
FEDERAL HOUSING FINANCE AGENCY



NEWS RELEASE

For Immediate Release
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U.S. House Prices Rise 1.1 Percent in Fourth Quarter

Washington, D.C. – U.S. house prices rose **1.1 percent** in the fourth quarter of 2018 according to the Federal Housing Finance Agency (FHFA) House Price Index (HPI). House prices rose **5.7 percent** from the fourth quarter of 2017 to the fourth quarter of 2018. FHFA's seasonally adjusted monthly index for December was up **0.3 percent** from November.

The HPI is calculated using home sales price information from mortgages sold to, or guaranteed by, Fannie Mae and Freddie Mac.

"House prices rose throughout 2018 but at a slower rate than in recent years," said Dr. William Doerner, Supervisory Economist. "In the fourth quarter, house price appreciation hit one of the lowest levels in the past four years."

See [video of highlights](#) for the fourth quarter featuring Dr. Doerner.

Significant Findings

- Home prices rose in all 50 states and the District of Columbia between the fourth quarters of 2017 and 2018. The top five areas in annual appreciation were: 1) **Idaho** 11.9 percent; 2) **Nevada** 11.2 percent; 3) **Utah** 9.8 percent; 4) **Georgia** 8.2 percent; and 5) **Arizona** 8.2 percent. The areas showing the smallest annual appreciation were: 1) **North Dakota** 0.0 percent; 2) **Connecticut** 0.9 percent; 3) **West Virginia** 1.6 percent; 4) **Louisiana** 1.8 percent; and 5) **Oklahoma** 2.0 percent.
- Home prices rose in 98 of the 100 largest metropolitan areas in the U.S. over the last four quarters. Annual price increases were greatest in **San Francisco-San Mateo-Redwood City, CA (MSAD)**, where prices increased by 17.0 percent. Prices were weakest in **Urban Honolulu, HI**, where they fell by 2.0 percent.
- Of the nine census divisions, the **Mountain** division experienced the strongest four-quarter appreciation, posting an 8.1 percent gain between the fourth quarters of 2017 and 2018 and a 1.6 percent increase in the fourth quarter of 2018. Annual house price appreciation was weakest in the **West South Central** division, where prices rose by 4.3 percent between the fourth quarters of 2017 and 2018.

Tables and graphs showing home price statistics for metropolitan areas, states, census divisions, and the U.S. as a whole are included on the following pages.

Technical Note

This quarter's HPI report also includes a technical note explaining changes in FHFA HPIs that resulted from a recent Office of Management and Budget bulletin announcing new metropolitan area delineations. The text and tables can be found on pages 23-35.

Other Price Indexes

Most statistics in the quarterly HPI report reference price changes computed by FHFA's basic "purchase-only" HPI. In some cases, however, the reported statistics reference alternative price measures. FHFA publishes—and makes [available for download](#)—three additional HPIs beyond the basic "purchase-only" series. Although they use the same general methodology, the three alternatives rely on slightly different datasets as follows:

- “**Distress-Free**” house price index. Sales of bank-owned properties and short sales are removed from the purchase-only dataset prior to estimation of the index.
- “**Expanded-Data**” house price index. Sales price information sourced from county recorder offices and from FHA-backed mortgages are added to the purchase-only data sample. This index is used annually to adjust the maximum conforming loan limits, which dictate the dollar amount of loans that can be acquired by Fannie Mae and Freddie Mac.
- “**All-Transactions**” house price index. Appraisal values from refinance mortgages are added to the purchase-only data sample.

Data constraints preclude the production of all types of indexes for every geographic area, but multiple index types are generally available. For individual states, for instance, three types of indexes are available. The various indexes tend to correlate closely over the long-term, but short-term differences can be significant.

Background

FHFA's HPI tracks changes in home values for individual properties owned or guaranteed by Fannie Mae or Freddie Mac over the past 43 years using more than eight million repeat transactions. The “repeat-transactions” methodology constructs index estimates by statistically evaluating price appreciation (or depreciation) for homes with multiple values over time. See this [video explaining](#) the basic methodology behind the FHFA HPI.

Note

- The next monthly HPI report (including data through January 2019) will be released March 26, 2019 and the next quarterly HPI report (including data for the first quarter of 2019) will be released May 28, 2019.
- Future HPI release dates for 2019 are available at <https://www.fhfa.gov/hpi>.
- Follow @FHFA on Twitter, LinkedIn and YouTube for more HPI news.

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The Federal Housing Finance Agency regulates Fannie Mae, Freddie Mac and the 11 Federal Home Loan Banks. These government-sponsored enterprises provide more than \$6.2 trillion in funding for the U.S. mortgage markets and financial institutions.

National Statistics

FHFA Seasonally Adjusted House Price Index for U.S.

Seasonally Adjusted, Purchase-Only HPI

1991Q2 - 2018Q4

Quarter	House Price Quarterly Appreciation	House Price Quarterly Appreciation Annualized	House Price Appreciation From Same Quarter One Year Earlier
2018Q4	1.12%	4.47%	5.73%
2018Q3	1.27%	5.09%	6.46%
2018Q2	1.28%	5.12%	6.85%
2018Q1	1.94%	7.76%	7.37%
2017Q4	1.82%	7.28%	6.82%
2017Q3	1.64%	6.56%	6.68%
2017Q2	1.77%	7.08%	6.63%
2017Q1	1.42%	5.68%	6.23%
2016Q4	1.69%	6.76%	6.23%
2016Q3	1.60%	6.38%	6.06%
2016Q2	1.39%	5.55%	5.77%
2016Q1	1.42%	5.68%	5.71%
2015Q4	1.52%	6.09%	5.63%
2015Q3	1.32%	5.29%	5.45%
2015Q2	1.33%	5.32%	5.30%
2015Q1	1.34%	5.35%	4.85%
2014Q4	1.35%	5.42%	4.81%
2014Q3	1.17%	4.69%	4.43%
2014Q2	0.90%	3.62%	4.91%
2014Q1	1.29%	5.16%	6.16%
2013Q4	0.99%	3.95%	7.00%
2013Q3	1.65%	6.59%	7.56%
2013Q2	2.11%	8.42%	7.12%
2013Q1	2.09%	8.37%	6.69%
2012Q4	1.51%	6.05%	4.99%
2012Q3	1.23%	4.90%	3.59%
2012Q2	1.70%	6.79%	2.78%
2012Q1	0.46%	1.85%	0.25%
2011Q4	0.16%	0.66%	-2.41%
2011Q3	0.43%	1.71%	-3.55%
2011Q2	-0.80%	-3.19%	-5.55%
2011Q1	-2.21%	-8.84%	-5.25%
2010Q4	-1.00%	-4.01%	-4.00%
2010Q3	-1.66%	-6.63%	-3.09%
2010Q2	-0.48%	-1.91%	-1.94%
2010Q1	-0.92%	-3.68%	-2.88%
2009Q4	-0.06%	-0.25%	-2.50%
2009Q3	-0.49%	-1.95%	-5.30%
2009Q2	-1.44%	-5.76%	-7.20%
2009Q1	-0.53%	-2.12%	-8.45%
2008Q4	-2.93%	-11.73%	-10.12%
2008Q3	-2.48%	-9.92%	-9.05%
2008Q2	-2.77%	-11.07%	-7.90%
2008Q1	-2.35%	-9.40%	-5.50%

FHFA Seasonally Adjusted House Price Index for U.S.

Seasonally Adjusted, Purchase-Only HPI

1991Q2 - 2018Q4

Quarter	House Price Quarterly Appreciation	House Price Quarterly Appreciation Annualized	House Price Appreciation From Same Quarter One Year Earlier
2007Q4	-1.77%	-7.08%	-2.64%
2007Q3	-1.25%	-5.00%	-0.39%
2007Q2	-0.24%	-0.95%	1.06%
2007Q1	0.61%	2.42%	2.03%
2006Q4	0.50%	2.01%	2.93%
2006Q3	0.18%	0.73%	4.58%
2006Q2	0.73%	2.90%	7.13%
2006Q1	1.49%	5.97%	9.15%
2005Q4	2.12%	8.47%	10.23%
2005Q3	2.62%	10.49%	10.60%
2005Q2	2.62%	10.48%	10.57%
2005Q1	2.50%	10.01%	10.45%
2004Q4	2.46%	9.83%	10.15%
2004Q3	2.59%	10.38%	9.95%
2004Q2	2.51%	10.05%	9.29%
2004Q1	2.22%	8.87%	8.33%
2003Q4	2.28%	9.11%	7.85%
2003Q3	1.97%	7.90%	7.56%
2003Q2	1.62%	6.46%	7.51%
2003Q1	1.77%	7.06%	7.75%
2002Q4	2.00%	8.01%	7.65%
2002Q3	1.92%	7.69%	7.19%
2002Q2	1.84%	7.38%	6.79%
2002Q1	1.67%	6.70%	6.54%
2001Q4	1.56%	6.25%	6.73%
2001Q3	1.54%	6.17%	6.92%
2001Q2	1.61%	6.43%	6.99%
2001Q1	1.86%	7.43%	7.07%
2000Q4	1.74%	6.95%	6.96%
2000Q3	1.61%	6.43%	6.73%
2000Q2	1.69%	6.75%	6.68%
2000Q1	1.75%	6.99%	6.47%
1999Q4	1.52%	6.10%	6.18%
1999Q3	1.56%	6.22%	6.29%
1999Q2	1.49%	5.95%	6.04%
1999Q1	1.47%	5.89%	5.96%
1998Q4	1.63%	6.53%	5.70%
1998Q3	1.32%	5.26%	5.12%
1998Q2	1.41%	5.63%	4.52%
1998Q1	1.23%	4.91%	3.94%
1997Q4	1.08%	4.30%	3.33%
1997Q3	0.74%	2.95%	2.79%
1997Q2	0.84%	3.38%	2.72%
1997Q1	0.63%	2.54%	2.56%

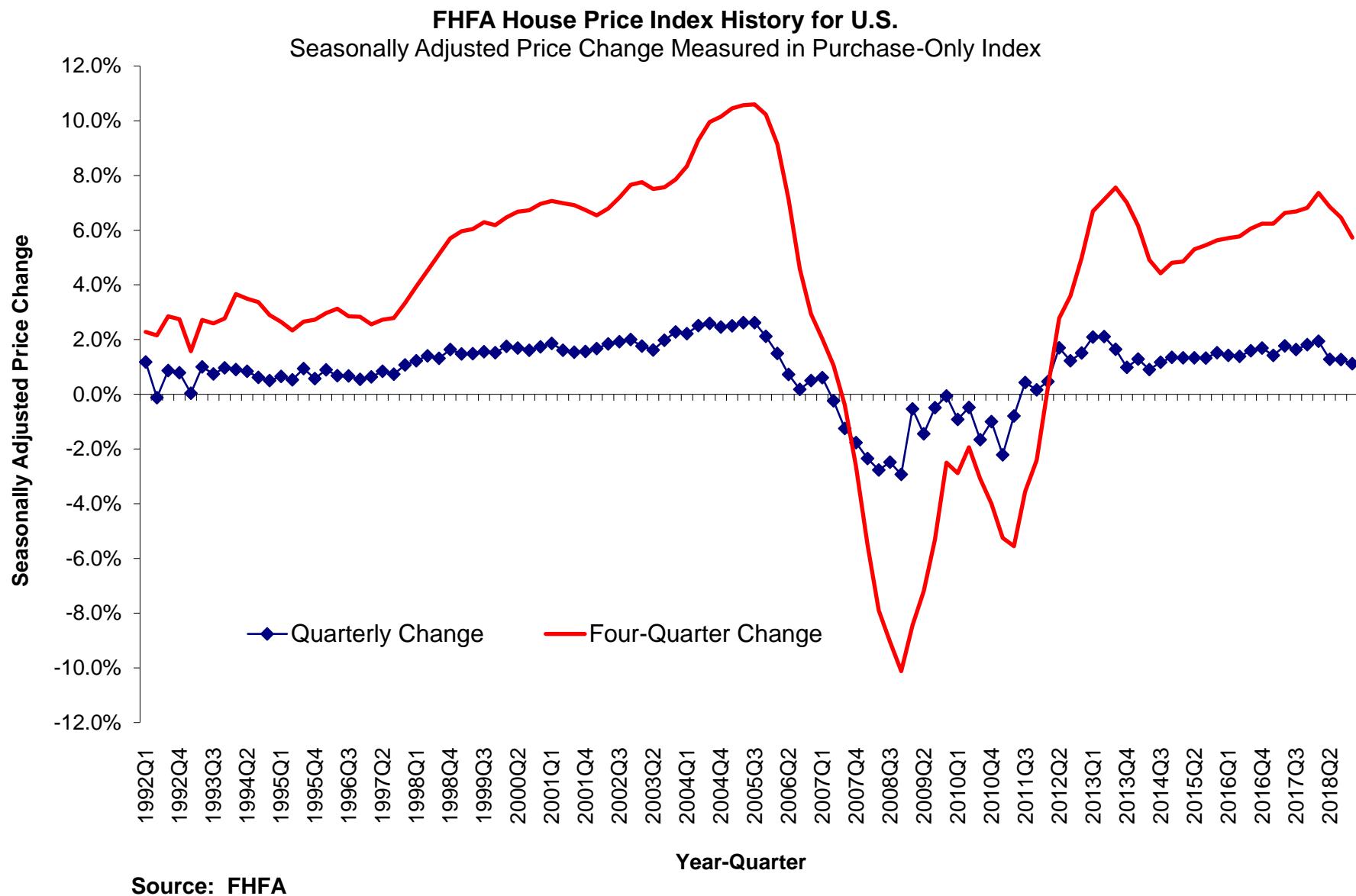
FHFA Seasonally Adjusted House Price Index for U.S.

Seasonally Adjusted, Purchase-Only HPI

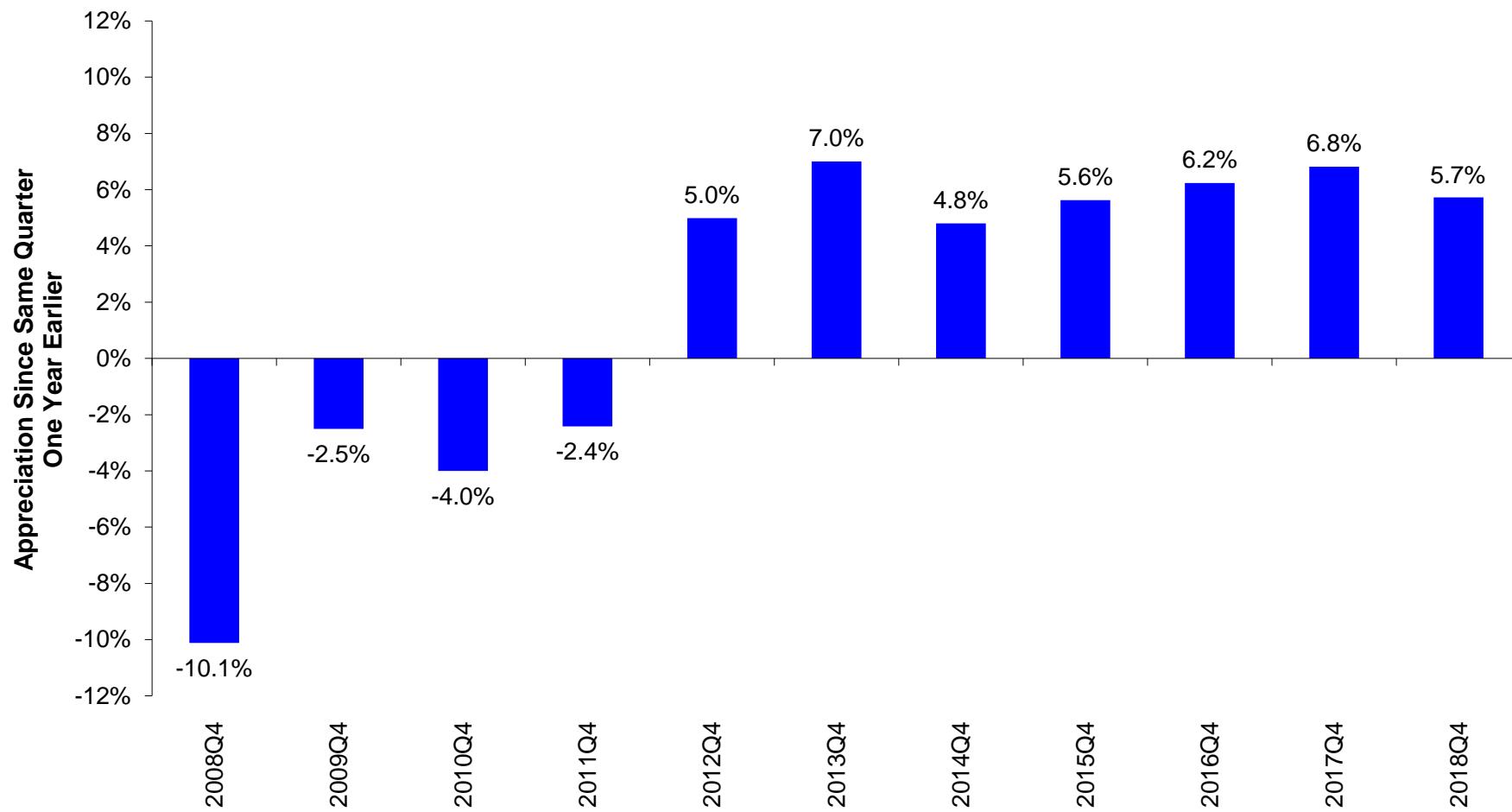
1991Q2 - 2018Q4

Quarter	House Price Quarterly Appreciation	House Price Quarterly Appreciation Annualized	House Price Appreciation From Same Quarter One Year Earlier
1996Q4	0.55%	2.18%	2.83%
1996Q3	0.67%	2.69%	2.86%
1996Q2	0.68%	2.74%	3.13%
1996Q1	0.90%	3.60%	2.97%
1995Q4	0.57%	2.28%	2.72%
1995Q3	0.94%	3.76%	2.66%
1995Q2	0.53%	2.12%	2.33%
1995Q1	0.66%	2.63%	2.65%
1994Q4	0.50%	2.02%	2.90%
1994Q3	0.62%	2.48%	3.37%
1994Q2	0.84%	3.36%	3.50%
1994Q1	0.90%	3.61%	3.66%
1993Q4	0.96%	3.85%	2.77%
1993Q3	0.75%	2.99%	2.60%
1993Q2	1.00%	4.01%	2.72%
1993Q1	0.04%	0.14%	1.58%
1992Q4	0.79%	3.15%	2.74%
1992Q3	0.87%	3.46%	2.85%
1992Q2	-0.12%	-0.48%	2.15%
1992Q1	1.18%	4.74%	2.28%
1991Q4	0.90%	3.58%	
1991Q3	0.18%	0.73%	
1991Q2	0.00%	0.01%	

Source: FHFA



House Price Appreciation Over Previous Four Quarters for U.S.
Seasonally Adjusted, Purchase-Only Index



Source: FHFA

Monthly Price Change Estimates for U.S. and Census Divisions

(Purchase-Only Index, Seasonally Adjusted)

	U.S.	Pacific	Mountain	West North Central	West South Central	East North Central	East South Central	New England	Middle Atlantic	South Atlantic
Nov 18 - Dec 18	0.3%	0.5%	0.6%	0.4%	-0.2%	0.2%	-0.3%	0.8%	0.4%	0.4%
Oct 18 - Nov 18	0.4%	-0.4%	0.1%	-0.1%	1.0%	-0.3%	0.8%	0.3%	1.5%	1.0%
(Previous Estimate)	0.4%	-0.8%	0.2%	-0.1%	1.0%	-0.2%	0.9%	0.2%	1.0%	1.1%
Sep 18 - Oct 18	0.4%	1.1%	0.2%	1.2%	0.2%	0.6%	0.9%	0.8%	-0.1%	-0.3%
(Previous Estimate)	0.4%	1.2%	0.2%	1.1%	0.1%	0.6%	0.8%	1.0%	0.0%	-0.3%
Aug 18 - Sep 18	0.3%	-0.6%	1.2%	-0.1%	0.3%	0.7%	0.3%	0.3%	0.5%	0.4%
(Previous Estimate)	0.3%	-0.7%	1.1%	-0.1%	0.3%	0.7%	0.2%	0.3%	0.4%	0.4%
Jul 18 - Aug 18	0.5%	0.7%	0.8%	0.3%	0.6%	0.4%	0.5%	0.7%	-0.3%	0.6%
(Previous Estimate)	0.4%	0.6%	0.8%	0.3%	0.5%	0.4%	0.5%	0.7%	-0.4%	0.6%
Jun 18 - Jul 18	0.5%	0.6%	-0.1%	0.4%	0.1%	0.5%	0.0%	-0.1%	0.5%	1.0%
(Previous Estimate)	0.4%	0.6%	-0.1%	0.4%	0.1%	0.5%	0.0%	-0.1%	0.4%	1.0%
12-Month Change:										
Dec 17 - Dec 18	5.6%	5.4%	7.7%	5.9%	4.0%	5.2%	6.2%	5.4%	5.0%	6.3%

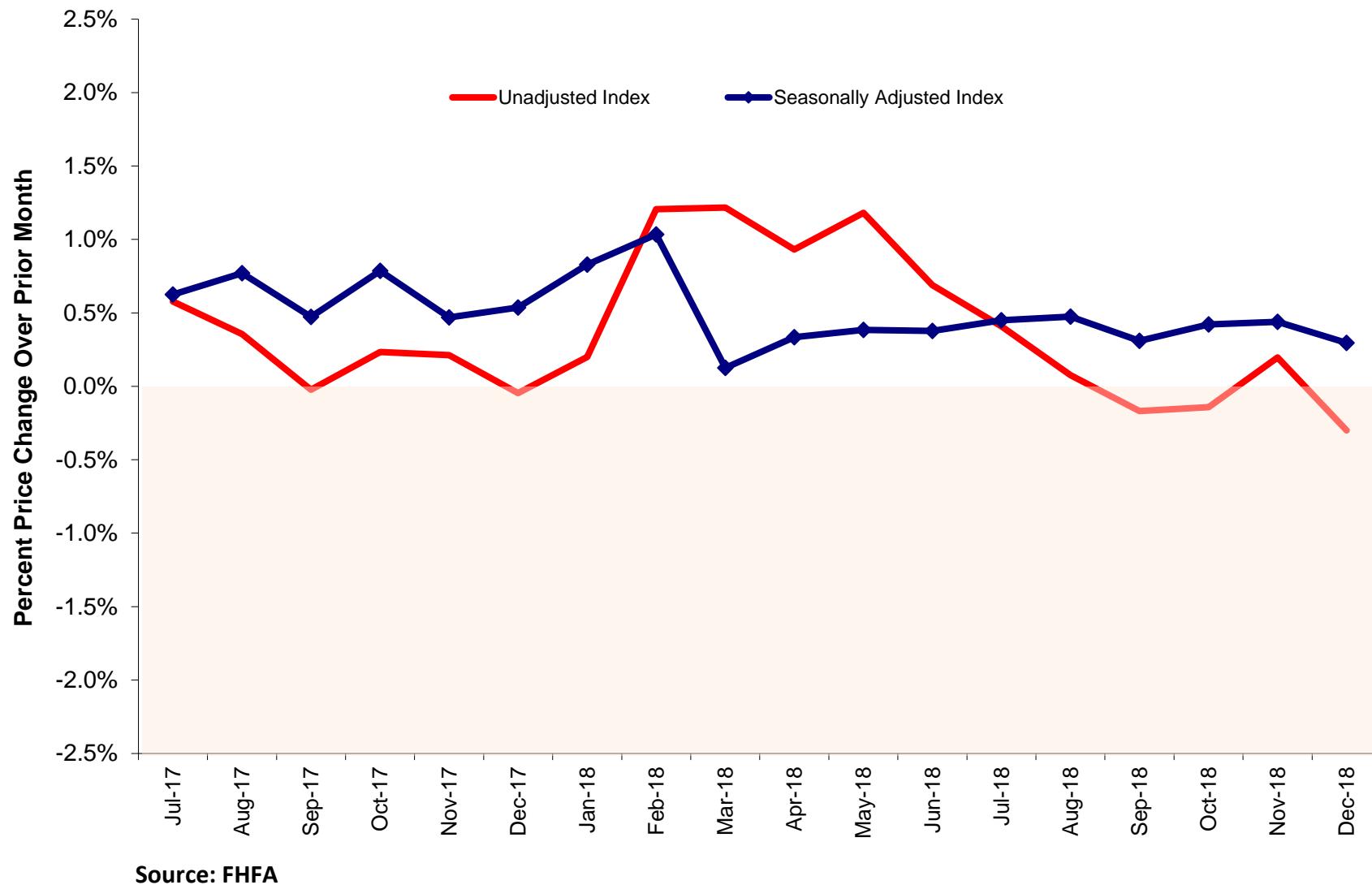
Monthly Index Values for Latest 18 Months: U.S. and Census Divisions

(Purchase-Only Index, Seasonally Adjusted, January 1991 = 100)

	U.S.	Pacific	Mountain	West North Central	West South Central	East North Central	East South Central	New England	Middle Atlantic	South Atlantic
December-18	270.2	313.2	366.5	267.9	283.1	223.0	246.5	256.8	241.9	275.1
November-18	269.4	311.6	364.4	266.9	283.6	222.5	247.2	254.7	240.9	274.0
October-18	268.3	312.8	363.9	267.2	280.9	223.2	245.3	253.9	237.5	271.3
September-18	267.1	309.3	363.0	264.0	280.3	221.9	243.2	251.9	237.7	272.0
August-18	266.3	311.2	358.6	264.4	279.4	220.3	242.6	251.1	236.6	271.0
July-18	265.1	309.0	355.9	263.5	277.8	219.5	241.3	249.2	237.4	269.4
June-18	263.9	307.3	356.2	262.4	277.6	218.4	241.3	249.4	236.4	266.6
May-18	262.9	305.9	352.7	260.8	277.4	217.1	239.1	249.4	235.2	267.1
April-18	261.9	305.4	350.4	259.6	274.9	217.6	236.5	248.0	235.0	265.8
March-18	261.0	304.3	348.7	258.8	275.2	215.7	235.7	246.4	236.7	264.3
February-18	260.7	305.0	345.3	257.4	276.9	216.0	236.7	248.3	232.8	264.0
January-18	258.0	301.2	343.4	256.4	270.7	214.2	234.1	244.7	231.6	261.8
December-17	255.9	297.2	340.3	253.0	272.2	212.1	232.2	243.7	230.4	258.7
November-17	254.5	295.8	338.5	252.7	271.0	210.7	230.6	241.9	229.2	257.1
October-17	253.3	293.1	334.2	251.4	269.1	209.5	233.7	242.1	229.6	255.4
September-17	251.3	291.5	331.1	250.0	267.7	208.0	229.0	239.4	227.6	253.7
August-17	250.2	289.8	328.2	248.6	266.2	206.8	229.1	238.5	226.5	253.1
July-17	248.3	285.5	326.4	246.9	264.3	205.8	228.0	238.0	224.6	251.1

Seasonally Adjusted and Unadjusted Monthly Appreciation Rates

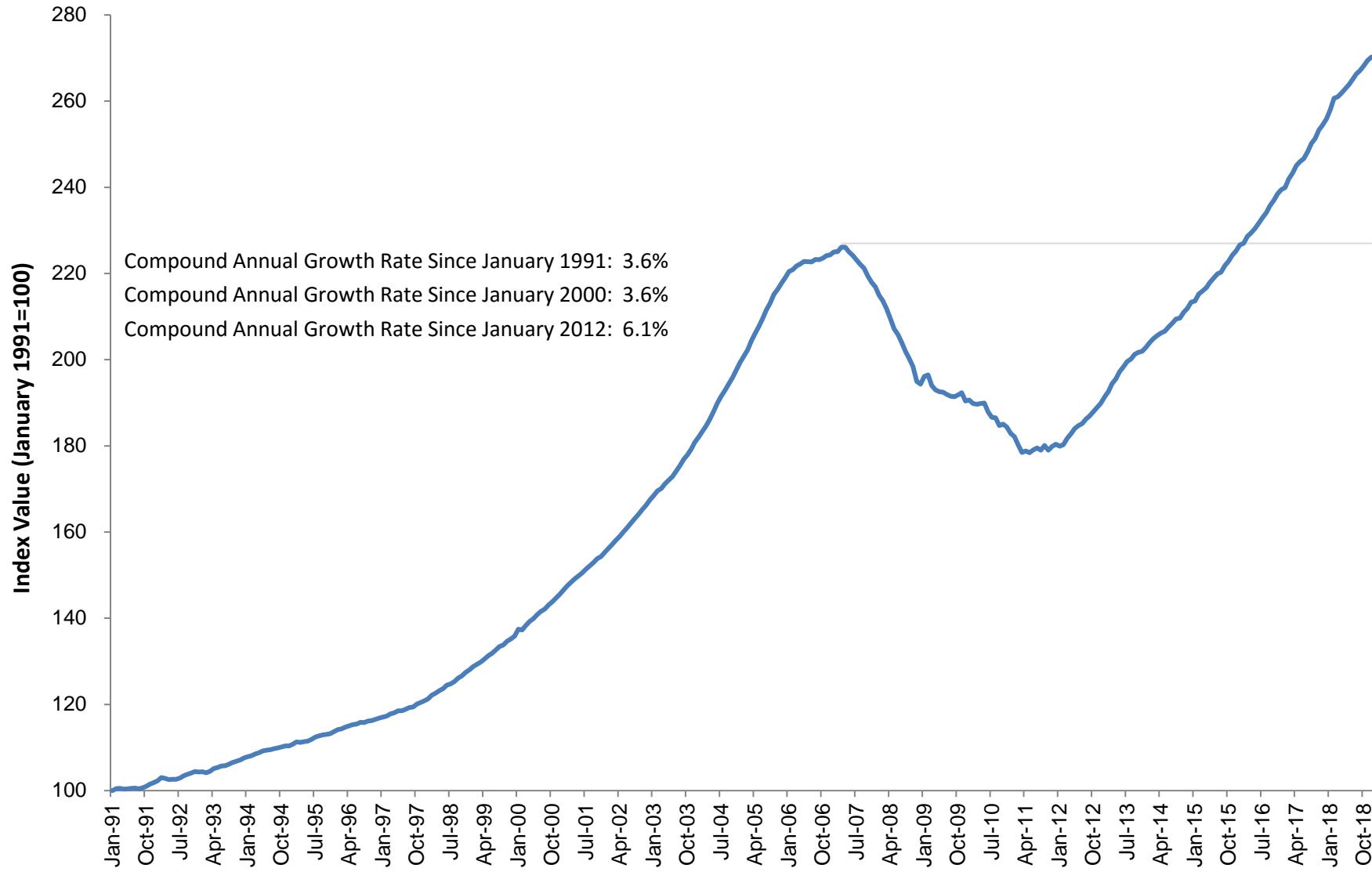
Purchase-Only Index for U.S.



Source: FHFA

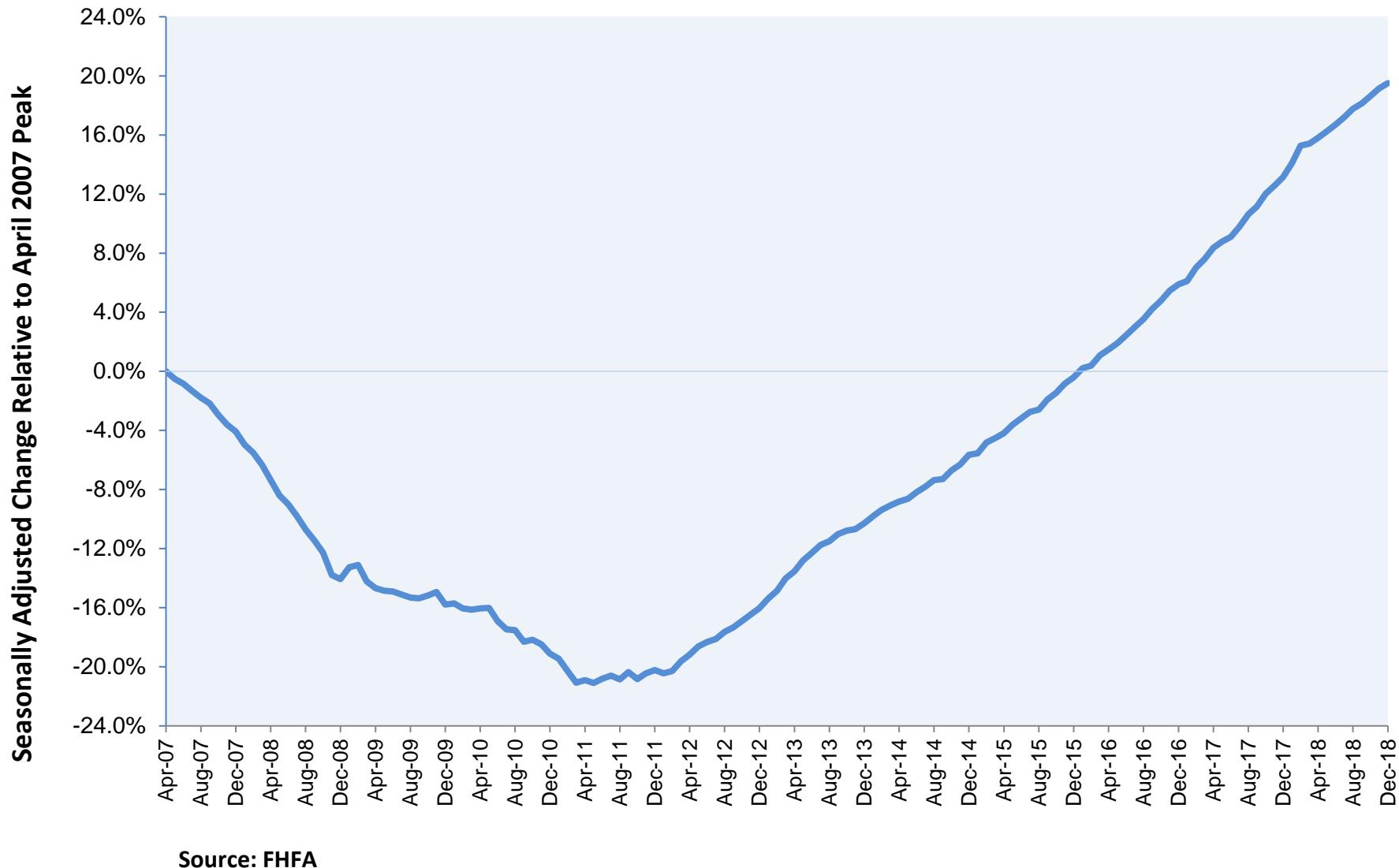
Monthly House Price Index for U.S.

Purchase-Only, Seasonally Adjusted Index, January 1991 - Present



Source: FHFA

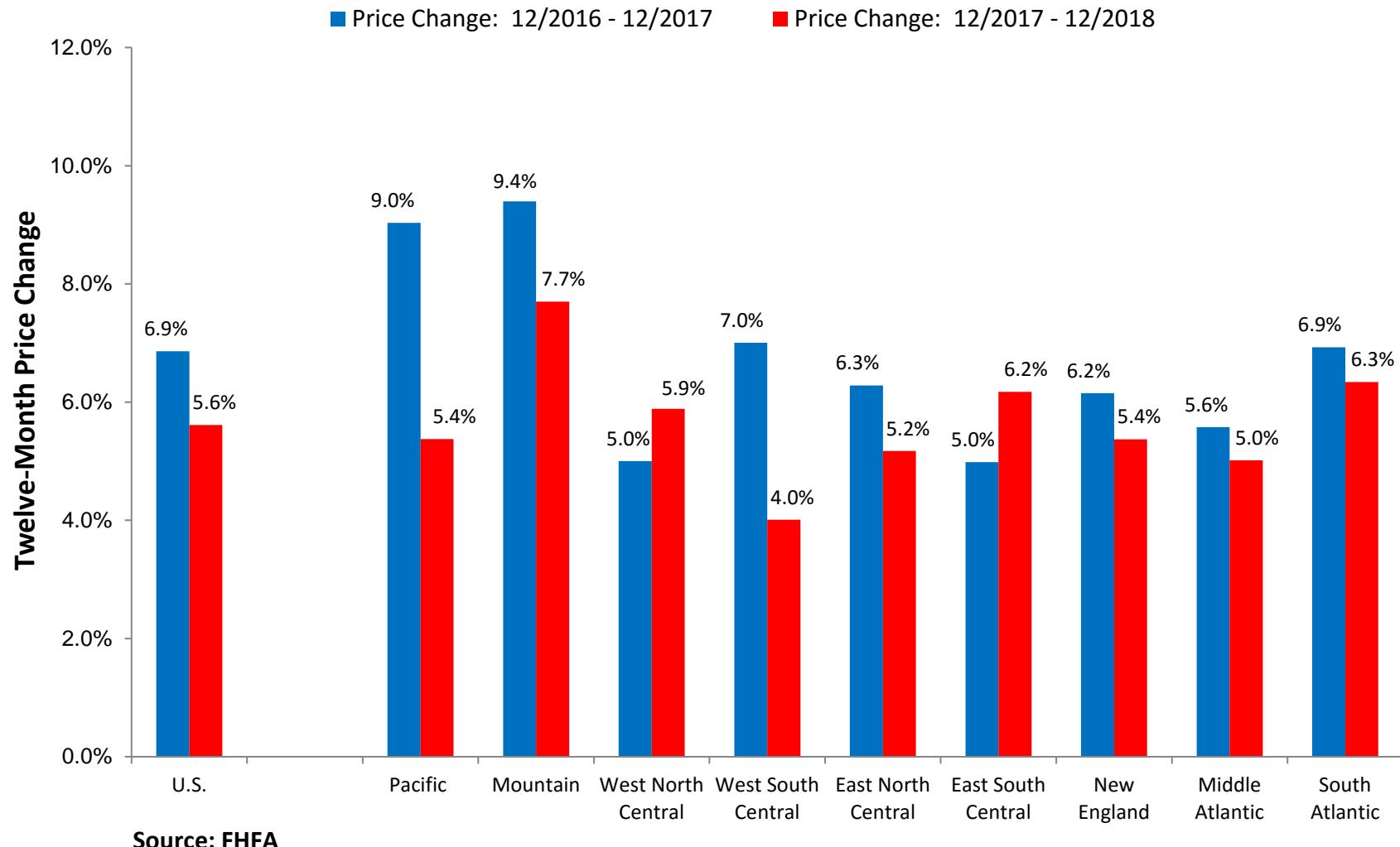
Cumulative Seasonally Adjusted Price Change Relative to the April 2007 Peak for the U.S.
Purchase-Only, Seasonally Adjusted Index



Source: FHFA

Twelve-Month Price Changes – Prior Year vs. Most Recent Year

Purchase-Only Index



Source: FHFA

U.S. Census Divisions
Percent Change in House Prices
 Seasonally Adjusted, Purchase-Only HPI

Period ended December 31, 2018

Division	Division Ranking*	1-Yr	Qtr	5-Yr	Since 1991Q1
USA		5.73%	1.12%	32.81%	165.78%
Mountain	1	8.11%	1.61%	45.65%	260.00%
South Atlantic	2	6.17%	1.00%	35.97%	168.69%
West North Central	3	6.12%	1.35%	28.37%	164.18%
East South Central	4	6.07%	1.37%	28.13%	141.41%
Pacific	5	5.85%	0.76%	44.27%	209.51%
East North Central	6	5.83%	1.11%	29.54%	120.48%
New England	7	4.82%	1.35%	23.77%	145.73%
Middle Atlantic	8	4.35%	1.00%	20.11%	139.56%
West South Central	9	4.31%	1.13%	32.13%	180.38%

Source: FHFA

*Rankings based on annual percentage change.

State Statistics

House Price Appreciation by State

Percent Change in House Prices

Seasonally Adjusted, Purchase-Only HPI

Period ended December 31, 2018

State	Rank*	1-Yr	Qtr	5-Yr	Since 1991Q1
Idaho (ID)	1	11.93%	2.26%	55.13%	238.32%
Nevada (NV)	2	11.20%	1.23%	65.91%	166.37%
Utah (UT)	3	9.80%	2.22%	47.18%	321.57%
Georgia (GA)	4	8.25%	1.34%	42.15%	146.71%
Arizona (AZ)	5	8.17%	2.18%	42.31%	226.22%
Washington (WA)	6	7.94%	0.39%	58.91%	269.80%
Wisconsin (WI)	7	7.64%	1.25%	29.55%	166.02%
Montana (MT)	8	7.39%	1.97%	29.05%	306.57%
Michigan (MI)	9	7.35%	1.78%	41.50%	133.51%
Missouri (MO)	10	7.26%	1.84%	30.30%	144.47%
Mississippi (MS)	11	7.12%	1.08%	17.39%	109.85%
Tennessee (TN)	12	6.86%	1.66%	38.33%	169.03%
Kansas (KS)	13	6.86%	2.32%	29.19%	151.18%
Florida (FL)	14	6.79%	0.71%	50.36%	212.49%
New Hampshire (NH)	15	6.78%	2.49%	31.21%	157.29%
Colorado (CO)	16	6.74%	0.65%	56.56%	367.80%
North Carolina (NC)	17	6.73%	1.70%	34.38%	148.62%
South Carolina (SC)	18	6.71%	1.06%	36.55%	150.04%
Maine (ME)	19	6.62%	1.95%	27.81%	156.37%
Minnesota (MN)	20	6.50%	1.26%	31.84%	192.78%
Oregon (OR)	21	6.35%	0.75%	49.37%	331.65%
Indiana (IN)	22	6.30%	1.02%	29.01%	113.27%
Massachusetts (MA)	23	6.29%	1.90%	30.79%	193.74%
South Dakota (SD)	24	6.19%	-0.32%	25.61%	200.28%
Ohio (OH)	25	6.00%	1.11%	29.64%	105.49%
Kentucky (KY)	26	5.81%	2.18%	27.21%	144.68%
USA		5.73%	1.12%	32.81%	165.78%
Nebraska (NE)	27	5.42%	0.92%	28.95%	168.01%

*Rankings based on annual percentage change.

House Price Appreciation by State

Percent Change in House Prices

Seasonally Adjusted, Purchase-Only HPI

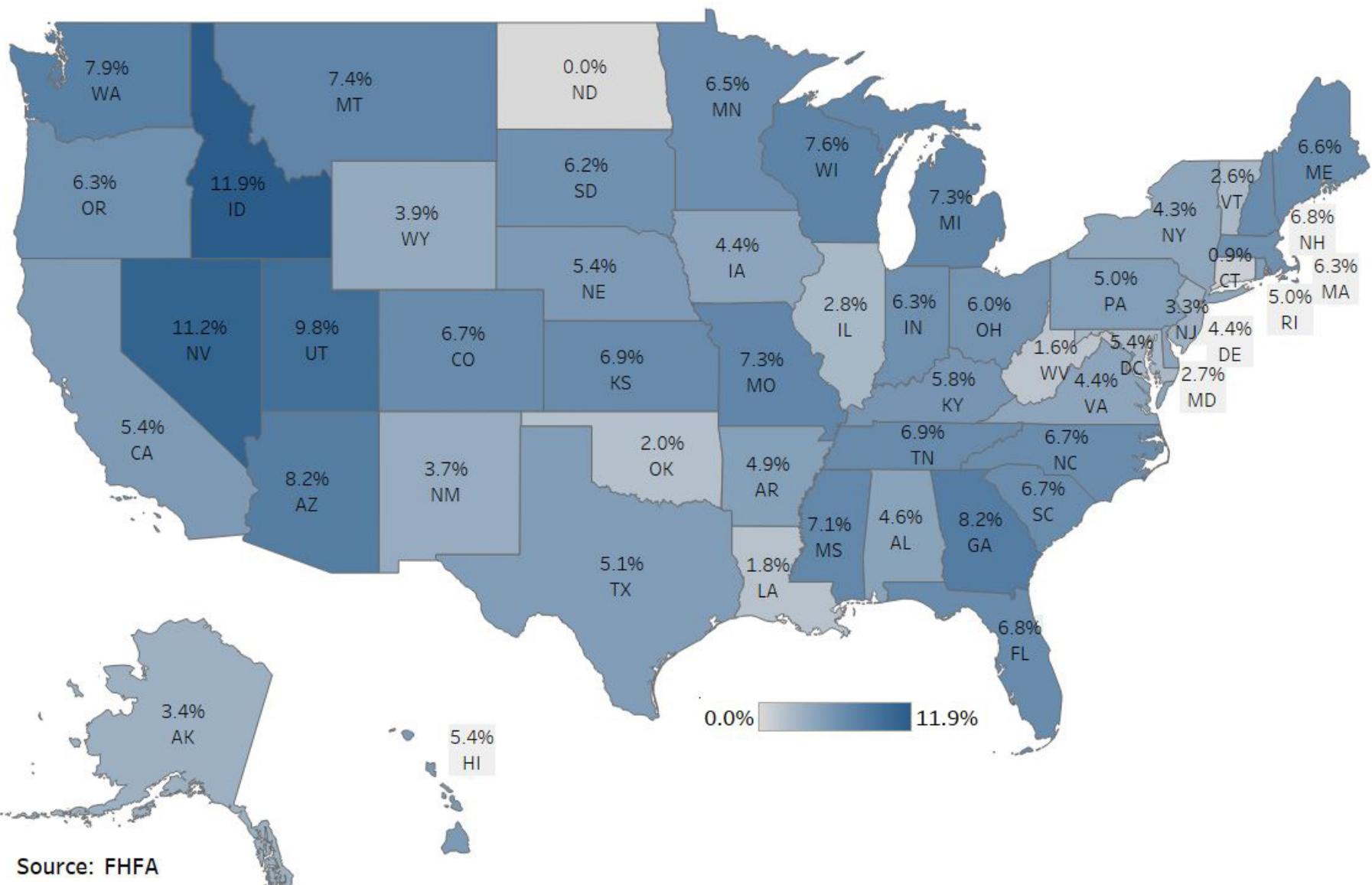
Period ended December 31, 2018

State	Rank*	1-Yr	Qtr	5-Yr	Since 1991Q1
District of Columbia (DC)	28	5.39%	6.37%	44.21%	478.83%
Hawaii (HI)	29	5.37%	1.81%	34.49%	165.87%
California (CA)	30	5.35%	0.75%	41.41%	185.28%
Texas (TX)	31	5.11%	1.10%	38.93%	193.66%
Rhode Island (RI)	32	5.04%	-0.80%	32.27%	135.33%
Pennsylvania (PA)	33	5.02%	1.89%	21.07%	129.82%
Arkansas (AR)	34	4.87%	2.32%	20.96%	125.10%
Alabama (AL)	35	4.60%	0.45%	22.57%	123.41%
Virginia (VA)	36	4.42%	1.13%	21.09%	163.60%
Delaware (DE)	37	4.40%	0.06%	14.75%	107.95%
Iowa (IA)	38	4.37%	0.70%	21.44%	149.13%
New York (NY)	39	4.30%	0.34%	21.28%	146.83%
Wyoming (WY)	40	3.91%	0.62%	15.89%	248.95%
New Mexico (NM)	41	3.73%	1.36%	18.89%	145.59%
Alaska (AK)	42	3.35%	3.23%	14.09%	163.96%
New Jersey (NJ)	43	3.32%	0.69%	16.41%	141.57%
Illinois (IL)	44	2.76%	0.40%	18.13%	105.07%
Maryland (MD)	45	2.74%	0.67%	15.91%	153.21%
Vermont (VT)	46	2.63%	2.22%	14.32%	140.32%
Oklahoma (OK)	47	2.04%	0.70%	21.00%	142.89%
Louisiana (LA)	48	1.83%	0.84%	17.05%	180.65%
West Virginia (WV)	49	1.59%	-1.48%	10.85%	113.93%
Connecticut (CT)	50	0.93%	-0.05%	7.43%	74.21%
North Dakota (ND)	51	0.02%	-0.48%	16.08%	211.10%

*Rankings based on annual percentage change.

Four-Quarter Price Change by State: Purchase-Only Index (Seasonally Adjusted)

U.S. Four-Quarter Appreciation = 5.7% (2017Q4-2018Q4)



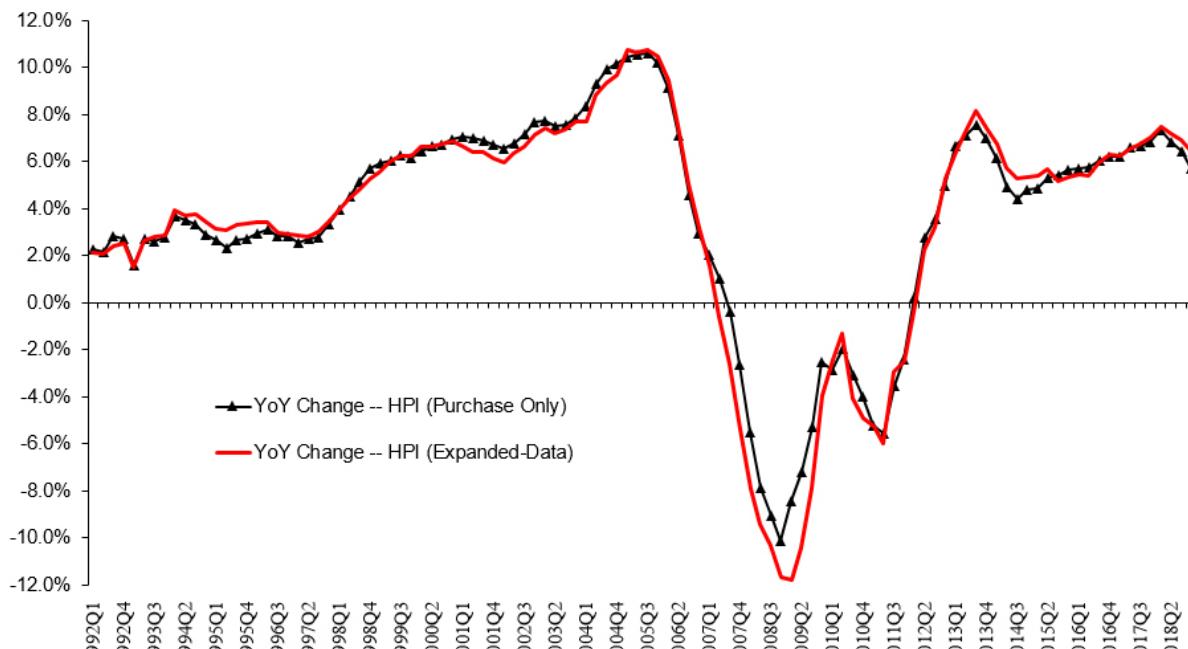
Comparison of the Purchase-Only and Expanded-Data House Price Indexes

FHFA publishes an “expanded-data” House Price Index (HPI), which is available for 50 states, census divisions, and the United States as a whole. The expanded-data HPI is estimated using an augmented dataset relative to the data used to estimate the purchase-only HPI. Like the purchase-only series, the expanded-data series includes sales price information from purchase-money mortgages guaranteed by Fannie Mae and Freddie Mac (the Enterprises). It also includes, however, sales prices for homes financed with Federal Housing Administration-endorsed purchase-money mortgages as well as county recorder data licensed from CoreLogic.

The figure below compares four-quarter percent changes in prices for the purchase-only and expanded-data series since 1992. Although the two series have diverged occasionally, the long-term trend for both is similar. Over the last four quarters, the purchase-only series has risen 5.7 percent, a very similar appreciation rate compared to the 6.4 percent increase for the expanded-data series.

A comparison of the purchase-only and expanded-data indexes for census divisions and states is supplied later in this report (where price changes are reported for such areas). The underlying data for the purchase-only and expanded-data HPI can be found at <https://www.fhfa.gov/DataTools/Downloads/Pages/House-Price-Index-Datasets.aspx#qpo>.

Differences in Measured Price Changes: Purchase-Only vs. Expanded-Data HPI
House Price Appreciation from Same Quarter One Year Earlier, Seasonally Adjusted



Source: FHFA

Comparison of Quarterly and Four-Quarter Price Changes Reported in Traditional Purchase-Only and Expanded-Data House Price Indexes

2018Q4 Release

	Change over Latest Quarter (Seasonally Adjusted)		Change over Latest Four Quarters (Seasonally Adjusted)	
	Traditional (Purchase-Only) HPI	Expanded-Data HPI*	Traditional (Purchase-Only) HPI	Expanded-Data HPI*
United States	1.1%	1.4%	5.7%	6.4%
Pacific Census Division	0.8%	0.9%	5.8%	6.8%
Mountain Census Division	1.6%	1.9%	8.1%	8.8%
West North Central Division	1.3%	1.6%	6.1%	6.2%
West South Central Division	1.1%	0.9%	4.3%	4.5%
East North Central Division	1.1%	1.5%	5.8%	6.6%
East South Central Division	1.4%	1.0%	6.1%	6.2%
New England Division	1.3%	1.7%	4.8%	5.8%
Middle Atlantic Division	1.0%	1.5%	4.4%	6.2%
South Atlantic Division	1.0%	1.7%	6.2%	6.6%
Alabama	0.5%	0.2%	4.6%	4.0%
Alaska	3.2%	1.2%	3.4%	2.1%
Arizona	2.2%	2.4%	8.2%	9.0%
Arkansas	2.3%	2.0%	4.9%	4.9%
California	0.8%	0.8%	5.4%	6.6%
Colorado	0.7%	1.5%	6.7%	7.9%
Connecticut	0.0%	1.3%	0.9%	4.2%
Delaware	0.1%	0.7%	4.4%	2.3%
District of Columbia	6.4%	2.6%	5.4%	3.8%
Florida	0.7%	2.0%	6.8%	7.9%
Georgia	1.3%	1.8%	8.2%	7.9%
Hawaii	1.8%	2.0%	5.4%	4.9%

* Estimated using mortgage data from Fannie Mae and Freddie Mac, county records information licensed from DataQuick Information Systems, and loan-level data from the Federal Housing Administration.

Comparison of Quarterly and Four-Quarter Price Changes Reported in Traditional Purchase-Only and Expanded-Data House Price Indexes

2018Q4 Release

	Change over Latest Quarter (Seasonally Adjusted)		Change over Latest Four Quarters (Seasonally Adjusted)	
	Traditional (Purchase-Only) HPI	Expanded-Data HPI*	Traditional (Purchase-Only) HPI	Expanded-Data HPI*
Idaho	2.3%	2.2%	11.9%	13.5%
Illinois	0.4%	1.2%	2.8%	4.0%
Indiana	1.0%	1.1%	6.3%	6.8%
Iowa	0.7%	0.8%	4.4%	3.9%
Kansas	2.3%	1.8%	6.9%	5.6%
Kentucky	2.2%	1.5%	5.8%	6.4%
Louisiana	0.8%	1.1%	1.8%	2.4%
Maine	1.9%	2.1%	6.6%	6.6%
Maryland	0.7%	0.7%	2.7%	4.2%
Massachusetts	1.9%	1.7%	6.3%	6.8%
Michigan	1.8%	1.9%	7.3%	8.4%
Minnesota	1.3%	1.4%	6.5%	6.4%
Mississippi	1.1%	0.7%	7.1%	6.8%
Missouri	1.8%	2.9%	7.3%	8.5%
Montana	2.0%	1.6%	7.4%	6.3%
Nebraska	0.9%	0.6%	5.4%	4.7%
Nevada	1.2%	2.1%	11.2%	12.2%
New Hampshire	2.5%	1.8%	6.8%	4.9%
New Jersey	0.7%	1.3%	3.3%	6.4%
New Mexico	1.4%	1.5%	3.7%	3.9%
New York	0.3%	1.4%	4.3%	6.9%
North Carolina	1.7%	1.4%	6.7%	6.2%
North Dakota	-0.5%	-0.3%	0.0%	0.1%
Ohio	1.1%	1.4%	6.0%	6.6%

* Estimated using mortgage data from Fannie Mae and Freddie Mac, county records information licensed from DataQuick Information Systems, and loan-level data from the Federal Housing Administration.

Comparison of Quarterly and Four-Quarter Price Changes Reported in Traditional Purchase-Only and Expanded-Data House Price Indexes

2018Q4 Release

	Change over Latest Quarter (Seasonally Adjusted)		Change over Latest Four Quarters (Seasonally Adjusted)	
	Traditional (Purchase-Only) HPI	Expanded-Data HPI*	Traditional (Purchase-Only) HPI	Expanded-Data HPI*
Oklahoma	0.7%	0.1%	2.0%	2.4%
Oregon	0.7%	0.7%	6.3%	6.2%
Pennsylvania	1.9%	1.8%	5.0%	5.4%
Rhode Island	-0.8%	1.6%	5.0%	7.3%
South Carolina	1.1%	1.4%	6.7%	6.0%
South Dakota	-0.3%	-0.1%	6.2%	6.7%
Tennessee	1.7%	1.6%	6.9%	7.4%
Texas	1.1%	0.9%	5.1%	5.3%
Utah	2.2%	2.1%	9.8%	10.3%
Vermont	2.2%	2.2%	2.6%	4.2%
Virginia	1.1%	1.7%	4.4%	4.5%
Washington	0.4%	1.3%	7.9%	8.9%
West Virginia	-1.5%	2.6%	1.6%	5.8%
Wisconsin	1.2%	1.6%	7.6%	7.3%
Wyoming	0.6%	0.6%	3.9%	3.8%

Source: FHFA

* Estimated using mortgage data from Fannie Mae and Freddie Mac, county records information licensed from DataQuick Information Systems, and loan-level data from the Federal Housing Administration.

Technical Note

Transitioning to the New OMB 2018 Metropolitan Area Definitions

FHFA produces house price indexes (HPIs) on a quarterly basis for a variety of metropolitan areas.¹ For several years, the metropolitan areas have followed definitions from the Office of Management and Budget (OMB) provided in a February 2013 announcement (and revised in July 2015, August 2017, and April 2018). However, OMB released a new set of delineations in September 2018 to reflect results from American Community Survey and Census Bureau population estimates for 2015.² Because FHFA has adopted the new OMB definitions, its set of metropolitan areas will change with this release and be reflected in this and future HPI reports.

This Technical Note addresses several questions related to the OMB announcement and offers detailed summary information about the changes. The new OMB definitions set forth names and numerical codes that identify metropolitan areas. The geographic delineations classify urbanized areas by population size and include surrounding areas that are integrated either socially or economically to the core urban area. Typically, the urbanized areas are counties that are combined to form a larger metropolitan area.³

Metropolitan areas tend to grow over time as populations increase and expand into nearby areas. To track such demographic movements, the Census Bureau conducts a comprehensive census every 10 years, ongoing surveys based on statistical sampling every year in between, and a substantial release of survey data and population estimates every five years. OMB relies on the decennial census to make major changes to metropolitan names and numerical codes used to identify the areas. The surveys are used for minor, periodic adjustments. Any such modification—whether major or minor—can have considerable impact on agencies, companies, homeowners, investors, or researchers that rely on the definitions. As a result, there is a delay between the census or surveys and releases of new definitions while the data are reconciled.

How will the new definitions affect the number of metropolitan areas?

The metropolitan area HPIs will follow the new OMB delineations. HPI users may be affected in several ways because changes have been made to codes, names, and the counties that comprise the metropolitan areas.⁴ For example, the “all-transactions” indexes represented 403 metropolitan

¹ For the purposes of FHFA HPIs, “metropolitan areas” may be used synonymously to refer to Metropolitan Statistical Areas or Metropolitan Divisions (where Metropolitan Statistical Areas are large enough to be divided). No methodological changes are made to the repeat-sales methodology used to calculate the FHFA HPIs.

² The announcement is provided at <https://www.whitehouse.gov/wp-content/uploads/2018/09/Bulletin-18-04.pdf>. The last major announcement for delineation files was in February 2013 to reflect results from the 2010 decennial census. OMB has indicated that it intends to issue major announcements every five years to coincide with the decennial census or the American Community Survey and Census Bureau population estimates, as appropriate. Minor announcements may be made on an unscheduled and less frequent basis.

³ Not all counties are affiliated, but the definitions cover over 90 percent of the U.S. population. Where a county is not the primary local government, the definitions may rely on places like cities, towns, boroughs, or parishes.

⁴ FHFA focuses on changes in CBSA codes (where “CBSA” stands for “Core-Based Statistical Areas”) and metropolitan names. Name changes occur where population shifts revise the central or outlying status of one or more counties, alter the principal city, or update the spelling of an already existing county. All of the new official names are used in this report.

areas previously but will cover 404 metropolitan areas now. The other types of HPIs, the “purchase-only” and “expanded-data” indexes, did not change in their total number of places that are tracked. All three indexes experienced changes in numerical codes and metropolitan names. Table 1 provides an overview of how each of the indexes have been affected. Few numerical code changes occurred and, when they did, they also involved a name change. Depending on the index, between 10 to 20 percent of the metropolitan areas experienced name changes. Generally speaking, though, the majority of the metropolitan areas stayed either exactly the same or changed so minimally that their numerical code remained the same.⁵

What kind of changes were experienced?

A breakdown of metropolitan area changes is shown in Table 2. A small number of prior metropolitan areas have been removed (red highlights) or new areas have been added (green highlights). The majority of changes are modifications to names (yellow highlights). The table is structured to show old definitions that FHFA had been utilizing, the new definitions, changes to codes and names, and what type of HPI is affected with each change.⁶

The handful of new metropolitan areas are due to restructuring of existing places, and the changes are usually obvious because the first principal city has remained the same in the name. However, two less obvious changes might be helpful to note. First, one metropolitan area had included two adjacent counties, Dutchess County and Putnam County, that have been split into an existing metropolitan area (New York-Jersey City-White Plains, NY-NJ) and a new metropolitan area (Poughkeepsie-Newburgh-Middletown, NY). Second, Frederick County and Montgomery County used to form Silver Spring-Frederick-Rockville, MD (MSAD) but they have been reclassified in code and name as Frederick-Gaithersburg-Rockville, MD (MSAD).⁷

Is a list available to show all the new CBSA codes and metropolitan names?

The full set of metropolitan areas is presented in Table 3. Highlighted cells denote the same kind of classification as used in Table 2, except the table does not show metropolitan areas that were removed. An Excel file with all three tables is posted in the “Additional Data” section on the HPI Downloadable Data page, or at <https://www.fhfa.gov/DataTools/Downloads/Pages/House-Price-Index-Datasets.aspx>. Further information about metropolitan areas can be found in the Frequently Asked Questions at <https://www.fhfa.gov/Media/PublicAffairs/Pages/House-Price-Index-Frequently-Asked-Questions.aspx>. Comments, questions, and suggestions should be addressed to hpihelpdesk@fhfa.gov.

⁵ We only classify “changes” as when a new numerical code is assigned or a name is altered for a metropolitan area. Names may change when metropolitan areas add counties or existing counties transition from outlying to central status. However, FHFA identifies metropolitan areas with their numerical codes and, as such, is concerned mainly with the numerical alterations.

⁶ Metropolitan areas are omitted if they did not experience any change to their code or name.

⁷ Several highly technical punctuation changes have happened. Three metropolitan names used to have two hyphens but one place no longer has hyphens. Sacramento--Roseville--Arden-Arcade, CA is Sacramento-Roseville-Folsom, CA. Quotes and parentheses have also been removed in one name. Honolulu ('Urban Honolulu'), HI is only referred to as Urban Honolulu, HI. Finally, note that Coeur d'Alene, ID still contains the single quote.

Table 1: Changes to Metropolitan Statistical Areas (MSAs) covered by the FHFA HPIs

Type of change	All-Transactions	Type of HPI Purchase-Only	Expanded-Data
Prior number of CBSA codes	403	100	50
Removed CBSA codes	5	3	1
Added CBSA codes	6	3	1
Total new number of CBSA codes	404	100	50
Prior number of Metropolitan names	403	100	50
Removed Metropolitan names	5	3	1
Added Metropolitan names	6	3	1
Modifications of remaining Metropolitan names	43	19	11
Total new number of Metropolitan names	404	100	50

Notes: "CBSA" stands for "Core-Based Statistical Area" and is a geographic area defined by the Office of Management and Budget (OMB). CBSAs can include both Metropolitan Statistical Areas and Micropolitan Statistical Areas. FHFA, though, only releases HPIs for Metropolitan Statistical Areas, which are commonly referred to as "MSAs". Certain MSAs are further divided into Metropolitan Divisions and, in those cases, FHFA produces HPIs for each Division rather than the MSA as a whole.

Source: FHFA's calculations are based on comparisons of existing MSAs where HPIs are produced and new delineations as outlined in OMB Bulletin No. 18-04 released on September 14, 2018 and available for download at <https://www.whitehouse.gov/wp-content/uploads/2018/09/Bulletin-18-04.pdf>.

Table 2. Showing changes in Metropolitan Statistical Areas (MSAs) covered by the FHFA HPIs

Old definitions (used previously by FHFA)		New definitions (after new delineations were announced)		Comparing changes		Type of HPI that is affected		
CBSA	Metropolitan name	CBSA	Metropolitan name	CBSA?	Name?	All-Transactions	Purchase-Only	Expanded-Data
10540	Albany, OR	10540	Albany-Lebanon, OR	Modified	Yes			
11500	Aniston-Oxford-Jacksonville, AL	11500	Aniston-Oxford, AL	Modified	Yes			
12060	Atlanta-Sandy Springs-Roswell, GA	12060	Atlanta-Sandy Springs-Alpharetta, GA	Modified	Yes	Yes	Yes	Yes
12420	Austin-Round Rock, TX	12420	Austin-Round Rock-Georgetown, TX	Modified	Yes	Yes	Yes	Yes
13460	Bend-Redmond, OR	13460	Bend, OR	Modified	Yes			
13980	Blacksburg-Christiansburg-Radford, VA	13980	Blacksburg-Christiansburg, VA	Modified	Yes			
14740	Bremerton-Silverdale, WA	14740	Bremerton-Silverdale-Port Orchard, WA	Modified	Yes			
15380	Buffalo-Cheektowaga-Niagara Falls, NY	15380	Buffalo-Cheektowaga, NY	Modified	Yes	Yes		
16974	Chicago-Naperville-Arlington Heights, IL (MSAD)	16984	Chicago-Naperville-Evanston, IL (MSAD)	Removed	Removed	Yes	Yes	Yes
19380	Dayton, OH	19430	Dayton-Kettering, OH	Removed	Removed	Yes	Yes	Yes
20524	Dutchess County-Putnam County, NY (MSAD)			Removed	Removed	Yes		
21660	Eugene, OR	21660	Eugene-Springfield, OR	Modified	Yes			
22220	Fayetteville-Springdale-Rogers, AR-MO	22220	Fayetteville-Springdale-Rogers, AR	Modified	Yes			
22744	Fort Lauderdale-Pompano Beach-Deerfield Beach, FL (MSAD)	22744	Fort Lauderdale-Pompano Beach-Sunrise, FL (MSAD)	Modified	Yes	Yes	Yes	Yes
23104	Fort Worth-Arlington, TX (MSAD)	23104	Fort Worth-Arlington-Grapevine, TX (MSAD)	Modified	Yes	Yes	Yes	Yes
		23224	Frederick-Gaithersburg-Rockville, MD (MSAD)	New	New	Yes	Yes	
24340	Grand Rapids-Wyoming, MI	24340	Grand Rapids-Kentwood, MI	Modified	Yes	Yes		
24860	Greenville-Anderson-Mauldin, SC	24860	Greenville-Anderson, SC	Modified	Yes	Yes		
25060	Gulfport-Biloxi-Pascagoula, MS	25060	Gulfport-Biloxi, MS	Modified	Yes			
25540	Hartford-West Hartford-East Hartford, CT	25540	Hartford-East Hartford-Middletown, CT	Modified	Yes	Yes		
25940	Hilton Head Island-Bluffton-Beaufort, SC	25940	Hilton Head Island-Bluffton, SC	Modified	Yes			
28700	Kingsport-Bristol-Bristol, TN-VA	28700	Kingsport-Bristol, TN-VA	Modified	Yes			
31420	Macon, GA	31420	Macon-Bibb County, GA	Modified	Yes			
31860	Mankato-North Mankato, MN	31860	Mankato, MN	Modified	Yes			
33340	Milwaukee-Waukesha-West Allis, WI	33340	Milwaukee-Waukesha, WI	Modified	Yes	Yes	Yes	
34940	Naples-Immokalee-Marco Island, FL	34940	Naples-Marco Island, FL	Modified	Yes			
		35154	New Brunswick-Lakewood, NJ (MSAD)	New	New	Yes		
35660	Niles-Benton Harbor, MI	35660	Niles, MI	Modified	Yes			
36084	Oakland-Hayward-Berkeley, CA (MSAD)	36084	Oakland-Berkeley-Livermore, CA (MSAD)	Modified	Yes	Yes	Yes	
36500	Olympia-Tumwater, WA	36500	Olympia-Lacey-Tumwater, WA	Modified	Yes			
38060	Phoenix-Mesa-Scottsdale, AZ	38060	Phoenix-Mesa-Chandler, AZ	Modified	Yes	Yes	Yes	
		39100	Poughkeepsie-Newburgh-Middletown, NY	New	New	Yes		
39140	Prescott, AZ	39150	Prescott Valley-Prescott, AZ	Removed	Removed	Yes		
39580	Raleigh, NC	39580	Raleigh-Cary, NC	New	New	Yes		
40900	Sacramento--Roseville--Arden-Arcade, CA	40900	Sacramento-Roseville-Folsom, CA	Modified	Yes	Yes	Yes	
41740	San Diego-Carlsbad, CA	41740	San Diego-Chula Vista-Carlsbad, CA	Modified	Yes	Yes	Yes	
41884	San Francisco-Redwood City-South San Francisco, CA (MSAD)	41884	San Francisco-San Mateo-Redwood City, CA (MSAD)	Modified	Yes	Yes	Yes	Yes
42020	San Luis Obispo-Paso Robles-Arroyo Grande, CA	42020	San Luis Obispo-Paso Robles, CA	Modified	Yes			
42220	Santa Rosa, CA	42220	Santa Rosa-Petaluma, CA	Modified	Yes			
42540	Scranton--Wilkes-Barre--Hazleton, PA	42540	Scranton--Wilkes-Barre, PA	Modified	Yes			
42644	Seattle-Bellevue-Everett, WA (MSAD)	42644	Seattle-Bellevue-Kent, WA (MSAD)	Modified	Yes	Yes	Yes	Yes
42700	Sebring, FL	42700	Sebring-Avon Park, FL	Modified	Yes			

Old definitions (used previously by FHFA)		New definitions (after new delineations were announced)		Comparing changes		Type of HPI that is affected		
CBSA	Metropolitan name	CBSA	Metropolitan name	CBSA?	Name?	All-Transactions	Purchase-Only	Expanded-Data
43524	Silver Spring-Frederick-Rockville, MD (MSAD)			Removed	Removed	Yes	Yes	
44420	Staunton-Waynesboro, VA	44420	Staunton, VA	Modified		Yes		
44700	Stockton-Lodi, CA	44700	Stockton, CA	Modified		Yes	Yes	
45940	Trenton, NJ	45940	Trenton-Princeton, NJ	Modified		Yes		
46520	Honolulu ('Urban Honolulu'), HI	46520	Urban Honolulu, HI	Modified		Yes	Yes	
46700	Vallejo-Fairfield, CA	46700	Vallejo, CA	Modified		Yes		
47300	Visalia-Porterville, CA	47300	Visalia, CA	Modified		Yes		
48140	Wausau, WI	48140	Wausau-Weston, WI	Modified		Yes		
48424	West Palm Beach-Boca Raton-Delray Beach, FL (MSAD)	48424	West Palm Beach-Boca Raton-Boynton Beach, FL (MSAD)	Modified		Yes	Yes	

Notes: "Old definitions" show what FHFA had been using prior to its 2018Q4 HPI report and the "New definitions" denote what will be used going forward (beginning February 2019). Highlighted cells indicate changes.

Source: FHFA's calculations are based on comparisons of existing MSAs where HPIs are produced and new delineations as outlined in OMB Bulletin No. 18-04 released on September 14, 2018 and available for download at <https://www.whitehouse.gov/wp-content/uploads/2018/09/Bulletin-18-04.pdf>.

Table 3. Listing all Metropolitan Statistical Areas (MSAs) covered by the FHFA HPIs

All-Transactions HPI			Purchase-Only HPI			Expanded-Data HPI		
Number	CBSA	Metropolitan name	CBSA	Metropolitan name	CBSA	Metropolitan name		
1	10180	Abilene, TX	10420	Akron, OH	11244	Anaheim-Santa Ana-Irvine, CA (MSAD)		
2	10420	Akron, OH	10580	Albany-Schenectady-Troy, NY	12060	Atlanta-Sandy Springs-Alpharetta, GA		
3	10500	Albany, GA	10740	Albuquerque, NM	12420	Austin-Round Rock-Georgetown, TX		
4	10540	Albany-Lebanon, OR	10900	Allentown-Bethlehem-Easton, PA-NJ	12580	Baltimore-Columbia-Towson, MD		
5	10580	Albany-Schenectady-Troy, NY	11244	Anaheim-Santa Ana-Irvine, CA (MSAD)	14454	Boston, MA (MSAD)		
6	10740	Albuquerque, NM	12060	Atlanta-Sandy Springs-Alpharetta, GA	15764	Cambridge-Newton-Framingham, MA (MSAD)		
7	10780	Alexandria, LA	12420	Austin-Round Rock-Georgetown, TX	16740	Charlotte-Concord-Gastonia, NC-SC		
8	10900	Allentown-Bethlehem-Easton, PA-NJ	12540	Bakersfield, CA	16984	Chicago-Naperville-Evanston, IL (MSAD)		
9	11020	Altoona, PA	12580	Baltimore-Columbia-Towson, MD	17140	Cincinnati, OH-KY-IN		
10	11100	Amarillo, TX	12940	Baton Rouge, LA	17460	Cleveland-Elyria, OH		
11	11180	Ames, IA	13820	Birmingham-Hoover, AL	18140	Columbus, OH		
12	11244	Anaheim-Santa Ana-Irvine, CA (MSAD)	14260	Boise City, ID	19124	Dallas-Plano-Irving, TX (MSAD)		
13	11260	Anchorage, AK	14454	Boston, MA (MSAD)	19740	Denver-Aurora-Lakewood, CO		
14	11460	Ann Arbor, MI	14860	Bridgeport-Stamford-Norwalk, CT	19804	Detroit-Dearborn-Livonia, MI (MSAD)		
15	11500	Anniston-Oxford, AL	15380	Buffalo-Checkwaga, NY	22744	Fort Lauderdale-Pompano Beach-Sunrise, FL (MSAD)		
16	11540	Appleton, WI	15764	Cambridge-Newton-Framingham, MA (MSAD)	23104	Fort Worth-Arlington-Grapevine, TX (MSAD)		
17	11700	Asheville, NC	15804	Camden, NJ (MSAD)	26420	Houston-The Woodlands-Sugar Land, TX		
18	12020	Athens-Clarke County, GA	15980	Cape Coral-Fort Myers, FL	26900	Indianapolis-Carmel-Anderson, IN		
19	12060	Atlanta-Sandy Springs-Alpharetta, GA	16700	Charleston-North Charleston, SC	27260	Jacksonville, FL		
20	12100	Atlantic City-Hammonton, NJ	16740	Charlotte-Concord-Gastonia, NC-SC	28140	Kansas City, MO-KS		
21	12220	Auburn-Opelika, AL	16984	Chicago-Naperville-Evanston, IL (MSAD)	29820	Las Vegas-Henderson-Paradise, NV		
22	12260	Augusta-Richmond County, GA-SC	17140	Cincinnati, OH-KY-IN	31084	Los Angeles-Long Beach-Glendale, CA (MSAD)		
23	12420	Austin-Round Rock-Georgetown, TX	17460	Cleveland-Elyria, OH	33124	Miami-Miami Beach-Kendall, FL (MSAD)		
24	12540	Bakersfield, CA	17820	Colorado Springs, CO	33340	Milwaukee-Waukesha, WI		
25	12580	Baltimore-Columbia-Towson, MD	17900	Columbus, SC	33460	Minneapolis-St. Paul-Bloomington, MN-WI		
26	12620	Bangor, ME	18140	Columbus, OH	33874	Montgomery County-Bucks County-Chester County, PA (MSAD)		
27	12700	Barnstable Town, MA	19124	Dallas-Plano-Irving, TX (MSAD)	34980	Nashville-Davidson-Murfreesboro-Franklin, TN		
28	12940	Baton Rouge, LA	19430	Dayton-Kettering, OH	35004	Nassau County-Suffolk County, NY (MSAD)		
29	12980	Battle Creek, MI	19740	Denver-Aurora-Lakewood, CO	35084	Newark, NJ-PA (MSAD)		
30	13020	Bay City, MI	19804	Detroit-Dearborn-Livonia, MI (MSAD)	35614	New York-Jersey City-White Plains, NY-NJ (MSAD)		
31	13140	Beaumont-Port Arthur, TX	20994	Elgin, IL (MSAD)	36084	Oakland-Berkeley-Livermore, CA (MSAD)		
32	13220	Beckley, WV	21340	El Paso, TX	36740	Orlando-Kissimmee-Sanford, FL		
33	13380	Bellingham, WA	22744	Fort Lauderdale-Pompano Beach-Sunrise, FL (MSAD)	37964	Philadelphia, PA (MSAD)		
34	13460	Bend, OR	23104	Fort Worth-Arlington-Grapevine, TX (MSAD)	38060	Phoenix-Mesa-Chandler, AZ		
35	13740	Billings, MT	23224	Frederick-Gaithersburg-Rockville, MD (MSAD)	38300	Pittsburgh, PA		
36	13780	Binghamton, NY	23420	Fresno, CA	38900	Portland-Vancouver-Hillsboro, OR-WA		
37	13820	Birmingham-Hoover, AL	23844	Gary, IN (MSAD)	39300	Providence-Warwick, RI-MA		
38	13900	Bismarck, ND	24340	Grand Rapids-Kentwood, MI	40140	Riverside-San Bernardino-Ontario, CA		
39	13980	Blacksburg-Christiansburg, VA	24660	Greensboro-High Point, NC	40900	Sacramento-Roseville-Folsom, CA		
40	14010	Bloomington, IL	24860	Greenville-Anderson, SC	41180	St. Louis, MO-IL		
41	14020	Bloomington, IN	25540	Hartford-East Hartford-Middletown, CT	41700	San Antonio-New Braunfels, TX		
42	14100	Bloomsburg-Berwick, PA	26420	Houston-The Woodlands-Sugar Land, TX	41740	San Diego-Chula Vista-Carlsbad, CA		
43	14260	Boise City, ID	26900	Indianapolis-Carmel-Anderson, IN	41884	San Francisco-San Mateo-Redwood City, CA (MSAD)		
44	14454	Boston, MA (MSAD)	27260	Jacksonville, FL	41940	San Jose-Sunnyvale-Santa Clara, CA		
45	14500	Boulder, CO	28140	Kansas City, MO-KS	42644	Seattle-Bellevue-Kent, WA (MSAD)		
46	14540	Bowling Green, KY	28940	Knoxville, TN	45300	Tampa-St. Petersburg-Clearwater, FL		
47	14740	Bremerton-Silverdale-Port Orchard, WA	29404	Lake County-Kenosha County, IL-WI (MSAD)	47260	Virginia Beach-Norfolk-Newport News, VA-NC		
48	14860	Bridgeport-Stamford-Norwalk, CT	29820	Las Vegas-Henderson-Paradise, NV	47664	Warren-Troy-Farmington Hills, MI (MSAD)		
49	15180	Brownsville-Harlingen, TX	30780	Little Rock-North Little Rock-Conway, AR	47894	Washington-Arlington-Alexandria, DC-VA-MD-WV (MSAD)		
50	15260	Brunswick, GA	31084	Los Angeles-Long Beach-Glendale, CA (MSAD)	48424	West Palm Beach-Boca Raton-Boynton Beach, FL (MSAD)		

All-Transactions HPI			Purchase-Only HPI		Expanded-Data HPI	
Number	CBSA	Metropolitan name	CBSA	Metropolitan name	CBSA	Metropolitan name
51	15380	Buffalo-Cheektowaga, NY	31140	Louisville/Jefferson County, KY-IN		
52	15500	Burlington, NC	32820	Memphis, TN-MS-AR		
53	15540	Burlington-South Burlington, VT	33124	Miami-Miami Beach-Kendall, FL (MSAD)		
54	15680	California-Lexington Park, MD	33340	Milwaukee-Waukesha, WI		
55	15764	Cambridge-Newton-Framingham, MA (MSAD)	33460	Minneapolis-St. Paul-Bloomington, MN-WI		
56	15804	Camden, NJ (MSAD)	33874	Montgomery County-Bucks County-Chester County, PA (MSAD)		
57	15940	Canton-Massillon, OH	34980	Nashville-Davidson-Murfreesboro-Franklin, TN		
58	15980	Cape Coral-Fort Myers, FL	35004	Nassau County-Suffolk County, NY (MSAD)		
59	16020	Cape Girardeau, MO-IL	35084	Newark, NJ-PA (MSAD)		
60	16060	Carbondale-Marion, IL	35300	New Haven-Milford, CT		
61	16180	Carson City, NV	35380	New Orleans-Metairie, LA		
62	16220	Casper, WY	35614	New York-Jersey City-White Plains, NY-NJ (MSAD)		
63	16300	Cedar Rapids, IA	35840	North Port-Sarasota-Bradenton, FL		
64	16540	Chambersburg-Waynesboro, PA	36084	Oakland-Berkeley-Livermore, CA (MSAD)		
65	16580	Champaign-Urbana, IL	36420	Oklahoma City, OK		
66	16620	Charleston, WV	36540	Omaha-Council Bluffs, NE-IA		
67	16700	Charleston-North Charleston, SC	36740	Orlando-Kissimmee-Sanford, FL		
68	16740	Charlotte-Concord-Gastonia, NC-SC	37100	Oxnard-Thousand Oaks-Ventura, CA		
69	16820	Charlottesville, VA	37964	Philadelphia, PA (MSAD)		
70	16860	Chattanooga, TN-GA	38060	Phoenix-Mesa-Chandler, AZ		
71	16940	Cheyenne, WY	38300	Pittsburgh, PA		
72	16984	Chicago-Naperville-Evanston, IL (MSAD)	38900	Portland-Vancouver-Hillsboro, OR-WA		
73	17020	Chico, CA	39300	Providence-Warwick, RI-MA		
74	17140	Cincinnati, OH-KY-IN	39580	Raleigh-Cary, NC		
75	17300	Clarksville, TN-KY	40060	Richmond, VA		
76	17420	Cleveland, TN	40140	Riverside-San Bernardino-Ontario, CA		
77	17460	Cleveland-Elyria, OH	40380	Rochester, NY		
78	17660	Coeur d'Alene, ID	40900	Sacramento-Roseville-Folsom, CA		
79	17780	College Station-Bryan, TX	41180	St. Louis, MO-IL		
80	17820	Colorado Springs, CO	41620	Salt Lake City, UT		
81	17860	Columbia, MO	41700	San Antonio-New Braunfels, TX		
82	17900	Columbia, SC	41740	San Diego-Chula Vista-Carlsbad, CA		
83	17980	Columbus, GA-AL	41884	San Francisco-San Mateo-Redwood City, CA (MSAD)		
84	18020	Columbus, IN	41940	San Jose-Sunnyvale-Santa Clara, CA		
85	18140	Columbus, OH	42644	Seattle-Bellevue-Kent, WA (MSAD)		
86	18580	Corpus Christi, TX	44700	Stockton, CA		
87	18700	Corvallis, OR	45060	Syracuse, NY		
88	18880	Crestview-Fort Walton Beach-Destin, FL	45104	Tacoma-Lakewood, WA (MSAD)		
89	19060	Cumberland, MD-WV	45300	Tampa-St. Petersburg-Clearwater, FL		
90	19124	Dallas-Plano-Irving, TX (MSAD)	46060	Tucson, AZ		
91	19140	Dalton, GA	46140	Tulsa, OK		
92	19180	Danville, IL	46520	Urban Honolulu, HI		
93	19300	Daphne-Fairhope-Foley, AL	47260	Virginia Beach-Norfolk-Newport News, VA-NC		
94	19340	Davenport-Moline-Rock Island, IA-IL	47664	Warren-Troy-Farmington Hills, MI (MSAD)		
95	19430	Dayton-Kettering, OH	47894	Washington-Arlington-Alexandria, DC-VA-MD-WV (MSAD)		
96	19460	Decatur, AL	48424	West Palm Beach-Boca Raton-Boynton Beach, FL (MSAD)		
97	19500	Decatur, IL	48620	Wichita, KS		
98	19660	Deltona-Daytona Beach-Ormond Beach, FL	48864	Wilmington, DE-MD-NJ (MSAD)		
99	19740	Denver-Aurora-Lakewood, CO	49180	Winston-Salem, NC		
100	19780	Des Moines-West Des Moines, IA	49340	Worcester, MA-CT		

All-Transactions HPI			Purchase-Only HPI		Expanded-Data HPI	
Number	CBSA	Metropolitan name	CBSA	Metropolitan name	CBSA	Metropolitan name
101	19804	Detroit-Dearborn-Livonia, MI (MSAD)				
102	20020	Dothan, AL				
103	20100	Dover, DE				
104	20220	Dubuque, IA				
105	20260	Duluth, MN-WI				
106	20500	Durham-Chapel Hill, NC				
107	20700	East Stroudsburg, PA				
108	20740	Eau Claire, WI				
109	20940	El Centro, CA				
110	20994	Elgin, IL (MSAD)				
111	21060	Elizabethtown-Fort Knox, KY				
112	21140	Elkhart-Goshen, IN				
113	21300	Elmira, NY				
114	21340	El Paso, TX				
115	21420	Enid, OK				
116	21500	Erie, PA				
117	21660	Eugene-Springfield, OR				
118	21780	Evansville, IN-KY				
119	21820	Fairbanks, AK				
120	22020	Fargo, ND-MN				
121	22140	Farmington, NM				
122	22180	Fayetteville, NC				
123	22220	Fayetteville-Springdale-Rogers, AR				
124	22380	Flagstaff, AZ				
125	22420	Flint, MI				
126	22500	Florence, SC				
127	22520	Florence-Muscle Shoals, AL				
128	22540	Fond du Lac, WI				
129	22660	Fort Collins, CO				
130	22744	Fort Lauderdale-Pompano Beach-Sunrise, FL (MSAD)				
131	22900	Fort Smith, AR-OK				
132	23060	Fort Wayne, IN				
133	23104	Fort Worth-Arlington-Grapevine, TX (MSAD)				
134	23224	Frederick-Gaithersburg-Rockville, MD (MSAD)				
135	23420	Fresno, CA				
136	23460	Gadsden, AL				
137	23540	Gainesville, FL				
138	23580	Gainesville, GA				
139	23844	Gary, IN (MSAD)				
140	23900	Gettysburg, PA				
141	24020	Glens Falls, NY				
142	24140	Goldsboro, NC				
143	24220	Grand Forks, ND-MN				
144	24260	Grand Island, NE				
145	24300	Grand Junction, CO				
146	24340	Grand Rapids-Kentwood, MI				
147	24420	Grants Pass, OR				
148	24500	Great Falls, MT				
149	24540	Greeley, CO				
150	24580	Green Bay, WI				

All-Transactions HPI		
Number	CBSA	Metropolitan name
151	24660	Greensboro-High Point, NC
152	24780	Greenville, NC
153	24860	Greenville-Anderson, SC
154	25060	Gulfport-Biloxi, MS
155	25180	Hagerstown-Martinsburg, MD-WV
156	25220	Hammond, LA
157	25260	Hanford-Corcoran, CA
158	25420	Harrisburg-Carlisle, PA
159	25500	Harrisonburg, VA
160	25540	Hartford-East Hartford-Middletown, CT
161	25620	Hattiesburg, MS
162	25860	Hickory-Lenoir-Morganton, NC
163	25940	Hilton Head Island-Bluffton, SC
164	25980	Hinesville, GA
165	26140	Homosassa Springs, FL
166	26300	Hot Springs, AR
167	26380	Houma-Thibodaux, LA
168	26420	Houston-The Woodlands-Sugar Land, TX
169	26580	Huntington-Ashland, WV-KY-OH
170	26620	Huntsville, AL
171	26820	Idaho Falls, ID
172	26900	Indianapolis-Carmel-Anderson, IN
173	26980	Iowa City, IA
174	27060	Ithaca, NY
175	27100	Jackson, MI
176	27140	Jackson, MS
177	27180	Jackson, TN
178	27260	Jacksonville, FL
179	27340	Jacksonville, NC
180	27500	Janesville-Beloit, WI
181	27620	Jefferson City, MO
182	27740	Johnson City, TN
183	27780	Johnstown, PA
184	27860	Jonesboro, AR
185	27900	Joplin, MO
186	27980	Kahului-Wailuku-Lahaina, HI
187	28020	Kalamazoo-Portage, MI
188	28100	Kankakee, IL
189	28140	Kansas City, MO-KS
190	28420	Kennewick-Richland, WA
191	28660	Killeen-Temple, TX
192	28700	Kingsport-Bristol, TN-VA
193	28740	Kingston, NY
194	28940	Knoxville, TN
195	29020	Kokomo, IN
196	29100	La Crosse-Onalaska, WI-MN
197	29180	Lafayette, LA
198	29200	Lafayette-West Lafayette, IN
199	29340	Lake Charles, LA
200	29404	Lake County-Kenosha County, IL-WI (MSAD)

Purchase-Only HPI	
CBSA	Metropolitan name

Expanded-Data HPI	
CBSA	Metropolitan name

All-Transactions HPI		
Number	CBSA	Metropolitan name
201	29420	Lake Havasu City-Kingman, AZ
202	29460	Lakeland-Winter Haven, FL
203	29540	Lancaster, PA
204	29620	Lansing-East Lansing, MI
205	29700	Laredo, TX
206	29740	Las Cruces, NM
207	29820	Las Vegas-Henderson-Paradise, NV
208	29940	Lawrence, KS
209	30020	Lawton, OK
210	30140	Lebanon, PA
211	30300	Lewiston, ID-WA
212	30340	Lewiston-Auburn, ME
213	30460	Lexington-Fayette, KY
214	30620	Lima, OH
215	30700	Lincoln, NE
216	30780	Little Rock-North Little Rock-Conway, AR
217	30860	Logan, UT-ID
218	30980	Longview, TX
219	31020	Longview, WA
220	31084	Los Angeles-Long Beach-Glendale, CA (MSAD)
221	31140	Louisville/Jefferson County, KY-IN
222	31180	Lubbock, TX
223	31340	Lynchburg, VA
224	31420	Macon-Bibb County, GA
225	31460	Madera, CA
226	31540	Madison, WI
227	31700	Manchester-Nashua, NH
228	31740	Manhattan, KS
229	31860	Mankato, MN
230	31900	Mansfield, OH
231	32580	McAllen-Edinburg-Mission, TX
232	32780	Medford, OR
233	32820	Memphis, TN-MS-AR
234	32900	Merced, CA
235	33124	Miami-Miami Beach-Kendall, FL (MSAD)
236	33140	Michigan City-La Porte, IN
237	33220	Midland, MI
238	33260	Midland, TX
239	33340	Milwaukee-Waukesha, WI
240	33460	Minneapolis-St. Paul-Bloomington, MN-WI
241	33540	Missoula, MT
242	33660	Mobile, AL
243	33700	Modesto, CA
244	33740	Monroe, LA
245	33780	Monroe, MI
246	33860	Montgomery, AL
247	33874	Montgomery County-Bucks County-Chester County, PA (MSAD)
248	34060	Morgantown, WV
249	34100	Morristown, TN
250	34580	Mount Vernon-Anacortes, WA

Purchase-Only HPI	
CBSA	Metropolitan name

Expanded-Data HPI	
CBSA	Metropolitan name

All-Transactions HPI		
Number	CBSA	Metropolitan name
251	34620	Muncie, IN
252	34740	Muskegon, MI
253	34820	Myrtle Beach-Conway-North Myrtle Beach, SC-NC
254	34900	Napa, CA
255	34940	Naples-Marco Island, FL
256	34980	Nashville-Davidson-Murfreesboro-Franklin, TN
257	35004	Nassau County-Suffolk County, NY (MSAD)
258	35084	Newark, NJ-PA (MSAD)
259	35100	New Bern, NC
260	35154	New Brunswick-Lakewood, NJ (MSAD)
261	35300	New Haven-Milford, CT
262	35380	New Orleans-Metairie, LA
263	35614	New York-Jersey City-White Plains, NY-NJ (MSAD)
264	35660	Niles, MI
265	35840	North Port-Sarasota-Bradenton, FL
266	35980	Norwich-New London, CT
267	36084	Oakland-Berkeley-Livermore, CA (MSAD)
268	36100	Ocala, FL
269	36140	Ocean City, NJ
270	36220	Odessa, TX
271	36260	Ogden-Clearfield, UT
272	36420	Oklahoma City, OK
273	36500	Olympia-Lacey-Tumwater, WA
274	36540	Omaha-Council Bluffs, NE-IA
275	36740	Orlando-Kissimmee-Sanford, FL
276	36780	Oshkosh-Neenah, WI
277	36980	Owensboro, KY
278	37100	Oxnard-Thousand Oaks-Ventura, CA
279	37340	Palm Bay-Melbourne-Titusville, FL
280	37460	Panama City, FL
281	37620	Parkersburg-Vienna, WV
282	37860	Pensacola-Ferry Pass-Brent, FL
283	37900	Peoria, IL
284	37964	Philadelphia, PA (MSAD)
285	38060	Phoenix-Mesa-Chandler, AZ
286	38220	Pine Bluff, AR
287	38300	Pittsburgh, PA
288	38340	Pittsfield, MA
289	38540	Pocatello, ID
290	38860	Portland-South Portland, ME
291	38900	Portland-Vancouver-Hillsboro, OR-WA
292	38940	Port St. Lucie, FL
293	39100	Poughkeepsie-Newburgh-Middletown, NY
294	39150	Prescott Valley-Prescott, AZ
295	39300	Providence-Warwick, RI-MA
296	39340	Provo-Orem, UT
297	39380	Pueblo, CO
298	39460	Punta Gorda, FL
299	39540	Racine, WI
300	39580	Raleigh-Cary, NC

Purchase-Only HPI	
CBSA	Metropolitan name

Expanded-Data HPI	
CBSA	Metropolitan name

All-Transactions HPI			Purchase-Only HPI		Expanded-Data HPI	
Number	CBSA	Metropolitan name	CBSA	Metropolitan name	CBSA	Metropolitan name
301	39660	Rapid City, SD				
302	39740	Reading, PA				
303	39820	Redding, CA				
304	39900	Reno, NV				
305	40060	Richmond, VA				
306	40140	Riverside-San Bernardino-Ontario, CA				
307	40220	Roanoke, VA				
308	40340	Rochester, MN				
309	40380	Rochester, NY				
310	40420	Rockford, IL				
311	40484	Rockingham County-Strafford County, NH (MSAD)				
312	40580	Rocky Mount, NC				
313	40660	Rome, GA				
314	40900	Sacramento-Roseville-Folsom, CA				
315	40980	Saginaw, MI				
316	41060	St. Cloud, MN				
317	41100	St. George, UT				
318	41140	St. Joseph, MO-KS				
319	41180	St. Louis, MO-IL				
320	41420	Salem, OR				
321	41500	Salinas, CA				
322	41540	Salisbury, MD-DE				
323	41620	Salt Lake City, UT				
324	41660	San Angelo, TX				
325	41700	San Antonio-New Braunfels, TX				
326	41740	San Diego-Chula Vista-Carlsbad, CA				
327	41884	San Francisco-San Mateo-Redwood City, CA (MSAD)				
328	41940	San Jose-Sunnyvale-Santa Clara, CA				
329	42020	San Luis Obispo-Paso Robles, CA				
330	42034	San Rafael, CA (MSAD)				
331	42100	Santa Cruz-Watsonville, CA				
332	42140	Santa Fe, NM				
333	42200	Santa Maria-Santa Barbara, CA				
334	42220	Santa Rosa-Petaluma, CA				
335	42340	Savannah, GA				
336	42540	Scranton-Wilkes-Barre, PA				
337	42644	Seattle-Bellevue-Kent, WA (MSAD)				
338	42680	Sebastian-Vero Beach, FL				
339	42700	Sebring-Avon Park, FL				
340	43100	Sheboygan, WI				
341	43300	Sherman-Denison, TX				
342	43340	Shreveport-Bossier City, LA				
343	43420	Sierra Vista-Douglas, AZ				
344	43580	Sioux City, IA-NE-SD				
345	43620	Sioux Falls, SD				
346	43780	South Bend-Mishawaka, IN-MI				
347	43900	Spartanburg, SC				
348	44060	Spokane-Spokane Valley, WA				
349	44100	Springfield, IL				
350	44140	Springfield, MA				

All-Transactions HPI			Purchase-Only HPI		Expanded-Data HPI	
Number	CBSA	Metropolitan name	CBSA	Metropolitan name	CBSA	Metropolitan name
351	44180	Springfield, MO				
352	44220	Springfield, OH				
353	44300	State College, PA				
354	44420	Staunton, VA				
355	44700	Stockton, CA				
356	44940	Sumter, SC				
357	45060	Syracuse, NY				
358	45104	Tacoma-Lakewood, WA (MSAD)				
359	45220	Tallahassee, FL				
360	45300	Tampa-St. Petersburg-Clearwater, FL				
361	45460	Terre Haute, IN				
362	45500	Texarkana, TX-AR				
363	45540	The Villages, FL				
364	45780	Toledo, OH				
365	45820	Topeka, KS				
366	45940	Trenton-Princeton, NJ				
367	46060	Tucson, AZ				
368	46140	Tulsa, OK				
369	46220	Tuscaloosa, AL				
370	46300	Twin Falls, ID				
371	46340	Tyler, TX				
372	46520	Urban Honolulu, HI				
373	46540	Utica-Rome, NY				
374	46660	Valdosta, GA				
375	46700	Vallejo, CA				
376	47020	Victoria, TX				
377	47220	Vineland-Bridgeton, NJ				
378	47260	Virginia Beach-Norfolk-Newport News, VA-NC				
379	47300	Visalia, CA				
380	47380	Waco, TX				
381	47460	Walla Walla, WA				
382	47580	Warner Robins, GA				
383	47664	Warren-Troy-Farmington Hills, MI (MSAD)				
384	47894	Washington-Arlington-Alexandria, DC-VA-MD-WV (MSAD)				
385	47940	Waterloo-Cedar Falls, IA				
386	48060	Watertown-Fort Drum, NY				
387	48140	Wausau-Weston, WI				
388	48260	Weirton-Steubenville, WV-OH				
389	48300	Wenatchee, WA				
390	48424	West Palm Beach-Boca Raton-Boynton Beach, FL (MSAD)				
391	48540	Wheeling, WV-OH				
392	48620	Wichita, KS				
393	48660	Wichita Falls, TX				
394	48700	Williamsport, PA				
395	48864	Wilmington, DE-MD-NJ (MSAD)				
396	48900	Wilmington, NC				
397	49020	Winchester, VA-WV				
398	49180	Winston-Salem, NC				
399	49340	Worcester, MA-CT				
400	49420	Yakima, WA				
401	49620	York-Hanover, PA				
402	49660	Youngstown-Warren-Boardman, OH-PA				
403	49700	Yuba City, CA				
404	49740	Yuma, AZ				

Notes: This is the complete list showing what MSAs are included in each type of FHFA's HPIs going forward (beginning February 2019). Highlighted cells indicate changes. The color scheme follows Table 2 where yellow denotes modifications to Metropolitan names and green indicates an added MSA that had changes in both the CBSA code and Metropolitan name. Red is not used because it denotes removed MSAs, which are not listed.

Source: FHFA's calculations are based on comparisons of existing MSAs where HPIs are produced and new delineations as outlined in OMB Bulletin No. 18-04 released on September 14, 2018 and available for download at <https://www.whitehouse.gov/wp-content/uploads/2018/09/Bulletin-18-04.pdf>.

HOUSE PRICE INDEX

FREQUENTLY ASKED QUESTIONS

(updated February 26, 2018)

1. What is the value of the FHFA House Price Index (HPI)?

The FHFA House Price Index (HPI) is a broad measure of the movement of single-family house prices. It serves as a timely, accurate indicator of house price trends at various geographic levels. It also provides housing economists with an analytical tool that is useful for estimating changes in the rates of mortgage defaults, prepayments and housing affordability in specific geographic areas. The HPI is a measure designed to capture changes in the value of single-family houses in the U.S. as a whole, in various regions and in smaller areas. The HPI is published by the Federal Housing Finance Agency (FHFA) using data provided by Fannie Mae and Freddie Mac. The Office of Federal Housing Enterprise Oversight (OFHEO), one of FHFA's predecessor agencies, began publishing the HPI in the fourth quarter of 1995.

2. What transactions are covered in the FHFA HPI?

The FHFA HPI is based on transactions involving conforming, conventional mortgages purchased or securitized by Fannie Mae or Freddie Mac. Only mortgage transactions on single-family properties are included. Conforming refers to a mortgage that both meets the underwriting guidelines of Fannie Mae or Freddie Mac and that does not exceed the conforming loan limit. For loans originated in the first nine months of 2011, the loan limit was set by Public Law 111-242. That law, in conjunction with prior legislation, provided for loan limits up to \$729,750 for one-unit properties in certain high-cost areas in the contiguous U.S. Mortgages originated after September 30, 2011 were no longer subject to the terms of prior initiatives and, under the formula established under the Housing and Economic Recovery Act of 2008, the "ceiling" limit for one-unit properties in the contiguous U.S. fell to \$625,500. For 2019-acquired loans, the ceiling limit rose to \$726,525 for one-unit homes in the contiguous U.S.

Conventional mortgages are those that are neither insured nor guaranteed by the FHA, VA, or other federal government entities. Mortgages on properties financed by government-insured loans, such as FHA or VA mortgages, are excluded from the HPI, as are properties with mortgages whose principal amount exceeds the conforming loan limit. Mortgage transactions on condominiums, cooperatives, multi-unit properties, and planned unit developments are also excluded.

3. How is the HPI computed?

The HPI is a weighted, repeat-sales index, meaning that it measures average price changes in repeat sales or refinancings on the same properties. This information is obtained by reviewing repeat mortgage transactions on single-family properties whose mortgages have been purchased or securitized by Fannie Mae or Freddie Mac since January 1975. The HPI is updated as additional mortgages are purchased or securitized

by Fannie Mae and Freddie Mac. The new mortgage acquisitions are used to identify repeat transactions for the most recent period and for each subsequent period since 1975.

House price index reports are released on a monthly basis for the United States and regions and on a quarterly basis for a variety of other geographies. Most statistics in the reports reference price changes computed by FHFA's standard "purchase-only" HPI. In some cases, however, the reported statistics reference alternative price measures. FHFA publishes – and makes [available for download](#) – several additional house price indexes beyond the standard "purchase-only" series. Although they use the same general methodology, the three alternatives rely on slightly different datasets as follows:

- "All-Transactions" house price index. Appraisal values from refinance mortgages are added to the purchase-only data sample.
- "Expanded-Data" house price index. Sales price information sourced from county recorder offices and from FHA-backed mortgages are added to the purchase-only data sample. This index is used annually to adjust the maximum conforming loan limits, which dictate the dollar amount of loans that can be acquired by Fannie Mae and Freddie Mac.
- "Distress-Free" house price index. Sales of bank-owned properties and short sales are removed from the purchase-only dataset prior to estimation of the index.

Data constraints preclude the production of all types of indexes for every geographic area, but multiple index types are generally available. For individual states, for instance, three types of indexes are available. The various indexes tend to correlate closely over the long-term, but short-term differences can be significant.

4. How often is the HPI published?

A comprehensive report is published every three months, approximately two months after the end of the previous quarter. Beginning in March 2008, OFHEO (one of FHFA's predecessor agencies) began publishing monthly indexes for census divisions and the U.S. FHFA continues publishing and updating these indexes each month.

5. How is the HPI updated?

Each month, Fannie Mae and Freddie Mac provide FHFA with information on their most recent mortgage transactions. These data are combined with the data from previous periods to establish price differentials on properties where more than one mortgage transaction has occurred. The data are merged, creating an updated historical database that is then used to estimate the HPI.

6. How do I interpret “four-quarter,” “one-year,” “annual,” and “one-quarter” price changes?

The “four-quarter” percentage change in home values is simply the price change relative to the same quarter one year earlier. For example, if the HPI release is for the second quarter, then the “four-quarter” price change reports the percentage change in values relative to the second quarter of the prior year. It reflects the best estimate for how much the value of a typical property increased over the four-quarter period (FAQ #2 reports the types of properties included in this estimate). “One-year” and “annual” appreciation are used synonymously with “four-quarter” appreciation in the full quarterly HPI releases.

Similar to the “four-quarter” price changes, the “one-quarter” percentage change estimates the percentage change in home values relative to the prior quarter. Please note that, in estimating the quarterly price index, all observations within a given quarter are pooled together; no distinction is made between transactions occurring in different months. As such, the “four-quarter” and “one-quarter” changes compare typical values throughout a quarter against valuations during a prior quarter. The appreciation rates do not compare values at the end of a quarter against values at the end of a prior quarter.

7. How are Metropolitan Statistical Areas (MSAs) and Metropolitan Divisions defined and what criteria are used to determine whether an MSA index is published?

MSAs are defined by the Office of Management and Budget (OMB). If specified criteria are met and an MSA contains a single core population greater than 2.5 million, the MSA is divided into Metropolitan Divisions. The following MSAs have been divided into Metropolitan Divisions: Boston-Cambridge-New ton, MA-NH; Chicago-Naperville-Elgin, IL-IN-WI; Dallas-Fort Worth-Arlington, TX; Detroit-Warren-Dearborn, MI; Los Angeles-Long Beach-Anaheim, CA; Miami-Fort Lauderdale-Pompano Beach, FL; New York-Newark-Jersey City, NY-NJ-PA; Philadelphia-Camden-Wilmington, PA-NJ-DE-MD; San Francisco-Oakland-Berkeley, CA; Seattle-Tacoma-Bellevue, WA; Washington-Arlington-Alexandria, DC-VA-MD-WV. For these MSAs, FHFA reports data for each Division, rather than the MSA as a whole.

FHFA requires that an MSA (or Metropolitan Division) must have at least 1,000 total transactions before it may be published. Additionally, an MSA or Division must have had at least 10 transactions in any given quarter for that quarterly value to be published. Blanks are displayed where this criterion is not met.

8. Does FHFA use the September 2018 revised Metropolitan Statistical Areas (MSAs) and Divisions?

Yes, FHFA uses the revised Metropolitan Statistical Areas (MSAs) and Divisions as defined by the Office of Management and Budget (OMB) in September 2018. The delineations became effective with the 2018Q4 HPI release in February 2019. These

MSAs and Divisions are based on Census data. According to OMB, an MSA comprises the central county or counties containing the core, plus adjacent outlying counties having a high degree of social and economic integration with the central county as measured through commuting. For information about the current MSAs, please visit:

<https://www.whitehouse.gov/wp-content/uploads/2018/09/Bulletin-18-04.pdf>

Previously, FHFA produced metropolitan area indexes based on the February 2013 delineations (and as revised in July 2015, August 2017, and April 2018) and, before that release, the December 2009 delineations provided by the OMB.

The 2018Q4 HPI report has a Technical Note which explains the transition to the newest definitions. The accompanying tables are posted on the HPI Downloadable Data page under the “Additional Data” section then the “Utility Files and Background Information for Index Construction” subsection. Information for the prior delineations are also posted on that page.

9. What geographic areas are covered by the HPI?

The HPI includes indexes for all nine census divisions, the 50 states and the District of Columbia, and every Metropolitan Statistical Area (MSA) in the U.S., excluding Puerto Rico. OMB recognizes 384 MSAs, 11 of which are subdivided into a total of 31 Metropolitan Divisions. As noted earlier, FHFA produces indexes for the divisions where they are available, in lieu of producing a single index for the MSA. In total, 404 indexes are released: 373 for the MSAs that do not have Metropolitan Divisions and 31 Division indexes. The starting dates for indexes differ and are determined by a minimum transaction threshold; index values are not provided for periods before at least 1,000 transactions have been accumulated.

In each release, FHFA publishes rankings and quarterly, annual, and five-year rates of changes for the MSAs and Metropolitan Divisions that have at least 15,000 transactions over the prior 10 years. In this release, 245 MSAs and Metropolitan Divisions satisfy this criterion. For the remaining areas, MSAs and Divisions, one-year and five-year rates of change are provided.

10. What is the methodology used by FHFA in computing the HPI?

The methodology is a modified version of the Case-Shiller® geometric weighted repeat-sales procedure. A detailed description of the HPI methodology is available upon request from FHFA at (202) 649-3195 or online at: <http://go.usa.gov/8BBT>.

11. How does the FHFA HPI differ from the Case-Shiller® Index?

Although both indexes employ the same fundamental repeat-valuations approach, there are a number of data and methodology differences. Among the dissimilarities:

- a. The Case-Shiller Indexes® only use purchase prices in index calibration, while the all-transactions HPI also includes refinance appraisals. FHFA's purchase-only series is restricted to purchase prices.
- b. FHFA's valuation data are derived from conforming mortgages provided by Fannie Mae and Freddie Mac. The Case-Shiller Indexes use information obtained from county assessor and recorder offices.
- c. The Case-Shiller Indexes are value-weighted, meaning that price trends for more expensive homes have greater influence on estimated price changes than other homes. FHFA's index weights price trends equally for all properties.
- d. The geographic coverage of the indexes differs. The Case-Shiller National Home Price Index, for example, does not have valuation data from 13 states. FHFA's U.S. index is calculated using data from all states.

For details on these and other differences, consult the HPI Technical Description (see <http://go.usa.gov/8BBT>) and the Case-Shiller methodology materials (see <https://us.spindices.com/index-family/real-estate/sp-corelogic-case-shiller>).

A paper that analyzes in detail the methodological and data differences between the two price metrics can be accessed at <http://go.usa.gov/8BBJ>.

12. How does the FHFA House Price Index differ from the Census Bureau's Constant Quality House Price Index (CQHPI)?

The FHFA HPI covers far more transactions than the Commerce Department survey. The CQHPI covers sales of new homes and homes for sale, based on a sample of about 14,000 transactions annually, gathered through monthly surveys. The quarterly purchase-only HPI is based on more than eight million repeat transaction pairs over 43 years. This gives a more accurate reflection of current property values than the Commerce Department index. The HPI also can be updated efficiently using data collected by Fannie Mae and Freddie Mac in the normal course of their business activity.

13. Where can I access MSA index numbers and standard errors for each year and quarter?

In addition to the information displayed in the MSA tables, FHFA makes available MSA indexes and standard errors. The data are available in ASCII format and may be accessed at <http://go.usa.gov/8kXz>.

14. What role do Fannie Mae and Freddie Mac play in the FHFA HPI?

FHFA uses data supplied by Fannie Mae and Freddie Mac in compiling the HPI. Each of the Enterprises had previously created a weighted repeat-transactions index based on property matches within its own database. In the first quarter of 1994, Freddie Mac began publishing the Conventional Mortgage Home Price Index (CMHPI). The CMHPI was jointly developed by Fannie Mae and Freddie Mac. The CMHPI series covers the period 1970 to the present.

15. Why is the FHFA HPI based on Fannie Mae or Freddie Mac mortgages?

FHFA has access to this information by virtue of its role as the federal regulator responsible for these government-sponsored enterprises. Chartered by Congress for the purpose of creating a reliable supply of mortgage funds for homebuyers, Fannie Mae and Freddie Mac are the largest mortgage finance institutions in the U.S. representing a significant share of total outstanding mortgages.

16. When are the indexes normalized in the downloadable ASCII data?

The ASCII data for metropolitan areas are normalized to the first quarter of 1995. That is, the HPI equals 100 for all MSAs in the first quarter of 1995. States and divisions are normalized to 100 in the first quarter of 1980. The purchase-only indexes are normalized to 100 in the first quarter of 1991. Note that normalization dates do not affect measured appreciation rates.

17. Is the HPI adjusted for inflation?

No, the HPI is not adjusted for inflation. For inflation adjustments, one can use the Consumer Price Index "All Items Less Shelter" series. The Bureau of Labor Statistics' price index series ID# CUUR0000SA0L2, for example, has tracked non-shelter consumer prices since the 1930s. That series and others can be downloaded at: <http://data.bls.gov/cgi-bin/srgate>.

18. How do I use the manipulatable data (in TXT files) on the website to calculate appreciation rates?

The index numbers alone (for census divisions and U.S., individual states, and MSAs) do not have significance. They have meaning in relation to previous or future index numbers, because you can use them to calculate appreciation rates using the formula below.

To calculate appreciation between any 2 quarters, use the formula:

$$\text{(QUARTER 2 INDEX NUMBER - QUARTER 1 INDEX NUMBER) / QUARTER 1 INDEX NUMBER}$$

You can generate annual numbers by taking the four quarter average for each year or monthly numbers by finding the difference between two months.

19. How is the FHFA HPI constructed for MSAs? The website says that FHFA uses the 2018 definitions based on the American Community Survey and Census Bureau population estimates for 2015 to define each MSA. Is this true for all time periods covered by each index? Or do the definitions change over time as the Census expanded its MSA definitions? For example, if the definition of an MSA added three counties between 1980 and 2000, would the value of the index in 1980 cover the three counties that were not included in the 1980 SMSA definition?

The HPI is recomputed historically each quarter. The MSA definition used to compute the 1982 (for example) index value in Anchorage, AK would be the most recent definition. The series is comparable backwards.

20. How can the HPI for an MSA be linked to ZIP codes within that MSA?

Although FHFA has published experimental house price indexes for some ZIP codes, those indexes are annual (i.e. quarterly index values are not provided). Researchers needing quarterly values for ZIP codes may be interested in using index values for the applicable metropolitan area.

Because ZIP codes sometimes overlap county boundaries, a single ZIP code can be located partially inside and outside of a Metropolitan Area. Thus, the development of a crosswalk between ZIP codes and Metropolitan Areas is not a straightforward exercise. The Department of Housing and Urban Development has released a lookup table that maps ZIP codes to the Metropolitan Area(s) that they fall within. That lookup file, as well as a discussion of the underlying technical issues, can be found here:

http://www.huduser.org/portal/datasets/usps_crosswalk.html.

21. How and why is the HPI revised each quarter?

Historical estimates of the HPI revise for three primary reasons:

- 1) The HPI is based on repeat transactions. That is, the estimates of appreciation are based on repeated valuations of the same property over time. Therefore, each time a property "repeats" in the form of a sale or refinance, average appreciation since the prior sale/refinance period is influenced.
- 2) Fannie Mae and Freddie Mac (the Enterprises) purchase seasoned loans, providing new information about prior quarters.
- 3) Due to a 30- to 45-day lag time from loan origination to Enterprise funding, FHFA receives data on new fundings for one additional month following the last month of the quarter. These fundings contain many loans originating in that most recent quarter, and especially the last month of the quarter. This will reduce with subsequent revisions,

however data on loans purchased with a longer lag, including seasoned loans, will continue to generate revisions, especially for the most recent quarters.

In connection with the release of the 2012Q2 HPI results, a special revision was made to two historical HPI values. In prior releases, the all-transactions index values for Vermont-1976Q1 and West Virginia-1982Q1 were both reported to be 100.01. Those values were not correct; index values for those respective periods should have been set to missing because no modeling data were available in the underlying sample. The HPI releases for 2012Q2 and later periods reflect the change.

22. What transaction dates are used in estimating the index?

For model estimation, the loan origination date is used as the relevant transaction date.

23. Are foreclosure sales included in the HPI?

Transactions that merely represent title transfers to lenders will not appear in the data. Once lenders take possession of foreclosed properties, however, the subsequent sale to the public can appear in the data. As with any other property sale, the sales information will be in FHFA's data if the buyer purchases the property with a loan that is bought or guaranteed by Fannie Mae or Freddie Mac.

24. How are the monthly HPIs calculated?

The monthly indexes are calculated in the same way the quarterly indexes are constructed, except transactions from the same quarter are no longer aggregated. To construct the quarterly index, all transactions from the same quarter are aggregated and index values are estimated using the assigned quarters. In the monthly indexing model, all transactions for the same month are aggregated and separate index values are estimated for each month.

25. How are the Census Division and U.S. HPIs formed?

As discussed in the Highlights article accompanying the 2011Q1 HPI Release (available for download at <http://go.usa.gov/8k5d>), the census division indexes are constructed from statistics for the component states. For the quarterly all-transactions and purchase-only indexes, the census division indexes are constructed from quarterly growth rate estimates for the underlying state indexes. Census division index estimates are "built-up" from quarterly growth rate estimates (monthly growth rates for the monthly index) for the component states.

The census division indexes are set equal to 100 in the relevant base periods. Then, the index values for subsequent periods are increased (or decreased) by the weighted average quarterly (or monthly) price change for the underlying states. Index values for periods before the base period are calculated in a similar fashion; beginning with the base period value, the preceding index values are sequentially determined so that the

growth rate in each period always reflects the weighted average growth rate for the component states.

The national HPI is constructed in an analogous fashion, except that the weighted components are census divisions. Because the census divisions measures are themselves weighted averages of state metrics, the U.S. index is equivalent to a state-weighted metric.

26. What weights are used in forming the Census Division and U.S. HPIs?

The weights used in constructing the indexes are estimates for the shares of one-unit detached properties in each state. For years in which decennial census data are available, the share from the relevant census is used. For intervening years, a state's share is the weighted average of the relevant shares in the prior and subsequent censuses, where the weights are changed by ten percentage points each year. For example, California's share of the housing stock for 1982 is calculated as 0.8 times its share in the 1980 census plus 0.2 times its share in the 1990 census. For 1983, the Pacific Division's share is 0.7 times its 1980 share plus 0.3 times its 1990 share.

For years since 2000, state shares are calculated as follows:

- For the 2001-2005 interval, shares are straight-line interpolated based on the state shares in the 2000 decennial Census and the 2005 values from the American Community Survey (ACS).
- For 2006-2017, the estimates are from the annual ACS.
- Until 2018 ACS estimates become available, shares from the 2017 ACS are used for subsequent periods.

The year-specific estimates of the state shares of U.S. detached housing stock can be accessed at <https://go.usa.gov/xnhpK>.

27. For those HPIs that are seasonally adjusted, what approach is used in performing the seasonal adjustment?

The Census Bureau's X-12 ARIMA procedure is used, as implemented in the SAS software package. The automated ARIMA model-selection algorithm in X-12 is employed, which searches through a series of seasonality structures and selects the first that satisfies the Ljung-Box test for serial correlation.

To obtain more information on the HPI contact us via the Data and Research Contact page at <http://go.usa.gov/8kN3>.

28. Do you have an HPI that includes loans which are not purchased or securitized by Fannie Mae and Freddie Mac?

Yes, the expanded-data index includes purchase-money mortgages from other sources. The approach to estimating the expanded-data HPI is detailed in the Highlights article published with the 2011Q2 HPI at <http://go.usa.gov/8kNm>. In general, the methodology is the same as is used in the construction of the standard purchase-only HPI, except a supplemented dataset is used for estimation. The augmented data include sales price information from Fannie Mae and Freddie Mac mortgages as well as two new information sources: (1) transactions records for houses with mortgages endorsed by FHA and (2) county recorder data licensed from CoreLogic. The licensed county recorder data do not include records in many U.S. counties—particularly rural ones. To ensure that the addition of the CoreLogic data to the estimation sample does not unduly bias index estimates toward price trends in urban areas, the expanded-data index for certain states is estimated by weighting price trends in areas with CoreLogic coverage and other areas. Details on this sub-area weighting can be found in the text of the Highlights piece referenced above.

29. Is there an HPI that corrects for distressed sales?

FHFA released a “distress-free” HPI in 2012Q2 along with the Highlights article at <http://go.usa.gov/8kNJ>. The index is a version of the purchase-only index that removes short sales and sales of bank-owned properties from the transactions data used to compute that traditional index. The index is still in a developmental stage. An analysis of how distressed sales affect the FHFA HPI is provided in an FHFA Working Paper released August 2013 at <http://go.usa.gov/8kRB>.

30. Can I use the data in the HPI and, if so, how should the index be cited?

Yes. The FHFA HPI data are freely available for download at <https://www.fhfa.gov/hpi>. To cite the index in an article or story, we suggest at least an attribution like “Source: FHFA HPI” or “Source: Federal Housing Finance Agency House Price Index (HPI)”. Additional clarifications could be helpful to denote the type of index (purchase-only, all-transactions, expanded-data) and whether the data are adjusted for seasonality or inflation. A more detailed citation might be “Source: FHFA HPI (purchase-only, seasonally-adjusted, nominal)”.

Metro Area Statistics

**Seasonally Adjusted Price Changes Reflected in
Purchase-Only Indexes
100 Largest Metropolitan Areas**

Metropolitan Statistical Area or Division	1-Yr	Qtr	5-Yr	Since 1991Q1
Akron, OH	2.10%	-0.62%	23.19%	92.15%
Albany-Schenectady-Troy, NY	4.13%	2.11%	15.42%	102.55%
Albuquerque, NM	2.70%	0.54%	18.86%	136.93%
Allentown-Bethlehem-Easton, PA-NJ	4.87%	2.69%	18.09%	89.37%
Anaheim-Santa Ana-Irvine, CA (MSAD)	2.57%	-0.43%	31.16%	218.79%
Atlanta-Sandy Springs-Alpharetta, GA	9.04%	1.04%	47.67%	162.82%
Austin-Round Rock-Georgetown, TX	4.36%	-0.30%	46.89%	362.63%
Bakersfield, CA	7.02%	2.42%	26.41%	103.27%
Baltimore-Columbia-Towson, MD	1.12%	0.02%	13.14%	156.94%
Baton Rouge, LA	4.11%	-0.01%	18.03%	175.13%
Birmingham-Hoover, AL	3.29%	0.70%	28.41%	150.97%
Boise City, ID	16.68%	1.58%	70.50%	295.43%
Boston, MA (MSAD)	6.12%	2.07%	32.09%	223.46%
Bridgeport-Stamford-Norwalk, CT	1.81%	0.97%	9.54%	108.19%
Buffalo-Cheektowaga, NY	4.61%	0.23%	26.96%	110.00%
Cambridge-Newton-Framingham, MA (MSAD)	7.74%	2.70%	35.03%	222.97%
Camden, NJ (MSAD)	4.30%	0.25%	13.46%	91.75%
Cape Coral-Fort Myers, FL	4.03%	-0.38%	48.86%	165.75%
Charleston-North Charleston, SC	0.73%	-1.71%	51.17%	266.78%
Charlotte-Concord-Gastonia, NC-SC	7.21%	1.66%	43.50%	165.82%
Chicago-Naperville-Evanston, IL (MSAD)	3.04%	0.35%	22.53%	120.71%
Cincinnati, OH-KY-IN	6.38%	1.01%	30.55%	115.41%
Cleveland-Elyria, OH	7.18%	1.59%	28.28%	88.08%
Colorado Springs, CO	8.78%	1.68%	46.05%	261.93%
Columbia, SC	3.59%	1.54%	29.13%	114.06%
Columbus, OH	6.04%	1.26%	39.19%	147.25%
Dallas-Plano-Irving, TX (MSAD)	3.63%	1.08%	50.36%	192.69%
Dayton-Kettering, OH	7.34%	1.09%	29.43%	76.92%
Denver-Aurora-Lakewood, CO	6.11%	0.44%	62.27%	418.94%
Detroit-Dearborn-Livonia, MI (MSAD)	7.12%	1.80%	45.07%	113.90%
Elgin, IL (MSAD)	1.07%	-1.06%	25.62%	77.80%
El Paso, TX	0.97%	-3.00%	10.98%	94.67%
Fort Lauderdale-Pompano Beach-Sunrise, FL (MSAD)	5.68%	0.41%	40.13%	240.81%
Fort Worth-Arlington-Grapevine, TX (MSAD)	6.92%	2.37%	50.83%	176.94%
Frederick-Gaithersburg-Rockville, MD (MSAD)	4.29%	0.45%	16.25%	172.87%
Fresno, CA	6.92%	2.26%	37.22%	141.45%
Gary, IN (MSAD)	8.55%	2.63%	25.11%	118.56%
Grand Rapids-Kentwood, MI	10.19%	3.64%	54.15%	158.35%
Greensboro-High Point, NC	6.08%	2.70%	23.89%	95.84%

**Seasonally Adjusted Price Changes Reflected in
Purchase-Only Indexes
100 Largest Metropolitan Areas**

Metropolitan Statistical Area or Division	1-Yr	Qtr	5-Yr	Since 1991Q1
Greenville-Anderson, SC	9.73%	1.63%	42.73%	168.89%
Hartford-East Hartford-Middletown, CT	-1.00%	-0.61%	4.79%	56.25%
Houston-The Woodlands-Sugar Land, TX	2.27%	-0.53%	27.39%	211.09%
Indianapolis-Carmel-Anderson, IN	6.35%	0.29%	35.22%	118.17%
Jacksonville, FL	7.69%	2.36%	47.31%	211.49%
Kansas City, MO-KS	8.90%	2.63%	41.91%	162.77%
Knoxville, TN	6.80%	1.11%	29.23%	152.37%
Lake County-Kenosha County, IL-WI (MSAD)	5.93%	3.22%	24.93%	94.81%
Las Vegas-Henderson-Paradise, NV	13.26%	0.34%	67.46%	146.12%
Little Rock-North Little Rock-Conway, AR	3.26%	2.07%	13.53%	116.96%
Los Angeles-Long Beach-Glendale, CA (MSAD)	4.52%	0.53%	42.09%	202.90%
Louisville/Jefferson County, KY-IN	6.08%	2.94%	32.12%	165.74%
Memphis, TN-MS-AR	6.80%	1.85%	28.76%	105.21%
Miami-Miami Beach-Kendall, FL (MSAD)	6.00%	2.33%	51.34%	310.01%
Milwaukee-Waukesha, WI	7.89%	1.35%	27.43%	161.19%
Minneapolis-St. Paul-Bloomington, MN-WI	6.54%	1.12%	33.29%	198.77%
Montgomery County-Bucks County-Chester County, PA (MSAD)	3.83%	0.27%	17.19%	127.48%
Nashville-Davidson--Murfreesboro--Franklin, TN	7.01%	0.99%	54.10%	252.32%
Nassau County-Suffolk County, NY (MSAD)	5.73%	0.23%	24.66%	211.71%
Newark, NJ-PA (MSAD)	3.14%	0.61%	17.30%	159.70%
New Haven-Milford, CT	1.44%	0.49%	5.95%	69.60%
New Orleans-Metairie, LA	3.50%	1.34%	24.89%	213.88%
New York-Jersey City-White Plains, NY-NJ (MSAD)	4.08%	1.16%	24.42%	191.09%
North Port-Sarasota-Bradenton, FL	5.74%	2.05%	54.92%	230.14%
Oakland-Berkeley-Livermore, CA (MSAD)	3.71%	-0.18%	55.94%	259.62%
Oklahoma City, OK	3.10%	1.03%	24.05%	160.53%
Omaha-Council Bluffs, NE-IA	6.97%	1.63%	29.53%	162.22%
Orlando-Kissimmee-Sanford, FL	6.80%	-0.45%	52.27%	178.35%
Oxnard-Thousand Oaks-Ventura, CA	3.55%	-0.11%	31.22%	183.74%
Philadelphia, PA (MSAD)	7.75%	2.10%	28.73%	191.98%
Phoenix-Mesa-Chandler, AZ	8.19%	1.85%	44.52%	255.95%
Pittsburgh, PA	4.80%	1.51%	26.29%	153.24%
Portland-Vancouver-Hillsboro, OR-WA	4.04%	0.13%	51.65%	356.45%
Providence-Warwick, RI-MA	5.57%	0.13%	31.32%	145.51%
Raleigh-Cary, NC	8.55%	2.70%	40.53%	174.59%
Richmond, VA	5.15%	1.31%	31.67%	167.37%
Riverside-San Bernardino-Ontario, CA	4.95%	-0.39%	41.23%	151.53%
Rochester, NY	4.84%	0.37%	20.56%	70.88%
Sacramento-Roseville-Folsom, CA	5.49%	0.26%	45.27%	152.54%

**Seasonally Adjusted Price Changes Reflected in
Purchase-Only Indexes
100 Largest Metropolitan Areas**

Metropolitan Statistical Area or Division	1-Yr	Qtr	5-Yr	Since 1991Q1
St. Louis, MO-IL	3.75%	-0.13%	25.82%	136.43%
Salt Lake City, UT	9.01%	1.35%	46.96%	371.66%
San Antonio-New Braunfels, TX	4.40%	0.48%	38.56%	211.14%
San Diego-Chula Vista-Carlsbad, CA	4.44%	0.93%	37.30%	231.78%
San Francisco-San Mateo-Redwood City, CA (MSAD)	17.01%	0.81%	65.20%	369.55%
San Jose-Sunnyvale-Santa Clara, CA	6.67%	0.30%	50.83%	313.97%
Seattle-Bellevue-Kent, WA (MSAD)	3.36%	-1.74%	62.10%	314.17%
Stockton, CA	7.52%	1.98%	52.27%	136.03%
Syracuse, NY	3.54%	0.86%	15.38%	72.26%
Tacoma-Lakewood, WA (MSAD)	11.36%	2.06%	73.11%	265.71%
Tampa-St. Petersburg-Clearwater, FL	8.38%	1.58%	54.46%	233.12%
Tucson, AZ	9.26%	3.96%	33.32%	188.60%
Tulsa, OK	1.59%	0.45%	24.53%	136.26%
Urban Honolulu, HI	-2.02%	2.98%	18.27%	155.43%
Virginia Beach-Norfolk-Newport News, VA-NC	3.46%	2.07%	18.38%	155.06%
Warren-Troy-Farmington Hills, MI (MSAD)	5.79%	0.41%	42.24%	133.63%
Washington-Arlington-Alexandria, DC-VA-MD-WV (MSAD)	3.63%	1.91%	20.22%	206.07%
West Palm Beach-Boca Raton-Boynton Beach, FL (MSAD)	5.23%	-1.42%	51.62%	223.02%
Wichita, KS	8.34%	2.21%	27.78%	123.11%
Wilmington, DE-MD-NJ (MSAD)	6.37%	2.60%	13.39%	104.69%
Winston-Salem, NC	7.16%	1.73%	25.98%	101.50%
Worcester, MA-CT	6.16%	1.79%	30.50%	136.73%

Note: Index values can be downloaded at <https://www.fhfa.gov/DataTools/Downloads/Pages/House-Price-Index-Datasets.aspx#qpo>.

Source: FHFA

Purchase-Only Indexes for Metropolitan Areas: Relative Frequency of Distressed Sales and Effect of Removing Distressed Sales on Estimated Price Changes

(Note: Price Changes Reported on Seasonally Adjusted Basis)

Period ended December 31, 2018

Metropolitan Area	Share of Enterprise-Financed Purchase-Money Mortgages that are Financing Distressed-Sales					Quarterly Price Change 2018Q3-2018Q4	Four Quarter Price Change 2017Q4-2018Q4		
	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4		Full Sample	Distress-Free	Full Sample
Anaheim-Santa Ana-Irvine, CA (MSAD)	3%	3%	1%	2%	1%	-0.4%	-0.8%	2.6%	2.2%
Atlanta-Sandy Springs-Alpharetta, GA	3%	2%	1%	1%	2%	1.0%	1.2%	9.0%	8.4%
Chicago-Naperville-Evanston, IL (MSAD)	7%	5%	2%	2%	2%	0.4%	0.4%	3.0%	3.3%
Los Angeles-Long Beach-Glendale, CA (MSAD)	5%	4%	2%	2%	2%	0.5%	1.1%	4.5%	4.8%
Miami-Miami Beach-Kendall, FL (MSAD)	9%	7%	4%	4%	3%	2.3%	1.8%	6.0%	6.3%
Oakland-Berkeley-Livermore, CA (MSAD)	3%	3%	1%	2%	1%	-0.2%	-0.6%	3.7%	3.3%
Phoenix-Mesa-Chandler, AZ	3%	2%	1%	1%	1%	1.8%	1.7%	8.2%	8.5%
Riverside-San Bernardino-Ontario, CA	5%	4%	2%	2%	3%	-0.4%	0.5%	5.0%	5.5%
San Diego-Chula Vista-Carlsbad, CA	4%	2%	3%	1%	1%	0.9%	0.5%	4.4%	3.4%
San Francisco-San Mateo-Redwood City, CA (MSAD)	1%	3%	2%	0%	0%	0.8%	0.4%	17.0%	17.4%
Tampa-St. Petersburg-Clearwater, FL	5%	4%	3%	3%	3%	1.6%	1.1%	8.4%	6.9%
Warren-Troy-Farmington Hills, MI (MSAD)	2%	2%	1%	1%	1%	0.4%	0.7%	5.8%	6.0%

Sources: Fannie Mae and Freddie Mac appraisal and mortgage data, including mortgage performance records; FHA mortgage performance data; and county records data licensed from CoreLogic.

Source: FHFA

**20 Metropolitan Areas
with Highest Rates of House Price Appreciation
Percent Change in House Prices with MSA Rankings**

All-transactions HPI which includes purchase and refinance mortgages

Period ended December 31, 2018

Metropolitan Statistical Area	National Ranking*	1-Yr	Qtr	5-Yr
Las Vegas-Henderson-Paradise, NV	1	17.63%	3.20%	73.68%
Boise City, ID	2	16.65%	1.37%	68.50%
Idaho Falls, ID	3	13.78%	3.62%	46.05%
Spokane-Spokane Valley, WA	4	13.08%	1.51%	46.45%
Coeur d'Alene, ID	5	12.85%	0.02%	55.90%
Yakima, WA	6	12.23%	2.48%	36.33%
Reno, NV	7	11.84%	1.48%	77.15%
Salem, OR	8	11.70%	0.87%	62.33%
Tacoma-Lakewood, WA (MSAD)	9	11.46%	2.07%	65.84%
Colorado Springs, CO	10	11.41%	1.17%	47.12%
San Jose-Sunnyvale-Santa Clara, CA	11	11.39%	0.76%	57.33%
Provo-Orem, UT	12	11.35%	1.34%	46.94%
Ogden-Clearfield, UT	13	11.18%	1.41%	47.32%
San Francisco-San Mateo-Redwood City, CA (MSAD)	14	11.04%	-1.55%	61.65%
Olympia-Lacey-Tumwater, WA	15	10.98%	0.03%	47.87%
Greeley, CO	16	10.68%	1.53%	73.05%
St. George, UT	17	10.68%	2.27%	43.94%
Racine, WI	18	10.64%	-0.07%	30.58%
Kennewick-Richland, WA	19	10.51%	1.35%	43.80%
Salt Lake City, UT	20	10.48%	0.88%	46.37%

Note: Purchase-only indexes, which omit appraisal values, are available for select metro areas at
<https://www.fhfa.gov/DataTools/Downloads/Pages/House-Price-Index-Datasets.aspx#qpo>.

For composition of metropolitan statistical areas and divisions see FHFA HPI FAQs #7 and #8 or <https://www.whitehouse.gov/wp-content/uploads/2018/09/Bulletin-18-04.pdf>.

Source: FHFA

*Rankings based on annual percentage change for all MSAs containing at least 15,000 transactions over the last 10 years.

**20 Metropolitan Areas
with Lowest Rates of House Price Appreciation
Percent Change in House Prices with MSA Rankings**

All-transactions HPI which includes purchase and refinance mortgages

Period ended December 31, 2018

Metropolitan Statistical Area	National Ranking*	1-Yr	Qtr	5-Yr
Bloomington, IL	245	-3.58%	-1.35%	0.23%
Shreveport-Bossier City, LA	244	-1.68%	-0.45%	6.81%
Anchorage, AK	243	-1.17%	-0.82%	8.57%
Davenport-Moline-Rock Island, IA-IL	242	-0.62%	-3.10%	9.80%
Lafayette, LA	241	-0.36%	-0.23%	9.63%
El Paso, TX	240	0.41%	-1.59%	9.71%
Hartford-East Hartford-Middletown, CT	239	0.50%	-1.54%	4.80%
Bismarck, ND	238	0.54%	-0.93%	13.09%
Ames, IA	237	0.55%	-1.20%	18.54%
Trenton-Princeton, NJ	236	0.91%	-1.04%	8.22%
Bridgeport-Stamford-Norwalk, CT	235	0.91%	0.03%	8.46%
Huntington-Ashland, WV-KY-OH	234	0.96%	-0.95%	5.87%
Baltimore-Columbia-Towson, MD	233	1.04%	-1.07%	13.69%
Virginia Beach-Norfolk-Newport News, VA-NC	232	1.25%	-1.12%	13.22%
Dubuque, IA	231	1.27%	-2.26%	13.74%
Fargo, ND-MN	230	1.38%	0.01%	26.29%
Billings, MT	229	1.55%	0.65%	18.99%
Scranton--Wilkes-Barre, PA	228	1.77%	-2.19%	7.13%
Little Rock-North Little Rock-Conway, AR	227	1.86%	2.46%	12.54%
Montgomery, AL	226	1.89%	2.28%	7.12%

Note: Purchase-only indexes, which omit appraisal values, are available for select metro areas at
<https://www.fhfa.gov/DataTools/Downloads/Pages/House-Price-Index-Datasets.aspx#qpo>.

For composition of metropolitan statistical areas and divisions see FHFA HPI FAQs #7 and #8 or
<https://www.whitehouse.gov/wp-content/uploads/2018/09/Bulletin-18-04.pdf>.

Source: FHFA

*Rankings based on annual percentage change for all MSAs containing at least 15,000 transactions over the last 10 years.

Rankings by Metropolitan Areas

Percent Change in House Prices with MSA Rankings

All-transactions HPI which includes purchase and refinance mortgages

Period ended December 31, 2018

Metropolitan Statistical Area	National Ranking*	1-Yr	Qtr	5-Yr
Akron, OH	205	3.22%	-2.68%	20.55%
Albany-Schenectady-Troy, NY	218	2.46%	-0.78%	11.59%
Albuquerque, NM	202	3.37%	0.27%	17.54%
Allentown-Bethlehem-Easton, PA-NJ	178	4.58%	0.25%	17.09%
Amarillo, TX	210	2.89%	-0.41%	16.93%
Ames, IA	237	0.55%	-1.20%	18.54%
Anaheim-Santa Ana-Irvine, CA (MSAD)	139	5.84%	0.43%	32.92%
Anchorage, AK	243	-1.17%	-0.82%	8.57%
Ann Arbor, MI	38	9.08%	-0.05%	40.94%
Appleton, WI	127	6.11%	-0.69%	24.09%
Asheville, NC	80	7.53%	-0.58%	40.55%
Athens-Clarke County, GA	150	5.58%	-2.93%	36.35%
Atlanta-Sandy Springs-Alpharetta, GA	35	9.25%	0.03%	49.09%
Atlantic City-Hammonton, NJ	208	2.94%	-1.24%	1.31%
Augusta-Richmond County, GA-SC	75	7.63%	1.62%	22.38%
Austin-Round Rock-Georgetown, TX	137	5.91%	-0.29%	49.36%
Bakersfield, CA	134	6.00%	-0.79%	29.52%
Baltimore-Columbia-Towson, MD	233	1.04%	-1.07%	13.69%
Barnstable Town, MA	225	1.94%	-3.75%	21.57%
Baton Rouge, LA	216	2.56%	-0.30%	19.32%
Bellingham, WA	30	9.62%	0.43%	48.78%
Bend, OR	89	7.17%	0.01%	63.07%
Billings, MT	229	1.55%	0.65%	18.99%
Birmingham-Hoover, AL	102	6.75%	0.53%	26.70%
Bismarck, ND	238	0.54%	-0.93%	13.09%
Bloomington, IL	245	-3.58%	-1.35%	0.23%
Bloomington, IN	29	9.69%	-1.31%	26.45%
Boise City, ID	2	16.65%	1.37%	68.50%
Boston, MA (MSAD)	117	6.37%	0.76%	33.50%
Boulder, CO	97	6.85%	-0.63%	60.11%
Bowling Green, KY	219	2.43%	0.36%	25.75%
Bremerton-Silverdale-Port Orchard, WA	24	9.97%	-1.13%	58.12%

*Rankings based on annual percentage change for all MSAs containing at least 15,000 transactions over the last 10 years.

Rankings by Metropolitan Areas

Percent Change in House Prices with MSA Rankings

All-transactions HPI which includes purchase and refinance mortgages

Period ended December 31, 2018

Metropolitan Statistical Area	National Ranking*	1-Yr	Qtr	5-Yr
Bridgeport-Stamford-Norwalk, CT	235	0.91%	0.03%	8.46%
Buffalo-Cheektowaga, NY	123	6.25%	-0.26%	27.69%
Burlington-South Burlington, VT	203	3.32%	-0.18%	15.44%
Cambridge-Newton-Framingham, MA (MSAD)	115	6.38%	0.26%	33.55%
Camden, NJ (MSAD)	224	1.99%	-0.58%	11.48%
Canton-Massillon, OH	182	4.33%	-1.40%	20.38%
Cape Coral-Fort Myers, FL	176	4.64%	-0.07%	51.21%
Cedar Rapids, IA	196	3.59%	-0.95%	13.75%
Champaign-Urbana, IL	195	3.61%	0.42%	15.19%
Charleston-North Charleston, SC	165	4.98%	1.03%	48.51%
Charlotte-Concord-Gastonia, NC-SC	26	9.83%	1.67%	42.67%
Charlottesville, VA	154	5.37%	1.20%	22.24%
Chattanooga, TN-GA	151	5.57%	0.69%	26.11%
Chicago-Naperville-Evanston, IL (MSAD)	194	3.62%	0.05%	22.76%
Chico, CA	36	9.17%	1.88%	37.38%
Cincinnati, OH-KY-IN	101	6.76%	0.94%	27.95%
Cleveland-Elyria, OH	112	6.45%	-0.52%	23.93%
Coeur d'Alene, ID	5	12.85%	0.02%	55.90%
Colorado Springs, CO	10	11.41%	1.17%	47.12%
Columbia, MO	185	4.16%	0.56%	17.20%
Columbia, SC	147	5.62%	1.65%	22.45%
Columbus, OH	81	7.41%	0.05%	36.68%
Dallas-Plano-Irving, TX (MSAD)	106	6.58%	0.13%	56.33%
Davenport-Moline-Rock Island, IA-IL	242	-0.62%	-3.10%	9.80%
Dayton-Kettering, OH	159	5.17%	-1.59%	23.28%
Deltona-Daytona Beach-Ormond Beach, FL	28	9.71%	2.14%	61.56%
Denver-Aurora-Lakewood, CO	64	8.15%	0.08%	64.63%
Des Moines-West Des Moines, IA	160	5.16%	0.68%	25.14%
Detroit-Dearborn-Livonia, MI (MSAD)	74	7.66%	0.03%	42.38%
Dubuque, IA	231	1.27%	-2.26%	13.74%
Duluth, MN-WI	223	2.07%	-2.17%	19.15%
Durham-Chapel Hill, NC	65	8.05%	0.93%	36.19%

*Rankings based on annual percentage change for all MSAs containing at least 15,000 transactions over the last 10 years.

Rankings by Metropolitan Areas

Percent Change in House Prices with MSA Rankings

All-transactions HPI which includes purchase and refinance mortgages

Period ended December 31, 2018

Metropolitan Statistical Area	National Ranking*	1-Yr	Qtr	5-Yr
Eau Claire, WI	42	9.01%	0.44%	28.41%
Elgin, IL (MSAD)	200	3.49%	-1.40%	23.42%
Elkhart-Goshen, IN	174	4.67%	1.71%	30.97%
El Paso, TX	240	0.41%	-1.59%	9.71%
Eugene-Springfield, OR	57	8.37%	-0.49%	41.87%
Evansville, IN-KY	109	6.54%	3.54%	21.71%
Fargo, ND-MN	230	1.38%	0.01%	26.29%
Fayetteville, NC	32	9.49%	9.25%	13.78%
Fayetteville-Springdale-Rogers, AR	87	7.20%	1.81%	32.24%
Flint, MI	84	7.38%	-0.23%	39.25%
Fond du Lac, WI	45	8.86%	2.76%	17.28%
Fort Collins, CO	59	8.29%	0.18%	57.61%
Fort Lauderdale-Pompano Beach-Sunrise, FL (MSAD)	73	7.75%	1.21%	49.43%
Fort Wayne, IN	33	9.35%	1.27%	29.51%
Fort Worth-Arlington-Grapevine, TX (MSAD)	41	9.03%	1.15%	53.26%
Frederick-Gaithersburg-Rockville, MD (MSAD)	201	3.48%	-0.66%	15.29%
Fresno, CA	31	9.55%	2.57%	42.14%
Gary, IN (MSAD)	82	7.40%	1.45%	22.28%
Grand Rapids-Kentwood, MI	39	9.07%	1.14%	48.85%
Greeley, CO	16	10.68%	1.53%	73.05%
Green Bay, WI	71	7.79%	0.51%	27.00%
Greensboro-High Point, NC	130	6.06%	0.40%	20.16%
Greenville-Anderson, SC	96	6.86%	-0.37%	33.82%
Gulfport-Biloxi, MS	143	5.72%	3.57%	23.91%
Hagerstown-Martinsburg, MD-WV	220	2.23%	-0.85%	18.53%
Harrisburg-Carlisle, PA	187	4.06%	1.39%	14.76%
Hartford-East Hartford-Middletown, CT	239	0.50%	-1.54%	4.80%
Hickory-Lenoir-Morganton, NC	138	5.88%	-1.03%	21.31%
Houston-The Woodlands-Sugar Land, TX	161	5.13%	-0.13%	36.79%
Huntington-Ashland, WV-KY-OH	234	0.96%	-0.95%	5.87%
Huntsville, AL	157	5.28%	0.82%	16.19%
Idaho Falls, ID	3	13.78%	3.62%	46.05%

*Rankings based on annual percentage change for all MSAs containing at least 15,000 transactions over the last 10 years.

Rankings by Metropolitan Areas

Percent Change in House Prices with MSA Rankings

All-transactions HPI which includes purchase and refinance mortgages

Period ended December 31, 2018

Metropolitan Statistical Area	National Ranking*	1-Yr	Qtr	5-Yr
Indianapolis-Carmel-Anderson, IN	47	8.69%	1.62%	32.10%
Iowa City, IA	153	5.40%	1.24%	19.14%
Jackson, MS	209	2.92%	-0.33%	11.77%
Jacksonville, FL	100	6.78%	0.05%	47.34%
Janesville-Beloit, WI	60	8.25%	-0.34%	33.45%
Jefferson City, MO	108	6.54%	3.64%	16.55%
Kalamazoo-Portage, MI	90	7.12%	-0.40%	29.79%
Kankakee, IL	72	7.77%	0.98%	13.64%
Kansas City, MO-KS	37	9.16%	1.59%	37.00%
Kennewick-Richland, WA	19	10.51%	1.35%	43.80%
Kingston, NY	23	10.10%	4.58%	23.58%
Knoxville, TN	50	8.63%	2.96%	27.02%
La Crosse-Onalaska, WI-MN	124	6.21%	0.63%	23.68%
Lafayette, LA	241	-0.36%	-0.23%	9.63%
Lafayette-West Lafayette, IN	166	4.94%	-0.78%	26.43%
Lake County-Kenosha County, IL-WI (MSAD)	192	3.76%	-0.40%	19.71%
Lake Havasu City-Kingman, AZ	34	9.25%	-0.74%	47.82%
Lancaster, PA	119	6.34%	1.79%	20.26%
Lansing-East Lansing, MI	55	8.41%	0.72%	35.82%
Las Vegas-Henderson-Paradise, NV	1	17.63%	3.20%	73.68%
Lawrence, KS	135	5.96%	0.76%	19.56%
Lexington-Fayette, KY	204	3.28%	-2.81%	23.17%
Lincoln, NE	107	6.55%	-0.15%	30.61%
Little Rock-North Little Rock-Conway, AR	227	1.86%	2.46%	12.54%
Logan, UT-ID	51	8.52%	2.62%	38.19%
Los Angeles-Long Beach-Glendale, CA (MSAD)	77	7.61%	0.51%	44.06%
Louisville/Jefferson County, KY-IN	131	6.06%	0.80%	27.94%
Lubbock, TX	180	4.48%	0.14%	21.76%
Lynchburg, VA	215	2.69%	-3.07%	11.57%
Madison, WI	140	5.82%	-1.20%	26.68%
Manchester-Nashua, NH	168	4.92%	-0.78%	26.94%
Mankato, MN	146	5.65%	-0.28%	24.55%

*Rankings based on annual percentage change for all MSAs containing at least 15,000 transactions over the last 10 years.

Rankings by Metropolitan Areas

Percent Change in House Prices with MSA Rankings

All-transactions HPI which includes purchase and refinance mortgages

Period ended December 31, 2018

Metropolitan Statistical Area	National Ranking*	1-Yr	Qtr	5-Yr
Medford, OR	136	5.92%	-1.08%	45.21%
Memphis, TN-MS-AR	88	7.18%	0.41%	27.77%
Merced, CA	25	9.89%	1.76%	58.82%
Miami-Miami Beach-Kendall, FL (MSAD)	66	8.04%	0.91%	55.38%
Milwaukee-Waukesha, WI	125	6.18%	0.25%	24.09%
Minneapolis-St. Paul-Bloomington, MN-WI	122	6.31%	-0.88%	31.91%
Missoula, MT	149	5.59%	0.19%	29.05%
Mobile, AL	53	8.45%	1.31%	21.41%
Modesto, CA	48	8.68%	0.46%	56.48%
Monroe, MI	52	8.47%	0.64%	34.79%
Montgomery, AL	226	1.89%	2.28%	7.12%
Montgomery County-Bucks County-Chester County, PA (MSAD)	211	2.80%	-0.88%	15.86%
Mount Vernon-Anacortes, WA	56	8.38%	-0.14%	50.75%
Muskegon, MI	21	10.37%	0.97%	45.13%
Myrtle Beach-Conway-North Myrtle Beach, SC-NC	86	7.25%	0.44%	32.00%
Napa, CA	152	5.49%	0.20%	47.59%
Nashville-Davidson--Murfreesboro--Franklin, TN	46	8.84%	1.21%	53.68%
Nassau County-Suffolk County, NY (MSAD)	129	6.06%	0.73%	27.22%
Newark, NJ-PA (MSAD)	212	2.80%	-0.88%	16.34%
New Brunswick-Lakewood, NJ (MSAD)	163	5.10%	1.47%	20.15%
New Haven-Milford, CT	222	2.08%	0.06%	6.90%
New Orleans-Metairie, LA	214	2.71%	0.41%	22.67%
New York-Jersey City-White Plains, NY-NJ (MSAD)	170	4.80%	0.47%	26.94%
Niles, MI	169	4.89%	-1.55%	27.11%
North Port-Sarasota-Bradenton, FL	118	6.35%	0.34%	57.03%
Norwich-New London, CT	189	4.01%	3.18%	13.02%
Oakland-Berkeley-Livermore, CA (MSAD)	67	8.01%	-0.89%	56.72%
Ogden-Clearfield, UT	13	11.18%	1.41%	47.32%
Oklahoma City, OK	191	3.87%	0.26%	21.60%
Olympia-Lacey-Tumwater, WA	15	10.98%	0.03%	47.87%
Omaha-Council Bluffs, NE-IA	120	6.33%	-0.24%	27.96%
Orlando-Kissimmee-Sanford, FL	68	7.92%	0.48%	55.21%

*Rankings based on annual percentage change for all MSAs containing at least 15,000 transactions over the last 10 years.

Rankings by Metropolitan Areas

Percent Change in House Prices with MSA Rankings

All-transactions HPI which includes purchase and refinance mortgages

Period ended December 31, 2018

Metropolitan Statistical Area	National Ranking*	1-Yr	Qtr	5-Yr
Oshkosh-Neenah, WI	78	7.60%	2.42%	24.05%
Oxnard-Thousand Oaks-Ventura, CA	190	3.89%	0.73%	31.11%
Palm Bay-Melbourne-Titusville, FL	85	7.37%	2.03%	67.84%
Pensacola-Ferry Pass-Brent, FL	105	6.61%	0.84%	40.63%
Peoria, IL	221	2.14%	1.82%	3.12%
Philadelphia, PA (MSAD)	70	7.87%	1.56%	28.08%
Phoenix-Mesa-Chandler, AZ	27	9.75%	1.14%	47.59%
Pittsburgh, PA	158	5.23%	-0.29%	23.09%
Portland-South Portland, ME	93	7.01%	1.85%	29.54%
Portland-Vancouver-Hillsboro, OR-WA	167	4.92%	-0.70%	54.27%
Port St. Lucie, FL	173	4.68%	-0.64%	66.40%
Poughkeepsie-Newburgh-Middletown, NY	162	5.12%	-1.58%	17.37%
Prescott Valley-Prescott, AZ	22	10.14%	0.95%	51.93%
Providence-Warwick, RI-MA	133	6.04%	-0.17%	29.27%
Provo-Orem, UT	12	11.35%	1.34%	46.94%
Racine, WI	18	10.64%	-0.07%	30.58%
Raleigh-Cary, NC	92	7.08%	0.57%	35.91%
Reading, PA	188	4.04%	1.07%	15.42%
Redding, CA	94	6.95%	0.96%	32.01%
Reno, NV	7	11.84%	1.48%	77.15%
Richmond, VA	121	6.32%	1.10%	27.93%
Riverside-San Bernardino-Ontario, CA	83	7.38%	0.60%	44.84%
Roanoke, VA	207	3.03%	0.36%	14.73%
Rochester, MN	91	7.08%	1.02%	33.87%
Rochester, NY	172	4.73%	-1.29%	18.60%
Rockford, IL	193	3.69%	-1.24%	17.92%
Rockingham County-Strafford County, NH (MSAD)	116	6.37%	1.12%	30.91%
Sacramento-Roseville-Folsom, CA	114	6.38%	-0.05%	45.40%
St. Cloud, MN	197	3.57%	-1.42%	22.96%
St. George, UT	17	10.68%	2.27%	43.94%
St. Louis, MO-IL	171	4.79%	0.25%	23.08%
Salem, OR	8	11.70%	0.87%	62.33%

*Rankings based on annual percentage change for all MSAs containing at least 15,000 transactions over the last 10 years.

Rankings by Metropolitan Areas

Percent Change in House Prices with MSA Rankings

All-transactions HPI which includes purchase and refinance mortgages

Period ended December 31, 2018

Metropolitan Statistical Area	National Ranking*	1-Yr	Qtr	5-Yr
Salinas, CA	95	6.87%	-1.20%	49.96%
Salisbury, MD-DE	126	6.13%	4.24%	18.69%
Salt Lake City, UT	20	10.48%	0.88%	46.37%
San Antonio-New Braunfels, TX	103	6.71%	1.95%	39.55%
San Diego-Chula Vista-Carlsbad, CA	128	6.10%	0.50%	38.19%
San Francisco-San Mateo-Redwood City, CA (MSAD)	14	11.04%	-1.55%	61.65%
San Jose-Sunnyvale-Santa Clara, CA	11	11.39%	0.76%	57.33%
San Luis Obispo-Paso Robles, CA	155	5.33%	-0.10%	36.66%
San Rafael, CA (MSAD)	156	5.30%	-1.51%	36.22%
Santa Cruz-Watsonville, CA	177	4.64%	-1.55%	45.60%
Santa Fe, NM	104	6.62%	0.39%	23.83%
Santa Maria-Santa Barbara, CA	111	6.47%	1.76%	37.20%
Santa Rosa-Petaluma, CA	141	5.75%	-1.36%	48.61%
Savannah, GA	132	6.05%	0.68%	29.50%
Scranton--Wilkes-Barre, PA	228	1.77%	-2.19%	7.13%
Seattle-Bellevue-Kent, WA (MSAD)	99	6.80%	-1.36%	63.88%
Sheboygan, WI	61	8.25%	1.48%	25.29%
Shreveport-Bossier City, LA	244	-1.68%	-0.45%	6.81%
Sioux City, IA-NE-SD	63	8.16%	1.13%	27.04%
Sioux Falls, SD	144	5.68%	-0.10%	29.97%
South Bend-Mishawaka, IN-MI	49	8.65%	-1.19%	26.99%
Spokane-Spokane Valley, WA	4	13.08%	1.51%	46.45%
Springfield, IL	213	2.77%	0.80%	9.93%
Springfield, MA	175	4.66%	-0.62%	14.91%
Springfield, MO	76	7.63%	2.80%	24.21%
Stockton, CA	44	8.88%	0.45%	54.46%
Syracuse, NY	186	4.11%	-0.21%	14.54%
Tacoma-Lakewood, WA (MSAD)	9	11.46%	2.07%	65.84%
Tampa-St. Petersburg-Clearwater, FL	40	9.06%	0.54%	56.78%
Toledo, OH	181	4.34%	-1.37%	22.61%
Topeka, KS	113	6.42%	2.47%	16.66%
Trenton-Princeton, NJ	236	0.91%	-1.04%	8.22%

*Rankings based on annual percentage change for all MSAs containing at least 15,000 transactions over the last 10 years.

Rankings by Metropolitan Areas

Percent Change in House Prices with MSA Rankings

All-transactions HPI which includes purchase and refinance mortgages

Period ended December 31, 2018

Metropolitan Statistical Area	National Ranking*	1-Yr	Qtr	5-Yr
Tucson, AZ	79	7.59%	1.34%	33.53%
Tulsa, OK	198	3.53%	0.54%	21.68%
Urban Honolulu, HI	148	5.62%	3.13%	32.46%
Vallejo, CA	43	8.95%	0.38%	59.73%
Virginia Beach-Norfolk-Newport News, VA-NC	232	1.25%	-1.12%	13.22%
Visalia, CA	217	2.50%	-2.07%	35.12%
Warren-Troy-Farmington Hills, MI (MSAD)	98	6.81%	-0.10%	39.11%
Washington-Arlington-Alexandria, DC-VA-MD-WV (MSAD)	164	5.00%	0.47%	24.05%
Waterloo-Cedar Falls, IA	142	5.73%	1.30%	12.36%
Wausau-Weston, WI	179	4.54%	0.28%	20.36%
Wenatchee, WA	58	8.34%	-1.26%	47.12%
West Palm Beach-Boca Raton-Boynton Beach, FL (MSAD)	69	7.91%	1.24%	58.85%
Wichita, KS	199	3.50%	-0.48%	19.80%
Wilmington, DE-MD-NJ (MSAD)	206	3.17%	-0.36%	12.10%
Wilmington, NC	54	8.45%	2.85%	36.94%
Winston-Salem, NC	62	8.22%	1.61%	23.65%
Worcester, MA-CT	145	5.67%	-0.63%	25.53%
Yakima, WA	6	12.23%	2.48%	36.33%
York-Hanover, PA	184	4.17%	1.15%	16.14%
Youngstown-Warren-Boardman, OH-PA	183	4.20%	2.45%	20.55%
Yuba City, CA	110	6.50%	-0.82%	51.49%

Note: Purchase-only indexes, which omit appraisal values, are available for select metro areas at

<https://www.fhfa.gov/DataTools/Downloads/Pages/House-Price-Index-Datasets.aspx#qpo>.

For composition of metropolitan statistical areas and divisions see FHFA HPI FAQs #7 and #8 or <https://www.whitehouse.gov/wp-content/uploads/2018/09/Bulletin-18-04.pdf>.

Source: FHFA

*Rankings based on annual percentage change for all MSAs containing at least 15,000 transactions over the last 10 years.

Unranked Metropolitan Areas
Percent Change in House Prices for MSAs and
Divisions Not Ranked in Previous Tables
All-transactions HPI which includes purchase and refinance mortgages

Period ended December 31, 2018

Metropolitan Statistical Area	1-Yr	5-Yr
Abilene, TX	8.60%	26.83%
Albany, GA	2.44%	8.80%
Albany-Lebanon, OR	11.92%	59.13%
Alexandria, LA	-4.12%	9.28%
Altoona, PA	0.23%	13.35%
Anniston-Oxford, AL	2.85%	11.66%
Auburn-Opelika, AL	10.19%	29.31%
Bangor, ME	5.10%	13.48%
Battle Creek, MI	8.47%	24.97%
Bay City, MI	8.15%	17.37%
Beaumont-Port Arthur, TX	9.33%	26.39%
Beckley, WV	5.80%	-0.42%
Binghamton, NY	4.14%	10.43%
Blacksburg-Christiansburg, VA	2.47%	15.02%
Bloomsburg-Berwick, PA	4.19%	11.72%
Brownsville-Harlingen, TX	3.77%	14.76%
Brunswick, GA	7.25%	34.86%
Burlington, NC	7.93%	26.36%
California-Lexington Park, MD	-2.18%	6.40%
Cape Girardeau, MO-IL	3.65%	14.05%
Carbondale-Marion, IL	1.55%	6.94%
Carson City, NV	13.57%	71.32%
Casper, WY	-1.26%	3.61%
Chambersburg-Waynesboro, PA	4.65%	10.98%
Charleston, WV	3.41%	10.00%
Cheyenne, WY	4.50%	27.08%
Clarksville, TN-KY	10.44%	22.32%
Cleveland, TN	8.51%	24.57%
College Station-Bryan, TX	7.27%	42.28%
Columbus, GA-AL	4.49%	7.33%

Unranked Metropolitan Areas
Percent Change in House Prices for MSAs and
Divisions Not Ranked in Previous Tables
All-transactions HPI which includes purchase and refinance mortgages

Period ended December 31, 2018

Metropolitan Statistical Area	1-Yr	5-Yr
Columbus, IN	3.06%	19.65%
Corpus Christi, TX	3.31%	23.41%
Corvallis, OR	7.51%	39.89%
Crestview-Fort Walton Beach-Destin, FL	5.64%	31.20%
Cumberland, MD-WV	-0.65%	4.74%
Dalton, GA	12.27%	32.48%
Danville, IL	-2.22%	3.78%
Daphne-Fairhope-Foley, AL	2.90%	29.79%
Decatur, AL	2.31%	18.84%
Decatur, IL	-4.23%	1.78%
Dothan, AL	0.79%	8.77%
Dover, DE	-0.03%	14.03%
East Stroudsburg, PA	7.67%	19.85%
El Centro, CA	7.45%	46.02%
Elizabethtown-Fort Knox, KY	9.17%	15.75%
Elmira, NY	1.28%	3.00%
Enid, OK	-2.10%	7.45%
Erie, PA	2.35%	5.23%
Fairbanks, AK	7.83%	14.82%
Farmington, NM	4.77%	4.52%
Flagstaff, AZ	5.79%	44.39%
Florence, SC	2.68%	8.28%
Florence-Muscle Shoals, AL	0.59%	11.98%
Fort Smith, AR-OK	4.52%	15.70%
Gadsden, AL	3.15%	14.80%
Gainesville, FL	3.51%	36.42%
Gainesville, GA	9.96%	48.15%
Gettysburg, PA	0.92%	12.51%
Glens Falls, NY	0.91%	7.90%
Goldsboro, NC	6.30%	-1.46%

Unranked Metropolitan Areas
Percent Change in House Prices for MSAs and
Divisions Not Ranked in Previous Tables
All-transactions HPI which includes purchase and refinance mortgages

Period ended December 31, 2018

Metropolitan Statistical Area	1-Yr	5-Yr
Grand Forks, ND-MN	1.17%	16.84%
Grand Island, NE	8.26%	30.41%
Grand Junction, CO	6.41%	31.75%
Grants Pass, OR	4.31%	51.58%
Great Falls, MT	7.82%	25.41%
Greenville, NC	2.22%	11.11%
Hammond, LA	-2.37%	6.93%
Hanford-Corcoran, CA	4.56%	33.85%
Harrisonburg, VA	3.97%	15.09%
Hattiesburg, MS	5.88%	15.24%
Hilton Head Island-Bluffton, SC	6.61%	31.97%
Hinesville, GA	0.91%	-2.14%
Homosassa Springs, FL	7.12%	59.17%
Hot Springs, AR	3.95%	16.41%
Houma-Thibodaux, LA	-1.18%	6.03%
Ithaca, NY	2.02%	20.94%
Jackson, MI	3.42%	32.32%
Jackson, TN	10.53%	23.00%
Jacksonville, NC	7.67%	6.52%
Johnson City, TN	1.18%	16.98%
Johnstown, PA	-7.23%	5.07%
Jonesboro, AR	0.81%	14.65%
Joplin, MO	7.35%	13.34%
Kahului-Wailuku-Lahaina, HI	5.83%	40.91%
Killeen-Temple, TX	7.04%	24.55%
Kingsport-Bristol, TN-VA	3.94%	14.09%
Kokomo, IN	2.91%	20.78%
Lake Charles, LA	2.05%	26.52%
Lakeland-Winter Haven, FL	8.22%	54.40%
Laredo, TX	0.36%	17.36%

Unranked Metropolitan Areas
Percent Change in House Prices for MSAs and
Divisions Not Ranked in Previous Tables
All-transactions HPI which includes purchase and refinance mortgages

Period ended December 31, 2018

Metropolitan Statistical Area	1-Yr	5-Yr
Las Cruces, NM	3.26%	10.08%
Lawton, OK	3.35%	6.69%
Lebanon, PA	2.97%	11.70%
Lewiston, ID-WA	5.29%	26.80%
Lewiston-Auburn, ME	10.15%	26.55%
Lima, OH	1.25%	15.89%
Longview, TX	10.23%	17.16%
Longview, WA	12.56%	60.32%
Macon-Bibb County, GA	5.39%	16.96%
Madera, CA	10.12%	47.32%
Manhattan, KS	0.94%	11.86%
Mansfield, OH	6.31%	27.42%
McAllen-Edinburg-Mission, TX	9.27%	24.90%
Michigan City-La Porte, IN	8.15%	24.02%
Midland, MI	4.67%	19.74%
Midland, TX	11.61%	29.71%
Monroe, LA	3.02%	15.88%
Morgantown, WV	-0.69%	7.82%
Morristown, TN	3.73%	14.77%
Muncie, IN	3.88%	16.44%
Naples-Marco Island, FL	5.19%	54.98%
New Bern, NC	1.88%	10.30%
Ocala, FL	7.97%	48.20%
Ocean City, NJ	6.11%	14.33%
Odessa, TX	16.18%	31.42%
Owensboro, KY	0.55%	20.42%
Panama City, FL	13.66%	43.48%
Parkersburg-Vienna, WV	5.02%	14.58%
Pine Bluff, AR	12.85%	16.95%
Pittsfield, MA	1.70%	9.57%

Unranked Metropolitan Areas
Percent Change in House Prices for MSAs and
Divisions Not Ranked in Previous Tables
All-transactions HPI which includes purchase and refinance mortgages

Period ended December 31, 2018

Metropolitan Statistical Area	1-Yr	5-Yr
Pocatello, ID	9.84%	28.02%
Pueblo, CO	13.94%	46.76%
Punta Gorda, FL	5.70%	53.39%
Rapid City, SD	6.12%	23.32%
Rocky Mount, NC	3.02%	8.40%
Rome, GA	8.49%	24.01%
Saginaw, MI	6.39%	17.34%
San Angelo, TX	5.78%	21.31%
Sebastian-Vero Beach, FL	10.74%	74.75%
Sebring-Avon Park, FL	11.14%	64.81%
Sherman-Denison, TX	8.74%	53.33%
Sierra Vista-Douglas, AZ	6.79%	8.70%
Spartanburg, SC	6.71%	30.78%
Springfield, OH	7.51%	20.42%
St. Joseph, MO-KS	7.54%	13.07%
State College, PA	1.23%	19.57%
Staunton, VA	3.38%	16.59%
Sumter, SC	1.17%	6.94%
Tallahassee, FL	-0.05%	21.69%
Terre Haute, IN	2.98%	10.99%
Texarkana, TX-AR	3.02%	11.03%
The Villages, FL	8.76%	25.30%
Tuscaloosa, AL	6.45%	16.30%
Twin Falls, ID	11.33%	39.49%
Tyler, TX	3.48%	23.48%
Utica-Rome, NY	7.38%	16.91%
Valdosta, GA	7.84%	6.61%
Victoria, TX	2.13%	7.80%
Vineland-Bridgeton, NJ	-0.90%	5.43%
Waco, TX	8.34%	35.67%

Unranked Metropolitan Areas
Percent Change in House Prices for MSAs and
Divisions Not Ranked in Previous Tables
All-transactions HPI which includes purchase and refinance mortgages

Period ended December 31, 2018

Metropolitan Statistical Area	1-Yr	5-Yr
Walla Walla, WA	9.86%	37.10%
Warner Robins, GA	5.71%	11.77%
Watertown-Fort Drum, NY	4.32%	8.54%
Weirton-Steubenville, WV-OH	1.70%	12.95%
Wheeling, WV-OH	9.24%	26.51%
Wichita Falls, TX	2.32%	17.00%
Williamsport, PA	-1.19%	5.02%
Winchester, VA-WV	5.34%	25.09%
Yuma, AZ	4.31%	22.09%

For composition of metropolitan statistical areas and divisions see FHFA HPI FAQs #7 and #8 or <https://www.whitehouse.gov/wp-content/uploads/2018/09/Bulletin-18-04.pdf>.

Source: FHFA

HOUSE PRICE INDEX (HPI) STATISTICAL REPORT

Purchase-Only House Price Index

1st Quarter 1991* to 4th Quarter 2018

This report contains the index number and standard error for each quarterly census division and state HPI since the first quarter of 1991. The number in each column is the index number. The number in parentheses is the standard error, which indicates the relative precision of the index number estimate.

The higher the standard error, the larger the range of possible statistical error. Higher error numbers are generally associated with areas having relatively few repeat transactions and also with areas experiencing more pronounced economic cycles which can result in wide swings in house prices.

This report also contains house price volatility parameter estimates and annualized volatility estimates for each division and state index. The United States index is constructed to reflect the weighted average quarterly price change for the fifty states and Washington, D.C. The weights are the estimated share of one-unit detached housing units in the respective states. For details on the index methodology and derivation of standard errors and volatility estimates, see the paper *OFHEO House Price Indexes: HPI Technical Description*. This paper is available upon request from FHFA or at <https://www.fhfa.gov/PolicyProgramsResearch/Research/Pages/HPI-Technical-Description.aspx>.

***Note that, prior to the release of the 2009Q1 data, the index values reported in this section of the HPI report reflected the “all-transactions” HPI, which is estimated using sales prices and appraisal values.** The all-transactions indexes and the associated volatility parameters are still available for download at <https://www.fhfa.gov/DataTools/Downloads/Pages/House-Price-Index-Datasets.aspx#atvol>.

You may also inquire with House Price Index questions on the Data and Research Contact page at <https://www.fhfa.gov/AboutUs/Contact/Pages/Data-and-Research-Form.aspx>.

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	United States	New England	Middle Atlantic	South Atlantic	East South Central
1991	1	100.00	100.00	100.00	100.00	100.00
1991	2	100.51	98.59	99.62	100.45	100.55
1991	3	100.79	97.71	99.98	100.26	100.83
1991	4	101.47	97.61	100.58	101.38	101.93
1992	1	102.26	98.28	101.29	101.87	103.38
1992	2	102.68	96.32	101.17	101.78	103.53
1992	3	103.70	96.54	101.68	103.06	105.23
1992	4	104.23	97.06	102.36	103.51	106.01
1993	1	103.85	94.12	100.80	103.08	106.65
1993	2	105.49	95.42	102.27	104.52	108.32
1993	3	106.44	95.54	102.44	105.33	109.82
1993	4	107.07	95.20	102.36	105.95	111.01
1994	1	107.62	95.25	101.75	106.50	112.77
1994	2	109.21	96.00	102.54	107.84	114.69
1994	3	110.08	96.25	103.00	108.90	115.97
1994	4	110.11	95.62	101.57	109.48	116.65
1995	1	110.46	95.09	100.81	109.99	117.97
1995	2	111.81	96.34	102.19	110.59	119.55
1995	3	113.05	97.12	102.82	112.04	121.11
1995	4	113.04	96.40	101.60	112.21	122.15
1996	1	113.72	97.26	101.68	113.20	122.88
1996	2	115.36	98.66	102.91	114.26	124.98
1996	3	116.29	99.51	103.51	115.34	126.52
1996	4	116.19	98.96	102.52	115.27	126.98
1997	1	116.64	98.86	102.27	116.40	128.18
1997	2	118.54	101.31	104.14	117.47	129.61
1997	3	119.54	102.37	104.76	118.19	130.37
1997	4	120.03	103.34	104.62	119.12	130.55
1998	1	121.24	104.04	104.72	120.22	131.97
1998	2	123.94	107.59	107.55	122.13	134.36
1998	3	125.67	110.06	109.21	123.43	135.42
1998	4	126.86	111.54	109.66	124.53	136.77
1999	1	128.45	113.00	110.45	126.31	138.33
1999	2	131.44	117.57	113.74	128.59	140.06
1999	3	133.58	121.01	116.40	130.33	141.38
1999	4	134.70	122.60	117.23	131.70	142.05
2000	1	136.75	124.93	118.79	133.38	143.28
2000	2	140.21	131.25	122.32	136.46	145.20
2000	3	142.60	135.18	125.29	138.61	145.85
2000	4	144.09	138.08	127.04	140.13	146.09
2001	1	146.39	141.09	128.87	142.74	147.02
2001	2	150.00	147.50	133.08	145.91	148.88
2001	3	152.51	152.80	137.15	148.68	149.78
2001	4	153.81	154.66	139.12	150.34	150.77
2002	1	155.92	157.68	141.63	153.12	151.50
2002	2	160.18	165.60	147.12	156.81	153.08
2002	3	163.54	172.42	152.32	160.05	154.61
2002	4	165.59	175.33	155.35	162.67	155.87
2003	1	167.94	177.85	158.58	165.39	157.08
2003	2	172.23	184.50	163.70	169.70	159.49
2003	3	175.97	189.75	169.22	173.43	161.57
2003	4	178.57	194.03	172.35	176.53	162.09
2004	1	181.86	196.59	175.96	180.81	163.76
2004	2	188.30	205.54	183.21	187.50	166.83
2004	3	193.53	212.08	188.77	193.97	169.59
2004	4	196.63	214.20	193.28	199.11	170.52

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	United States	New England	Middle Atlantic	South Atlantic	East South Central
2005	1	200.79	218.06	196.21	205.85	173.20
2005	2	208.33	225.29	203.01	215.22	176.90
2005	3	214.11	228.75	210.71	223.26	180.26
2005	4	216.67	227.52	212.46	228.50	183.11
2006	1	219.06	226.88	214.36	232.64	186.48
2006	2	223.32	229.02	218.22	237.28	190.95
2006	3	224.01	226.85	218.90	238.57	192.93
2006	4	222.96	223.21	217.71	239.56	194.08
2007	1	223.33	222.21	217.52	239.86	195.76
2007	2	225.84	224.95	221.29	241.73	199.66
2007	3	223.22	222.84	220.18	237.67	199.22
2007	4	217.07	218.16	217.65	230.99	197.44
2008	1	210.82	214.37	214.54	223.20	194.73
2008	2	208.13	212.49	213.79	217.27	196.31
2008	3	203.15	208.53	212.22	209.03	193.58
2008	4	195.14	203.85	206.23	197.92	189.62
2009	1	192.73	204.38	203.85	196.10	187.25
2009	2	193.27	203.90	203.87	195.22	189.82
2009	3	192.52	201.85	203.72	193.99	188.59
2009	4	190.27	199.92	202.35	189.84	187.39
2010	1	186.94	196.85	201.42	186.15	181.84
2010	2	189.64	198.77	202.01	188.17	184.71
2010	3	186.74	198.33	200.74	183.38	183.39
2010	4	182.65	195.58	198.90	179.55	179.25
2011	1	176.93	190.40	193.68	172.81	174.75
2011	2	179.25	193.37	195.95	174.62	177.64
2011	3	180.23	192.77	195.87	176.04	179.53
2011	4	178.17	191.03	191.58	175.12	177.13
2012	1	177.31	187.11	190.26	174.29	176.24
2012	2	184.35	191.49	194.65	181.22	182.27
2012	3	186.77	192.79	195.42	183.35	181.90
2012	4	186.95	192.05	193.88	183.69	182.01
2013	1	189.20	192.24	193.44	186.52	182.46
2013	2	197.57	198.64	199.43	194.69	188.78
2013	3	200.90	201.35	201.32	197.74	189.30
2013	4	199.93	198.01	199.45	197.48	187.70
2014	1	201.03	197.96	197.36	198.96	188.07
2014	2	207.33	204.22	203.63	204.94	193.16
2014	3	209.71	206.62	204.50	206.62	194.65
2014	4	209.47	203.07	203.63	207.45	194.07
2015	1	211.01	203.42	202.47	209.63	195.88
2015	2	218.32	211.29	207.76	217.06	201.58
2015	3	221.02	212.70	210.15	219.78	202.99
2015	4	221.22	210.70	208.40	221.14	203.41
2016	1	223.30	210.85	208.29	224.03	204.86
2016	2	230.87	218.40	215.60	231.43	210.68
2016	3	234.31	220.90	217.78	234.97	213.45
2016	4	235.02	220.76	217.59	236.68	214.16
2017	1	237.42	222.44	217.41	238.71	216.68
2017	2	246.13	230.86	224.53	247.67	222.48
2017	3	249.90	233.70	228.89	250.91	226.94
2017	4	251.04	233.82	229.65	252.70	226.84
2018	1	255.06	235.16	231.23	257.68	229.20
2018	2	262.95	243.67	237.68	265.28	236.42
2018	3	266.02	245.03	240.25	268.89	240.13
2018	4	265.43	245.19	239.63	268.27	240.64

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
 Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	West South Central	West North Central	East North Central	Mountain	Pacific
1991	1	100.00	100.00	100.00	100.00	100.00
1991	2	100.91	100.62	101.31	101.41	100.18
1991	3	101.56	101.14	101.99	101.85	100.38
1991	4	101.60	101.67	102.61	103.83	100.82
1992	1	102.61	102.81	103.73	105.22	100.73
1992	2	103.28	104.17	105.51	106.83	100.31
1992	3	104.46	105.60	106.47	108.58	100.77
1992	4	105.46	105.98	107.44	110.75	99.70
1993	1	105.68	106.89	107.76	112.05	98.10
1993	2	107.57	109.20	110.07	115.46	98.23
1993	3	109.11	111.19	111.57	118.61	97.58
1993	4	110.36	112.50	112.43	121.30	97.06
1994	1	111.35	113.76	113.59	123.63	96.22
1994	2	112.95	115.80	116.08	127.77	96.80
1994	3	113.60	117.28	117.15	130.06	96.96
1994	4	113.84	117.46	117.91	131.55	95.97
1995	1	114.02	118.33	119.04	132.65	95.72
1995	2	115.73	120.63	121.39	135.18	95.70
1995	3	116.95	122.52	123.05	137.55	96.10
1995	4	117.38	123.07	123.74	138.01	95.26
1996	1	117.94	123.92	124.96	139.21	95.27
1996	2	119.44	126.37	127.81	141.77	95.95
1996	3	120.18	127.88	128.90	143.05	96.35
1996	4	120.15	127.97	129.28	143.10	96.21
1997	1	120.60	128.67	129.84	143.97	95.97
1997	2	122.33	130.70	132.21	146.35	98.19
1997	3	123.07	132.28	133.37	147.41	99.59
1997	4	123.79	132.66	133.63	147.57	100.22
1998	1	125.31	134.39	134.70	148.66	102.16
1998	2	127.45	136.87	137.29	151.78	105.83
1998	3	129.53	139.16	138.94	153.41	107.66
1998	4	130.66	141.21	140.11	154.50	109.07
1999	1	131.95	142.75	141.51	156.38	111.44
1999	2	134.73	146.30	144.57	159.45	114.64
1999	3	136.62	148.49	146.71	162.08	116.67
1999	4	137.83	148.92	147.28	163.20	118.54
2000	1	139.66	151.35	149.10	165.27	121.83
2000	2	142.68	155.28	152.44	168.62	125.59
2000	3	144.53	157.66	154.56	170.56	128.80
2000	4	145.44	158.41	154.84	172.21	132.07
2001	1	146.86	160.47	156.45	175.52	135.91
2001	2	149.48	164.94	159.81	178.84	140.10
2001	3	150.92	167.35	161.65	180.31	142.85
2001	4	151.23	168.19	162.23	181.55	144.90
2002	1	152.00	169.50	163.49	183.38	148.72
2002	2	154.93	173.80	166.78	186.77	155.34
2002	3	155.94	176.42	168.87	189.41	161.31
2002	4	156.64	177.56	169.54	191.51	165.17
2003	1	157.49	179.64	170.66	193.49	170.03
2003	2	159.76	183.27	174.42	197.79	176.73
2003	3	161.26	186.45	176.70	201.62	183.57
2003	4	161.67	187.38	177.46	204.64	190.94
2004	1	163.04	189.45	178.28	209.45	198.98
2004	2	166.32	193.85	182.70	218.36	211.66
2004	3	167.68	196.79	184.95	225.88	224.56
2004	4	168.72	197.59	184.99	230.68	232.51

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	West South Central	West North Central	East North Central	Mountain	Pacific
2005	1	170.54	198.82	185.48	239.59	242.71
2005	2	174.59	204.29	190.16	253.56	257.47
2005	3	177.46	206.71	191.75	264.25	270.62
2005	4	180.14	207.27	191.21	271.80	274.76
2006	1	182.88	208.49	190.54	278.50	278.58
2006	2	187.05	212.25	194.23	285.99	282.86
2006	3	189.62	213.42	193.93	287.67	281.12
2006	4	191.20	211.30	191.00	289.91	275.57
2007	1	193.36	212.27	190.19	290.41	275.49
2007	2	196.93	215.30	192.35	293.92	275.04
2007	3	198.39	215.14	189.86	290.76	264.99
2007	4	197.33	209.85	184.36	279.61	248.06
2008	1	195.47	206.13	179.66	271.82	230.21
2008	2	197.69	207.67	179.73	265.87	217.37
2008	3	197.55	205.53	176.61	255.30	206.26
2008	4	193.12	200.63	170.05	239.98	194.05
2009	1	192.91	199.36	168.95	234.09	187.02
2009	2	196.02	202.14	170.63	230.38	185.97
2009	3	195.40	201.48	169.29	226.98	187.87
2009	4	194.77	199.50	166.37	222.32	187.52
2010	1	192.84	194.62	162.27	218.23	185.07
2010	2	196.90	200.58	165.98	218.07	187.37
2010	3	194.99	196.93	164.21	212.68	183.63
2010	4	190.40	192.39	161.20	205.64	177.89
2011	1	188.34	186.56	154.39	198.91	171.54
2011	2	192.59	190.21	157.97	198.92	171.30
2011	3	191.60	192.44	159.97	200.79	171.48
2011	4	191.72	190.26	156.81	198.65	169.22
2012	1	192.13	189.21	154.24	201.06	169.31
2012	2	198.43	195.72	161.46	213.78	177.46
2012	3	200.55	198.40	163.40	220.55	181.83
2012	4	200.82	197.55	161.09	222.41	186.35
2013	1	203.55	197.66	161.26	228.01	193.28
2013	2	210.22	204.79	169.54	240.27	205.65
2013	3	211.21	208.09	172.45	245.48	213.85
2013	4	211.73	205.65	169.95	246.69	214.46
2014	1	215.66	206.43	169.47	249.48	217.55
2014	2	220.00	212.64	176.45	256.56	225.25
2014	3	223.32	215.18	178.80	259.66	229.14
2014	4	223.86	213.75	177.48	260.78	230.08
2015	1	227.76	212.93	176.71	266.60	233.85
2015	2	234.33	220.93	184.56	274.61	242.23
2015	3	237.12	224.13	185.97	281.21	246.09
2015	4	237.34	223.47	184.89	281.88	249.10
2016	1	240.57	225.28	185.40	286.85	252.96
2016	2	247.15	232.05	192.99	297.22	261.82
2016	3	250.79	236.27	196.46	301.49	265.67
2016	4	251.32	235.54	195.67	304.60	268.18
2017	1	255.16	236.73	196.92	310.70	273.00
2017	2	263.86	246.01	204.59	321.64	284.51
2017	3	266.72	248.67	207.91	328.07	289.35
2017	4	268.06	248.37	207.88	332.44	291.98
2018	1	271.65	251.82	210.22	341.32	299.78
2018	2	278.10	260.96	218.43	352.95	307.40
2018	3	279.91	264.32	221.63	357.86	310.08
2018	4	279.69	263.52	219.99	359.49	309.04

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	Alabama	Alaska	Arizona	Arkansas	California
1991	1	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)
1991	2	101.72 (0.63)	100.80 (1.74)	100.53 (0.72)	100.38 (0.99)	99.66 (0.18)
1991	3	102.75 (0.63)	102.05 (1.69)	99.31 (0.69)	101.82 (0.94)	99.53 (0.19)
1991	4	103.44 (0.65)	102.21 (1.75)	102.05 (0.73)	102.95 (0.97)	99.68 (0.19)
1992	1	104.45 (0.60)	102.45 (1.65)	102.34 (0.70)	102.85 (0.88)	99.04 (0.18)
1992	2	104.75 (0.61)	104.03 (1.63)	101.60 (0.68)	104.03 (0.95)	98.00 (0.18)
1992	3	106.96 (0.59)	104.92 (1.62)	102.76 (0.68)	105.08 (0.90)	97.72 (0.18)
1992	4	108.44 (0.62)	104.21 (1.65)	103.77 (0.68)	105.66 (0.90)	95.97 (0.18)
1993	1	109.00 (0.66)	104.94 (1.77)	104.24 (0.72)	107.54 (0.98)	93.64 (0.20)
1993	2	110.12 (0.62)	107.05 (1.67)	105.47 (0.68)	109.66 (0.93)	92.93 (0.18)
1993	3	112.10 (0.63)	108.06 (1.63)	106.72 (0.68)	111.56 (0.93)	91.49 (0.18)
1993	4	113.35 (0.65)	110.44 (1.75)	109.23 (0.70)	111.61 (0.94)	90.25 (0.18)
1994	1	114.19 (0.68)	110.94 (1.82)	109.94 (0.72)	115.21 (1.01)	88.82 (0.19)
1994	2	116.43 (0.67)	111.54 (1.79)	112.58 (0.72)	116.62 (1.02)	88.56 (0.18)
1994	3	117.27 (0.70)	112.78 (1.80)	114.04 (0.74)	117.04 (1.05)	88.32 (0.20)
1994	4	117.95 (0.79)	111.19 (1.84)	116.33 (0.79)	119.36 (1.16)	86.94 (0.21)
1995	1	118.54 (0.79)	114.68 (1.97)	117.29 (0.81)	119.11 (1.18)	86.18 (0.21)
1995	2	119.85 (0.70)	116.41 (1.85)	118.66 (0.77)	121.55 (1.09)	86.01 (0.19)
1995	3	121.65 (0.69)	117.69 (1.82)	120.97 (0.77)	123.14 (1.08)	86.20 (0.18)
1995	4	121.93 (0.72)	117.44 (1.93)	121.67 (0.79)	123.58 (1.10)	85.09 (0.18)
1996	1	122.93 (0.72)	121.00 (2.08)	123.26 (0.79)	124.35 (1.12)	84.95 (0.19)
1996	2	125.27 (0.71)	121.11 (1.91)	124.82 (0.79)	125.92 (1.10)	85.05 (0.17)
1996	3	125.86 (0.72)	120.80 (1.93)	126.15 (0.81)	125.44 (1.10)	85.41 (0.18)
1996	4	126.68 (0.75)	123.18 (2.07)	126.30 (0.83)	126.16 (1.15)	85.17 (0.19)
1997	1	127.94 (0.76)	122.91 (2.20)	127.32 (0.83)	127.25 (1.17)	84.72 (0.19)
1997	2	128.46 (0.73)	124.94 (2.00)	129.25 (0.82)	128.26 (1.13)	86.86 (0.18)
1997	3	129.86 (0.73)	125.20 (1.99)	130.43 (0.83)	128.63 (1.12)	88.08 (0.18)
1997	4	129.75 (0.75)	125.44 (2.03)	131.12 (0.85)	129.21 (1.14)	88.90 (0.18)
1998	1	131.03 (0.74)	125.66 (2.13)	132.38 (0.84)	129.52 (1.14)	90.89 (0.19)
1998	2	133.01 (0.73)	129.17 (2.06)	135.42 (0.84)	129.91 (1.10)	94.35 (0.18)
1998	3	134.30 (0.74)	130.02 (2.02)	137.45 (0.85)	132.62 (1.13)	96.44 (0.18)
1998	4	135.67 (0.76)	130.70 (2.11)	138.54 (0.86)	132.74 (1.15)	98.01 (0.19)
1999	1	136.64 (0.78)	131.67 (2.18)	140.80 (0.88)	133.90 (1.19)	100.49 (0.20)
1999	2	138.27 (0.76)	133.97 (2.12)	143.30 (0.88)	135.54 (1.16)	103.75 (0.19)
1999	3	138.87 (0.78)	134.62 (2.09)	145.59 (0.91)	136.43 (1.18)	106.06 (0.20)
1999	4	139.85 (0.81)	130.96 (2.18)	147.07 (0.93)	137.07 (1.22)	108.24 (0.22)
2000	1	141.42 (0.84)	133.18 (2.31)	149.29 (0.94)	137.25 (1.24)	111.65 (0.22)
2000	2	142.65 (0.80)	136.50 (2.23)	151.95 (0.94)	140.08 (1.21)	116.00 (0.22)
2000	3	142.94 (0.80)	138.08 (2.24)	153.19 (0.95)	140.43 (1.21)	119.77 (0.22)
2000	4	143.15 (0.83)	136.71 (2.21)	155.72 (0.97)	141.27 (1.26)	123.69 (0.23)
2001	1	144.56 (0.82)	139.94 (2.32)	157.89 (0.98)	142.79 (1.24)	127.88 (0.24)
2001	2	146.41 (0.80)	144.76 (2.24)	161.11 (0.98)	143.95 (1.21)	132.43 (0.24)
2001	3	147.07 (0.81)	147.04 (2.27)	162.89 (1.00)	145.95 (1.24)	135.36 (0.24)
2001	4	147.54 (0.83)	148.41 (2.32)	165.90 (1.03)	146.20 (1.26)	137.93 (0.26)
2002	1	148.81 (0.85)	149.06 (2.38)	166.65 (1.03)	147.21 (1.28)	142.26 (0.26)
2002	2	150.57 (0.83)	153.42 (2.38)	170.31 (1.04)	150.20 (1.27)	149.73 (0.26)
2002	3	151.70 (0.83)	157.99 (2.42)	172.84 (1.06)	151.47 (1.27)	157.00 (0.28)
2002	4	153.55 (0.86)	156.82 (2.43)	176.56 (1.08)	152.66 (1.30)	161.66 (0.29)
2003	1	154.43 (0.87)	159.92 (2.58)	179.58 (1.11)	154.47 (1.33)	167.31 (0.31)
2003	2	156.75 (0.85)	164.18 (2.55)	183.62 (1.12)	157.24 (1.31)	174.91 (0.31)
2003	3	159.88 (0.86)	166.78 (2.56)	187.40 (1.14)	160.65 (1.33)	182.72 (0.33)
2003	4	159.25 (0.91)	170.41 (2.65)	192.87 (1.20)	161.37 (1.38)	191.55 (0.37)
2004	1	160.47 (0.92)	175.02 (2.86)	198.85 (1.25)	164.59 (1.42)	200.85 (0.41)
2004	2	163.87 (0.89)	178.73 (2.75)	206.81 (1.27)	167.94 (1.40)	215.54 (0.43)
2004	3	167.80 (0.92)	185.43 (2.83)	217.46 (1.35)	170.83 (1.43)	230.81 (0.48)
2004	4	168.83 (0.96)	187.63 (2.95)	228.47 (1.45)	173.02 (1.48)	240.03 (0.53)

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	Alabama	Alaska	Arizona	Arkansas	California
2005	1	171.68 (0.97)	192.19 (3.04)	244.23 (1.56)	175.17 (1.51)	251.72 (0.60)
2005	2	175.62 (0.95)	199.77 (3.04)	269.89 (1.68)	178.59 (1.49)	267.37 (0.59)
2005	3	179.48 (0.97)	206.73 (3.14)	291.46 (1.83)	182.63 (1.52)	280.79 (0.64)
2005	4	182.92 (1.02)	207.89 (3.24)	302.84 (1.95)	185.69 (1.57)	284.22 (0.68)
2006	1	187.24 (1.05)	211.23 (3.35)	314.65 (2.05)	186.98 (1.61)	285.94 (0.72)
2006	2	192.48 (1.04)	219.05 (3.35)	321.22 (2.04)	190.43 (1.59)	287.44 (0.68)
2006	3	195.42 (1.07)	220.40 (3.34)	317.43 (2.06)	192.22 (1.61)	282.52 (0.67)
2006	4	196.46 (1.11)	219.68 (3.47)	319.08 (2.11)	193.19 (1.65)	274.21 (0.67)
2007	1	198.23 (1.11)	221.00 (3.57)	317.90 (2.10)	192.36 (1.65)	271.73 (0.65)
2007	2	202.84 (1.10)	229.38 (3.52)	316.00 (2.02)	195.75 (1.64)	269.06 (0.60)
2007	3	202.79 (1.12)	226.77 (3.47)	309.04 (2.04)	195.74 (1.66)	255.26 (0.58)
2007	4	200.72 (1.17)	222.18 (3.51)	288.95 (1.98)	194.09 (1.69)	234.51 (0.53)
2008	1	198.59 (1.18)	217.06 (3.71)	276.07 (1.94)	189.77 (1.69)	212.71 (0.48)
2008	2	198.96 (1.20)	226.48 (3.59)	263.47 (1.84)	189.87 (1.71)	195.74 (0.42)
2008	3	196.38 (1.25)	223.89 (3.66)	244.63 (1.77)	189.46 (1.78)	183.58 (0.39)
2008	4	191.47 (1.40)	225.07 (3.92)	224.34 (1.76)	185.61 (1.91)	171.41 (0.38)
2009	1	191.70 (1.36)	223.57 (3.81)	214.18 (1.67)	184.27 (1.95)	163.59 (0.39)
2009	2	193.35 (1.32)	218.77 (3.61)	203.19 (1.49)	184.59 (1.80)	163.89 (0.38)
2009	3	188.92 (1.34)	217.90 (3.59)	200.74 (1.53)	184.94 (1.80)	167.17 (0.38)
2009	4	192.76 (1.49)	215.71 (3.67)	195.18 (1.52)	188.23 (2.01)	168.08 (0.40)
2010	1	183.27 (1.56)	213.02 (3.99)	190.43 (1.53)	177.66 (1.93)	166.17 (0.42)
2010	2	183.20 (1.32)	222.37 (3.70)	188.11 (1.41)	183.82 (1.79)	168.10 (0.39)
2010	3	182.92 (1.43)	225.53 (3.88)	180.57 (1.38)	178.19 (1.80)	165.17 (0.39)
2010	4	175.49 (1.42)	219.97 (3.79)	170.62 (1.30)	174.90 (1.84)	160.33 (0.39)
2011	1	170.68 (1.43)	222.46 (4.03)	166.60 (1.27)	178.39 (1.98)	154.72 (0.38)
2011	2	172.96 (1.28)	225.55 (3.92)	163.38 (1.20)	174.15 (1.83)	154.21 (0.37)
2011	3	174.65 (1.31)	227.69 (3.91)	164.54 (1.20)	176.57 (1.78)	154.32 (0.37)
2011	4	171.36 (1.38)	223.40 (4.00)	166.87 (1.27)	178.18 (1.89)	152.97 (0.38)
2012	1	173.44 (1.39)	215.50 (4.21)	172.40 (1.29)	178.25 (1.98)	153.53 (0.39)
2012	2	179.62 (1.30)	227.37 (3.90)	184.96 (1.34)	183.78 (1.83)	160.87 (0.38)
2012	3	176.98 (1.31)	230.62 (3.84)	195.15 (1.45)	182.62 (1.78)	164.89 (0.39)
2012	4	177.98 (1.37)	227.35 (4.07)	198.12 (1.46)	180.71 (1.87)	170.48 (0.41)
2013	1	177.64 (1.39)	227.09 (4.30)	205.29 (1.51)	186.99 (1.94)	178.11 (0.44)
2013	2	183.24 (1.26)	234.64 (3.99)	218.67 (1.55)	187.68 (1.81)	190.95 (0.43)
2013	3	184.79 (1.31)	233.91 (3.94)	223.24 (1.60)	187.67 (1.79)	199.72 (0.45)
2013	4	181.51 (1.39)	231.88 (4.02)	228.29 (1.71)	184.47 (1.91)	201.71 (0.49)
2014	1	182.92 (1.49)	228.21 (4.16)	229.24 (1.74)	188.19 (2.02)	204.94 (0.53)
2014	2	185.61 (1.29)	239.09 (4.09)	234.62 (1.67)	189.38 (1.86)	211.85 (0.49)
2014	3	188.36 (1.32)	240.18 (4.07)	237.20 (1.72)	190.40 (1.84)	215.41 (0.50)
2014	4	188.29 (1.40)	242.42 (4.54)	237.57 (1.78)	192.23 (1.94)	216.67 (0.53)
2015	1	187.19 (1.39)	237.35 (4.71)	242.65 (1.85)	188.75 (1.98)	220.41 (0.56)
2015	2	194.72 (1.37)	246.09 (4.16)	248.90 (1.76)	194.77 (1.90)	226.88 (0.53)
2015	3	195.31 (1.41)	245.02 (4.22)	254.22 (1.84)	198.11 (1.92)	230.41 (0.54)
2015	4	192.44 (1.48)	248.68 (4.52)	257.45 (1.94)	195.91 (2.03)	233.08 (0.59)
2016	1	194.61 (1.53)	242.23 (4.69)	261.26 (1.96)	199.34 (2.08)	236.32 (0.61)
2016	2	199.67 (1.38)	255.08 (4.27)	269.37 (1.90)	199.91 (1.93)	243.62 (0.57)
2016	3	203.13 (1.44)	252.67 (4.44)	271.16 (1.91)	202.65 (1.94)	247.07 (0.58)
2016	4	201.76 (1.54)	249.13 (4.47)	276.35 (1.98)	202.10 (2.06)	249.17 (0.61)
2017	1	205.00 (1.60)	248.51 (4.78)	281.02 (2.04)	205.94 (2.19)	253.90 (0.67)
2017	2	208.57 (1.48)	253.08 (4.41)	291.89 (2.02)	207.98 (2.03)	263.26 (0.62)
2017	3	212.17 (1.53)	257.44 (4.57)	297.77 (2.12)	211.38 (2.06)	267.81 (0.64)
2017	4	212.59 (1.60)	256.68 (4.65)	300.50 (2.23)	214.64 (2.19)	270.59 (0.69)
2018	1	213.18 (1.71)	256.83 (4.93)	308.93 (2.29)	214.56 (2.31)	277.19 (0.74)
2018	2	222.08 (1.56)	261.06 (4.63)	316.17 (2.22)	216.72 (2.15)	283.10 (0.70)
2018	3	225.40 (1.62)	257.19 (4.76)	320.35 (2.33)	220.72 (2.26)	285.41 (0.73)
2018	4	222.34 (1.83)	265.28 (5.10)	325.11 (2.46)	225.49 (2.51)	285.09 (0.81)

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	Colorado	Connecticut	Delaware	Washington DC	Florida
1991	1	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)
1991	2	100.97 (0.51)	97.77 (0.57)	99.79 (0.88)	101.12 (2.99)	100.49 (0.36)
1991	3	102.22 (0.51)	97.01 (0.59)	99.80 (0.91)	98.74 (3.00)	100.24 (0.36)
1991	4	103.12 (0.51)	96.54 (0.59)	100.92 (0.94)	98.02 (2.88)	100.83 (0.36)
1992	1	105.36 (0.51)	97.30 (0.57)	100.77 (0.87)	99.64 (2.87)	101.25 (0.35)
1992	2	108.84 (0.51)	95.21 (0.55)	99.77 (0.87)	100.55 (2.81)	101.00 (0.35)
1992	3	111.00 (0.51)	95.11 (0.55)	99.42 (0.86)	101.78 (2.87)	102.27 (0.35)
1992	4	113.77 (0.52)	95.99 (0.54)	100.79 (0.87)	97.96 (2.66)	102.68 (0.34)
1993	1	115.61 (0.56)	92.36 (0.61)	99.18 (1.02)	93.33 (2.86)	102.56 (0.38)
1993	2	120.40 (0.54)	91.57 (0.55)	99.50 (0.90)	98.44 (2.69)	103.84 (0.35)
1993	3	125.09 (0.57)	92.35 (0.53)	99.19 (0.90)	98.28 (2.83)	104.56 (0.35)
1993	4	128.05 (0.60)	91.92 (0.54)	98.61 (0.90)	90.74 (2.72)	105.53 (0.36)
1994	1	131.89 (0.64)	91.08 (0.58)	97.14 (0.95)	95.58 (3.21)	105.99 (0.38)
1994	2	136.93 (0.64)	91.86 (0.58)	99.81 (0.93)	97.64 (3.07)	106.52 (0.37)
1994	3	139.77 (0.67)	92.72 (0.60)	99.96 (1.00)	99.37 (3.18)	107.96 (0.39)
1994	4	140.38 (0.72)	91.82 (0.67)	100.09 (1.06)	91.64 (3.21)	108.49 (0.41)
1995	1	141.81 (0.74)	90.40 (0.72)	99.93 (1.21)	92.21 (3.48)	108.84 (0.43)
1995	2	144.94 (0.69)	90.66 (0.59)	99.29 (1.01)	89.52 (3.01)	109.09 (0.38)
1995	3	147.73 (0.69)	91.86 (0.57)	99.99 (1.00)	92.29 (3.03)	110.65 (0.38)
1995	4	148.52 (0.71)	91.00 (0.60)	99.44 (1.01)	93.66 (3.10)	110.55 (0.39)
1996	1	150.02 (0.73)	90.55 (0.62)	99.70 (1.05)	93.44 (3.37)	111.07 (0.40)
1996	2	153.42 (0.72)	91.94 (0.59)	99.57 (0.99)	95.05 (3.00)	112.06 (0.38)
1996	3	155.05 (0.73)	91.84 (0.58)	101.23 (0.99)	93.69 (3.01)	112.85 (0.39)
1996	4	156.21 (0.77)	90.78 (0.60)	100.45 (1.05)	96.71 (3.33)	112.59 (0.40)
1997	1	157.38 (0.79)	90.64 (0.62)	100.36 (1.08)	89.40 (3.33)	113.91 (0.42)
1997	2	160.76 (0.76)	92.60 (0.58)	100.79 (0.96)	96.29 (3.19)	114.37 (0.40)
1997	3	162.79 (0.76)	93.44 (0.56)	102.88 (0.98)	92.97 (3.03)	115.06 (0.40)
1997	4	163.57 (0.79)	93.37 (0.57)	101.07 (1.02)	94.51 (2.86)	115.99 (0.40)
1998	1	166.11 (0.80)	93.31 (0.59)	103.02 (1.04)	97.29 (3.16)	117.82 (0.41)
1998	2	170.29 (0.78)	96.31 (0.54)	103.47 (0.95)	100.27 (2.89)	119.11 (0.39)
1998	3	173.26 (0.79)	98.47 (0.55)	106.55 (0.97)	105.85 (3.11)	120.51 (0.40)
1998	4	175.87 (0.82)	99.54 (0.57)	105.81 (0.98)	107.16 (3.12)	121.38 (0.40)
1999	1	179.84 (0.86)	101.14 (0.60)	107.96 (1.04)	108.10 (3.31)	123.21 (0.42)
1999	2	186.29 (0.85)	104.57 (0.58)	109.72 (0.99)	110.83 (3.17)	125.41 (0.41)
1999	3	192.33 (0.89)	106.92 (0.60)	112.09 (1.02)	117.90 (3.29)	127.13 (0.42)
1999	4	194.57 (0.94)	108.03 (0.64)	112.73 (1.06)	117.37 (3.45)	129.00 (0.43)
2000	1	200.39 (0.96)	109.83 (0.67)	114.48 (1.15)	126.76 (3.85)	131.57 (0.45)
2000	2	207.31 (0.95)	114.45 (0.64)	116.36 (1.04)	129.36 (3.73)	134.05 (0.43)
2000	3	213.30 (0.98)	116.52 (0.64)	119.23 (1.07)	133.39 (3.70)	136.97 (0.44)
2000	4	216.98 (1.02)	117.81 (0.66)	121.46 (1.14)	132.56 (3.67)	140.01 (0.45)
2001	1	223.87 (1.06)	119.74 (0.69)	123.83 (1.17)	140.38 (4.00)	143.34 (0.47)
2001	2	229.03 (1.04)	124.65 (0.67)	126.02 (1.10)	148.00 (4.16)	147.50 (0.46)
2001	3	230.64 (1.06)	128.94 (0.70)	128.70 (1.13)	156.68 (4.30)	151.85 (0.48)
2001	4	230.35 (1.10)	130.18 (0.73)	131.59 (1.17)	159.06 (4.55)	155.54 (0.50)
2002	1	234.03 (1.13)	131.73 (0.75)	133.22 (1.23)	167.37 (4.67)	159.18 (0.51)
2002	2	237.13 (1.10)	138.43 (0.75)	137.66 (1.20)	178.94 (4.82)	164.52 (0.52)
2002	3	239.50 (1.12)	143.15 (0.77)	142.92 (1.26)	185.11 (5.05)	169.27 (0.53)
2002	4	239.50 (1.15)	146.19 (0.81)	144.89 (1.26)	190.53 (5.23)	173.97 (0.55)
2003	1	240.46 (1.18)	148.09 (0.84)	147.61 (1.32)	187.52 (5.22)	179.23 (0.58)
2003	2	243.61 (1.14)	153.25 (0.83)	151.94 (1.30)	207.79 (5.61)	185.04 (0.58)
2003	3	244.87 (1.15)	158.26 (0.84)	155.95 (1.31)	219.03 (6.04)	191.26 (0.60)
2003	4	244.57 (1.23)	159.84 (0.89)	160.45 (1.47)	218.10 (6.21)	198.02 (0.64)
2004	1	246.38 (1.26)	161.92 (0.95)	165.71 (1.53)	239.15 (7.22)	205.38 (0.68)
2004	2	253.58 (1.22)	170.56 (0.92)	170.25 (1.48)	250.58 (7.05)	216.43 (0.69)
2004	3	255.73 (1.25)	177.25 (0.98)	180.69 (1.60)	255.51 (7.54)	228.60 (0.75)
2004	4	254.58 (1.31)	178.37 (1.02)	184.46 (1.66)	276.44 (8.17)	239.55 (0.81)

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	Colorado	Connecticut	Delaware	Washington DC	Florida
2005	1	258.29 (1.36)	181.36 (1.09)	188.96 (1.88)	281.37 (9.00)	254.21 (0.87)
2005	2	264.87 (1.28)	189.44 (1.05)	197.27 (1.77)	315.62 (9.83)	272.39 (0.89)
2005	3	267.54 (1.30)	193.46 (1.07)	203.28 (1.79)	330.96 (10.27)	290.26 (0.97)
2005	4	270.02 (1.37)	193.50 (1.14)	208.62 (1.92)	323.40 (10.45)	300.88 (1.05)
2006	1	270.33 (1.39)	195.13 (1.19)	215.04 (2.19)	319.56 (10.14)	307.63 (1.09)
2006	2	275.98 (1.33)	199.57 (1.13)	215.15 (1.99)	325.78 (9.46)	312.43 (1.07)
2006	3	275.79 (1.34)	197.34 (1.12)	219.74 (2.04)	338.21 (9.77)	312.52 (1.12)
2006	4	276.07 (1.38)	194.21 (1.14)	221.63 (2.17)	335.11 (10.50)	310.69 (1.16)
2007	1	274.66 (1.40)	196.08 (1.19)	218.44 (2.29)	333.07 (11.04)	307.24 (1.15)
2007	2	279.88 (1.32)	198.32 (1.12)	219.75 (2.04)	343.58 (9.83)	304.90 (1.07)
2007	3	278.38 (1.34)	198.72 (1.12)	222.09 (2.10)	345.66 (10.01)	290.98 (1.07)
2007	4	270.39 (1.37)	192.85 (1.16)	215.08 (2.20)	334.50 (9.70)	277.70 (1.08)
2008	1	265.57 (1.41)	188.18 (1.21)	213.63 (2.31)	327.31 (10.02)	256.91 (1.08)
2008	2	270.98 (1.40)	189.50 (1.16)	208.52 (2.25)	320.96 (9.45)	237.58 (0.98)
2008	3	265.69 (1.42)	185.55 (1.19)	204.19 (2.42)	329.31 (10.12)	219.42 (0.96)
2008	4	255.95 (1.51)	179.92 (1.30)	197.40 (2.84)	317.22 (10.40)	204.17 (0.99)
2009	1	259.48 (1.57)	176.34 (1.35)	201.27 (2.75)	303.81 (11.73)	194.26 (0.97)
2009	2	266.93 (1.52)	177.52 (1.19)	204.40 (2.41)	314.59 (10.19)	190.51 (0.86)
2009	3	266.34 (1.55)	176.05 (1.18)	193.23 (2.53)	316.08 (10.02)	187.76 (0.89)
2009	4	261.98 (1.61)	172.27 (1.23)	189.75 (2.61)	322.39 (10.38)	185.45 (0.91)
2010	1	261.08 (1.72)	168.20 (1.36)	190.64 (2.99)	323.57 (10.85)	183.15 (0.95)
2010	2	264.48 (1.53)	172.56 (1.14)	186.17 (2.37)	312.62 (9.50)	181.58 (0.85)
2010	3	258.78 (1.60)	169.88 (1.23)	184.54 (2.53)	333.51 (11.24)	177.62 (0.89)
2010	4	257.05 (1.62)	165.97 (1.23)	187.87 (2.81)	320.19 (10.53)	173.15 (0.86)
2011	1	249.27 (1.66)	162.02 (1.36)	180.85 (3.05)	313.11 (10.77)	165.41 (0.84)
2011	2	254.09 (1.50)	167.51 (1.19)	173.14 (2.58)	335.25 (10.50)	167.26 (0.81)
2011	3	256.90 (1.52)	164.47 (1.16)	170.65 (2.45)	331.52 (10.35)	170.25 (0.84)
2011	4	251.66 (1.59)	161.29 (1.27)	176.28 (2.60)	341.00 (10.88)	169.82 (0.84)
2012	1	251.30 (1.66)	156.73 (1.32)	169.69 (2.62)	337.55 (11.63)	172.42 (0.88)
2012	2	268.38 (1.47)	161.93 (1.11)	172.97 (2.65)	345.57 (10.23)	178.81 (0.83)
2012	3	272.95 (1.51)	163.19 (1.11)	176.97 (2.44)	368.29 (11.27)	182.56 (0.85)
2012	4	273.80 (1.59)	160.11 (1.17)	178.71 (2.78)	368.32 (11.37)	184.39 (0.86)
2013	1	276.29 (1.64)	157.84 (1.22)	177.97 (2.78)	381.58 (12.71)	189.65 (0.89)
2013	2	293.86 (1.54)	164.29 (1.09)	181.79 (2.46)	395.23 (11.52)	198.36 (0.84)
2013	3	297.45 (1.54)	165.81 (1.08)	184.04 (2.43)	423.03 (13.55)	204.15 (0.86)
2013	4	296.93 (1.66)	161.33 (1.17)	181.30 (2.91)	406.84 (12.94)	207.86 (0.92)
2014	1	301.86 (1.81)	161.65 (1.33)	178.60 (3.03)	437.33 (14.74)	209.24 (0.96)
2014	2	315.85 (1.66)	164.08 (1.11)	184.17 (2.43)	424.37 (13.36)	215.26 (0.91)
2014	3	318.98 (1.68)	165.13 (1.10)	182.73 (2.56)	426.82 (13.95)	219.63 (0.91)
2014	4	322.16 (1.77)	161.68 (1.17)	179.50 (2.61)	440.80 (13.75)	223.05 (0.95)
2015	1	337.65 (1.99)	161.64 (1.29)	185.47 (2.93)	434.42 (15.64)	227.19 (1.00)
2015	2	351.70 (1.86)	166.64 (1.15)	188.20 (2.81)	458.52 (14.67)	234.91 (0.96)
2015	3	358.75 (1.88)	166.81 (1.11)	189.76 (2.71)	485.22 (17.15)	240.27 (0.98)
2015	4	357.29 (2.00)	163.39 (1.20)	187.90 (2.81)	473.21 (16.66)	244.57 (1.06)
2016	1	368.69 (2.16)	162.93 (1.28)	190.73 (3.25)	448.75 (16.62)	249.43 (1.10)
2016	2	387.27 (2.05)	167.97 (1.15)	194.71 (2.76)	493.69 (15.21)	257.40 (1.03)
2016	3	394.65 (2.09)	167.77 (1.11)	194.69 (2.62)	482.98 (15.43)	265.08 (1.08)
2016	4	395.38 (2.19)	165.89 (1.23)	191.94 (3.04)	496.30 (16.63)	268.71 (1.14)
2017	1	408.46 (2.38)	165.03 (1.32)	191.83 (3.03)	511.14 (18.02)	274.53 (1.20)
2017	2	427.60 (2.29)	171.09 (1.15)	196.60 (2.58)	512.06 (16.67)	281.77 (1.14)
2017	3	429.69 (2.33)	172.79 (1.16)	197.62 (2.87)	539.03 (17.29)	287.20 (1.20)
2017	4	433.10 (2.47)	172.04 (1.27)	196.67 (3.07)	561.82 (19.52)	292.63 (1.27)
2018	1	453.85 (2.73)	171.34 (1.43)	206.57 (3.93)	548.77 (20.92)	298.50 (1.32)
2018	2	467.10 (2.53)	175.79 (1.19)	209.52 (2.81)	562.64 (18.92)	306.44 (1.26)
2018	3	469.60 (2.66)	176.57 (1.22)	209.30 (2.90)	548.07 (20.34)	312.61 (1.32)
2018	4	462.23 (2.87)	173.69 (1.36)	205.12 (3.34)	593.32 (22.52)	312.51 (1.44)

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	Georgia	Hawaii	Idaho	Illinois	Indiana
1991	1	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)
1991	2	100.28 (0.42)	97.33 (1.99)	101.33 (1.41)	100.83 (0.26)	100.63 (0.46)
1991	3	100.16 (0.42)	100.01 (2.10)	103.56 (1.41)	101.85 (0.27)	101.02 (0.46)
1991	4	101.19 (0.43)	98.77 (2.10)	106.07 (1.40)	102.56 (0.27)	101.52 (0.45)
1992	1	101.81 (0.41)	102.72 (2.12)	106.69 (1.47)	103.28 (0.26)	102.22 (0.43)
1992	2	101.31 (0.42)	97.39 (1.93)	109.99 (1.46)	104.84 (0.26)	104.47 (0.45)
1992	3	103.18 (0.40)	102.47 (2.12)	112.22 (1.45)	105.60 (0.26)	105.35 (0.44)
1992	4	103.29 (0.41)	102.54 (1.97)	114.58 (1.47)	106.91 (0.26)	105.99 (0.45)
1993	1	103.40 (0.44)	101.35 (2.16)	116.20 (1.61)	107.29 (0.30)	106.85 (0.50)
1993	2	104.85 (0.41)	103.09 (2.02)	118.94 (1.52)	109.02 (0.27)	109.12 (0.46)
1993	3	105.25 (0.41)	99.57 (2.07)	124.38 (1.57)	110.83 (0.28)	110.22 (0.47)
1993	4	106.17 (0.41)	100.96 (2.16)	125.01 (1.58)	110.87 (0.29)	111.62 (0.48)
1994	1	106.58 (0.44)	98.41 (2.26)	125.93 (1.65)	112.54 (0.32)	112.31 (0.51)
1994	2	108.38 (0.44)	100.26 (2.41)	130.49 (1.69)	114.66 (0.30)	114.41 (0.50)
1994	3	109.45 (0.45)	100.01 (2.55)	133.15 (1.75)	115.50 (0.33)	115.24 (0.53)
1994	4	110.30 (0.49)	98.36 (3.02)	132.98 (1.79)	115.71 (0.37)	116.32 (0.58)
1995	1	110.85 (0.49)	98.43 (3.10)	134.05 (1.88)	115.88 (0.39)	118.08 (0.60)
1995	2	112.44 (0.45)	95.53 (2.52)	135.71 (1.80)	118.26 (0.33)	119.17 (0.53)
1995	3	113.95 (0.45)	94.74 (2.42)	137.29 (1.74)	119.42 (0.32)	120.79 (0.52)
1995	4	115.18 (0.46)	95.31 (2.46)	137.36 (1.78)	119.18 (0.34)	121.31 (0.54)
1996	1	116.37 (0.47)	90.06 (2.33)	136.68 (1.84)	119.92 (0.36)	122.23 (0.56)
1996	2	117.84 (0.46)	93.67 (2.28)	138.47 (1.77)	122.01 (0.33)	124.91 (0.54)
1996	3	119.08 (0.47)	89.57 (2.49)	139.80 (1.80)	122.58 (0.35)	125.83 (0.55)
1996	4	119.21 (0.48)	89.68 (2.26)	139.63 (1.85)	122.55 (0.37)	126.52 (0.58)
1997	1	120.97 (0.50)	82.78 (2.35)	139.06 (1.92)	122.30 (0.39)	126.11 (0.60)
1997	2	122.42 (0.49)	82.83 (2.21)	140.90 (1.84)	124.20 (0.35)	128.28 (0.57)
1997	3	124.05 (0.49)	83.27 (2.01)	142.51 (1.83)	125.08 (0.34)	128.85 (0.56)
1997	4	125.19 (0.50)	82.66 (2.16)	141.85 (1.88)	124.87 (0.36)	129.57 (0.58)
1998	1	126.87 (0.50)	83.48 (2.21)	142.29 (1.89)	125.24 (0.36)	130.10 (0.59)
1998	2	129.34 (0.49)	85.21 (1.98)	144.40 (1.83)	127.10 (0.33)	132.23 (0.56)
1998	3	131.54 (0.50)	82.59 (2.06)	145.50 (1.84)	128.77 (0.33)	133.09 (0.56)
1998	4	133.31 (0.51)	83.06 (2.01)	144.70 (1.86)	129.85 (0.35)	134.86 (0.58)
1999	1	135.66 (0.54)	84.26 (2.02)	146.02 (1.92)	130.80 (0.37)	135.22 (0.60)
1999	2	138.23 (0.53)	82.48 (1.76)	148.91 (1.89)	133.65 (0.34)	136.89 (0.58)
1999	3	141.19 (0.54)	82.85 (1.85)	149.53 (1.89)	136.06 (0.36)	138.89 (0.60)
1999	4	142.93 (0.57)	85.58 (1.89)	150.07 (1.96)	136.89 (0.39)	138.59 (0.63)
2000	1	144.84 (0.59)	89.55 (2.04)	150.87 (2.00)	138.23 (0.42)	140.82 (0.67)
2000	2	148.13 (0.57)	89.41 (1.97)	152.60 (1.92)	141.90 (0.37)	142.10 (0.62)
2000	3	150.14 (0.58)	89.75 (1.87)	152.55 (1.92)	144.77 (0.38)	143.44 (0.62)
2000	4	152.13 (0.61)	92.49 (1.94)	154.44 (1.98)	145.74 (0.40)	142.63 (0.64)
2001	1	153.81 (0.61)	95.53 (1.92)	155.74 (2.00)	147.81 (0.42)	144.12 (0.65)
2001	2	156.41 (0.59)	98.34 (1.83)	158.64 (1.98)	151.93 (0.39)	145.68 (0.61)
2001	3	158.23 (0.61)	99.97 (2.02)	159.84 (1.99)	154.68 (0.39)	146.33 (0.63)
2001	4	159.45 (0.63)	101.15 (2.08)	158.51 (2.00)	155.46 (0.42)	147.44 (0.65)
2002	1	161.46 (0.64)	102.03 (2.10)	159.15 (2.04)	157.36 (0.44)	147.88 (0.67)
2002	2	162.51 (0.63)	108.12 (2.17)	162.89 (2.02)	161.90 (0.41)	149.32 (0.64)
2002	3	164.86 (0.64)	111.60 (2.13)	164.83 (2.02)	164.84 (0.42)	150.40 (0.65)
2002	4	166.74 (0.66)	113.43 (2.23)	164.41 (2.05)	166.49 (0.44)	149.78 (0.66)
2003	1	168.07 (0.67)	117.42 (2.34)	167.10 (2.12)	168.13 (0.46)	151.22 (0.69)
2003	2	169.38 (0.65)	119.63 (2.30)	170.20 (2.09)	173.36 (0.44)	153.43 (0.65)
2003	3	171.28 (0.65)	129.49 (2.46)	174.38 (2.13)	176.47 (0.45)	154.94 (0.66)
2003	4	171.59 (0.70)	137.14 (2.75)	174.10 (2.19)	178.57 (0.49)	155.05 (0.70)
2004	1	172.44 (0.71)	141.76 (2.93)	176.94 (2.23)	180.02 (0.52)	155.02 (0.72)
2004	2	175.49 (0.69)	152.47 (3.17)	185.87 (2.27)	185.52 (0.48)	159.16 (0.69)
2004	3	177.95 (0.71)	165.61 (3.52)	192.55 (2.36)	189.05 (0.50)	160.68 (0.70)
2004	4	179.42 (0.75)	168.44 (3.60)	193.40 (2.43)	189.97 (0.53)	159.99 (0.73)

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	Georgia	Hawaii	Idaho	Illinois	Indiana
2005	1	181.03 (0.76)	178.84 (3.90)	201.36 (2.58)	192.06 (0.58)	160.52 (0.75)
2005	2	185.60 (0.73)	192.72 (4.17)	209.61 (2.58)	198.15 (0.52)	163.63 (0.71)
2005	3	188.71 (0.74)	204.29 (4.43)	220.02 (2.68)	201.98 (0.53)	164.81 (0.71)
2005	4	191.48 (0.79)	202.91 (4.60)	228.61 (2.83)	203.62 (0.58)	165.33 (0.75)
2006	1	192.72 (0.81)	214.87 (4.87)	235.84 (2.95)	205.19 (0.61)	164.69 (0.77)
2006	2	196.67 (0.77)	211.47 (4.63)	249.62 (3.03)	210.55 (0.56)	168.33 (0.73)
2006	3	198.08 (0.78)	210.46 (4.42)	252.71 (3.10)	211.22 (0.57)	169.30 (0.74)
2006	4	199.52 (0.83)	211.20 (5.05)	257.42 (3.21)	209.86 (0.61)	167.43 (0.76)
2007	1	199.17 (0.83)	215.59 (4.61)	258.64 (3.27)	211.78 (0.64)	167.73 (0.78)
2007	2	203.35 (0.80)	214.23 (4.44)	266.26 (3.25)	212.86 (0.57)	170.96 (0.74)
2007	3	201.08 (0.81)	212.76 (4.54)	264.17 (3.26)	211.14 (0.58)	171.13 (0.75)
2007	4	196.84 (0.85)	205.26 (4.40)	260.49 (3.32)	207.68 (0.63)	165.58 (0.78)
2008	1	192.07 (0.87)	206.76 (4.53)	258.03 (3.35)	201.40 (0.66)	164.18 (0.80)
2008	2	191.10 (0.88)	205.55 (4.44)	253.70 (3.28)	201.39 (0.63)	164.16 (0.80)
2008	3	187.18 (0.91)	197.25 (4.69)	247.67 (3.28)	197.05 (0.65)	164.66 (0.85)
2008	4	174.61 (0.98)	198.66 (5.51)	236.17 (3.33)	191.05 (0.74)	158.22 (0.92)
2009	1	175.91 (1.02)	193.29 (5.18)	236.81 (3.41)	184.07 (0.75)	157.94 (0.93)
2009	2	173.85 (0.95)	180.79 (4.27)	235.68 (3.23)	185.11 (0.65)	160.76 (0.84)
2009	3	176.95 (1.02)	184.85 (4.67)	226.85 (3.18)	186.21 (0.65)	159.58 (0.86)
2009	4	168.78 (1.04)	177.60 (4.49)	217.27 (3.14)	180.98 (0.67)	158.84 (0.91)
2010	1	162.84 (1.11)	178.20 (4.42)	206.79 (3.16)	176.73 (0.75)	155.43 (0.98)
2010	2	167.87 (0.99)	177.20 (4.42)	207.74 (2.97)	180.37 (0.62)	159.63 (0.86)
2010	3	160.84 (0.99)	173.86 (4.42)	201.92 (2.86)	177.75 (0.69)	159.34 (0.90)
2010	4	152.13 (0.98)	175.38 (4.45)	189.05 (2.77)	173.00 (0.70)	156.39 (0.91)
2011	1	149.68 (0.97)	158.85 (4.20)	178.40 (2.70)	166.16 (0.75)	152.45 (1.00)
2011	2	148.93 (0.87)	168.63 (4.55)	181.09 (2.56)	167.44 (0.63)	157.62 (0.89)
2011	3	149.75 (0.87)	172.77 (5.30)	186.52 (2.63)	169.67 (0.62)	158.33 (0.87)
2011	4	148.46 (0.92)	164.36 (4.31)	182.11 (2.63)	162.58 (0.68)	157.45 (0.95)
2012	1	146.29 (0.93)	170.34 (4.61)	183.95 (2.72)	160.49 (0.68)	154.06 (0.97)
2012	2	154.26 (0.87)	177.92 (4.72)	200.03 (2.73)	166.74 (0.58)	159.62 (0.87)
2012	3	157.76 (0.89)	178.30 (4.46)	203.51 (2.76)	168.64 (0.59)	159.21 (0.85)
2012	4	158.45 (0.92)	181.19 (4.59)	201.85 (2.79)	163.83 (0.61)	159.60 (0.92)
2013	1	161.13 (0.94)	190.46 (5.15)	207.28 (2.90)	163.81 (0.65)	159.29 (0.95)
2013	2	170.03 (0.86)	191.77 (4.82)	216.00 (2.85)	173.51 (0.57)	164.68 (0.85)
2013	3	173.02 (0.89)	196.35 (5.33)	222.87 (2.92)	174.81 (0.57)	167.58 (0.86)
2013	4	172.89 (0.97)	196.36 (5.47)	217.37 (2.99)	172.92 (0.63)	165.56 (0.92)
2014	1	177.93 (1.08)	206.60 (5.53)	221.59 (3.18)	170.72 (0.71)	165.47 (1.00)
2014	2	181.46 (0.92)	199.22 (5.41)	226.41 (2.98)	178.86 (0.59)	169.06 (0.87)
2014	3	183.61 (0.96)	209.54 (5.33)	230.69 (3.05)	180.73 (0.60)	171.02 (0.88)
2014	4	185.06 (1.03)	209.95 (6.21)	228.24 (3.13)	177.79 (0.66)	170.63 (0.93)
2015	1	187.39 (1.08)	215.17 (6.13)	230.07 (3.18)	176.10 (0.72)	171.48 (1.02)
2015	2	194.88 (0.98)	214.90 (5.87)	242.43 (3.14)	185.00 (0.62)	176.52 (0.92)
2015	3	196.95 (1.03)	219.91 (5.76)	246.92 (3.20)	185.73 (0.63)	177.69 (0.92)
2015	4	197.49 (1.12)	221.81 (6.69)	252.01 (3.44)	182.16 (0.70)	177.57 (1.00)
2016	1	199.91 (1.15)	228.11 (6.85)	251.71 (3.47)	182.09 (0.73)	178.14 (1.05)
2016	2	208.63 (1.05)	219.81 (5.67)	261.97 (3.38)	190.05 (0.62)	184.28 (0.94)
2016	3	211.01 (1.09)	225.36 (5.75)	270.16 (3.48)	192.76 (0.64)	188.09 (0.96)
2016	4	211.83 (1.16)	233.19 (6.50)	270.23 (3.57)	192.35 (0.72)	187.82 (1.03)
2017	1	214.14 (1.22)	230.30 (6.76)	277.39 (3.90)	192.58 (0.78)	187.80 (1.12)
2017	2	223.97 (1.13)	242.65 (6.46)	288.43 (3.75)	197.44 (0.65)	193.99 (0.99)
2017	3	226.92 (1.17)	253.75 (7.29)	292.22 (3.81)	199.40 (0.69)	197.68 (1.02)
2017	4	226.25 (1.25)	252.57 (7.38)	303.05 (4.02)	198.96 (0.77)	200.89 (1.10)
2018	1	232.22 (1.36)	249.90 (7.35)	308.04 (4.27)	199.59 (0.84)	202.89 (1.22)
2018	2	242.21 (1.22)	251.20 (7.46)	327.08 (4.29)	206.04 (0.70)	210.88 (1.08)
2018	3	246.46 (1.31)	263.54 (8.20)	335.59 (4.39)	207.10 (0.74)	213.76 (1.11)
2018	4	244.67 (1.45)	266.57 (9.02)	339.30 (4.65)	204.53 (0.86)	213.56 (1.20)

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	Iowa	Kansas	Kentucky	Louisiana	Maine
1991	1	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)
1991	2	101.24 (0.62)	99.94 (0.75)	100.35 (0.54)	102.57 (0.61)	100.14 (1.55)
1991	3	102.56 (0.61)	99.94 (0.76)	100.08 (0.55)	104.29 (0.64)	100.74 (1.57)
1991	4	103.14 (0.62)	100.91 (0.77)	101.23 (0.54)	104.70 (0.62)	99.67 (1.48)
1992	1	103.79 (0.61)	101.58 (0.74)	103.31 (0.53)	105.67 (0.58)	101.87 (1.40)
1992	2	106.75 (0.61)	102.07 (0.73)	103.42 (0.54)	107.74 (0.60)	98.64 (1.38)
1992	3	108.42 (0.61)	104.07 (0.72)	105.23 (0.53)	109.16 (0.59)	100.00 (1.38)
1992	4	108.89 (0.61)	104.34 (0.73)	106.37 (0.54)	110.92 (0.60)	99.96 (1.38)
1993	1	110.93 (0.69)	105.23 (0.81)	107.59 (0.58)	111.61 (0.66)	94.74 (1.64)
1993	2	112.96 (0.62)	107.05 (0.72)	109.47 (0.54)	113.61 (0.62)	99.04 (1.49)
1993	3	115.99 (0.64)	109.41 (0.75)	110.36 (0.54)	116.16 (0.64)	97.33 (1.44)
1993	4	118.13 (0.66)	110.59 (0.77)	111.09 (0.55)	118.54 (0.66)	96.60 (1.41)
1994	1	118.92 (0.70)	112.17 (0.82)	114.15 (0.62)	120.17 (0.68)	97.99 (1.66)
1994	2	120.68 (0.68)	115.14 (0.83)	115.46 (0.60)	122.60 (0.68)	98.14 (1.56)
1994	3	123.18 (0.72)	116.35 (0.86)	116.88 (0.63)	124.09 (0.72)	97.36 (1.50)
1994	4	123.02 (0.79)	116.60 (0.94)	117.41 (0.67)	122.52 (0.77)	95.72 (1.65)
1995	1	123.68 (0.82)	118.49 (0.99)	118.60 (0.69)	123.94 (0.78)	96.72 (1.76)
1995	2	126.30 (0.71)	120.58 (0.86)	120.38 (0.63)	127.42 (0.74)	98.10 (1.52)
1995	3	128.91 (0.70)	122.39 (0.85)	121.66 (0.61)	129.12 (0.72)	98.60 (1.46)
1995	4	129.02 (0.73)	123.50 (0.90)	123.05 (0.63)	130.26 (0.76)	97.05 (1.46)
1996	1	130.25 (0.76)	123.99 (0.92)	123.34 (0.65)	132.23 (0.77)	100.64 (1.60)
1996	2	132.24 (0.73)	126.62 (0.89)	125.35 (0.63)	133.95 (0.76)	100.59 (1.46)
1996	3	133.89 (0.75)	127.83 (0.90)	127.07 (0.64)	134.80 (0.77)	102.29 (1.55)
1996	4	133.63 (0.77)	127.48 (0.95)	127.62 (0.66)	135.85 (0.79)	100.57 (1.57)
1997	1	134.19 (0.81)	127.64 (0.98)	129.14 (0.69)	137.19 (0.81)	100.87 (1.70)
1997	2	136.53 (0.77)	130.56 (0.94)	130.27 (0.65)	138.87 (0.79)	102.37 (1.50)
1997	3	137.57 (0.76)	132.82 (0.94)	131.64 (0.65)	139.77 (0.78)	102.54 (1.48)
1997	4	138.17 (0.78)	133.50 (0.97)	131.61 (0.68)	140.72 (0.81)	105.24 (1.55)
1998	1	139.75 (0.80)	135.91 (0.97)	132.49 (0.67)	142.67 (0.81)	105.29 (1.63)
1998	2	142.62 (0.77)	137.18 (0.92)	135.46 (0.66)	145.03 (0.79)	107.85 (1.49)
1998	3	144.32 (0.78)	139.58 (0.94)	136.57 (0.66)	147.43 (0.80)	108.75 (1.50)
1998	4	146.67 (0.80)	142.74 (0.99)	138.08 (0.68)	148.39 (0.83)	112.27 (1.59)
1999	1	146.56 (0.83)	144.46 (1.02)	139.85 (0.71)	148.71 (0.84)	112.17 (1.69)
1999	2	150.48 (0.81)	146.76 (1.00)	142.08 (0.69)	151.19 (0.82)	115.96 (1.57)
1999	3	151.66 (0.84)	148.14 (1.03)	144.14 (0.71)	152.98 (0.84)	118.52 (1.62)
1999	4	152.62 (0.89)	147.54 (1.07)	144.93 (0.74)	152.50 (0.89)	120.56 (1.70)
2000	1	153.84 (0.93)	150.17 (1.12)	146.94 (0.77)	154.45 (0.90)	120.61 (1.75)
2000	2	156.58 (0.87)	152.70 (1.06)	148.57 (0.73)	157.29 (0.88)	127.09 (1.72)
2000	3	158.53 (0.87)	154.46 (1.06)	149.65 (0.74)	158.00 (0.88)	129.61 (1.74)
2000	4	157.94 (0.89)	154.21 (1.10)	150.45 (0.76)	157.24 (0.90)	132.12 (1.82)
2001	1	159.51 (0.91)	155.70 (1.10)	151.04 (0.77)	159.15 (0.89)	135.32 (1.91)
2001	2	162.13 (0.87)	159.49 (1.07)	153.60 (0.75)	161.51 (0.87)	139.64 (1.86)
2001	3	163.45 (0.88)	160.85 (1.09)	154.71 (0.75)	163.65 (0.89)	145.15 (1.91)
2001	4	164.22 (0.91)	162.27 (1.14)	155.98 (0.77)	164.98 (0.91)	145.97 (1.95)
2002	1	164.21 (0.93)	162.58 (1.16)	155.99 (0.79)	164.69 (0.92)	150.67 (2.05)
2002	2	167.69 (0.90)	165.55 (1.12)	159.06 (0.77)	168.51 (0.91)	156.70 (2.06)
2002	3	169.74 (0.91)	166.91 (1.12)	159.32 (0.77)	170.46 (0.92)	161.95 (2.11)
2002	4	170.67 (0.93)	167.26 (1.14)	161.67 (0.81)	171.73 (0.95)	164.27 (2.16)
2003	1	171.40 (0.97)	168.96 (1.19)	162.33 (0.82)	174.55 (0.97)	168.66 (2.30)
2003	2	174.18 (0.93)	171.30 (1.14)	165.70 (0.80)	176.36 (0.94)	173.05 (2.24)
2003	3	176.24 (0.94)	174.12 (1.16)	167.89 (0.80)	179.70 (0.96)	177.46 (2.29)
2003	4	176.39 (0.98)	174.00 (1.22)	168.56 (0.85)	181.54 (1.01)	184.60 (2.45)
2004	1	177.40 (1.02)	175.73 (1.28)	171.27 (0.88)	183.83 (1.03)	184.09 (2.55)
2004	2	181.85 (0.97)	180.45 (1.22)	173.12 (0.84)	188.28 (1.01)	193.74 (2.53)
2004	3	183.55 (0.99)	180.40 (1.22)	174.96 (0.85)	191.14 (1.04)	199.64 (2.62)
2004	4	185.34 (1.03)	180.92 (1.28)	176.64 (0.89)	192.53 (1.07)	201.85 (2.71)

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	Iowa	Kansas	Kentucky	Louisiana	Maine
2005	1	184.48 (1.06)	182.15 (1.32)	177.20 (0.92)	195.38 (1.09)	207.52 (2.89)
2005	2	190.67 (1.02)	187.12 (1.27)	181.06 (0.88)	200.08 (1.06)	213.78 (2.84)
2005	3	190.61 (1.02)	187.92 (1.27)	183.31 (0.89)	203.63 (1.09)	217.91 (2.86)
2005	4	191.30 (1.06)	188.05 (1.33)	183.64 (0.93)	213.45 (1.13)	218.56 (2.97)
2006	1	192.70 (1.09)	191.30 (1.37)	186.31 (0.96)	218.94 (1.18)	217.84 (3.05)
2006	2	196.50 (1.05)	194.36 (1.32)	188.43 (0.92)	224.25 (1.19)	218.75 (2.92)
2006	3	197.78 (1.06)	195.97 (1.34)	189.55 (0.93)	228.64 (1.22)	219.27 (2.93)
2006	4	196.26 (1.09)	195.84 (1.39)	188.61 (0.95)	230.65 (1.27)	217.76 (2.98)
2007	1	197.00 (1.11)	196.54 (1.41)	189.23 (0.97)	233.35 (1.28)	217.19 (3.04)
2007	2	199.98 (1.07)	201.08 (1.35)	193.11 (0.94)	236.52 (1.27)	219.99 (2.93)
2007	3	202.02 (1.09)	200.89 (1.39)	192.52 (0.95)	238.17 (1.30)	218.92 (2.96)
2007	4	198.49 (1.12)	199.31 (1.44)	190.65 (1.00)	235.29 (1.33)	219.13 (3.04)
2008	1	197.00 (1.15)	196.11 (1.47)	188.05 (1.02)	233.92 (1.35)	214.77 (3.05)
2008	2	198.70 (1.12)	198.96 (1.46)	191.27 (1.03)	234.56 (1.37)	214.48 (3.01)
2008	3	198.25 (1.15)	196.09 (1.53)	191.20 (1.06)	231.75 (1.44)	214.00 (3.05)
2008	4	196.67 (1.26)	195.68 (1.72)	186.43 (1.18)	228.55 (1.60)	204.70 (3.02)
2009	1	192.76 (1.27)	193.83 (1.77)	185.36 (1.21)	228.78 (1.60)	209.12 (3.03)
2009	2	195.76 (1.16)	195.28 (1.56)	188.40 (1.07)	231.01 (1.48)	209.59 (2.91)
2009	3	198.57 (1.19)	195.81 (1.59)	188.78 (1.09)	228.85 (1.51)	204.88 (3.00)
2009	4	195.44 (1.22)	196.31 (1.72)	186.17 (1.15)	228.25 (1.65)	203.45 (3.09)
2010	1	192.90 (1.40)	188.39 (1.87)	184.31 (1.25)	227.00 (1.76)	202.06 (3.41)
2010	2	197.83 (1.19)	196.31 (1.60)	186.74 (1.08)	229.69 (1.58)	198.27 (3.00)
2010	3	193.16 (1.23)	191.78 (1.70)	187.28 (1.17)	229.73 (1.65)	202.61 (2.98)
2010	4	194.11 (1.27)	189.57 (1.82)	185.69 (1.21)	225.41 (1.75)	200.45 (2.92)
2011	1	187.46 (1.38)	182.44 (1.87)	181.10 (1.30)	220.38 (1.70)	195.36 (3.26)
2011	2	192.65 (1.22)	187.24 (1.62)	182.80 (1.13)	224.03 (1.57)	194.51 (3.09)
2011	3	194.42 (1.20)	188.38 (1.60)	184.31 (1.13)	224.31 (1.54)	198.32 (3.02)
2011	4	192.45 (1.23)	186.60 (1.71)	181.08 (1.18)	223.87 (1.73)	197.81 (3.04)
2012	1	193.52 (1.29)	184.66 (1.80)	182.54 (1.25)	221.58 (1.69)	192.44 (3.20)
2012	2	197.02 (1.18)	190.20 (1.56)	187.08 (1.12)	227.70 (1.56)	194.36 (2.96)
2012	3	199.10 (1.19)	193.99 (1.63)	186.55 (1.11)	230.43 (1.61)	193.92 (2.88)
2012	4	198.11 (1.23)	191.79 (1.72)	185.57 (1.14)	229.30 (1.63)	198.39 (3.06)
2013	1	197.86 (1.29)	187.50 (1.71)	185.16 (1.19)	234.75 (1.69)	200.58 (3.25)
2013	2	204.30 (1.19)	195.80 (1.55)	191.10 (1.11)	239.04 (1.56)	200.33 (2.99)
2013	3	206.00 (1.20)	197.73 (1.54)	194.01 (1.10)	238.25 (1.56)	203.12 (3.06)
2013	4	205.64 (1.27)	193.92 (1.65)	191.03 (1.19)	240.05 (1.72)	199.49 (3.18)
2014	1	204.27 (1.37)	197.80 (1.84)	189.22 (1.29)	240.14 (1.77)	201.78 (3.45)
2014	2	208.78 (1.24)	203.12 (1.61)	195.74 (1.14)	243.78 (1.62)	204.19 (3.11)
2014	3	212.36 (1.26)	205.55 (1.66)	197.00 (1.15)	247.64 (1.62)	209.17 (3.17)
2014	4	210.30 (1.30)	202.70 (1.75)	195.93 (1.23)	247.06 (1.71)	204.58 (3.21)
2015	1	210.43 (1.34)	204.19 (1.80)	197.82 (1.26)	249.83 (1.81)	204.04 (3.48)
2015	2	216.04 (1.26)	209.26 (1.61)	202.93 (1.17)	254.35 (1.72)	213.65 (3.24)
2015	3	218.39 (1.28)	212.03 (1.67)	204.86 (1.19)	257.15 (1.72)	212.95 (3.29)
2015	4	219.57 (1.39)	211.03 (1.83)	206.55 (1.26)	256.77 (1.89)	213.56 (3.44)
2016	1	218.92 (1.46)	214.05 (1.94)	206.53 (1.31)	260.65 (1.91)	214.52 (3.65)
2016	2	224.63 (1.31)	222.19 (1.71)	212.14 (1.23)	263.11 (1.79)	217.73 (3.28)
2016	3	230.42 (1.36)	223.02 (1.76)	215.64 (1.23)	263.60 (1.81)	224.04 (3.35)
2016	4	228.42 (1.42)	225.12 (1.91)	215.05 (1.31)	268.69 (1.90)	228.74 (3.65)
2017	1	229.83 (1.55)	224.22 (2.00)	218.38 (1.40)	266.78 (2.10)	224.86 (4.03)
2017	2	234.85 (1.39)	233.29 (1.83)	226.16 (1.33)	273.65 (1.95)	233.25 (3.70)
2017	3	238.97 (1.45)	234.21 (1.89)	230.66 (1.35)	276.30 (1.96)	239.80 (3.69)
2017	4	239.08 (1.54)	234.21 (2.01)	229.39 (1.43)	275.68 (2.01)	240.05 (3.66)
2018	1	239.60 (1.66)	238.28 (2.19)	232.65 (1.54)	278.06 (2.21)	238.27 (4.30)
2018	2	248.74 (1.51)	247.08 (1.95)	238.75 (1.42)	280.78 (1.96)	248.78 (3.89)
2018	3	251.40 (1.56)	246.75 (2.00)	241.00 (1.43)	280.12 (2.05)	252.28 (3.84)
2018	4	249.46 (1.68)	250.41 (2.33)	242.75 (1.58)	280.82 (2.30)	256.16 (4.17)

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	Maryland	Massachusetts	Michigan	Minnesota	Mississippi
1991	1	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)
1991	2	101.20 (0.47)	98.69 (0.37)	101.77 (0.29)	99.35 (0.45)	98.96 (0.96)
1991	3	100.61 (0.48)	97.46 (0.37)	102.01 (0.30)	100.01 (0.46)	98.79 (0.92)
1991	4	102.16 (0.48)	98.15 (0.38)	102.43 (0.30)	100.41 (0.47)	100.50 (0.91)
1992	1	102.94 (0.46)	98.54 (0.36)	103.72 (0.29)	101.26 (0.47)	103.33 (0.87)
1992	2	101.45 (0.45)	96.49 (0.35)	104.88 (0.29)	102.77 (0.44)	103.69 (0.93)
1992	3	103.16 (0.45)	96.96 (0.35)	105.61 (0.29)	104.30 (0.44)	103.55 (0.85)
1992	4	103.22 (0.45)	97.23 (0.34)	106.20 (0.28)	104.47 (0.44)	103.85 (0.88)
1993	1	101.32 (0.53)	94.75 (0.40)	105.62 (0.32)	105.49 (0.51)	105.17 (1.01)
1993	2	102.28 (0.47)	96.97 (0.36)	108.03 (0.29)	107.73 (0.45)	106.28 (0.92)
1993	3	103.01 (0.48)	97.33 (0.37)	108.84 (0.30)	109.16 (0.47)	107.70 (0.95)
1993	4	102.79 (0.49)	96.89 (0.37)	109.51 (0.30)	109.66 (0.48)	109.31 (0.97)
1994	1	102.35 (0.58)	96.74 (0.41)	110.62 (0.33)	111.07 (0.53)	111.07 (1.01)
1994	2	103.69 (0.54)	98.08 (0.39)	113.22 (0.31)	113.10 (0.50)	113.20 (1.00)
1994	3	102.93 (0.58)	98.41 (0.42)	114.84 (0.33)	113.64 (0.52)	113.97 (1.04)
1994	4	102.16 (0.64)	98.35 (0.46)	115.79 (0.35)	114.16 (0.59)	115.36 (1.11)
1995	1	101.76 (0.70)	98.05 (0.47)	117.80 (0.38)	114.08 (0.59)	115.88 (1.14)
1995	2	101.65 (0.57)	99.54 (0.42)	121.47 (0.34)	116.50 (0.51)	117.99 (1.07)
1995	3	103.09 (0.55)	100.39 (0.41)	123.79 (0.34)	118.67 (0.50)	118.85 (1.06)
1995	4	102.63 (0.57)	100.28 (0.42)	125.45 (0.36)	119.25 (0.53)	119.74 (1.08)
1996	1	102.99 (0.63)	100.86 (0.45)	127.77 (0.37)	119.81 (0.55)	120.11 (1.11)
1996	2	103.13 (0.56)	103.17 (0.42)	131.64 (0.36)	122.75 (0.52)	121.76 (1.09)
1996	3	103.45 (0.57)	104.39 (0.43)	133.91 (0.37)	123.93 (0.53)	124.02 (1.09)
1996	4	102.82 (0.61)	104.86 (0.45)	134.97 (0.39)	124.63 (0.56)	124.23 (1.14)
1997	1	103.38 (0.63)	104.29 (0.47)	136.89 (0.42)	124.99 (0.59)	124.61 (1.19)
1997	2	103.11 (0.56)	107.98 (0.44)	140.43 (0.39)	127.13 (0.54)	126.66 (1.12)
1997	3	103.55 (0.56)	109.61 (0.43)	141.93 (0.39)	129.18 (0.54)	126.69 (1.11)
1997	4	104.26 (0.57)	110.82 (0.45)	143.15 (0.41)	128.90 (0.56)	127.09 (1.16)
1998	1	104.97 (0.59)	112.16 (0.46)	145.01 (0.42)	130.40 (0.57)	129.08 (1.16)
1998	2	105.88 (0.53)	116.88 (0.44)	148.95 (0.39)	134.14 (0.54)	131.32 (1.14)
1998	3	106.59 (0.52)	120.40 (0.45)	151.39 (0.40)	137.79 (0.56)	132.00 (1.14)
1998	4	107.62 (0.54)	121.60 (0.47)	152.78 (0.41)	139.58 (0.58)	133.72 (1.16)
1999	1	109.35 (0.59)	123.94 (0.50)	155.19 (0.45)	141.73 (0.62)	135.30 (1.21)
1999	2	111.52 (0.54)	129.78 (0.49)	159.27 (0.42)	148.01 (0.60)	137.46 (1.18)
1999	3	112.76 (0.55)	134.45 (0.52)	161.90 (0.44)	152.03 (0.62)	138.69 (1.20)
1999	4	114.24 (0.59)	136.40 (0.57)	163.06 (0.47)	153.62 (0.65)	137.64 (1.25)
2000	1	115.15 (0.64)	139.92 (0.61)	165.78 (0.49)	157.94 (0.69)	138.47 (1.29)
2000	2	119.35 (0.57)	147.77 (0.58)	170.43 (0.46)	164.44 (0.67)	141.61 (1.25)
2000	3	121.79 (0.58)	153.23 (0.58)	173.03 (0.47)	169.30 (0.68)	143.01 (1.27)
2000	4	122.56 (0.60)	156.95 (0.61)	173.34 (0.49)	171.82 (0.71)	142.06 (1.30)
2001	1	125.35 (0.63)	161.75 (0.64)	175.30 (0.51)	176.20 (0.74)	142.46 (1.30)
2001	2	130.43 (0.60)	169.44 (0.63)	178.90 (0.47)	183.57 (0.73)	144.74 (1.26)
2001	3	134.24 (0.62)	175.71 (0.65)	181.55 (0.49)	188.80 (0.76)	146.36 (1.28)
2001	4	136.91 (0.66)	177.81 (0.69)	181.48 (0.51)	189.41 (0.77)	146.73 (1.30)
2002	1	140.06 (0.70)	181.45 (0.72)	182.88 (0.53)	193.04 (0.81)	147.41 (1.34)
2002	2	146.87 (0.67)	191.07 (0.71)	186.49 (0.51)	200.66 (0.81)	147.40 (1.28)
2002	3	153.08 (0.70)	199.75 (0.75)	188.16 (0.51)	205.99 (0.82)	150.26 (1.31)
2002	4	157.29 (0.74)	202.68 (0.77)	188.60 (0.52)	207.39 (0.84)	151.79 (1.34)
2003	1	159.00 (0.76)	204.85 (0.81)	189.38 (0.54)	211.36 (0.88)	152.65 (1.39)
2003	2	168.08 (0.76)	212.85 (0.79)	192.20 (0.52)	217.75 (0.87)	153.79 (1.32)
2003	3	175.67 (0.79)	218.24 (0.81)	194.99 (0.52)	222.02 (0.88)	155.11 (1.32)
2003	4	180.01 (0.86)	223.29 (0.87)	194.68 (0.58)	224.73 (0.94)	154.91 (1.38)
2004	1	186.74 (0.94)	226.32 (0.95)	195.16 (0.61)	227.57 (0.98)	157.03 (1.41)
2004	2	198.18 (0.92)	234.69 (0.90)	199.01 (0.56)	233.81 (0.94)	160.19 (1.38)
2004	3	208.97 (0.97)	241.53 (0.94)	200.53 (0.57)	238.81 (0.97)	162.19 (1.39)
2004	4	215.13 (1.06)	243.11 (1.00)	200.27 (0.61)	239.10 (1.01)	162.15 (1.42)

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	Maryland	Massachusetts	Michigan	Minnesota	Mississippi
2005	1	224.90 (1.18)	246.40 (1.10)	199.69 (0.66)	241.14 (1.08)	165.64 (1.46)
2005	2	240.31 (1.14)	253.48 (1.02)	203.17 (0.59)	247.78 (1.01)	168.42 (1.43)
2005	3	251.34 (1.19)	255.30 (1.02)	203.62 (0.59)	251.82 (1.03)	172.98 (1.49)
2005	4	255.01 (1.31)	251.71 (1.09)	200.34 (0.64)	252.00 (1.09)	177.85 (1.52)
2006	1	259.76 (1.39)	250.13 (1.12)	196.73 (0.68)	251.41 (1.14)	179.90 (1.58)
2006	2	267.77 (1.31)	249.00 (1.02)	198.95 (0.60)	254.57 (1.06)	185.92 (1.57)
2006	3	266.89 (1.34)	246.09 (1.01)	196.84 (0.60)	253.29 (1.06)	188.23 (1.60)
2006	4	265.83 (1.43)	240.51 (1.02)	191.69 (0.62)	249.44 (1.09)	191.49 (1.66)
2007	1	269.33 (1.42)	238.58 (1.02)	188.18 (0.62)	250.41 (1.13)	194.34 (1.72)
2007	2	271.88 (1.33)	241.12 (0.95)	188.71 (0.57)	251.97 (1.05)	194.94 (1.66)
2007	3	267.35 (1.35)	237.40 (0.95)	182.23 (0.55)	248.23 (1.05)	193.39 (1.67)
2007	4	260.89 (1.42)	231.83 (0.98)	174.17 (0.58)	239.72 (1.07)	194.05 (1.76)
2008	1	249.44 (1.46)	229.50 (1.03)	167.68 (0.61)	233.35 (1.10)	189.47 (1.81)
2008	2	240.37 (1.38)	224.69 (0.97)	165.19 (0.59)	231.10 (1.04)	192.44 (1.85)
2008	3	235.31 (1.46)	220.86 (0.96)	159.92 (0.58)	227.94 (1.05)	186.17 (1.83)
2008	4	220.95 (1.62)	218.05 (1.02)	152.78 (0.61)	217.84 (1.10)	186.09 (2.14)
2009	1	221.82 (1.63)	219.86 (1.00)	156.35 (0.62)	217.46 (1.09)	176.91 (2.17)
2009	2	220.87 (1.36)	218.38 (0.94)	154.84 (0.57)	219.07 (1.03)	182.66 (1.99)
2009	3	219.54 (1.43)	217.09 (0.95)	150.65 (0.60)	215.68 (1.03)	183.56 (2.00)
2009	4	211.66 (1.44)	216.44 (0.98)	148.22 (0.59)	214.09 (1.07)	177.71 (2.06)
2010	1	211.56 (1.71)	214.76 (1.09)	142.30 (0.65)	206.46 (1.16)	171.87 (2.26)
2010	2	215.04 (1.37)	216.79 (0.94)	147.32 (0.58)	213.32 (1.02)	177.14 (2.05)
2010	3	209.12 (1.46)	215.25 (0.95)	146.18 (0.60)	210.00 (1.05)	178.09 (2.14)
2010	4	206.69 (1.52)	213.98 (0.97)	144.46 (0.58)	205.85 (1.06)	172.14 (2.14)
2011	1	199.52 (1.54)	208.19 (1.09)	137.18 (0.65)	193.00 (1.09)	168.39 (2.20)
2011	2	202.66 (1.36)	211.93 (1.00)	140.06 (0.58)	197.07 (0.98)	173.67 (2.09)
2011	3	202.44 (1.41)	211.17 (0.96)	143.29 (0.57)	199.82 (0.97)	173.63 (2.12)
2011	4	199.69 (1.52)	208.18 (0.98)	142.01 (0.60)	198.70 (1.01)	175.05 (2.28)
2012	1	196.20 (1.51)	205.57 (1.01)	138.89 (0.60)	193.33 (1.01)	170.12 (2.34)
2012	2	209.12 (1.36)	211.00 (0.93)	148.50 (0.56)	203.82 (0.95)	174.55 (1.97)
2012	3	207.54 (1.37)	213.39 (0.92)	152.25 (0.56)	208.97 (0.96)	177.19 (1.99)
2012	4	208.00 (1.48)	212.92 (0.96)	151.80 (0.58)	208.47 (1.00)	174.99 (2.10)
2013	1	209.26 (1.56)	213.73 (1.03)	153.35 (0.61)	209.15 (1.04)	177.66 (2.37)
2013	2	219.18 (1.32)	222.48 (0.96)	163.03 (0.57)	219.27 (0.97)	182.02 (2.07)
2013	3	219.99 (1.35)	226.08 (0.97)	167.58 (0.56)	225.75 (1.00)	178.12 (2.02)
2013	4	218.92 (1.49)	224.44 (1.06)	164.90 (0.61)	222.01 (1.05)	177.21 (2.24)
2014	1	216.44 (1.66)	222.22 (1.23)	165.71 (0.70)	222.23 (1.16)	177.78 (2.26)
2014	2	225.47 (1.44)	233.54 (1.06)	173.68 (0.62)	231.43 (1.04)	182.21 (2.04)
2014	3	221.87 (1.39)	235.73 (1.03)	178.34 (0.62)	232.02 (1.04)	182.41 (1.98)
2014	4	220.88 (1.51)	232.83 (1.12)	176.75 (0.66)	230.29 (1.10)	180.90 (2.19)
2015	1	218.41 (1.60)	232.77 (1.25)	175.96 (0.71)	227.28 (1.15)	184.21 (2.32)
2015	2	228.25 (1.44)	243.02 (1.12)	185.44 (0.65)	240.97 (1.07)	186.74 (2.07)
2015	3	227.88 (1.50)	244.78 (1.08)	187.44 (0.63)	243.30 (1.08)	187.12 (2.04)
2015	4	223.99 (1.53)	243.16 (1.19)	187.86 (0.70)	242.72 (1.15)	189.69 (2.24)
2016	1	227.31 (1.68)	244.96 (1.32)	188.29 (0.75)	243.46 (1.25)	190.19 (2.52)
2016	2	237.01 (1.44)	254.94 (1.16)	196.59 (0.67)	254.03 (1.11)	191.87 (2.18)
2016	3	233.67 (1.45)	258.15 (1.14)	201.28 (0.67)	258.78 (1.14)	193.14 (2.08)
2016	4	237.03 (1.60)	258.56 (1.25)	199.95 (0.72)	257.13 (1.21)	196.21 (2.49)
2017	1	236.83 (1.77)	260.47 (1.42)	203.10 (0.80)	259.90 (1.34)	195.58 (2.55)
2017	2	245.99 (1.48)	273.83 (1.27)	212.61 (0.73)	272.01 (1.20)	197.03 (2.29)
2017	3	247.91 (1.58)	276.90 (1.28)	216.78 (0.73)	274.88 (1.24)	200.81 (2.35)
2017	4	245.96 (1.65)	275.35 (1.39)	216.58 (0.78)	272.83 (1.30)	194.70 (2.40)
2018	1	250.07 (1.90)	279.72 (1.67)	220.15 (0.89)	278.10 (1.44)	200.33 (2.62)
2018	2	256.15 (1.59)	290.84 (1.43)	229.47 (0.80)	290.31 (1.31)	204.45 (2.37)
2018	3	255.09 (1.63)	291.74 (1.39)	233.39 (0.79)	293.60 (1.33)	207.34 (2.48)
2018	4	252.66 (1.87)	292.70 (1.58)	232.43 (0.88)	290.26 (1.46)	208.55 (2.84)

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	Missouri	Montana	Nebraska	Nevada	New Hampshire
1991	1	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)
1991	2	100.95 (0.49)	105.14 (2.66)	101.68 (0.84)	101.01 (0.72)	98.40 (1.06)
1991	3	101.42 (0.47)	107.43 (2.59)	102.22 (0.83)	100.82 (0.71)	97.30 (1.03)
1991	4	102.16 (0.47)	111.02 (2.65)	102.08 (0.87)	102.26 (0.73)	95.46 (1.03)
1992	1	102.59 (0.46)	111.96 (2.73)	106.17 (0.90)	103.07 (0.73)	95.83 (0.99)
1992	2	103.50 (0.48)	114.10 (2.60)	107.24 (0.86)	102.39 (0.72)	94.10 (0.95)
1992	3	104.36 (0.46)	118.34 (2.59)	109.27 (0.84)	104.29 (0.72)	93.04 (0.94)
1992	4	104.28 (0.47)	121.73 (2.71)	110.82 (0.87)	104.75 (0.71)	93.52 (0.94)
1993	1	104.17 (0.55)	124.53 (2.85)	112.12 (0.96)	104.15 (0.77)	91.54 (1.04)
1993	2	106.57 (0.49)	129.26 (2.87)	114.68 (0.87)	106.19 (0.72)	92.29 (0.94)
1993	3	108.32 (0.50)	132.41 (2.92)	116.92 (0.89)	106.35 (0.72)	92.66 (0.95)
1993	4	109.15 (0.52)	137.25 (2.99)	120.24 (0.92)	106.93 (0.74)	92.86 (0.98)
1994	1	110.68 (0.56)	137.65 (3.12)	120.14 (0.97)	107.69 (0.75)	94.08 (1.09)
1994	2	112.40 (0.56)	145.47 (3.22)	121.53 (0.94)	109.47 (0.74)	93.19 (0.98)
1994	3	114.16 (0.60)	144.64 (3.21)	124.03 (0.99)	110.66 (0.79)	93.61 (1.01)
1994	4	113.96 (0.65)	147.32 (3.31)	124.05 (1.10)	110.66 (0.80)	94.05 (1.09)
1995	1	115.29 (0.66)	148.18 (3.41)	125.43 (1.17)	110.71 (0.83)	92.11 (1.16)
1995	2	116.80 (0.58)	150.34 (3.34)	128.65 (1.00)	113.77 (0.80)	94.77 (1.01)
1995	3	119.07 (0.56)	155.00 (3.36)	130.10 (0.99)	114.39 (0.77)	96.16 (1.00)
1995	4	119.31 (0.59)	154.13 (3.42)	130.44 (1.03)	114.10 (0.78)	95.42 (1.02)
1996	1	120.22 (0.61)	154.38 (3.43)	131.66 (1.04)	114.18 (0.78)	95.60 (1.03)
1996	2	122.48 (0.59)	158.06 (3.45)	134.88 (1.03)	115.81 (0.77)	96.74 (1.02)
1996	3	123.82 (0.61)	160.62 (3.49)	136.73 (1.05)	116.35 (0.78)	99.52 (1.03)
1996	4	124.11 (0.63)	158.91 (3.53)	136.87 (1.08)	116.06 (0.81)	97.82 (1.05)
1997	1	125.29 (0.68)	161.73 (3.64)	138.59 (1.12)	116.72 (0.83)	99.03 (1.14)
1997	2	126.08 (0.61)	161.58 (3.54)	141.84 (1.09)	117.79 (0.81)	101.96 (1.05)
1997	3	127.29 (0.60)	161.78 (3.52)	142.77 (1.09)	119.14 (0.81)	103.01 (1.03)
1997	4	127.92 (0.63)	162.27 (3.58)	144.28 (1.12)	118.27 (0.82)	104.08 (1.06)
1998	1	129.32 (0.63)	163.47 (3.62)	146.99 (1.14)	116.69 (0.80)	105.24 (1.08)
1998	2	131.66 (0.60)	164.87 (3.56)	147.89 (1.10)	119.26 (0.79)	109.00 (1.05)
1998	3	133.63 (0.61)	166.49 (3.59)	148.89 (1.10)	120.05 (0.78)	112.02 (1.07)
1998	4	134.91 (0.64)	166.42 (3.60)	153.71 (1.16)	120.60 (0.80)	113.07 (1.10)
1999	1	136.85 (0.68)	166.72 (3.68)	153.96 (1.18)	121.02 (0.81)	114.98 (1.19)
1999	2	139.44 (0.64)	170.52 (3.67)	156.15 (1.16)	121.85 (0.80)	120.81 (1.15)
1999	3	141.42 (0.66)	173.98 (3.75)	157.63 (1.19)	123.60 (0.81)	122.93 (1.18)
1999	4	141.88 (0.70)	172.80 (3.81)	156.80 (1.23)	124.32 (0.84)	125.15 (1.23)
2000	1	143.50 (0.73)	174.29 (3.87)	158.19 (1.26)	124.55 (0.85)	129.16 (1.32)
2000	2	147.53 (0.68)	177.37 (3.83)	160.91 (1.22)	127.06 (0.83)	135.46 (1.29)
2000	3	148.73 (0.69)	180.57 (3.90)	162.48 (1.22)	127.35 (0.83)	140.09 (1.33)
2000	4	150.55 (0.72)	180.01 (3.91)	161.99 (1.26)	129.08 (0.84)	145.76 (1.39)
2001	1	151.42 (0.72)	185.94 (4.06)	162.45 (1.28)	131.41 (0.85)	147.96 (1.45)
2001	2	156.05 (0.70)	187.54 (4.01)	165.67 (1.23)	134.73 (0.84)	155.32 (1.46)
2001	3	158.01 (0.71)	188.18 (4.03)	167.36 (1.25)	137.00 (0.86)	161.40 (1.51)
2001	4	158.93 (0.73)	191.45 (4.13)	166.33 (1.27)	138.85 (0.90)	163.27 (1.56)
2002	1	160.01 (0.76)	194.24 (4.21)	168.38 (1.33)	140.97 (0.92)	165.36 (1.61)
2002	2	163.41 (0.73)	197.66 (4.24)	170.89 (1.28)	143.78 (0.91)	174.32 (1.64)
2002	3	165.43 (0.74)	202.97 (4.32)	173.16 (1.29)	147.98 (0.93)	182.10 (1.70)
2002	4	166.94 (0.76)	205.28 (4.40)	173.41 (1.32)	150.69 (0.95)	184.57 (1.74)
2003	1	168.97 (0.78)	207.05 (4.47)	175.26 (1.37)	154.20 (0.99)	187.51 (1.84)
2003	2	171.99 (0.76)	216.18 (4.61)	177.99 (1.31)	158.94 (1.00)	195.08 (1.83)
2003	3	175.19 (0.77)	221.74 (4.72)	180.44 (1.33)	166.87 (1.04)	199.32 (1.87)
2003	4	176.44 (0.82)	223.64 (4.81)	179.84 (1.37)	175.77 (1.14)	203.63 (1.95)
2004	1	178.81 (0.86)	225.56 (4.88)	181.98 (1.44)	187.44 (1.22)	206.97 (2.05)
2004	2	182.42 (0.81)	237.53 (5.07)	183.88 (1.36)	206.99 (1.35)	214.24 (2.01)
2004	3	184.99 (0.83)	243.82 (5.20)	189.12 (1.40)	223.37 (1.48)	217.58 (2.06)
2004	4	186.40 (0.88)	246.20 (5.31)	188.12 (1.43)	231.28 (1.60)	222.83 (2.18)

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	Missouri	Montana	Nebraska	Nevada	New Hampshire
2005	1	187.81 (0.91)	251.88 (5.46)	189.37 (1.47)	241.27 (1.71)	225.99 (2.29)
2005	2	193.32 (0.87)	265.39 (5.66)	190.98 (1.41)	257.26 (1.74)	233.21 (2.24)
2005	3	196.54 (0.89)	270.76 (5.76)	194.53 (1.43)	262.26 (1.79)	237.12 (2.26)
2005	4	197.15 (0.93)	276.11 (5.93)	193.57 (1.47)	270.41 (1.93)	236.44 (2.34)
2006	1	199.49 (0.96)	284.95 (6.20)	193.23 (1.51)	274.88 (2.07)	234.82 (2.44)
2006	2	202.50 (0.91)	294.18 (6.27)	198.63 (1.47)	274.38 (1.99)	237.78 (2.31)
2006	3	204.77 (0.93)	301.98 (6.44)	199.97 (1.48)	272.55 (2.02)	234.35 (2.30)
2006	4	202.42 (0.97)	303.97 (6.54)	197.07 (1.50)	267.52 (2.07)	228.55 (2.31)
2007	1	203.80 (0.98)	307.02 (6.63)	196.76 (1.53)	264.77 (2.03)	229.99 (2.36)
2007	2	206.28 (0.93)	315.93 (6.74)	201.85 (1.48)	262.16 (1.88)	233.01 (2.26)
2007	3	207.19 (0.95)	317.01 (6.78)	200.71 (1.48)	252.64 (1.88)	227.83 (2.22)
2007	4	200.27 (0.98)	318.09 (6.90)	196.43 (1.53)	235.85 (1.88)	221.03 (2.25)
2008	1	195.87 (1.00)	317.09 (6.92)	192.58 (1.56)	217.78 (1.89)	217.21 (2.31)
2008	2	198.99 (0.98)	315.30 (6.84)	194.75 (1.55)	199.87 (1.71)	215.93 (2.21)
2008	3	196.02 (1.03)	314.54 (6.87)	193.57 (1.60)	184.77 (1.64)	210.42 (2.20)
2008	4	189.91 (1.12)	301.73 (6.78)	190.97 (1.79)	161.65 (1.61)	203.58 (2.29)
2009	1	190.10 (1.12)	306.05 (6.91)	188.21 (1.80)	150.98 (1.54)	206.72 (2.31)
2009	2	192.41 (1.04)	302.40 (6.70)	195.25 (1.64)	143.43 (1.32)	205.90 (2.19)
2009	3	191.17 (1.07)	303.76 (6.72)	195.80 (1.66)	136.34 (1.31)	199.87 (2.18)
2009	4	188.06 (1.11)	299.24 (6.71)	193.61 (1.75)	134.37 (1.33)	200.87 (2.32)
2010	1	184.04 (1.24)	298.06 (6.93)	188.92 (1.91)	131.92 (1.35)	192.48 (2.43)
2010	2	189.94 (1.07)	294.56 (6.55)	195.98 (1.68)	132.47 (1.30)	197.58 (2.19)
2010	3	186.24 (1.16)	292.67 (6.56)	192.81 (1.80)	130.17 (1.25)	199.77 (2.29)
2010	4	177.04 (1.15)	281.99 (6.40)	187.16 (1.78)	125.28 (1.20)	194.77 (2.21)
2011	1	174.45 (1.23)	277.89 (6.55)	187.26 (1.96)	118.64 (1.15)	184.95 (2.26)
2011	2	176.90 (1.06)	286.25 (6.39)	190.01 (1.66)	115.86 (1.08)	188.91 (2.16)
2011	3	179.48 (1.08)	285.16 (6.35)	191.68 (1.67)	116.30 (1.08)	190.03 (2.13)
2011	4	175.22 (1.15)	287.68 (6.55)	190.20 (1.80)	111.42 (1.09)	189.90 (2.21)
2012	1	176.22 (1.19)	286.74 (6.56)	191.19 (1.84)	111.82 (1.08)	181.76 (2.17)
2012	2	181.65 (1.07)	291.28 (6.46)	196.81 (1.65)	120.97 (1.12)	188.56 (2.08)
2012	3	182.62 (1.07)	294.54 (6.52)	196.96 (1.66)	128.26 (1.20)	189.35 (2.07)
2012	4	180.80 (1.13)	303.25 (6.81)	199.27 (1.77)	131.02 (1.26)	188.30 (2.09)
2013	1	182.12 (1.19)	310.06 (7.02)	200.39 (1.86)	139.04 (1.32)	188.66 (2.29)
2013	2	188.09 (1.07)	309.37 (6.77)	204.19 (1.66)	149.25 (1.32)	197.49 (2.12)
2013	3	190.36 (1.06)	309.99 (6.79)	205.63 (1.65)	158.03 (1.40)	198.89 (2.20)
2013	4	186.75 (1.19)	317.56 (7.18)	207.76 (1.77)	160.58 (1.48)	194.38 (2.22)
2014	1	187.67 (1.26)	316.68 (7.25)	206.55 (1.89)	164.81 (1.55)	197.18 (2.63)
2014	2	193.47 (1.08)	321.69 (7.12)	211.59 (1.71)	169.45 (1.44)	201.65 (2.23)
2014	3	196.20 (1.10)	329.22 (7.26)	215.09 (1.74)	174.96 (1.49)	205.30 (2.22)
2014	4	195.03 (1.20)	328.81 (7.37)	214.52 (1.84)	177.63 (1.63)	201.16 (2.31)
2015	1	193.29 (1.26)	331.76 (7.64)	216.38 (1.93)	181.14 (1.69)	205.50 (2.56)
2015	2	200.77 (1.11)	334.26 (7.40)	222.15 (1.78)	186.43 (1.65)	210.76 (2.30)
2015	3	204.75 (1.15)	340.85 (7.51)	226.35 (1.82)	195.19 (1.66)	215.22 (2.28)
2015	4	203.56 (1.25)	340.96 (7.63)	224.02 (1.95)	194.99 (1.78)	213.24 (2.43)
2016	1	207.68 (1.32)	343.94 (7.89)	222.52 (1.99)	199.66 (1.84)	213.07 (2.59)
2016	2	210.89 (1.14)	351.69 (7.75)	232.40 (1.89)	205.64 (1.69)	222.37 (2.33)
2016	3	215.82 (1.19)	356.19 (7.88)	235.92 (1.92)	210.49 (1.77)	223.80 (2.37)
2016	4	215.36 (1.26)	367.28 (8.24)	233.91 (1.96)	213.98 (1.87)	221.65 (2.49)
2017	1	215.47 (1.42)	363.65 (8.47)	237.64 (2.14)	217.47 (1.96)	232.26 (3.00)
2017	2	224.99 (1.25)	374.02 (8.33)	246.89 (1.98)	222.05 (1.76)	234.59 (2.55)
2017	3	227.47 (1.28)	381.54 (8.48)	249.99 (2.03)	232.04 (1.86)	238.04 (2.53)
2017	4	227.50 (1.36)	380.42 (8.71)	253.39 (2.18)	240.83 (1.98)	238.49 (2.69)
2018	1	230.54 (1.48)	387.73 (9.08)	258.26 (2.31)	247.49 (2.10)	243.02 (3.06)
2018	2	238.72 (1.32)	397.32 (8.89)	263.28 (2.17)	259.31 (2.07)	249.44 (2.71)
2018	3	243.32 (1.38)	403.08 (8.99)	268.90 (2.23)	266.40 (2.18)	252.33 (2.69)
2018	4	244.01 (1.56)	408.52 (9.48)	267.12 (2.42)	267.90 (2.36)	254.89 (2.98)

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	New Jersey	New Mexico	New York	North Carolina	North Dakota
1991	1	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)
1991	2	99.01 (0.38)	101.51 (0.81)	99.58 (0.43)	100.43 (0.43)	100.55 (2.12)
1991	3	99.09 (0.38)	101.05 (0.78)	100.13 (0.41)	100.14 (0.42)	99.13 (2.12)
1991	4	99.60 (0.39)	103.34 (0.80)	100.40 (0.44)	101.73 (0.42)	100.65 (2.13)
1992	1	101.12 (0.38)	106.20 (0.79)	100.97 (0.43)	102.01 (0.40)	102.04 (2.20)
1992	2	100.20 (0.37)	107.05 (0.78)	100.68 (0.42)	102.39 (0.42)	104.06 (2.06)
1992	3	100.75 (0.37)	108.33 (0.78)	101.48 (0.42)	103.85 (0.39)	103.43 (2.01)
1992	4	101.31 (0.37)	110.14 (0.79)	102.47 (0.41)	104.84 (0.40)	105.28 (2.02)
1993	1	100.32 (0.41)	111.58 (0.85)	99.75 (0.46)	104.05 (0.45)	107.08 (2.40)
1993	2	101.07 (0.38)	116.12 (0.82)	101.73 (0.43)	106.08 (0.41)	109.97 (2.15)
1993	3	101.69 (0.38)	118.44 (0.84)	101.49 (0.42)	107.16 (0.41)	112.56 (2.15)
1993	4	101.75 (0.39)	120.26 (0.87)	100.70 (0.43)	108.47 (0.42)	113.79 (2.20)
1994	1	102.07 (0.42)	124.91 (0.92)	99.32 (0.45)	109.38 (0.45)	114.54 (2.42)
1994	2	101.94 (0.42)	127.81 (0.92)	100.46 (0.45)	111.39 (0.45)	117.76 (2.50)
1994	3	102.86 (0.44)	131.11 (0.95)	100.46 (0.45)	113.35 (0.48)	118.79 (2.43)
1994	4	101.18 (0.46)	133.16 (1.03)	98.74 (0.49)	114.72 (0.52)	119.05 (2.59)
1995	1	101.11 (0.51)	133.13 (1.05)	98.03 (0.54)	115.47 (0.54)	121.38 (2.82)
1995	2	101.47 (0.43)	136.58 (1.00)	99.52 (0.47)	116.58 (0.48)	122.99 (2.42)
1995	3	102.69 (0.42)	137.87 (1.00)	100.23 (0.44)	118.32 (0.47)	120.97 (2.33)
1995	4	101.31 (0.43)	136.63 (1.01)	98.47 (0.45)	119.44 (0.49)	122.85 (2.41)
1996	1	101.33 (0.46)	137.08 (1.02)	99.02 (0.48)	120.79 (0.50)	122.83 (2.64)
1996	2	102.92 (0.43)	139.77 (1.02)	99.78 (0.45)	122.29 (0.49)	123.97 (2.40)
1996	3	103.22 (0.43)	138.93 (1.01)	100.49 (0.45)	124.30 (0.50)	127.56 (2.45)
1996	4	102.28 (0.44)	137.85 (1.07)	99.33 (0.47)	124.62 (0.52)	125.77 (2.48)
1997	1	102.09 (0.47)	138.70 (1.10)	98.73 (0.50)	125.83 (0.54)	126.08 (2.76)
1997	2	103.93 (0.44)	140.90 (1.04)	101.41 (0.48)	128.04 (0.51)	127.46 (2.44)
1997	3	104.70 (0.43)	139.46 (1.04)	102.08 (0.46)	128.82 (0.51)	130.77 (2.52)
1997	4	104.97 (0.44)	138.97 (1.06)	101.55 (0.47)	130.15 (0.53)	129.45 (2.62)
1998	1	106.02 (0.46)	139.03 (1.05)	101.42 (0.49)	130.69 (0.53)	128.73 (2.54)
1998	2	108.47 (0.42)	141.20 (1.02)	104.89 (0.45)	132.74 (0.51)	131.81 (2.49)
1998	3	110.30 (0.42)	142.51 (1.03)	107.49 (0.45)	134.28 (0.52)	135.17 (2.52)
1998	4	109.99 (0.43)	143.10 (1.07)	108.13 (0.47)	135.43 (0.53)	135.69 (2.59)
1999	1	111.69 (0.45)	143.71 (1.11)	108.58 (0.50)	136.52 (0.55)	134.78 (2.67)
1999	2	115.29 (0.44)	144.22 (1.06)	112.73 (0.48)	138.83 (0.53)	136.43 (2.55)
1999	3	118.73 (0.46)	145.05 (1.08)	116.15 (0.49)	140.04 (0.55)	137.79 (2.67)
1999	4	119.31 (0.48)	145.99 (1.14)	117.59 (0.52)	141.20 (0.58)	135.71 (2.75)
2000	1	122.03 (0.51)	144.86 (1.14)	119.07 (0.55)	141.61 (0.60)	139.35 (2.92)
2000	2	126.40 (0.49)	146.24 (1.09)	122.71 (0.53)	144.09 (0.56)	139.21 (2.71)
2000	3	130.19 (0.49)	146.80 (1.08)	126.94 (0.53)	145.97 (0.57)	141.57 (2.71)
2000	4	132.79 (0.51)	145.19 (1.11)	129.23 (0.55)	146.32 (0.59)	137.87 (2.66)
2001	1	135.70 (0.54)	148.35 (1.12)	130.69 (0.58)	147.86 (0.60)	143.20 (2.81)
2001	2	140.37 (0.52)	150.23 (1.10)	135.22 (0.56)	149.25 (0.57)	143.22 (2.66)
2001	3	146.52 (0.54)	151.44 (1.09)	139.92 (0.56)	150.16 (0.58)	143.44 (2.65)
2001	4	148.93 (0.56)	150.92 (1.12)	142.75 (0.59)	149.89 (0.60)	147.12 (2.80)
2002	1	152.27 (0.59)	152.47 (1.15)	145.38 (0.62)	151.58 (0.61)	146.66 (2.85)
2002	2	160.43 (0.59)	156.72 (1.13)	150.78 (0.62)	153.17 (0.59)	150.46 (2.79)
2002	3	167.89 (0.61)	158.84 (1.13)	156.80 (0.63)	154.71 (0.60)	154.10 (2.83)
2002	4	172.43 (0.64)	160.96 (1.17)	159.54 (0.66)	155.23 (0.61)	156.70 (2.96)
2003	1	174.84 (0.67)	162.26 (1.19)	164.52 (0.70)	156.71 (0.64)	157.26 (2.99)
2003	2	183.85 (0.67)	165.75 (1.17)	167.95 (0.69)	158.32 (0.61)	160.08 (2.89)
2003	3	190.22 (0.69)	169.06 (1.18)	174.24 (0.69)	159.30 (0.61)	163.28 (2.95)
2003	4	194.81 (0.74)	171.48 (1.26)	179.09 (0.74)	160.00 (0.67)	164.41 (3.03)
2004	1	199.75 (0.79)	174.12 (1.29)	182.21 (0.80)	161.80 (0.68)	165.85 (3.11)
2004	2	209.92 (0.78)	179.39 (1.27)	188.26 (0.78)	165.76 (0.66)	171.09 (3.10)
2004	3	217.89 (0.82)	183.49 (1.30)	193.04 (0.79)	166.99 (0.66)	175.05 (3.17)
2004	4	223.66 (0.87)	185.95 (1.35)	198.12 (0.85)	169.37 (0.70)	176.73 (3.25)

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	New Jersey	New Mexico	New York	North Carolina	North Dakota
2005	1	229.30 (0.95)	192.32 (1.42)	200.64 (0.92)	172.78 (0.73)	178.98 (3.36)
2005	2	240.27 (0.92)	200.30 (1.41)	204.84 (0.87)	175.97 (0.69)	184.49 (3.34)
2005	3	249.58 (0.95)	207.99 (1.45)	212.59 (0.88)	179.45 (0.70)	188.19 (3.37)
2005	4	252.37 (1.02)	214.49 (1.52)	213.85 (0.93)	182.73 (0.74)	191.08 (3.52)
2006	1	254.38 (1.09)	220.40 (1.59)	214.78 (1.00)	186.60 (0.78)	189.28 (3.57)
2006	2	260.07 (1.02)	229.42 (1.62)	218.15 (0.94)	190.24 (0.74)	198.68 (3.63)
2006	3	258.68 (1.04)	234.89 (1.65)	217.70 (0.93)	193.47 (0.75)	200.67 (3.63)
2006	4	255.19 (1.06)	238.20 (1.73)	217.17 (0.97)	196.75 (0.80)	199.95 (3.69)
2007	1	255.44 (1.08)	240.39 (1.77)	215.49 (0.99)	198.64 (0.82)	201.97 (3.75)
2007	2	257.52 (1.01)	243.71 (1.73)	219.48 (0.94)	201.36 (0.79)	206.85 (3.73)
2007	3	253.68 (1.02)	243.26 (1.74)	219.46 (0.93)	202.77 (0.80)	209.43 (3.80)
2007	4	250.00 (1.05)	239.86 (1.82)	217.22 (0.97)	200.95 (0.84)	206.45 (3.79)
2008	1	244.07 (1.09)	240.12 (1.87)	214.64 (1.03)	199.62 (0.87)	208.29 (3.94)
2008	2	240.07 (1.03)	237.25 (1.81)	214.86 (0.99)	202.97 (0.87)	212.02 (3.93)
2008	3	235.25 (1.05)	234.82 (1.84)	214.81 (0.99)	197.92 (0.92)	213.65 (4.03)
2008	4	229.08 (1.13)	230.38 (2.02)	208.48 (1.07)	192.50 (1.01)	211.58 (4.17)
2009	1	226.70 (1.17)	222.77 (2.08)	206.40 (1.17)	196.29 (0.98)	208.51 (4.34)
2009	2	223.42 (1.04)	224.76 (1.96)	205.97 (1.02)	195.44 (0.94)	216.99 (4.17)
2009	3	222.37 (1.03)	222.30 (1.94)	206.51 (0.99)	192.88 (0.99)	216.26 (4.10)
2009	4	219.00 (1.09)	221.87 (2.04)	205.35 (1.05)	188.46 (1.00)	214.79 (4.15)
2010	1	218.38 (1.22)	220.56 (2.23)	203.95 (1.21)	183.75 (1.08)	220.29 (4.74)
2010	2	218.10 (1.03)	214.41 (1.94)	205.19 (1.01)	186.45 (0.95)	218.23 (4.12)
2010	3	217.49 (1.10)	212.37 (2.01)	204.68 (1.10)	181.47 (0.99)	217.40 (4.21)
2010	4	213.71 (1.10)	209.27 (2.06)	203.53 (1.12)	181.91 (1.01)	223.69 (4.39)
2011	1	206.41 (1.17)	203.25 (2.07)	198.36 (1.22)	171.95 (1.03)	221.88 (4.57)
2011	2	206.17 (1.06)	201.53 (1.91)	200.19 (1.12)	175.20 (0.95)	226.74 (4.38)
2011	3	206.55 (1.05)	203.10 (1.89)	200.71 (1.06)	175.57 (0.99)	229.60 (4.30)
2011	4	201.73 (1.09)	200.10 (1.99)	196.66 (1.11)	175.65 (1.00)	232.92 (4.46)
2012	1	197.44 (1.12)	198.63 (2.02)	195.90 (1.21)	171.88 (1.04)	235.15 (4.62)
2012	2	202.53 (1.01)	204.60 (1.85)	199.38 (1.08)	176.28 (0.90)	243.98 (4.55)
2012	3	203.47 (0.99)	205.46 (1.93)	200.52 (1.03)	177.36 (0.92)	249.90 (4.62)
2012	4	201.54 (1.07)	201.95 (1.94)	198.54 (1.08)	175.45 (0.94)	254.75 (4.74)
2013	1	199.03 (1.11)	204.42 (2.04)	198.63 (1.18)	179.03 (0.99)	256.13 (4.88)
2013	2	207.95 (0.99)	207.17 (1.89)	202.72 (1.04)	184.26 (0.89)	262.07 (4.78)
2013	3	209.10 (0.97)	209.23 (1.84)	205.21 (1.00)	185.80 (0.93)	270.11 (4.93)
2013	4	206.87 (1.09)	206.99 (1.97)	204.32 (1.07)	184.50 (0.99)	268.94 (4.99)
2014	1	204.16 (1.20)	206.06 (2.03)	201.96 (1.23)	184.73 (1.09)	275.00 (5.22)
2014	2	212.42 (1.05)	211.35 (1.92)	205.96 (1.10)	191.32 (0.95)	279.58 (5.09)
2014	3	212.97 (1.02)	211.56 (1.89)	207.54 (1.03)	190.68 (0.95)	289.60 (5.30)
2014	4	212.34 (1.12)	212.28 (2.02)	208.00 (1.13)	189.83 (1.00)	291.51 (5.44)
2015	1	209.85 (1.18)	209.99 (2.14)	207.34 (1.26)	192.79 (1.06)	293.78 (5.64)
2015	2	214.55 (1.06)	214.02 (1.92)	211.11 (1.13)	199.58 (0.97)	296.12 (5.51)
2015	3	217.12 (1.04)	221.62 (1.96)	214.88 (1.06)	203.20 (1.01)	300.98 (5.56)
2015	4	215.75 (1.14)	214.45 (2.10)	212.58 (1.15)	202.76 (1.08)	301.11 (5.68)
2016	1	213.26 (1.21)	215.60 (2.17)	212.66 (1.28)	205.73 (1.13)	298.83 (5.93)
2016	2	222.66 (1.07)	222.97 (2.01)	219.47 (1.14)	211.81 (1.02)	304.81 (5.67)
2016	3	223.62 (1.05)	222.44 (2.01)	222.00 (1.09)	215.56 (1.05)	307.82 (5.71)
2016	4	222.52 (1.12)	225.27 (2.09)	224.06 (1.20)	216.30 (1.13)	306.64 (5.76)
2017	1	220.33 (1.26)	225.85 (2.24)	223.79 (1.33)	217.45 (1.21)	302.43 (6.05)
2017	2	229.01 (1.10)	230.32 (2.07)	229.52 (1.22)	228.67 (1.12)	311.01 (5.89)
2017	3	233.28 (1.10)	236.07 (2.19)	235.84 (1.19)	229.23 (1.16)	313.43 (5.87)
2017	4	232.84 (1.19)	237.59 (2.28)	237.75 (1.28)	232.00 (1.21)	310.92 (6.10)
2018	1	233.91 (1.32)	234.23 (2.25)	238.64 (1.44)	238.30 (1.34)	309.86 (6.42)
2018	2	238.95 (1.15)	242.40 (2.16)	245.77 (1.33)	244.51 (1.21)	318.19 (6.08)
2018	3	242.30 (1.18)	243.98 (2.22)	249.69 (1.28)	246.30 (1.27)	315.99 (6.14)
2018	4	240.46 (1.32)	246.60 (2.42)	247.94 (1.45)	247.67 (1.45)	310.71 (6.39)

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	Ohio	Oklahoma	Oregon	Pennsylvania	Rhode Island
1991	1	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)
1991	2	101.48 (0.26)	100.81 (0.79)	102.43 (0.54)	100.05 (0.36)	97.43 (0.89)
1991	3	101.92 (0.27)	101.56 (0.77)	104.36 (0.55)	100.38 (0.36)	95.88 (0.95)
1991	4	102.82 (0.27)	102.43 (0.82)	105.46 (0.54)	101.38 (0.36)	96.81 (0.93)
1992	1	104.22 (0.26)	102.68 (0.76)	108.33 (0.56)	101.75 (0.35)	96.06 (0.89)
1992	2	105.79 (0.26)	102.87 (0.77)	110.82 (0.55)	102.32 (0.35)	94.43 (0.89)
1992	3	106.94 (0.26)	103.82 (0.74)	113.29 (0.57)	102.48 (0.35)	94.92 (0.86)
1992	4	107.91 (0.26)	105.35 (0.76)	115.19 (0.56)	102.89 (0.35)	96.47 (0.85)
1993	1	108.01 (0.29)	105.66 (0.82)	116.85 (0.63)	102.25 (0.40)	93.34 (0.97)
1993	2	110.50 (0.27)	108.06 (0.77)	120.27 (0.59)	103.58 (0.36)	93.31 (0.89)
1993	3	112.02 (0.27)	109.65 (0.78)	123.22 (0.59)	103.95 (0.36)	92.89 (0.90)
1993	4	113.11 (0.28)	111.54 (0.80)	126.36 (0.61)	104.58 (0.37)	92.78 (0.92)
1994	1	113.67 (0.31)	111.90 (0.85)	128.92 (0.64)	104.27 (0.41)	92.55 (1.00)
1994	2	116.41 (0.30)	114.29 (0.84)	133.63 (0.65)	105.22 (0.39)	93.48 (0.94)
1994	3	117.21 (0.31)	114.34 (0.88)	136.53 (0.69)	105.90 (0.41)	92.86 (1.06)
1994	4	118.07 (0.34)	115.96 (0.93)	139.11 (0.73)	105.00 (0.45)	91.89 (1.09)
1995	1	119.03 (0.36)	114.94 (0.98)	142.13 (0.77)	103.74 (0.47)	91.91 (1.18)
1995	2	120.81 (0.31)	116.65 (0.88)	144.75 (0.72)	105.63 (0.40)	92.11 (0.99)
1995	3	122.29 (0.31)	118.44 (0.87)	147.41 (0.72)	105.77 (0.39)	91.66 (0.97)
1995	4	123.10 (0.32)	118.85 (0.90)	148.53 (0.73)	105.29 (0.41)	92.12 (1.04)
1996	1	124.26 (0.33)	118.94 (0.91)	151.37 (0.75)	104.87 (0.43)	90.53 (1.04)
1996	2	126.78 (0.32)	121.48 (0.88)	155.42 (0.75)	106.40 (0.39)	91.70 (0.98)
1996	3	127.60 (0.33)	122.35 (0.90)	157.65 (0.76)	107.07 (0.40)	91.75 (1.00)
1996	4	127.83 (0.34)	122.40 (0.93)	159.08 (0.79)	106.24 (0.42)	90.49 (1.02)
1997	1	128.37 (0.36)	122.64 (0.96)	162.33 (0.84)	106.36 (0.44)	91.19 (1.15)
1997	2	130.32 (0.33)	124.49 (0.91)	164.24 (0.81)	107.31 (0.41)	91.93 (0.98)
1997	3	131.39 (0.33)	125.37 (0.91)	166.10 (0.80)	107.76 (0.39)	91.60 (0.94)
1997	4	131.30 (0.35)	125.89 (0.95)	165.78 (0.83)	107.83 (0.41)	92.72 (0.97)
1998	1	132.77 (0.35)	126.79 (0.95)	165.61 (0.82)	107.59 (0.41)	92.56 (0.98)
1998	2	134.83 (0.33)	129.74 (0.93)	170.54 (0.81)	109.90 (0.38)	95.59 (0.90)
1998	3	136.02 (0.33)	130.78 (0.94)	171.78 (0.82)	110.38 (0.38)	96.72 (0.91)
1998	4	136.94 (0.35)	133.16 (0.97)	171.59 (0.84)	111.08 (0.40)	97.81 (0.93)
1999	1	138.60 (0.36)	133.98 (1.01)	173.44 (0.88)	111.68 (0.42)	98.71 (0.99)
1999	2	141.26 (0.35)	136.00 (0.97)	176.83 (0.85)	113.82 (0.39)	100.47 (0.92)
1999	3	142.87 (0.36)	138.44 (1.00)	177.61 (0.87)	115.16 (0.40)	104.89 (0.97)
1999	4	143.07 (0.38)	138.81 (1.04)	177.01 (0.91)	115.47 (0.43)	106.48 (1.07)
2000	1	144.09 (0.40)	139.80 (1.06)	179.76 (0.93)	116.43 (0.45)	106.56 (1.11)
2000	2	147.14 (0.37)	142.17 (1.02)	181.20 (0.88)	119.35 (0.41)	113.16 (1.04)
2000	3	148.37 (0.37)	143.40 (1.02)	182.57 (0.89)	120.50 (0.41)	117.62 (1.08)
2000	4	148.53 (0.39)	144.80 (1.07)	183.97 (0.91)	121.23 (0.43)	120.31 (1.09)
2001	1	149.41 (0.39)	145.07 (1.07)	186.31 (0.92)	122.83 (0.45)	121.71 (1.14)
2001	2	152.66 (0.37)	148.03 (1.05)	190.10 (0.90)	126.43 (0.42)	128.29 (1.12)
2001	3	153.39 (0.38)	149.38 (1.06)	192.49 (0.92)	128.71 (0.43)	134.07 (1.18)
2001	4	153.72 (0.40)	149.74 (1.09)	192.90 (0.95)	129.57 (0.45)	138.56 (1.25)
2002	1	154.96 (0.41)	151.02 (1.12)	195.30 (0.97)	131.50 (0.47)	142.91 (1.33)
2002	2	157.53 (0.39)	152.86 (1.09)	199.89 (0.95)	135.66 (0.45)	151.58 (1.33)
2002	3	158.95 (0.40)	154.10 (1.10)	203.49 (0.97)	138.84 (0.46)	160.58 (1.40)
2002	4	159.57 (0.41)	155.77 (1.11)	204.51 (0.98)	141.37 (0.48)	165.95 (1.45)
2003	1	160.03 (0.43)	155.69 (1.15)	207.79 (1.03)	143.30 (0.51)	170.00 (1.55)
2003	2	163.87 (0.40)	159.23 (1.13)	213.90 (1.01)	148.03 (0.49)	179.58 (1.55)
2003	3	164.89 (0.40)	160.74 (1.13)	217.60 (1.02)	152.33 (0.50)	186.35 (1.60)
2003	4	165.16 (0.44)	161.41 (1.19)	221.09 (1.07)	153.09 (0.53)	192.98 (1.77)
2004	1	165.57 (0.46)	162.06 (1.21)	225.60 (1.13)	156.48 (0.56)	199.56 (1.89)
2004	2	169.48 (0.43)	166.37 (1.18)	233.64 (1.11)	163.34 (0.54)	208.03 (1.87)
2004	3	170.59 (0.44)	165.58 (1.18)	243.20 (1.16)	168.43 (0.56)	219.56 (1.99)
2004	4	170.18 (0.47)	168.23 (1.24)	248.90 (1.23)	171.75 (0.60)	220.98 (2.13)

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	Ohio	Oklahoma	Oregon	Pennsylvania	Rhode Island
2005	1	170.48 (0.49)	168.89 (1.26)	256.08 (1.28)	173.75 (0.63)	229.05 (2.35)
2005	2	174.89 (0.45)	173.90 (1.23)	270.54 (1.30)	180.95 (0.60)	233.09 (2.17)
2005	3	175.20 (0.45)	176.95 (1.24)	286.94 (1.36)	187.74 (0.62)	237.59 (2.21)
2005	4	174.48 (0.49)	178.02 (1.29)	296.40 (1.45)	189.46 (0.65)	236.90 (2.36)
2006	1	173.83 (0.50)	180.02 (1.32)	304.91 (1.52)	192.19 (0.69)	235.06 (2.41)
2006	2	177.51 (0.46)	185.03 (1.31)	319.44 (1.53)	195.61 (0.66)	238.96 (2.25)
2006	3	176.68 (0.46)	185.83 (1.32)	327.74 (1.59)	198.32 (0.68)	235.78 (2.28)
2006	4	173.73 (0.49)	186.15 (1.37)	326.57 (1.64)	197.58 (0.70)	234.47 (2.38)
2007	1	172.45 (0.50)	189.75 (1.39)	332.71 (1.68)	198.61 (0.72)	225.43 (2.34)
2007	2	175.39 (0.46)	191.60 (1.35)	340.44 (1.63)	202.91 (0.68)	227.76 (2.15)
2007	3	173.82 (0.46)	195.73 (1.39)	338.17 (1.65)	202.03 (0.69)	224.31 (2.18)
2007	4	168.90 (0.49)	194.67 (1.42)	330.09 (1.69)	199.82 (0.73)	222.09 (2.31)
2008	1	164.11 (0.52)	191.84 (1.48)	321.47 (1.73)	197.58 (0.76)	211.37 (2.30)
2008	2	166.43 (0.51)	195.89 (1.50)	322.15 (1.71)	197.49 (0.74)	209.98 (2.22)
2008	3	163.94 (0.54)	194.99 (1.53)	314.87 (1.72)	196.07 (0.76)	200.42 (2.19)
2008	4	157.11 (0.60)	188.09 (1.67)	300.18 (1.84)	190.56 (0.84)	196.80 (2.29)
2009	1	154.27 (0.65)	190.35 (1.74)	293.84 (1.85)	187.92 (0.89)	197.85 (2.25)
2009	2	159.64 (0.56)	196.29 (1.64)	287.80 (1.72)	190.00 (0.78)	190.95 (2.03)
2009	3	159.72 (0.57)	196.03 (1.66)	284.46 (1.67)	189.64 (0.79)	192.68 (2.15)
2009	4	157.02 (0.60)	192.89 (1.73)	277.44 (1.69)	189.08 (0.85)	190.04 (2.34)
2010	1	154.96 (0.69)	190.33 (1.91)	268.36 (1.78)	188.48 (0.98)	182.36 (2.41)
2010	2	157.08 (0.55)	195.64 (1.68)	275.74 (1.64)	188.87 (0.80)	184.94 (2.15)
2010	3	154.15 (0.60)	194.31 (1.75)	263.46 (1.60)	186.51 (0.86)	186.39 (2.23)
2010	4	150.85 (0.62)	192.41 (1.87)	252.69 (1.59)	185.01 (0.90)	183.58 (2.31)
2011	1	144.38 (0.68)	183.10 (1.83)	243.57 (1.62)	180.86 (0.99)	177.55 (2.43)
2011	2	149.57 (0.57)	193.42 (1.69)	244.34 (1.49)	184.87 (0.84)	176.78 (2.21)
2011	3	151.08 (0.56)	189.22 (1.65)	248.11 (1.51)	183.94 (0.82)	173.71 (2.21)
2011	4	147.71 (0.60)	191.52 (1.78)	244.67 (1.54)	179.75 (0.88)	173.49 (2.25)
2012	1	145.99 (0.62)	188.09 (1.84)	240.15 (1.55)	179.47 (0.93)	173.20 (2.33)
2012	2	153.40 (0.55)	194.62 (1.68)	251.67 (1.46)	184.36 (0.80)	175.13 (2.02)
2012	3	154.81 (0.54)	197.83 (1.69)	262.54 (1.50)	184.65 (0.80)	172.74 (1.96)
2012	4	151.60 (0.57)	196.54 (1.78)	259.14 (1.53)	183.77 (0.84)	174.02 (2.01)
2013	1	151.23 (0.61)	198.89 (1.84)	266.99 (1.64)	183.93 (0.90)	171.75 (2.19)
2013	2	158.21 (0.52)	204.75 (1.70)	282.78 (1.53)	190.15 (0.78)	178.80 (1.99)
2013	3	160.94 (0.52)	204.31 (1.67)	287.69 (1.55)	191.85 (0.79)	181.75 (2.02)
2013	4	157.95 (0.58)	200.49 (1.76)	288.19 (1.66)	189.21 (0.85)	178.44 (2.11)
2014	1	158.24 (0.65)	204.70 (1.86)	289.35 (1.77)	187.72 (0.96)	182.92 (2.62)
2014	2	164.72 (0.55)	206.97 (1.73)	302.24 (1.64)	195.13 (0.82)	184.25 (2.06)
2014	3	165.90 (0.55)	210.34 (1.77)	308.01 (1.65)	195.42 (0.82)	187.12 (2.08)
2014	4	165.42 (0.60)	209.43 (1.91)	308.40 (1.74)	193.10 (0.87)	189.33 (2.18)
2015	1	163.88 (0.65)	215.07 (1.99)	310.15 (1.80)	192.17 (0.96)	187.32 (2.36)
2015	2	171.37 (0.57)	218.74 (1.87)	329.20 (1.75)	199.24 (0.85)	191.39 (2.14)
2015	3	172.99 (0.58)	221.84 (1.89)	336.98 (1.79)	200.14 (0.86)	193.74 (2.19)
2015	4	171.85 (0.64)	220.55 (2.09)	340.92 (1.91)	198.74 (0.93)	196.59 (2.27)
2016	1	172.39 (0.68)	218.63 (2.08)	348.35 (2.02)	199.76 (1.01)	193.20 (2.45)
2016	2	179.35 (0.59)	225.03 (1.90)	367.08 (1.96)	206.34 (0.87)	202.44 (2.19)
2016	3	182.64 (0.60)	227.05 (1.95)	371.78 (1.97)	208.83 (0.88)	204.67 (2.25)
2016	4	181.37 (0.65)	224.89 (2.09)	378.06 (2.11)	206.87 (0.94)	207.31 (2.38)
2017	1	182.33 (0.73)	227.57 (2.19)	378.82 (2.23)	207.92 (1.06)	210.32 (2.79)
2017	2	190.56 (0.63)	234.27 (1.99)	399.06 (2.18)	215.49 (0.91)	219.24 (2.38)
2017	3	193.80 (0.65)	235.90 (2.06)	404.40 (2.19)	217.89 (0.94)	218.72 (2.46)
2017	4	193.55 (0.71)	237.62 (2.20)	402.98 (2.26)	218.17 (1.02)	223.84 (2.78)
2018	1	195.32 (0.80)	233.01 (2.23)	417.26 (2.46)	220.72 (1.14)	225.01 (2.98)
2018	2	202.84 (0.67)	243.10 (2.12)	429.90 (2.34)	227.23 (0.97)	237.44 (2.74)
2018	3	207.14 (0.69)	244.26 (2.16)	433.97 (2.40)	228.01 (0.99)	237.66 (2.73)
2018	4	205.16 (0.77)	242.54 (2.38)	428.16 (2.55)	229.18 (1.12)	234.89 (2.95)

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	South Carolina	South Dakota	Tennessee	Texas	Utah
1991	1	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)
1991	2	100.77 (0.60)	103.35 (1.95)	100.56 (0.56)	100.62 (0.34)	101.57 (0.68)
1991	3	101.92 (0.61)	103.60 (1.87)	100.87 (0.55)	100.85 (0.34)	102.39 (0.67)
1991	4	102.41 (0.61)	102.26 (1.82)	101.95 (0.56)	100.45 (0.35)	104.33 (0.67)
1992	1	102.87 (0.58)	107.00 (1.97)	102.57 (0.53)	101.80 (0.34)	106.22 (0.65)
1992	2	103.41 (0.59)	107.42 (1.83)	102.50 (0.54)	102.17 (0.33)	109.72 (0.68)
1992	3	104.86 (0.57)	109.80 (1.79)	104.65 (0.52)	103.37 (0.33)	110.66 (0.66)
1992	4	105.76 (0.57)	111.16 (1.85)	104.84 (0.52)	104.14 (0.33)	114.75 (0.68)
1993	1	105.35 (0.63)	112.77 (2.04)	104.77 (0.57)	103.98 (0.35)	117.75 (0.77)
1993	2	105.75 (0.58)	116.75 (1.96)	107.01 (0.54)	105.69 (0.33)	123.17 (0.75)
1993	3	107.75 (0.59)	117.34 (1.97)	108.62 (0.55)	106.94 (0.33)	128.70 (0.77)
1993	4	108.40 (0.60)	120.07 (2.02)	109.86 (0.56)	107.98 (0.34)	134.09 (0.82)
1994	1	109.08 (0.66)	122.55 (2.24)	111.43 (0.60)	108.56 (0.36)	138.00 (0.86)
1994	2	110.59 (0.64)	125.19 (2.12)	113.41 (0.59)	109.84 (0.35)	145.74 (0.89)
1994	3	110.91 (0.69)	125.34 (2.11)	115.20 (0.61)	110.46 (0.35)	149.72 (0.93)
1994	4	111.72 (0.77)	127.84 (2.25)	115.62 (0.65)	110.48 (0.38)	152.38 (0.99)
1995	1	113.27 (0.78)	125.47 (2.33)	118.02 (0.69)	110.70 (0.39)	155.21 (1.03)
1995	2	114.14 (0.67)	131.17 (2.21)	119.40 (0.62)	111.94 (0.36)	158.29 (0.97)
1995	3	115.21 (0.66)	129.53 (2.13)	121.30 (0.62)	112.88 (0.35)	162.33 (0.99)
1995	4	114.66 (0.68)	131.50 (2.23)	122.81 (0.64)	113.15 (0.37)	164.34 (1.02)
1996	1	117.04 (0.69)	133.40 (2.27)	123.83 (0.64)	113.49 (0.37)	168.14 (1.06)
1996	2	118.55 (0.67)	134.61 (2.22)	126.01 (0.64)	114.71 (0.36)	172.33 (1.04)
1996	3	119.27 (0.69)	137.54 (2.28)	127.82 (0.65)	115.58 (0.36)	174.80 (1.07)
1996	4	122.15 (0.74)	136.58 (2.29)	128.04 (0.67)	115.21 (0.37)	175.76 (1.11)
1997	1	122.33 (0.73)	136.32 (2.43)	129.39 (0.70)	115.43 (0.38)	175.70 (1.14)
1997	2	122.97 (0.70)	140.75 (2.33)	131.44 (0.67)	117.25 (0.37)	179.79 (1.12)
1997	3	123.93 (0.69)	141.74 (2.33)	131.62 (0.66)	117.97 (0.37)	180.53 (1.11)
1997	4	125.23 (0.72)	141.22 (2.39)	132.05 (0.68)	118.70 (0.38)	180.46 (1.14)
1998	1	126.37 (0.72)	145.10 (2.43)	133.69 (0.68)	120.43 (0.38)	182.31 (1.16)
1998	2	128.69 (0.69)	145.97 (2.39)	136.09 (0.67)	122.61 (0.37)	186.50 (1.13)
1998	3	130.57 (0.70)	145.46 (2.39)	137.11 (0.67)	124.74 (0.38)	185.22 (1.12)
1998	4	131.91 (0.73)	145.01 (2.39)	138.14 (0.69)	125.79 (0.39)	187.24 (1.15)
1999	1	133.20 (0.75)	150.12 (2.55)	140.02 (0.72)	127.39 (0.40)	187.93 (1.19)
1999	2	136.56 (0.73)	151.61 (2.47)	141.27 (0.69)	130.53 (0.40)	190.64 (1.16)
1999	3	138.28 (0.76)	153.07 (2.48)	142.67 (0.71)	132.47 (0.41)	190.42 (1.17)
1999	4	138.95 (0.81)	153.01 (2.54)	143.87 (0.75)	134.26 (0.43)	191.08 (1.22)
2000	1	140.44 (0.83)	155.26 (2.65)	144.47 (0.77)	136.49 (0.43)	192.30 (1.24)
2000	2	143.78 (0.79)	159.14 (2.60)	146.53 (0.74)	139.69 (0.43)	194.39 (1.19)
2000	3	144.53 (0.80)	161.71 (2.64)	146.81 (0.73)	142.14 (0.44)	195.51 (1.20)
2000	4	144.92 (0.82)	159.54 (2.65)	147.29 (0.75)	143.29 (0.45)	194.49 (1.22)
2001	1	146.55 (0.84)	162.12 (2.73)	148.31 (0.76)	144.83 (0.46)	196.62 (1.22)
2001	2	148.50 (0.80)	165.35 (2.68)	149.50 (0.73)	147.66 (0.45)	198.52 (1.20)
2001	3	149.76 (0.83)	167.37 (2.71)	150.07 (0.74)	148.87 (0.46)	197.90 (1.20)
2001	4	149.64 (0.85)	168.40 (2.76)	151.61 (0.75)	148.97 (0.47)	198.14 (1.24)
2002	1	152.26 (0.87)	167.74 (2.81)	152.39 (0.78)	149.81 (0.48)	199.28 (1.26)
2002	2	153.00 (0.84)	173.44 (2.81)	153.62 (0.75)	152.76 (0.47)	200.35 (1.22)
2002	3	154.52 (0.85)	172.76 (2.81)	155.66 (0.77)	153.49 (0.47)	201.14 (1.21)
2002	4	155.74 (0.87)	173.85 (2.85)	155.55 (0.78)	153.80 (0.49)	203.13 (1.24)
2003	1	155.53 (0.89)	174.92 (2.91)	157.56 (0.80)	154.29 (0.49)	202.50 (1.26)
2003	2	158.31 (0.86)	179.38 (2.91)	160.03 (0.78)	156.31 (0.48)	206.41 (1.24)
2003	3	159.95 (0.87)	184.01 (2.97)	161.53 (0.78)	157.14 (0.48)	208.16 (1.25)
2003	4	160.48 (0.93)	183.59 (3.02)	163.24 (0.83)	157.19 (0.50)	207.88 (1.29)
2004	1	163.56 (0.97)	185.15 (3.08)	164.31 (0.84)	158.23 (0.52)	211.18 (1.32)
2004	2	165.55 (0.92)	189.28 (3.07)	167.92 (0.82)	161.07 (0.50)	216.17 (1.30)
2004	3	169.53 (0.96)	194.30 (3.14)	170.74 (0.83)	162.34 (0.51)	220.51 (1.33)
2004	4	170.94 (1.00)	192.90 (3.13)	171.54 (0.86)	162.82 (0.53)	224.24 (1.38)

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	South Carolina	South Dakota	Tennessee	Texas	Utah
2005	1	173.25 (1.03)	196.12 (3.28)	175.14 (0.89)	164.62 (0.55)	228.53 (1.43)
2005	2	177.28 (0.98)	202.42 (3.29)	179.00 (0.87)	168.43 (0.52)	237.21 (1.40)
2005	3	180.78 (1.00)	202.75 (3.26)	182.10 (0.88)	170.96 (0.53)	247.58 (1.45)
2005	4	185.88 (1.08)	207.43 (3.38)	185.28 (0.92)	172.58 (0.55)	256.87 (1.53)
2006	1	187.81 (1.10)	206.71 (3.43)	189.02 (0.96)	175.18 (0.57)	265.25 (1.59)
2006	2	192.21 (1.06)	212.31 (3.43)	193.78 (0.94)	179.06 (0.55)	277.77 (1.61)
2006	3	193.46 (1.07)	214.36 (3.46)	195.45 (0.95)	181.76 (0.56)	289.70 (1.68)
2006	4	197.51 (1.16)	214.15 (3.52)	197.15 (0.99)	183.58 (0.59)	300.20 (1.77)
2007	1	198.31 (1.16)	216.05 (3.59)	198.96 (1.00)	185.77 (0.60)	308.43 (1.83)
2007	2	202.10 (1.12)	218.62 (3.52)	203.90 (0.99)	189.72 (0.58)	320.98 (1.86)
2007	3	202.12 (1.14)	220.58 (3.57)	203.80 (1.00)	190.83 (0.59)	323.69 (1.91)
2007	4	200.11 (1.22)	220.27 (3.64)	201.14 (1.03)	190.16 (0.62)	316.59 (1.93)
2008	1	200.87 (1.26)	221.88 (3.69)	198.80 (1.05)	188.77 (0.63)	312.55 (1.96)
2008	2	199.88 (1.24)	223.21 (3.65)	199.45 (1.05)	191.18 (0.63)	309.34 (1.93)
2008	3	196.92 (1.32)	224.28 (3.72)	196.40 (1.08)	191.65 (0.66)	301.08 (1.95)
2008	4	189.50 (1.49)	220.89 (3.78)	191.85 (1.16)	187.44 (0.72)	287.06 (2.02)
2009	1	192.96 (1.51)	220.68 (3.78)	189.86 (1.16)	186.85 (0.76)	277.95 (2.02)
2009	2	191.69 (1.41)	223.14 (3.73)	191.19 (1.12)	189.95 (0.69)	271.54 (1.86)
2009	3	191.62 (1.49)	221.65 (3.77)	190.26 (1.13)	189.38 (0.70)	268.96 (1.86)
2009	4	186.59 (1.56)	222.03 (3.86)	188.35 (1.16)	188.65 (0.76)	264.72 (1.91)
2010	1	183.37 (1.71)	221.02 (4.13)	183.43 (1.22)	187.95 (0.80)	255.95 (1.99)
2010	2	183.44 (1.46)	220.57 (3.81)	187.69 (1.12)	191.65 (0.71)	260.12 (1.84)
2010	3	179.59 (1.56)	220.08 (3.78)	183.20 (1.16)	189.88 (0.76)	255.07 (1.86)
2010	4	179.30 (1.57)	215.37 (3.89)	180.81 (1.19)	184.60 (0.77)	249.63 (1.85)
2011	1	169.07 (1.57)	216.70 (4.08)	176.24 (1.22)	183.51 (0.80)	237.17 (1.83)
2011	2	170.65 (1.46)	218.05 (3.81)	179.22 (1.14)	187.91 (0.72)	240.14 (1.69)
2011	3	172.44 (1.47)	220.58 (3.81)	182.43 (1.13)	186.79 (0.73)	243.09 (1.71)
2011	4	173.99 (1.58)	222.00 (3.95)	179.46 (1.20)	186.38 (0.77)	239.29 (1.72)
2012	1	168.10 (1.54)	217.98 (3.88)	176.52 (1.19)	187.96 (0.79)	243.64 (1.78)
2012	2	176.74 (1.44)	223.64 (3.78)	184.11 (1.10)	194.28 (0.71)	255.81 (1.73)
2012	3	176.50 (1.38)	227.23 (3.81)	184.21 (1.10)	196.57 (0.73)	259.74 (1.74)
2012	4	174.03 (1.48)	226.66 (3.87)	185.42 (1.16)	197.68 (0.77)	264.04 (1.83)
2013	1	175.75 (1.48)	228.01 (4.00)	185.98 (1.19)	199.46 (0.78)	268.34 (1.90)
2013	2	182.91 (1.36)	232.07 (3.88)	194.06 (1.11)	207.48 (0.73)	283.00 (1.81)
2013	3	187.17 (1.41)	237.70 (3.94)	194.24 (1.11)	209.18 (0.73)	288.39 (1.83)
2013	4	182.80 (1.52)	238.64 (4.06)	194.59 (1.17)	210.85 (0.78)	285.61 (1.90)
2014	1	182.51 (1.63)	239.34 (4.20)	195.48 (1.24)	215.37 (0.83)	289.67 (1.98)
2014	2	189.15 (1.42)	243.85 (4.09)	201.85 (1.15)	220.68 (0.77)	297.13 (1.89)
2014	3	193.17 (1.45)	245.09 (4.07)	203.10 (1.16)	224.22 (0.79)	296.39 (1.89)
2014	4	192.56 (1.58)	247.60 (4.20)	202.92 (1.21)	225.02 (0.84)	297.21 (1.99)
2015	1	196.54 (1.64)	246.90 (4.33)	206.29 (1.26)	229.90 (0.89)	303.05 (2.02)
2015	2	202.95 (1.49)	252.84 (4.20)	212.41 (1.20)	237.41 (0.84)	312.44 (1.96)
2015	3	203.26 (1.50)	255.61 (4.26)	214.66 (1.20)	240.00 (0.86)	316.06 (1.98)
2015	4	206.41 (1.73)	256.48 (4.33)	215.86 (1.32)	241.02 (0.91)	319.74 (2.10)
2016	1	209.86 (1.73)	261.29 (4.66)	218.18 (1.37)	245.07 (0.95)	326.74 (2.18)
2016	2	212.54 (1.56)	265.68 (4.44)	226.92 (1.27)	253.34 (0.90)	339.01 (2.12)
2016	3	216.65 (1.61)	268.98 (4.46)	229.32 (1.29)	257.98 (0.93)	345.93 (2.15)
2016	4	219.81 (1.72)	269.31 (4.60)	231.48 (1.37)	258.39 (0.99)	345.93 (2.26)
2017	1	220.00 (1.77)	274.92 (4.98)	234.45 (1.45)	263.45 (1.04)	356.51 (2.38)
2017	2	226.06 (1.64)	282.84 (4.72)	243.05 (1.38)	273.93 (0.99)	368.75 (2.30)
2017	3	232.62 (1.72)	284.57 (4.77)	248.54 (1.41)	276.95 (1.02)	379.01 (2.42)
2017	4	234.53 (1.88)	281.38 (4.89)	252.14 (1.48)	278.23 (1.09)	382.24 (2.49)
2018	1	236.16 (1.97)	286.92 (5.12)	253.50 (1.59)	284.32 (1.15)	393.62 (2.65)
2018	2	244.98 (1.77)	296.20 (5.01)	261.65 (1.50)	291.36 (1.07)	411.57 (2.60)
2018	3	250.15 (1.86)	304.67 (5.16)	267.17 (1.55)	293.37 (1.11)	417.03 (2.70)
2018	4	250.39 (2.17)	298.49 (5.31)	269.55 (1.70)	292.41 (1.23)	419.63 (2.87)

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	Vermont	Virginia	Washington	West Virginia	Wisconsin	Wyoming
1991	1	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)	100.00 (.)
1991	2	99.74 (1.47)	99.91 (0.40)	101.73 (0.37)	100.70 (2.31)	101.80 (0.33)	103.92 (1.74)
1991	3	98.92 (1.54)	99.44 (0.41)	102.00 (0.37)	100.19 (2.38)	103.55 (0.34)	105.80 (1.73)
1991	4	98.55 (1.46)	100.76 (0.42)	103.73 (0.37)	102.86 (2.49)	103.88 (0.33)	105.90 (1.81)
1992	1	99.93 (1.43)	101.40 (0.41)	103.93 (0.36)	103.45 (2.45)	105.34 (0.32)	106.72 (1.65)
1992	2	101.07 (1.43)	100.68 (0.40)	105.51 (0.37)	107.30 (2.36)	108.67 (0.34)	108.90 (1.66)
1992	3	100.26 (1.40)	101.66 (0.39)	107.73 (0.37)	106.46 (2.35)	110.12 (0.33)	110.28 (1.67)
1992	4	101.12 (1.38)	101.89 (0.39)	108.32 (0.37)	106.75 (2.40)	111.67 (0.35)	113.28 (1.71)
1993	1	101.51 (1.75)	101.17 (0.45)	108.47 (0.41)	108.28 (2.52)	113.54 (0.43)	112.64 (1.84)
1993	2	101.26 (1.49)	102.30 (0.39)	110.90 (0.38)	112.31 (2.41)	116.48 (0.37)	116.08 (1.75)
1993	3	100.81 (1.58)	102.57 (0.40)	113.06 (0.40)	114.16 (2.49)	119.24 (0.38)	120.79 (1.81)
1993	4	101.35 (1.63)	102.79 (0.41)	114.10 (0.41)	112.75 (2.41)	120.96 (0.40)	123.52 (1.88)
1994	1	102.03 (1.98)	102.95 (0.46)	115.13 (0.43)	116.43 (2.75)	123.12 (0.45)	127.16 (1.98)
1994	2	102.44 (1.67)	104.25 (0.44)	118.29 (0.43)	118.11 (2.61)	126.10 (0.43)	129.48 (2.01)
1994	3	102.36 (1.83)	104.98 (0.47)	119.48 (0.47)	119.71 (2.72)	127.38 (0.47)	133.80 (2.06)
1994	4	99.67 (1.91)	105.55 (0.53)	119.33 (0.50)	119.67 (2.90)	128.21 (0.54)	134.90 (2.17)
1995	1	99.85 (2.75)	105.12 (0.57)	120.27 (0.53)	123.82 (3.15)	128.98 (0.56)	136.53 (2.21)
1995	2	102.50 (1.83)	105.80 (0.47)	120.28 (0.47)	122.51 (2.78)	131.30 (0.44)	141.05 (2.19)
1995	3	101.90 (1.69)	106.52 (0.45)	120.99 (0.46)	125.35 (2.81)	133.08 (0.45)	142.10 (2.18)
1995	4	97.72 (1.79)	106.02 (0.48)	120.68 (0.48)	124.96 (2.80)	133.63 (0.47)	144.38 (2.22)
1996	1	104.87 (1.93)	106.86 (0.51)	121.06 (0.47)	126.78 (2.90)	134.06 (0.49)	144.43 (2.27)
1996	2	103.84 (1.70)	107.84 (0.46)	123.25 (0.45)	126.91 (2.79)	137.30 (0.46)	146.90 (2.26)
1996	3	102.12 (1.72)	108.36 (0.47)	124.06 (0.47)	130.22 (2.94)	137.89 (0.48)	148.43 (2.33)
1996	4	102.53 (1.85)	108.16 (0.50)	123.44 (0.49)	125.17 (2.89)	137.74 (0.51)	145.77 (2.36)
1997	1	101.40 (2.14)	109.24 (0.53)	124.55 (0.49)	126.85 (2.96)	138.50 (0.54)	146.56 (2.43)
1997	2	101.20 (1.74)	109.82 (0.47)	127.56 (0.47)	131.66 (2.92)	140.75 (0.48)	151.10 (2.35)
1997	3	103.33 (1.74)	110.34 (0.46)	130.04 (0.47)	129.62 (2.81)	142.81 (0.48)	152.12 (2.37)
1997	4	103.16 (1.82)	111.07 (0.49)	130.17 (0.48)	129.80 (2.88)	142.36 (0.50)	150.87 (2.40)
1998	1	105.09 (1.80)	111.13 (0.48)	132.85 (0.49)	129.64 (2.94)	143.13 (0.51)	152.05 (2.41)
1998	2	105.68 (1.62)	113.25 (0.44)	137.18 (0.48)	134.58 (2.86)	146.44 (0.47)	155.06 (2.36)
1998	3	107.05 (1.61)	113.90 (0.45)	138.52 (0.48)	132.48 (2.82)	148.60 (0.49)	157.12 (2.42)
1998	4	108.69 (1.64)	114.99 (0.47)	139.80 (0.50)	133.06 (2.82)	149.31 (0.50)	155.08 (2.47)
1999	1	107.25 (1.95)	117.29 (0.49)	141.82 (0.53)	133.97 (3.02)	150.42 (0.55)	156.09 (2.48)
1999	2	112.15 (1.62)	118.88 (0.46)	145.50 (0.51)	136.34 (2.94)	154.73 (0.50)	158.01 (2.47)
1999	3	115.49 (1.67)	120.50 (0.47)	146.77 (0.53)	136.79 (3.02)	156.69 (0.52)	162.08 (2.51)
1999	4	114.77 (1.76)	121.78 (0.51)	148.05 (0.57)	135.90 (3.01)	157.61 (0.57)	161.24 (2.61)
2000	1	117.32 (1.95)	123.70 (0.53)	150.44 (0.58)	135.93 (3.07)	159.97 (0.60)	162.25 (2.60)
2000	2	120.75 (1.76)	127.56 (0.49)	152.55 (0.55)	139.16 (2.97)	163.50 (0.54)	166.81 (2.61)
2000	3	124.92 (1.78)	129.86 (0.50)	154.04 (0.55)	138.38 (2.94)	166.21 (0.54)	166.29 (2.59)
2000	4	126.71 (1.86)	131.10 (0.53)	154.91 (0.57)	137.04 (2.96)	166.74 (0.58)	169.66 (2.71)
2001	1	126.88 (1.91)	134.60 (0.55)	157.58 (0.57)	140.07 (3.02)	168.54 (0.57)	168.47 (2.65)
2001	2	134.78 (1.90)	139.07 (0.52)	160.03 (0.56)	139.24 (2.92)	172.54 (0.54)	173.23 (2.62)
2001	3	136.08 (1.90)	142.13 (0.54)	162.09 (0.57)	141.14 (2.96)	175.18 (0.56)	176.67 (2.67)
2001	4	137.94 (1.97)	143.12 (0.57)	162.36 (0.60)	141.57 (2.98)	176.35 (0.58)	180.17 (2.75)
2002	1	139.78 (2.13)	146.13 (0.58)	165.14 (0.61)	144.62 (3.10)	177.20 (0.61)	183.85 (2.87)
2002	2	144.09 (2.04)	151.88 (0.57)	168.45 (0.59)	146.91 (3.04)	181.50 (0.58)	189.17 (2.87)
2002	3	148.52 (2.04)	155.17 (0.58)	169.53 (0.59)	147.05 (3.04)	185.67 (0.58)	191.57 (2.90)
2002	4	149.23 (2.08)	157.23 (0.61)	171.88 (0.61)	149.06 (3.12)	186.71 (0.60)	193.90 (3.03)
2003	1	149.58 (2.15)	160.91 (0.63)	173.97 (0.63)	150.68 (3.16)	188.47 (0.62)	193.46 (3.00)
2003	2	154.66 (2.14)	167.25 (0.62)	177.87 (0.61)	154.47 (3.19)	192.97 (0.59)	202.28 (3.04)
2003	3	160.95 (2.20)	172.00 (0.64)	181.46 (0.62)	154.57 (3.17)	196.79 (0.61)	208.39 (3.12)
2003	4	163.50 (2.34)	176.18 (0.69)	184.38 (0.67)	155.43 (3.27)	198.99 (0.68)	208.49 (3.23)
2004	1	166.33 (2.55)	181.16 (0.74)	189.64 (0.70)	159.66 (3.44)	201.45 (0.70)	215.51 (3.32)
2004	2	179.48 (2.58)	189.55 (0.72)	197.24 (0.68)	162.66 (3.39)	206.33 (0.65)	221.02 (3.34)
2004	3	183.67 (2.58)	197.38 (0.75)	202.45 (0.71)	166.91 (3.42)	211.38 (0.68)	227.00 (3.42)
2004	4	188.36 (2.71)	203.18 (0.82)	207.92 (0.76)	169.55 (3.56)	212.50 (0.73)	228.93 (3.52)

FHFA House Price Indexes: 2018 Q4
Census Division and State indexes: 1991 Q1 = 100
Not Seasonally Adjusted, Purchase-Only HPI

Year	Qtr	Vermont	Virginia	Washington	West Virginia	Wisconsin	Wyoming
2005	1	191.38 (3.00)	210.71 (0.88)	214.09 (0.81)	170.41 (3.63)	212.27 (0.76)	235.92 (3.64)
2005	2	199.93 (2.84)	221.02 (0.86)	226.29 (0.79)	176.57 (3.64)	219.55 (0.71)	242.54 (3.66)
2005	3	206.27 (2.95)	228.86 (0.89)	237.47 (0.82)	179.56 (3.69)	222.76 (0.72)	253.56 (3.80)
2005	4	207.27 (3.15)	233.65 (0.96)	243.02 (0.88)	180.31 (3.79)	222.42 (0.78)	258.51 (3.94)
2006	1	205.02 (3.35)	239.33 (1.03)	251.12 (0.94)	182.47 (3.86)	223.47 (0.81)	267.25 (4.11)
2006	2	214.98 (3.10)	245.09 (0.96)	262.32 (0.92)	185.73 (3.83)	226.98 (0.73)	274.16 (4.11)
2006	3	214.89 (3.13)	245.18 (0.98)	268.34 (0.94)	187.73 (3.88)	228.09 (0.75)	281.95 (4.24)
2006	4	217.29 (3.26)	246.59 (1.06)	270.78 (1.01)	185.55 (3.90)	225.63 (0.79)	291.62 (4.50)
2007	1	212.60 (3.48)	248.48 (1.06)	277.16 (1.05)	190.68 (4.06)	225.06 (0.81)	294.96 (4.55)
2007	2	218.33 (3.23)	251.42 (1.00)	281.87 (0.98)	191.31 (3.93)	229.12 (0.74)	303.14 (4.58)
2007	3	219.52 (3.24)	248.08 (1.01)	283.07 (1.00)	194.52 (4.05)	227.88 (0.75)	309.94 (4.66)
2007	4	215.75 (3.33)	238.25 (1.04)	277.66 (1.06)	192.05 (4.11)	223.35 (0.80)	301.95 (4.70)
2008	1	216.25 (3.48)	234.72 (1.08)	271.21 (1.07)	189.98 (4.16)	221.32 (0.80)	303.98 (4.78)
2008	2	213.24 (3.30)	229.86 (1.00)	270.81 (1.08)	192.96 (4.11)	221.94 (0.77)	303.40 (4.79)
2008	3	210.39 (3.46)	224.36 (1.04)	264.02 (1.12)	190.34 (4.26)	219.40 (0.80)	304.84 (4.88)
2008	4	211.17 (3.73)	212.19 (1.14)	250.38 (1.20)	189.84 (4.41)	214.24 (0.85)	300.06 (5.25)
2009	1	207.80 (3.57)	212.49 (1.13)	248.33 (1.25)	182.99 (4.45)	216.07 (0.80)	286.50 (5.13)
2009	2	212.53 (3.41)	217.07 (1.06)	243.64 (1.11)	191.33 (4.28)	214.93 (0.74)	295.52 (4.91)
2009	3	211.45 (3.41)	216.31 (1.10)	238.63 (1.09)	186.98 (4.25)	212.13 (0.77)	293.29 (4.94)
2009	4	204.46 (3.47)	216.00 (1.17)	235.32 (1.13)	185.21 (4.29)	208.81 (0.81)	282.35 (4.91)
2010	1	209.40 (4.01)	209.90 (1.25)	232.66 (1.21)	184.55 (4.61)	203.56 (0.88)	280.04 (5.25)
2010	2	204.52 (3.43)	216.42 (1.09)	234.18 (1.10)	187.57 (4.36)	207.00 (0.74)	285.74 (4.83)
2010	3	203.17 (3.52)	210.52 (1.13)	229.40 (1.12)	189.89 (4.53)	206.28 (0.78)	280.56 (4.84)
2010	4	199.84 (3.41)	205.64 (1.20)	219.95 (1.11)	187.43 (4.54)	204.43 (0.81)	275.91 (4.85)
2011	1	202.74 (3.95)	201.41 (1.22)	212.44 (1.12)	184.22 (4.99)	194.05 (0.90)	280.41 (5.11)
2011	2	199.48 (3.51)	206.81 (1.11)	210.87 (1.01)	181.83 (4.33)	197.30 (0.78)	285.27 (4.74)
2011	3	201.38 (3.56)	206.51 (1.12)	208.72 (0.99)	186.73 (4.39)	198.72 (0.75)	286.74 (4.79)
2011	4	207.16 (3.73)	201.72 (1.19)	203.30 (1.01)	185.14 (4.48)	196.22 (0.79)	276.19 (4.84)
2012	1	205.01 (4.04)	202.43 (1.24)	202.56 (1.03)	190.83 (5.07)	193.11 (0.80)	279.82 (5.01)
2012	2	201.77 (3.48)	210.92 (1.09)	212.61 (0.96)	188.24 (4.46)	197.69 (0.72)	289.99 (4.81)
2012	3	206.03 (3.46)	211.39 (1.11)	216.13 (0.98)	189.96 (4.56)	199.98 (0.73)	297.34 (4.90)
2012	4	200.64 (3.44)	210.68 (1.21)	219.00 (1.02)	196.19 (4.71)	196.83 (0.76)	294.27 (5.03)
2013	1	207.60 (3.93)	210.29 (1.21)	221.31 (1.08)	192.02 (4.70)	196.13 (0.79)	286.58 (4.98)
2013	2	207.17 (3.51)	222.43 (1.08)	230.98 (0.97)	193.12 (4.49)	205.24 (0.73)	300.18 (4.89)
2013	3	211.71 (3.61)	220.87 (1.10)	238.79 (1.00)	196.39 (4.56)	208.01 (0.75)	304.57 (4.92)
2013	4	207.14 (3.99)	216.73 (1.21)	232.64 (1.07)	194.39 (4.70)	205.32 (0.82)	299.99 (5.10)
2014	1	201.45 (4.26)	216.68 (1.30)	235.21 (1.17)	201.58 (5.43)	202.99 (0.89)	308.64 (5.53)
2014	2	213.28 (3.94)	225.13 (1.14)	246.16 (1.05)	200.56 (4.77)	211.04 (0.76)	308.20 (5.00)
2014	3	214.12 (4.01)	223.66 (1.15)	249.70 (1.06)	205.60 (4.91)	212.70 (0.77)	312.35 (4.99)
2014	4	202.82 (3.78)	224.44 (1.27)	249.20 (1.12)	200.62 (4.95)	211.92 (0.86)	314.12 (5.31)
2015	1	205.26 (4.20)	223.57 (1.34)	254.48 (1.19)	195.94 (5.63)	212.76 (0.88)	319.85 (5.53)
2015	2	217.00 (3.67)	229.81 (1.18)	268.24 (1.10)	205.41 (5.07)	219.38 (0.77)	317.02 (5.20)
2015	3	220.53 (3.91)	229.68 (1.22)	272.01 (1.14)	207.23 (5.05)	220.61 (0.79)	325.45 (5.32)
2015	4	211.59 (3.90)	229.84 (1.36)	276.29 (1.25)	211.31 (5.30)	220.29 (0.86)	322.32 (5.49)
2016	1	208.21 (4.33)	231.52 (1.44)	282.05 (1.34)	203.83 (5.41)	222.02 (0.92)	321.78 (5.64)
2016	2	217.14 (3.97)	239.70 (1.20)	296.25 (1.23)	210.35 (5.05)	230.63 (0.81)	325.89 (5.33)
2016	3	221.82 (3.89)	240.13 (1.23)	301.92 (1.24)	211.70 (5.10)	232.94 (0.83)	327.21 (5.51)
2016	4	216.74 (4.64)	239.67 (1.34)	304.29 (1.34)	211.19 (5.36)	233.02 (0.91)	322.12 (5.70)
2017	1	224.83 (4.77)	239.67 (1.45)	313.29 (1.49)	205.93 (5.43)	234.84 (1.03)	326.93 (6.20)
2017	2	224.32 (4.22)	250.32 (1.27)	331.60 (1.39)	211.29 (5.38)	244.94 (0.89)	331.62 (5.60)
2017	3	225.45 (4.06)	251.75 (1.31)	336.17 (1.41)	214.30 (5.18)	248.97 (0.92)	335.58 (5.77)
2017	4	232.46 (4.42)	251.78 (1.40)	340.90 (1.52)	211.52 (5.45)	245.94 (0.97)	337.01 (5.99)
2018	1	228.75 (5.09)	255.49 (1.61)	354.39 (1.72)	210.10 (5.80)	251.29 (1.11)	337.39 (6.20)
2018	2	235.62 (4.33)	261.60 (1.35)	369.78 (1.57)	215.60 (5.38)	262.76 (0.97)	343.14 (5.86)
2018	3	236.09 (4.42)	263.05 (1.41)	372.50 (1.60)	221.55 (5.47)	266.64 (0.99)	352.38 (6.04)
2018	4	239.34 (4.89)	262.86 (1.58)	367.82 (1.77)	214.54 (5.78)	264.52 (1.11)	350.30 (6.54)

Source: FHFA

2018 Q4 Volatility Parameter Estimates

Not Seasonally Adjusted, Purchase-Only HPI

Division/State	A Parameter*	B Parameter*	Annualized Volatility Estimate (Four Quarter)
Alabama	0.0014246584	-0.0000016428	0.0753149919
Alaska	0.0008916963	-0.0000042413	0.0591517028
Arizona	0.0016569924	-0.0000058605	0.0808344145
Arkansas	0.0010959264	0.0000014963	0.0663901106
California	0.0015507037	-0.0000042708	0.0783229357
Colorado	0.0015893106	-0.0000049339	0.0792357261
Connecticut	0.0012978595	-0.0000036020	0.0716505831
Delaware	0.0013123181	-0.0000052322	0.0718718167
District of Columbia	0.0024211266	-0.0000098733	0.0976039627
Florida	0.0018885231	-0.0000042329	0.0865237877
Georgia	0.0017335446	0.0000000062	0.0832723101
Hawaii	0.0022057552	-0.0000109733	0.0929916533
Idaho	0.0017644083	-0.0000078744	0.0832564850
Illinois	0.0014275231	-0.0000003109	0.0755322274
Indiana	0.0015850531	-0.0000052791	0.0790932775
Iowa	0.0011501742	-0.0000037041	0.0673901476
Kansas	0.0011429348	-0.0000019040	0.0673889823
Kentucky	0.0010547887	-0.0000017042	0.0647447827
Louisiana	0.0013517090	-0.0000019361	0.0733202492
Maine	0.0016386205	-0.0000062559	0.0803392025
Maryland	0.0014270920	-0.0000045277	0.0750727955
Massachusetts	0.0013969597	-0.0000051352	0.0742002373
Michigan	0.0017192580	-0.0000066020	0.0822885165
Minnesota	0.0013234967	-0.0000032977	0.0723962927
Mississippi	0.0014401902	-0.0000051179	0.0753583128
Missouri	0.0013906024	-0.0000012491	0.0744474532
Montana	0.0014965644	-0.0000058363	0.0767650811
Nebraska	0.0010309993	-0.0000021955	0.0639442690
Nevada	0.0012043136	-0.0000057420	0.0687414181
New Hampshire	0.0013385738	-0.0000069444	0.0724098415
New Jersey	0.0015861083	-0.0000051193	0.0791361127
New Mexico	0.0012449286	-0.0000043904	0.0700675941
New York	0.0021923743	-0.0000025497	0.0934275234
North Carolina	0.0016589630	-0.0000024176	0.0812229703
North Dakota	0.0012189787	-0.0000052032	0.0692290618
Ohio	0.0013784095	-0.0000027450	0.0739575458
Oklahoma	0.0014535463	-0.0000049968	0.0757247414
Oregon	0.0015499692	-0.0000042808	0.0783031528
Pennsylvania	0.0016201661	-0.0000018126	0.0803222476
Rhode Island	0.0013159552	-0.0000048183	0.0720189455
South Carolina	0.0016356459	-0.0000006366	0.0808232504
South Dakota	0.0009682196	-0.0000014329	0.0620479879

2018 Q4 Volatility Parameter Estimates

Not Seasonally Adjusted, Purchase-Only HPI

Division/State	A Parameter*	B Parameter*	Annualized Volatility Estimate (Four Quarter)
Tennessee	0.0014328905	-0.0000010977	0.0755909963
Texas	0.0017836533	-0.0000029280	0.0841888619
Utah	0.0010158510	-0.0000026386	0.0634128276
Vermont	0.0014296190	-0.0000058028	0.0750042059
Virginia	0.0013548836	-0.0000029810	0.0732928309
Washington	0.0012961411	-0.0000003109	0.0719693715
West Virginia	0.0019942404	-0.0000091580	0.0884897360
Wisconsin	0.0012270934	-0.0000030673	0.0697086504
Wyoming	0.0013964614	-0.0000063690	0.0740536343

*For details on how these values are constructed and information on what they represent, see
<https://www.fhfa.gov/PolicyProgramsResearch/Research/Pages/HPI-Technical-Description.aspx>.

Source: FHFA