices to residences.

  - Surveys suggest more openness to remote work on the part of both employers and employees. For example, an HR consultancy found employers expect remote work to nearly triple in the post-COVID-19 world.[3]
  - Productivity and employee retention can be enhanced by accommodating different individual work styles. Some 75% of employees said that during the first few months of the pandemic, they have been able to maintain or improve productivity on their individual tasks and 50% said the same for group tasks, according to Boston Consulting Group.[4] That is because many of us function optimally in a quiet work environment, something increasingly rare in open-plan office layouts.

Bottom Line — Housing Will Remain in Demand

Leading indicators, such as purchase apps, months' supply, sale prices and list prices, suggest strong housing demand will persist near-term. This is fueled by low mortgage rates and a shift in relative value toward housing and away from other uses of money. Many of the 140 million people who are still employed are reassessing their housing needs.

The "work-from-home genie" cannot be put back into the bottle.

Low interest rates are likely just pulling future demand forward. Still, over the long run, demand for housing should remain higher than it was pre-pandemic because of two factors.

The first is a change in our psychological understanding of what constitutes the ideal amount of space in general. The second is a more specific need for better home offices since the "work-from-home genie" cannot be put back into the bottle. Post-pandemic, far more office workers will split their workweek between home and a traditional office. Furthermore, since office employees view flexibility as a perk, competition for talent will incline more firms to allow partial work-from-home schedules.

Perhaps, if you listen carefully enough, you can hear the housing market singing, "I'm back."

[1] *Assuming a 30-year mortgage, 10% down payment, annual escrow of 1.75% of the property value for insurance/property taxes/etc. and a 0.75% higher interest rate for mortgage insurance and g-fee risk add-ons.*

[2] *According to the* Wall Street Journal*, Oct. 9, 2020.*

[3] *Employer Response to COVID-19: XpertHR Survey Report.*

[4] *What 12,000 Employees Have to Say About the Future of Remote Work, Boston Consulting Group.*

Five Housing Trends to Watch in 2021

Strong demand is likely to continue into 2021, as the effects of the pandemic continue to reverberate. Here are five trends we think will be important for the housing market in 2021.

1. Location, location ... wait a minute — a *different* location!

More remote work will result in faster growth in suburbs, exurbs and smaller cities. That is great news for builders since lots are easier to develop further away from large downtowns. More importantly, it is also great news for homeownership since housing is more affordable outside dense cities. For example, only one-third of New York City and San Francisco households are homeowners, vs. two-thirds nationwide. Thus, any redirection of future growth towards less dense areas should enable more people to achieve homeownership over time.

Of course, the downside is that denser and more expensive areas in the Northeast and along the Pacific Coast are likely to see increased outmigration to the South and Mountain West. Expensive markets in the Northeast and California only avoided falling populations because of an inflow of international immigration (which has temporarily stopped because of the pandemic). That said, we are not expecting a material reduction in home values in expensive markets, just stronger economic and home-price growth in lower-cost/lower-tax areas in the coming years.

2. The end of forbearance programs should be a non-event for home prices.

The financial hardships and tragedies this pandemic has caused are everywhere and plain to see.

Unfortunately, there will be an increase in foreclosures. Foreclosures will occur based on each borrower's ability to maintain or return to something close to their pre-pandemic income. Unfortunately, the excruciatingly slow back-and-forth in Washington, D.C., over additional stimulus is a clear negative. Furthermore, some were teetering on the brink of foreclosure before the moratoriums, many of which are likely to continue into foreclosure. The only silver lining is that the housing market itself should remain stable even as foreclosures increase.

WHY? First, forbearance programs by the GSEs, the FHA and some private servicers are generous by any historical standard because of the special circumstances. For borrowers in need, missed payments can be added at the end of the loan term. Thus, borrowers do not need to pay back the missed payments in a lump sum or have to make larger monthly payments to catch up. While the number of loans in forbearance is daunting (3 million at the time of writing this, according to McDash[5]), some people undoubtedly entered into forbearance plans as a form of insurance, just in case their financial condition worsened.

Strong demand, supportive forbearance terms and high overall home equity mean that the housing market should remain stable.

There is some comforting evidence suggesting many of the forbearances will not end in default. An astounding 18% of loans in forbearance cured in the week ending Oct. 7 as many hit the six-month mark when additional documentation of hardship was required to stay in forbearance. McDash also expects further reductions as more loans hit their six-month mark.

Second, in addition to helpful forbearance terms, home prices have been growing steadily in recent years and in most markets, growing rapidly since last summer. This means most borrowers have enough equity to pay off their mortgage by selling their home if they cannot resume making their payments. Only 3.2% of all mortgage holders owe more than their property is worth in the second quarter of 2020, according to CoreLogic®. That compares favorably to an estimated 26% of mortgages that had negative equity back in the fourth quarter of 2009. While being forced to sell is unquestionably terrible, it is better for the owner to sell their home rather than the lender because lenders often sell at a discount.

In short, strong demand, supportive forbearance terms and home equity mean that the housing market itself should remain stable even as foreclosures increase. That is because demand has outstripped supply — thanks, in part, to favorable interest-rate conditions.

One thing we can say for sure about the pandemic: Your home has never been more important.

[5] *Forbearances See Largest Single Week Decline Yet, Black Knight Blog, Oct. 9, 2020.*

(continued on page 8)

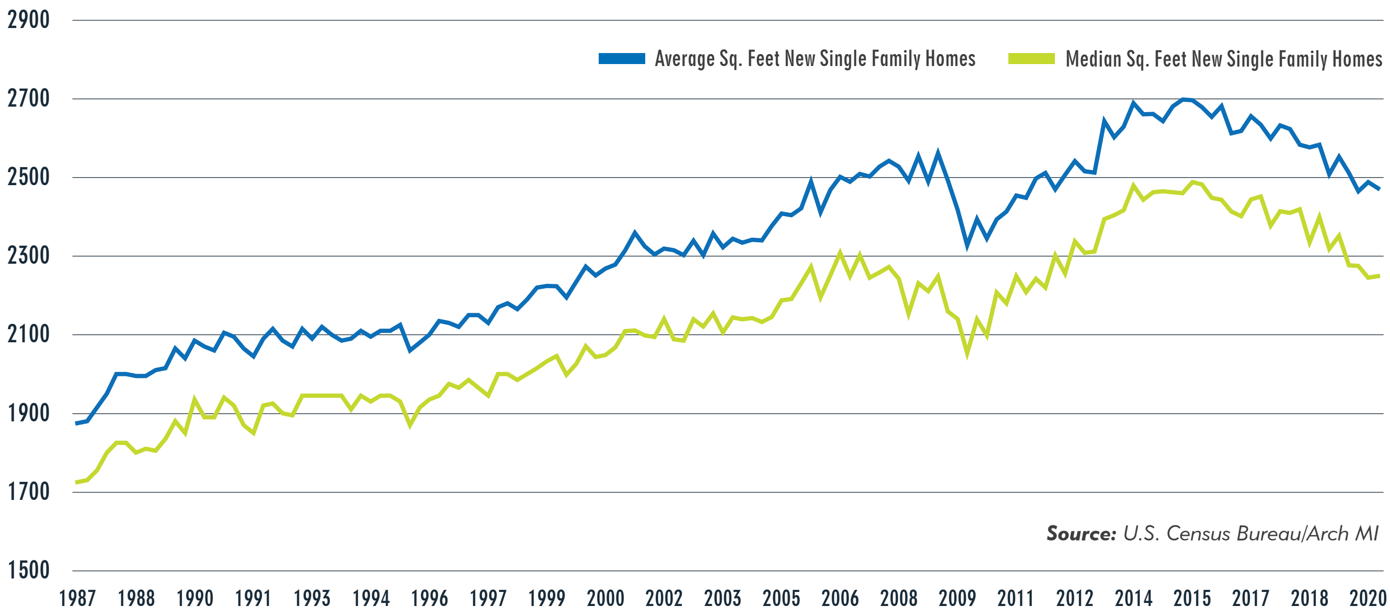
Five Housing Trends to Watch in 2021 *(continued from page 7)*

3. Big is back: New construction will pivot to more square footage.

One thing we can say for sure about the pandemic: Your home has never been more important. Demand has been strong for housing, in part because many families realized they could use more space. A shift in demand toward larger homes is clear, based on the data on the median square footage of pending home sales,[6] which has been trending upwards since May.

Builders are agile and likely to respond to this shift in demand. You can see from the following chart that the average (and median) square footage of new homes peaked in 2015 and had been trending downward as builders responded to strong demand close to city centers. This trend is likely to reverse over the next few years as construction migrates to less dense areas and home offices become more common.

Average and Median Square Footage of New Homes



4. The single-family rental market will continue to grow.

Demand for single-family rentals has increased due to the pandemic. So much so that rents have been increasing. Low expected returns on other investments suggest more mom-and-pop investors will view housing as the only game in town. More importantly, institutional investors continue to expand. These landlords have the capital and desire to expand from their current single-digit share of the rental market.

- Institutional money continues to flow in. For example, Invitation Homes, owner of about 80,000 houses, has been adding roughly $200 million in properties each quarter and recently raised an additional $1 billion.
- Some rental firms are looking to buy houses from people in trouble and rent them back, so the occupants don't have to move. This relates back to our point earlier that the end of forbearance programs shouldn't result in falling home prices.
- The housing market has strong fundamentals, which act like a giant shock absorber to the recent economic earthquake.

[6] *Data is available from Redfin at https://www.redfin.com/news/data-center/.*

5. **Administrative actions may become more interesting.**
   The likelihood of a continuation of split control of the federal government in all probability will lead to the sustained use of executive orders rather than legislative solutions to address key policy issues.

   Split control of government is the most negative outcome because it would be difficult to get much done.

   The split Congress is almost certain to force President-elect Joe Biden to govern from the middle. That includes nominating candidates to head government agencies that will be acceptable to the Republican-controlled Senate that needs to approve them.

   One thing is certain in the Senate: It will have a new chairman of its Banking, Housing & Urban Affairs Committee. The Republican cap of six years for committee chairs will require the current committee chairman, Mike Crapo of Idaho, to turn over the gavel to Pennsylvania's Pat Toomey. But Toomey will serve for only two years as he announced he won't stand for re-election in 2022. That is likely to limit the chance for passage of significant legislative proposals, such as the never-ending quest for housing finance reform.

   Specific to housing, we should expect quick executive action to restore the Affirmatively Furthering Fair Housing rule, which the Trump administration ended earlier this year.

   We believe conditions will remain generally favorable for housing under any outcome due to favorable demographics, interest rates and undersupply.

   For more housing policy analysis and podcasts, check out Arch MI's Capital Commentary and the Arch Mortgage Insurance PolicyCast at insights.archmi.com/housing-policy.

What Is Driving the Shortage of Homes for Sale?

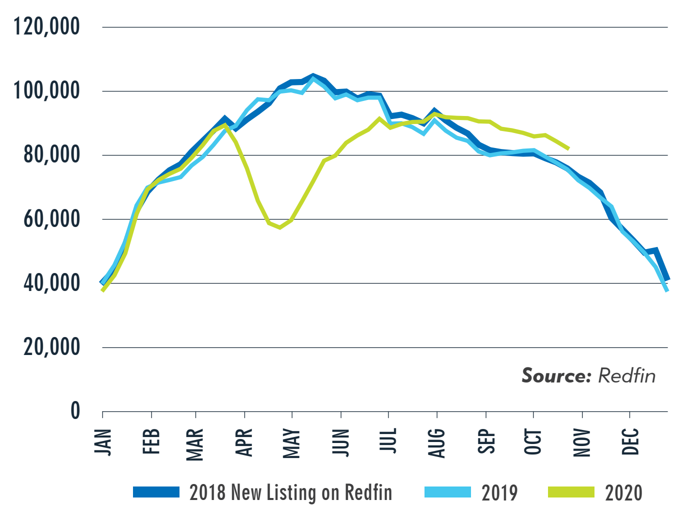
At least three important factors are driving the current shortage of homes for sale.

1. **Exceptional demand.**
   This is because of record-low interest rates and an increased need for space for home offices, exercise equipment, etc.

2. **"Missing" new listings because of the pandemic.**
   Listings data suggests that many people are holding off on trading up or downsizing this year out of health concerns. Understandably, some people feel hesitant about opening up their homes for showings to potential buyers. We are also seeing fewer people moving into senior housing facilities this year.

   The following chart shows new listings by the week of the year for 2018, 2019 and 2020. New listings dropped by over a third compared to the past two years as the pandemic hit. New listings then returned to levels similar to those in recent years, but without making up most of the earlier deficit.

New Listings of Homes for Sale in All Redfin Metros



Source: *Redfin*

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What Is Driving the Shortage of Homes for Sale? *(continued from page 9)*

3. Constraints on construction.

New home construction has been held back by a perfect storm of NIMBY (Not in My Backyard) restrictions or lawsuits, a shortage of skilled labor and suitable land, and conservative builders and lenders that remember being burned by the last recession. And all that was before lumber prices shot up.

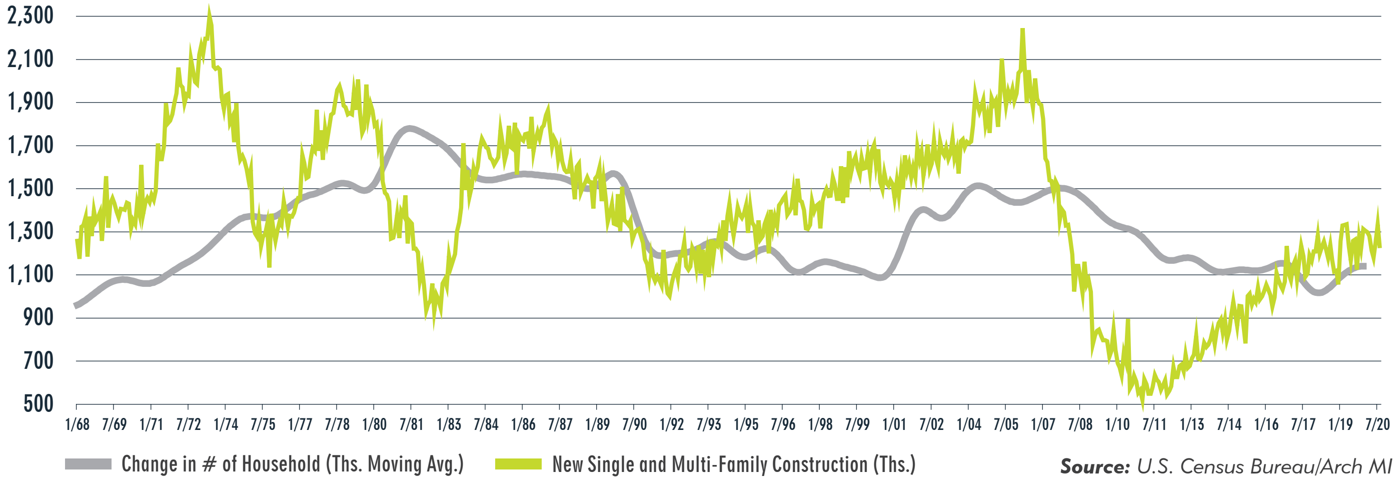
Constraints on construction over the past decade mean that we now have a supply shortage from coast-to-coast. The U.S. Census Bureau reported 1.3 million housing starts last year (both single- and multifamily), while both Moody's Analytics and the Urban Institute independently estimated that we need to add between 1.5 and 2.0 million homes every year due to a growing population and the need to replace obsolescent housing.[7] Similarly, Freddie Mac researchers[8] estimated a similar annual shortfall and that the total cumulative U.S. housing shortage is around 3.3 million units.

You can get some sense of this cumulative undersupply from years of low construction in the next chart. It shows new supply compared to the growth in the total number of households.

Before proceeding, it is worth mentioning that new construction has averaged about 10% higher than the net growth in households. That is because every year some housing becomes obsolete, is replaced by commercial uses, etc.

From the chart, we can see that construction was too high in the early 2000s, then the excess supply was absorbed via underbuilding over the past 10 years.

Net New Demand vs. New Construction



Source: *U.S. Census Bureau/Arch MI*

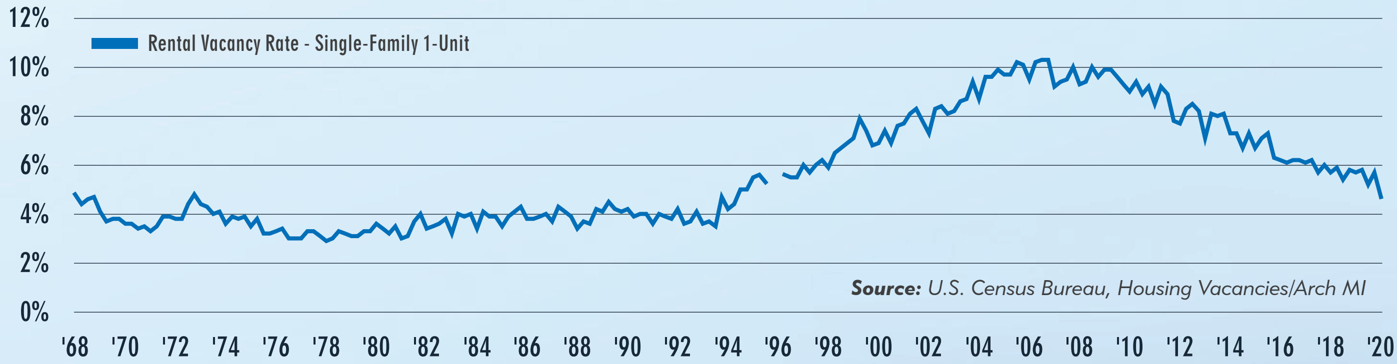
In brief, the shortage of housing is driven by high demand, fewer listings than usual and a long stretch of underbuilding.

Besides looking at construction trends, we can also detect a housing shortage in single-family rental vacancy data. As you can see in the following chart, vacancy rates are trending down and are at 25-year lows. This, in turn, has resulted in rents rising faster than inflation for many years, also indicating a shortage.

[7] *Moody's Analytics: "2020 U.S. Economic Outlook: Two-Handed Economist." Urban Institute: January 2020 Housing Chartbook.*

[8] *Freddie Mac, "The Housing Supply Shortage: State of the States," Feb. 27, 2020. They estimate a shortfall of 3.3 million units but it varies between 0.9 million and 4 million units, depending on assumptions.*

U.S. Rental Vacancy Rates for Single-Family Homes



Source: *U.S. Census Bureau, Housing Vacancies/Arch MI*

In summary, three factors are driving the shortage of homes for sale: high demand, homes being held off the market and a long-standing lack of new construction.

Focusing our thinking on these three factors suggests several things are likely to happen down the road:

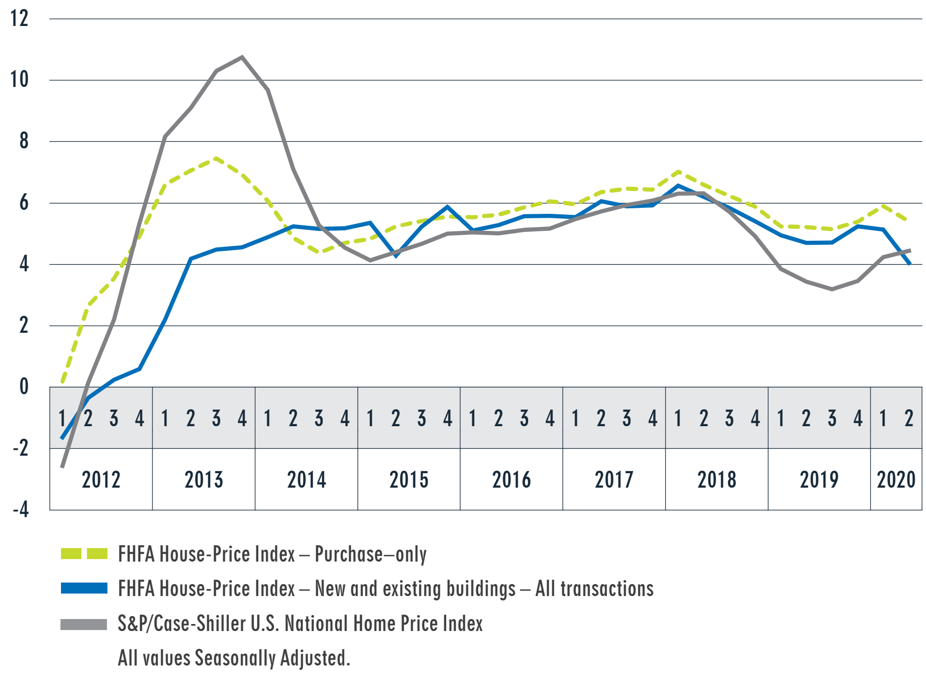
- Most of the "missing" new listings should come on the market once the pandemic is over. Given the record-low supply of homes for sale right now, that should not be a problem.
- Construction is likely to increase by 10% or more for several years until the market becomes more balanced between buyers and sellers. However, given the wide range of constraints on builders, a dramatic increase would take many years. Thus, any risk of a future oversupply appears to be a long way off.
- Home prices will rise faster than incomes until demand cools or listings increase dramatically.

Of the factors driving the shortage of homes, the biggest wildcard is demand. Probably the largest risk to demand is that it is inevitable that interest rates will increase at some point. That will slow sales and home-price growth, probably for a year or more. We saw exactly this dynamic as recently as 2018, when the 30-year fixed-rate mortgage increased from 4% to 4.9%, and both sales and price growth weakened dramatically in higher-cost areas such as California.

Taking all this together suggests strong near-term home-price growth. That should be followed by the housing market becoming more balanced after the pandemic is over, as more people become willing to list their homes and builders slowly ramp up new construction.

Housing and Mortgage Market Indicators

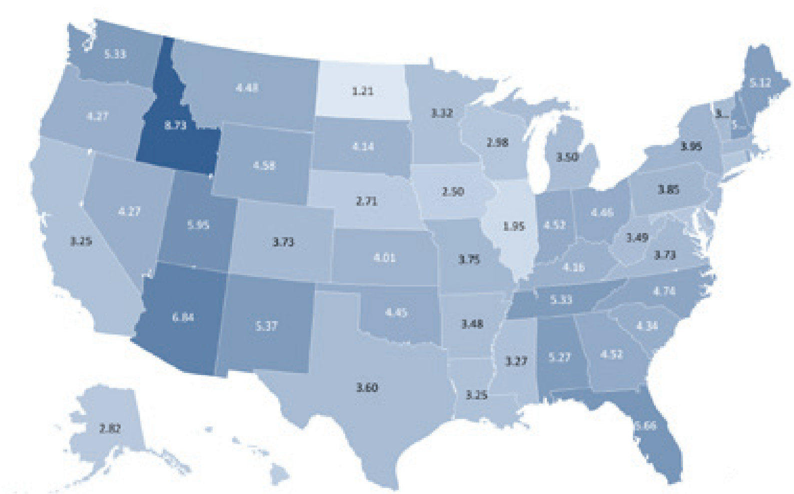
YEAR-OVER-YEAR PERCENTAGE CHANGE IN HOME PRICES



National home prices continue to grow. There was a pronounced slowdown early in the pandemic and home prices have accelerated since then. The year-over-year growth rate ranged between 4% and 6% in the major home price indices. The various measures of price growth are telling a consistent story that the market is cooling from what was an overheated situation in many areas, even though the home price indicators differ in methodologies and data sources (i.e., the FHFA only uses GSE loans, while the Case-Shiller index includes many jumbo and other types of loans). The Case-Shiller index is the weakest, consistent with sales listing data indicating a weaker market for more expensive homes.

Sources: *CoreLogic Case-Shiller/FHFA/Moody's Analytics/Arch MI*

YEAR-OVER-YEAR PERCENTAGE CHANGE IN HOME PRICES



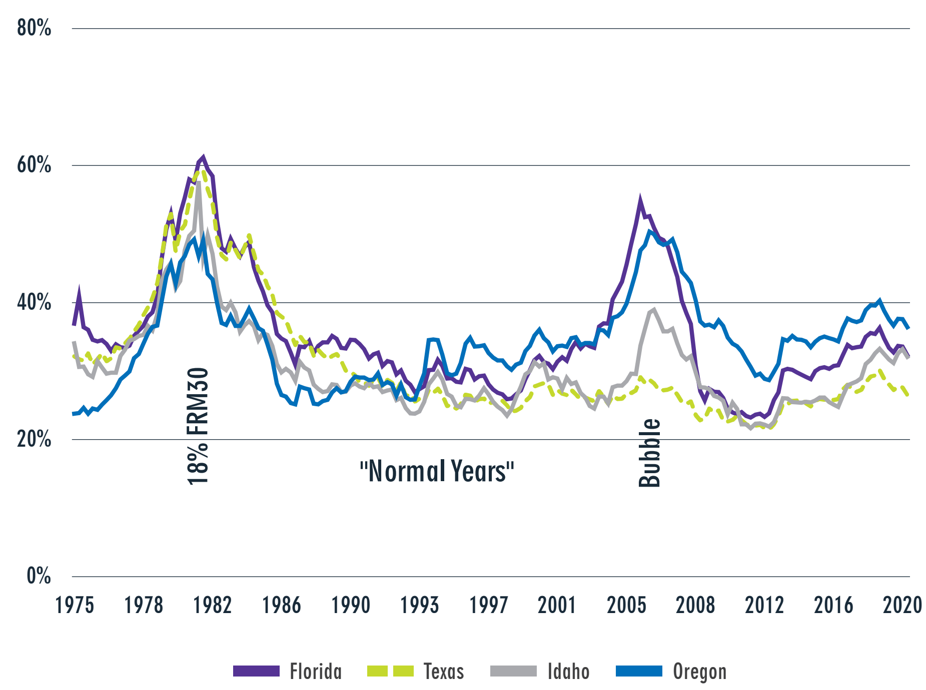
Home prices are up in all 50 states over the past year. The fastest growth in home prices was in Idaho, Arizona, Montana, New Mexico and Wyoming. The slowest growth was in Hawaii, Illinois, North Dakota, Alaska and Iowa.

Sources: *FHFA All-Transactions HPI/Moody's Analytics/Arch MI*

SA *stands for Seasonally Adjusted.*

Housing and Mortgage Market Indicators

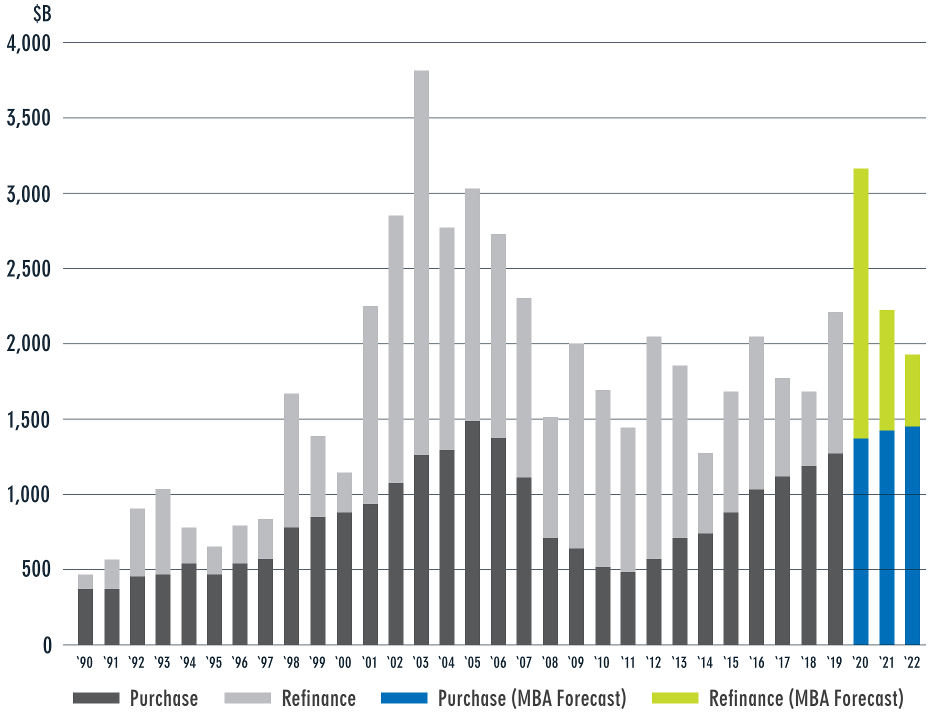
PERCENTAGE OF MEDIAN INCOME NEEDED FOR PAYMENTS ON A MEDIAN-PRICED HOME



Housing affordability improved because of lower mortgage rates. It remains better than historic norms nationally. Arch MI's affordability measure is the percentage of a median income required for monthly payments on a median-priced home. The U.S. overall fell from 30% to 27% due to lower interest rates. This is a calculation and not based on the front-end DTIs of actual loans. Calculations are based on pre-tax median household income, a 10% down payment, escrow of annual expenses of roughly 1.75% of the initial home price (for insurance and property taxes) and the prevailing 30-year fixed rate, plus 0.75% to cover mortgage insurance and risk add-ons.

Sources: *U.S. Census Bureau/Freddie Mac/NAR/Arch MI*

ORIGINATIONS IN MILLIONS OF $

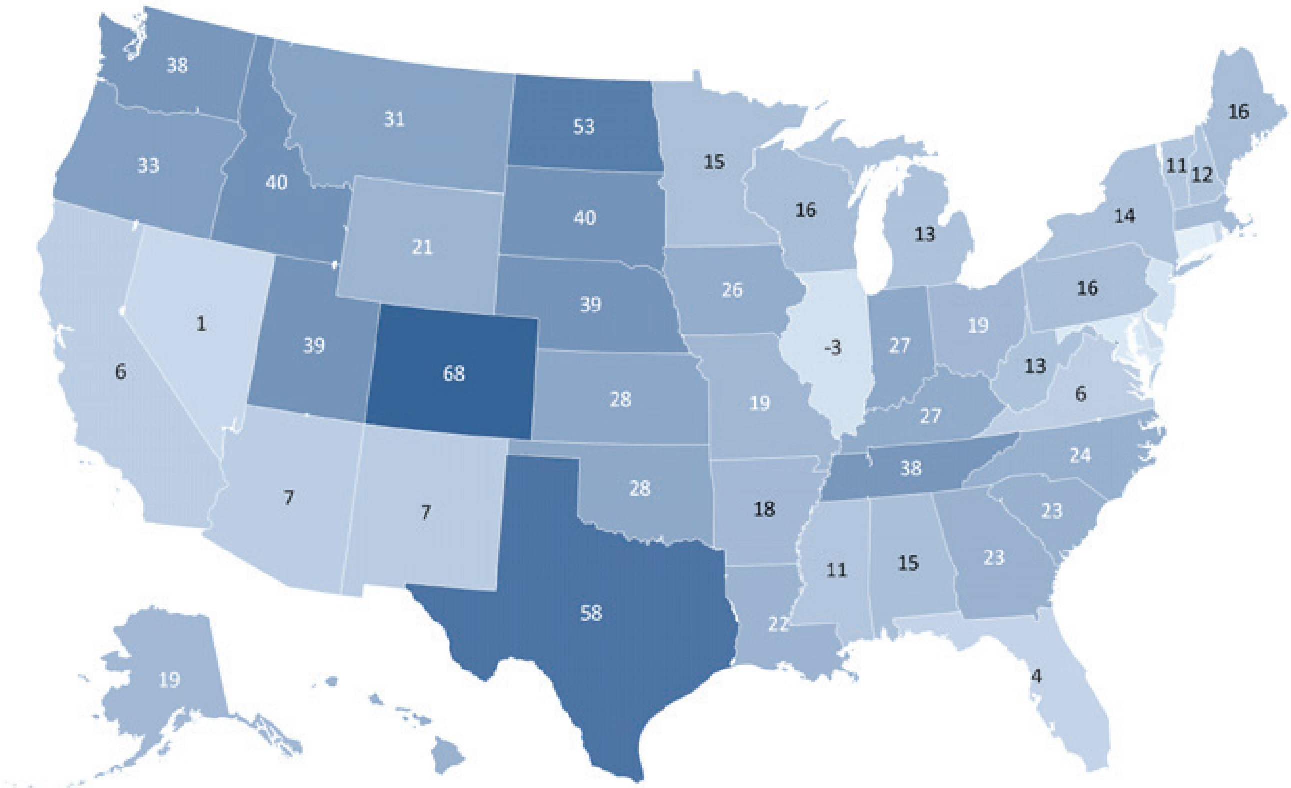


Future mortgage originations are likely to tilt toward purchase loans. 2020 refis are projected to be over $1,700B, nearly double last year's, while purchase originations of $1,400B should be up 10%. Dollar volume of purchase mortgage originations is projected to continue its upward trend for the next two years, with refis declining 55% next year and another 40% in 2022.

Source: *Mortgage Bankers Association (MBA)*

Housing and Mortgage Market Indicators

HOME PRICE PERCENTAGE CHANGE FROM PRIOR PEAK (2005–2008)

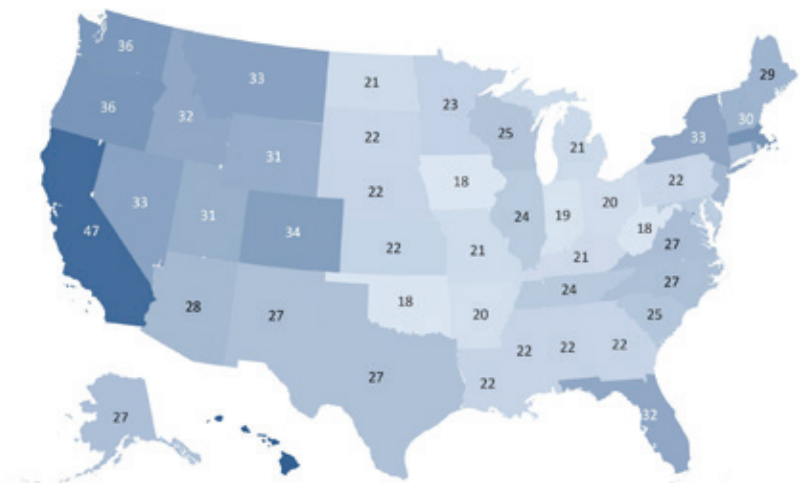


Home prices are still below their prior peak in five states: Connecticut (-11%), Maryland (-6%), New Jersey (-4%), Illinois (-3%) and Delaware (-1%). Cumulative home-price growth has varied widely since prices last peaked around 2006 (we measure since the peak for each state, which varied around 2006/2007). The largest cumulative home-price growth since home prices peaked is in Colorado, followed by Texas and North Dakota, which have gone up more than twice as fast as the national average of 21%. This chart is intended to aid understanding of market strength over the past decade and doesn't indicate any overvaluation since it doesn't account for changes in income or reasonableness of prices at their prior peak. Values shown are in nominal (not inflation-adjusted) terms. To adjust for inflation, simply subtract the 29% cumulative inflation since the end of 2006. Adjusted for inflation, home prices are still below their pre-crisis peak in 35 states.

Sources: *FHFA/Moody's Analytics/Arch MI*

Housing and Mortgage Market Indicators

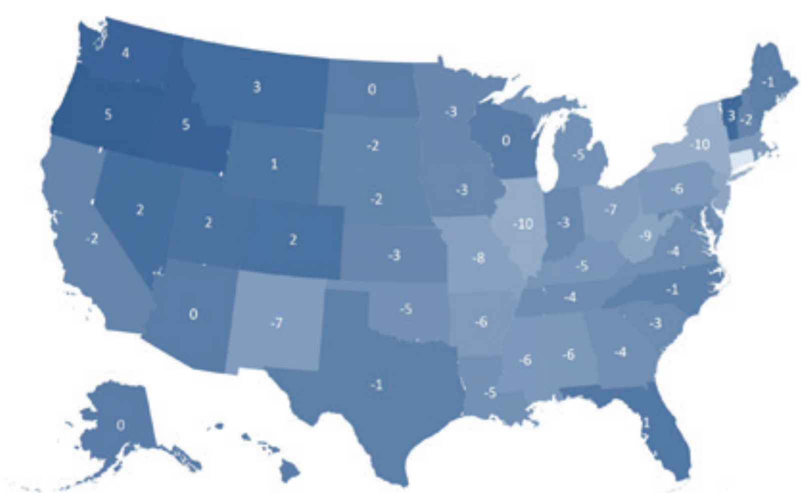
PERCENTAGE OF MEDIAN INCOME NEEDED FOR PAYMENTS ON A MEDIAN-PRICED HOME



Our affordability measure is the percentage of median income required to make monthly mortgage payments on a median-priced home. Lower values indicator better affordability, such as in West Virginia, Iowa and Oklahoma. It is a calculation and not based on the front-end debt-to-income ratios (DTIs) of actual loans. Calculations are based on pre-tax median household income, a 10% down payment, escrow of annual expenses of roughly 1.75% of the initial home price (for insurance and property taxes, which we vary by state) and the prevailing 30-year fixed rate, plus 0.75% to cover mortgage insurance and risk add-ons.

Sources: *U.S. Census Bureau/Freddie Mac/NAR/Moody's Analytics/Arch MI*

DIFFERENCE IN PERCENTAGE OF MEDIAN INCOME NEEDED NOW VS. NORMAL YEARS

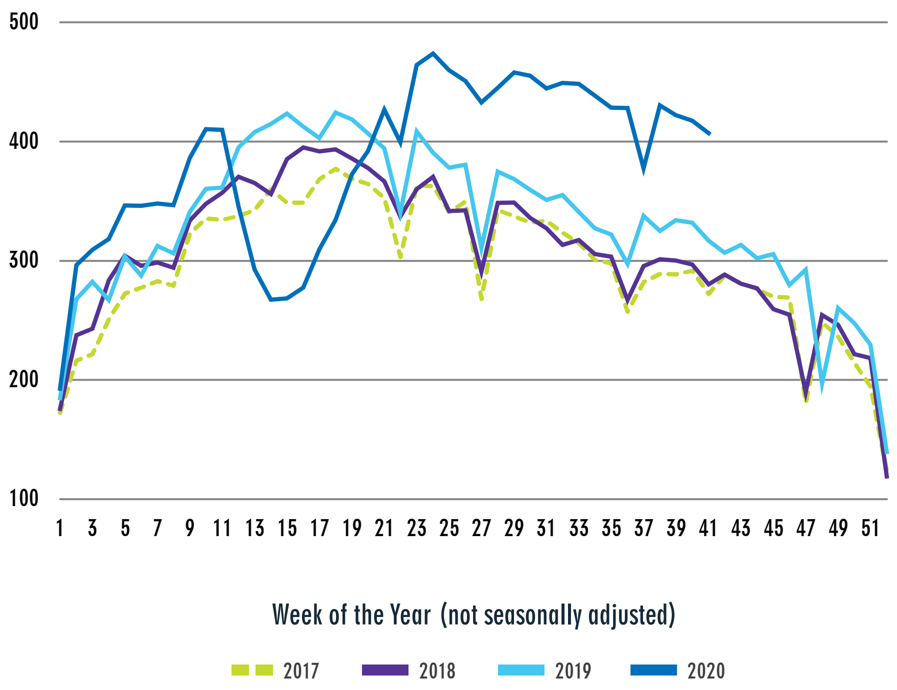


Affordability is worse than historical norms in the Northwest and Mountain West. This map shows how affordability differs now compared to historical norms; a value of 5 indicates mortgage payments on the same home takes 5% more of a borrower's income than it did many years ago. It is the percentage of median income needed for monthly mortgage payments on a median-priced home (shown above) minus the average from the pre-bubble years between 1987 and 2004. For the U.S., the median-priced home only requires 27% of the median income, down 7% from its 1987–2004 average of 34%. Oregon has the worst state affordability now compared to its 1987–2004 average, followed by Idaho and Washington.

Sources: *U.S. Census Bureau/Freddie Mac/NAR/Moody's Analytics/Arch MI*

Housing and Mortgage Market Indicators

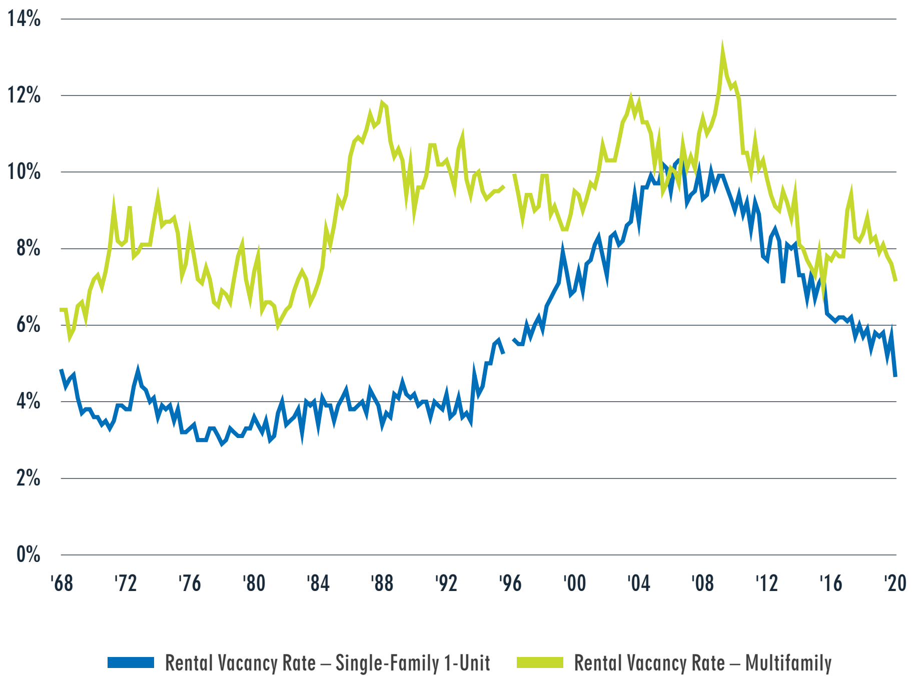
MBA MORTGAGE PURCHASE APPLICATION INDEX



Purchase mortgage applications are at 12-year highs for this time of year. The weekly MBA purchase mortgage applications index (for conventional loans) has recovered from the early spring dip and has been around 25% higher than a year ago for over four months.

Sources: *MBA/Arch MI*

U.S. RENTAL VACANCY RATE

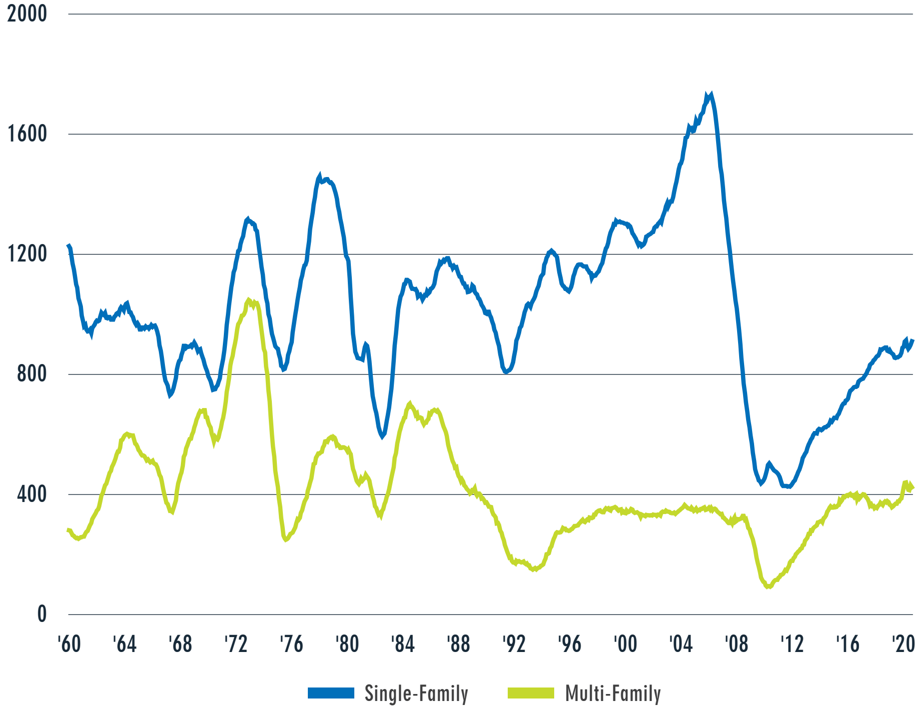


The U.S. single-family rental vacancy rate continued to fall to the lowest level since 1994, at 4.7% in the second quarter. This suggests a shift in demand from multifamily to single-family rental. Sustained low rental vacancy rates indicate a tight housing market going into the pandemic.

Sources: *U.S. Census Bureau/Moody's Analytics/Arch MI*

Housing and Mortgage Market Indicators

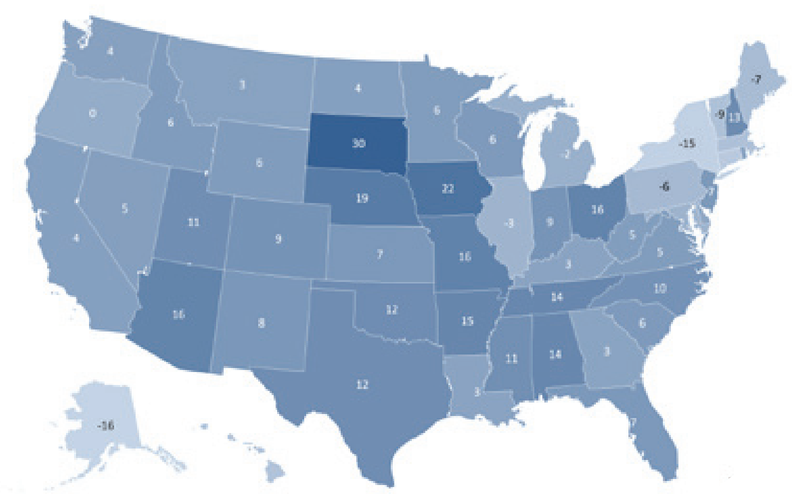
ANNUAL HOUSING STARTS, IN THOUSANDS



Housing starts bottomed out during the peak of the lockdowns. Single-family housing starts have recovered to their recent peak in February of one million units (seasonally adjusted annual rate) and multifamily starts were around an annualized rate of 400,000 units a year. The chart smooths out highly volatile monthly data by taking a 12-month moving average.

Sources: *U.S. Census Bureau/Moody's Analytics/Arch MI*

ANNUAL PERCENTAGE CHANGE IN HOUSING STARTS

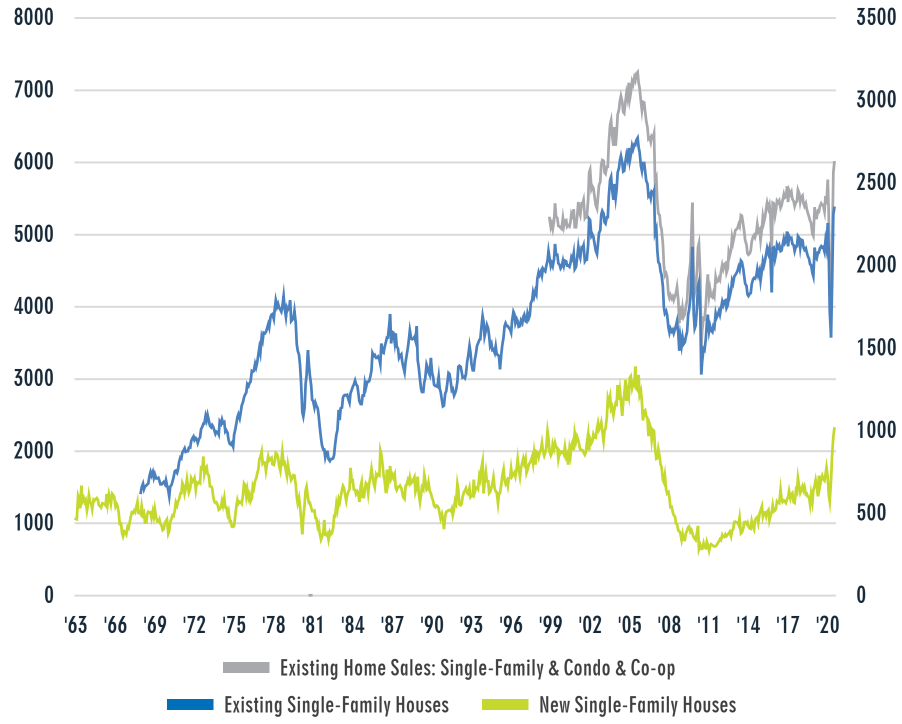


The percentage change in housing starts varies widely and is strongest in the middle of the country.
The growth in single-family housing starts is weakest in the Northeast. Housing starts increased the most in South Dakota, followed by Iowa and Nebraska. To get a clearer understanding of the trend, unlike numbers seen elsewhere, we smooth the data by showing a 12-month moving average to dampen short-term volatility due to weather, survey limitations, etc.

Sources: *U.S. Census Bureau/Moody's Analytics/Arch MI*

Housing and Mortgage Market Indicators

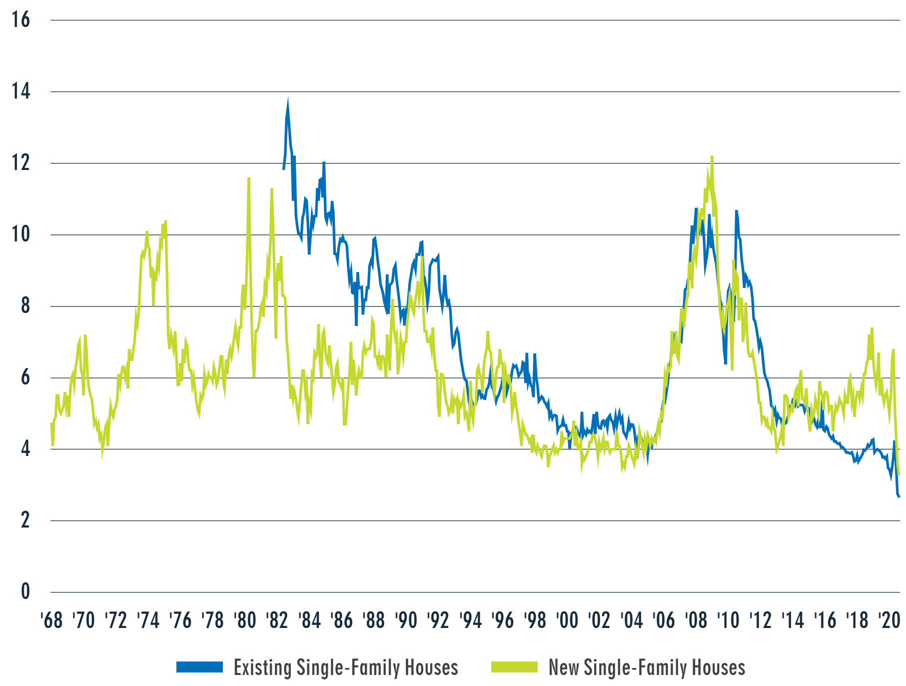
NEW AND EXISTING HOME SALES IN THOUSANDS



Both new and existing home sales have bounced back strongly. Sales of existing homes (including single-family, condo and co-ops) were 6.0 million units (after annualizing the monthly number) in August. That was 10% higher than the year before. Sales of newly constructed homes were 776,000 units (annualized rate), up 7% from a year ago. Existing home sales are based on the closing of contracts signed one to two months earlier, while new home sales are counted at the time of signing.

Sources: *NAR/U.S. Census Bureau/ Moody's Analytics/Arch MI*

MONTHS' SUPPLY OF HOMES FOR SALE



The inventory of homes for sale hit record lows. The months' supply of existing single-family homes for sale (total current listings ÷ last month's sales) **was 2.7** months at the end of August, compared to 3.8 months a year ago. The months' supply of new homes for sale, shown in green, declined sharply to **3.3 months.** This is much lower than its post-crisis high of 7.4 months reached at the end of 2018 and lower than its long-term average of 6.1 months.

Sources: *NAR/Moody's Analytics/Arch MI*

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[1] *Subject to any applicable regulatory requirements, Arch MI reserves the right to terminate the program at any time without notice.*

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Cautionary Note Regarding Forward-Looking Statements

The Private Securities Litigation Reform Act of 1995 provides a "safe harbor" for forward-looking statements. This release or any other written or oral statements made by or on behalf of Arch Capital Group Ltd. and its subsidiaries may include forward-looking statements, which reflect our current views with respect to future events and financial performance. All statements other than statements of historical fact included in or incorporated by reference in this release are forward-looking statements.

Forward-looking statements can generally be identified by the use of forward-looking terminology such as "may," "will," "expect," "intend," "estimate," "anticipate," "believe" or "continue" or their negative or variations or similar terminology. Forward-looking statements involve our current assessment of risks and uncertainties. Actual events and results may differ materially from those expressed or implied in these statements. A non-exclusive list of the important factors that could cause actual results to differ materially from those in such forward-looking statements includes the following: adverse general economic and market conditions; increased competition; pricing and policy term trends; fluctuations in the actions of rating agencies and the Company's ability to maintain and improve its ratings; investment performance; the loss of key personnel; the adequacy of the Company's loss reserves, severity and/or frequency of losses, greater than expected loss ratios and adverse development on claim and/or claim expense liabilities; greater frequency or severity of unpredictable natural and man-made catastrophic events, including pandemics such as COVID-19; the impact of acts of terrorism and acts of war; changes in regulations and/or tax laws in the United States or elsewhere; the Company's ability to successfully integrate, establish and maintain operating procedures as well as consummate acquisitions and integrate the businesses the Company has acquired or may acquire into the existing operations; changes in accounting principles or policies; material differences between actual and expected assessments for guaranty funds and mandatory pooling arrangements; availability and cost to the Company of reinsurance to manage the Company's gross and net exposures; the failure of others to meet their obligations to the Company; changes in the method for determining the London Inter-bank Offered Rate ("LIBOR") and the potential replacement of LIBOR and other factors identified in the Company's filings with the U.S. Securities and Exchange Commission ("SEC").

The foregoing review of important factors should not be construed as exhaustive and should be read in conjunction with other cautionary statements that are included herein or elsewhere. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements. The Company undertakes no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

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