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The State of the State's Housing Market

Utah's housing market faces a severe imbalance that creates record price increases for homeowners and renters.

October 2021

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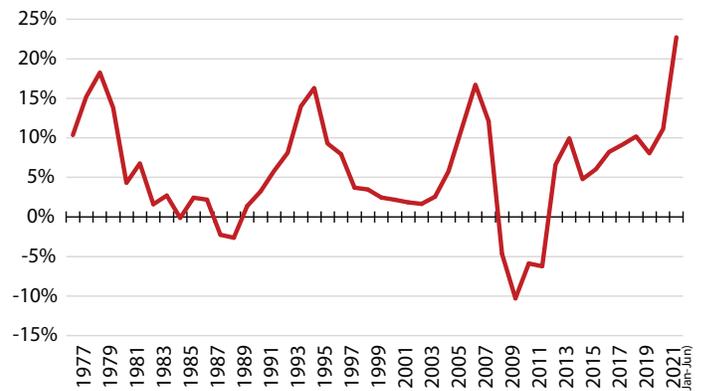
Analysis in Brief

Utah's housing market faces a severe imbalance that creates record price increases for homeowners and renters. The COVID-19 pandemic made the housing shortage worse by disrupting supply chains for building materials and distorting demand through lower interest rates and increased liquidity. For renters, the path to ownership narrowed further. Rental vacancy rates dropped to record levels and rental rates increased dramatically in the large Wasatch Front counties. Analysts expect price acceleration and production to remain positive in 2022. A housing bubble looks unlikely.

Key Findings

- Despite record increases in prices, a housing bubble looks unlikely**—In Utah, both brief and prolonged price declines have always been associated with job losses and recessions. Neither appears likely in the next two to three years. Furthermore, global and national financial conditions are much improved over the 2008–2011 period, when Utah experienced its only housing bubble with 15 consecutive quarters of declining housing prices.
- The Utah housing market has a history of extreme price spikes**—Home prices in Utah have a history of rapid acceleration. In the second quarter of 1994, the state led the country with an 18.3% increase in prices, and led again in the second quarter of 2006 with a 17.2% increase. But both these price spikes pale in comparison with the 2021 second-quarter increase of 28.3%, which ranks second among all states.
- Market conditions confirm Utah's housing shortage**—Market indicators confirm Utah's housing shortage continues, whether measured by the gap between housing units and households or "on the ground" data, such as days on market, inventory of vacant unsold new homes, and rental vacancy rates.
- COVID-19 created unprecedented conditions in the housing market**—COVID-19 *disrupted* the supply chain for building materials—30% of construction materials are imported from China—and *disrupted* the availability of labor. On the demand side, the Federal Reserve *distorted*

Annual Percent Change in Housing Prices in Utah, 1976–2021



Source: Federal Housing Finance Agency Housing Price Index

demand through lower interest rates and an extraordinary increase in liquidity via quantitative easing. These policies triggered high rates of demand, which in turn pushed up housing prices to record-breaking levels.

- More than half of Utah's households unable to afford the median-priced home**— By the end of 2020, the median price reached \$380,000, pricing out approximately 48.5% of Utah households. As prices accelerated in 2021, more than half of Utah households are unable to afford the median-priced home. For renters, the path to ownership narrowed further. In 2019, approximately 63.1% of renter households were priced out of the median home price. In 2020, the share of renters priced out increased to 72.8%.
- Price acceleration and production are expected to remain positive in 2022**—After a record year of price acceleration and construction activity, 2022 will be dictated by mortgage rates, while demographic tailwinds are expected to keep housing demand robust for the rest of the decade. An average of eight different forecasts shows the 30-year mortgage rate at 3.1% in 2021 and climbing to 3.6% in 2022. While this isn't a dramatic rise in rates, it is expected to impact affordability and bring price acceleration in Utah to single-digit growth.

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This inaugural edition of *The State of the State's Housing Market* marks the beginning of an annual fall publication by the Kem C. Gardner Policy Institute, University of Utah. The publication will examine the most pertinent housing market issues over the past year and provide a construction and real estate forecast for the coming year. Housing prices and affordability will likely be

persistent themes, but other issues are sure to arise, some unexpectedly like a global health crisis. The purpose of the *State of the State* report is to go beyond a simple description of data and trends by providing an analytical approach to the most current issues and the implications for homeowners, renters, homebuilders, developers, and the Utah economy.

Does Utah Have a Housing Bubble?

Historical Perspective

Home prices in Utah have a history of rapid acceleration. In 1994, the state led the country with an 18.3% increase in prices, and led again in 2006 with a 17.2% increase. These nation-leading price spikes pale in comparison with the 2021 second-quarter increase of 28.3% (see Figure 1). However, in 2021, Utah didn't lead the country but ranked second to Idaho's extraordinary increase of 37.3% (see Map 1). As the map shows, the most rapid increases in housing prices are in western states. Of the 11 western states, eight have price increases of more than 20% in the past year.

The quarterly Utah data from the Federal Housing Finance Agency's Housing Price Index illustrate a strong pattern of price acceleration, culminating in a price spike followed by price deceleration. The historical data show that Utah's current price cycle is distinguished by its length and the magnitude of the price increase in 2021.

Price Acceleration Post–Great Recession

Since 2000, the median sales price in Utah for homes and condominiums has averaged over 5% growth annually (see Table 1 and Figures 2–3). At this rate, the price of the typical home doubles every 13 years. Even when adjusted for inflation

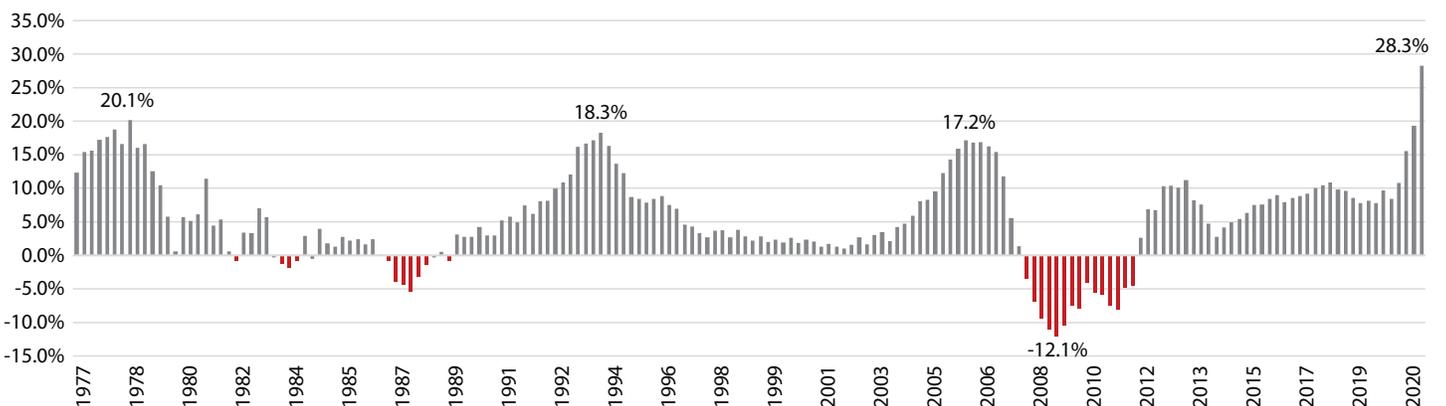
(constant dollars), housing prices in Utah have averaged increases of over 3% annually. These long-term growth rates include the 15 consecutive quarters of price declines from the second quarter of 2008 to the fourth quarter of 2011. Once the economic recovery took hold, price increases accelerated from 2011–2021, averaging nearly 10% annually. This has culminated in the second quarter of 2021 with the unexpected and unprecedented 29.0% surge in prices, despite a global pandemic and recession.

Record Housing Price Increases Include Nearly All Counties

Almost all Utah counties have experienced substantial increases in housing prices in the past year. This widespread growth is a distinctive characteristic of the past 12 months. Generally, past price upswings have been concentrated in the metropolitan areas, but over the past year prices increased by at least 20% in 21 of Utah's 29 counties (see Table 2). (Some of the smaller counties have a limited number of sales transactions. Therefore, the percent change may not be a reliable measure of change.) In twelve counties, the change was greater than 30%. Two counties, with more than 100 sales transactions, had price increases greater than 40%—Sevier and Summit counties. Only two counties saw declines, Uintah and Wayne. The 2.1% decline in Uintah reflects the county's struggling energy-based economy.

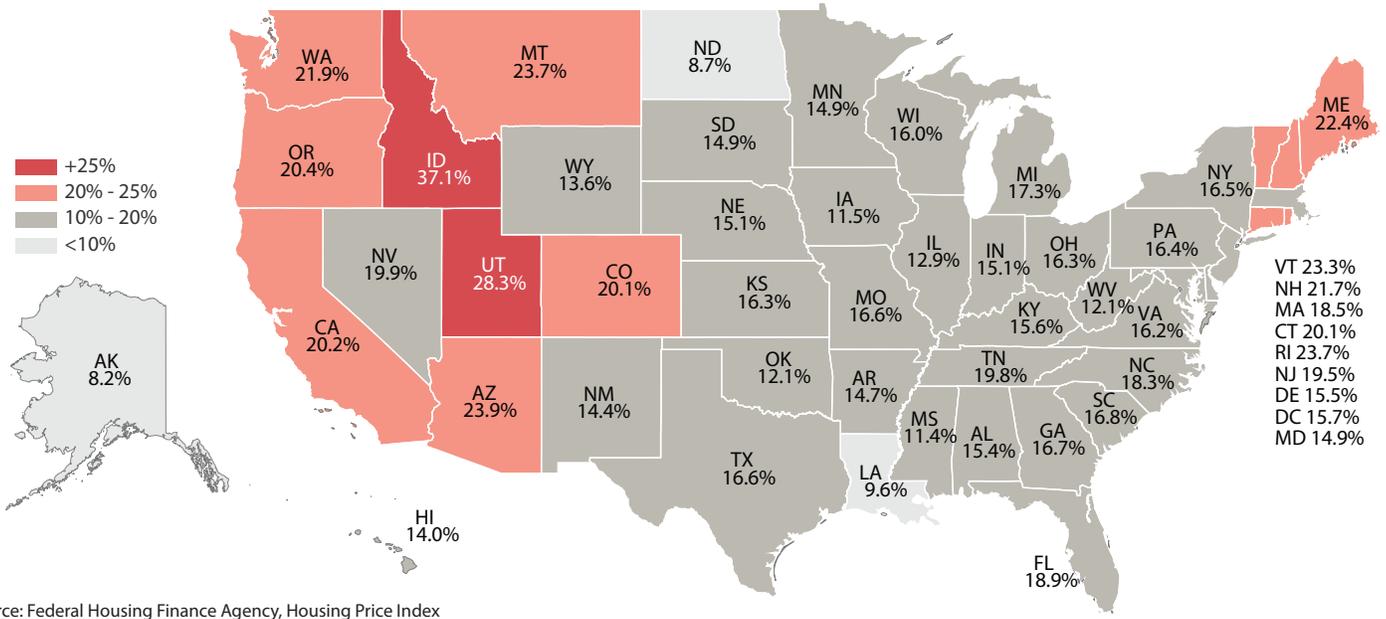
Figure 1: Year-Over Quarterly Percent Change in Utah's Housing Price Index, 1Q 1977–2Q 2021

(single-family homes)



Source: Federal Housing Finance Agency, Housing Price Index

Map 1: Year-Over Quarterly Increase in Housing Price Index, Second Quarter 2020–2021



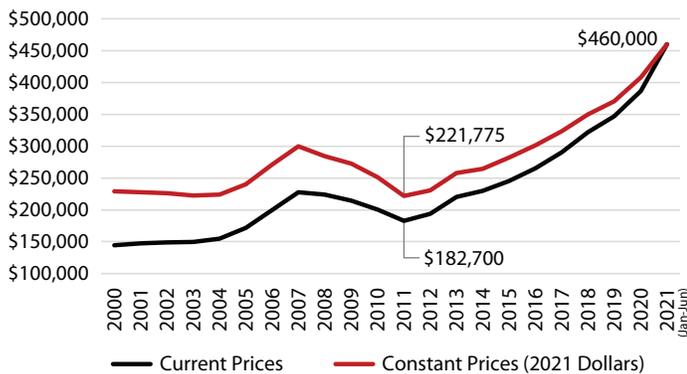
Source: Federal Housing Finance Agency, Housing Price Index

Table 1: Average Annual Change in Median Sales Price in Utah

	Long-Term 2000–2021	2011–2021	Year-Over 2nd Qtr. 2020–2021
Single-Family			
Current Prices	5.7%	9.7%	29.0%
Constant Prices	3.4%	7.6%	22.4%
Multifamily (Condominium, Townhome, Twin Home)			
Current Prices	5.5%	9.4%	30.2%
Constant Prices	3.2%	8.3%	23.3%

Source: UtahRealEstate.com

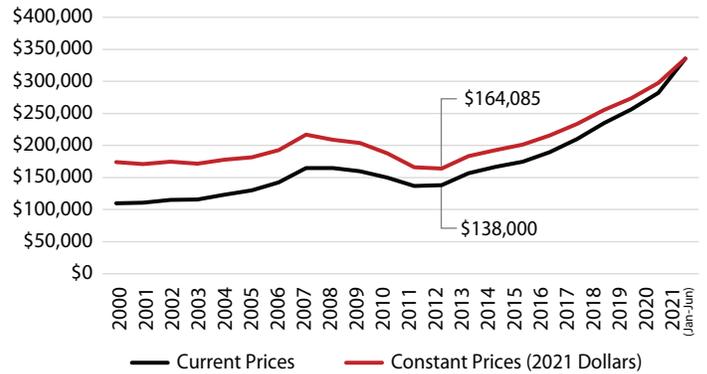
Figure 2: Median Sales Price of Single-Family Homes in Utah, 2000–2021



Source: UtahRealEstate.com

Figure 3: Median Sales Price of Multifamily Homes in Utah, 2000–2021

(condominiums, townhomes, twin homes)



Source: UtahRealEstate.com

With the drop in oil prices in 2020, exploration and drilling activity fell by 600 jobs, resulting in an 8% decline in employment (Utah Department of Workforce Services.) Wayne County’s decline is likely a result of the changing price mix of homes sold rather than an overall decline in housing prices. In Summit County, the median sales price increased by nearly \$350,000 to \$1.15 million. A neighboring county, Wasatch, had a median sales price of nearly \$758,500, the second highest priced housing market. Keep in mind, the data in Table 2 include all types of housing—single-family, condominiums, town-homes, and twin homes.

Table 2: Percent Change in Median Sales Price of Homes in Utah by County, 2020–2021

(single-family, condominiums, townhomes, and twin homes)

County	January-June 2020*	January-June 2021	Percent Change	2021 Transactions
Sevier	\$185,000	\$275,000	48.60%	121
Summit	\$801,274	\$1,150,000	43.50%	1,079
Sanpete	\$217,000	\$284,000	30.90%	122
Wasatch	\$580,000	\$758,500	30.80%	522
Iron	\$229,900	\$300,250	30.60%	823
Cache	\$270,000	\$350,000	29.60%	658
Washington	\$339,000	\$437,250	29.00%	2,882
Weber	\$272,000	\$349,650	28.50%	2,077
Utah	\$344,820	\$430,100	24.70%	5,037
Davis	\$350,000	\$432,520	23.60%	2,192
Carbon	\$138,500	\$168,000	21.30%	152
Box Elder	\$275,000	\$332,150	20.80%	352
Salt Lake	\$365,000	\$440,000	20.50%	8,405
Tooele	\$311,000	\$373,382	20.10%	696
Duchesne	\$153,250	\$183,000	19.40%	159
Uintah	\$194,000	\$190,000	-2.10%	422

Counties with less than 100 sales transactions

Morgan	\$414,750	\$657,500	58.90%	26
Rich	\$317,000	\$494,310	55.90%	58
Beaver	\$157,025	\$225,000	43.30%	45
San Juan	\$247,500	\$335,000	35.40%	38
Daggett	\$152,500	\$205,000	34.40%	10
Juab	\$269,000	\$384,999	32.80%	71
Kane	\$290,000	\$384,999	32.80%	32
Grand	\$380,000	\$435,000	14.50%	95
Millard	\$174,000	\$194,000	11.50%	39
Garfield	\$234,500	\$256,450	9.40%	23
Emery	\$143,000	\$151,000	5.60%	35
Piute	\$205,000	\$207,500	1.20%	6
Wayne	\$439,000	\$360,000	-18.20%	17

*The January-to-June timeframe was necessary to ensure a sufficient number of sales transactions.

Source: Utah Association of REALTORS

Large Cities See Substantial Price Increases

Of Utah's 15 cities with more than 50,000 population, 11 experienced price increases greater than 30% (see Table 3). Certainly for most, if not all of these cities, the gains were record-breaking. Thirty percent price increases were unheard of in Utah before 2020–2021. Layton led all major cities with an increase of 41.7%, followed by Herriman's 38.1% gain. Nine other major cities saw increases of more than 30%. Interestingly, Herriman was the only city in Salt Lake County to rank in the top half of the 15 large cities. Lehi, Logan, St. George, Ogden, Provo, and Orem registered larger increases than most major cities in Salt Lake County.

Table 3: Year-Over Change in Median Sales Price of Single-Family Homes in Large Cities, 2Q 2020–2Q 2021

(Cities with over 50,000 population and >100 sales transactions*)

City	2nd Qtr. 2020	2nd Qtr. 2021	Percent Change
Layton	\$355,910	\$504,289	41.7%
Herriman	\$449,000	\$620,000	38.1%
Lehi	\$408,500	\$556,000	36.1%
Logan	\$259,000	\$350,000	35.1%
St. George	\$415,000	\$554,700	33.7%
Provo	\$350,000	\$465,000	32.9%
Ogden	\$250,600	\$332,000	32.5%
Orem	\$344,900	\$455,000	31.9%
Sandy	\$440,000	\$575,000	30.7%
Salt Lake City	\$415,000	\$542,000	30.6%
Taylorsville	\$330,000	\$430,000	30.3%
West Valley City	\$315,000	\$405,000	28.6%
South Jordan	\$500,000	\$630,000	26.0%
West Jordan	\$379,000	\$473,000	24.8%

*Millcreek City not included due to insufficient sales transactions.

Source: UtahRealEstate.com

Double-Digit Price Increase for New Homes

While the median sales price of new homes is up 13% in the Greater Salt Lake market area, this increase is well below the price run-up prior to the Great Recession. From 2005 to 2007, the median sales price of a new single-family home in Salt Lake County jumped from \$240,384 to \$434,726, a clearly unsustainable 80% increase. With the onset of the Great Recession, the housing bubble burst as the median sales price fell to \$352,077 and did not regain the 2007 price level for 11 more years (see Table 4). The 2005–2007 housing bubble proved disastrous for the single-family home building industry, much more so than for the existing residential real estate market. But in the last few years, single-family home building has rallied.

The number of permits issued for single-family homes will likely exceed 20,000 units in 2021, a level topped only by the all-time record of 20,950 units in 2006. As demand has picked up, the price of a new home has increased. Year-over second-quarter data show the median sales price of new homes in Salt Lake County is up 16.7% and in Utah County up 15.9%. With increased land, labor, and material costs, plus rising demand, the recent price hikes for new homes are modest compared with the recent price increases for existing homes. The median price of new single-family homes is now below the median sales price of existing homes in Salt Lake and Utah counties. In Salt Lake County, the typical new home sells for \$507,441 compared with \$535,000 for an existing home, while in Utah County, the typical new home sells for \$461,566 compared with \$509,674 for an existing home. This price differential is likely

Table 4: Median Sales Price of New Detached Single-Family Homes, 2005–2021

Year	GSL Market*	Salt Lake County	Utah County
2005	\$247,955	\$240,384	\$209,062
2006	\$307,587	\$340,043	\$300,617
2007	\$353,168	\$434,726	\$334,589
2008	\$328,220	\$352,077	\$302,357
2009	\$266,475	\$242,223	\$194,333
2010	\$269,629	\$265,423	\$218,040
2011	\$273,735	\$284,883	\$217,728
2012	\$279,011	\$268,826	\$223,748
2013	\$314,767	\$326,558	\$308,082
2014	\$330,666	\$336,736	\$324,391
2015	\$341,770	\$348,200	\$338,648
2016	\$351,120	\$365,070	\$339,227
2017	\$366,582	\$383,697	\$343,236
2018	\$392,741	\$418,708	\$376,505
2019	\$404,517	\$426,815	\$393,263
2020	\$425,394	\$452,681	\$414,662
2Q2020	\$411,404	\$434,968	\$398,164
2Q2021	\$464,900	\$507,441	\$461,566
2Q % Change	13.0%	16.7%	15.9%

*GSL = Greater Salt Lake market consists of Salt Lake, Utah, Davis, Weber, Tooele, Summit, and Wasatch counties.

Source: Zonda, (formerly Metrostudy, Hanley Wood & Meyers Research)

explained by the premium paid for location. Existing homes are generally closer to employment, cultural, and commercial opportunities, thereby commanding higher prices.

Housing Prices and the Impact on Household Wealth and Debt

The wealth of Utah’s homeowners grew by as much as \$70 billion over the past year. Utah has 700,000 homeowners. Assuming an average home value of \$400,000 (a conservative estimate), the total value of owner-occupied units would be \$280 billion. A 25% price increase in housing values yields a homeowner equity gain of \$70 billion.

Price appreciation is making home ownership an attractive investment and buyers are taking on more household debt. Fourth-quarter 2020 per capita (18 and older) mortgage debt in Utah was \$49,530, up 7.9% over 2019, the second-largest increase of any state (see Table 5). Utah ranks eighth among all states and the District of Columbia in the level of mortgage debt, partly because of the state’s young population (see Table 6). But a more important factor is the high price of homes in Utah. Notice that those states ahead of Utah in Table 6 are states with higher household incomes. To participate in the housing boom and the benefits of homeownership, most new buyers in Utah must take on relatively high levels of mortgage debt.

Table 5: Top Five States Ranked by Change in Per Capita Mortgage Debt, 2019–2020

(fourth quarter)

State	2019	2020	Percent Change
Idaho	\$34,210	\$37,110	8.5%
Utah	\$45,900	\$49,530	7.9%
Kentucky	\$20,310	\$21,740	7.0%
Nevada	\$38,900	\$41,590	6.9%
Florida	\$29,970	\$31,980	6.7%
U.S.	\$34,790	\$36,710	4.0%

Note: Per capita is measured by individuals 18 years and older.

Source: New York Federal Reserve, Household Debt Statistics

Table 6: Top 10 States Ranked by Per Capita Mortgage Debt, 2020

State	Per Capita Mortgage Debt	Median Household Income
District of Columbia	\$67,370	\$92,266
Colorado	\$58,590	\$77,127
California	\$58,060	\$80,440
Hawaii	\$57,580	\$83,102
Washington	\$54,130	\$78,687
Maryland	\$53,100	\$86,738
Massachusetts	\$50,230	\$85,843
Utah	\$49,530	\$75,780
Virginia	\$48,830	\$76,456
Alaska	\$44,390	\$75,463

Note: Per capita consists of those individuals 18 years and older.

Source: New York Federal Reserve, Household Debt Statistics and U.S. Census Bureau, American Community Survey, 2019

What Does Utah’s Housing Past Tell Us About Housing Bubbles?

Housing price acceleration and deceleration/decline define price cycles. Utah is now in the fourth price cycle since the 1970s. These price cycles consist of the following:

Cycle One: 1976–1990

Cycle Two: 1991–2003

Cycle Three: 2004–2011

Cycle Four: 2012–present

The two recent cycles stand out as remarkable but in different ways. First, the third cycle that included the period of declining housing prices from 2008–2011 and second, the subsequent cycle’s prolonged period of acceleration, which is now in its ninth year (2013–2021) (see Table 7 and Figure 4).

In the aftermath of the Great Recession, housing prices fell by 15.6%. This is the only instance in the past 75 years of housing history when price declines lasted more than a few consecutive quarters. There were two single-year declines during the 1950s, a single-year decline in the 1960s, and a few consecutive quarters

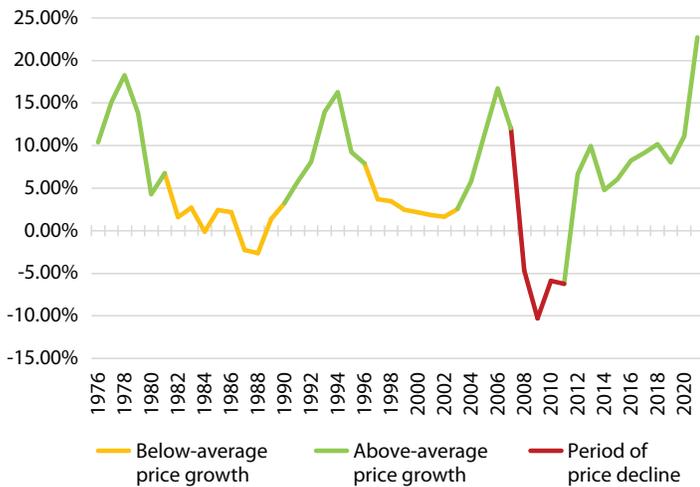
Table 7: Housing Price Cycles in Utah, 1976–2021

Price Change	Cycle Years		Total Percent Change In Index	Duration
Cycle One				
Acceleration*	1976	1981	72.7%	6 yrs
Deceleration	1982	1990	7.0%	9 yrs
Cycle Two				
Acceleration	1991	1996	69.0%	6 yrs
Deceleration	1997	2003	15.0%	7 yrs
Cycle Three				
Acceleration	2004	2007	38.6%	4 yrs
Decline	2008	2011	-15.6%	5 yrs
Cycle Four				
Acceleration	2012	2021	110.9%	9 yrs

*Acceleration is defined as years in which housing price increases were above the historic average of 5.1%, and deceleration is defined as years in which price changes were below the historical average.

Source: Federal Housing Finance Agency Housing Price Index

Figure 4: Annual Percent Change in Housing Prices in Utah, 1976–2021



Source: Federal Housing Finance Agency Housing Price Index

in 1983 and 1987–1988. But the rare occurrence of falling prices over an extended period (2008–2011), the bursting of Utah’s only housing bubble, set the stage for a long period of price acceleration. The first few years of the current acceleration were a recouping of falling prices during the Great Recession and its aftermath.

Have the nine years of rising prices created the potential for a housing bubble? Utah’s housing past, at least back to World War II, confirms the market has experienced only one housing bubble, despite nation-leading price spikes in 1994 and 2006. Every period of price decline, whether brief or prolonged, from the 1950s to 2008–2011 has been associated with a weak or contracting labor market. From the historical data, it appears that a housing bubble, with its extended price decline, must be associated with a substantial loss in jobs. For Utah to experience a housing bubble in the near term it would require a loss of jobs, an unlikely prospect in the next few years.¹

Furthermore, Utah’s only housing bubble occurred during the first U.S. financial crisis since the Great Depression. Financial crises are much rarer, more serious, and destructive than recessions. The 2008 financial crisis was precipitated, in large part, by loosened banking regulations, reckless lending practices (subprime loans), and risky financial innovations (mortgage-backed securities and collateralized debt obligations), all of which led to a dangerously leveraged global financial market. These conditions are not present in 2021.

The most likely outcome for housing prices in Utah over the next two to three years is the beginning of a period of price moderation. A period of extended price declines created by a bursting bubble is extremely unlikely.

With Record Levels of Residential Construction, Does Utah Still Have a Housing Shortage?

Housing Shortage as Measured by Households and Housing Units

The commonly used housing shortage measure compares the increase in households to the increase in housing units. This method assumes that an additional household requires an additional housing unit. This assumption is consistent with the U.S. Census Bureau’s methodology, which reports occupied housing units and households as equal and interchangeable estimates.

A housing shortage occurs when the growth in households exceeds the growth in housing units, historically an uncommon condition in Utah. A review of changes in households and housing units shows that from the 1970s through the 2000s, the decadal growth in housing units exceeded the growth in households by nearly 15% (see Table 8). The surplus is explained, in part, by the addition of units that are not occupied by a full-time resident (household), such as second homes, recreational condominiums (timeshare units), and cabins.

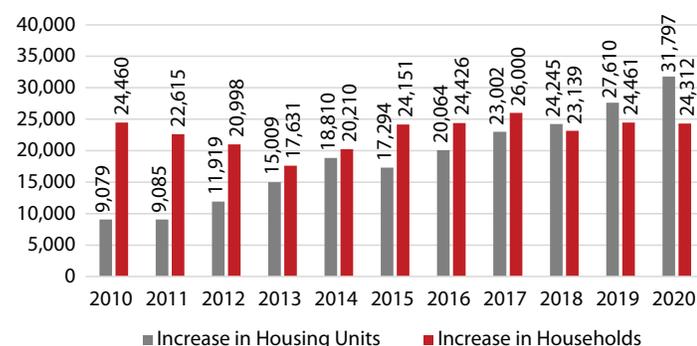
Since 2010, however, the housing-units-to-households relationship has flipped, with additional households outnumbering additional housing units, thus creating Utah’s first prolonged

Table 8: Change in Utah Households and Housing Units by Decade, 1970–2009

Decade	Increase in Households	Increase in Housing Units	Increase in Housing Units Compared to Increase in Households
1970s	150,669	174,241	Higher by 15.6%
1980s	88,670	108,382	Higher by 22.2%
1990s	164,008	170,206	Higher by 3.8%
2000s	176,411	213,227	Higher by 20.9%
Total	579,758	666,056	Higher by 14.9%

Source: U.S. Census Bureau

Figure 5: Annual Increase in Housing Units and Households in Utah, 2010–2020



Source: Kem C. Gardner Policy Institute, University of Utah

Table 9: Cumulative Shortage of Housing Units in Utah, 2010–2020

Year	Additional Households Compared to Additional Housing Units	Year	Additional Households Compared to Additional Housing Units
2010	+15,381	2016	+4,362
2011	+13,530	2017	+2,998
2012	+9,079	2018	-1,106
2013	+2,622	2019	-3,149
2014	+1,400	2020	-7,485
2015	+6,857	Total	+44,489

Source: Kem C. Gardner Policy Institute, University of Utah

housing shortage. Each year, from 2010 to 2017, the growth in households was greater than the growth in housing units, although the gap gradually declined over the seven-year period. By 2018 and through 2020, the number of new housing units finally outpaced new households (see Figure 5).

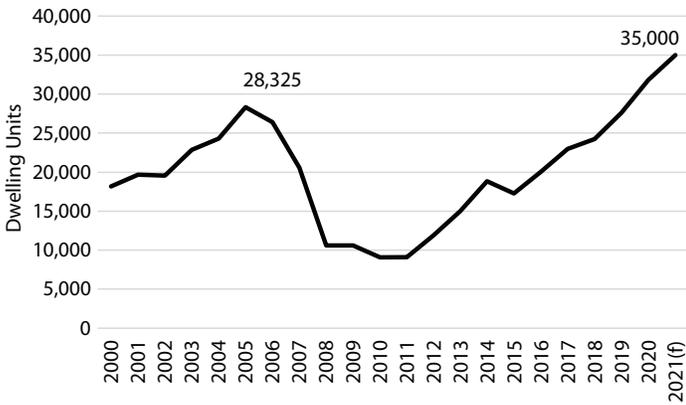
The cumulative shortage from 2010 to 2020 totals 44,500 housing units. This should not be interpreted as leading to 44,000 homeless households. Rather, the shortage has created record low rental vacancy rates, the smallest supply of unsold vacant new homes, and the smallest supply of vacant for-sale existing homes. In other words, the shortage has removed vacant units from the housing market, an unhealthy condition leading to higher housing prices and rental rates. Given the sizeable gap between household growth and housing units, it will take several years for the housing market to return to a healthy condition.

Market Conditions Confirm Utah’s Housing Shortage

Another measure of a housing shortage looks at conditions “on the ground.” The housing market has three entry points: buying a new home, buying an existing home, or renting a unit. All three points of entry show stress from demand outstripping supply.

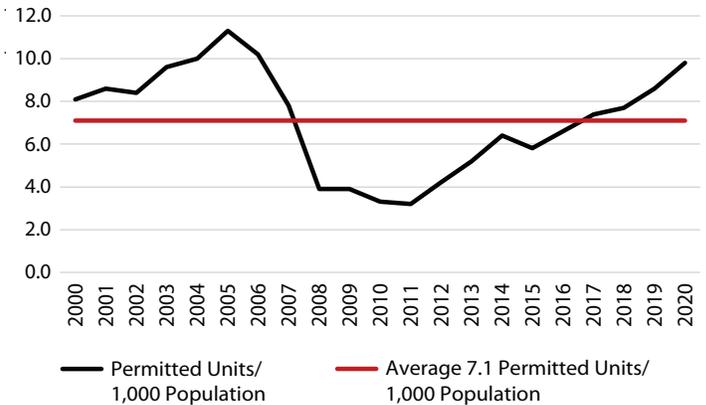
New Home Market – Homebuilding is booming as builders respond to the housing shortage. In 2020, residential construction set an all-time record with building permits issued for 31,797 new dwelling units, and through July of 2021 the industry is on pace for 35,000 permitted units (see Figure 6). While 2020 and 2021 will be record-setting years in sheer numbers, adjusting for Utah’s population growth gives a slightly different result. The peak production years were 2004–2006, measured by the number of permitted units per 1,000 population. In each of those years, 10 to 11 housing units were permitted per 1,000 population, slightly higher than the 9.8

Figure 6: Residential Building Permits Issued for Dwelling Units in Utah, 2000–2021



Source: Kem C. Gardner Policy Institute, University of Utah

Figure 7: Permitted New Residential Units per 1,000 Population, 2000–2020



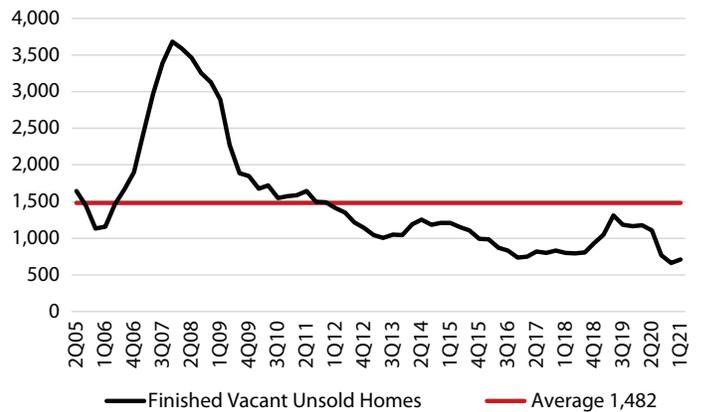
Source: Kem C. Gardner Policy Institute, University of Utah

units in 2020 (see Figure 7). Nevertheless, whether measured in raw or per capita numbers, the data make clear that the Utah home-building industry is booming. But despite the high level of construction activity, signs of a shortage persist. The number of "finished vacant unsold homes" is at the lowest level on record, down to only 700 units. Typically, this cushion of supply runs at about 1,500 units, but the housing shortage has compressed availability (see Figure 8). A corollary to the number of vacant new homes is the months of available supply. The months of supply typically is two months. Currently, supply is down to two weeks, the lowest in 15 years (see Figure 9).

Existing Home Market – Even the wildest days of the 2005–2007 real estate boom can't match the past 12 months, with the bidding wars, lack of inventory, offers above listing prices, and plummeting days on market. By the summer of 2021, the median days on market was only six—that's six days from the time a home was listed until an offer was accepted (see Figure 10). In 2006, the median days on market was 16, and in the summer of 2020, 14 days. No other statistic is a better measure of the growing imbalance between housing supply and demand than the median days on market. Six days on the market sends a strong signal of a severe housing shortage.

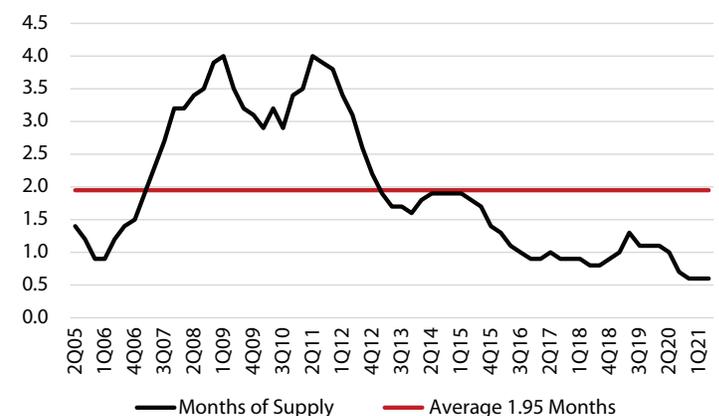
In markets past, selling a home above the list price was a rarity. But the housing shortage has turned rarities into common practice. Since September 2020, homes have typically sold above the list price. For homes sold in April, May, and June of 2021, the average sales price was 5% above the list price (see Figure 11). While the data are limited, anecdotal comments by longtime real estate agents suggest that even in past "hot" markets, "offers above list" played, at best, a minor role; never were they the typical transaction. Again, current market conditions confirm the housing shortage.

Figure 8: Number of Finished Vacant Unsold Homes in Utah, 2Q 2005–1Q 2021



Source: Zonda (formerly Metrostudy, Hanley Wood & Meyers Research)

Figure 9: Supply of Finished Vacant Unsold Homes in the Greater Salt Lake Market, 2Q 2005–1Q 2021

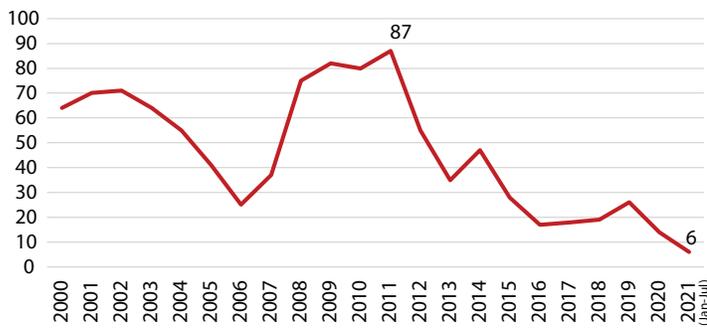


Note: The Greater Salt Lake market consists of Salt Lake, Utah, Davis, Weber, Tooele, Summit and Wasatch counties.

Source: Zonda (formerly Metrostudy, Hanley Wood & Meyers Research)

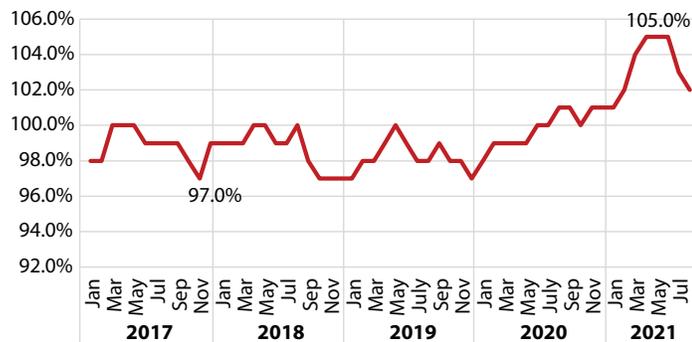
Figure 10: Median Days on Market for Residential Units in Utah, 2000–2021

(single-family, twin home, townhomes, and condominiums)



Source: UtahRealEstate.com

Figure 11: Sales Prices as Percent of List Prices for Residential Real Estate in Utah, January 2017–July 2021



Source: UtahRealEstate.com

Rental Market – Renters have not escaped the effects of the housing shortage. Vacant units are nearly nonexistent. Households looking to rent likely face a waiting period—sometimes several weeks—before a vacant unit is available in their desired community. For existing renters, the housing shortage most likely means a rent hike.

In the 16-year historical record, vacancy rates have never been lower in the Wasatch Front counties (see Table 10). The mid-year 2021 vacancy rate in Davis County is 1.9%, Salt Lake County less than 2%, Utah County 2.2%, and Weber County 2.1%. Shockingly low vacancy rates limit rental opportunities for those who often have no other housing alternative. And of course, the shortage has produced rent increases, the first double-digit increases for the Wasatch Front counties since pre-Great Recession years (see Table 11).

Whether measured by the gap in housing units and households or “on the ground” market conditions, all indicators point to a continued serious shortage of housing in Utah, despite the boom in new residential construction.

Table 10: Rental Vacancy Rates for Wasatch Front Counties, 2006–2021

Year	Davis	Salt Lake	Utah	Weber
2006	5.8%	4.0%	3.8%	6.5%
2007	4.8%	3.2%	3.6%	6.2%
2008	5.9%	4.6%	5.8%	7.0%
2009	8.0%	7.2%	7.0%	9.0%
2010	5.1%	5.7%	5.5%	6.8%
2011	5.8%	5.2%	5.0%	6.5%
2012	6.6%	3.8%	3.2%	6.1%
2013	4.6%	3.9%	4.4%	6.9%
2014	4.6%	3.0%	3.6%	4.7%
2015	4.0%	2.7%	4.1%	4.2%
2016	3.4%	2.9%	4.0%	2.3%
2017	3.5%	2.6%	4.1%	3.2%
2018	3.0%	2.7%	4.4%	2.5%
2019	3.0%	3.4%	3.2%	3.0%
2020	2.8%	3.9%	4.2%	4.1%
2021*	1.9%	<2.0%	2.2%	2.1%

* Mid-year

Source: CBRE and Cushman & Wakefield

Table 11: Average Rental Rate for Wasatch Front Counties, 2006–2021

Year	Davis	Salt Lake	Utah	Weber
2006	\$630	\$652	\$660	\$596
2007	\$670	\$728	\$705	\$623
2008	\$715	\$793	\$719	\$651
2009	\$701	\$740	\$701	\$639
2010	\$711	\$720	\$716	\$640
2011	\$701	\$754	\$753	\$655
2012	\$720	\$814	\$788	\$684
2013	\$756	\$850	\$807	\$678
2014	\$796	\$865	\$868	\$698
2015	\$839	\$907	\$924	\$754
2016	\$933	\$949	\$1,041	\$810
2017	\$1,005	\$1,011	\$1,097	\$864
2018	\$1,060	\$1,072	\$1,138	\$937
2019	\$1,102	\$1,145	\$1,181	\$995
2020	\$1,136	\$1,182	\$1,196	\$1,040
2021 ¹	\$1,272	\$1,301	\$1,395	\$1,206
2020–2021 Change ²	12.0%	10.0%	16.6%	16.0%

1. Mid-year

2. Year-over second quarter.

Source: CBRE and Cushman & Wakefield

Silicon Slopes—The Epicenter of Utah’s Growth

By Carolyn Love

Utah has experienced record population growth of nearly 1 million people over the last two decades. Approximately 25.6% of that growth is concentrated in seven cities clustered near the border of Salt Lake and Utah counties, often referred to as Silicon Slopes. These include South Jordan, Draper, Bluffdale, Herriman, Saratoga Springs, Lehi, and Eagle Mountain. Between 2001 and 2019, Utah’s population increased by 936,456 people, from 2,283,715 to 3,220,171, growing 41% in total and 2.3% on average annually. The Silicon Slopes area grew at a much higher rate of 239% during this time. The population increased by 239,932 people, from 100,286 in 2001 to 339,678 in 2019.

In 2000, Silicon Slopes accounted for 13.4% of total Utah permitted dwelling units. By 2018, Silicon Slopes accounted for 31.9% of Utah’s total permitted units, dipping to 24.1% in 2020 (see Figure 12). Permitted units in Silicon Slopes reached 5,596 in 2006, a pre-recession record. Single-family homes accounted for 92% of total units. After a decline through the Great Recession, the pre-recession record wasn’t exceeded until 2018, with permitted units reaching 7,553. However, only 48% of those units were single-family permits, with 35% condos and townhomes and 18% apartments.

Figure 12: Silicon Slopes Residential Permits by Type, 2000–2020



Source: UtahRealEstate.com

What Hath COVID-19 Wrought for the Housing Market?

Supply Disruption

The construction industry depends on a global supply chain. For example, Spain, Italy, and Lithuania are significant sources of glass and aluminum materials. Germany supplies plumbing materials and South Korea heating and air conditioning systems. But by far, the most important global source of building materials is China. According to FW Dodge Data, 30% of all building material imports to the U.S. come from China, including flooring, electrical, hardware, and plumbing materials. With the outbreak of COVID, many Chinese manufacturing plants supplying building materials locked down, disrupting the supply chain and causing building delays and higher construction costs.

COVID also affected the national supply chain. Stay-at-home orders in Northwest lumber mills cut production at a time when, unexpectedly, the demand for housing and DIY home

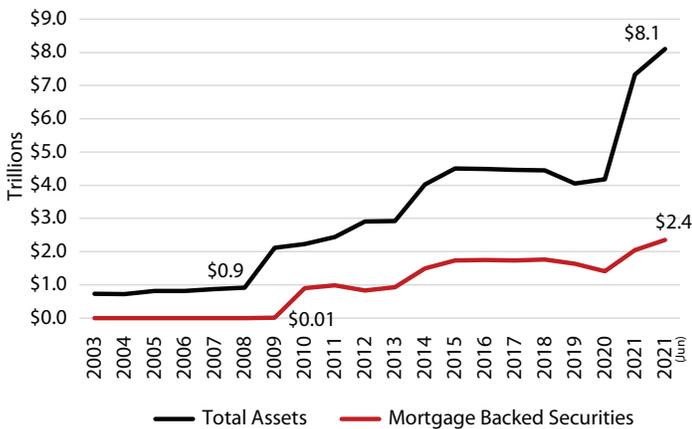
improvements accelerated. It was widely expected that COVID would subdue demand for housing, but the opposite occurred. Consequently, lumber prices soared for several months before recently retreating to levels still well above pre-pandemic prices. Supply disruption also affected prices for steel, plastic pipe, and wood engineered products. Building materials prices have always been prone to volatility, but COVID amplified this volatility and contributed to the double-digit increase in new home prices.

Demand Distortion

Outside wartime, the federal response to the pandemic was the most comprehensive 12-month mobilization of policies and funding ever marshaled by the government. Many programs either directly or indirectly assisted homeowners and renters; for example, forbearance for homeowners and eviction moratoriums and \$200 million in assistance for renters. And

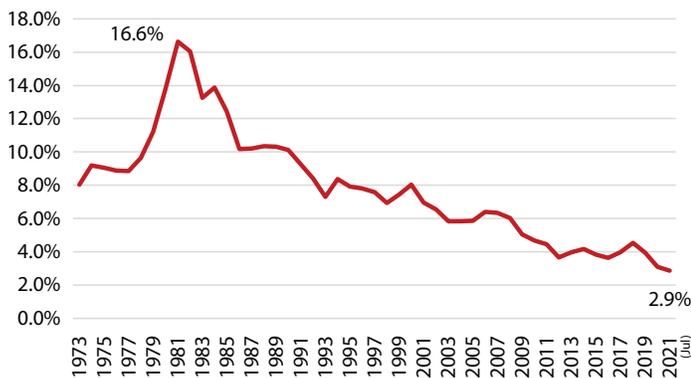
Figure 13: Total Assets and Mortgage-Backed Securities Held by the Federal Reserve, 2003–2021

(First week of January except for week of June 16, 2021; trillions)



Source: Federal Reserve Economic Data (FRED)

Figure 14: Mortgage Interest Rates, 1973–2021



Source: Freddie Mac

beyond the direct housing assistance programs, an array of policies and programs provided indirect benefits to the housing market by augmenting household incomes, including expanded and extended unemployment insurance, stimulus payments, and advanced child tax credit payments. Again, the Congressional and executive responses have been unprecedented. Still, it's the policies of the Federal Reserve, an independent agency, that have had the greatest impact on the housing market and the economy.

In March 2020, the U.S. economy faced the threat of a severe recession as the coronavirus crisis emerged with associated employment layoffs, business closures, stay safe–stay home

policies, and the huge 19% drop in consumer confidence. These developments triggered the Federal Reserve's massive intervention aimed at limiting the economic damage. Their actions included \$2.3 trillion in lending support to businesses and households, lowering the federal funds rate, lending to money market funds, lending to major corporations, supporting loans to small and mid-size businesses, and a number of other actions. But most consequential, at least for the housing market, was providing liquidity to financial markets through the purchase of trillions of dollars of securities. This practice, known as quantitative easing, includes purchases of securities (e.g., U.S. Treasuries) from banks, thus adding assets to the Federal Reserve balance sheet and, at the same time, providing banks with an increase in cash and liquidity.

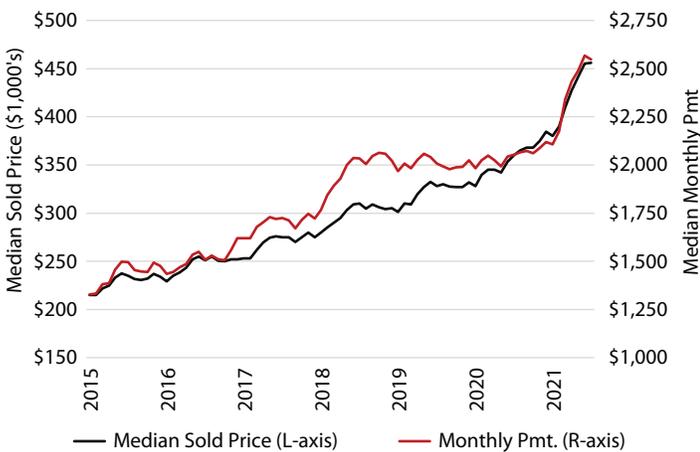
In 12 weeks from March 11, 2020, to June 3, 2020, the Federal Reserve purchased nearly \$3 trillion in securities from financial institutions. Over that short period, the Federal Reserve's balance sheet grew from \$4.3 trillion to \$7.2 trillion, a 67% increase in three months. This extraordinary increase is depicted in Figure 13. From January of 2021 to June of 2021, the Federal Reserve's balance sheet grew by another \$800 billion. A capital market, flush with nearly \$4 trillion in additional liquidity, will inevitably see lower interest rates as the holders of cash "chase yields." One trillion of the \$4 trillion in Fed purchases has been for mortgage-backed securities (MBS). MBSes are bonds secured by real estate loans. The purchase of MBSes pumps liquidity directly into the real estate market rather than the broader capital market. The Fed's MBS holdings have increased from \$1.4 trillion to \$2.4 trillion since March 2020.

In summary, the Federal Reserve's intervention, whether through lowering the federal funds rate or the purchase of U.S. Treasuries and mortgage-backed securities, pumped an extraordinary level of liquidity into capital markets, which in turn lowered interest rates (see Figure 14) and produced a housing boom with the largest single-year price increase in housing history. Housing price increases of 20%, 30%, and even 40% are the consequence of avoiding a severely damaging recession, a consequence that will likely have lingering effects on future housing prices.²

Affordability

According to the 2019 Survey of Consumer Finances, the median homeowner net worth was \$255,000, while renter net worth was \$6,300.³ For the majority of homeowners, the survey shows housing to be the major source of wealth. Across all income groups, housing wealth accounted for 32% of the wealth created between 2016 and 2019, the largest of any category. Additionally, 92% of the wealth of owners who are in the lowest income bracket is attributed to the value of the residence. Although the price acceleration experienced through the COVID pandemic increased the wealth of current homeowners, it added further challenges on the path to ownership for renters and is likely to impact future wealth generation.

Figure 15: Comparison of Utah Median Sales Price and Median Monthly Payment, 2015–2021



Note: Mortgage payments assume a 3% down payment, taxes at .007% of the value of the home, private mortgage insurance (PMI) at 1% of the value of the home, home insurance of \$800 annually, and mortgage interest rate reported by Freddie Mac for corresponding month. Source: UtahRealEstate.com, Kem C. Gardner Policy Institute

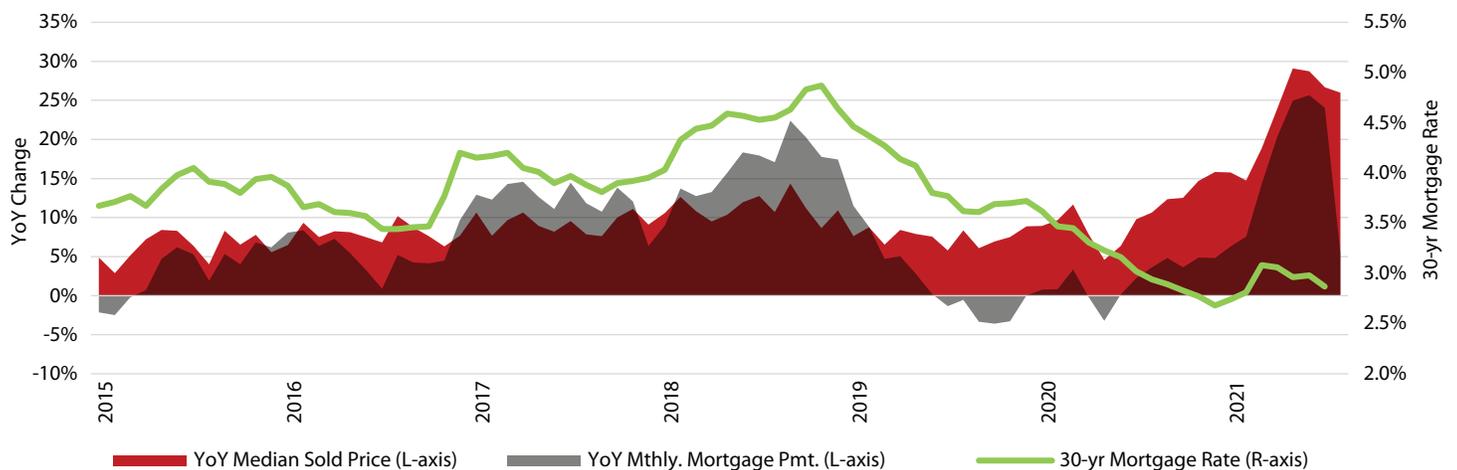
For homeowners, housing affordability is generally dictated by household income and interest rates. From May 2018 through January 2021, the median monthly mortgage payment stayed relatively flat, ranging from \$1,968 to \$2,120 and averaging \$2,030. During this period the median sold price increased from \$303,000 to \$380,000 (see Figure 15). While prices rose, the median payment declined through parts of 2019 and 2020 as mortgage rates fell from decadal highs to historic lows (see Figure 16).

Interest rates, arguably, have the strongest impact on prices short-term. In the last decade, 2018 experienced the highest rates, with the 30-year rate topping 4.9%. Since March 2012, Utah’s housing prices have experienced positive growth. However, while rates increased in 2018, the monthly median sold price declined during the latter half of the year from \$310,000 to \$301,000.

The 30-year mortgage rate reached historic lows throughout 2020, allowing buyers to qualify for a higher sale price while keeping the monthly payment somewhat reasonable. For example, a \$1,500 monthly mortgage payment (excluding down payment, taxes and insurance) with a 2.5% 30-year fixed interest rate qualifies for a principal of \$324,194. When the interest rate is at 3.5%, the principal decreases to \$285,263.

Combining incomes and rates shows that households with incomes between \$35,000 and \$49,999 can afford a monthly mortgage payment that is between \$875 and \$1,250 (see Table 12). Adding a down payment of 3.5%, and a 3.11% 30-year fixed interest rate (the average rate in 2020), allows for this group to qualify for a home that is priced between \$211,800 and \$302,600. In 2020, these households could afford 31.3% of the homes for sale in Utah (see Table 13).

Figure 16: Year-Over Percent Change in Median Sales Price and Median Monthly Payment in Utah, 2015–2021



Note: Assumes 30% debt-to-income, PMI, annual avg. 30-yr mortgage rate, and property taxes. Source: Calculated by Kem C. Gardner Policy Institute from data provided by UtahRealEstate.com

Table 12: Households by Income, Monthly Payment, and Affordable Price Range in Utah, 2019

Annual HH Income Range (\$1,000s)	2019		Affordable Monthly Payment @ 30% of Income	Affordable Price 30yr, 3.11% Rate, 3% Down Payment (\$1,000s)
	# of Households	Share of Households		
< \$5.0	19,670	1.9%	≤ \$125	≤ \$29.2
\$5.0–\$9.9	16,738	1.6%	\$125–\$250	\$30.3–\$60.5
\$10.0–\$14.9	28,407	2.8%	\$250–\$375	\$60.5–\$90.8
\$15.0–\$19.9	29,587	2.9%	\$375–\$500	\$90.8–\$121.0
\$20.0–\$24.9	31,755	3.1%	\$500–\$625	\$121.0–\$151.3
\$25.0–\$34.9	72,795	7.1%	\$625–\$875	\$151.3–\$211.8
\$35.0–\$49.9	108,755	10.6%	\$875–\$1,250	\$211.8–\$302.6
\$50.0–\$74.9	198,560	19.4%	\$1,250–\$1,875	\$302.6–\$453.9
\$75.0–\$99.9	162,387	15.9%	\$1,875–\$2,500	\$453.9–\$605.2
\$100.0–\$149.9	197,549	19.3%	\$2,500–\$3,750	\$605.2–\$907.8
\$150.0 +	157,652	15.4%	≥ \$3,750	≥ \$907.8

Source: U.S. Census Bureau 2019 1-Year American Community Survey data, Kem C. Gardner Policy Institute

Table 13: Affordable Homes Sold by Income in Utah, 2020

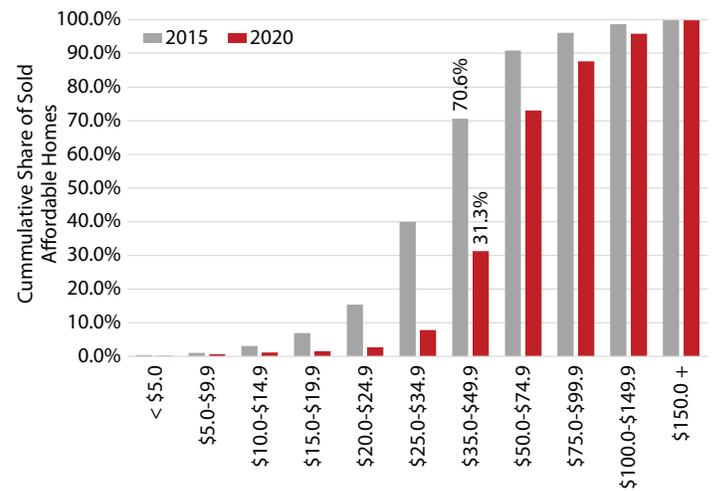
Annual HH Income Range (\$1,000s)	Affordable Price 30yr, 3.11% Rate, 3% Down Payment (\$1,000s)	# of Homes Sold Considered Affordable 2020	Share of Total	Cumulative Share
< \$5.0	≤ \$29.2	84	0.2%	0.2%
\$5.0–\$9.9	\$30.3–\$60.5	237	0.4%	0.6%
\$10.0–\$14.9	\$60.5–\$90.8	271	0.5%	1.1%
\$15.0–\$19.9	\$90.8–\$121.0	266	0.5%	1.6%
\$20.0–\$24.9	\$121.0–\$151.3	578	1.1%	2.7%
\$25.0–\$34.9	\$151.3–\$211.8	2,775	5.2%	7.9%
\$35.0–\$49.9	\$211.8–\$302.6	12,506	23.4%	31.3%
\$50.0–\$74.9	\$302.6–\$453.9	22,262	41.7%	73.0%
\$75.0–\$99.9	\$453.9–\$605.2	7,823	14.6%	87.6%
\$100.0–\$149.9	\$605.2–\$907.8	4,372	8.2%	95.8%
\$150.0 +	≥ \$907.8	2,234	4.2%	99.0%

Source: Kem C. Gardner Policy Institute analysis of U.S. Census Bureau 2019 1-Year American Community Survey data and home sales data provided by UtahRealEstate.com

Utah’s median household income increased from \$62,912 in 2015 to \$75,780 in 2019, growing 20.5%. Regardless of the growth in household income, affordability decreased in every income bracket. The availability of affordable/entry-priced housing has decreased over the last five years. Households with incomes less than \$50,000 in 2015 could afford 70.6% of homes on the market that year. In 2020, their share of affordable homes had decreased to 31.3% (see Figure 17).

The acceleration of housing prices throughout the COVID-19 pandemic continued to exacerbate existing affordability challenges. In 2019, the median sales price in Utah was \$320,000 and approximately 40% of households were priced out (see Figure 18). By the end of 2020, the median price reached \$380,000, pricing out approximately 48.5% of Utah households. As prices have accelerated in 2021, more than half of Utah households are unable to afford the median. For renters, the path to ownership narrowed further. In 2019, approximately 63.1% of renter households were priced out of the median home price. In 2020, the share of renters priced out increased to 72.8% (see Figure 19).

Figure 17: Decrease in the Share of Affordable Homes Sold by Income Range in Utah, 2015 to 2020



Note: Assumes 30% debt-to-income, PMI, annual avg. 30-yr mortgage rate, and property taxes.
Source: Kem C. Gardner Policy Institute analysis of U.S. Census Bureau 2019 1-Year American Community Survey data and home sales data provided by UtahRealEstate.com

Figure 18: Percent of Utah Households Priced Out of the Median-Priced Home



Note: Assumes 30% debt-to-income, PMI, annual avg. 30-yr mortgage rate, and property taxes.
 Source: Kem C. Gardner Policy Institute analysis of U.S. Census Bureau 2019 1-Year American Community Survey data and home sales data provided by UtahRealEstate.com

Figure 19: Percent of Utah Renter Households Priced Out of the Median-Priced Home



Note: Assumes 30% debt-to-income, PMI, annual avg. 30-yr mortgage rate, and property taxes.
 Source: Kem C. Gardner Policy Institute analysis of U.S. Census Bureau 2019 1-Year American Community Survey data and home sales data provided by UtahRealEstate.com

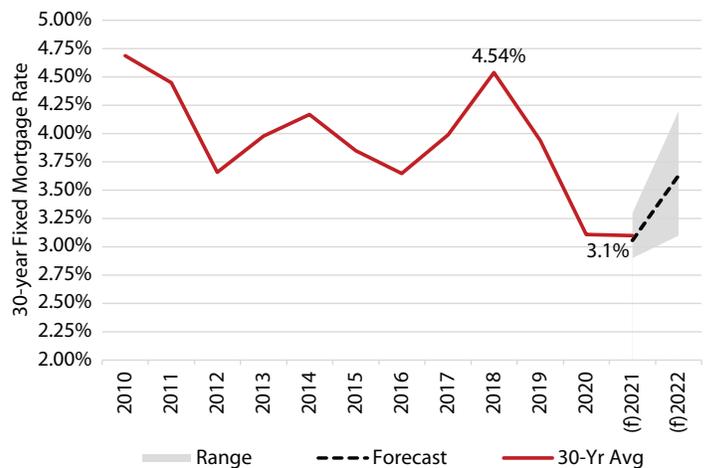
What's in Store for Housing Prices, Demand, and Construction?

Mortgage rates and demographics will dictate what lies ahead for prices and demand after a record year of price increases and purchases. Demographic tailwinds are favorable for strong housing demand, but the lack of affordable housing and low inventory are expected to continue to be major challenges.

In the near term, rates are expected to rise after historic lows (see Figure 20). An average of eight different forecasts shows the 30-year mortgage rate at 3.1% in 2021 and climbing to 3.6% in 2022. While this isn't a dramatic rise in rates, it is expected to have an impact on affordability and bring price acceleration in Utah to single-digit growth. After a record year of both absolute and percent growth, price acceleration is expected to stay positive, albeit at a much slower pace (see Figure 21). Median sales price growth in Utah is expected to range from 3.5% to 7.2% in 2022.

During 2020, Utah experienced an increase in younger buyers. According to mortgage application records, 32.3% of applicants were between 25 to 34 years old; additionally, 41.2% were below the age of 34 (see Figure 22). Nationally, the median age of first-time homebuyers was 32 years in 2018.⁴ Both the U.S. and Utah have a significant share of the population reaching peak first-time home-buying age over the next several years (see Figure 23). Individuals between the age of 26 and 32 account for 9.9% (32.5 million) of the U.S. population and 10.4% (332,000) of Utah's population. This age cohort is expected to provide a wave of first-time homebuyers, keeping the demand for housing strong for the rest of the decade.

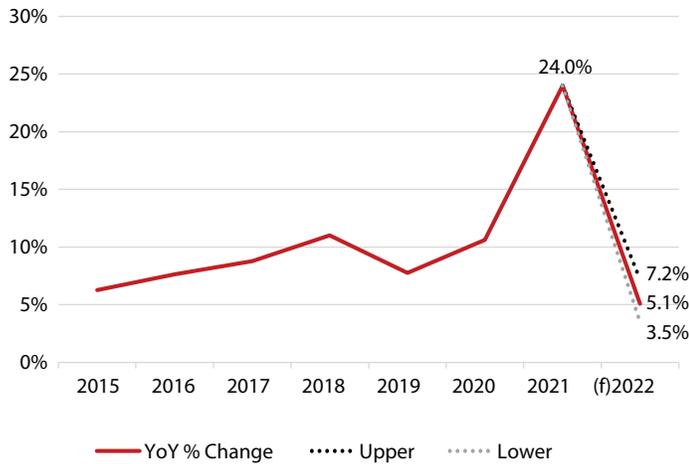
Figure 20: Annual Average 30-Year Fixed Mortgage Rate, 2010–2022



Source: 30-yr avg. from Freddie Mac; forecast is an average of Freddie Mac, Fannie Mae, Mortgage Bankers Association, National Association of Home Builders, Moody's, National Association of Realtors, and Wells Fargo.

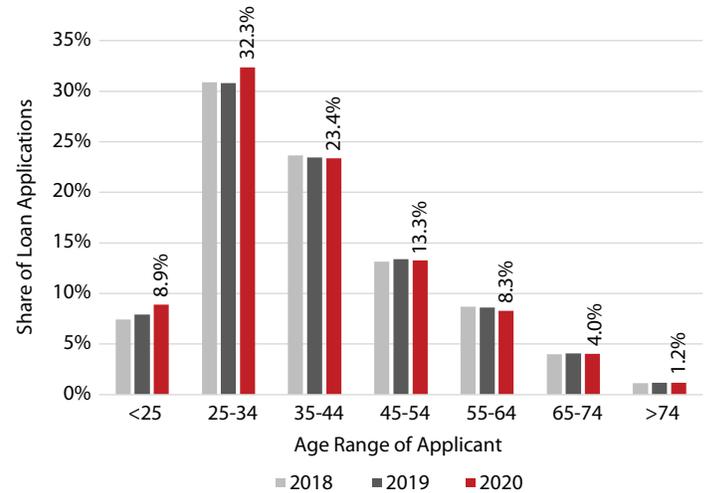
Housing construction is expected to reach 35,000 units in 2021, an increase of 10.3% over 2020. Another 36,000 units are projected in 2022, a growing 2.9% over 2021 and the lowest growth rate since 2015 (see Figure 24).

Figure 21: Annual Median Home Price Year-Over Percent Change in Utah, 2015–2022



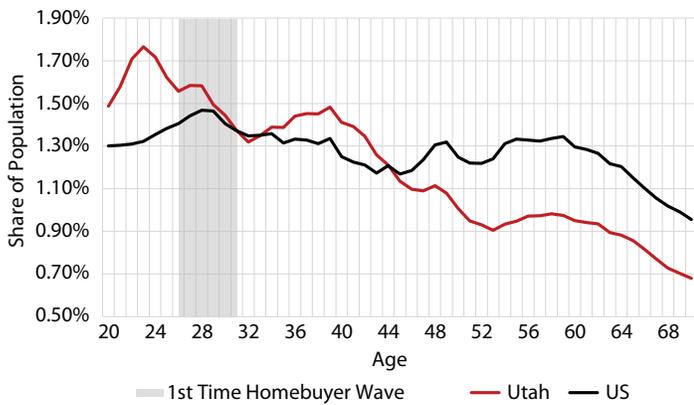
Source: Kem C. Gardner Policy Institute analysis of UtahRealEstate.com data

Figure 22: Utah Home Purchase Loan Applications Share by Age, 2018–2020



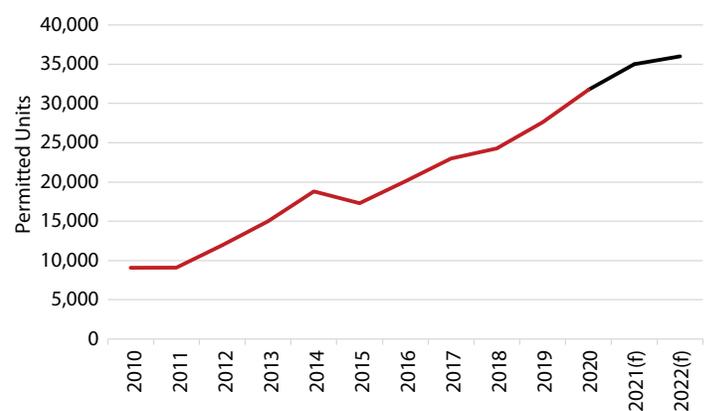
Source: Federal Financial Institutions Examination Council's Home Mortgage Disclosure Act

Figure 23: Age Distribution of the U.S. and Utah Populations, 2019



Source: US Census Bureau Annual Estimates of the Resident Population by Single Year of Age

Figure 24: Past and Projected Housing Permits in Utah, 2010–2022



Source: Kem C. Gardner Policy Institute

Endnotes

1. A bubble is confirmed when housing prices decline after the bubble bursts. Otherwise, every run-up in housing prices would qualify as a bubble. Bubbles occur with overinvestment, overbuilding, and irrational exuberance that drive prices higher than the assets fundamentally justify. Alan Greenspan commented, in his 1996 speech "The Challenge of Central Banking in a Democratic Society," on the difficulty of defining a bubble as *prices rise*: "But how do we know when irrational exuberance has unduly escalated asset values, which then become subject to unexpected and prolonged contractions?" Only after the fact. We know there was a bubble when the asset price has a prolonged contraction, as occurred with housing prices in Utah from 2008 to 2011, rather than a deceleration or moderation of housing price increases.
2. In hindsight, the extent of the Federal Reserve's response has been second-guessed, but consider the uncertain economic and public health conditions in the spring of 2020. "In the historic record of modern capitalism, there has never been a moment in which close to 95 percent of the world's economies suffered a simultaneous contraction in per capita GDP, as they did in the first half of 2020. Over 3 billion adults were furloughed from their jobs or struggled to work from home. The fact that the world collectively willed the shutdown makes this utterly unlike any previous recession." Tooze, Adam, *Shutdown: How Covid Shook the World's Economy*, New York City, Viking, 2021.
3. <https://www.federalreserve.gov/publications/files/scf20.pdf>
4. https://files.consumerfinance.gov/f/documents/cfpb_market-snapshot-first-time-homebuyers_report.pdf

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 Wilford Clyde
 Sophia M. DiCaro

Cameron Diehl
 Lisa Eccles
 Spencer P. Eccles
 Christian Gardner
 Kem C. Gardner
 Kimberly Gardner
 Natalie Gochnour
 Brandy Grace
 Rachel Hayes
 Clark Ivory
 Mike S. Leavitt
 Derek Miller
 Ann Millner

Sterling Nielsen
 Cristina Ortega
 Jason Perry
 Ray Pickup
 Gary B. Porter
 Taylor Randall
 Jill Remington Love
 Brad Rencher
 Josh Romney
 Charles W. Sorenson
 James Lee Sorenson
 Vicki Varela

Ex Officio (invited)

Governor Spencer Cox
 Speaker Brad Wilson
 Senate President
 Stuart Adams
 Representative Brian King
 Senator Karen Mayne
 Mayor Jenny Wilson
 Mayor Erin Mendenhall

Kem C. Gardner Policy Institute Staff and Advisors

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 Jennifer Robinson, Associate Director
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 Colleen Larson, Administrative Manager
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 Pamela S. Perlich, Director of Demographic Research
 Juliette Tennert, Chief Economist
 Nicholas Thiriot, Communications Director
 James A. Wood, Ivory-Boyer Senior Fellow

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