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# FEDERAL HOUSING FINANCE AGENCY



## NEWS RELEASE

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### **HOME PRICES SLIDE FURTHER IN SUMMER MONTHS; FEW STATES SHOW PRICE GAINS**

**WASHINGTON, DC** – U.S. home prices fell **1.8 percent** in the third quarter of 2008 from the previous quarter, according to FHFA's seasonally-adjusted **purchase-only** house price index, which is based on data from repeat home sales. This decline was greater than the 1.4 percent decline in the prior quarter and the largest in the purchase-only index's 17-year history. Over the past year, prices fell 6.0 percent between the third quarter of 2007 and the third quarter of 2008.

FHFA's **all-transactions** House Price Index (HPI), which includes data from home sales and appraisals for refinancings, showed more weakness over the latest quarter than the purchase-only index. The all-transactions HPI fell 2.7 percent in the latest quarter and was down 4.0 percent over the four-quarter period. The four-quarter decline was the largest four-quarter drop in the history of the index, which extends back to 1975.

"The impact of foreclosures and tightening credit conditions weighed heavily on house prices in the third quarter," said FHFA Director James B. Lockhart. "Recent public and private foreclosure prevention efforts, including the Streamlined Modification Program we recently announced with the U.S. Treasury Department, the Federal Housing Administration (FHA), Fannie Mae, Freddie Mac and HOPE NOW, provide some hope for moderating the adverse effect of foreclosures on families and on housing markets. Recent government actions to stabilize financial markets are aimed at countering the tight credit conditions affecting housing."

With this release, FHFA continues its publication of its monthly price index, which was introduced in February. Monthly price trends are shown on pages 8 and 9 and are provided for months through September. Prices fell 1.3 percent between August and

September on a seasonally-adjusted basis and are down 7.9 percent since their April 2007 peak.

While the national purchase-only house price index fell 6.0 percent between the third quarters of 2007 and 2008, prices of other goods and services rose 6.7 percent. Accordingly, the inflation-adjusted price of homes fell approximately 12.7 percent over the latest year.

"Prices continued their retreat in most areas in the third quarter," said FHFA Chief Economist Patrick Lawler. "While housing affordability has improved and may have drawn in some new buyers, it seems that high inventory levels and buyer uncertainty have had the dominant impact on prices."

### **Significant Findings:**

#### **Purchase-only Index:**

1. Prices fell in the latest quarter in 41 states.
2. Eight states exhibited quarterly price declines of more than three percent and three—Nevada, California, and Arizona—saw price declines of more than five percent.
3. All nine Census Divisions experienced price declines in the latest quarter. Prices were weakest in the Pacific Census Division, which experienced a 5.4 percent price decline in the quarter and strongest in the West South Central Division, which experienced a price decline of 0.2 percent.

#### **All- transactions HPI:**

4. The states with the greatest price appreciation between the third quarters of 2007 and 2008 were: North Dakota (4.0%), South Dakota (3.9%), Texas (3.2%), Alabama (2.8%), and Oklahoma (2.8%). The states with the sharpest depreciation for the same period were: Nevada (-20.9%), California (-20.8%), Florida (-16.0%), Arizona (-13.5%), and Rhode Island (-8.0%).
5. The MSAs with the greatest appreciation over the past year were: Austin-Round Rock, TX (5.6%), Augusta-Richmond County, GA-SC (5.5%), and Rapid City, SD (5.4%)
6. Of the 20 ranked cities with the greatest price declines over the last four quarters, all but one (Las Vegas-Paradise, NV) was in California or Florida.
7. The MSAs with the sharpest depreciation over the year were: Merced, CA (-42.3%), Stockton, CA (-41.4%), and Modesto, CA (-36.7%).

The complete list of state appreciation rates can be found on pages 18 and 19.  
The complete list of city (MSA) appreciation rates is available on pages 32 - 46.

### **Highlights/Technical Note**

The quarter's Highlights piece addresses the weighting system used in calculating the national price index. The article analyzes the benefits of and issues surrounding alternative weighting systems that might be employed.

## **Background**

FHFA's purchase-only and all-transactions house price indexes track average house price changes in repeat sales or refinancings of the same single-family properties. The purchase-only index is based on more than five million repeat sales transactions, while the all-transactions index includes approximately 36 million repeat transactions. Both indexes are based on data obtained from Fannie Mae and Freddie Mac for mortgages originated over the past 34 years.

FHFA analyzes the combined mortgage records of Fannie Mae and Freddie Mac, which form the nation's largest database of conventional, conforming mortgage transactions. The conforming loan limit for mortgages purchased since the beginning of 2006 has been \$417,000. Legislation enacted in February 2008 has raised it for this year to as much as \$729,750 in high-cost areas in the continental United States for loans originated between mid-year 2007 and the end of 2008. The national loan limit in the continental U.S. will be \$417,000 for 2009, with higher limits of up to \$625,500 in high-cost areas. The 2009 limits were recently announced and can be found at <http://www.ofheo.gov/Regulations.aspx?Nav=128>. These higher limit loans are included in the HPI.

This HPI report contains four tables: 1) A ranking of the 50 States and Washington, D.C. by House Price Appreciation; 2) Percentage Changes in House Price Appreciation by Census Division; 3) A ranking of 292 MSAs and Metropolitan Divisions by House Price Appreciation; and 4) A list of one-year and five-year House Price Appreciation rates for MSAs not ranked.

This report was previously published by the Office of Federal Housing Enterprise Oversight (OFHEO). FHFA's full PDF of the report is at: [www.ofheo.gov/media/pdf/3q08hpi.pdf](http://www.ofheo.gov/media/pdf/3q08hpi.pdf). Also, be sure to visit [www.FHFA.gov](http://www.FHFA.gov) to use the FHFA House Price calculator. Please e-mail [FHFAinfo@FHFA.gov](mailto:FHFAinfo@FHFA.gov) for a printed copy of the report. The next quarterly HPI report, which will release data for the fourth quarter of 2008, will be posted February 24, 2009. The next monthly index will be released on December 23, 2008.

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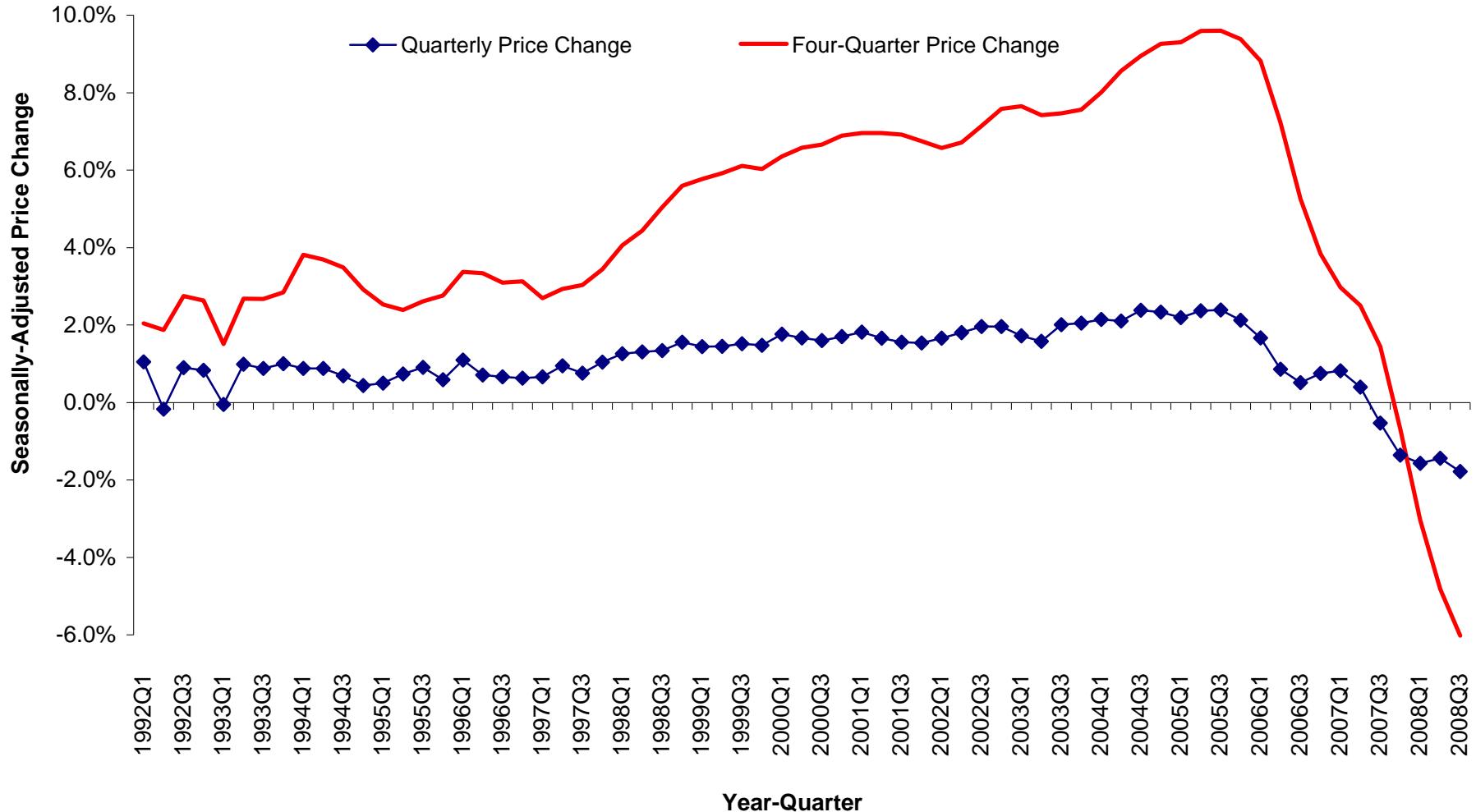
*The Federal Housing Finance Agency regulates Fannie Mae, Freddie Mac and the 12 Federal Home Loan Banks. These government-sponsored enterprises provide more than \$6.2 trillion in funding for the U.S. mortgage markets and financial institutions.*

**FHFA SEASONALLY-ADJUSTED HOUSE PRICE INDEX FOR USA**  
 (Includes Only Valuation Data from Purchases)  
 1991Q2 - 2008Q3

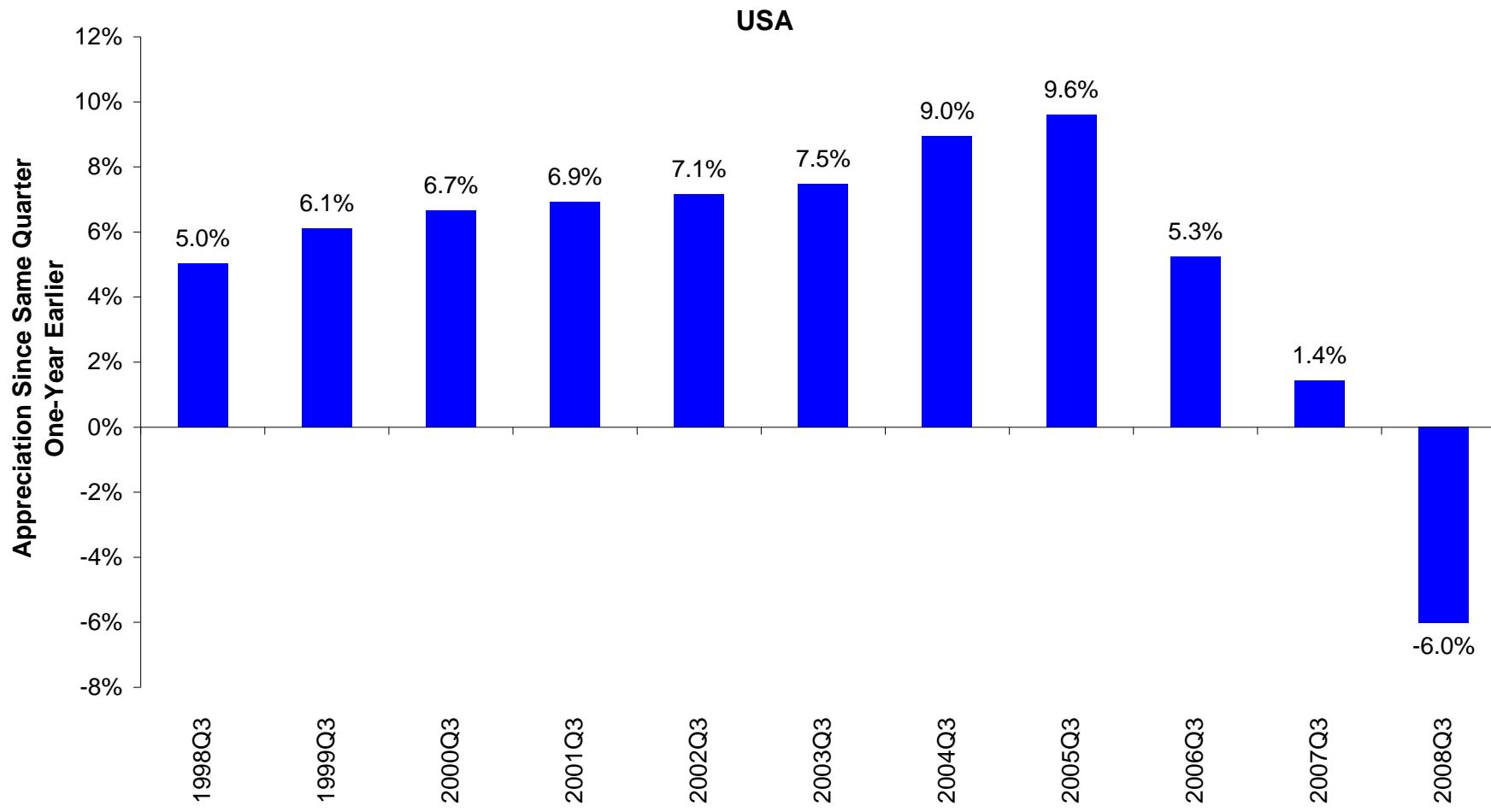
| Quarter | House Price Quarterly<br>Appreciation<br>(%) | House Price Quarterly<br>Appreciation<br>Annualized<br>(%) | House Price<br>Appreciation From<br>Same Quarter One<br>Year Earlier<br>(%) |
|---------|--|--|---|
| 2008Q3  | -1.78%                                       | -7.12%   | -6.02%  |
| 2008Q2  | -1.44%                                       | -5.76%   | -4.82%  |
| 2008Q1  | -1.57%                                       | -6.28%   | -3.04%  |
| 2007Q4  | -1.36%                                       | -5.44%   | -0.68%  |
| 2007Q3  | -0.53%                                       | -2.12%   | 1.44%   |
| 2007Q2  | 0.40%  | 1.60%  | 2.50%   |
| 2007Q1  | 0.82%  | 3.28%  | 2.97%   |
| 2006Q4  | 0.75%  | 3.00%  | 3.84%   |
| 2006Q3  | 0.51%  | 2.04%  | 5.25%   |
| 2006Q2  | 0.86%  | 3.44%  | 7.22%   |
| 2006Q1  | 1.67%  | 6.68%  | 8.82%   |
| 2005Q4  | 2.12%  | 8.48%  | 9.38%   |
| 2005Q3  | 2.39%  | 9.56%  | 9.60%   |
| 2005Q2  | 2.37%  | 9.48%  | 9.59%   |
| 2005Q1  | 2.19%  | 8.76%  | 9.30%   |
| 2004Q4  | 2.33%  | 9.32%  | 9.26%   |
| 2004Q3  | 2.38%  | 9.52%  | 8.95%   |
| 2004Q2  | 2.10%  | 8.40%  | 8.56%   |
| 2004Q1  | 2.14%  | 8.56%  | 8.01%   |
| 2003Q4  | 2.05%  | 8.20%  | 7.56%   |
| 2003Q3  | 2.01%  | 8.04%  | 7.47%   |
| 2003Q2  | 1.58%  | 6.32%  | 7.42%   |
| 2003Q1  | 1.72%  | 6.88%  | 7.65%   |
| 2002Q4  | 1.96%  | 7.84%  | 7.58%   |
| 2002Q3  | 1.96%  | 7.84%  | 7.14%   |
| 2002Q2  | 1.80%  | 7.20%  | 6.71%   |
| 2002Q1  | 1.66%  | 6.64%  | 6.57%   |
| 2001Q4  | 1.54%  | 6.16%  | 6.75%   |
| 2001Q3  | 1.56%  | 6.24%  | 6.92%   |
| 2001Q2  | 1.66%  | 6.64%  | 6.96%   |
| 2001Q1  | 1.82%  | 7.28%  | 6.96%   |
| 2000Q4  | 1.70%  | 6.80%  | 6.89%   |
| 2000Q3  | 1.60%  | 6.40%  | 6.66%   |

| Quarter | House Price Quarterly Appreciation (%) | House Price Quarterly Appreciation Annualized (%) | House Price Appreciation From Same Quarter One Year Earlier (%) |
|---------|--|---|---|
| 2000Q2  | 1.67%                                  | 6.68%   | 6.58%   |
| 2000Q1  | 1.76%                                  | 7.04%   | 6.35%   |
| 1999Q4  | 1.48%                                  | 5.92%   | 6.03%   |
| 1999Q3  | 1.52%                                  | 6.08%   | 6.11%   |
| 1999Q2  | 1.45%                                  | 5.80%   | 5.92%   |
| 1999Q1  | 1.44%                                  | 5.76%   | 5.77%   |
| 1998Q4  | 1.56%                                  | 6.24%   | 5.59%   |
| 1998Q3  | 1.34%                                  | 5.36%   | 5.04%   |
| 1998Q2  | 1.31%                                  | 5.24%   | 4.44%   |
| 1998Q1  | 1.26%                                  | 5.04%   | 4.06%   |
| 1997Q4  | 1.04%                                  | 4.16%   | 3.44%   |
| 1997Q3  | 0.76%                                  | 3.04%   | 3.03%   |
| 1997Q2  | 0.95%                                  | 3.80%   | 2.93%   |
| 1997Q1  | 0.66%                                  | 2.64%   | 2.69%   |
| 1996Q4  | 0.63%                                  | 2.52%   | 3.13%   |
| 1996Q3  | 0.66%                                  | 2.64%   | 3.09%   |
| 1996Q2  | 0.71%                                  | 2.84%   | 3.34%   |
| 1996Q1  | 1.10%                                  | 4.40%   | 3.37%   |
| 1995Q4  | 0.59%                                  | 2.36%   | 2.76%   |
| 1995Q3  | 0.91%                                  | 3.64%   | 2.61%   |
| 1995Q2  | 0.74%                                  | 2.96%   | 2.39%   |
| 1995Q1  | 0.50%                                  | 2.00%   | 2.53%   |
| 1994Q4  | 0.44%                                  | 1.76%   | 2.92%   |
| 1994Q3  | 0.69%                                  | 2.76%   | 3.49%   |
| 1994Q2  | 0.88%                                  | 3.52%   | 3.69%   |
| 1994Q1  | 0.88%                                  | 3.52%   | 3.81%   |
| 1993Q4  | 1.00%                                  | 4.00%   | 2.84%   |
| 1993Q3  | 0.88%                                  | 3.52%   | 2.67%   |
| 1993Q2  | 0.99%                                  | 3.96%   | 2.68%   |
| 1993Q1  | -0.05%                                 | -0.20%  | 1.51%   |
| 1992Q4  | 0.83%                                  | 3.32%   | 2.63%   |
| 1992Q3  | 0.90%                                  | 3.60%   | 2.75%   |
| 1992Q2  | -0.17%                                 | -0.68%  | 1.87%   |
| 1992Q1  | 1.05%                                  | 4.20%   | 2.04%   |
| 1991Q4  | 0.94%                                  | 3.76%   |   |
| 1991Q3  | 0.03%                                  | 0.12%   |   |
| 1991Q2  | 0.00%                                  | 0.00%   |   |

**FHFA HOUSE PRICE INDEX HISTORY FOR USA**  
**Seasonally-Adjusted Price Change Measured in Purchase-Only Index**



**HOUSE PRICE APPRECIATION OVER PREVIOUS FOUR QUARTERS**  
**(Seasonally-Adjusted Purchase-Only Index)**



## 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 |
|-------------------------|--------------|---------------|--------------|--------------------|--------------------|--------------------|--------------------|--------------|-----------------|----------------|
| <b>Aug 08 - Sep 08</b>  | <b>-1.3%</b> | <b>-2.1%</b>  | <b>-2.6%</b> | <b>-0.5%</b>       | <b>0.7%</b>        | <b>-1.9%</b>       | <b>-0.8%</b>       | <b>-1.2%</b> | <b>0.8%</b>     | <b>-2.8%</b>   |
| <b>Jul 08 - Aug 08</b>  | <b>-0.8%</b> | <b>-2.1%</b>  | <b>-1.1%</b> | <b>-0.3%</b>       | <b>-0.9%</b>       | <b>0.1%</b>        | <b>-0.7%</b>       | <b>-0.1%</b> | <b>-0.6%</b>    | <b>-1.0%</b>   |
| (Previous Estimate)     | -0.6%        | -1.8%         | -0.8%        | -0.4%              | -0.6%              | -0.1%              | -0.7%              | 0.4%         | -0.3%           | -0.5%          |
| <b>Jun 08 - Jul 08</b>  | <b>-0.7%</b> | <b>-2.1%</b>  | <b>-1.2%</b> | <b>-0.4%</b>       | <b>-0.4%</b>       | <b>-0.6%</b>       | <b>-0.1%</b>       | <b>-1.5%</b> | <b>-0.3%</b>    | <b>-0.3%</b>   |
| (Previous Estimate)     | -0.8%        | -2.2%         | -0.7%        | -0.4%              | -0.5%              | -0.7%              | -0.1%              | -1.5%        | -0.4%           | -0.6%          |
| <b>May 08 - Jun 08</b>  | <b>-0.3%</b> | <b>-2.1%</b>  | <b>0.4%</b>  | <b>0.2%</b>        | <b>1.1%</b>        | <b>-0.6%</b>       | <b>-0.2%</b>       | <b>0.8%</b>  | <b>-0.9%</b>    | <b>-0.1%</b>   |
| (Previous Estimate)     | -0.3%        | -2.3%         | 0.1%         | 0.1%               | 1.3%               | -0.6%              | -0.2%              | 0.9%         | -0.8%           | 0.1%           |
| <b>Apr 08 - May 08</b>  | <b>-0.5%</b> | <b>-1.3%</b>  | <b>-0.4%</b> | <b>-0.2%</b>       | <b>-0.7%</b>       | <b>0.6%</b>        | <b>0.0%</b>        | <b>-1.0%</b> | <b>0.3%</b>     | <b>-1.4%</b>   |
| (Previous Estimate)     | -0.5%        | -1.1%         | -0.5%        | -0.1%              | -0.7%              | 0.7%               | 0.0%               | -1.0%        | 0.1%            | -1.5%          |
| <b>Mar 08 - Apr 08</b>  | <b>-0.8%</b> | <b>-2.3%</b>  | <b>-0.9%</b> | <b>-0.4%</b>       | <b>0.6%</b>        | <b>-1.2%</b>       | <b>0.8%</b>        | <b>-1.3%</b> | <b>-0.9%</b>    | <b>-0.5%</b>   |
| (Previous Estimate)     | -0.7%        | -2.1%         | -0.8%        | -0.4%              | 0.5%               | -1.3%              | 0.7%               | -1.3%        | -1.0%           | -0.4%          |
| <b>12-Month Change:</b> |              |               |              |                    |                    |                    |                    |              |                 |                |
| Sep 07 - Sep 08         | <b>-7.0%</b> | <b>-20.5%</b> | <b>-8.6%</b> | <b>-3.1%</b>       | <b>0.5%</b>        | <b>-4.6%</b>       | <b>-2.6%</b>       | <b>-5.2%</b> | <b>-1.8%</b>    | <b>-9.4%</b>   |

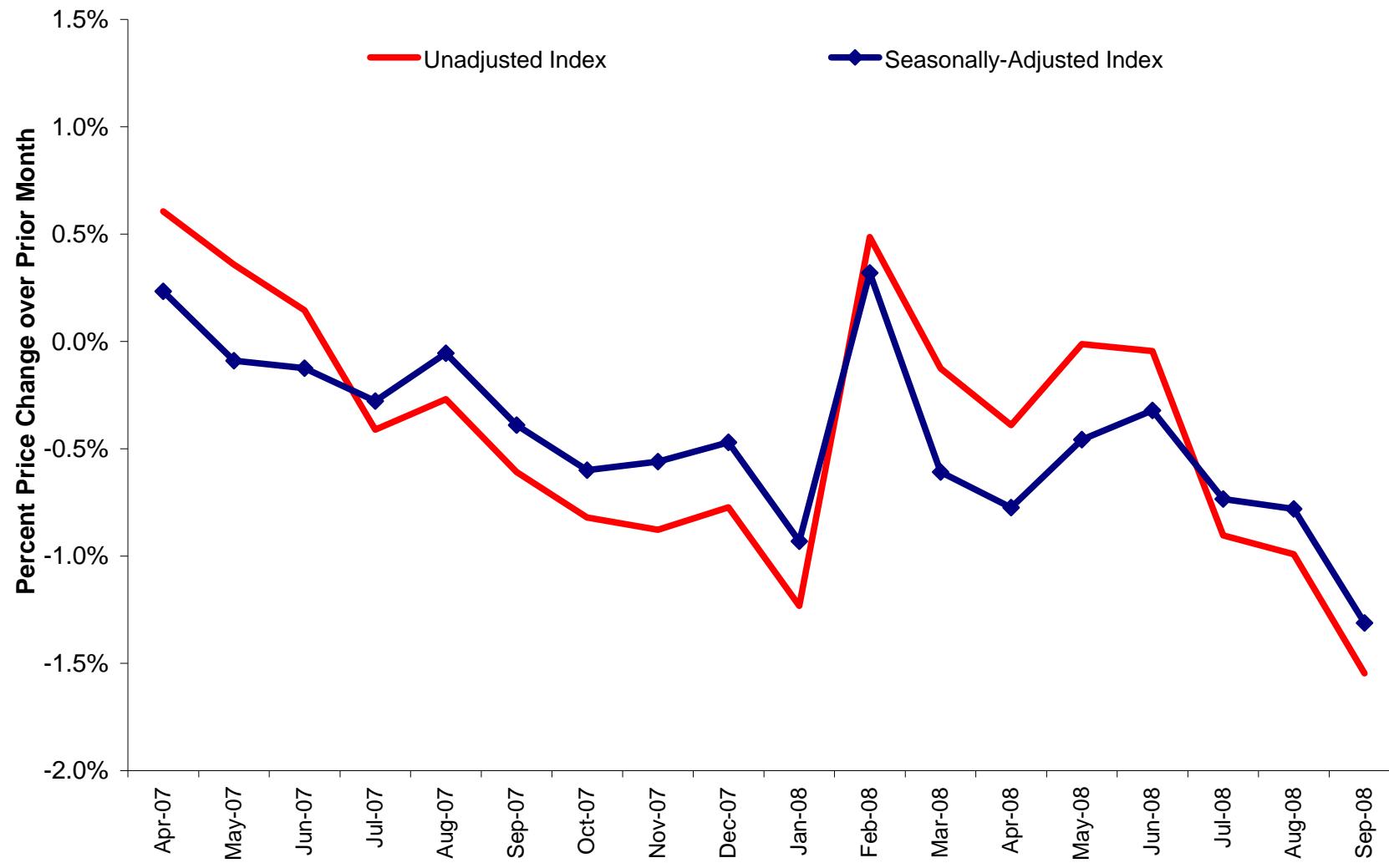
## Monthly Index Values for Latest 18 Months: U.S. and Census Divisions

(Purchase-Only Index, Seasonally-Adjusted, 1991Q1=100)

|              | U.S.  | Pacific | Mountain | West North Central | West South Central | East North Central | East South Central | New England | Middle Atlantic | South Atlantic |
|--------------|-------|---------|----------|--------------------|--------------------|--------------------|--------------------|-------------|-----------------|----------------|
| September-08 | 206.8 | 202.6   | 259.8    | 211.8              | 199.3              | 183.5              | 196.8              | 216.6       | 220.0           | 212.2          |
| August-08    | 209.5 | 207.0   | 266.6    | 213.0              | 197.9              | 187.1              | 198.5              | 219.2       | 218.2           | 218.3          |
| July-08      | 211.2 | 211.5   | 269.7    | 213.6              | 199.7              | 186.9              | 199.8              | 219.3       | 219.5           | 220.5          |
| June-08      | 212.8 | 216.1   | 272.9    | 214.4              | 200.5              | 188.1              | 200.1              | 222.6       | 220.1           | 221.2          |
| May-08       | 213.4 | 220.6   | 271.8    | 214.1              | 198.3              | 189.3              | 200.4              | 220.9       | 222.0           | 221.5          |
| April-08     | 214.4 | 223.5   | 273.0    | 214.4              | 199.6              | 188.2              | 200.4              | 223.1       | 221.3           | 224.5          |
| March-08     | 216.1 | 228.8   | 275.5    | 215.3              | 198.5              | 190.6              | 198.8              | 226.1       | 223.4           | 225.7          |
| February-08  | 217.4 | 235.8   | 277.1    | 215.6              | 198.4              | 190.6              | 200.5              | 229.4       | 224.2           | 225.4          |
| January-08   | 216.7 | 236.9   | 278.3    | 213.0              | 197.2              | 188.4              | 198.9              | 224.9       | 224.1           | 227.0          |
| December-07  | 218.8 | 242.4   | 278.1    | 217.4              | 197.9              | 189.2              | 201.2              | 229.6       | 225.0           | 228.3          |
| November-07  | 219.8 | 246.5   | 277.5    | 217.3              | 197.9              | 191.3              | 200.6              | 227.2       | 224.7           | 230.2          |
| October-07   | 221.0 | 251.3   | 280.9    | 216.6              | 198.4              | 191.0              | 201.4              | 230.4       | 224.8           | 231.9          |
| September-07 | 222.4 | 254.9   | 284.2    | 218.6              | 198.4              | 192.4              | 202.1              | 228.6       | 224.0           | 234.2          |
| August-07    | 223.2 | 257.7   | 287.3    | 217.7              | 199.0              | 193.6              | 201.5              | 230.2       | 224.7           | 234.2          |
| July-07      | 223.4 | 259.9   | 285.7    | 218.4              | 197.6              | 194.2              | 200.9              | 231.3       | 225.7           | 233.3          |
| June-07      | 224.0 | 260.7   | 287.3    | 218.5              | 196.9              | 195.4              | 201.6              | 231.6       | 225.6           | 234.6          |
| May-07       | 224.3 | 261.8   | 286.1    | 219.1              | 196.6              | 195.6              | 200.8              | 232.5       | 225.6           | 235.6          |
| April-07     | 224.5 | 263.7   | 286.6    | 219.4              | 195.5              | 195.7              | 200.3              | 233.3       | 226.9           | 235.1          |

## Seasonally-Adjusted and Unadjusted Monthly Appreciation Rates

Purchase-Only Index--USA

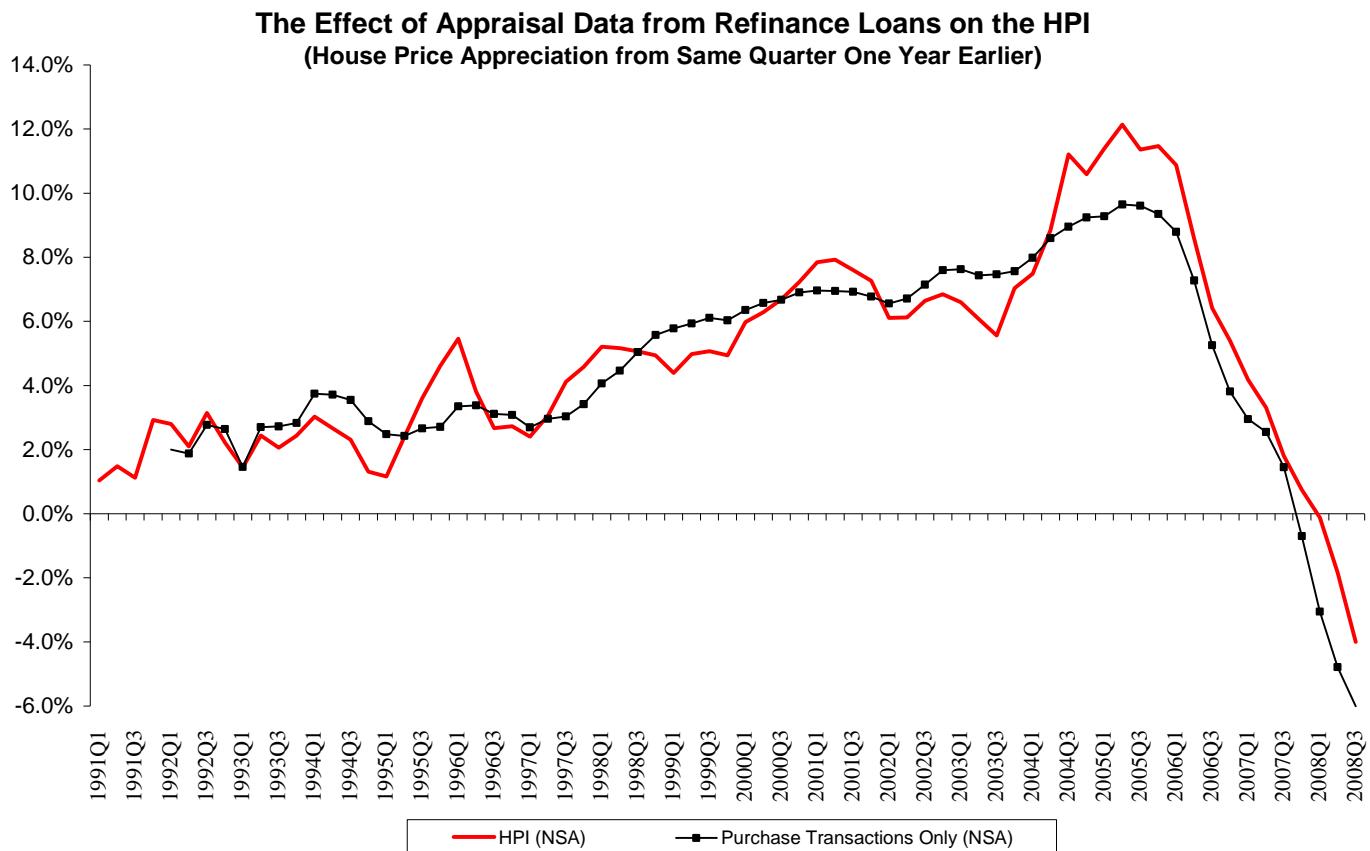


## Comparison of the House Price Index and a Purchase-Only Index

An important factor that has affected the House Price Index in some recent quarters is the influence of refinancings on the overall index. The figure below shows percent changes in the HPI for the United States as a whole over the prior four quarters compared with changes in an index constructed using only house prices associated with mortgages used for house purchases. The trend is generally the same, but the purchase-only index has exhibited greater price weakness over the latest year. Over the past four quarters, the all-transactions HPI fell 4.0 percent, while the purchase-only index declined 6.0 percent.

The share of mortgages that are refinancings can vary considerably from period to period. Approximately 53.5 percent of the third quarter mortgage data used in estimating the HPI were refinances, down considerably from 70.3 percent in the prior quarter. The 53.5 percent share is below the average share for the period since 1991. A table showing the fraction of mortgages by loan purpose (purchases, rate-term refinances, and cash-out refinances) is available at <http://www.ofheo.gov/media/hpi/loantype.xls>.

Note that a purchase-only index and a seasonally-adjusted purchase-only index for the U.S. can be downloaded at <http://www.ofheo.gov/media/pdf/3q08POSummary.xls>. Purchase-only indexes are also available for every Census Division and state and are downloadable at [http://www.ofheo.gov/hpi\\_download.aspx](http://www.ofheo.gov/hpi_download.aspx).



## **Highlights**

### **Assessing the Weights Used in the Federal Housing Finance Agency's National House Price Index**

#### *Background*

The Federal Housing Finance Agency's (FHFA's) national house price index is constructed in a fundamentally different manner than its other indexes. By construction, the change in the national index is set equal to the weighted average price change for the nine underlying Census Divisions, where the weights reflect the share of the housing stock in each of the Divisions.<sup>1</sup> Forming the national index is thus a two-step process; the individual Census Division indexes are estimated and then the national index is increased or decreased by the weighted average change in those nine indexes. Other FHFA indexes, by contrast, are not built-up from component indexes. To calculate the Census Division, state, and metropolitan area indexes, all transactions data from the relevant geographic area are pooled together and the index values are directly estimated from the raw data.<sup>2</sup>

This Highlights article discusses the advantages of the weighting approach currently used in producing the FHFA's national house price index. It also assesses the benefits of adjusting the weighting system to include more geographic weighting units. FHFA is considering refining its methodology so that states (rather than Census Divisions) form the basis for the weighted national measure.

#### *Volume-Related Distortions*

Although constructing the national index from an average of sub-indexes requires an extra step relative to pooling, it comes with a significant advantage: it is less susceptible to distortions related to geographic shifts in transaction sales volumes. Without the weighting system, shifts in sales volumes across geographic areas can introduce biases in index measures as a relationship frequently exists between sales volumes and prices. With pooling, price trends evident in the highest-volume areas are given more weight than trends in other areas.

Industry participants usually presume that there is a positive relationship between volume and price: areas with the strongest price trends exhibit relatively high volumes. The relationship can be the inverse, however; sales volumes can rise when previously-reluctant sellers finally drop their selling prices to facilitate sales. Whether the price-volume correlation is positive or negative, however, the basic problem associated with pooling still exists.

#### *Benefits of State Weighting*

As currently constructed, the national measure is not entirely immune from problems caused by volume shifts. The susceptibility stems from the fact that the national index is constructed from Census Division indexes, which are themselves calculated by pooling data from the underlying states. Although the national index controls for changes in volumes across Census

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<sup>1</sup> See <http://www.ofheo.gov/media/hpi/focus/Focus4Q07.pdf> for details.

<sup>2</sup> For information on the basic indexing methodology, see <http://www.ofheo.gov/hpi.aspx?Nav=306>.

Divisions, volume shifts *within* the Census Divisions can distort the respective Census Division figures and, therefore, the national estimates.

Figure 1 illustrates the problem by showing the magnitude of volume shifts within the Pacific Census Division over time. For the period between 1992 and the present, the table reports the share of the purchase-money mortgages in the HPI dataset that were in each of the states within that Division. The graph reveals that California's contribution to the Pacific Census Division ranged from about 60 to 70 percent during most of the 1990s, but then plummeted to less than 50 percent for the period between 2004 and late 2007. Over the latest year, California's contribution has grown rapidly and exceeded 70 percent in the latest quarter.<sup>3</sup>

Figure 2 reflects the effects of the shifts in California's and other states' contributions to the Census Division estimate. The graph compares price trends reflected in the usual (pooled) Census Division index against price movements evident in an index constructed from state indexes.<sup>4</sup> Price growth in the state-weighted index for the Pacific Division is weighted by each state's share of overall Census Division housing stock. Each of the indexes is estimated using sales prices from purchase-money mortgages.

The graph reveals significant differences between the measures. The divergence is most notable in the boom and bust periods in this decade. As California's share of the Pacific Census Division data fell in the 2004 to 2006 period, the graphs show that the price growth reflected in the weighted measure would have been higher than for the usual pooled index. During that period, the relatively high-appreciation observations from California contributed less and less to the pooled index and thus the pooled appreciation rate lagged that of the weighted index, which maintained a steady 70 percent contribution rate for California.<sup>5</sup> During the early part of the bust, as prices fell in California and remained relatively steady elsewhere, the relatively large and steady California contribution embedded in the weighted index ensured that the weighted index showed more extreme depreciation than the pooled measure. For example, between the third quarters of 2006 and 2007, the weighted index fell 4.9 percent while the pooled measure grew 0.2 percent. As relative California volume picked up in the latest year, the divergence between the two measures has shrunk considerably.

With the benefits of weighting established, Figure 3 then takes the next step and depicts the national index with the state-weighting approach. To form the national measure, nine Census Division measures are first constructed, but (as with the Pacific index described earlier) they are each assembled so that they reflect the weighted average price trends in the component states. Then, the growth rate in the national index is set equal to the weighted average growth rates for the new Census Division measures. This approach, which employs housing stock data as the relevant weights (both the state contributions to the Census Divisions and the Census Division contributions to the national measure), produces the same result as would be produced if the national measure were directly formed from the state measures.

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<sup>3</sup> It should be noted that the reported changes in the relative state volumes reflect both shifts in real estate sales volumes as well as shifts in the Enterprises' share of the mortgage market over time. Some of the decline in California's contribution to the Pacific Census Division in the 2004-2007 period may be the result of the growing prevalence of non-Enterprise funding. Also, some of the increase in the latest few quarters may be due to higher California loan limits resulting from the Economic Stimulus Act of 2008.

<sup>4</sup> The indexes are estimated using only data from mortgages financing house purchases.

<sup>5</sup> California's share of the one-unit housing stock in the Pacific Census Division has been between about 71 and 73 percent since 1970.

Figure 3 compares this new index, which is calibrated using exclusively sales-price data, against the standard purchase-only national index. The graph, which plots four-quarter appreciation rates since 1992 for both indexes, reveals the same type of phenomenon as was observed in Figure 2 for the Pacific Division; the state-weighted index shows greater appreciation during the boom and more significant price declines during the bust. Prior to the boom-bust of the latest several years, the growth rates in the two national indexes were nearly identical, however. Unlike the Pacific Census Division estimates, which diverged all the way back to 1992, the divergence in the two national measures has generally been confined to the last several years.<sup>6</sup>

#### *Benefits of Weighting Using Smaller Geographic Areas*

The question then arises: Can benefits be yielded from forming the national index out of even smaller geographic units? For example, one might calculate separate indexes for zip codes (either three-digit or five-digit codes) and form the national measure so it reflects the weighted average price growth across all of those hundreds or thousands of measures. As long as the relevant weights are available and all geographic areas are covered in an index, this more refined measure would then mitigate any distortions related to volume shifts that occur within states.

Initial evaluation of the empirical data suggests that the benefits of opting for an even finer resolution measure would be modest. Figure 4 compares the state-weighted national measures against a national measure formed out of several hundred three-digit zip code indexes. The zip code-based-national index closely resembles the state-weighted index, with a maximum divergence of only about 0.4 percentage points in the four-quarter price change measures. A national measure based on five-digit zip codes shows qualitatively the same result.

The additional precision associated with building from smaller areas appears minor, and it is likely outweighed by the costs of many more calculations and the risks of losing useful data owing to zip code boundary changes that would make address matching more difficult over time.

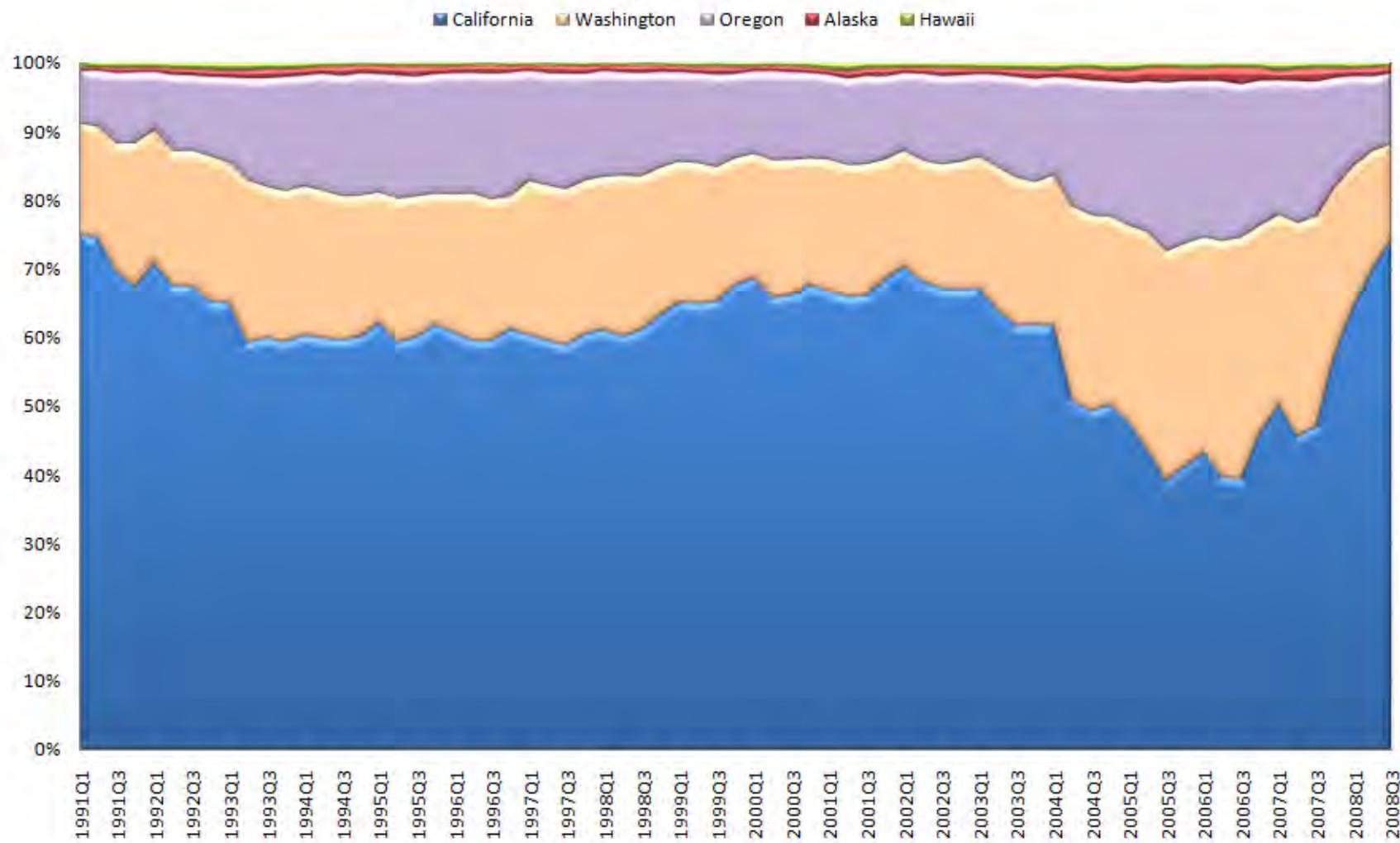
#### *Conclusion*

FHFA will continue to consider reweighting the Census Division and national indexes during the next quarter. Comments are welcome; please submit them to [andrew.leventis@fhfa.gov](mailto:andrew.leventis@fhfa.gov).

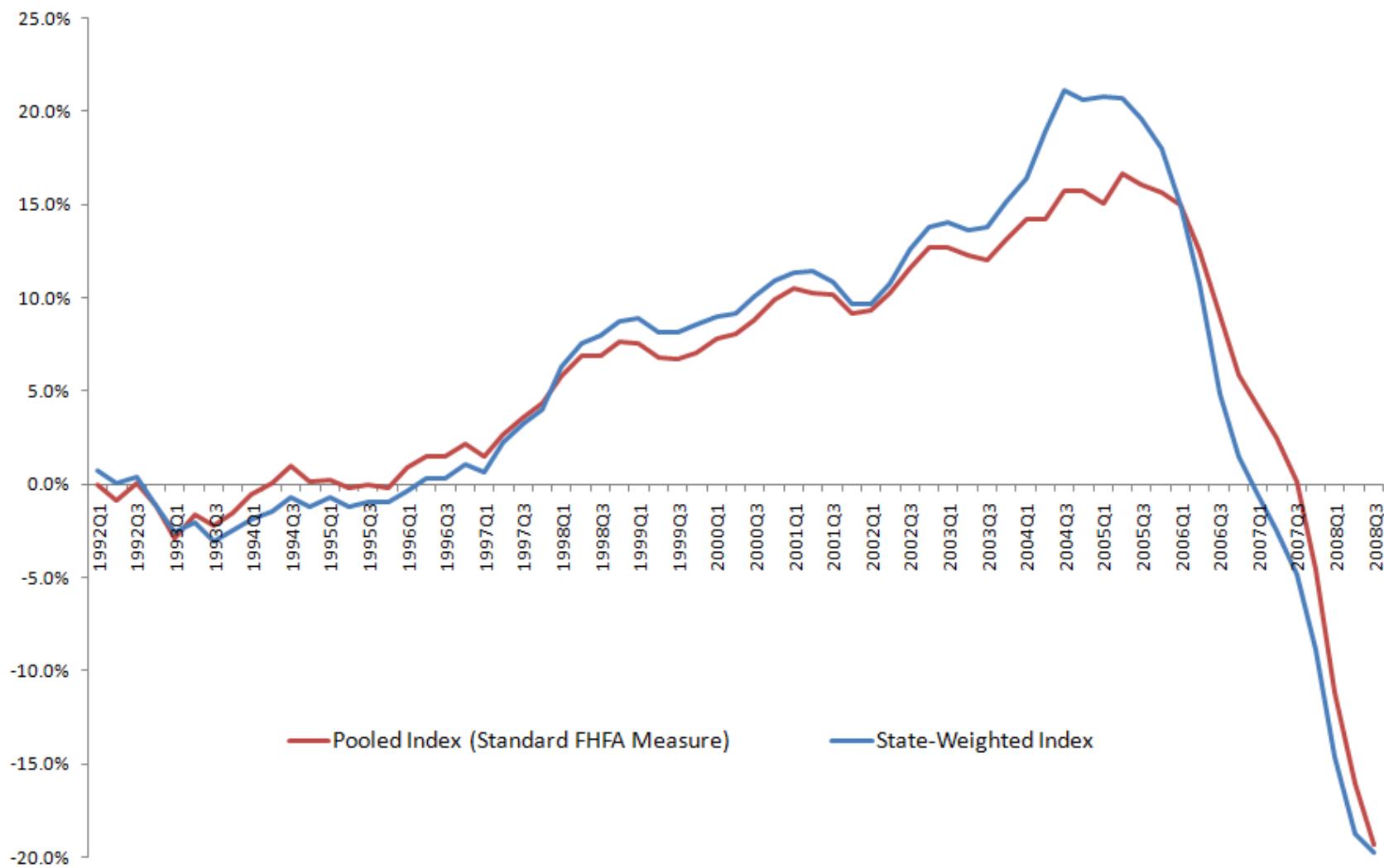
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<sup>6</sup> For the all-transactions index (which includes sales price data as well as appraisal values from mortgage refinancings), there is minimal divergence even in the latest years between the existing national series and a state-weighted series.

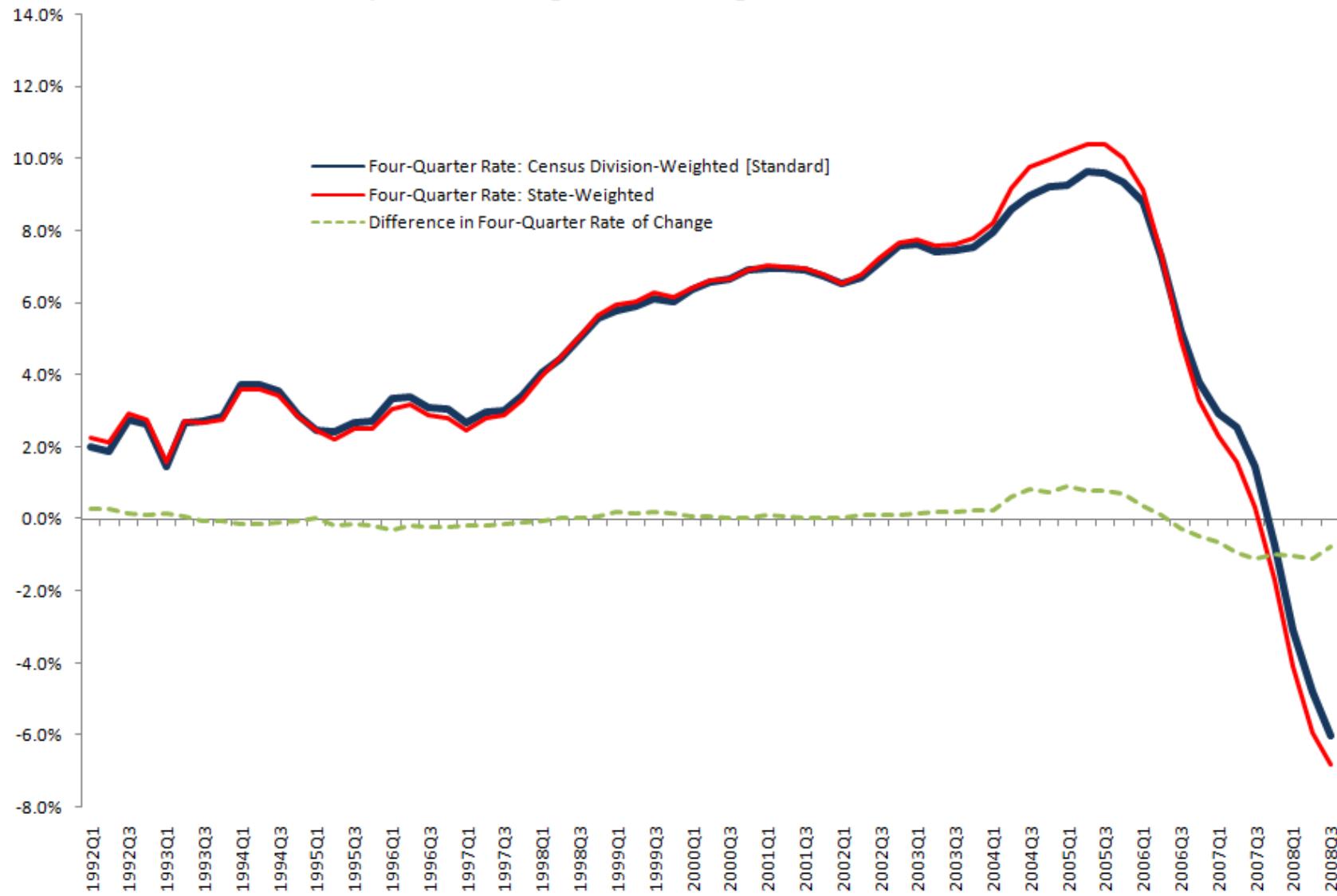
**Figure 1: Share of Pacific Census Division Data by State  
(Purchase Mortgages)**



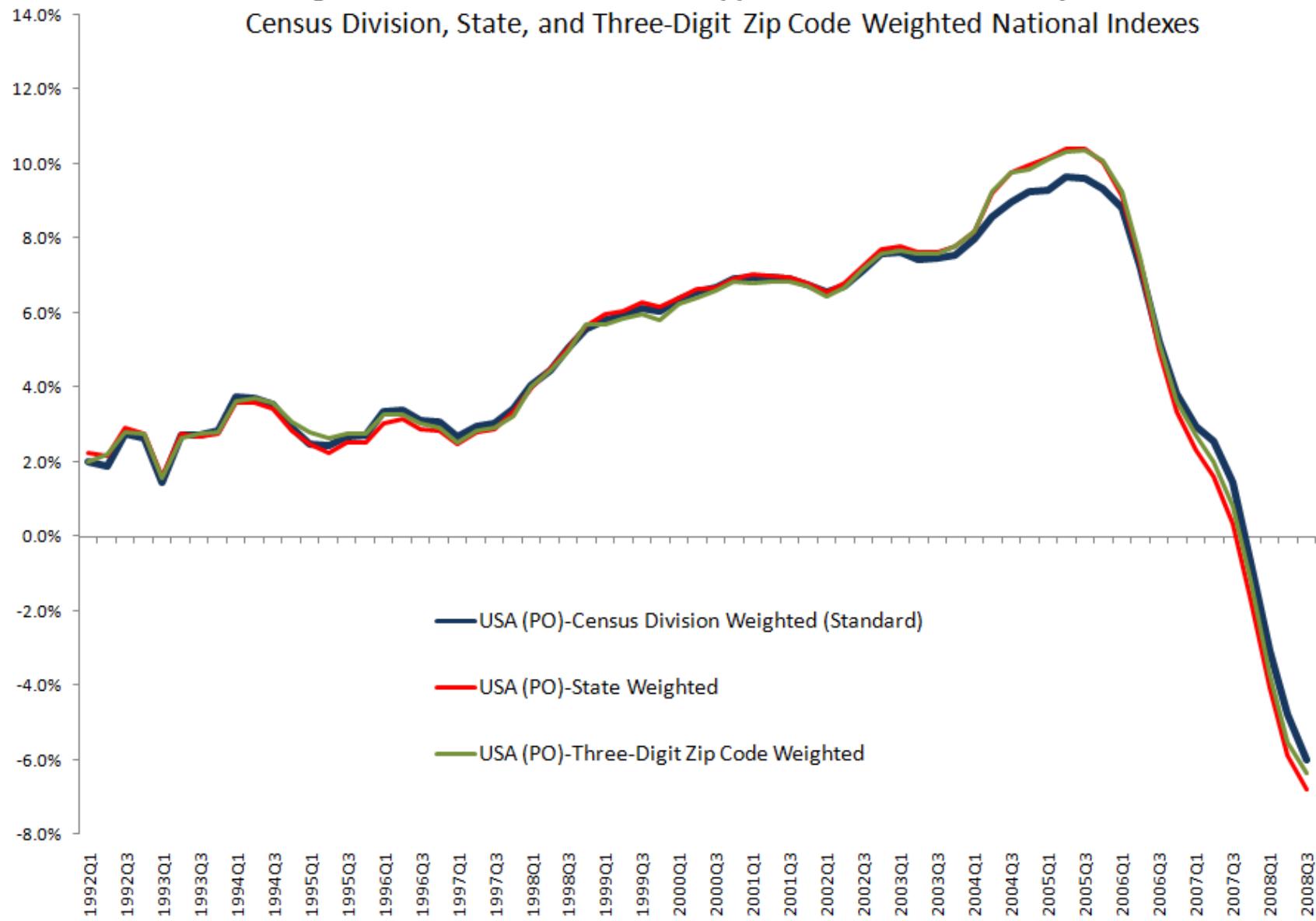
**Figure 2: Four-Quarter Price Changes Estimated in Pooled and State-Weighted House Price Indexes for Pacific Census Division**  
 (Indexes Estimated Using Sales Price Data)



**Figure 3: Four-Quarter Rates of Appreciation: Purchase-Only Index**  
Impact of Shifting to State-Weighted National Index



**Figure 4: Four-Quarter Rates of Appreciation--Purchase-Only Index**  
Census Division, State, and Three-Digit Zip Code Weighted National Indexes



**House Price Appreciation by State**  
**Percent Change in House Prices**  
**Period Ended September 30, 2008**

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| State                | Rank* | 1-Yr. | Qtr.  | 5-Yr. | Since 1980 |
|----------------------|-------|-------|-------|-------|------------|
| North Dakota, (ND)   | 1     | 4.02  | 0.67  | 37.58 | 163.94     |
| South Dakota, (SD)   | 2     | 3.89  | 1.24  | 31.04 | 202.60     |
| Texas, (TX)          | 3     | 3.19  | 0.45  | 25.31 | 132.79     |
| Alabama, (AL)        | 4     | 2.81  | 0.36  | 30.92 | 199.81     |
| Oklahoma, (OK)       | 5     | 2.75  | -0.32 | 25.26 | 112.21     |
| South Carolina, (SC) | 6     | 2.42  | -0.45 | 30.66 | 227.18     |
| North Carolina, (NC) | 7     | 1.99  | -0.63 | 29.86 | 245.83     |
| Wyoming, (WY)        | 8     | 1.63  | -0.82 | 57.34 | 190.20     |
| Kentucky, (KY)       | 9     | 1.46  | -1.14 | 19.92 | 194.11     |
| Maine, (ME)          | 10    | 1.44  | -0.27 | 36.09 | 413.39     |
| Tennessee, (TN)      | 11    | 1.38  | -0.68 | 28.31 | 213.80     |
| Montana, (MT)        | 12    | 1.00  | -1.24 | 52.49 | 290.64     |
| Arkansas, (AR)       | 13    | 0.85  | -0.06 | 27.08 | 162.23     |
| Iowa, (IA)           | 14    | 0.67  | -0.86 | 18.00 | 153.56     |
| Louisiana, (LA)      | 15    | 0.44  | -1.09 | 34.66 | 152.14     |
| Kansas, (KS)         | 16    | 0.34  | -0.71 | 18.24 | 147.32     |
| Mississippi, (MS)    | 17    | 0.09  | -1.97 | 27.50 | 164.87     |
| West Virginia, (WV)  | 18    | 0.01  | -2.37 | 28.19 | 129.54     |
| Indiana, (IN)        | 19    | -0.02 | -1.58 | 11.27 | 157.86     |
| Vermont, (VT)        | 20    | -0.02 | -0.82 | 46.81 | 368.98     |
| New Mexico, (NM)     | 21    | -0.22 | -0.97 | 47.47 | 236.89     |
| Nebraska, (NE)       | 22    | -0.27 | -1.68 | 14.46 | 157.15     |
| Alaska, (AK)         | 23    | -0.28 | -0.63 | 43.13 | 182.66     |
| Colorado, (CO)       | 24    | -0.31 | -2.13 | 14.42 | 264.52     |
| Georgia, (GA)        | 25    | -0.61 | -1.69 | 19.69 | 229.29     |
| Pennsylvania, (PA)   | 26    | -0.62 | -1.46 | 38.82 | 308.30     |

\*Note: Ranking based on one-year appreciation.

\*\*Note: United States index calculated to reflect weighted average of price changes in the nine Census Divisions, with one-unit housing stock shares as weights.

# House Price Appreciation by State

## Percent Change in House Prices

### Period Ended September 30, 2008

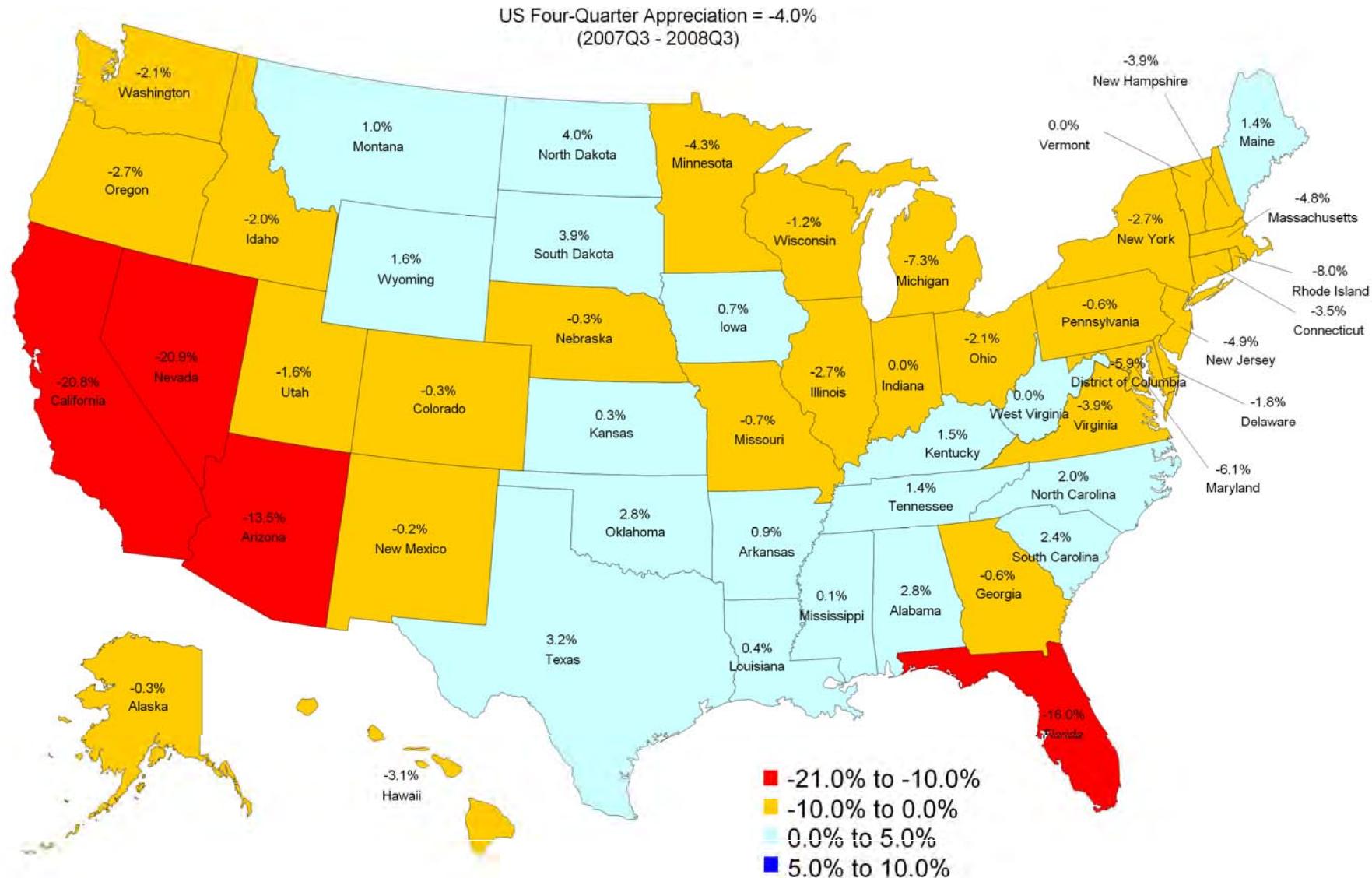
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>State</b>               | <b>Rank*</b> | <b>1-Yr.</b> | <b>Qtr.</b>  | <b>5-Yr.</b>  | <b>Since<br/>1980</b> |
|----------------------------|--------------|--------------|--------------|---------------|-----------------------|
| Missouri, (MO)             | 27           | -0.65        | -1.54        | 21.23         | 199.89                |
| Wisconsin, (WI)            | 28           | -1.20        | -1.98        | 23.48         | 226.44                |
| Utah, (UT)                 | 29           | -1.64        | -1.93        | 47.70         | 280.06                |
| Delaware, (DE)             | 30           | -1.77        | -1.03        | 45.82         | 403.92                |
| Idaho, (ID)                | 31           | -2.02        | -1.70        | 53.41         | 245.86                |
| Washington, (WA)           | 32           | -2.10        | -1.90        | 56.22         | 395.12                |
| Ohio, (OH)                 | 33           | -2.13        | -2.62        | 5.61          | 160.87                |
| Illinois, (IL)             | 34           | -2.65        | -2.20        | 26.20         | 269.95                |
| Oregon, (OR)               | 35           | -2.65        | -2.14        | 55.62         | 354.04                |
| New York, (NY)             | 36           | -2.66        | -2.59        | 36.42         | 536.12                |
| Hawaii, (HI)               | 37           | -3.06        | -0.52        | 75.57         | 430.75                |
| Connecticut, (CT)          | 38           | -3.51        | -2.55        | 29.83         | 356.20                |
| New Hampshire, (NH)        | 39           | -3.87        | -3.09        | 20.38         | 372.47                |
| Virginia, (VA)             | 40           | -3.94        | -1.78        | 50.07         | 352.89                |
| <b>United States **</b>    | <b>-4.00</b> | <b>-2.68</b> | <b>28.78</b> | <b>269.42</b> |                       |
| Minnesota, (MN)            | 41           | -4.33        | -3.12        | 16.30         | 247.68                |
| Massachusetts, (MA)        | 42           | -4.82        | -3.31        | 13.44         | 561.62                |
| New Jersey, (NJ)           | 43           | -4.87        | -2.44        | 38.87         | 444.33                |
| District of Columbia, (DC) | 44           | -5.89        | -1.70        | 63.74         | 522.07                |
| Maryland, (MD)             | 45           | -6.06        | -2.75        | 56.53         | 402.61                |
| Michigan, (MI)             | 46           | -7.25        | -4.90        | -5.27         | 180.57                |
| Rhode Island, (RI)         | 47           | -7.99        | -4.54        | 25.42         | 432.54                |
| Arizona, (AZ)              | 48           | -13.49       | -6.03        | 50.19         | 263.94                |
| Florida, (FL)              | 49           | -16.04       | -6.14        | 40.40         | 291.91                |
| California, (CA)           | 50           | -20.79       | -8.27        | 24.80         | 378.35                |
| Nevada, (NV)               | 51           | -20.92       | -9.54        | 31.76         | 211.17                |

\*Note: Ranking based on one-year appreciation.

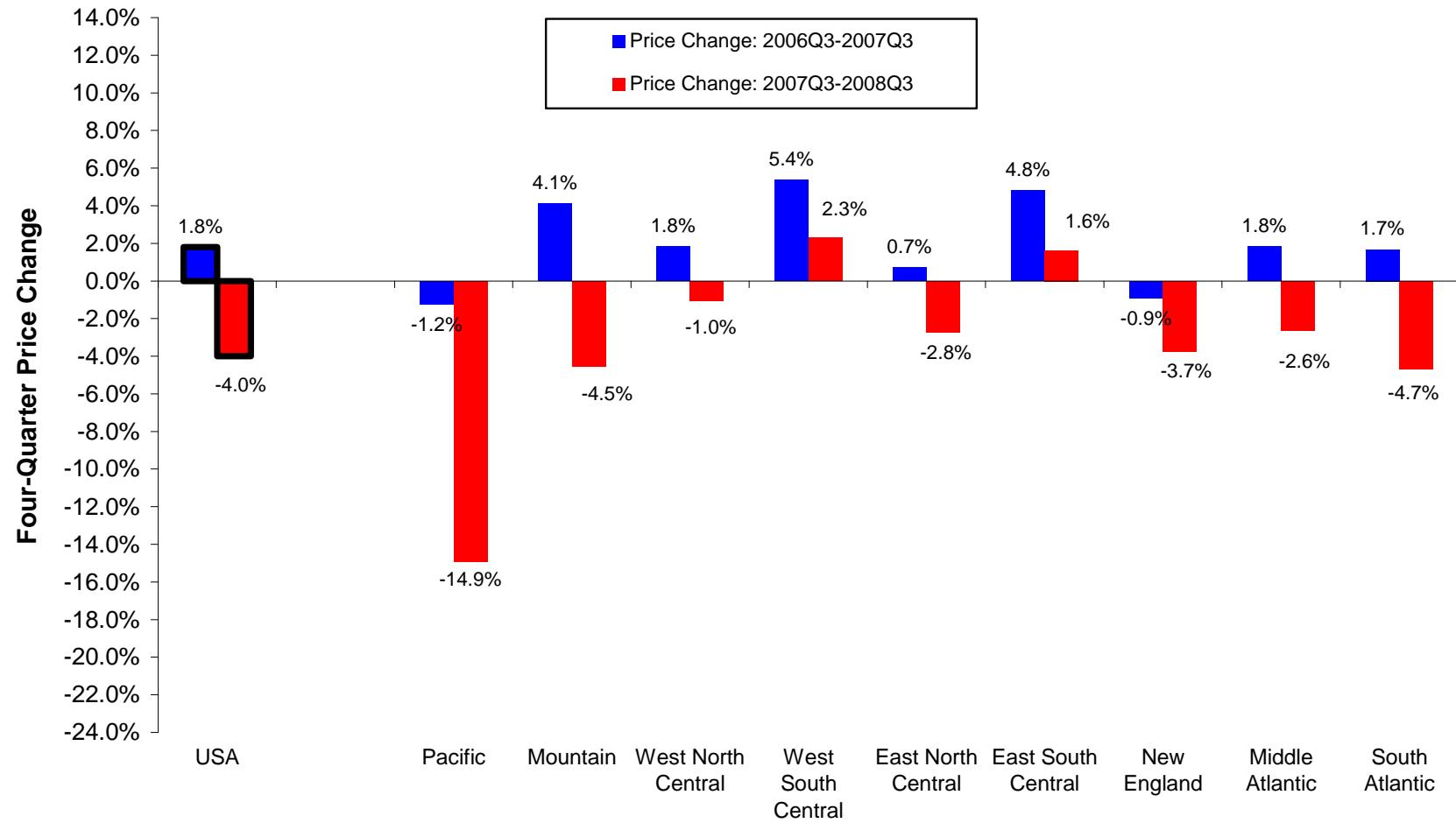
\*\*Note: United States index calculated to reflect weighted average of price changes in the nine Census Divisions, with one-unit housing stock shares as weights.

## Four-Quarter Price Change by State: FHFA HPI (Uses Purchase Prices and Appraisal Valuations)



## Four-Quarter Appreciation Rates: Most Recent Year vs. Prior Year

Estimates from HPI (Refinance and Purchase Data Included)



# HOUSE PRICE INDEX

## FREQUENTLY ASKED QUESTIONS

*(updated November 2008)*

### **1. What is the value of the HPI?**

The 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 homes in the U.S. as a whole, in various regions of the country, and in the individual states and the District of Columbia. 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 HPI?**

The House Price Index 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. The conforming loan limit for mortgages purchased in 2007 was \$417,000. Legislation enacted in February 2008 raised the limit on a temporary basis to as much as \$729,750 in high cost areas in the continental United States. The loan limit for 2009 will be \$417,000 for one-unit homes in most areas, but can be up to \$625,500 in certain high-cost areas in the continental United States.

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 each quarter 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 quarter and for each quarter since the first quarter of 1975.

#### **4. How often is the HPI published?**

A full release is provided every three months, approximately two months after the end of the previous quarter. The HPI reflecting home price figures for the quarter ending September 30, 2008 is reported in this release. Beginning in March 2008, OFHEO began publishing monthly indexes for Census Divisions and the United States. FHFA continues publishing and updating these indexes each month.

#### **5. How is the HPI updated?**

Each quarter, Fannie Mae and Freddie Mac provide FHFA with information on their most recent mortgage transactions. These data are combined with the data from previous years 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 quarter 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-Quincy, MA-NH; Chicago-Naperville-Joliet, IL-IN-WI; Dallas-Fort Worth-Arlington, TX; Detroit-Warren-Livonia, MI; Los Angeles-Long Beach-Santa Ana, CA; Miami-Fort Lauderdale-Miami Beach, FL; New York-Northern New Jersey-Long Island, NY-NJ-PA; Philadelphia-Camden-Wilmington, PA-NJ-DE-MD; San Francisco-Oakland-Fremont, CA;

Seattle-Tacoma-Bellevue, WA and 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 December 2007 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 December 2007. 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: <http://www.whitehouse.gov/omb/bulletins/fy2008/b08-01.pdf>.

## **9. What geographic areas are covered by the House Price Index?**

The HPI includes provides 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 363 MSAs, 11 of which are subdivided into a total of 29 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, 381 indexes are released: 352 for the MSAs that do not have Metropolitan Divisions and 29 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, 292 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. 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 [/hpi\\_download.aspx](/hpi_download.aspx).

## **11. Why is the 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 ensuring the financial safety and soundness of 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 United States representing 40 percent of total outstanding mortgages.

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

The HPI published by FHFA 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 HPI is based on more than 36 million repeat transaction pairs over 34 years. This gives a more accurate reflection of current property values than the Commerce 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. How does the HPI differ from the S&P/Case-Shiller® Home Price indexes?**

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

- a. The S&P/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, as are the S&P/Case-Shiller indexes.
- b. FHFA's valuation data are derived from conforming, conventional mortgages provided by Fannie Mae and Freddie Mac. The S&P/Case-Shiller indexes use information obtained from county assessor and recorder offices.
- c. The S&P/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 S&P/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 concerning these and other differences, consult the HPI Technical Description (see [www.ofheo.gov/Media/Archive/house/hpi\\_tech.pdf](http://www.ofheo.gov/Media/Archive/house/hpi_tech.pdf)) and the S&P/Case-Shiller methodology materials.

Also note that recent papers analyze in detail the methodological and data differences between the two price metrics. The most recent paper can be downloaded at [/media/research/OFHEOSPCS12008.pdf](http://media/research/OFHEOSPCS12008.pdf).

## **14. What role do Fannie Mae and Freddie Mac play in the House Price Index?**

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. What is the methodology used by FHFA in computing the Index?**

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) 414-6922 or online at: [/Media/Archive/house/hpi\\_tech.pdf](/Media/Archive/house/hpi_tech.pdf).

## **16. A Note Regarding 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 have the first quarter of 1991 as their base period. 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 Web site to calculate appreciation rates?**

The index numbers alone (for Census Divisions and US, 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.

**19. How is FHFA's House Price Index constructed for MSAs? The Web site says that you use the 2007 definitions based on the 2000 Census 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. So the MSA definition used to compute the 1982 (for example) index value in Anchorage, AK would be the 2007 definition. The series is comparable backwards.

**20. How can the House Price Index for an MSA be linked to zip codes within that MSA?**

FHFA does not publish price indexes for specific zip codes. Researchers are sometimes interested in associating the MSA-level index with zip codes within that MSA, however. A crosswalk that precisely matches zip codes to MSAs is not available as it would involve certain technical problems.

Please see <http://www.census.gov/geo/www/tiger/tigermap.html> for a description of the underlying technical difficulties involved with constructing a crosswalk table.

One can create an imperfect lookup table in two steps using publicly available data, however. In the first step, one can download a table that provides county information for each zip code in the U.S. This information, which is available at: [www.census.gov/geo/www/tiger/zip1999.html](http://www.census.gov/geo/www/tiger/zip1999.html), was compiled in 1999 by the Census Bureau. Counties are identified by their Federal Information Processing Standard (FIPS) code number. One can then identify the Metropolitan Statistical Area associated with each county FIPS code by using data found at <http://www.bea.gov/bea/regional/xls/ea/eastructure.xls>. These data were compiled by the Bureau of Economic Analysis in 2004 and thus may be somewhat out of date.

**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) GSEs purchase seasoned loans, providing new information about prior quarters.
- 3) Due to a 30- to 45-day lag time from loan origination to GSE 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.

## **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 House Price Indexes calculated?**

The monthly indexes are calculated in the same way as 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 U.S. indexes constructed?**

For both the all-transactions and purchase-only indexes, the national index is constructed using quarterly growth rates for the Census Divisions. The U.S. index is set equal to 100 in the relevant base period (1980Q1 for the all-transaction index and 1991Q1 for the purchase-only measure). Then, the national index for the following quarter is increased (or decreased) by the weighted average quarterly price change for the nine Census Divisions. Then, in each subsequent quarter, the national index grows by a rate equal to the average quarterly growth rate for relevant quarter. For the period immediately before the base quarter, the national index value is set equal to 100 divided by the weighted average quarterly growth rate for the base quarter. Preceding index values are calculated in a similar fashion (so that, when increased by the weighted average growth rate for the following quarter, its value will equal the known index value for the following quarter).

The weights used in constructing the weighted average quarterly growth rates reflect an estimate of the Census Division's contemporary share of one-unit detached properties in the U.S. For years in which a Census was taken, the share from the relevant Census is used. For intervening years, a Census Division'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, the Pacific Division's weight for 1982 would be 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 would be 0.7 times its 1980 share plus 0.3 times its 1990 share. Until the 2010 Census data become available, for years between 2001 and 2009, Census Division weights will be set to the relevant shares in the 2000 Census. Year-specific Census Division weights can be downloaded at </media/hpi/weights.xls>. The underlying housing stock estimates from the Census Bureau can be accessed at [www.census.gov/hhes/www/housing/census/historic/units.html](http://www.census.gov/hhes/www/housing/census/historic/units.html).

**26. For those house price indexes 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 FHFA at (202) 414-6922 or via e-mail at: [hpihelpdesk@fhfa.gov](mailto:hpihelpdesk@fhfa.gov).

**U.S. Census Divisions**  
**Percent Change in House Prices**  
**Period Ended September 30, 2008**

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| Division                | Division Ranking* | 1-Yr.        | Qtr.         | 5-Yr.        | Since 1980    |
|-------------------------|-------------------|--------------|--------------|--------------|---------------|
| <b>United States **</b> |                   | <b>-4.00</b> | <b>-2.68</b> | <b>28.78</b> | <b>269.42</b> |
| West South Central      | 1                 | 2.31         | -0.03        | 27.24        | 135.27        |
| East South Central      | 2                 | 1.62         | -0.64        | 26.70        | 198.79        |
| West North Central      | 3                 | -1.03        | -1.68        | 19.07        | 197.88        |
| Middle Atlantic         | 4                 | -2.63        | -2.13        | 37.99        | 418.30        |
| East North Central      | 5                 | -2.75        | -2.89        | 12.05        | 206.09        |
| New England             | 6                 | -3.73        | -2.70        | 22.03        | 485.15        |
| Mountain                | 7                 | -4.54        | -3.17        | 41.03        | 265.40        |
| South Atlantic          | 8                 | -4.66        | -2.55        | 39.66        | 295.74        |
| Pacific                 | 9                 | -14.94       | -6.65        | 34.53        | 392.92        |

\*Note: Rankings based on annual percentage change.

\*\*Note: United States index calculated to reflect weighted average of price changes in the nine Census Divisions, with one-unit housing stock shares as weights.

**\*Top 20 Metropolitan Statistical Areas  
and Divisions With  
Highest Rates of House Price Appreciation**

**Percent Change in House Prices with MSA Rankings  
Period Ended September 30, 2008**

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| MSA                              | National<br>Ranking** | 1-Yr. | Qtr.  | 5-Yr. |
|----------------------------------|-----------------------|-------|-------|-------|
| Austin-Round Rock, TX            | 1                     | 5.62  | 1.69  | 35.32 |
| Augusta-Richmond County, GA-SC   | 2                     | 5.48  | 2.00  | 38.97 |
| Rapid City, SD                   | 3                     | 5.43  | 0.74  | 29.67 |
| Houma-Bayou Cane-Thibodaux, LA   | 4                     | 5.18  | -1.64 | 43.28 |
| Houston-Sugar Land-Baytown, TX   | 5                     | 5.17  | 1.49  | 27.10 |
| Mobile, AL                       | 6                     | 4.97  | 2.49  | 41.92 |
| Grand Junction, CO               | 7                     | 4.67  | 1.21  | 66.11 |
| Logan, UT-ID                     | 8                     | 4.55  | 1.11  | 34.25 |
| Greenville-Mouldin-Easley, SC    | 9                     | 4.55  | -0.61 | 22.63 |
| Decatur, AL                      | 10                    | 4.21  | -0.48 | 22.97 |
| Spartanburg, SC                  | 11                    | 4.12  | 2.20  | 16.64 |
| Huntsville, AL                   | 12                    | 4.12  | 0.51  | 31.51 |
| Kennewick-Pasco-Richland, WA     | 13                    | 4.11  | 0.80  | 20.05 |
| Kingsport-Bristol-Bristol, TN-VA | 14                    | 3.93  | 0.69  | 32.41 |
| Raleigh-Cary, NC                 | 15                    | 3.84  | 0.41  | 27.81 |
| Florence, SC                     | 16                    | 3.74  | -0.30 | 22.86 |
| Hickory-Lenoir-Morganton, NC     | 17                    | 3.68  | 1.87  | 20.38 |
| Macon, GA                        | 18                    | 3.47  | 3.64  | 21.51 |
| Lubbock, TX                      | 19                    | 3.20  | 0.62  | 18.91 |
| Tuscaloosa, AL                   | 20                    | 3.14  | -0.14 | 28.42 |

\*For composition of metropolitan statistical areas and divisions see <http://www.whitehouse.gov/omb/20bulletins/fy2008/b08-01.pdf> or see FHFA HPI FAQ #7 for more information.

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

**\*Bottom 20 Metropolitan Statistical Areas  
and Divisions With  
Lowest Rates of House Price Appreciation**

**Percent Change in House Prices with MSA Rankings**

***Period Ended September 30, 2008***

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| MSA  | National<br>Ranking** | 1-Yr.  | Qtr.   | 5-Yr.  |
|--|-----------------------|--------|--------|--------|
| Merced, CA   | 292                   | -42.30 | -16.51 | -15.00 |
| Stockton, CA   | 291                   | -41.44 | -19.11 | -15.04 |
| Modesto, CA  | 290                   | -36.65 | -15.04 | -6.96  |
| Salinas, CA  | 289                   | -34.09 | -17.64 | -1.76  |
| Vallejo-Fairfield, CA                                    | 288                   | -33.27 | -16.84 | -5.57  |
| Riverside-San Bernardino-Ontario, CA                     | 287                   | -31.46 | -13.65 | 20.42  |
| Bakersfield, CA  | 286                   | -28.54 | -13.55 | 31.92  |
| Cape Coral-Fort Myers, FL                                | 285                   | -28.28 | -14.20 | 14.57  |
| Port St. Lucie, FL                                       | 284                   | -27.12 | -10.95 | 14.09  |
| Las Vegas-Paradise, NV                                   | 283                   | -26.78 | -12.63 | 25.82  |
| Madera, CA   | 282                   | -26.41 | -13.86 | 26.65  |
| Naples-Marco Island, FL                                  | 281                   | -25.25 | -9.01  | 29.78  |
| Yuba City, CA  | 280                   | -25.24 | -12.94 | 8.24   |
| Fresno, CA   | 279                   | -23.52 | -9.64  | 26.08  |
| West Palm Beach-Boca Raton-Boynton Beach, FL (MSAD)      | 278                   | -23.23 | -9.10  | 27.43  |
| Sacramento-Arden-Arcade-Roseville, CA                    | 277                   | -22.52 | -9.40  | 6.04   |
| Fort Lauderdale-Pompano Beach-Deerfield Beach, FL (MSAD) | 276                   | -22.33 | -9.14  | 32.75  |
| Bradenton-Sarasota-Venice, FL                            | 275                   | -21.29 | -8.90  | 21.54  |
| Punta Gorda, FL  | 274                   | -21.26 | -10.00 | 16.76  |
| Oxnard-Thousand Oaks-Ventura, CA                         | 273                   | -20.15 | -7.41  | 21.77  |

\*For composition of metropolitan statistical areas and divisions see  
<http://www.whitehouse.gov/omb/20bulletins/fy2008/b08-01.pdf> or see FHFA HPI FAQ #7 for more information.

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

**Rankings by**  
**\*Metropolitan Statistical Areas and Divisions**  
**Percent Change in House Prices with MSA Rankings\*\***

*Period Ended September 30, 2008*

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| MSA  | National  |        |        |       |
|--|-----------|--------|--------|-------|
|  | Ranking** | 1-Yr.  | Qtr.   | 5-Yr. |
| Akron, OH                                  | 187       | -3.51  | -3.96  | 1.21  |
| Albany-Schenectady-Troy, NY                | 90        | 0.30   | -0.41  | 51.50 |
| Albuquerque, NM                            | 115       | -0.54  | -0.70  | 49.03 |
| Allentown-Bethlehem-Easton, PA-NJ          | 172       | -2.64  | -0.93  | 44.74 |
| Amarillo, TX                               | 41        | 2.24   | 1.27   | 24.30 |
| Ames, IA                                   | 100       | -0.04  | -1.21  | 13.46 |
| Anchorage, AK                              | 88        | 0.34   | 0.35   | 44.34 |
| Anderson, IN                               | 26        | 2.85   | -2.07  | 0.49  |
| Anderson, SC                               | 39        | 2.28   | -1.86  | 18.88 |
| Ann Arbor, MI                              | 221       | -6.33  | -3.91  | -8.28 |
| Appleton, WI                               | 204       | -4.89  | -5.45  | 10.41 |
| Asheville, NC                              | 43        | 2.12   | -0.65  | 48.74 |
| Athens-Clarke County, GA                   | 131       | -0.90  | -3.08  | 19.51 |
| Atlanta-Sandy Springs-Marietta, GA         | 156       | -1.75  | -2.29  | 13.70 |
| Atlantic City-Hammonton, NJ                | 230       | -7.62  | -5.29  | 49.93 |
| Augusta-Richmond County, GA-SC             | 2         | 5.48   | 2.00   | 38.97 |
| Austin-Round Rock, TX                      | 1         | 5.62   | 1.69   | 35.32 |
| Bakersfield, CA                            | 286       | -28.54 | -13.55 | 31.92 |
| Baltimore-Towson, MD                       | 190       | -3.81  | -1.93  | 60.56 |
| Barnstable Town, MA                        | 209       | -5.25  | -3.21  | 18.34 |
| Baton Rouge, LA                            | 70        | 1.10   | -0.19  | 35.63 |
| Battle Creek, MI                           | 202       | -4.60  | -4.86  | 1.57  |
| Bay City, MI                               | 225       | -6.64  | -2.65  | -1.74 |
| Beaumont-Port Arthur, TX                   | 59        | 1.44   | -1.89  | 30.30 |
| Bellingham, WA                             | 102       | -0.06  | -1.58  | 65.56 |
| Bend, OR                                   | 241       | -10.04 | -3.16  | 58.77 |
| Bethesda-Frederick-Gaithersburg, MD (MSAD) | 236       | -8.57  | -4.11  | 41.98 |
| Billings, MT                               | 28        | 2.80   | 0.38   | 43.77 |
| Birmingham-Hoover, AL                      | 46        | 1.96   | -0.73  | 25.74 |
| Bismarck, ND                               | 37        | 2.43   | -0.91  | 37.66 |

\*For composition of metropolitan statistical areas and divisions see <http://www.whitehouse.gov/omb/bulletins/fy2008/b08-01.pdf> or see FHFA HPI FAQ #7 for more information.

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

**Rankings by**  
**\*Metropolitan Statistical Areas and Divisions**  
**Percent Change in House Prices with MSA Rankings\*\***

*Period Ended September 30, 2008*

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>MSA</b>                                  | <b>National</b>  |              |             |              |
|---|------------------|--------------|-------------|--------------|
|   | <b>Ranking**</b> | <b>1-Yr.</b> | <b>Qtr.</b> | <b>5-Yr.</b> |
| Blacksburg-Christiansburg-Radford, VA       | 21               | 3.03         | 0.93        | 37.68        |
| Bloomington, IN                             | 34               | 2.55         | -2.07       | 21.41        |
| Bloomington-Normal, IL                      | 84               | 0.50         | -0.59       | 14.83        |
| Boise City-Nampa, ID                        | 217              | -5.68        | -3.29       | 50.95        |
| Boston-Quincy, MA (MSAD)                    | 194              | -4.13        | -2.68       | 12.83        |
| Boulder, CO                                 | 38               | 2.38         | 0.23        | 15.24        |
| Bowling Green, KY                           | 74               | 0.98         | -1.75       | 17.02        |
| Bradenton-Sarasota-Venice, FL               | 275              | -21.29       | -8.90       | 21.54        |
| Bremerton-Silverdale, WA                    | 205              | -4.98        | -3.43       | 61.00        |
| Bridgeport-Stamford-Norwalk, CT             | 196              | -4.15        | -2.12       | 28.77        |
| Buffalo-Niagara Falls, NY                   | 23               | 2.93         | 0.23        | 23.15        |
| Burlington, NC                              | 99               | 0.00         | -2.07       | 6.43         |
| Burlington-South Burlington, VT             | 119              | -0.65        | -1.84       | 42.33        |
| Cambridge-Newton-Framingham, MA (MSAD)      | 180              | -3.09        | -2.27       | 11.65        |
| Camden, NJ (MSAD)                           | 184              | -3.28        | -0.50       | 45.92        |
| Canton-Massillon, OH                        | 169              | -2.53        | -2.65       | 1.35         |
| Cape Coral-Fort Myers, FL                   | 285              | -28.28       | -14.20      | 14.57        |
| Cedar Rapids, IA                            | 85               | 0.44         | 0.39        | 12.59        |
| Champaign-Urbana, IL                        | 66               | 1.35         | 0.60        | 24.18        |
| Charleston, WV                              | 52               | 1.71         | -2.93       | 17.96        |
| Charleston-North Charleston-Summerville, SC | 65               | 1.37         | -0.30       | 50.88        |
| Charlotte-Gastonia-Concord, NC-SC           | 54               | 1.58         | -1.71       | 26.80        |
| Charlottesville, VA                         | 129              | -0.80        | 0.99        | 54.79        |
| Chattanooga, TN-GA                          | 104              | -0.08        | -1.06       | 25.32        |
| Cheyenne, WY                                | 40               | 2.27         | -0.66       | 32.34        |
| Chicago-Naperville-Joliet, IL (MSAD)        | 189              | -3.79        | -2.74       | 28.25        |
| Chico, CA                                   | 244              | -10.51       | -3.87       | 30.19        |
| Cincinnati-Middletown, OH-KY-IN             | 132              | -0.91        | -1.19       | 10.61        |
| Cleveland-Elyria-Mentor, OH                 | 216              | -5.66        | -5.10       | -0.89        |
| Coeur d'Alene, ID                           | 198              | -4.44        | -1.79       | 70.02        |

\*For composition of metropolitan statistical areas and divisions see <http://www.whitehouse.gov/omb/bulletins/fy2008/b08-01.pdf> or see FHFA HPI FAQ #7 for more information.

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

**Rankings by**  
**\*Metropolitan Statistical Areas and Divisions**  
**Percent Change in House Prices with MSA Rankings\*\***

*Period Ended September 30, 2008*

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>MSA</b>                             | <b>National</b>  |              |             |              |
|--|------------------|--------------|-------------|--------------|
|  | <b>Ranking**</b> | <b>1-Yr.</b> | <b>Qtr.</b> | <b>5-Yr.</b> |
| Colorado Springs, CO                   | 175              | -2.80        | -2.89       | 15.60        |
| Columbia, MO                           | 47               | 1.88         | 1.72        | 25.63        |
| Columbia, SC                           | 24               | 2.92         | -0.05       | 26.44        |
| Columbus, GA-AL                        | 140              | -1.17        | -0.51       | 30.37        |
| Columbus, IN                           | 162              | -1.93        | -4.90       | 11.82        |
| Columbus, OH                           | 141              | -1.26        | -1.94       | 8.47         |
| Corpus Christi, TX                     | 112              | -0.44        | -1.38       | 27.55        |
| Dallas-Plano-Irving, TX (MSAD)         | 33               | 2.55         | 0.03        | 15.70        |
| Davenport-Moline-Rock Island, IA-IL    | 116              | -0.58        | -2.93       | 16.58        |
| Dayton, OH                             | 97               | 0.06         | -1.39       | 7.49         |
| Decatur, AL                            | 10               | 4.21         | -0.48       | 22.97        |
| Decatur, IL                            | 22               | 3.01         | 0.85        | 18.42        |
| Deltona-Daytona Beach-Ormond Beach, FL | 264              | -17.48       | -7.25       | 40.69        |
| Denver-Aurora, CO                      | 133              | -0.95        | -2.25       | 6.67         |
| Des Moines-West Des Moines, IA         | 148              | -1.44        | -2.12       | 14.92        |
| Detroit-Livonia-Dearborn, MI (MSAD)    | 253              | -13.29       | -6.82       | -18.36       |
| Dubuque, IA                            | 106              | -0.13        | -1.79       | 19.98        |
| Duluth, MN-WI                          | 117              | -0.60        | -0.63       | 28.82        |
| Durham, NC                             | 55               | 1.53         | -1.59       | 24.40        |
| Eau Claire, WI                         | 101              | -0.05        | -1.17       | 21.71        |
| Edison-New Brunswick, NJ (MSAD)        | 200              | -4.49        | -2.09       | 37.11        |
| Elkhart-Goshen, IN                     | 164              | -1.98        | -4.15       | 10.82        |
| El Paso, TX                            | 49               | 1.83         | 0.20        | 48.64        |
| Erie, PA                               | 81               | 0.55         | -0.89       | 15.28        |
| Eugene-Springfield, OR                 | 181              | -3.10        | -2.39       | 55.73        |
| Evansville, IN-KY                      | 79               | 0.69         | -0.90       | 12.32        |
| Fargo, ND-MN                           | 57               | 1.52         | -0.59       | 26.67        |
| Fayetteville, NC                       | 62               | 1.39         | -0.97       | 27.28        |
| Fayetteville-Springdale-Rogers, AR-MO  | 192              | -4.09        | -2.60       | 27.15        |
| Flagstaff, AZ-UT                       | 222              | -6.35        | -3.81       | 66.52        |

\*For composition of metropolitan statistical areas and divisions see <http://www.whitehouse.gov/omb/bulletins/fy2008/b08-01.pdf> or see FHFA HPI FAQ #7 for more information.

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

**Rankings by**  
**\*Metropolitan Statistical Areas and Divisions**  
**Percent Change in House Prices with MSA Rankings\*\***

*Period Ended September 30, 2008*

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| MSA  | National  |        |        |        |
|--|-----------|--------|--------|--------|
|  | Ranking** | 1-Yr.  | Qtr.   | 5-Yr.  |
| Flint, MI  | 252       | -13.21 | -10.22 | -13.74 |
| Florence, SC   | 16        | 3.74   | -0.30  | 22.86  |
| Fond du Lac, WI  | 146       | -1.35  | -1.61  | 19.42  |
| Fort Collins-Loveland, CO                                | 114       | -0.52  | -0.40  | 9.84   |
| Fort Lauderdale-Pompano Beach-Deerfield Beach, FL (MSAD) | 276       | -22.33 | -9.14  | 32.75  |
| Fort Smith, AR-OK  | 30        | 2.67   | 1.89   | 23.97  |
| Fort Walton Beach-Crestview-Destin, FL                   | 251       | -12.64 | -3.52  | 46.45  |
| Fort Wayne, IN   | 67        | 1.29   | 1.24   | 7.90   |
| Fort Worth-Arlington, TX (MSAD)                          | 63        | 1.38   | -0.37  | 14.99  |
| Fresno, CA   | 279       | -23.52 | -9.64  | 26.08  |
| Gainesville, GA  | 48        | 1.84   | 1.88   | 23.56  |
| Gary, IN (MSAD)  | 120       | -0.67  | -2.27  | 19.78  |
| Grand Junction, CO                                       | 7         | 4.67   | 1.21   | 66.11  |
| Grand Rapids-Wyoming, MI                                 | 220       | -5.89  | -5.40  | -1.56  |
| Greeley, CO  | 218       | -5.69  | -4.97  | -5.49  |
| Green Bay, WI  | 151       | -1.53  | -2.29  | 13.15  |
| Greensboro-High Point, NC                                | 32        | 2.63   | -0.06  | 16.08  |
| Greenville-Mouldin-Easley, SC                            | 9         | 4.55   | -0.61  | 22.63  |
| Gulfport-Biloxi, MS                                      | 165       | -2.17  | -4.79  | 41.72  |
| Hagerstown-Martinsburg, MD-WV                            | 215       | -5.61  | -3.98  | 52.83  |
| Harrisburg-Carlisle, PA                                  | 64        | 1.38   | -1.19  | 36.13  |
| Hartford-West Hartford-East Hartford, CT                 | 158       | -1.78  | -1.94  | 29.61  |
| Hickory-Lenoir-Morganton, NC                             | 17        | 3.68   | 1.87   | 20.38  |
| Holland-Grand Haven, MI                                  | 186       | -3.45  | -3.12  | 2.98   |
| Honolulu, HI   | 144       | -1.32  | -0.20  | 78.73  |
| Houma-Bayou Cane-Thibodaux, LA                           | 4         | 5.18   | -1.64  | 43.28  |
| Houston-Sugar Land-Baytown, TX                           | 5         | 5.17   | 1.49   | 27.10  |
| Huntington-Ashland, WV-KY-OH                             | 60        | 1.44   | -0.38  | 23.61  |
| Huntsville, AL   | 12        | 4.12   | 0.51   | 31.51  |
| Idaho Falls, ID  | 118       | -0.61  | -2.10  | 42.25  |

\*For composition of metropolitan statistical areas and divisions see <http://www.whitehouse.gov/omb/bulletins/fy2008/b08-01.pdf> or see FHFA HPI FAQ #7 for more information.

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

**Rankings by**  
**\*Metropolitan Statistical Areas and Divisions**  
**Percent Change in House Prices with MSA Rankings\*\***

*Period Ended September 30, 2008*

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>MSA</b>                               | <b>National</b>  |              |             |              |
|--|------------------|--------------|-------------|--------------|
|  | <b>Ranking**</b> | <b>1-Yr.</b> | <b>Qtr.</b> | <b>5-Yr.</b> |
| Indianapolis-Carmel, IN                  | 82               | 0.55         | -0.47       | 9.47         |
| Iowa City, IA                            | 124              | -0.74        | -2.13       | 15.88        |
| Jackson, MI                              | 249              | -12.08       | -10.41      | -8.30        |
| Jackson, MS                              | 126              | -0.78        | -2.50       | 21.42        |
| Jacksonville, FL                         | 229              | -7.17        | -2.88       | 47.46        |
| Janesville, WI                           | 183              | -3.27        | -3.18       | 20.39        |
| Jefferson City, MO                       | 76               | 0.91         | 0.17        | 21.35        |
| Joplin, MO                               | 94               | 0.25         | -1.70       | 15.31        |
| Kalamazoo-Portage, MI                    | 203              | -4.61        | -1.16       | 5.30         |
| Kankakee-Bradley, IL                     | 35               | 2.47         | 0.24        | 32.34        |
| Kansas City, MO-KS                       | 170              | -2.62        | -2.99       | 11.92        |
| Kennewick-Pasco-Richland, WA             | 13               | 4.11         | 0.80        | 20.05        |
| Kingsport-Bristol-Bristol, TN-VA         | 14               | 3.93         | 0.69        | 32.41        |
| Kingston, NY                             | 188              | -3.65        | -3.72       | 40.80        |
| Knoxville, TN                            | 56               | 1.53         | 0.60        | 35.02        |
| Kokomo, IN                               | 212              | -5.31        | -2.80       | -4.12        |
| La Crosse, WI-MN                         | 145              | -1.34        | -2.77       | 21.59        |
| Lafayette, IN                            | 127              | -0.78        | -0.93       | 3.16         |
| Lafayette, LA                            | 77               | 0.84         | -2.23       | 35.37        |
| Lake County-Kenosha County, IL-WI (MSAD) | 176              | -2.94        | -1.52       | 21.14        |
| Lake Havasu City-Kingman, AZ             | 262              | -16.73       | -5.93       | 42.56        |
| Lakeland-Winter Haven, FL                | 243              | -10.44       | -1.80       | 56.35        |
| Lancaster, PA                            | 103              | -0.07        | -1.04       | 40.88        |
| Lansing-East Lansing, MI                 | 227              | -6.97        | -5.85       | -1.51        |
| Las Cruces, NM                           | 93               | 0.25         | -0.08       | 49.64        |
| Las Vegas-Paradise, NV                   | 283              | -26.78       | -12.63      | 25.82        |
| Lawrence, KS                             | 98               | 0.01         | -0.95       | 19.44        |
| Lexington-Fayette, KY                    | 25               | 2.89         | 0.49        | 23.07        |
| Lima, OH                                 | 137              | -1.11        | 0.19        | 13.03        |
| Lincoln, NE                              | 91               | 0.29         | -1.64       | 13.50        |

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

**Rankings by**  
**\*Metropolitan Statistical Areas and Divisions**  
**Percent Change in House Prices with MSA Rankings\*\***

*Period Ended September 30, 2008*

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>MSA</b>                                 | <b>National</b>  |              |             |              |
|--|------------------|--------------|-------------|--------------|
|  | <b>Ranking**</b> | <b>1-Yr.</b> | <b>Qtr.</b> | <b>5-Yr.</b> |
| Little Rock-North Little Rock-Conway, AR   | 75               | 0.97         | -0.12       | 24.82        |
| Logan, UT-ID                               | 8                | 4.55         | 1.11        | 34.25        |
| Longview, WA                               | 87               | 0.37         | -1.31       | 49.90        |
| Los Angeles-Long Beach-Glendale, CA (MSAD) | 269              | -18.84       | -6.57       | 45.55        |
| Louisville-Jefferson County, KY-IN         | 71               | 1.04         | -1.62       | 17.01        |
| Lubbock, TX                                | 19               | 3.20         | 0.62        | 18.91        |
| Lynchburg, VA                              | 50               | 1.82         | -1.30       | 41.41        |
| Macon, GA                                  | 18               | 3.47         | 3.64        | 21.51        |
| Madera, CA                                 | 282              | -26.41       | -13.86      | 26.65        |
| Madison, WI                                | 147              | -1.40        | -2.04       | 24.66        |
| Manchester-Nashua, NH                      | 191              | -3.90        | -2.67       | 17.18        |
| Mansfield, OH                              | 80               | 0.56         | 0.88        | 2.53         |
| Medford, OR                                | 245              | -10.69       | -5.60       | 42.19        |
| Memphis, TN-MS-AR                          | 121              | -0.67        | -1.77       | 14.14        |
| Merced, CA                                 | 292              | -42.30       | -16.51      | -15.00       |
| Miami-Miami Beach-Kendall, FL (MSAD)       | 267              | -17.91       | -8.24       | 55.97        |
| Michigan City-La Porte, IN                 | 136              | -1.07        | -2.58       | 15.84        |
| Milwaukee-Waukesha-West Allis, WI          | 159              | -1.78        | -2.17       | 25.98        |
| Minneapolis-St. Paul-Bloomington, MN-WI    | 224              | -6.47        | -4.34       | 12.19        |
| Missoula, MT                               | 123              | -0.72        | -2.94       | 43.52        |
| Mobile, AL                                 | 6                | 4.97         | 2.49        | 41.92        |
| Modesto, CA                                | 290              | -36.65       | -15.04      | -6.96        |
| Monroe, LA                                 | 29               | 2.75         | 1.54        | 21.34        |
| Monroe, MI                                 | 233              | -8.23        | -2.69       | -7.50        |
| Montgomery, AL                             | 125              | -0.76        | -0.80       | 25.04        |
| Mount Vernon-Anacortes, WA                 | 113              | -0.45        | 1.04        | 63.32        |
| Muskegon-North Shores, MI                  | 152              | -1.54        | -1.07       | 2.45         |
| Myrtle Beach-North Myrtle Beach-Conway, SC | 199              | -4.47        | -1.13       | 49.38        |
| Napa, CA                                   | 260              | -16.33       | -6.25       | 18.87        |
| Naples-Marco Island, FL                    | 281              | -25.25       | -9.01       | 29.78        |

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

**Rankings by**  
**\*Metropolitan Statistical Areas and Divisions**  
**Percent Change in House Prices with MSA Rankings\*\***

*Period Ended September 30, 2008*

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>MSA</b>                                     | <b>National</b>  |              |             |              |
|--|------------------|--------------|-------------|--------------|
|  | <b>Ranking**</b> | <b>1-Yr.</b> | <b>Qtr.</b> | <b>5-Yr.</b> |
| Nashville-Davidson--Murfreesboro--Franklin, TN | 61               | 1.41         | -0.76       | 32.32        |
| Nassau-Suffolk, NY (MSAD)                      | 219              | -5.81        | -3.62       | 33.76        |
| Newark-Union, NJ-PA (MSAD)                     | 214              | -5.60        | -3.05       | 35.21        |
| New Haven-Milford, CT                          | 207              | -5.02        | -2.92       | 30.31        |
| New Orleans-Metairie-Kenner, LA                | 171              | -2.62        | -2.06       | 34.12        |
| New York-White Plains-Wayne, NY-NJ (MSAD)      | 201              | -4.55        | -3.17       | 42.81        |
| Niles-Benton Harbor, MI                        | 211              | -5.29        | -6.79       | 15.01        |
| Norwich-New London, CT                         | 178              | -2.99        | -2.75       | 33.69        |
| Oakland-Fremont-Hayward, CA (MSAD)             | 272              | -19.91       | -8.75       | 14.12        |
| Ocala, FL                                      | 255              | -13.63       | -4.80       | 50.75        |
| Ocean City, NJ                                 | 242              | -10.04       | -7.51       | 44.24        |
| Ogden-Clearfield, UT                           | 111              | -0.38        | -1.81       | 37.57        |
| Oklahoma City, OK                              | 44               | 2.10         | -0.54       | 26.67        |
| Olympia, WA                                    | 160              | -1.81        | -1.22       | 60.79        |
| Omaha-Council Bluffs, NE-IA                    | 142              | -1.26        | -2.38       | 11.99        |
| Orlando-Kissimmee, FL                          | 259              | -15.44       | -6.74       | 48.66        |
| Oshkosh-Neenah, WI                             | 73               | 0.99         | 0.66        | 17.84        |
| Owensboro, KY                                  | 92               | 0.29         | -1.58       | 9.19         |
| Oxnard-Thousand Oaks-Ventura, CA               | 273              | -20.15       | -7.41       | 21.77        |
| Palm Bay-Melbourne-Titusville, FL              | 271              | -19.16       | -6.80       | 29.95        |
| Panama City-Lynn Haven, FL                     | 238              | -9.07        | -5.76       | 51.24        |
| Peabody, MA (MSAD)                             | 208              | -5.14        | -3.83       | 8.47         |
| Pensacola-Ferry Pass-Brent, FL                 | 226              | -6.71        | -1.94       | 41.38        |
| Peoria, IL                                     | 72               | 1.02         | -0.41       | 20.52        |
| Philadelphia, PA (MSAD)                        | 161              | -1.81        | -1.94       | 44.64        |
| Phoenix-Mesa-Scottsdale, AZ                    | 261              | -16.63       | -7.53       | 48.32        |
| Pittsburgh, PA                                 | 42               | 2.22         | -0.41       | 19.79        |
| Portland-South Portland-Biddeford, ME          | 105              | -0.08        | -0.41       | 31.63        |
| Portland-Vancouver-Beaverton, OR-WA            | 173              | -2.64        | -2.28       | 55.46        |
| Port St. Lucie, FL                             | 284              | -27.12       | -10.95      | 14.09        |

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

**Rankings by**  
**\*Metropolitan Statistical Areas and Divisions**  
**Percent Change in House Prices with MSA Rankings\*\***

*Period Ended September 30, 2008*

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>MSA</b>                                      | <b>National</b>  |              |             |              |
|---|------------------|--------------|-------------|--------------|
|   | <b>Ranking**</b> | <b>1-Yr.</b> | <b>Qtr.</b> | <b>5-Yr.</b> |
| Poughkeepsie-Newburgh-Middletown, NY            | 195              | -4.14        | -2.37       | 33.14        |
| Prescott, AZ                                    | 240              | -9.80        | -5.13       | 52.36        |
| Providence-New Bedford-Fall River, RI-MA        | 231              | -7.93        | -4.60       | 21.65        |
| Provo-Orem, UT                                  | 182              | -3.10        | -2.72       | 43.10        |
| Pueblo, CO                                      | 223              | -6.37        | -6.01       | 5.53         |
| Punta Gorda, FL                                 | 274              | -21.26       | -10.00      | 16.76        |
| Racine, WI                                      | 168              | -2.39        | -2.46       | 25.87        |
| Raleigh-Cary, NC                                | 15               | 3.84         | 0.41        | 27.81        |
| Rapid City, SD                                  | 3                | 5.43         | 0.74        | 29.67        |
| Reading, PA                                     | 154              | -1.71        | -3.14       | 42.42        |
| Redding, CA                                     | 256              | -14.07       | -6.63       | 31.14        |
| Reno-Sparks, NV                                 | 257              | -15.03       | -6.14       | 32.87        |
| Richmond, VA                                    | 130              | -0.83        | -0.62       | 51.17        |
| Riverside-San Bernardino-Ontario, CA            | 287              | -31.46       | -13.65      | 20.42        |
| Roanoke, VA                                     | 31               | 2.65         | 0.37        | 40.06        |
| Rochester, MN                                   | 153              | -1.69        | -0.92       | 11.45        |
| Rochester, NY                                   | 107              | -0.15        | -2.12       | 14.31        |
| Rockford, IL                                    | 143              | -1.30        | -2.26       | 23.64        |
| Rockingham County-Strafford County, NH (MSAD)   | 206              | -5.01        | -3.55       | 15.78        |
| Sacramento-Arden-Arcade-Roseville, CA           | 277              | -22.52       | -9.40       | 6.04         |
| Saginaw-Saginaw Township North, MI              | 237              | -9.03        | -8.31       | -7.73        |
| St. Cloud, MN                                   | 128              | -0.79        | -0.81       | 20.35        |
| St. George, UT                                  | 235              | -8.47        | -4.73       | 59.47        |
| St. Louis, MO-IL                                | 135              | -0.96        | -1.66       | 23.53        |
| Salem, OR                                       | 138              | -1.13        | -1.52       | 47.78        |
| Salinas, CA                                     | 289              | -34.09       | -17.64      | -1.76        |
| Salt Lake City, UT                              | 157              | -1.76        | -1.74       | 52.86        |
| San Antonio, TX                                 | 45               | 1.99         | -0.15       | 35.76        |
| San Diego-Carlsbad-San Marcos, CA               | 265              | -17.55       | -6.07       | 15.10        |
| San Francisco-San Mateo-Redwood City, CA (MSAD) | 232              | -8.03        | -2.56       | 31.94        |

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

**Rankings by**  
**\*Metropolitan Statistical Areas and Divisions**  
**Percent Change in House Prices with MSA Rankings\*\***

*Period Ended September 30, 2008*

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>MSA</b>                           | <b>National</b>  |              |             |              |
|--------------------------------------|------------------|--------------|-------------|--------------|
|                                      | <b>Ranking**</b> | <b>1-Yr.</b> | <b>Qtr.</b> | <b>5-Yr.</b> |
| San Jose-Sunnyvale-Santa Clara, CA   | 247              | -11.51       | -4.94       | 27.73        |
| San Luis Obispo-Paso Robles, CA      | 239              | -9.07        | -3.03       | 26.24        |
| Santa Ana-Anaheim-Irvine, CA (MSAD)  | 268              | -18.17       | -4.96       | 32.21        |
| Santa Barbara-Santa Maria-Goleta, CA | 266              | -17.74       | -6.24       | 10.24        |
| Santa Cruz-Watsonville, CA           | 248              | -11.64       | -3.72       | 23.57        |
| Santa Fe, NM                         | 155              | -1.71        | -1.29       | 42.34        |
| Santa Rosa-Petaluma, CA              | 263              | -16.77       | -5.62       | 10.43        |
| Savannah, GA                         | 149              | -1.46        | -2.56       | 42.84        |
| Scranton-Wilkes-Barre, PA            | 69               | 1.11         | -2.16       | 35.03        |
| Seattle-Bellevue-Everett, WA (MSAD)  | 177              | -2.97        | -2.20       | 54.86        |
| Sheboygan, WI                        | 167              | -2.27        | -2.55       | 21.67        |
| Shreveport-Bossier City, LA          | 58               | 1.48         | -0.92       | 29.06        |
| Sioux City, IA-NE-SD                 | 86               | 0.40         | -2.78       | 10.46        |
| Sioux Falls, SD                      | 51               | 1.76         | -1.13       | 21.60        |
| South Bend-Mishawaka, IN-MI          | 83               | 0.54         | -2.63       | 13.99        |
| Spartanburg, SC                      | 11               | 4.12         | 2.20        | 16.64        |
| Spokane, WA                          | 122              | -0.70        | -1.83       | 62.03        |
| Springfield, IL                      | 109              | -0.23        | -2.52       | 15.47        |
| Springfield, MA                      | 210              | -5.26        | -4.13       | 28.71        |
| Springfield, MO                      | 110              | -0.26        | -2.38       | 22.76        |
| Springfield, OH                      | 197              | -4.21        | -4.05       | 3.10         |
| Stockton, CA                         | 291              | -41.44       | -19.11      | -15.04       |
| Syracuse, NY                         | 27               | 2.82         | 1.41        | 29.88        |
| Tacoma, WA (MSAD)                    | 185              | -3.45        | -2.33       | 58.23        |
| Tallahassee, FL                      | 134              | -0.96        | 0.18        | 51.13        |
| Tampa-St. Petersburg-Clearwater, FL  | 258              | -15.09       | -4.57       | 37.60        |
| Terre Haute, IN                      | 174              | -2.74        | -2.91       | 8.95         |
| Toledo, OH                           | 213              | -5.55        | -3.03       | -1.01        |
| Topeka, KS                           | 89               | 0.34         | 1.78        | 19.46        |
| Trenton-Ewing, NJ                    | 179              | -3.01        | -2.07       | 36.22        |

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**Rankings by**  
**\*Metropolitan Statistical Areas and Divisions**  
**Percent Change in House Prices with MSA Rankings\*\***

*Period Ended September 30, 2008*

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>MSA</b>  | <b>National</b>  |              |             |              |
|---|------------------|--------------|-------------|--------------|
|   | <b>Ranking**</b> | <b>1-Yr.</b> | <b>Qtr.</b> | <b>5-Yr.</b> |
| Tucson, AZ  | 234              | -8.29        | -3.89       | 48.14        |
| Tulsa, OK   | 36               | 2.44         | -0.37       | 18.30        |
| Tuscaloosa, AL                                      | 20               | 3.14         | -0.14       | 28.42        |
| Vallejo-Fairfield, CA                               | 288              | -33.27       | -16.84      | -5.57        |
| Virginia Beach-Norfolk-Newport News, VA-NC          | 163              | -1.97        | -1.02       | 72.58        |
| Visalia-Porterville, CA                             | 270              | -18.92       | -5.86       | 45.28        |
| Warren-Troy-Farmington Hills, MI (MSAD)             | 246              | -10.74       | -5.48       | -13.04       |
| Washington-Arlington-Alexandria, DC-VA-MD-WV (MSAD) | 250              | -12.52       | -4.74       | 43.74        |
| Waterloo-Cedar Falls, IA                            | 53               | 1.64         | 1.06        | 21.47        |
| Wausau, WI  | 108              | -0.19        | -1.67       | 22.44        |
| Wenatchee, WA                                       | 150              | -1.47        | -2.71       | 69.17        |
| West Palm Beach-Boca Raton-Boynton Beach, FL (MSAD) | 278              | -23.23       | -9.10       | 27.43        |
| Wichita, KS   | 78               | 0.78         | -2.20       | 15.09        |
| Wilmington, DE-MD-NJ (MSAD)                         | 166              | -2.19        | -0.74       | 45.51        |
| Wilmington, NC                                      | 96               | 0.14         | -1.05       | 62.12        |
| Winchester, VA-WV                                   | 254              | -13.37       | -5.54       | 39.94        |
| Winston-Salem, NC                                   | 139              | -1.14        | -3.46       | 13.51        |
| Worcester, MA                                       | 228              | -6.99        | -4.71       | 10.44        |
| Yakima, WA  | 68               | 1.27         | -1.48       | 33.30        |
| York-Hanover, PA                                    | 95               | 0.23         | 0.07        | 47.38        |
| Youngstown-Warren-Boardman, OH-PA                   | 193              | -4.10        | -5.24       | 2.88         |
| Yuba City, CA                                       | 280              | -25.24       | -12.94      | 8.24         |

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**Unranked Metropolitan Statistical Areas and Divisions\***  
**Percent Change in House Prices for MSAs and**  
**Divisions Not Ranked in Previous Tables**  
**Period Ended September 30, 2008**

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| MSA                       | 1-Yr.  | 5-Yr.** |
|---------------------------|--------|---------|
| Abilene, TX               | 0.42   | 31.90   |
| Albany, GA                | 1.12   | 23.16   |
| Alexandria, LA            | 2.18   | 29.28   |
| Altoona, PA               | 4.79   | 30.34   |
| Anniston-Oxford, AL       | 2.44   | 28.33   |
| Auburn-Opelika, AL        | 2.43   | 38.67   |
| Bangor, ME                | 2.03   | 38.24   |
| Binghamton, NY            | 8.17   | 48.53   |
| Brownsville-Harlingen, TX | -0.81  | 14.84   |
| Brunswick, GA             | 0.72   | 48.20   |
| Carson City, NV           | -8.49  | 41.80   |
| Casper, WY                | 0.40   | 63.62   |
| Clarksville, TN-KY        | 3.02   | 30.66   |
| Cleveland, TN             | 1.63   | 25.52   |
| College Station-Bryan, TX | 6.75   | 28.74   |
| Corvallis, OR             | 0.62   | 53.14   |
| Cumberland, MD-WV         | 2.63   | 57.60   |
| Dalton, GA                | -2.54  | 17.60   |
| Danville, IL              | -7.45  | 14.76   |
| Danville, VA              | -4.74  | 16.25   |
| Dothan, AL                | 3.00   | 33.01   |
| Dover, DE                 | -1.35  | 55.71   |
| El Centro, CA             | -22.82 | 32.00   |
| Elizabethtown, KY         | -0.88  | 23.90   |
| Elmira, NY                | -0.82  | 18.17   |
| Fairbanks, AK             | -5.18  | 32.96   |

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Note: While these MSAs meet FHFA's minimum criteria for publication, the indexes are subject to more variability based on smaller sample sizes. As this variability is most pronounced in the last quarter, it is advised that the reader track these numbers for stability over the release of the next few HPI reports.

\*\*Note: Blanks are displayed where statistical criteria are not met early enough to display the five-year percentage change.

**Unranked Metropolitan Statistical Areas and Divisions\***  
**Percent Change in House Prices for MSAs and**  
**Divisions Not Ranked in Previous Tables**  
**Period Ended September 30, 2008**

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| MSA                          | 1-Yr.  | 5-Yr.** |
|------------------------------|--------|---------|
| Farmington, NM               | -0.07  | 49.05   |
| Florence-Muscle Shoals, AL   | 8.88   | 30.42   |
| Gadsden, AL                  | 3.72   | 25.21   |
| Gainesville, FL              | -7.01  | 55.19   |
| Glens Falls, NY              | 2.57   | 61.46   |
| Goldsboro, NC                | 2.44   | 19.12   |
| Grand Forks, ND-MN           | -1.22  | 33.14   |
| Great Falls, MT              | 2.73   | 39.69   |
| Greenville, NC               | 1.71   | 19.19   |
| Hanford-Corcoran, CA         | -15.93 | 48.56   |
| Harrisonburg, VA             | -1.12  | 54.82   |
| Hattiesburg, MS              | -1.51  | 29.66   |
| Hinesville-Fort Stewart, GA  | 2.39   | 47.38   |
| Hot Springs, AR              | 4.25   | 39.97   |
| Ithaca, NY                   | 5.62   | 47.68   |
| Jackson, TN                  | -2.63  | 10.22   |
| Jacksonville, NC             | 1.65   | 52.76   |
| Johnson City, TN             | 3.63   | 33.27   |
| Johnstown, PA                | 2.93   | 29.36   |
| Jonesboro, AR                | 4.56   | 10.67   |
| Killeen-Temple-Fort Hood, TX | 1.87   | 25.79   |
| Lake Charles, LA             | 2.92   | 36.74   |
| Laredo, TX                   | 1.35   | 26.29   |
| Lawton, OK                   | -1.85  | 31.52   |
| Lebanon, PA                  | 2.02   | 51.36   |
| Lewiston, ID-WA              | 3.99   | 65.49   |
| Lewiston-Auburn, ME          | 3.42   | 40.10   |

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**Unranked Metropolitan Statistical Areas and Divisions\***  
**Percent Change in House Prices for MSAs and**  
**Divisions Not Ranked in Previous Tables**  
**Period Ended September 30, 2008**

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

|                                    |        |       |
|------------------------------------|--------|-------|
| Longview, TX                       | 4.05   | 38.24 |
| McAllen-Edinburg-Mission, TX       | 2.99   | 22.79 |
| Midland, TX                        | 2.73   | 74.53 |
| Morgantown, WV                     | 1.73   | 44.21 |
| Morristown, TN                     | 1.99   | 32.28 |
| Muncie, IN                         | -4.03  | -1.97 |
| Odessa, TX                         | 7.95   | 79.24 |
| Palm Coast, FL                     | -17.97 | 26.58 |
| Parkersburg-Marietta-Vienna, WV-OH | 5.90   | 20.80 |
| Pascagoula, MS                     | -2.05  | 45.02 |
| Pine Bluff, AR                     | 0.55   | 26.57 |
| Pittsfield, MA                     | -4.14  | 32.57 |
| Pocatello, ID                      | 1.18   | 40.68 |
| Rocky Mount, NC                    | 6.84   | 17.02 |
| Rome, GA                           | 0.60   | 14.47 |
| Salisbury, MD                      | -0.21  | 63.15 |
| San Angelo, TX                     | 1.88   | 39.28 |
| Sandusky, OH                       | -12.64 | -6.65 |
| Sebastian-Vero Beach, FL           | -18.13 | 29.97 |
| Sherman-Denison, TX                | 8.35   | 24.49 |
| St. Joseph, MO-KS                  | -4.87  | 13.90 |
| State College, PA                  | 1.91   | 34.12 |
| Sumter, SC                         | 1.24   | 31.92 |
| Texarkana, TX-Texarkana, AR        | -1.60  | 22.03 |
| Tyler, TX                          | -0.57  | 24.22 |
| Utica-Rome, NY                     | 2.14   | 38.20 |
| Valdosta, GA                       | -1.34  | 31.46 |

\*For composition of metropolitan statistical areas and divisions see <http://www.whitehouse.gov/omb/bulletins/fy2008/b08-01.pdf> or see FHFA HPI FAQ #7 for more information.

Note: While these MSAs meet FHFA's minimum criteria for publication, the indexes are subject to more variability based on smaller sample sizes. As this variability is most pronounced in the last quarter, it is advised that the reader track these numbers for stability over the release of the next few HPI reports.

\*\*Note: Blanks are displayed where statistical criteria are not met early enough to display the five-year percentage change.

**Unranked Metropolitan Statistical Areas and Divisions\***  
**Percent Change in House Prices for MSAs and**  
**Divisions Not Ranked in Previous Tables**  
**Period Ended September 30, 2008**

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| MSA                              | 1-Yr. | 5-Yr.** |
|----------------------------------|-------|---------|
| Victoria, TX                     | 8.38  | 33.91   |
| Vineland-Millville-Bridgeton, NJ | -2.45 | 59.33   |
| Waco, TX                         | 2.42  | 22.79   |
| Warner Robins, GA                | -1.66 | 16.12   |
| Weirton-Steubenville, WV-OH      | -1.64 | 10.24   |
| Wheeling, WV-OH                  | -1.44 | 20.54   |
| Wichita Falls, TX                | -2.98 | 18.85   |
| Williamsport, PA                 | -1.02 | 24.83   |
| Yuma, AZ                         | -5.84 | 64.58   |

\*For composition of metropolitan statistical areas and divisions see <http://www.whitehouse.gov/omb/bulletins/fy2008/b08-01.pdf> or see FHFA HPI FAQ #7 for more information.

Note: While these MSAs meet FHFA's minimum criteria for publication, the indexes are subject to more variability based on smaller sample sizes. As this variability is most pronounced in the last quarter, it is advised that the reader track these numbers for stability over the release of the next few HPI reports.

\*\*Note: Blanks are displayed where statistical criteria are not met early enough to display the five-year percentage change.

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# **HOUSE PRICE INDEX (HPI) STATISTICAL REPORT**

## **House Price Index Series 1st Quarter 1985\* to 3<sup>rd</sup> Quarter 2008**

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This report contains the index number and standard error for each quarterly Census Division and state HPI since the first quarter of 1985. The number in each column is the index number. The number in parenthesis 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 with relatively few repeat transactions and also with areas where the economy has experienced more pronounced ups and downs with resulting wide swings in house prices.

This report also contains house price volatility parameter estimates and annualized volatility estimates for each division and state index. 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 [http://www.ofheo.gov/Media/Archive/house/hpi\\_tech.pdf](http://www.ofheo.gov/Media/Archive/house/hpi_tech.pdf).

\*Due to space limitations, information is reported in this document from 1985 to present. To access earlier information (from 1975 through 1985), visit the agency's website to access manipulatable data for census divisions, the U.S., Census Divisions, states and MSAs. (go to: [http://www.ofheo.gov/hpi\\_download.aspx](http://www.ofheo.gov/hpi_download.aspx)).

You may also contact the Office of External Relations at (202)414-6922 with any questions. Data are available back to 1975Q1 for states, Census Divisions, and the United States. The starting point for the MSA data varies.

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**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>United States</b> | <b>New England</b> | <b>Middle Atlantic</b> | <b>South Atlantic</b> | <b>East South Central</b> |
|-------------|------------|----------------------|--------------------|------------------------|-----------------------|---------------------------|
| 1985        | 1          | 123.80               | 170.85 (1.36)      | 143.54 (0.70)          | 127.21 (0.44)         | 116.08 (0.84)             |
| 1985        | 2          | 125.79               | 182.43 (1.45)      | 149.38 (0.72)          | 127.82 (0.43)         | 118.33 (0.84)             |
| 1985        | 3          | 127.95               | 191.99 (1.51)      | 154.87 (0.74)          | 130.12 (0.43)         | 119.30 (0.83)             |
| 1985        | 4          | 129.50               | 203.74 (1.61)      | 160.03 (0.77)          | 131.70 (0.44)         | 121.01 (0.85)             |
| 1986        | 1          | 131.96               | 211.58 (1.67)      | 164.24 (0.79)          | 134.52 (0.45)         | 122.31 (0.85)             |
| 1986        | 2          | 134.71               | 222.19 (1.74)      | 171.29 (0.81)          | 136.48 (0.44)         | 124.30 (0.85)             |
| 1986        | 3          | 136.92               | 234.21 (1.84)      | 181.47 (0.86)          | 137.85 (0.45)         | 125.41 (0.86)             |
| 1986        | 4          | 139.11               | 246.62 (1.94)      | 189.12 (0.90)          | 139.71 (0.45)         | 127.65 (0.88)             |
| 1987        | 1          | 141.96               | 256.20 (2.02)      | 195.98 (0.93)          | 142.89 (0.46)         | 129.70 (0.89)             |
| 1987        | 2          | 144.39               | 265.26 (2.09)      | 204.99 (0.97)          | 145.00 (0.47)         | 131.37 (0.90)             |
| 1987        | 3          | 146.21               | 274.79 (2.19)      | 214.64 (1.03)          | 147.88 (0.49)         | 132.81 (0.93)             |
| 1987        | 4          | 147.23               | 279.60 (2.24)      | 219.96 (1.07)          | 149.52 (0.50)         | 132.98 (0.95)             |
| 1988        | 1          | 149.77               | 284.31 (2.28)      | 224.13 (1.09)          | 152.37 (0.51)         | 135.03 (0.96)             |
| 1988        | 2          | 152.83               | 288.43 (2.28)      | 230.00 (1.10)          | 156.15 (0.51)         | 135.88 (0.95)             |
| 1988        | 3          | 154.32               | 288.33 (2.29)      | 232.39 (1.11)          | 158.07 (0.52)         | 136.28 (0.95)             |
| 1988        | 4          | 155.84               | 289.95 (2.30)      | 233.18 (1.12)          | 159.85 (0.53)         | 136.45 (0.96)             |
| 1989        | 1          | 157.88               | 288.13 (2.29)      | 234.32 (1.13)          | 161.91 (0.54)         | 137.15 (0.97)             |
| 1989        | 2          | 160.08               | 287.03 (2.27)      | 233.80 (1.12)          | 164.01 (0.54)         | 138.47 (0.97)             |
| 1989        | 3          | 163.64               | 291.07 (2.30)      | 236.85 (1.13)          | 166.66 (0.54)         | 139.97 (0.96)             |
| 1989        | 4          | 165.06               | 291.86 (2.30)      | 238.63 (1.14)          | 167.95 (0.55)         | 140.58 (0.97)             |
| 1990        | 1          | 165.73               | 287.62 (2.28)      | 237.73 (1.14)          | 168.60 (0.55)         | 140.93 (0.97)             |
| 1990        | 2          | 165.98               | 279.53 (2.21)      | 235.13 (1.12)          | 168.59 (0.55)         | 141.47 (0.97)             |
| 1990        | 3          | 166.70               | 275.43 (2.18)      | 234.01 (1.11)          | 169.10 (0.55)         | 141.89 (0.97)             |
| 1990        | 4          | 166.04               | 269.27 (2.13)      | 231.72 (1.11)          | 168.11 (0.55)         | 141.56 (0.97)             |
| 1991        | 1          | 167.46               | 267.41 (2.11)      | 232.00 (1.11)          | 169.71 (0.55)         | 143.46 (0.98)             |
| 1991        | 2          | 168.45               | 264.09 (2.08)      | 232.50 (1.10)          | 170.96 (0.55)         | 144.47 (0.98)             |
| 1991        | 3          | 168.57               | 260.72 (2.05)      | 231.94 (1.10)          | 170.36 (0.55)         | 144.95 (0.98)             |
| 1991        | 4          | 170.90               | 263.20 (2.07)      | 235.16 (1.11)          | 173.25 (0.56)         | 147.34 (1.00)             |
| 1992        | 1          | 172.15               | 262.89 (2.06)      | 237.67 (1.12)          | 174.59 (0.56)         | 148.51 (1.00)             |
| 1992        | 2          | 171.99               | 258.83 (2.03)      | 235.42 (1.11)          | 174.02 (0.56)         | 148.91 (1.01)             |
| 1992        | 3          | 173.87               | 259.75 (2.04)      | 237.96 (1.12)          | 176.21 (0.56)         | 151.36 (1.02)             |
| 1992        | 4          | 174.68               | 260.24 (2.04)      | 239.16 (1.13)          | 176.95 (0.57)         | 152.13 (1.03)             |
| 1993        | 1          | 174.64               | 257.76 (2.03)      | 237.49 (1.12)          | 176.51 (0.57)         | 152.94 (1.03)             |
| 1993        | 2          | 176.19               | 259.24 (2.03)      | 240.58 (1.13)          | 178.12 (0.57)         | 154.82 (1.04)             |
| 1993        | 3          | 177.45               | 259.60 (2.04)      | 240.65 (1.13)          | 179.06 (0.57)         | 156.80 (1.06)             |
| 1993        | 4          | 178.93               | 260.91 (2.05)      | 242.31 (1.14)          | 180.29 (0.57)         | 158.36 (1.07)             |

The United States index is constructed to reflect the weighted average quarterly price change for the nine Census Divisions (weights are the share of 1-unit detached housing units in each division). Standard error of index number is in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>United States</b> | <b>New England</b> | <b>Middle Atlantic</b> | <b>South Atlantic</b> | <b>East South Central</b> |
|-------------|------------|----------------------|--------------------|------------------------|-----------------------|---------------------------|
| 1994        | 1          | 179.93               | 260.38 (2.05)      | 241.09 (1.14)          | 180.59 (0.58)         | 160.33 (1.08)             |
| 1994        | 2          | 180.88               | 256.41 (2.02)      | 239.14 (1.14)          | 180.22 (0.58)         | 162.97 (1.11)             |
| 1994        | 3          | 181.54               | 254.87 (2.02)      | 237.31 (1.14)          | 180.45 (0.59)         | 164.45 (1.12)             |
| 1994        | 4          | 181.27               | 252.43 (2.00)      | 234.14 (1.13)          | 180.45 (0.59)         | 165.69 (1.13)             |
| 1995        | 1          | 182.01               | 252.82 (2.01)      | 233.20 (1.12)          | 180.71 (0.59)         | 167.14 (1.14)             |
| 1995        | 2          | 185.22               | 257.08 (2.03)      | 237.18 (1.14)          | 183.52 (0.60)         | 170.41 (1.16)             |
| 1995        | 3          | 188.10               | 261.42 (2.06)      | 240.99 (1.15)          | 186.47 (0.60)         | 173.07 (1.17)             |
| 1995        | 4          | 189.63               | 262.73 (2.07)      | 241.39 (1.15)          | 188.21 (0.61)         | 174.93 (1.18)             |
| 1996        | 1          | 191.95               | 265.79 (2.09)      | 245.11 (1.17)          | 190.50 (0.61)         | 177.55 (1.20)             |
| 1996        | 2          | 192.27               | 264.76 (2.09)      | 242.73 (1.16)          | 190.30 (0.61)         | 178.48 (1.21)             |
| 1996        | 3          | 193.12               | 264.19 (2.09)      | 241.55 (1.15)          | 190.98 (0.62)         | 180.04 (1.22)             |
| 1996        | 4          | 194.81               | 267.03 (2.11)      | 242.30 (1.16)          | 192.54 (0.62)         | 181.93 (1.23)             |
| 1997        | 1          | 196.57               | 268.97 (2.12)      | 243.63 (1.17)          | 194.64 (0.63)         | 184.08 (1.25)             |
| 1997        | 2          | 198.16               | 271.73 (2.14)      | 245.09 (1.17)          | 195.63 (0.63)         | 185.31 (1.25)             |
| 1997        | 3          | 201.08               | 275.39 (2.17)      | 247.67 (1.18)          | 198.49 (0.64)         | 187.91 (1.27)             |
| 1997        | 4          | 203.73               | 279.22 (2.20)      | 250.13 (1.19)          | 201.22 (0.65)         | 190.44 (1.29)             |
| 1998        | 1          | 206.81               | 283.19 (2.22)      | 254.95 (1.21)          | 204.59 (0.65)         | 193.17 (1.30)             |
| 1998        | 2          | 208.37               | 287.43 (2.26)      | 255.27 (1.21)          | 205.27 (0.66)         | 194.98 (1.31)             |
| 1998        | 3          | 211.26               | 293.33 (2.30)      | 257.07 (1.22)          | 208.00 (0.67)         | 197.23 (1.33)             |
| 1998        | 4          | 213.79               | 297.25 (2.33)      | 260.27 (1.23)          | 210.42 (0.67)         | 199.70 (1.34)             |
| 1999        | 1          | 215.89               | 302.32 (2.38)      | 262.26 (1.24)          | 212.34 (0.68)         | 201.23 (1.36)             |
| 1999        | 2          | 218.75               | 309.76 (2.44)      | 265.50 (1.26)          | 214.35 (0.69)         | 202.52 (1.37)             |
| 1999        | 3          | 221.97               | 319.94 (2.52)      | 270.36 (1.28)          | 217.19 (0.70)         | 203.47 (1.37)             |
| 1999        | 4          | 224.35               | 325.77 (2.57)      | 273.57 (1.30)          | 219.28 (0.71)         | 204.64 (1.38)             |
| 2000        | 1          | 228.80               | 336.92 (2.66)      | 278.25 (1.32)          | 222.77 (0.72)         | 206.56 (1.40)             |
| 2000        | 2          | 232.48               | 346.89 (2.73)      | 284.77 (1.35)          | 226.11 (0.72)         | 208.03 (1.40)             |
| 2000        | 3          | 236.81               | 358.06 (2.81)      | 290.77 (1.37)          | 230.11 (0.74)         | 210.04 (1.42)             |
| 2000        | 4          | 240.57               | 366.01 (2.88)      | 295.01 (1.39)          | 233.73 (0.75)         | 212.52 (1.43)             |
| 2001        | 1          | 246.77               | 375.63 (2.95)      | 302.32 (1.43)          | 240.45 (0.77)         | 217.77 (1.47)             |
| 2001        | 2          | 250.90               | 386.21 (3.03)      | 309.06 (1.46)          | 244.30 (0.78)         | 219.18 (1.47)             |
| 2001        | 3          | 254.81               | 398.26 (3.12)      | 315.81 (1.49)          | 248.45 (0.79)         | 220.82 (1.49)             |
| 2001        | 4          | 258.05               | 405.95 (3.18)      | 321.36 (1.51)          | 252.38 (0.80)         | 223.13 (1.50)             |
| 2002        | 1          | 261.83               | 417.04 (3.27)      | 329.00 (1.55)          | 255.94 (0.82)         | 224.21 (1.51)             |
| 2002        | 2          | 266.26               | 431.16 (3.38)      | 338.19 (1.59)          | 260.59 (0.83)         | 224.98 (1.51)             |
| 2002        | 3          | 271.74               | 443.87 (3.48)      | 347.50 (1.63)          | 266.61 (0.85)         | 228.22 (1.53)             |
| 2002        | 4          | 275.74               | 453.79 (3.56)      | 355.01 (1.67)          | 270.54 (0.86)         | 230.41 (1.55)             |

The United States index is constructed to reflect the weighted average quarterly price change for the nine Census Divisions (weights are the share of 1-unit detached housing units in each division). Standard error of index number is in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>United States</b> | <b>New England</b> | <b>Middle Atlantic</b> | <b>South Atlantic</b> | <b>East South Central</b> |
|-------------|------------|----------------------|--------------------|------------------------|-----------------------|---------------------------|
| 2003        | 1          | 279.12               | 462.06 (3.62)      | 361.25 (1.70)          | 274.26 (0.87)         | 232.29 (1.56)             |
| 2003        | 2          | 282.43               | 469.42 (3.68)      | 367.19 (1.73)          | 278.44 (0.89)         | 234.23 (1.57)             |
| 2003        | 3          | 286.85               | 479.52 (3.76)      | 375.60 (1.77)          | 283.36 (0.90)         | 235.81 (1.59)             |
| 2003        | 4          | 295.14               | 499.48 (3.92)      | 392.37 (1.85)          | 291.96 (0.93)         | 238.24 (1.61)             |
| 2004        | 1          | 300.02               | 508.95 (4.00)      | 399.09 (1.88)          | 298.90 (0.96)         | 240.65 (1.62)             |
| 2004        | 2          | 307.39               | 522.71 (4.10)      | 410.98 (1.94)          | 307.76 (0.98)         | 242.76 (1.64)             |
| 2004        | 3          | 319.02               | 548.43 (4.31)      | 431.89 (2.04)          | 321.00 (1.03)         | 246.37 (1.66)             |
| 2004        | 4          | 326.40               | 559.37 (4.39)      | 443.11 (2.09)          | 331.73 (1.06)         | 250.33 (1.69)             |
| 2005        | 1          | 334.20               | 573.11 (4.50)      | 454.87 (2.15)          | 344.16 (1.10)         | 253.06 (1.71)             |
| 2005        | 2          | 344.70               | 588.84 (4.63)      | 471.48 (2.23)          | 359.24 (1.15)         | 258.13 (1.74)             |
| 2005        | 3          | 355.25               | 601.63 (4.73)      | 487.72 (2.30)          | 376.02 (1.20)         | 263.34 (1.78)             |
| 2005        | 4          | 363.85               | 610.74 (4.81)      | 501.54 (2.38)          | 389.17 (1.25)         | 267.29 (1.81)             |
| 2006        | 1          | 370.53               | 615.87 (4.85)      | 512.65 (2.43)          | 399.37 (1.28)         | 271.92 (1.84)             |
| 2006        | 2          | 374.32               | 614.21 (4.84)      | 518.19 (2.46)          | 404.37 (1.30)         | 276.53 (1.87)             |
| 2006        | 3          | 378.01               | 613.45 (4.83)      | 522.72 (2.48)          | 408.22 (1.31)         | 280.53 (1.89)             |
| 2006        | 4          | 383.51               | 618.45 (4.87)      | 529.58 (2.51)          | 416.45 (1.34)         | 285.78 (1.93)             |
| 2007        | 1          | 386.03               | 619.12 (4.87)      | 533.81 (2.53)          | 418.94 (1.35)         | 289.10 (1.95)             |
| 2007        | 2          | 386.71               | 614.25 (4.83)      | 534.02 (2.53)          | 419.08 (1.35)         | 292.36 (1.97)             |
| 2007        | 3          | 384.82               | 607.84 (4.78)      | 532.29 (2.52)          | 415.08 (1.34)         | 294.02 (1.99)             |
| 2007        | 4          | 386.39               | 611.74 (4.82)      | 535.79 (2.54)          | 416.01 (1.34)         | 297.56 (2.01)             |
| 2008        | 1          | 385.56               | 612.58 (4.82)      | 536.25 (2.54)          | 414.11 (1.33)         | 299.75 (2.02)             |
| 2008        | 2          | 379.58               | 601.41 (4.74)      | 529.60 (2.52)          | 406.08 (1.31)         | 300.72 (2.04)             |
| 2008        | 3          | 369.42               | 585.15 (4.67)      | 518.30 (2.50)          | 395.74 (1.31)         | 298.79 (2.05)             |

The United States index is constructed to reflect the weighted average quarterly price change for the nine Census Divisions (weights are the share of 1-unit detached housing units in each division). Standard error of index number is in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>West South Central</b> | <b>West North Central</b> | <b>East North Central</b> | <b>Mountain</b> | <b>Pacific</b> |
|-------------|------------|---------------------------|---------------------------|---------------------------|-----------------|----------------|
| 1985        | 1          | 124.81 (0.50)             | 113.44 (0.64)             | 107.52 (0.33)             | 121.94 (0.75)   | 123.33 (0.29)  |
| 1985        | 2          | 125.31 (0.49)             | 115.28 (0.63)             | 108.77 (0.32)             | 122.01 (0.73)   | 124.75 (0.28)  |
| 1985        | 3          | 125.47 (0.48)             | 116.04 (0.63)             | 110.32 (0.32)             | 123.28 (0.71)   | 127.04 (0.28)  |
| 1985        | 4          | 124.19 (0.49)             | 117.11 (0.64)             | 111.13 (0.33)             | 122.69 (0.71)   | 128.22 (0.28)  |
| 1986        | 1          | 126.47 (0.48)             | 118.48 (0.64)             | 113.12 (0.33)             | 125.55 (0.72)   | 129.74 (0.28)  |
| 1986        | 2          | 128.52 (0.47)             | 119.38 (0.63)             | 115.37 (0.33)             | 127.06 (0.70)   | 132.13 (0.27)  |
| 1986        | 3          | 125.77 (0.46)             | 121.07 (0.64)             | 117.34 (0.34)             | 126.74 (0.70)   | 134.52 (0.28)  |
| 1986        | 4          | 123.71 (0.46)             | 122.02 (0.65)             | 119.30 (0.35)             | 126.52 (0.70)   | 137.44 (0.29)  |
| 1987        | 1          | 124.09 (0.46)             | 123.57 (0.66)             | 121.36 (0.35)             | 128.68 (0.71)   | 140.90 (0.30)  |
| 1987        | 2          | 121.66 (0.45)             | 125.25 (0.67)             | 124.75 (0.36)             | 127.72 (0.71)   | 143.68 (0.30)  |
| 1987        | 3          | 116.13 (0.45)             | 125.68 (0.68)             | 127.29 (0.38)             | 125.16 (0.71)   | 147.20 (0.32)  |
| 1987        | 4          | 113.04 (0.46)             | 125.03 (0.70)             | 128.96 (0.39)             | 123.22 (0.72)   | 150.53 (0.33)  |
| 1988        | 1          | 112.79 (0.45)             | 126.24 (0.71)             | 131.19 (0.40)             | 124.39 (0.72)   | 156.37 (0.34)  |
| 1988        | 2          | 113.98 (0.44)             | 127.51 (0.69)             | 134.25 (0.39)             | 124.81 (0.71)   | 162.17 (0.35)  |
| 1988        | 3          | 111.56 (0.43)             | 127.93 (0.70)             | 136.32 (0.40)             | 124.10 (0.70)   | 169.04 (0.36)  |
| 1988        | 4          | 110.79 (0.43)             | 128.03 (0.70)             | 137.55 (0.41)             | 123.48 (0.70)   | 176.90 (0.38)  |
| 1989        | 1          | 111.11 (0.44)             | 128.62 (0.71)             | 139.68 (0.42)             | 123.97 (0.72)   | 184.96 (0.40)  |
| 1989        | 2          | 112.13 (0.43)             | 129.91 (0.71)             | 141.89 (0.42)             | 124.34 (0.71)   | 193.40 (0.41)  |
| 1989        | 3          | 114.23 (0.43)             | 131.26 (0.70)             | 144.87 (0.42)             | 126.72 (0.71)   | 204.87 (0.43)  |
| 1989        | 4          | 113.71 (0.43)             | 132.13 (0.71)             | 145.96 (0.43)             | 126.94 (0.71)   | 211.40 (0.44)  |
| 1990        | 1          | 113.43 (0.43)             | 132.45 (0.71)             | 147.74 (0.43)             | 127.35 (0.71)   | 214.58 (0.45)  |
| 1990        | 2          | 114.30 (0.43)             | 132.48 (0.71)             | 149.55 (0.44)             | 127.62 (0.71)   | 215.60 (0.45)  |
| 1990        | 3          | 114.77 (0.43)             | 133.15 (0.71)             | 151.07 (0.44)             | 129.16 (0.71)   | 217.81 (0.46)  |
| 1990        | 4          | 114.15 (0.43)             | 132.84 (0.71)             | 151.48 (0.44)             | 129.28 (0.71)   | 217.57 (0.46)  |
| 1991        | 1          | 115.13 (0.43)             | 134.49 (0.72)             | 153.21 (0.44)             | 131.23 (0.72)   | 219.26 (0.46)  |
| 1991        | 2          | 116.63 (0.43)             | 135.34 (0.71)             | 155.23 (0.45)             | 132.40 (0.72)   | 218.39 (0.45)  |
| 1991        | 3          | 116.89 (0.43)             | 135.89 (0.72)             | 156.46 (0.45)             | 132.87 (0.72)   | 218.07 (0.45)  |
| 1991        | 4          | 118.37 (0.43)             | 137.79 (0.72)             | 158.38 (0.46)             | 135.32 (0.73)   | 220.45 (0.45)  |
| 1992        | 1          | 119.88 (0.43)             | 138.69 (0.73)             | 159.87 (0.46)             | 136.98 (0.74)   | 220.00 (0.45)  |
| 1992        | 2          | 119.80 (0.43)             | 139.50 (0.73)             | 161.30 (0.46)             | 138.25 (0.74)   | 218.04 (0.45)  |
| 1992        | 3          | 121.74 (0.44)             | 141.02 (0.74)             | 163.01 (0.47)             | 140.49 (0.75)   | 218.58 (0.45)  |
| 1992        | 4          | 122.39 (0.44)             | 141.90 (0.74)             | 164.54 (0.47)             | 142.44 (0.76)   | 217.40 (0.44)  |
| 1993        | 1          | 122.95 (0.45)             | 142.74 (0.75)             | 165.45 (0.48)             | 144.24 (0.78)   | 214.76 (0.44)  |
| 1993        | 2          | 124.31 (0.45)             | 144.05 (0.75)             | 167.07 (0.48)             | 147.16 (0.79)   | 214.02 (0.44)  |
| 1993        | 3          | 125.94 (0.45)             | 145.79 (0.76)             | 168.91 (0.48)             | 150.38 (0.81)   | 213.01 (0.44)  |
| 1993        | 4          | 127.31 (0.46)             | 147.40 (0.77)             | 170.56 (0.49)             | 153.62 (0.82)   | 213.13 (0.44)  |

The United States index is constructed to reflect the weighted average quarterly price change for the nine Census Divisions (weights are the share of 1-unit detached housing units in each division). Standard error of index number is in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>West South Central</b> | <b>West North Central</b> | <b>East North Central</b> | <b>Mountain</b> | <b>Pacific</b> |
|-------------|------------|---------------------------|---------------------------|---------------------------|-----------------|----------------|
| 1994        | 1          | 128.29 (0.46)             | 149.02 (0.78)             | 172.94 (0.50)             | 157.10 (0.84)   | 212.16 (0.44)  |
| 1994        | 2          | 129.34 (0.47)             | 152.48 (0.81)             | 175.85 (0.51)             | 162.20 (0.87)   | 209.62 (0.44)  |
| 1994        | 3          | 129.66 (0.48)             | 154.56 (0.82)             | 178.05 (0.52)             | 165.82 (0.90)   | 208.03 (0.45)  |
| 1994        | 4          | 129.23 (0.48)             | 155.11 (0.83)             | 178.97 (0.52)             | 167.35 (0.91)   | 205.98 (0.44)  |
| 1995        | 1          | 129.53 (0.48)             | 156.31 (0.83)             | 181.01 (0.53)             | 169.60 (0.92)   | 205.73 (0.45)  |
| 1995        | 2          | 131.99 (0.48)             | 159.21 (0.84)             | 184.45 (0.53)             | 173.37 (0.93)   | 208.72 (0.44)  |
| 1995        | 3          | 133.65 (0.49)             | 161.59 (0.85)             | 187.35 (0.54)             | 177.10 (0.95)   | 211.64 (0.44)  |
| 1995        | 4          | 134.69 (0.49)             | 163.22 (0.86)             | 189.77 (0.55)             | 179.90 (0.97)   | 211.87 (0.44)  |
| 1996        | 1          | 136.35 (0.50)             | 165.19 (0.87)             | 192.14 (0.55)             | 182.52 (0.98)   | 213.45 (0.44)  |
| 1996        | 2          | 136.49 (0.50)             | 166.77 (0.88)             | 194.66 (0.56)             | 183.11 (0.98)   | 212.41 (0.45)  |
| 1996        | 3          | 136.84 (0.50)             | 168.20 (0.89)             | 196.96 (0.57)             | 184.93 (0.99)   | 212.50 (0.45)  |
| 1996        | 4          | 137.84 (0.50)             | 169.85 (0.90)             | 199.25 (0.57)             | 187.48 (1.01)   | 214.04 (0.45)  |
| 1997        | 1          | 138.64 (0.51)             | 171.73 (0.91)             | 201.65 (0.58)             | 189.18 (1.02)   | 215.42 (0.45)  |
| 1997        | 2          | 139.53 (0.51)             | 173.51 (0.91)             | 204.07 (0.59)             | 190.29 (1.02)   | 217.52 (0.46)  |
| 1997        | 3          | 141.12 (0.51)             | 176.07 (0.93)             | 207.03 (0.60)             | 193.47 (1.04)   | 222.19 (0.46)  |
| 1997        | 4          | 143.15 (0.52)             | 178.15 (0.94)             | 209.56 (0.60)             | 196.61 (1.05)   | 225.38 (0.47)  |
| 1998        | 1          | 145.35 (0.52)             | 180.35 (0.95)             | 211.60 (0.61)             | 198.83 (1.06)   | 229.95 (0.47)  |
| 1998        | 2          | 145.93 (0.53)             | 182.00 (0.95)             | 213.95 (0.61)             | 199.83 (1.07)   | 233.05 (0.48)  |
| 1998        | 3          | 148.36 (0.53)             | 184.63 (0.97)             | 216.56 (0.62)             | 202.29 (1.08)   | 237.54 (0.49)  |
| 1998        | 4          | 150.22 (0.54)             | 186.76 (0.98)             | 218.26 (0.63)             | 204.44 (1.09)   | 241.56 (0.50)  |
| 1999        | 1          | 151.19 (0.54)             | 189.49 (0.99)             | 221.19 (0.64)             | 205.92 (1.10)   | 243.39 (0.50)  |
| 1999        | 2          | 153.39 (0.55)             | 193.25 (1.02)             | 224.15 (0.64)             | 208.32 (1.12)   | 246.81 (0.51)  |
| 1999        | 3          | 155.31 (0.56)             | 196.31 (1.03)             | 226.83 (0.65)             | 210.81 (1.13)   | 251.34 (0.53)  |
| 1999        | 4          | 156.73 (0.57)             | 198.11 (1.04)             | 228.88 (0.66)             | 212.75 (1.15)   | 255.40 (0.54)  |
| 2000        | 1          | 158.72 (0.58)             | 202.36 (1.07)             | 233.17 (0.67)             | 217.25 (1.17)   | 263.94 (0.55)  |
| 2000        | 2          | 160.71 (0.58)             | 205.77 (1.08)             | 235.77 (0.68)             | 219.90 (1.18)   | 269.81 (0.56)  |
| 2000        | 3          | 162.93 (0.59)             | 209.51 (1.10)             | 239.45 (0.69)             | 223.55 (1.20)   | 277.03 (0.57)  |
| 2000        | 4          | 164.75 (0.59)             | 212.43 (1.12)             | 242.56 (0.70)             | 227.47 (1.22)   | 283.92 (0.59)  |
| 2001        | 1          | 169.17 (0.61)             | 217.11 (1.14)             | 246.54 (0.71)             | 233.53 (1.25)   | 294.05 (0.60)  |
| 2001        | 2          | 171.10 (0.61)             | 221.06 (1.16)             | 249.76 (0.72)             | 236.52 (1.26)   | 301.27 (0.62)  |
| 2001        | 3          | 172.48 (0.62)             | 225.18 (1.18)             | 252.93 (0.73)             | 239.41 (1.28)   | 306.49 (0.63)  |
| 2001        | 4          | 174.29 (0.62)             | 227.72 (1.19)             | 255.07 (0.73)             | 242.02 (1.29)   | 310.28 (0.63)  |
| 2002        | 1          | 175.08 (0.63)             | 231.45 (1.21)             | 258.33 (0.74)             | 243.78 (1.30)   | 317.05 (0.65)  |
| 2002        | 2          | 176.41 (0.63)             | 235.13 (1.23)             | 261.17 (0.75)             | 245.70 (1.31)   | 325.75 (0.67)  |
| 2002        | 3          | 179.09 (0.64)             | 238.81 (1.25)             | 264.02 (0.76)             | 250.17 (1.34)   | 336.31 (0.69)  |
| 2002        | 4          | 181.31 (0.65)             | 241.82 (1.27)             | 266.04 (0.76)             | 252.40 (1.35)   | 344.32 (0.70)  |

The United States index is constructed to reflect the weighted average quarterly price change for the nine Census Divisions (weights are the share of 1-unit detached housing units in each division). Standard error of index number is in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>West South Central</b> | <b>West North Central</b> | <b>East North Central</b> | <b>Mountain</b> | <b>Pacific</b> |
|-------------|------------|---------------------------|---------------------------|---------------------------|-----------------|----------------|
| 2003        | 1          | 182.54 (0.65)             | 244.10 (1.28)             | 268.28 (0.77)             | 254.04 (1.36)   | 351.22 (0.72)  |
| 2003        | 2          | 183.89 (0.66)             | 246.28 (1.29)             | 270.34 (0.77)             | 256.23 (1.37)   | 356.87 (0.73)  |
| 2003        | 3          | 184.91 (0.66)             | 250.18 (1.31)             | 273.18 (0.78)             | 259.10 (1.38)   | 366.40 (0.75)  |
| 2003        | 4          | 186.69 (0.67)             | 256.41 (1.35)             | 278.57 (0.80)             | 264.46 (1.42)   | 385.94 (0.79)  |
| 2004        | 1          | 188.18 (0.68)             | 259.05 (1.36)             | 280.97 (0.81)             | 268.38 (1.44)   | 397.70 (0.82)  |
| 2004        | 2          | 190.30 (0.68)             | 263.39 (1.38)             | 284.59 (0.82)             | 275.79 (1.48)   | 417.59 (0.86)  |
| 2004        | 3          | 192.34 (0.70)             | 269.69 (1.42)             | 290.63 (0.84)             | 287.69 (1.54)   | 449.97 (0.93)  |
| 2004        | 4          | 195.21 (0.71)             | 273.54 (1.44)             | 294.42 (0.85)             | 294.73 (1.58)   | 466.29 (0.96)  |
| 2005        | 1          | 196.75 (0.72)             | 277.24 (1.46)             | 298.31 (0.86)             | 303.55 (1.63)   | 485.05 (1.01)  |
| 2005        | 2          | 200.22 (0.73)             | 282.50 (1.48)             | 302.63 (0.87)             | 318.27 (1.71)   | 509.53 (1.06)  |
| 2005        | 3          | 203.85 (0.74)             | 287.29 (1.51)             | 307.20 (0.89)             | 333.45 (1.79)   | 532.27 (1.10)  |
| 2005        | 4          | 207.31 (0.75)             | 290.38 (1.53)             | 309.60 (0.89)             | 346.17 (1.86)   | 554.90 (1.16)  |
| 2006        | 1          | 210.97 (0.77)             | 291.95 (1.54)             | 311.55 (0.90)             | 354.60 (1.91)   | 571.34 (1.20)  |
| 2006        | 2          | 214.71 (0.78)             | 293.10 (1.54)             | 311.57 (0.90)             | 361.13 (1.94)   | 579.48 (1.21)  |
| 2006        | 3          | 218.26 (0.79)             | 295.57 (1.56)             | 312.57 (0.90)             | 367.64 (1.98)   | 586.74 (1.23)  |
| 2006        | 4          | 221.99 (0.81)             | 299.00 (1.58)             | 316.07 (0.91)             | 376.03 (2.02)   | 591.59 (1.23)  |
| 2007        | 1          | 224.87 (0.82)             | 301.23 (1.59)             | 317.22 (0.92)             | 380.56 (2.05)   | 592.11 (1.24)  |
| 2007        | 2          | 227.90 (0.83)             | 302.10 (1.59)             | 316.59 (0.91)             | 382.61 (2.06)   | 589.63 (1.23)  |
| 2007        | 3          | 229.96 (0.84)             | 300.97 (1.58)             | 314.76 (0.91)             | 382.78 (2.06)   | 579.48 (1.21)  |
| 2007        | 4          | 232.96 (0.85)             | 303.57 (1.60)             | 316.96 (0.92)             | 384.37 (2.07)   | 571.12 (1.20)  |
| 2008        | 1          | 233.97 (0.85)             | 304.99 (1.60)             | 318.48 (0.92)             | 383.47 (2.06)   | 556.48 (1.16)  |
| 2008        | 2          | 235.34 (0.86)             | 302.96 (1.60)             | 315.21 (0.91)             | 377.38 (2.04)   | 528.01 (1.11)  |
| 2008        | 3          | 235.27 (0.89)             | 297.88 (1.60)             | 306.09 (0.91)             | 365.40 (2.00)   | 492.92 (1.09)  |

The United States index is constructed to reflect the weighted average quarterly price change for the nine Census Divisions (weights are the share of 1-unit detached housing units in each division). Standard error of index number is in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>Alabama</b> | <b>Alaska</b> | <b>Arizona</b> | <b>Arkansas</b> | <b>California</b> |
|-------------|------------|----------------|---------------|----------------|-----------------|-------------------|
| 1985        | 1          | 115.13 (1.84)  | 141.33 (7.29) | 125.18 (1.36)  | 120.60 (2.42)   | 124.70 (0.28)     |
| 1985        | 2          | 118.74 (1.86)  | 141.85 (7.32) | 125.74 (1.33)  | 119.40 (2.32)   | 126.43 (0.27)     |
| 1985        | 3          | 121.43 (1.88)  | 141.93 (7.33) | 127.67 (1.31)  | 123.63 (2.41)   | 129.31 (0.27)     |
| 1985        | 4          | 121.89 (1.91)  | 138.44 (7.15) | 129.18 (1.33)  | 123.74 (2.45)   | 130.75 (0.28)     |
| 1986        | 1          | 123.67 (1.93)  | 138.02 (7.15) | 131.39 (1.33)  | 125.55 (2.44)   | 132.39 (0.28)     |
| 1986        | 2          | 125.45 (1.90)  | 140.96 (7.24) | 135.27 (1.32)  | 127.99 (2.38)   | 134.96 (0.27)     |
| 1986        | 3          | 127.54 (1.94)  | 136.36 (7.01) | 135.24 (1.32)  | 126.37 (2.37)   | 137.84 (0.28)     |
| 1986        | 4          | 129.86 (1.98)  | 132.99 (6.84) | 134.29 (1.31)  | 127.67 (2.41)   | 141.17 (0.29)     |
| 1987        | 1          | 131.44 (2.01)  | 129.49 (6.73) | 137.72 (1.34)  | 128.81 (2.45)   | 144.83 (0.29)     |
| 1987        | 2          | 132.59 (2.02)  | 121.37 (6.32) | 136.73 (1.32)  | 130.48 (2.50)   | 148.31 (0.30)     |
| 1987        | 3          | 133.11 (2.06)  | 112.72 (5.88) | 136.06 (1.36)  | 126.79 (2.52)   | 152.93 (0.32)     |
| 1987        | 4          | 133.08 (2.10)  | 102.32 (5.35) | 133.48 (1.37)  | 124.16 (2.54)   | 157.19 (0.34)     |
| 1988        | 1          | 135.45 (2.12)  | 117.85 (6.14) | 134.24 (1.36)  | 125.85 (2.50)   | 163.00 (0.34)     |
| 1988        | 2          | 136.78 (2.11)  | 112.84 (5.86) | 136.25 (1.35)  | 126.44 (2.47)   | 169.68 (0.35)     |
| 1988        | 3          | 135.73 (2.09)  | 122.40 (6.33) | 133.79 (1.33)  | 125.93 (2.46)   | 177.71 (0.37)     |
| 1988        | 4          | 134.79 (2.09)  | 128.43 (6.60) | 133.90 (1.34)  | 126.02 (2.53)   | 187.42 (0.39)     |
| 1989        | 1          | 135.77 (2.12)  | 124.73 (6.43) | 132.63 (1.34)  | 126.31 (2.52)   | 196.13 (0.41)     |
| 1989        | 2          | 136.98 (2.12)  | 101.18 (5.27) | 132.56 (1.32)  | 127.49 (2.51)   | 205.80 (0.43)     |
| 1989        | 3          | 138.86 (2.12)  | 101.42 (5.30) | 134.36 (1.31)  | 127.77 (2.44)   | 217.69 (0.44)     |
| 1989        | 4          | 139.71 (2.14)  | 99.52 (5.18)  | 133.71 (1.31)  | 126.74 (2.41)   | 224.51 (0.45)     |
| 1990        | 1          | 139.23 (2.13)  | 95.64 (5.02)  | 133.28 (1.31)  | 127.64 (2.45)   | 227.15 (0.46)     |
| 1990        | 2          | 140.59 (2.14)  | 108.96 (5.66) | 132.63 (1.29)  | 127.95 (2.43)   | 227.89 (0.46)     |
| 1990        | 3          | 140.75 (2.13)  | 118.44 (6.13) | 133.30 (1.29)  | 128.47 (2.41)   | 229.78 (0.47)     |
| 1990        | 4          | 140.79 (2.15)  | 116.17 (6.03) | 132.27 (1.29)  | 128.06 (2.41)   | 228.32 (0.47)     |
| 1991        | 1          | 142.47 (2.16)  | 120.89 (6.30) | 134.68 (1.31)  | 129.03 (2.41)   | 228.14 (0.46)     |
| 1991        | 2          | 144.22 (2.18)  | 123.78 (6.41) | 135.43 (1.30)  | 130.04 (2.40)   | 226.72 (0.45)     |
| 1991        | 3          | 145.11 (2.19)  | 127.51 (6.58) | 134.77 (1.29)  | 131.12 (2.42)   | 226.69 (0.45)     |
| 1991        | 4          | 147.45 (2.22)  | 127.57 (6.59) | 138.76 (1.32)  | 133.16 (2.45)   | 228.38 (0.45)     |
| 1992        | 1          | 148.62 (2.23)  | 129.21 (6.65) | 139.55 (1.32)  | 134.32 (2.45)   | 227.11 (0.45)     |
| 1992        | 2          | 148.91 (2.24)  | 130.48 (6.71) | 139.26 (1.32)  | 133.64 (2.45)   | 224.79 (0.45)     |
| 1992        | 3          | 151.78 (2.28)  | 131.29 (6.76) | 140.16 (1.33)  | 135.88 (2.48)   | 224.35 (0.44)     |
| 1992        | 4          | 152.82 (2.29)  | 132.24 (6.79) | 140.93 (1.33)  | 136.77 (2.50)   | 222.24 (0.44)     |
| 1993        | 1          | 153.85 (2.31)  | 131.53 (6.77) | 141.04 (1.34)  | 138.34 (2.54)   | 218.79 (0.43)     |
| 1993        | 2          | 155.65 (2.33)  | 132.24 (6.80) | 142.71 (1.35)  | 140.30 (2.56)   | 216.94 (0.43)     |
| 1993        | 3          | 158.40 (2.38)  | 134.60 (6.91) | 143.89 (1.36)  | 142.69 (2.60)   | 215.09 (0.43)     |
| 1993        | 4          | 159.68 (2.39)  | 135.21 (6.94) | 145.91 (1.38)  | 144.42 (2.63)   | 213.80 (0.42)     |
| 1994        | 1          | 160.75 (2.42)  | 136.27 (7.00) | 147.97 (1.40)  | 147.28 (2.70)   | 211.63 (0.42)     |
| 1994        | 2          | 162.65 (2.45)  | 139.47 (7.18) | 149.90 (1.43)  | 148.60 (2.73)   | 206.46 (0.42)     |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996.](#)

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| Year | Qtr | Alabama       | Alaska         | Arizona       | Arkansas      | California    |
|------|-----|---------------|----------------|---------------|---------------|---------------|
| 1994 | 3   | 163.21 (2.47) | 141.39 (7.29)  | 151.59 (1.45) | 149.84 (2.76) | 203.38 (0.43) |
| 1994 | 4   | 163.27 (2.47) | 140.08 (7.22)  | 153.72 (1.47) | 151.60 (2.79) | 200.29 (0.43) |
| 1995 | 1   | 164.74 (2.49) | 142.75 (7.37)  | 155.05 (1.48) | 152.43 (2.81) | 198.91 (0.42) |
| 1995 | 2   | 168.00 (2.53) | 144.84 (7.46)  | 157.86 (1.51) | 156.50 (2.88) | 200.87 (0.42) |
| 1995 | 3   | 170.93 (2.57) | 146.21 (7.52)  | 160.96 (1.53) | 157.99 (2.89) | 203.17 (0.41) |
| 1995 | 4   | 172.39 (2.60) | 146.76 (7.55)  | 162.92 (1.55) | 158.98 (2.91) | 202.87 (0.41) |
| 1996 | 1   | 175.38 (2.64) | 149.19 (7.67)  | 165.62 (1.57) | 161.72 (2.96) | 202.94 (0.41) |
| 1996 | 2   | 175.26 (2.64) | 151.79 (7.80)  | 165.74 (1.57) | 161.42 (2.95) | 200.23 (0.41) |
| 1996 | 3   | 175.46 (2.64) | 152.11 (7.82)  | 167.30 (1.59) | 161.05 (2.95) | 199.69 (0.41) |
| 1996 | 4   | 177.64 (2.68) | 154.15 (7.93)  | 169.14 (1.61) | 163.03 (2.99) | 200.79 (0.41) |
| 1997 | 1   | 179.34 (2.70) | 154.02 (7.94)  | 170.72 (1.63) | 164.45 (3.02) | 201.84 (0.42) |
| 1997 | 2   | 180.70 (2.72) | 154.99 (7.97)  | 171.58 (1.63) | 165.99 (3.04) | 203.72 (0.42) |
| 1997 | 3   | 183.50 (2.76) | 156.41 (8.04)  | 174.74 (1.66) | 166.80 (3.05) | 207.82 (0.42) |
| 1997 | 4   | 185.89 (2.80) | 158.20 (8.12)  | 177.37 (1.68) | 168.98 (3.09) | 211.52 (0.43) |
| 1998 | 1   | 189.18 (2.84) | 158.31 (8.12)  | 179.54 (1.70) | 171.07 (3.11) | 216.10 (0.43) |
| 1998 | 2   | 190.64 (2.86) | 160.91 (8.25)  | 181.36 (1.71) | 170.82 (3.11) | 220.67 (0.44) |
| 1998 | 3   | 192.64 (2.89) | 161.88 (8.31)  | 183.69 (1.74) | 173.72 (3.16) | 226.41 (0.45) |
| 1998 | 4   | 195.09 (2.92) | 161.98 (8.31)  | 186.04 (1.76) | 175.77 (3.19) | 230.76 (0.46) |
| 1999 | 1   | 195.67 (2.94) | 163.92 (8.41)  | 188.02 (1.78) | 176.62 (3.22) | 234.24 (0.47) |
| 1999 | 2   | 196.42 (2.95) | 167.25 (8.59)  | 190.32 (1.80) | 176.63 (3.22) | 238.04 (0.48) |
| 1999 | 3   | 196.65 (2.96) | 166.66 (8.56)  | 192.83 (1.83) | 177.43 (3.24) | 243.12 (0.49) |
| 1999 | 4   | 198.26 (2.98) | 166.97 (8.59)  | 194.68 (1.85) | 178.03 (3.25) | 248.27 (0.51) |
| 2000 | 1   | 198.76 (2.99) | 166.56 (8.59)  | 199.06 (1.89) | 178.79 (3.26) | 259.03 (0.53) |
| 2000 | 2   | 200.49 (3.01) | 169.21 (8.70)  | 201.20 (1.91) | 180.27 (3.28) | 265.78 (0.54) |
| 2000 | 3   | 202.19 (3.03) | 169.64 (8.72)  | 203.75 (1.93) | 181.55 (3.30) | 274.77 (0.55) |
| 2000 | 4   | 204.64 (3.07) | 170.29 (8.75)  | 207.32 (1.96) | 183.82 (3.35) | 283.27 (0.57) |
| 2001 | 1   | 210.91 (3.16) | 173.45 (8.90)  | 211.90 (2.00) | 188.57 (3.43) | 294.47 (0.59) |
| 2001 | 2   | 211.83 (3.17) | 176.64 (9.06)  | 215.33 (2.03) | 189.98 (3.45) | 303.39 (0.60) |
| 2001 | 3   | 213.25 (3.20) | 179.72 (9.22)  | 218.51 (2.06) | 191.70 (3.48) | 309.72 (0.61) |
| 2001 | 4   | 215.73 (3.23) | 179.70 (9.21)  | 220.60 (2.08) | 193.65 (3.51) | 314.20 (0.62) |
| 2002 | 1   | 216.19 (3.24) | 182.78 (9.37)  | 223.63 (2.11) | 194.58 (3.53) | 322.54 (0.64) |
| 2002 | 2   | 217.16 (3.25) | 187.56 (9.62)  | 226.50 (2.14) | 195.36 (3.55) | 333.18 (0.66) |
| 2002 | 3   | 220.61 (3.30) | 189.09 (9.69)  | 230.46 (2.17) | 198.69 (3.61) | 345.81 (0.68) |
| 2002 | 4   | 223.09 (3.34) | 188.65 (9.67)  | 233.45 (2.20) | 201.04 (3.65) | 355.98 (0.70) |
| 2003 | 1   | 225.30 (3.37) | 190.17 (9.75)  | 236.33 (2.23) | 202.62 (3.68) | 364.23 (0.72) |
| 2003 | 2   | 227.40 (3.40) | 192.70 (9.88)  | 238.70 (2.25) | 203.79 (3.70) | 371.01 (0.73) |
| 2003 | 3   | 229.00 (3.43) | 197.48 (10.12) | 242.31 (2.28) | 206.35 (3.74) | 383.29 (0.76) |
| 2003 | 4   | 230.15 (3.45) | 204.83 (10.51) | 250.86 (2.37) | 209.38 (3.81) | 406.96 (0.81) |
| 2004 | 1   | 232.59 (3.49) | 206.01 (10.57) | 255.14 (2.41) | 211.88 (3.85) | 420.36 (0.84) |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996.](#)

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| Year | Qtr | Alabama       | Alaska         | Arizona       | Arkansas      | California    |
|------|-----|---------------|----------------|---------------|---------------|---------------|
| 2004 | 2   | 233.78 (3.51) | 211.23 (10.83) | 264.32 (2.50) | 215.01 (3.91) | 446.35 (0.89) |
| 2004 | 3   | 238.36 (3.58) | 222.19 (11.41) | 280.32 (2.66) | 218.77 (3.98) | 489.16 (0.98) |
| 2004 | 4   | 241.96 (3.64) | 225.26 (11.56) | 291.60 (2.76) | 223.10 (4.06) | 508.04 (1.02) |
| 2005 | 1   | 245.38 (3.69) | 230.61 (11.84) | 308.47 (2.92) | 226.09 (4.12) | 530.63 (1.07) |
| 2005 | 2   | 251.25 (3.77) | 238.86 (12.26) | 340.41 (3.22) | 231.45 (4.21) | 560.46 (1.13) |
| 2005 | 3   | 256.44 (3.85) | 248.42 (12.75) | 368.17 (3.48) | 236.68 (4.31) | 588.11 (1.18) |
| 2005 | 4   | 261.81 (3.94) | 256.04 (13.15) | 394.34 (3.73) | 239.58 (4.36) | 615.14 (1.25) |
| 2006 | 1   | 266.97 (4.01) | 260.27 (13.37) | 410.06 (3.89) | 244.04 (4.45) | 629.56 (1.28) |
| 2006 | 2   | 272.01 (4.09) | 267.77 (13.75) | 420.41 (3.98) | 248.25 (4.52) | 636.83 (1.30) |
| 2006 | 3   | 276.90 (4.16) | 272.83 (14.01) | 425.46 (4.03) | 251.44 (4.58) | 640.05 (1.31) |
| 2006 | 4   | 283.18 (4.26) | 273.86 (14.07) | 429.57 (4.07) | 253.74 (4.63) | 638.55 (1.30) |
| 2007 | 1   | 284.89 (4.28) | 279.13 (14.34) | 429.64 (4.07) | 256.67 (4.68) | 632.37 (1.29) |
| 2007 | 2   | 289.66 (4.35) | 284.14 (14.58) | 426.99 (4.04) | 260.01 (4.74) | 622.88 (1.27) |
| 2007 | 3   | 291.61 (4.38) | 283.45 (14.55) | 420.69 (3.99) | 260.01 (4.74) | 603.89 (1.24) |
| 2007 | 4   | 295.09 (4.44) | 283.78 (14.59) | 416.20 (3.95) | 263.24 (4.80) | 586.13 (1.20) |
| 2008 | 1   | 297.96 (4.48) | 282.84 (14.52) | 405.25 (3.84) | 262.04 (4.78) | 561.46 (1.14) |
| 2008 | 2   | 298.73 (4.50) | 284.46 (14.62) | 387.30 (3.70) | 262.39 (4.80) | 521.47 (1.08) |
| 2008 | 3   | 299.81 (4.55) | 282.66 (14.59) | 363.94 (3.55) | 262.23 (4.85) | 478.35 (1.04) |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>Colorado</b> | <b>Connecticut</b> | <b>Delaware</b> | <b>Washington DC</b> | <b>Florida</b> |
|-------------|------------|-----------------|--------------------|-----------------|----------------------|----------------|
| 1985        | 1          | 127.25 (1.23)   | 148.38 (2.47)      | 139.27 (2.94)   | 110.85 (4.48)        | 128.85 (0.71)  |
| 1985        | 2          | 126.48 (1.19)   | 155.34 (2.58)      | 143.10 (2.96)   | 113.83 (4.57)        | 129.42 (0.70)  |
| 1985        | 3          | 127.49 (1.15)   | 160.03 (2.64)      | 145.88 (3.00)   | 115.73 (4.61)        | 129.58 (0.68)  |
| 1985        | 4          | 125.19 (1.14)   | 168.70 (2.79)      | 148.57 (3.07)   | 118.33 (4.78)        | 131.32 (0.69)  |
| 1986        | 1          | 129.69 (1.16)   | 174.44 (2.89)      | 153.75 (3.19)   | 118.57 (4.81)        | 132.43 (0.70)  |
| 1986        | 2          | 130.47 (1.12)   | 185.42 (3.04)      | 157.75 (3.21)   | 123.73 (4.75)        | 135.90 (0.69)  |
| 1986        | 3          | 129.27 (1.11)   | 199.02 (3.27)      | 162.13 (3.30)   | 126.70 (4.86)        | 136.69 (0.69)  |
| 1986        | 4          | 128.87 (1.11)   | 212.67 (3.50)      | 167.64 (3.42)   | 132.42 (5.07)        | 136.71 (0.70)  |
| 1987        | 1          | 130.56 (1.13)   | 224.81 (3.70)      | 173.31 (3.56)   | 137.24 (5.30)        | 137.69 (0.70)  |
| 1987        | 2          | 128.97 (1.11)   | 236.97 (3.90)      | 178.81 (3.65)   | 140.63 (5.36)        | 139.42 (0.71)  |
| 1987        | 3          | 126.46 (1.12)   | 250.08 (4.16)      | 185.41 (3.81)   | 144.11 (5.67)        | 139.69 (0.72)  |
| 1987        | 4          | 125.21 (1.13)   | 257.13 (4.30)      | 190.99 (3.97)   | 151.08 (6.11)        | 140.58 (0.74)  |
| 1988        | 1          | 125.82 (1.15)   | 262.86 (4.40)      | 193.24 (4.02)   | 159.75 (6.45)        | 142.14 (0.75)  |
| 1988        | 2          | 125.75 (1.11)   | 267.14 (4.42)      | 199.42 (4.09)   | 167.15 (6.53)        | 145.03 (0.75)  |
| 1988        | 3          | 124.87 (1.11)   | 265.84 (4.42)      | 204.29 (4.20)   | 169.59 (6.65)        | 146.07 (0.76)  |
| 1988        | 4          | 124.03 (1.11)   | 266.02 (4.43)      | 210.46 (4.33)   | 177.08 (6.98)        | 147.35 (0.77)  |
| 1989        | 1          | 124.08 (1.12)   | 261.24 (4.35)      | 212.95 (4.41)   | 185.99 (7.33)        | 148.38 (0.78)  |
| 1989        | 2          | 125.22 (1.11)   | 261.15 (4.33)      | 219.70 (4.51)   | 187.59 (7.39)        | 149.51 (0.78)  |
| 1989        | 3          | 127.58 (1.11)   | 262.24 (4.33)      | 225.51 (4.61)   | 190.32 (7.42)        | 151.89 (0.78)  |
| 1989        | 4          | 127.23 (1.11)   | 261.16 (4.31)      | 226.88 (4.64)   | 193.07 (7.48)        | 152.99 (0.78)  |
| 1990        | 1          | 127.62 (1.12)   | 257.55 (4.26)      | 230.27 (4.73)   | 198.81 (7.78)        | 153.76 (0.79)  |
| 1990        | 2          | 128.48 (1.11)   | 249.47 (4.12)      | 229.07 (4.68)   | 199.41 (7.77)        | 153.25 (0.78)  |
| 1990        | 3          | 129.52 (1.12)   | 246.95 (4.07)      | 227.54 (4.64)   | 193.37 (7.47)        | 153.97 (0.78)  |
| 1990        | 4          | 129.91 (1.13)   | 240.05 (3.97)      | 227.58 (4.65)   | 194.04 (7.59)        | 153.49 (0.79)  |
| 1991        | 1          | 131.26 (1.13)   | 239.67 (3.96)      | 230.92 (4.72)   | 194.98 (7.56)        | 155.30 (0.79)  |
| 1991        | 2          | 132.92 (1.13)   | 236.40 (3.89)      | 231.85 (4.71)   | 198.49 (7.58)        | 155.86 (0.79)  |
| 1991        | 3          | 134.02 (1.13)   | 233.78 (3.85)      | 231.72 (4.72)   | 196.20 (7.53)        | 155.59 (0.79)  |
| 1991        | 4          | 136.26 (1.15)   | 236.00 (3.88)      | 235.01 (4.77)   | 199.57 (7.61)        | 158.15 (0.80)  |
| 1992        | 1          | 138.33 (1.16)   | 236.87 (3.89)      | 235.18 (4.76)   | 202.39 (7.66)        | 160.15 (0.80)  |
| 1992        | 2          | 141.32 (1.19)   | 232.47 (3.82)      | 233.60 (4.73)   | 202.46 (7.67)        | 158.71 (0.80)  |
| 1992        | 3          | 144.38 (1.21)   | 233.26 (3.83)      | 235.23 (4.76)   | 202.00 (7.63)        | 161.41 (0.81)  |
| 1992        | 4          | 147.16 (1.23)   | 232.90 (3.82)      | 236.94 (4.79)   | 200.17 (7.57)        | 161.57 (0.81)  |
| 1993        | 1          | 149.91 (1.26)   | 229.54 (3.78)      | 235.58 (4.79)   | 199.71 (7.59)        | 161.77 (0.81)  |
| 1993        | 2          | 153.61 (1.28)   | 230.08 (3.77)      | 236.81 (4.79)   | 200.22 (7.56)        | 163.56 (0.81)  |
| 1993        | 3          | 157.92 (1.32)   | 230.11 (3.78)      | 236.04 (4.78)   | 200.73 (7.58)        | 164.76 (0.82)  |
| 1993        | 4          | 161.79 (1.35)   | 230.54 (3.78)      | 236.92 (4.79)   | 200.84 (7.57)        | 166.45 (0.83)  |
| 1994        | 1          | 166.68 (1.40)   | 228.78 (3.76)      | 236.07 (4.79)   | 202.68 (7.68)        | 166.16 (0.83)  |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| Year | Qtr | Colorado      | Connecticut   | Delaware      | Washington DC  | Florida       |
|------|-----|---------------|---------------|---------------|----------------|---------------|
| 1994 | 2   | 174.05 (1.47) | 223.62 (3.69) | 233.83 (4.77) | 194.18 (7.45)  | 164.96 (0.83) |
| 1994 | 3   | 178.53 (1.51) | 220.72 (3.66) | 230.78 (4.74) | 194.96 (7.58)  | 165.24 (0.84) |
| 1994 | 4   | 179.55 (1.52) | 217.86 (3.62) | 229.68 (4.74) | 187.46 (7.32)  | 165.01 (0.84) |
| 1995 | 1   | 182.75 (1.54) | 216.63 (3.61) | 230.11 (4.77) | 188.30 (7.44)  | 165.36 (0.85) |
| 1995 | 2   | 186.36 (1.57) | 219.10 (3.63) | 230.81 (4.74) | 188.98 (7.35)  | 167.60 (0.85) |
| 1995 | 3   | 190.30 (1.60) | 224.45 (3.70) | 234.91 (4.80) | 194.79 (7.48)  | 170.87 (0.86) |
| 1995 | 4   | 193.27 (1.62) | 224.63 (3.71) | 235.87 (4.83) | 197.97 (7.58)  | 172.26 (0.87) |
| 1996 | 1   | 195.72 (1.64) | 227.91 (3.76) | 238.39 (4.87) | 200.61 (7.66)  | 174.20 (0.88) |
| 1996 | 2   | 198.11 (1.66) | 224.51 (3.71) | 235.45 (4.81) | 196.69 (7.52)  | 173.23 (0.87) |
| 1996 | 3   | 200.36 (1.68) | 221.35 (3.66) | 235.54 (4.82) | 194.64 (7.51)  | 173.50 (0.88) |
| 1996 | 4   | 203.17 (1.71) | 222.92 (3.69) | 237.83 (4.88) | 195.49 (7.53)  | 174.29 (0.88) |
| 1997 | 1   | 205.40 (1.73) | 224.19 (3.71) | 238.85 (4.90) | 195.88 (7.59)  | 176.63 (0.90) |
| 1997 | 2   | 208.10 (1.75) | 224.89 (3.71) | 237.95 (4.86) | 197.31 (7.57)  | 176.30 (0.89) |
| 1997 | 3   | 211.55 (1.77) | 227.71 (3.76) | 241.06 (4.92) | 196.63 (7.54)  | 178.83 (0.90) |
| 1997 | 4   | 215.00 (1.80) | 230.07 (3.79) | 242.74 (4.96) | 196.14 (7.47)  | 182.04 (0.92) |
| 1998 | 1   | 218.05 (1.82) | 235.77 (3.87) | 246.55 (5.01) | 203.36 (7.70)  | 185.82 (0.93) |
| 1998 | 2   | 220.51 (1.84) | 235.66 (3.87) | 247.77 (5.03) | 204.78 (7.76)  | 185.52 (0.92) |
| 1998 | 3   | 224.61 (1.88) | 239.26 (3.93) | 248.40 (5.05) | 207.11 (7.85)  | 187.88 (0.94) |
| 1998 | 4   | 227.49 (1.90) | 242.61 (3.98) | 249.75 (5.06) | 212.07 (8.02)  | 190.80 (0.95) |
| 1999 | 1   | 231.75 (1.94) | 245.74 (4.04) | 253.55 (5.15) | 215.13 (8.15)  | 192.02 (0.96) |
| 1999 | 2   | 238.74 (2.00) | 248.21 (4.08) | 255.88 (5.20) | 218.88 (8.31)  | 193.54 (0.97) |
| 1999 | 3   | 246.15 (2.07) | 252.94 (4.16) | 259.21 (5.28) | 226.86 (8.65)  | 195.67 (0.98) |
| 1999 | 4   | 250.65 (2.11) | 255.68 (4.21) | 260.87 (5.33) | 231.63 (8.86)  | 197.98 (1.00) |
| 2000 | 1   | 260.00 (2.18) | 260.58 (4.30) | 265.57 (5.43) | 242.31 (9.28)  | 201.91 (1.01) |
| 2000 | 2   | 266.20 (2.23) | 267.45 (4.40) | 269.80 (5.48) | 251.91 (9.58)  | 205.40 (1.03) |
| 2000 | 3   | 273.02 (2.29) | 273.36 (4.49) | 275.19 (5.59) | 259.26 (9.84)  | 209.70 (1.05) |
| 2000 | 4   | 279.49 (2.34) | 277.17 (4.55) | 278.80 (5.66) | 264.47 (10.03) | 214.18 (1.07) |
| 2001 | 1   | 287.68 (2.40) | 284.57 (4.67) | 285.38 (5.78) | 275.84 (10.41) | 220.53 (1.10) |
| 2001 | 2   | 293.33 (2.45) | 290.57 (4.77) | 290.03 (5.87) | 286.48 (10.80) | 225.98 (1.12) |
| 2001 | 3   | 298.91 (2.50) | 297.54 (4.88) | 295.75 (5.99) | 299.63 (11.30) | 231.04 (1.15) |
| 2001 | 4   | 301.49 (2.52) | 302.89 (4.97) | 299.89 (6.06) | 308.97 (11.63) | 236.60 (1.17) |
| 2002 | 1   | 305.05 (2.55) | 309.51 (5.08) | 305.08 (6.17) | 318.52 (11.99) | 241.22 (1.20) |
| 2002 | 2   | 308.06 (2.57) | 318.14 (5.22) | 312.83 (6.33) | 329.60 (12.42) | 248.26 (1.23) |
| 2002 | 3   | 312.79 (2.61) | 326.78 (5.36) | 320.55 (6.48) | 344.38 (12.96) | 255.25 (1.26) |
| 2002 | 4   | 314.83 (2.63) | 333.77 (5.47) | 325.85 (6.58) | 354.56 (13.33) | 261.27 (1.29) |
| 2003 | 1   | 315.79 (2.64) | 338.11 (5.54) | 331.14 (6.69) | 361.76 (13.60) | 266.69 (1.32) |
| 2003 | 2   | 317.15 (2.65) | 343.51 (5.63) | 337.82 (6.82) | 368.40 (13.84) | 272.95 (1.35) |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>Colorado</b> | <b>Connecticut</b> | <b>Delaware</b> | <b>Washington DC</b> | <b>Florida</b> |
|-------------|------------|-----------------|--------------------|-----------------|----------------------|----------------|
| 2003        | 3          | 318.58 (2.66)   | 351.37 (5.76)      | 345.57 (6.98)   | 379.91 (14.28)       | 279.14 (1.38)  |
| 2003        | 4          | 322.40 (2.70)   | 364.14 (5.98)      | 358.71 (7.27)   | 402.65 (15.18)       | 291.70 (1.45)  |
| 2004        | 1          | 324.53 (2.72)   | 371.06 (6.09)      | 369.91 (7.50)   | 416.03 (15.69)       | 300.58 (1.49)  |
| 2004        | 2          | 327.25 (2.74)   | 382.70 (6.28)      | 378.07 (7.66)   | 436.37 (16.44)       | 314.73 (1.56)  |
| 2004        | 3          | 331.91 (2.79)   | 401.83 (6.60)      | 400.38 (8.13)   | 469.35 (17.73)       | 334.11 (1.67)  |
| 2004        | 4          | 335.11 (2.82)   | 410.23 (6.74)      | 412.29 (8.36)   | 494.40 (18.67)       | 349.40 (1.75)  |
| 2005        | 1          | 338.91 (2.85)   | 421.20 (6.92)      | 424.23 (8.63)   | 513.66 (19.41)       | 368.11 (1.84)  |
| 2005        | 2          | 344.56 (2.90)   | 434.87 (7.15)      | 442.14 (8.97)   | 544.42 (20.58)       | 394.74 (1.97)  |
| 2005        | 3          | 349.57 (2.94)   | 447.30 (7.35)      | 462.60 (9.38)   | 575.09 (21.71)       | 422.10 (2.10)  |
| 2005        | 4          | 353.13 (2.98)   | 457.39 (7.52)      | 473.85 (9.63)   | 607.19 (22.95)       | 445.48 (2.23)  |
| 2006        | 1          | 353.46 (2.99)   | 464.56 (7.65)      | 484.18 (9.86)   | 618.42 (23.41)       | 464.54 (2.33)  |
| 2006        | 2          | 356.14 (3.00)   | 466.83 (7.68)      | 493.82 (10.05)  | 627.64 (23.71)       | 475.23 (2.38)  |
| 2006        | 3          | 358.23 (3.02)   | 469.05 (7.72)      | 499.24 (10.16)  | 633.52 (23.94)       | 480.99 (2.41)  |
| 2006        | 4          | 362.20 (3.06)   | 471.88 (7.77)      | 508.43 (10.35)  | 645.55 (24.40)       | 485.01 (2.43)  |
| 2007        | 1          | 363.86 (3.07)   | 478.10 (7.87)      | 508.71 (10.36)  | 653.71 (24.72)       | 484.16 (2.43)  |
| 2007        | 2          | 366.23 (3.09)   | 475.07 (7.82)      | 515.65 (10.49)  | 655.41 (24.76)       | 479.25 (2.40)  |
| 2007        | 3          | 365.66 (3.08)   | 472.82 (7.78)      | 512.99 (10.44)  | 661.03 (24.98)       | 466.78 (2.35)  |
| 2007        | 4          | 368.32 (3.11)   | 474.61 (7.81)      | 515.27 (10.49)  | 656.49 (24.81)       | 458.45 (2.31)  |
| 2008        | 1          | 371.52 (3.13)   | 475.50 (7.82)      | 514.45 (10.46)  | 644.52 (24.34)       | 442.98 (2.23)  |
| 2008        | 2          | 372.45 (3.16)   | 468.15 (7.72)      | 509.15 (10.40)  | 632.82 (24.00)       | 417.54 (2.13)  |
| 2008        | 3          | 364.52 (3.16)   | 456.20 (7.59)      | 503.92 (10.50)  | 622.07 (23.94)       | 391.91 (2.10)  |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996.](#)

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>Georgia</b> | <b>Hawaii</b> | <b>Idaho</b>  | <b>Illinois</b> | <b>Indiana</b> |
|-------------|------------|----------------|---------------|---------------|-----------------|----------------|
| 1985        | 1          | 131.90 (0.98)  | 115.46 (2.95) | 108.64 (3.33) | 113.42 (0.65)   | 109.20 (1.05)  |
| 1985        | 2          | 129.76 (0.95)  | 113.09 (2.83) | 113.51 (3.39) | 114.80 (0.64)   | 110.71 (1.03)  |
| 1985        | 3          | 135.49 (0.98)  | 116.94 (2.88) | 114.60 (3.25) | 116.11 (0.64)   | 111.58 (1.02)  |
| 1985        | 4          | 138.19 (1.02)  | 118.04 (2.92) | 112.52 (3.28) | 118.07 (0.66)   | 112.97 (1.04)  |
| 1986        | 1          | 140.47 (1.02)  | 120.50 (2.98) | 114.67 (3.26) | 119.84 (0.66)   | 114.33 (1.04)  |
| 1986        | 2          | 142.33 (1.02)  | 119.97 (2.91) | 112.95 (3.10) | 122.47 (0.66)   | 116.45 (1.04)  |
| 1986        | 3          | 144.26 (1.03)  | 121.66 (2.95) | 114.17 (3.15) | 125.23 (0.68)   | 118.17 (1.06)  |
| 1986        | 4          | 146.43 (1.06)  | 123.73 (3.01) | 114.66 (3.17) | 128.20 (0.70)   | 119.70 (1.08)  |
| 1987        | 1          | 148.96 (1.07)  | 127.66 (3.12) | 114.52 (3.20) | 130.50 (0.71)   | 121.35 (1.10)  |
| 1987        | 2          | 150.52 (1.08)  | 130.67 (3.18) | 113.60 (3.20) | 135.26 (0.74)   | 122.75 (1.11)  |
| 1987        | 3          | 152.24 (1.11)  | 132.36 (3.28) | 109.89 (3.20) | 138.24 (0.77)   | 124.35 (1.15)  |
| 1987        | 4          | 152.83 (1.13)  | 135.59 (3.45) | 110.86 (3.25) | 140.23 (0.79)   | 124.77 (1.18)  |
| 1988        | 1          | 154.80 (1.15)  | 143.76 (3.65) | 112.33 (3.36) | 143.43 (0.81)   | 127.23 (1.20)  |
| 1988        | 2          | 157.12 (1.14)  | 151.02 (3.78) | 113.71 (3.24) | 147.90 (0.81)   | 129.16 (1.18)  |
| 1988        | 3          | 157.33 (1.15)  | 155.63 (3.92) | 111.44 (3.17) | 151.04 (0.84)   | 129.75 (1.19)  |
| 1988        | 4          | 157.14 (1.15)  | 165.95 (4.16) | 110.45 (3.19) | 152.48 (0.85)   | 130.87 (1.21)  |
| 1989        | 1          | 157.86 (1.16)  | 178.13 (4.47) | 114.92 (3.36) | 155.47 (0.87)   | 132.21 (1.23)  |
| 1989        | 2          | 158.63 (1.16)  | 183.14 (4.53) | 115.25 (3.28) | 158.35 (0.87)   | 134.11 (1.23)  |
| 1989        | 3          | 160.82 (1.16)  | 195.22 (4.78) | 117.37 (3.26) | 161.93 (0.88)   | 136.23 (1.23)  |
| 1989        | 4          | 161.88 (1.17)  | 201.30 (4.90) | 118.00 (3.27) | 163.86 (0.90)   | 136.61 (1.24)  |
| 1990        | 1          | 161.38 (1.18)  | 217.68 (5.31) | 119.97 (3.33) | 165.77 (0.91)   | 137.55 (1.25)  |
| 1990        | 2          | 160.00 (1.16)  | 230.77 (5.61) | 124.45 (3.41) | 167.45 (0.91)   | 139.02 (1.26)  |
| 1990        | 3          | 161.01 (1.16)  | 241.65 (5.88) | 126.69 (3.45) | 169.50 (0.92)   | 140.19 (1.26)  |
| 1990        | 4          | 159.94 (1.16)  | 250.87 (6.11) | 126.32 (3.44) | 170.01 (0.93)   | 140.61 (1.27)  |
| 1991        | 1          | 161.55 (1.17)  | 256.70 (6.23) | 129.87 (3.54) | 172.03 (0.94)   | 142.92 (1.29)  |
| 1991        | 2          | 162.06 (1.16)  | 258.75 (6.23) | 129.65 (3.50) | 173.90 (0.94)   | 144.27 (1.29)  |
| 1991        | 3          | 161.64 (1.16)  | 259.04 (6.25) | 132.85 (3.58) | 175.06 (0.95)   | 145.24 (1.30)  |
| 1991        | 4          | 163.44 (1.17)  | 263.29 (6.34) | 136.08 (3.66) | 177.43 (0.96)   | 147.32 (1.31)  |
| 1992        | 1          | 164.42 (1.17)  | 262.82 (6.31) | 137.48 (3.69) | 178.70 (0.96)   | 148.63 (1.32)  |
| 1992        | 2          | 164.69 (1.18)  | 261.99 (6.28) | 138.92 (3.73) | 180.27 (0.97)   | 149.88 (1.33)  |
| 1992        | 3          | 168.01 (1.19)  | 263.93 (6.34) | 141.93 (3.80) | 181.98 (0.98)   | 152.25 (1.35)  |
| 1992        | 4          | 168.41 (1.20)  | 264.35 (6.34) | 145.76 (3.90) | 183.65 (0.99)   | 153.18 (1.36)  |
| 1993        | 1          | 168.71 (1.20)  | 263.92 (6.35) | 146.95 (3.95) | 184.76 (1.00)   | 154.10 (1.37)  |
| 1993        | 2          | 170.58 (1.21)  | 265.21 (6.36) | 151.65 (4.06) | 186.44 (1.00)   | 155.62 (1.38)  |
| 1993        | 3          | 171.71 (1.22)  | 264.06 (6.33) | 155.78 (4.17) | 188.35 (1.01)   | 157.50 (1.40)  |
| 1993        | 4          | 173.00 (1.23)  | 265.65 (6.37) | 158.90 (4.25) | 190.05 (1.02)   | 159.04 (1.41)  |
| 1994        | 1          | 173.54 (1.24)  | 266.67 (6.41) | 159.72 (4.28) | 192.80 (1.04)   | 160.70 (1.43)  |
| 1994        | 2          | 174.50 (1.25)  | 263.82 (6.42) | 166.02 (4.46) | 195.50 (1.06)   | 163.05 (1.46)  |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| Year | Qtr | Georgia       | Hawaii        | Idaho         | Illinois      | Indiana       |
|------|-----|---------------|---------------|---------------|---------------|---------------|
| 1994 | 3   | 175.04 (1.26) | 265.69 (6.54) | 167.91 (4.52) | 197.10 (1.07) | 164.96 (1.48) |
| 1994 | 4   | 175.73 (1.27) | 258.58 (6.40) | 169.02 (4.55) | 197.37 (1.08) | 165.07 (1.49) |
| 1995 | 1   | 176.25 (1.27) | 257.48 (6.39) | 168.61 (4.54) | 198.95 (1.09) | 167.28 (1.50) |
| 1995 | 2   | 179.85 (1.29) | 259.92 (6.39) | 173.38 (4.66) | 201.95 (1.10) | 170.08 (1.52) |
| 1995 | 3   | 182.33 (1.30) | 261.28 (6.35) | 177.16 (4.75) | 204.47 (1.11) | 173.01 (1.54) |
| 1995 | 4   | 185.08 (1.32) | 261.08 (6.36) | 178.21 (4.78) | 206.33 (1.12) | 175.11 (1.56) |
| 1996 | 1   | 187.41 (1.34) | 256.55 (6.23) | 181.32 (4.86) | 208.73 (1.13) | 177.44 (1.58) |
| 1996 | 2   | 188.20 (1.35) | 250.80 (6.10) | 179.54 (4.81) | 209.18 (1.13) | 179.09 (1.60) |
| 1996 | 3   | 190.05 (1.36) | 243.14 (6.00) | 180.24 (4.84) | 210.09 (1.14) | 180.28 (1.61) |
| 1996 | 4   | 191.44 (1.37) | 238.08 (5.90) | 181.06 (4.86) | 212.25 (1.15) | 182.59 (1.63) |
| 1997 | 1   | 193.71 (1.39) | 236.63 (5.87) | 182.96 (4.92) | 213.74 (1.16) | 183.95 (1.65) |
| 1997 | 2   | 195.98 (1.40) | 230.72 (5.70) | 183.64 (4.93) | 215.10 (1.17) | 186.05 (1.66) |
| 1997 | 3   | 199.26 (1.43) | 231.86 (5.71) | 186.54 (5.00) | 217.44 (1.18) | 188.56 (1.68) |
| 1997 | 4   | 202.16 (1.44) | 228.22 (5.60) | 188.56 (5.05) | 219.68 (1.19) | 191.16 (1.70) |
| 1998 | 1   | 205.75 (1.46) | 230.16 (5.59) | 191.19 (5.11) | 221.62 (1.20) | 193.02 (1.71) |
| 1998 | 2   | 207.70 (1.48) | 229.81 (5.57) | 191.55 (5.12) | 222.48 (1.20) | 194.65 (1.73) |
| 1998 | 3   | 211.44 (1.51) | 232.48 (5.66) | 192.81 (5.16) | 224.64 (1.21) | 196.89 (1.75) |
| 1998 | 4   | 214.66 (1.53) | 230.33 (5.58) | 193.94 (5.18) | 226.31 (1.22) | 198.76 (1.76) |
| 1999 | 1   | 217.48 (1.55) | 229.58 (5.57) | 195.81 (5.24) | 228.39 (1.23) | 200.46 (1.78) |
| 1999 | 2   | 220.90 (1.57) | 228.17 (5.55) | 196.98 (5.28) | 230.93 (1.25) | 201.54 (1.79) |
| 1999 | 3   | 224.41 (1.60) | 223.65 (5.50) | 194.71 (5.22) | 234.09 (1.27) | 202.47 (1.81) |
| 1999 | 4   | 227.20 (1.62) | 223.62 (5.52) | 194.33 (5.22) | 236.59 (1.29) | 203.34 (1.82) |
| 2000 | 1   | 230.07 (1.64) | 227.88 (5.60) | 197.86 (5.31) | 241.37 (1.31) | 205.06 (1.83) |
| 2000 | 2   | 233.66 (1.66) | 228.82 (5.60) | 197.28 (5.28) | 245.18 (1.33) | 206.52 (1.84) |
| 2000 | 3   | 237.49 (1.69) | 231.93 (5.65) | 199.44 (5.34) | 249.24 (1.35) | 209.43 (1.86) |
| 2000 | 4   | 241.37 (1.72) | 237.65 (5.78) | 201.45 (5.39) | 252.13 (1.36) | 211.30 (1.88) |
| 2001 | 1   | 248.36 (1.76) | 245.45 (5.93) | 206.40 (5.52) | 255.70 (1.38) | 216.03 (1.92) |
| 2001 | 2   | 251.43 (1.79) | 249.33 (6.00) | 209.09 (5.59) | 260.15 (1.40) | 217.74 (1.93) |
| 2001 | 3   | 254.56 (1.81) | 253.69 (6.11) | 210.29 (5.62) | 264.84 (1.43) | 219.23 (1.95) |
| 2001 | 4   | 258.08 (1.83) | 257.65 (6.19) | 212.68 (5.68) | 267.45 (1.44) | 221.32 (1.96) |
| 2002 | 1   | 260.08 (1.85) | 261.61 (6.29) | 212.93 (5.69) | 272.06 (1.47) | 223.01 (1.98) |
| 2002 | 2   | 261.98 (1.86) | 267.33 (6.44) | 214.12 (5.72) | 276.67 (1.49) | 223.41 (1.98) |
| 2002 | 3   | 266.50 (1.89) | 276.04 (6.63) | 217.47 (5.81) | 280.36 (1.51) | 226.02 (2.00) |
| 2002 | 4   | 269.65 (1.91) | 279.18 (6.70) | 219.57 (5.86) | 283.52 (1.53) | 227.26 (2.01) |
| 2003 | 1   | 271.70 (1.93) | 287.41 (6.90) | 221.86 (5.93) | 286.44 (1.54) | 229.02 (2.03) |
| 2003 | 2   | 273.51 (1.94) | 294.34 (7.06) | 223.64 (5.97) | 289.21 (1.56) | 230.19 (2.04) |
| 2003 | 3   | 275.13 (1.95) | 302.31 (7.25) | 225.44 (6.02) | 293.15 (1.58) | 231.74 (2.06) |
| 2003 | 4   | 278.44 (1.98) | 320.12 (7.71) | 228.74 (6.12) | 302.32 (1.63) | 233.68 (2.08) |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| Year | Qtr | Georgia       | Hawaii         | Idaho         | Illinois      | Indiana       |
|------|-----|---------------|----------------|---------------|---------------|---------------|
| 2004 | 1   | 282.33 (2.01) | 335.88 (8.10)  | 231.39 (6.19) | 305.79 (1.65) | 235.05 (2.09) |
| 2004 | 2   | 284.47 (2.03) | 354.25 (8.54)  | 237.66 (6.36) | 312.73 (1.69) | 235.99 (2.10) |
| 2004 | 3   | 288.62 (2.06) | 388.72 (9.43)  | 245.94 (6.58) | 323.34 (1.75) | 238.52 (2.13) |
| 2004 | 4   | 292.80 (2.09) | 402.17 (9.74)  | 251.82 (6.74) | 328.10 (1.77) | 241.63 (2.16) |
| 2005 | 1   | 297.03 (2.12) | 421.08 (10.22) | 258.15 (6.92) | 334.82 (1.81) | 243.18 (2.17) |
| 2005 | 2   | 301.03 (2.15) | 445.90 (10.82) | 268.98 (7.20) | 343.05 (1.86) | 245.70 (2.19) |
| 2005 | 3   | 306.44 (2.19) | 473.06 (11.47) | 284.92 (7.62) | 350.20 (1.89) | 249.43 (2.22) |
| 2005 | 4   | 310.56 (2.22) | 500.83 (12.18) | 298.29 (7.99) | 357.56 (1.94) | 250.22 (2.24) |
| 2006 | 1   | 314.33 (2.26) | 517.55 (12.62) | 309.16 (8.28) | 363.71 (1.97) | 250.62 (2.25) |
| 2006 | 2   | 316.80 (2.27) | 526.71 (12.85) | 322.79 (8.64) | 368.10 (1.99) | 250.47 (2.24) |
| 2006 | 3   | 320.15 (2.29) | 536.49 (13.08) | 331.50 (8.88) | 372.07 (2.01) | 252.36 (2.26) |
| 2006 | 4   | 326.19 (2.34) | 535.97 (13.04) | 340.76 (9.12) | 376.33 (2.04) | 255.06 (2.28) |
| 2007 | 1   | 329.40 (2.36) | 543.30 (13.21) | 346.16 (9.27) | 379.60 (2.06) | 256.68 (2.30) |
| 2007 | 2   | 331.94 (2.38) | 548.71 (13.32) | 347.50 (9.30) | 380.19 (2.06) | 257.84 (2.31) |
| 2007 | 3   | 331.30 (2.38) | 547.50 (13.32) | 352.98 (9.45) | 380.01 (2.06) | 257.91 (2.31) |
| 2007 | 4   | 335.40 (2.41) | 544.78 (13.24) | 354.67 (9.50) | 382.74 (2.07) | 259.40 (2.32) |
| 2008 | 1   | 336.64 (2.41) | 540.17 (13.09) | 354.49 (9.49) | 381.86 (2.07) | 262.72 (2.35) |
| 2008 | 2   | 334.94 (2.41) | 533.53 (13.00) | 351.85 (9.43) | 378.29 (2.05) | 262.01 (2.35) |
| 2008 | 3   | 329.29 (2.43) | 530.75 (13.23) | 345.86 (9.33) | 369.95 (2.04) | 257.86 (2.36) |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996.](#)

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>Iowa</b>   | <b>Kansas</b> | <b>Kentucky</b> | <b>Louisiana</b> | <b>Maine</b>  |
|-------------|------------|---------------|---------------|-----------------|------------------|---------------|
| 1985        | 1          | 101.49 (1.76) | 110.32 (1.26) | 112.89 (1.33)   | 112.68 (1.13)    | 143.79 (5.20) |
| 1985        | 2          | 101.74 (1.67) | 111.08 (1.22) | 113.53 (1.31)   | 113.97 (1.11)    | 148.40 (5.22) |
| 1985        | 3          | 102.77 (1.64) | 111.68 (1.19) | 112.92 (1.27)   | 113.93 (1.08)    | 153.60 (5.38) |
| 1985        | 4          | 101.98 (1.66) | 112.09 (1.22) | 115.41 (1.32)   | 112.00 (1.10)    | 161.90 (5.69) |
| 1986        | 1          | 103.21 (1.66) | 114.48 (1.23) | 116.39 (1.31)   | 114.37 (1.09)    | 163.99 (5.76) |
| 1986        | 2          | 103.96 (1.64) | 114.67 (1.19) | 118.58 (1.31)   | 115.35 (1.05)    | 170.84 (5.93) |
| 1986        | 3          | 104.23 (1.65) | 115.78 (1.22) | 118.84 (1.32)   | 112.65 (1.04)    | 177.27 (6.15) |
| 1986        | 4          | 103.91 (1.65) | 116.65 (1.24) | 121.62 (1.36)   | 111.26 (1.04)    | 186.66 (6.50) |
| 1987        | 1          | 105.20 (1.67) | 117.39 (1.24) | 122.95 (1.37)   | 111.33 (1.04)    | 192.95 (6.70) |
| 1987        | 2          | 105.54 (1.67) | 118.96 (1.25) | 124.40 (1.39)   | 111.15 (1.04)    | 200.79 (6.98) |
| 1987        | 3          | 105.62 (1.71) | 118.72 (1.30) | 127.24 (1.46)   | 105.70 (1.04)    | 208.97 (7.38) |
| 1987        | 4          | 102.25 (1.71) | 116.84 (1.32) | 127.25 (1.50)   | 105.09 (1.06)    | 218.43 (7.75) |
| 1988        | 1          | 104.59 (1.73) | 118.57 (1.35) | 129.64 (1.51)   | 102.57 (1.06)    | 223.67 (7.96) |
| 1988        | 2          | 106.46 (1.71) | 119.12 (1.30) | 130.63 (1.48)   | 102.85 (1.01)    | 225.79 (7.91) |
| 1988        | 3          | 108.56 (1.75) | 118.90 (1.32) | 132.51 (1.52)   | 102.23 (1.01)    | 231.49 (8.13) |
| 1988        | 4          | 108.17 (1.76) | 120.11 (1.35) | 134.06 (1.54)   | 100.40 (1.01)    | 234.28 (8.25) |
| 1989        | 1          | 109.87 (1.81) | 119.92 (1.38) | 135.70 (1.57)   | 101.45 (1.05)    | 235.77 (8.33) |
| 1989        | 2          | 111.06 (1.78) | 120.95 (1.35) | 136.74 (1.55)   | 101.24 (1.02)    | 237.34 (8.31) |
| 1989        | 3          | 113.22 (1.79) | 120.86 (1.30) | 139.12 (1.56)   | 103.16 (1.00)    | 240.39 (8.38) |
| 1989        | 4          | 114.24 (1.82) | 121.51 (1.31) | 140.08 (1.58)   | 102.87 (1.01)    | 243.72 (8.50) |
| 1990        | 1          | 115.87 (1.85) | 121.18 (1.32) | 140.44 (1.58)   | 102.38 (1.00)    | 239.33 (8.37) |
| 1990        | 2          | 117.08 (1.86) | 120.70 (1.30) | 141.71 (1.59)   | 103.44 (0.99)    | 234.13 (8.18) |
| 1990        | 3          | 118.80 (1.87) | 120.95 (1.29) | 142.95 (1.60)   | 103.71 (0.97)    | 231.43 (8.08) |
| 1990        | 4          | 119.63 (1.89) | 120.81 (1.30) | 142.42 (1.60)   | 104.13 (0.98)    | 232.99 (8.16) |
| 1991        | 1          | 121.26 (1.91) | 121.31 (1.30) | 144.83 (1.61)   | 103.74 (0.97)    | 226.88 (7.94) |
| 1991        | 2          | 122.67 (1.92) | 121.86 (1.28) | 146.05 (1.62)   | 105.98 (0.97)    | 230.42 (8.01) |
| 1991        | 3          | 123.71 (1.94) | 122.29 (1.29) | 146.79 (1.63)   | 106.97 (0.98)    | 227.18 (7.90) |
| 1991        | 4          | 125.50 (1.96) | 123.69 (1.29) | 148.71 (1.64)   | 108.75 (0.99)    | 228.79 (7.94) |
| 1992        | 1          | 126.02 (1.97) | 124.30 (1.29) | 149.61 (1.65)   | 109.95 (0.99)    | 230.48 (7.98) |
| 1992        | 2          | 127.97 (2.00) | 125.16 (1.30) | 150.91 (1.66)   | 111.17 (1.00)    | 225.57 (7.82) |
| 1992        | 3          | 129.65 (2.02) | 126.31 (1.31) | 152.82 (1.68)   | 112.44 (1.01)    | 226.49 (7.85) |
| 1992        | 4          | 130.81 (2.04) | 126.76 (1.31) | 154.16 (1.70)   | 113.61 (1.02)    | 227.66 (7.88) |
| 1993        | 1          | 132.01 (2.07) | 127.52 (1.33) | 154.92 (1.71)   | 114.47 (1.03)    | 224.73 (7.82) |
| 1993        | 2          | 133.86 (2.09) | 128.56 (1.33) | 156.81 (1.73)   | 116.41 (1.04)    | 227.34 (7.87) |
| 1993        | 3          | 136.63 (2.13) | 130.28 (1.35) | 158.04 (1.74)   | 118.55 (1.06)    | 226.34 (7.84) |
| 1993        | 4          | 138.17 (2.15) | 131.38 (1.36) | 159.87 (1.76)   | 120.17 (1.07)    | 228.41 (7.90) |
| 1994        | 1          | 140.84 (2.20) | 133.86 (1.39) | 162.58 (1.80)   | 122.23 (1.10)    | 228.05 (7.92) |
| 1994        | 2          | 144.46 (2.27) | 137.70 (1.44) | 166.66 (1.85)   | 124.94 (1.13)    | 223.65 (7.80) |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| Year | Qtr | Iowa          | Kansas        | Kentucky      | Louisiana     | Maine          |
|------|-----|---------------|---------------|---------------|---------------|----------------|
| 1994 | 3   | 147.24 (2.31) | 139.46 (1.48) | 168.09 (1.87) | 126.14 (1.15) | 221.58 (7.75)  |
| 1994 | 4   | 147.32 (2.32) | 140.49 (1.49) | 169.92 (1.89) | 125.95 (1.15) | 216.99 (7.61)  |
| 1995 | 1   | 148.95 (2.35) | 141.26 (1.51) | 171.68 (1.91) | 127.21 (1.16) | 219.69 (7.71)  |
| 1995 | 2   | 152.04 (2.38) | 144.35 (1.52) | 174.72 (1.94) | 129.91 (1.18) | 222.29 (7.77)  |
| 1995 | 3   | 154.25 (2.41) | 145.76 (1.52) | 177.06 (1.96) | 131.81 (1.19) | 226.99 (7.90)  |
| 1995 | 4   | 155.85 (2.44) | 148.26 (1.55) | 178.70 (1.98) | 133.33 (1.21) | 227.47 (7.91)  |
| 1996 | 1   | 157.94 (2.47) | 148.54 (1.55) | 181.16 (2.00) | 135.19 (1.22) | 232.66 (8.09)  |
| 1996 | 2   | 159.17 (2.49) | 151.29 (1.58) | 182.37 (2.02) | 137.02 (1.24) | 229.03 (7.96)  |
| 1996 | 3   | 160.39 (2.51) | 152.87 (1.60) | 184.22 (2.04) | 137.79 (1.25) | 228.56 (7.96)  |
| 1996 | 4   | 161.46 (2.53) | 154.48 (1.62) | 186.12 (2.06) | 139.70 (1.26) | 232.70 (8.10)  |
| 1997 | 1   | 163.30 (2.56) | 154.62 (1.63) | 188.96 (2.09) | 141.12 (1.28) | 230.90 (8.05)  |
| 1997 | 2   | 164.91 (2.58) | 157.02 (1.65) | 189.86 (2.10) | 142.00 (1.28) | 233.15 (8.10)  |
| 1997 | 3   | 167.26 (2.62) | 158.80 (1.65) | 192.49 (2.12) | 144.21 (1.30) | 236.76 (8.22)  |
| 1997 | 4   | 168.96 (2.64) | 160.95 (1.68) | 194.83 (2.15) | 146.58 (1.32) | 240.64 (8.35)  |
| 1998 | 1   | 171.24 (2.67) | 162.97 (1.69) | 196.54 (2.16) | 148.57 (1.33) | 243.84 (8.44)  |
| 1998 | 2   | 173.22 (2.70) | 164.54 (1.70) | 198.89 (2.19) | 149.79 (1.34) | 245.76 (8.51)  |
| 1998 | 3   | 175.36 (2.74) | 167.44 (1.74) | 201.23 (2.22) | 152.21 (1.36) | 249.07 (8.63)  |
| 1998 | 4   | 177.49 (2.77) | 169.33 (1.75) | 203.94 (2.24) | 153.76 (1.37) | 252.43 (8.73)  |
| 1999 | 1   | 179.17 (2.80) | 171.14 (1.77) | 205.66 (2.26) | 154.97 (1.38) | 255.08 (8.84)  |
| 1999 | 2   | 181.48 (2.84) | 174.27 (1.81) | 207.72 (2.29) | 156.74 (1.40) | 259.88 (9.01)  |
| 1999 | 3   | 182.51 (2.86) | 175.95 (1.83) | 209.26 (2.31) | 157.73 (1.42) | 265.46 (9.22)  |
| 1999 | 4   | 183.71 (2.88) | 177.18 (1.85) | 211.19 (2.33) | 158.38 (1.43) | 268.08 (9.32)  |
| 2000 | 1   | 185.61 (2.91) | 180.50 (1.89) | 214.45 (2.37) | 160.64 (1.44) | 273.31 (9.50)  |
| 2000 | 2   | 187.98 (2.94) | 181.92 (1.89) | 216.10 (2.38) | 161.05 (1.44) | 280.83 (9.73)  |
| 2000 | 3   | 190.56 (2.98) | 184.71 (1.92) | 217.87 (2.40) | 162.97 (1.46) | 286.93 (9.94)  |
| 2000 | 4   | 192.20 (3.00) | 186.41 (1.93) | 220.86 (2.43) | 164.51 (1.47) | 292.74 (10.14) |
| 2001 | 1   | 196.38 (3.06) | 190.17 (1.96) | 225.38 (2.48) | 168.80 (1.50) | 302.00 (10.45) |
| 2001 | 2   | 198.41 (3.09) | 192.70 (1.99) | 227.42 (2.50) | 170.51 (1.51) | 307.51 (10.63) |
| 2001 | 3   | 199.79 (3.12) | 194.71 (2.01) | 229.27 (2.52) | 172.15 (1.53) | 316.40 (10.94) |
| 2001 | 4   | 202.20 (3.15) | 196.45 (2.02) | 231.26 (2.54) | 173.72 (1.54) | 321.71 (11.12) |
| 2002 | 1   | 204.01 (3.18) | 198.96 (2.05) | 232.99 (2.56) | 174.63 (1.55) | 328.81 (11.37) |
| 2002 | 2   | 204.92 (3.20) | 200.83 (2.07) | 234.48 (2.58) | 176.03 (1.56) | 338.79 (11.72) |
| 2002 | 3   | 207.52 (3.23) | 203.14 (2.09) | 237.20 (2.61) | 179.07 (1.59) | 348.45 (12.05) |
| 2002 | 4   | 209.36 (3.26) | 204.71 (2.11) | 239.39 (2.63) | 181.75 (1.61) | 354.90 (12.26) |
| 2003 | 1   | 210.67 (3.28) | 206.29 (2.12) | 241.41 (2.65) | 183.79 (1.63) | 361.66 (12.50) |
| 2003 | 2   | 212.22 (3.31) | 207.68 (2.14) | 243.37 (2.67) | 185.58 (1.64) | 366.46 (12.66) |
| 2003 | 3   | 214.88 (3.35) | 209.16 (2.15) | 245.26 (2.69) | 187.24 (1.66) | 377.24 (13.04) |
| 2003 | 4   | 218.20 (3.41) | 212.52 (2.20) | 248.97 (2.74) | 190.44 (1.70) | 391.74 (13.55) |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| Year | Qtr | Iowa          | Kansas        | Kentucky      | Louisiana     | Maine          |
|------|-----|---------------|---------------|---------------|---------------|----------------|
| 2004 | 1   | 219.74 (3.43) | 214.69 (2.22) | 251.78 (2.77) | 192.63 (1.72) | 400.92 (13.87) |
| 2004 | 2   | 222.26 (3.47) | 216.93 (2.24) | 254.17 (2.80) | 195.44 (1.74) | 411.94 (14.25) |
| 2004 | 3   | 225.55 (3.52) | 219.50 (2.28) | 257.26 (2.84) | 198.95 (1.78) | 431.21 (14.93) |
| 2004 | 4   | 228.15 (3.57) | 222.41 (2.31) | 262.59 (2.90) | 201.53 (1.80) | 441.15 (15.27) |
| 2005 | 1   | 230.50 (3.61) | 224.19 (2.34) | 264.44 (2.92) | 203.86 (1.83) | 453.32 (15.70) |
| 2005 | 2   | 233.92 (3.66) | 228.01 (2.37) | 268.39 (2.96) | 208.19 (1.86) | 464.76 (16.09) |
| 2005 | 3   | 238.09 (3.72) | 230.82 (2.40) | 272.75 (3.01) | 212.45 (1.90) | 476.31 (16.49) |
| 2005 | 4   | 240.66 (3.77) | 232.01 (2.42) | 274.06 (3.03) | 219.88 (1.97) | 484.89 (16.80) |
| 2006 | 1   | 240.18 (3.76) | 233.20 (2.44) | 277.49 (3.07) | 226.78 (2.04) | 491.34 (17.03) |
| 2006 | 2   | 242.05 (3.79) | 235.34 (2.45) | 278.58 (3.08) | 233.15 (2.09) | 490.43 (16.99) |
| 2006 | 3   | 244.37 (3.82) | 238.32 (2.49) | 280.83 (3.10) | 238.32 (2.14) | 494.28 (17.12) |
| 2006 | 4   | 246.72 (3.86) | 241.06 (2.52) | 284.08 (3.14) | 242.69 (2.18) | 504.27 (17.47) |
| 2007 | 1   | 248.47 (3.89) | 242.47 (2.54) | 287.41 (3.18) | 245.50 (2.21) | 508.19 (17.61) |
| 2007 | 2   | 251.00 (3.93) | 246.39 (2.57) | 288.54 (3.19) | 248.13 (2.22) | 505.56 (17.51) |
| 2007 | 3   | 251.87 (3.94) | 246.48 (2.57) | 289.86 (3.20) | 251.04 (2.25) | 506.09 (17.54) |
| 2007 | 4   | 254.18 (3.98) | 247.58 (2.59) | 293.75 (3.25) | 253.31 (2.28) | 514.87 (17.85) |
| 2008 | 1   | 255.24 (3.99) | 249.28 (2.60) | 295.58 (3.26) | 254.32 (2.28) | 519.77 (18.00) |
| 2008 | 2   | 255.76 (4.01) | 249.09 (2.62) | 297.50 (3.30) | 254.91 (2.31) | 514.79 (17.86) |
| 2008 | 3   | 253.56 (4.01) | 247.32 (2.68) | 294.11 (3.31) | 252.14 (2.34) | 513.39 (17.92) |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>Maryland</b> | <b>Massachusetts</b> | <b>Michigan</b> | <b>Minnesota</b> | <b>Mississippi</b> |
|-------------|------------|-----------------|----------------------|-----------------|------------------|--------------------|
| 1985        | 1          | 126.35 (1.04)   | 190.42 (1.82)        | 99.55 (0.61)    | 115.09 (1.29)    | 120.91 (2.71)      |
| 1985        | 2          | 128.15 (1.03)   | 205.18 (1.95)        | 100.58 (0.60)   | 116.81 (1.26)    | 124.22 (2.68)      |
| 1985        | 3          | 130.51 (1.03)   | 218.11 (2.06)        | 102.48 (0.60)   | 114.77 (1.21)    | 123.91 (2.62)      |
| 1985        | 4          | 130.58 (1.04)   | 232.54 (2.21)        | 103.61 (0.61)   | 118.33 (1.25)    | 123.91 (2.69)      |
| 1986        | 1          | 133.39 (1.07)   | 241.76 (2.29)        | 105.18 (0.62)   | 119.57 (1.27)    | 125.80 (2.64)      |
| 1986        | 2          | 137.24 (1.06)   | 253.79 (2.39)        | 108.51 (0.63)   | 119.18 (1.23)    | 127.52 (2.59)      |
| 1986        | 3          | 140.63 (1.09)   | 266.26 (2.51)        | 111.75 (0.65)   | 122.35 (1.26)    | 125.83 (2.60)      |
| 1986        | 4          | 144.30 (1.12)   | 279.03 (2.64)        | 114.20 (0.67)   | 122.38 (1.26)    | 125.34 (2.59)      |
| 1987        | 1          | 148.37 (1.16)   | 288.35 (2.73)        | 117.08 (0.69)   | 124.93 (1.29)    | 128.09 (2.63)      |
| 1987        | 2          | 152.72 (1.18)   | 295.26 (2.79)        | 121.02 (0.71)   | 127.07 (1.31)    | 126.14 (2.60)      |
| 1987        | 3          | 159.44 (1.26)   | 304.29 (2.91)        | 123.60 (0.73)   | 128.09 (1.34)    | 127.58 (2.71)      |
| 1987        | 4          | 161.81 (1.30)   | 306.38 (2.95)        | 125.68 (0.75)   | 127.17 (1.35)    | 123.39 (2.67)      |
| 1988        | 1          | 167.19 (1.36)   | 310.10 (2.99)        | 127.56 (0.77)   | 129.60 (1.39)    | 123.33 (2.69)      |
| 1988        | 2          | 173.28 (1.36)   | 315.28 (3.00)        | 130.75 (0.77)   | 131.23 (1.36)    | 125.60 (2.65)      |
| 1988        | 3          | 178.77 (1.41)   | 314.12 (3.00)        | 132.84 (0.79)   | 131.36 (1.37)    | 124.30 (2.59)      |
| 1988        | 4          | 182.76 (1.44)   | 316.27 (3.02)        | 134.01 (0.80)   | 132.12 (1.38)    | 125.86 (2.64)      |
| 1989        | 1          | 187.37 (1.49)   | 313.79 (3.01)        | 136.21 (0.81)   | 132.35 (1.40)    | 121.79 (2.62)      |
| 1989        | 2          | 192.14 (1.51)   | 311.71 (2.97)        | 138.95 (0.82)   | 134.36 (1.40)    | 125.61 (2.66)      |
| 1989        | 3          | 195.61 (1.53)   | 316.49 (3.00)        | 142.22 (0.83)   | 136.29 (1.40)    | 127.45 (2.62)      |
| 1989        | 4          | 198.86 (1.55)   | 317.22 (3.01)        | 142.91 (0.84)   | 136.99 (1.41)    | 126.38 (2.60)      |
| 1990        | 1          | 201.12 (1.58)   | 312.99 (2.98)        | 144.92 (0.85)   | 137.22 (1.42)    | 128.36 (2.66)      |
| 1990        | 2          | 201.90 (1.58)   | 304.29 (2.89)        | 147.29 (0.86)   | 137.16 (1.41)    | 125.89 (2.59)      |
| 1990        | 3          | 203.00 (1.59)   | 298.88 (2.84)        | 148.13 (0.87)   | 137.89 (1.42)    | 127.59 (2.60)      |
| 1990        | 4          | 201.61 (1.58)   | 291.89 (2.78)        | 148.58 (0.87)   | 137.82 (1.42)    | 126.40 (2.58)      |
| 1991        | 1          | 202.95 (1.59)   | 289.04 (2.75)        | 150.32 (0.88)   | 139.84 (1.43)    | 129.13 (2.62)      |
| 1991        | 2          | 205.29 (1.59)   | 285.86 (2.70)        | 152.38 (0.88)   | 140.81 (1.43)    | 128.11 (2.58)      |
| 1991        | 3          | 204.76 (1.59)   | 282.64 (2.68)        | 153.63 (0.89)   | 141.22 (1.44)    | 127.99 (2.57)      |
| 1991        | 4          | 208.71 (1.61)   | 285.21 (2.69)        | 155.48 (0.90)   | 143.74 (1.46)    | 131.19 (2.62)      |
| 1992        | 1          | 209.54 (1.61)   | 284.38 (2.68)        | 156.75 (0.91)   | 144.38 (1.47)    | 132.88 (2.64)      |
| 1992        | 2          | 208.20 (1.60)   | 280.92 (2.65)        | 157.77 (0.91)   | 145.17 (1.47)    | 133.39 (2.66)      |
| 1992        | 3          | 210.13 (1.62)   | 282.45 (2.66)        | 158.96 (0.92)   | 146.92 (1.49)    | 134.30 (2.67)      |
| 1992        | 4          | 210.86 (1.62)   | 283.19 (2.67)        | 160.22 (0.93)   | 147.84 (1.50)    | 134.88 (2.68)      |
| 1993        | 1          | 210.12 (1.62)   | 281.24 (2.65)        | 160.82 (0.93)   | 149.15 (1.52)    | 135.40 (2.70)      |
| 1993        | 2          | 210.90 (1.62)   | 282.92 (2.66)        | 162.01 (0.94)   | 150.61 (1.53)    | 137.20 (2.72)      |
| 1993        | 3          | 211.62 (1.63)   | 283.95 (2.68)        | 163.49 (0.94)   | 152.52 (1.55)    | 139.08 (2.76)      |
| 1993        | 4          | 212.45 (1.63)   | 285.65 (2.69)        | 164.83 (0.95)   | 154.12 (1.56)    | 140.23 (2.78)      |
| 1994        | 1          | 212.87 (1.64)   | 285.84 (2.70)        | 166.72 (0.97)   | 155.00 (1.58)    | 142.41 (2.84)      |
| 1994        | 2          | 210.82 (1.65)   | 283.07 (2.68)        | 169.55 (0.99)   | 157.82 (1.61)    | 144.39 (2.89)      |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| Year | Qtr | Maryland      | Massachusetts | Michigan      | Minnesota     | Mississippi   |
|------|-----|---------------|---------------|---------------|---------------|---------------|
| 1994 | 3   | 208.99 (1.65) | 282.72 (2.69) | 172.79 (1.01) | 158.92 (1.63) | 145.97 (2.92) |
| 1994 | 4   | 206.93 (1.64) | 280.67 (2.68) | 175.03 (1.02) | 159.52 (1.64) | 148.38 (2.97) |
| 1995 | 1   | 207.00 (1.65) | 281.77 (2.69) | 177.78 (1.04) | 160.65 (1.65) | 148.06 (2.97) |
| 1995 | 2   | 209.44 (1.65) | 287.28 (2.73) | 181.32 (1.05) | 163.88 (1.67) | 151.54 (3.03) |
| 1995 | 3   | 212.10 (1.66) | 291.86 (2.76) | 184.75 (1.07) | 166.83 (1.70) | 153.96 (3.07) |
| 1995 | 4   | 213.82 (1.67) | 293.70 (2.78) | 187.81 (1.09) | 169.12 (1.72) | 155.36 (3.10) |
| 1996 | 1   | 216.32 (1.68) | 297.41 (2.81) | 190.67 (1.10) | 171.50 (1.74) | 156.64 (3.12) |
| 1996 | 2   | 214.06 (1.67) | 297.68 (2.82) | 195.78 (1.13) | 172.43 (1.76) | 157.44 (3.14) |
| 1996 | 3   | 211.99 (1.66) | 298.43 (2.83) | 200.19 (1.16) | 174.03 (1.77) | 160.20 (3.19) |
| 1996 | 4   | 214.55 (1.68) | 302.56 (2.87) | 202.99 (1.18) | 176.11 (1.79) | 161.35 (3.22) |
| 1997 | 1   | 215.37 (1.69) | 305.43 (2.90) | 206.52 (1.20) | 178.17 (1.82) | 162.00 (3.24) |
| 1997 | 2   | 214.46 (1.68) | 309.70 (2.93) | 210.83 (1.22) | 180.10 (1.83) | 163.22 (3.25) |
| 1997 | 3   | 216.35 (1.69) | 314.34 (2.97) | 214.63 (1.24) | 183.52 (1.87) | 165.34 (3.30) |
| 1997 | 4   | 218.90 (1.70) | 319.40 (3.02) | 217.76 (1.26) | 186.07 (1.89) | 167.88 (3.35) |
| 1998 | 1   | 221.61 (1.71) | 323.93 (3.05) | 220.45 (1.27) | 189.39 (1.92) | 170.12 (3.38) |
| 1998 | 2   | 221.36 (1.71) | 330.59 (3.12) | 224.48 (1.30) | 190.74 (1.94) | 172.59 (3.43) |
| 1998 | 3   | 222.71 (1.72) | 338.79 (3.20) | 228.18 (1.32) | 194.52 (1.97) | 174.20 (3.46) |
| 1998 | 4   | 224.89 (1.73) | 343.93 (3.24) | 230.41 (1.33) | 196.93 (2.00) | 176.03 (3.49) |
| 1999 | 1   | 227.23 (1.75) | 350.92 (3.31) | 234.15 (1.35) | 200.15 (2.03) | 178.19 (3.54) |
| 1999 | 2   | 227.87 (1.76) | 362.09 (3.42) | 239.03 (1.38) | 206.13 (2.09) | 180.47 (3.59) |
| 1999 | 3   | 229.74 (1.79) | 376.77 (3.57) | 243.69 (1.41) | 212.34 (2.16) | 181.23 (3.61) |
| 1999 | 4   | 232.10 (1.81) | 385.86 (3.66) | 246.78 (1.43) | 215.14 (2.19) | 180.82 (3.60) |
| 2000 | 1   | 236.49 (1.85) | 402.05 (3.82) | 252.49 (1.47) | 221.17 (2.25) | 182.94 (3.64) |
| 2000 | 2   | 239.20 (1.85) | 414.67 (3.92) | 255.83 (1.48) | 227.68 (2.31) | 184.21 (3.66) |
| 2000 | 3   | 243.41 (1.88) | 429.90 (4.06) | 260.47 (1.51) | 233.32 (2.37) | 186.91 (3.71) |
| 2000 | 4   | 247.32 (1.91) | 440.73 (4.16) | 264.33 (1.53) | 238.03 (2.42) | 188.34 (3.74) |
| 2001 | 1   | 253.18 (1.95) | 453.19 (4.27) | 268.75 (1.55) | 244.58 (2.48) | 193.28 (3.83) |
| 2001 | 2   | 257.91 (1.98) | 466.80 (4.40) | 272.19 (1.57) | 251.05 (2.54) | 194.52 (3.86) |
| 2001 | 3   | 264.70 (2.04) | 482.30 (4.55) | 275.75 (1.59) | 258.64 (2.62) | 196.52 (3.90) |
| 2001 | 4   | 269.17 (2.07) | 492.33 (4.64) | 278.15 (1.61) | 262.21 (2.66) | 198.12 (3.92) |
| 2002 | 1   | 275.91 (2.12) | 506.66 (4.77) | 281.58 (1.63) | 267.63 (2.71) | 198.79 (3.94) |
| 2002 | 2   | 284.69 (2.19) | 525.04 (4.95) | 284.56 (1.64) | 274.63 (2.78) | 198.16 (3.93) |
| 2002 | 3   | 293.62 (2.25) | 540.54 (5.09) | 287.36 (1.66) | 280.68 (2.84) | 201.80 (4.00) |
| 2002 | 4   | 299.65 (2.30) | 552.91 (5.21) | 289.29 (1.67) | 285.12 (2.89) | 203.58 (4.03) |
| 2003 | 1   | 305.34 (2.34) | 563.65 (5.31) | 291.43 (1.68) | 289.03 (2.93) | 205.09 (4.06) |
| 2003 | 2   | 311.76 (2.39) | 572.61 (5.39) | 293.61 (1.69) | 292.26 (2.96) | 206.62 (4.09) |
| 2003 | 3   | 321.10 (2.46) | 583.25 (5.49) | 296.19 (1.71) | 298.94 (3.03) | 207.74 (4.11) |
| 2003 | 4   | 338.55 (2.61) | 607.94 (5.74) | 300.58 (1.74) | 309.82 (3.14) | 209.15 (4.15) |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>Maryland</b> | <b>Massachusetts</b> | <b>Michigan</b> | <b>Minnesota</b> | <b>Mississippi</b> |
|-------------|------------|-----------------|----------------------|-----------------|------------------|--------------------|
| 2004        | 1          | 347.87 (2.68)   | 618.43 (5.83)        | 302.61 (1.75)   | 313.53 (3.18)    | 211.48 (4.20)      |
| 2004        | 2          | 363.78 (2.80)   | 632.86 (5.97)        | 304.85 (1.76)   | 319.80 (3.24)    | 213.65 (4.24)      |
| 2004        | 3          | 390.64 (3.02)   | 662.77 (6.26)        | 309.60 (1.80)   | 330.55 (3.36)    | 216.36 (4.30)      |
| 2004        | 4          | 403.95 (3.12)   | 674.25 (6.37)        | 313.07 (1.82)   | 335.84 (3.41)    | 219.32 (4.36)      |
| 2005        | 1          | 422.07 (3.26)   | 689.45 (6.51)        | 315.89 (1.83)   | 341.74 (3.47)    | 220.93 (4.40)      |
| 2005        | 2          | 447.23 (3.45)   | 705.29 (6.67)        | 318.05 (1.85)   | 349.03 (3.55)    | 225.49 (4.48)      |
| 2005        | 3          | 469.88 (3.62)   | 717.24 (6.78)        | 321.17 (1.87)   | 355.55 (3.61)    | 229.75 (4.57)      |
| 2005        | 4          | 490.67 (3.79)   | 724.15 (6.86)        | 320.95 (1.87)   | 360.88 (3.67)    | 235.23 (4.69)      |
| 2006        | 1          | 504.90 (3.91)   | 725.68 (6.88)        | 320.39 (1.87)   | 363.11 (3.70)    | 239.55 (4.77)      |
| 2006        | 2          | 516.98 (4.00)   | 717.75 (6.80)        | 316.03 (1.84)   | 362.89 (3.69)    | 246.66 (4.91)      |
| 2006        | 3          | 525.52 (4.06)   | 713.79 (6.76)        | 314.37 (1.83)   | 363.95 (3.71)    | 252.19 (5.02)      |
| 2006        | 4          | 532.70 (4.12)   | 718.56 (6.80)        | 316.76 (1.84)   | 368.45 (3.75)    | 256.81 (5.12)      |
| 2007        | 1          | 535.68 (4.15)   | 715.07 (6.77)        | 315.04 (1.84)   | 370.74 (3.78)    | 261.60 (5.21)      |
| 2007        | 2          | 538.62 (4.17)   | 705.93 (6.68)        | 310.30 (1.81)   | 368.35 (3.75)    | 262.54 (5.22)      |
| 2007        | 3          | 535.04 (4.14)   | 695.11 (6.58)        | 302.51 (1.76)   | 363.42 (3.70)    | 264.62 (5.27)      |
| 2007        | 4          | 534.72 (4.14)   | 699.98 (6.63)        | 303.02 (1.77)   | 364.80 (3.72)    | 268.53 (5.36)      |
| 2008        | 1          | 528.42 (4.08)   | 700.70 (6.63)        | 304.38 (1.77)   | 367.02 (3.73)    | 269.72 (5.37)      |
| 2008        | 2          | 516.83 (4.02)   | 684.28 (6.50)        | 295.02 (1.73)   | 358.88 (3.67)    | 270.19 (5.40)      |
| 2008        | 3          | 502.61 (4.01)   | 661.62 (6.38)        | 280.57 (1.69)   | 347.68 (3.60)    | 264.87 (5.36)      |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996.](#)

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>Missouri</b> | <b>Montana</b> | <b>Nebraska</b> | <b>Nevada</b> | <b>New Hampshire</b> |
|-------------|------------|-----------------|----------------|-----------------|---------------|----------------------|
| 1985        | 1          | 119.78 (1.14)   | 116.20 (5.51)  | 112.32 (1.63)   | 116.05 (2.18) | 151.15 (4.96)        |
| 1985        | 2          | 122.84 (1.15)   | 111.19 (4.74)  | 113.26 (1.61)   | 116.55 (2.01) | 161.07 (5.25)        |
| 1985        | 3          | 125.16 (1.16)   | 116.26 (4.91)  | 113.44 (1.59)   | 118.06 (1.95) | 170.07 (5.52)        |
| 1985        | 4          | 126.00 (1.18)   | 118.17 (5.05)  | 114.72 (1.63)   | 117.68 (2.00) | 180.55 (5.88)        |
| 1986        | 1          | 126.95 (1.18)   | 117.52 (4.99)  | 115.68 (1.62)   | 119.94 (2.02) | 189.47 (6.16)        |
| 1986        | 2          | 128.80 (1.17)   | 114.78 (4.62)  | 115.96 (1.59)   | 122.65 (1.95) | 198.76 (6.44)        |
| 1986        | 3          | 131.23 (1.20)   | 116.15 (4.74)  | 115.95 (1.59)   | 123.32 (1.96) | 207.96 (6.74)        |
| 1986        | 4          | 133.65 (1.22)   | 115.79 (4.75)  | 117.14 (1.62)   | 122.93 (1.96) | 219.84 (7.14)        |
| 1987        | 1          | 135.32 (1.24)   | 113.10 (4.61)  | 117.78 (1.63)   | 126.13 (2.01) | 225.27 (7.31)        |
| 1987        | 2          | 138.21 (1.27)   | 113.59 (4.71)  | 117.35 (1.62)   | 124.90 (1.99) | 234.73 (7.62)        |
| 1987        | 3          | 139.51 (1.31)   | 112.14 (4.86)  | 116.36 (1.68)   | 123.93 (2.00) | 237.48 (7.76)        |
| 1987        | 4          | 140.10 (1.34)   | 105.78 (4.61)  | 117.20 (1.76)   | 123.20 (2.00) | 241.16 (7.91)        |
| 1988        | 1          | 140.34 (1.34)   | 109.97 (4.87)  | 117.34 (1.73)   | 124.28 (2.01) | 240.92 (7.93)        |
| 1988        | 2          | 141.88 (1.32)   | 110.20 (4.68)  | 118.13 (1.69)   | 125.55 (2.00) | 243.96 (7.95)        |
| 1988        | 3          | 142.94 (1.34)   | 115.49 (4.95)  | 118.62 (1.70)   | 127.12 (2.01) | 243.65 (7.95)        |
| 1988        | 4          | 142.87 (1.35)   | 114.09 (4.93)  | 118.46 (1.70)   | 128.04 (2.04) | 243.61 (7.95)        |
| 1989        | 1          | 142.93 (1.37)   | 111.90 (4.82)  | 119.61 (1.75)   | 129.12 (2.07) | 243.93 (7.99)        |
| 1989        | 2          | 144.55 (1.36)   | 112.91 (4.81)  | 121.05 (1.74)   | 130.67 (2.06) | 240.99 (7.86)        |
| 1989        | 3          | 145.25 (1.34)   | 115.94 (4.86)  | 121.50 (1.71)   | 134.19 (2.10) | 244.34 (7.95)        |
| 1989        | 4          | 145.94 (1.35)   | 116.86 (4.88)  | 123.01 (1.74)   | 136.04 (2.11) | 244.73 (7.96)        |
| 1990        | 1          | 145.94 (1.36)   | 114.60 (4.82)  | 123.87 (1.77)   | 138.76 (2.16) | 240.62 (7.85)        |
| 1990        | 2          | 145.89 (1.35)   | 117.32 (4.79)  | 125.81 (1.76)   | 140.63 (2.17) | 229.79 (7.49)        |
| 1990        | 3          | 146.23 (1.34)   | 123.04 (5.03)  | 127.20 (1.77)   | 144.31 (2.22) | 224.71 (7.32)        |
| 1990        | 4          | 144.98 (1.34)   | 122.72 (5.00)  | 127.34 (1.79)   | 146.07 (2.25) | 216.87 (7.07)        |
| 1991        | 1          | 146.66 (1.35)   | 120.52 (4.92)  | 128.36 (1.79)   | 149.14 (2.30) | 214.31 (6.98)        |
| 1991        | 2          | 147.31 (1.34)   | 124.95 (5.00)  | 129.82 (1.79)   | 150.41 (2.30) | 210.82 (6.85)        |
| 1991        | 3          | 147.89 (1.35)   | 126.99 (5.07)  | 130.76 (1.80)   | 151.03 (2.31) | 206.26 (6.70)        |
| 1991        | 4          | 149.41 (1.36)   | 131.44 (5.23)  | 131.85 (1.81)   | 154.11 (2.35) | 206.71 (6.71)        |
| 1992        | 1          | 150.20 (1.36)   | 133.52 (5.29)  | 133.57 (1.82)   | 155.71 (2.37) | 206.73 (6.70)        |
| 1992        | 2          | 150.64 (1.36)   | 135.24 (5.36)  | 135.33 (1.85)   | 155.15 (2.37) | 202.07 (6.55)        |
| 1992        | 3          | 151.66 (1.37)   | 139.56 (5.53)  | 137.48 (1.88)   | 158.04 (2.41) | 201.40 (6.53)        |
| 1992        | 4          | 152.51 (1.38)   | 143.82 (5.69)  | 138.34 (1.89)   | 158.99 (2.42) | 201.21 (6.52)        |
| 1993        | 1          | 152.69 (1.38)   | 146.30 (5.81)  | 139.72 (1.92)   | 158.74 (2.43) | 199.57 (6.48)        |
| 1993        | 2          | 153.62 (1.39)   | 150.41 (5.95)  | 141.33 (1.93)   | 160.11 (2.44) | 201.85 (6.54)        |
| 1993        | 3          | 154.71 (1.40)   | 153.04 (6.05)  | 143.56 (1.96)   | 161.40 (2.46) | 202.15 (6.55)        |
| 1993        | 4          | 156.06 (1.41)   | 157.98 (6.24)  | 145.79 (1.99)   | 162.43 (2.47) | 202.85 (6.57)        |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>Missouri</b> | <b>Montana</b> | <b>Nebraska</b> | <b>Nevada</b> | <b>New Hampshire</b> |
|-------------|------------|-----------------|----------------|-----------------|---------------|----------------------|
| 1994        | 1          | 157.55 (1.43)   | 160.90 (6.37)  | 147.76 (2.03)   | 162.42 (2.48) | 203.20 (6.59)        |
| 1994        | 2          | 160.55 (1.47)   | 168.13 (6.66)  | 152.71 (2.10)   | 163.15 (2.50) | 200.17 (6.51)        |
| 1994        | 3          | 162.94 (1.50)   | 171.38 (6.80)  | 156.44 (2.16)   | 163.90 (2.52) | 196.63 (6.41)        |
| 1994        | 4          | 163.45 (1.51)   | 172.25 (6.83)  | 156.18 (2.17)   | 163.31 (2.51) | 195.74 (6.39)        |
| 1995        | 1          | 165.39 (1.52)   | 173.92 (6.90)  | 157.36 (2.19)   | 164.21 (2.52) | 196.24 (6.41)        |
| 1995        | 2          | 167.29 (1.53)   | 178.26 (7.07)  | 160.90 (2.21)   | 167.74 (2.57) | 198.99 (6.47)        |
| 1995        | 3          | 169.89 (1.55)   | 181.79 (7.19)  | 163.05 (2.24)   | 170.37 (2.61) | 203.38 (6.61)        |
| 1995        | 4          | 171.19 (1.56)   | 183.14 (7.25)  | 164.35 (2.26)   | 171.87 (2.63) | 205.95 (6.69)        |
| 1996        | 1          | 172.87 (1.57)   | 186.24 (7.36)  | 166.43 (2.28)   | 173.95 (2.66) | 207.43 (6.73)        |
| 1996        | 2          | 174.94 (1.59)   | 187.03 (7.39)  | 169.47 (2.33)   | 172.97 (2.64) | 206.71 (6.71)        |
| 1996        | 3          | 176.36 (1.61)   | 189.31 (7.49)  | 172.03 (2.36)   | 172.87 (2.65) | 208.54 (6.78)        |
| 1996        | 4          | 178.26 (1.63)   | 190.97 (7.56)  | 173.20 (2.38)   | 174.86 (2.68) | 210.30 (6.83)        |
| 1997        | 1          | 180.02 (1.64)   | 191.15 (7.57)  | 174.74 (2.41)   | 175.84 (2.69) | 211.71 (6.88)        |
| 1997        | 2          | 181.57 (1.65)   | 192.24 (7.60)  | 177.94 (2.44)   | 176.01 (2.69) | 214.15 (6.95)        |
| 1997        | 3          | 184.01 (1.67)   | 194.62 (7.69)  | 180.23 (2.47)   | 178.91 (2.74) | 217.04 (7.04)        |
| 1997        | 4          | 185.84 (1.69)   | 198.31 (7.84)  | 182.59 (2.50)   | 179.56 (2.74) | 220.45 (7.15)        |
| 1998        | 1          | 187.53 (1.70)   | 199.70 (7.88)  | 184.57 (2.52)   | 181.84 (2.77) | 223.76 (7.25)        |
| 1998        | 2          | 189.14 (1.71)   | 199.67 (7.88)  | 185.78 (2.54)   | 182.46 (2.78) | 228.14 (7.39)        |
| 1998        | 3          | 191.51 (1.74)   | 201.05 (7.94)  | 188.50 (2.57)   | 183.34 (2.79) | 232.23 (7.53)        |
| 1998        | 4          | 193.22 (1.75)   | 203.04 (8.01)  | 190.75 (2.60)   | 184.48 (2.81) | 236.37 (7.65)        |
| 1999        | 1          | 195.72 (1.77)   | 203.43 (8.03)  | 192.06 (2.62)   | 184.87 (2.82) | 239.74 (7.77)        |
| 1999        | 2          | 198.70 (1.80)   | 205.13 (8.10)  | 195.43 (2.67)   | 184.23 (2.81) | 246.55 (7.99)        |
| 1999        | 3          | 201.02 (1.83)   | 207.46 (8.20)  | 196.30 (2.69)   | 185.38 (2.83) | 254.42 (8.25)        |
| 1999        | 4          | 202.95 (1.85)   | 207.07 (8.19)  | 197.47 (2.71)   | 185.38 (2.84) | 259.14 (8.41)        |
| 2000        | 1          | 206.78 (1.89)   | 210.03 (8.31)  | 198.84 (2.73)   | 187.14 (2.86) | 269.14 (8.74)        |
| 2000        | 2          | 209.18 (1.90)   | 212.07 (8.37)  | 201.42 (2.75)   | 189.34 (2.89) | 278.11 (9.01)        |
| 2000        | 3          | 212.62 (1.93)   | 214.90 (8.48)  | 203.32 (2.78)   | 191.18 (2.92) | 288.54 (9.35)        |
| 2000        | 4          | 215.27 (1.95)   | 217.78 (8.60)  | 204.84 (2.80)   | 194.24 (2.96) | 296.82 (9.62)        |
| 2001        | 1          | 219.18 (1.98)   | 222.48 (8.78)  | 207.66 (2.83)   | 198.58 (3.02) | 303.83 (9.84)        |
| 2001        | 2          | 222.39 (2.01)   | 225.26 (8.88)  | 209.96 (2.86)   | 201.10 (3.06) | 314.28 (10.17)       |
| 2001        | 3          | 225.62 (2.04)   | 227.19 (8.96)  | 211.72 (2.88)   | 204.87 (3.12) | 324.74 (10.51)       |
| 2001        | 4          | 227.87 (2.06)   | 228.91 (9.02)  | 213.44 (2.90)   | 207.60 (3.16) | 331.07 (10.72)       |
| 2002        | 1          | 231.74 (2.10)   | 234.01 (9.23)  | 215.29 (2.93)   | 210.50 (3.20) | 340.08 (11.01)       |
| 2002        | 2          | 234.70 (2.12)   | 236.51 (9.33)  | 216.31 (2.95)   | 213.86 (3.25) | 351.88 (11.40)       |
| 2002        | 3          | 237.61 (2.15)   | 240.90 (9.50)  | 218.54 (2.97)   | 218.62 (3.32) | 362.80 (11.74)       |
| 2002        | 4          | 240.63 (2.17)   | 242.96 (9.58)  | 220.04 (2.99)   | 221.19 (3.36) | 371.16 (12.01)       |
| 2003        | 1          | 242.66 (2.19)   | 245.65 (9.68)  | 221.28 (3.01)   | 225.27 (3.42) | 376.99 (12.20)       |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>Missouri</b> | <b>Montana</b> | <b>Nebraska</b> | <b>Nevada</b> | <b>New Hampshire</b> |
|-------------|------------|-----------------|----------------|-----------------|---------------|----------------------|
| 2003        | 2          | 244.34 (2.21)   | 250.84 (9.89)  | 222.35 (3.02)   | 229.53 (3.49) | 382.56 (12.40)       |
| 2003        | 3          | 247.38 (2.24)   | 256.17 (10.10) | 224.66 (3.06)   | 236.16 (3.59) | 392.48 (12.70)       |
| 2003        | 4          | 253.12 (2.29)   | 263.43 (10.39) | 228.47 (3.12)   | 250.34 (3.81) | 407.83 (13.21)       |
| 2004        | 1          | 256.04 (2.32)   | 268.43 (10.59) | 229.63 (3.14)   | 263.31 (4.01) | 413.91 (13.40)       |
| 2004        | 2          | 259.49 (2.35)   | 274.77 (10.84) | 232.95 (3.18)   | 287.44 (4.38) | 424.57 (13.75)       |
| 2004        | 3          | 265.81 (2.41)   | 284.28 (11.22) | 237.56 (3.25)   | 323.77 (4.94) | 442.92 (14.35)       |
| 2004        | 4          | 269.65 (2.45)   | 291.95 (11.53) | 240.03 (3.28)   | 335.84 (5.12) | 452.38 (14.65)       |
| 2005        | 1          | 274.03 (2.49)   | 298.67 (11.79) | 241.58 (3.31)   | 349.68 (5.33) | 464.22 (15.04)       |
| 2005        | 2          | 278.52 (2.53)   | 310.96 (12.28) | 245.36 (3.36)   | 368.46 (5.62) | 475.52 (15.41)       |
| 2005        | 3          | 283.31 (2.57)   | 320.08 (12.63) | 249.01 (3.41)   | 381.89 (5.82) | 486.69 (15.77)       |
| 2005        | 4          | 287.19 (2.61)   | 331.96 (13.11) | 248.81 (3.42)   | 397.04 (6.06) | 493.51 (15.99)       |
| 2006        | 1          | 290.33 (2.64)   | 338.00 (13.36) | 249.50 (3.44)   | 407.18 (6.22) | 497.88 (16.15)       |
| 2006        | 2          | 291.62 (2.65)   | 349.99 (13.82) | 252.24 (3.46)   | 408.98 (6.25) | 496.78 (16.10)       |
| 2006        | 3          | 294.63 (2.68)   | 359.71 (14.20) | 254.02 (3.49)   | 410.05 (6.27) | 496.04 (16.08)       |
| 2006        | 4          | 298.67 (2.72)   | 367.98 (14.53) | 254.14 (3.49)   | 411.52 (6.29) | 499.94 (16.21)       |
| 2007        | 1          | 301.00 (2.74)   | 373.36 (14.74) | 256.07 (3.53)   | 409.03 (6.26) | 499.84 (16.21)       |
| 2007        | 2          | 302.29 (2.75)   | 382.04 (15.08) | 258.04 (3.54)   | 402.46 (6.15) | 498.48 (16.16)       |
| 2007        | 3          | 301.86 (2.74)   | 386.76 (15.27) | 257.84 (3.54)   | 393.50 (6.03) | 491.51 (15.94)       |
| 2007        | 4          | 305.01 (2.77)   | 392.09 (15.49) | 258.49 (3.56)   | 384.98 (5.90) | 494.43 (16.03)       |
| 2008        | 1          | 305.81 (2.78)   | 394.53 (15.57) | 260.76 (3.57)   | 365.98 (5.61) | 495.74 (16.07)       |
| 2008        | 2          | 304.58 (2.78)   | 395.52 (15.63) | 261.53 (3.61)   | 343.99 (5.31) | 487.56 (15.82)       |
| 2008        | 3          | 299.89 (2.78)   | 390.64 (15.49) | 257.15 (3.62)   | 311.17 (4.90) | 472.47 (15.41)       |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996.](#)

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>New Jersey</b> | <b>New Mexico</b> | <b>New York</b> | <b>North Carolina</b> | <b>North Dakota</b> |
|-------------|------------|-------------------|-------------------|-----------------|-----------------------|---------------------|
| 1985        | 1          | 141.33 (1.02)     | 125.95 (2.04)     | 175.78 (1.63)   | 127.83 (1.09)         | 112.11 (4.56)       |
| 1985        | 2          | 147.57 (1.05)     | 127.43 (2.02)     | 184.19 (1.70)   | 130.12 (1.09)         | 112.66 (4.67)       |
| 1985        | 3          | 154.07 (1.09)     | 128.57 (1.99)     | 192.32 (1.75)   | 132.99 (1.09)         | 116.12 (4.52)       |
| 1985        | 4          | 160.80 (1.14)     | 128.79 (2.01)     | 199.13 (1.82)   | 135.09 (1.12)         | 111.59 (4.44)       |
| 1986        | 1          | 166.86 (1.19)     | 130.86 (2.03)     | 207.87 (1.91)   | 136.23 (1.11)         | 116.12 (4.51)       |
| 1986        | 2          | 176.68 (1.24)     | 133.43 (2.01)     | 216.54 (1.95)   | 138.57 (1.11)         | 115.27 (4.36)       |
| 1986        | 3          | 187.83 (1.31)     | 132.70 (2.01)     | 226.62 (2.04)   | 141.30 (1.14)         | 114.85 (4.42)       |
| 1986        | 4          | 197.78 (1.39)     | 133.76 (2.03)     | 236.58 (2.13)   | 142.99 (1.16)         | 112.80 (4.33)       |
| 1987        | 1          | 208.50 (1.47)     | 135.36 (2.06)     | 246.10 (2.23)   | 145.56 (1.18)         | 116.70 (4.50)       |
| 1987        | 2          | 219.43 (1.54)     | 134.43 (2.05)     | 254.24 (2.29)   | 147.40 (1.19)         | 113.95 (4.38)       |
| 1987        | 3          | 228.24 (1.62)     | 132.68 (2.06)     | 266.22 (2.41)   | 149.40 (1.24)         | 113.92 (4.53)       |
| 1987        | 4          | 233.15 (1.68)     | 131.43 (2.09)     | 270.20 (2.48)   | 150.53 (1.27)         | 112.87 (4.55)       |
| 1988        | 1          | 238.29 (1.73)     | 131.88 (2.08)     | 276.64 (2.56)   | 151.39 (1.28)         | 110.63 (4.57)       |
| 1988        | 2          | 244.55 (1.73)     | 130.73 (2.02)     | 279.87 (2.54)   | 153.72 (1.27)         | 112.43 (4.45)       |
| 1988        | 3          | 245.01 (1.75)     | 132.14 (2.04)     | 281.71 (2.56)   | 155.50 (1.28)         | 112.56 (4.44)       |
| 1988        | 4          | 244.30 (1.74)     | 130.28 (2.02)     | 282.23 (2.57)   | 155.97 (1.29)         | 108.01 (4.31)       |
| 1989        | 1          | 243.74 (1.75)     | 131.62 (2.06)     | 282.67 (2.58)   | 157.00 (1.31)         | 112.12 (4.54)       |
| 1989        | 2          | 243.07 (1.73)     | 131.70 (2.04)     | 281.93 (2.56)   | 157.45 (1.30)         | 111.32 (4.41)       |
| 1989        | 3          | 244.60 (1.73)     | 134.07 (2.06)     | 284.74 (2.57)   | 160.33 (1.31)         | 112.86 (4.37)       |
| 1989        | 4          | 245.27 (1.73)     | 135.72 (2.08)     | 285.72 (2.58)   | 160.61 (1.31)         | 114.26 (4.40)       |
| 1990        | 1          | 242.23 (1.72)     | 133.53 (2.06)     | 285.53 (2.58)   | 161.13 (1.32)         | 114.48 (4.46)       |
| 1990        | 2          | 237.11 (1.68)     | 134.05 (2.04)     | 282.21 (2.55)   | 161.74 (1.32)         | 113.74 (4.38)       |
| 1990        | 3          | 234.05 (1.65)     | 135.84 (2.06)     | 280.69 (2.53)   | 163.40 (1.33)         | 115.89 (4.41)       |
| 1990        | 4          | 230.14 (1.63)     | 135.92 (2.07)     | 277.42 (2.50)   | 162.99 (1.33)         | 114.45 (4.36)       |
| 1991        | 1          | 229.03 (1.63)     | 136.78 (2.08)     | 277.31 (2.51)   | 164.10 (1.33)         | 116.06 (4.42)       |
| 1991        | 2          | 227.31 (1.59)     | 138.26 (2.07)     | 278.94 (2.50)   | 165.05 (1.33)         | 117.33 (4.42)       |
| 1991        | 3          | 226.08 (1.59)     | 139.06 (2.09)     | 278.15 (2.50)   | 165.53 (1.33)         | 117.96 (4.44)       |
| 1991        | 4          | 228.78 (1.61)     | 141.21 (2.11)     | 280.39 (2.52)   | 167.76 (1.34)         | 118.68 (4.46)       |
| 1992        | 1          | 230.35 (1.61)     | 144.71 (2.15)     | 285.73 (2.56)   | 169.10 (1.35)         | 121.35 (4.55)       |
| 1992        | 2          | 228.59 (1.59)     | 145.49 (2.17)     | 281.70 (2.52)   | 169.38 (1.35)         | 121.61 (4.56)       |
| 1992        | 3          | 230.41 (1.61)     | 146.45 (2.18)     | 284.76 (2.55)   | 171.36 (1.37)         | 122.72 (4.60)       |
| 1992        | 4          | 231.70 (1.61)     | 148.55 (2.21)     | 286.73 (2.56)   | 172.23 (1.37)         | 124.02 (4.65)       |
| 1993        | 1          | 231.56 (1.62)     | 150.43 (2.25)     | 282.11 (2.53)   | 172.56 (1.38)         | 125.20 (4.71)       |
| 1993        | 2          | 233.28 (1.62)     | 154.22 (2.29)     | 287.95 (2.57)   | 174.06 (1.39)         | 127.46 (4.78)       |
| 1993        | 3          | 233.78 (1.63)     | 157.21 (2.33)     | 287.27 (2.57)   | 175.90 (1.40)         | 129.95 (4.87)       |
| 1993        | 4          | 235.22 (1.64)     | 159.89 (2.37)     | 288.29 (2.58)   | 177.29 (1.41)         | 130.98 (4.90)       |
| 1994        | 1          | 235.73 (1.65)     | 165.16 (2.46)     | 285.27 (2.56)   | 178.95 (1.43)         | 132.68 (5.00)       |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| Year | Qtr | New Jersey    | New Mexico    | New York      | North Carolina | North Dakota  |
|------|-----|---------------|---------------|---------------|----------------|---------------|
| 1994 | 2   | 233.61 (1.65) | 169.99 (2.54) | 281.90 (2.54) | 181.55 (1.46)  | 136.62 (5.18) |
| 1994 | 3   | 231.35 (1.65) | 173.86 (2.60) | 279.90 (2.53) | 184.18 (1.49)  | 137.79 (5.23) |
| 1994 | 4   | 228.57 (1.63) | 176.58 (2.65) | 274.70 (2.50) | 186.05 (1.51)  | 137.91 (5.24) |
| 1995 | 1   | 227.74 (1.64) | 177.43 (2.66) | 272.74 (2.49) | 187.13 (1.51)  | 139.32 (5.29) |
| 1995 | 2   | 230.54 (1.64) | 181.58 (2.71) | 277.70 (2.52) | 189.75 (1.53)  | 141.97 (5.36) |
| 1995 | 3   | 234.70 (1.66) | 185.37 (2.76) | 282.02 (2.55) | 193.17 (1.55)  | 143.46 (5.40) |
| 1995 | 4   | 235.18 (1.67) | 186.87 (2.79) | 281.62 (2.55) | 195.15 (1.57)  | 144.25 (5.44) |
| 1996 | 1   | 238.56 (1.68) | 187.70 (2.79) | 286.47 (2.59) | 197.59 (1.58)  | 148.11 (5.58) |
| 1996 | 2   | 236.26 (1.67) | 187.46 (2.80) | 284.55 (2.56) | 199.03 (1.60)  | 146.19 (5.51) |
| 1996 | 3   | 235.57 (1.67) | 186.94 (2.79) | 282.52 (2.55) | 201.37 (1.62)  | 148.94 (5.61) |
| 1996 | 4   | 235.50 (1.67) | 188.37 (2.82) | 282.31 (2.56) | 203.29 (1.63)  | 149.08 (5.62) |
| 1997 | 1   | 237.44 (1.69) | 189.14 (2.83) | 282.41 (2.57) | 205.71 (1.66)  | 149.75 (5.69) |
| 1997 | 2   | 238.32 (1.69) | 190.45 (2.84) | 285.95 (2.59) | 208.08 (1.67)  | 149.90 (5.65) |
| 1997 | 3   | 241.11 (1.70) | 191.60 (2.86) | 288.59 (2.61) | 211.15 (1.69)  | 152.58 (5.75) |
| 1997 | 4   | 243.64 (1.72) | 193.24 (2.88) | 291.57 (2.63) | 214.58 (1.72)  | 154.64 (5.82) |
| 1998 | 1   | 248.29 (1.74) | 194.56 (2.88) | 298.22 (2.68) | 217.32 (1.73)  | 158.14 (5.93) |
| 1998 | 2   | 248.87 (1.74) | 194.56 (2.89) | 300.25 (2.69) | 218.75 (1.74)  | 159.21 (5.97) |
| 1998 | 3   | 251.27 (1.76) | 196.20 (2.91) | 302.41 (2.71) | 221.97 (1.77)  | 161.01 (6.04) |
| 1998 | 4   | 253.47 (1.77) | 198.43 (2.94) | 306.64 (2.75) | 224.15 (1.79)  | 161.26 (6.04) |
| 1999 | 1   | 256.49 (1.79) | 198.45 (2.95) | 309.34 (2.77) | 226.22 (1.80)  | 162.21 (6.09) |
| 1999 | 2   | 259.74 (1.82) | 198.19 (2.95) | 314.77 (2.83) | 228.27 (1.82)  | 162.63 (6.11) |
| 1999 | 3   | 265.90 (1.87) | 197.57 (2.95) | 323.34 (2.91) | 229.65 (1.84)  | 162.74 (6.12) |
| 1999 | 4   | 268.79 (1.90) | 198.26 (2.97) | 329.35 (2.97) | 230.61 (1.85)  | 161.77 (6.10) |
| 2000 | 1   | 275.43 (1.95) | 198.87 (2.97) | 334.57 (3.02) | 232.67 (1.87)  | 162.99 (6.15) |
| 2000 | 2   | 282.08 (1.98) | 199.56 (2.97) | 344.53 (3.09) | 235.60 (1.88)  | 163.93 (6.16) |
| 2000 | 3   | 290.07 (2.03) | 200.74 (2.99) | 354.16 (3.18) | 238.54 (1.90)  | 165.74 (6.22) |
| 2000 | 4   | 294.88 (2.06) | 202.13 (3.01) | 359.73 (3.23) | 241.22 (1.93)  | 167.58 (6.29) |
| 2001 | 1   | 301.95 (2.11) | 207.17 (3.08) | 368.68 (3.30) | 246.63 (1.96)  | 172.13 (6.45) |
| 2001 | 2   | 310.53 (2.16) | 208.37 (3.09) | 377.09 (3.37) | 248.91 (1.98)  | 173.04 (6.48) |
| 2001 | 3   | 319.31 (2.22) | 209.84 (3.11) | 386.92 (3.46) | 250.73 (2.00)  | 174.67 (6.54) |
| 2001 | 4   | 325.91 (2.26) | 211.30 (3.13) | 394.29 (3.52) | 253.23 (2.01)  | 175.98 (6.59) |
| 2002 | 1   | 335.34 (2.33) | 212.47 (3.15) | 404.38 (3.61) | 254.68 (2.03)  | 177.68 (6.65) |
| 2002 | 2   | 347.40 (2.42) | 215.45 (3.20) | 416.86 (3.73) | 255.67 (2.04)  | 179.78 (6.73) |
| 2002 | 3   | 359.03 (2.49) | 218.44 (3.24) | 428.80 (3.83) | 259.27 (2.06)  | 183.67 (6.87) |
| 2002 | 4   | 367.48 (2.55) | 220.54 (3.26) | 438.76 (3.92) | 261.20 (2.08)  | 185.78 (6.95) |
| 2003 | 1   | 374.34 (2.60) | 223.09 (3.30) | 448.76 (4.01) | 263.25 (2.09)  | 186.84 (6.99) |
| 2003 | 2   | 380.56 (2.64) | 225.75 (3.34) | 459.59 (4.10) | 265.15 (2.11)  | 189.70 (7.10) |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>New Jersey</b> | <b>New Mexico</b> | <b>New York</b> | <b>North Carolina</b> | <b>North Dakota</b> |
|-------------|------------|-------------------|-------------------|-----------------|-----------------------|---------------------|
| 2003        | 3          | 391.98 (2.72)     | 228.45 (3.38)     | 466.29 (4.16)   | 266.31 (2.12)         | 191.85 (7.18)       |
| 2003        | 4          | 412.01 (2.87)     | 233.58 (3.47)     | 489.84 (4.38)   | 268.75 (2.15)         | 196.28 (7.36)       |
| 2004        | 1          | 420.18 (2.93)     | 236.18 (3.51)     | 500.26 (4.48)   | 271.66 (2.17)         | 197.63 (7.41)       |
| 2004        | 2          | 433.59 (3.02)     | 241.20 (3.58)     | 514.58 (4.61)   | 274.09 (2.19)         | 202.17 (7.58)       |
| 2004        | 3          | 461.81 (3.23)     | 247.75 (3.69)     | 540.09 (4.85)   | 276.83 (2.22)         | 208.23 (7.82)       |
| 2004        | 4          | 474.16 (3.31)     | 252.47 (3.76)     | 554.06 (4.97)   | 281.89 (2.26)         | 212.99 (8.00)       |
| 2005        | 1          | 488.58 (3.42)     | 258.04 (3.85)     | 569.77 (5.13)   | 286.49 (2.30)         | 214.23 (8.05)       |
| 2005        | 2          | 509.14 (3.56)     | 269.10 (4.00)     | 588.96 (5.29)   | 290.09 (2.32)         | 219.46 (8.24)       |
| 2005        | 3          | 528.81 (3.69)     | 279.84 (4.16)     | 607.45 (5.45)   | 296.74 (2.37)         | 226.29 (8.49)       |
| 2005        | 4          | 546.39 (3.83)     | 288.51 (4.30)     | 623.84 (5.61)   | 303.41 (2.43)         | 229.04 (8.61)       |
| 2006        | 1          | 558.35 (3.92)     | 297.29 (4.43)     | 637.64 (5.75)   | 309.09 (2.48)         | 231.61 (8.72)       |
| 2006        | 2          | 566.17 (3.97)     | 308.71 (4.60)     | 641.36 (5.78)   | 313.97 (2.52)         | 237.72 (8.94)       |
| 2006        | 3          | 570.70 (4.00)     | 317.32 (4.72)     | 643.82 (5.80)   | 319.18 (2.56)         | 241.20 (9.06)       |
| 2006        | 4          | 575.26 (4.03)     | 324.85 (4.84)     | 653.94 (5.89)   | 326.16 (2.62)         | 241.78 (9.10)       |
| 2007        | 1          | 578.05 (4.05)     | 330.45 (4.92)     | 658.30 (5.94)   | 332.37 (2.67)         | 248.57 (9.35)       |
| 2007        | 2          | 575.91 (4.03)     | 334.49 (4.98)     | 658.33 (5.93)   | 336.13 (2.69)         | 252.78 (9.49)       |
| 2007        | 3          | 572.19 (4.01)     | 337.61 (5.03)     | 653.53 (5.89)   | 339.08 (2.72)         | 253.74 (9.53)       |
| 2007        | 4          | 573.28 (4.02)     | 341.33 (5.09)     | 660.81 (5.96)   | 342.85 (2.75)         | 260.50 (9.80)       |
| 2008        | 1          | 569.94 (3.99)     | 342.38 (5.10)     | 661.31 (5.95)   | 346.01 (2.77)         | 259.84 (9.75)       |
| 2008        | 2          | 557.94 (3.93)     | 340.18 (5.09)     | 653.02 (5.90)   | 348.03 (2.80)         | 262.18 (9.86)       |
| 2008        | 3          | 544.33 (3.92)     | 336.89 (5.10)     | 636.12 (5.82)   | 345.83 (2.83)         | 263.94 (10.02)      |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996.](#)

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>Ohio</b>   | <b>Oklahoma</b> | <b>Oregon</b> | <b>Pennsylvania</b> | <b>Rhode Island</b> |
|-------------|------------|---------------|-----------------|---------------|---------------------|---------------------|
| 1985        | 1          | 107.68 (0.55) | 119.87 (1.26)   | 98.53 (1.28)  | 122.62 (0.94)       | 129.52 (4.03)       |
| 1985        | 2          | 108.90 (0.54) | 118.08 (1.22)   | 98.43 (1.24)  | 125.58 (0.95)       | 135.61 (4.19)       |
| 1985        | 3          | 110.23 (0.54) | 117.94 (1.17)   | 97.76 (1.17)  | 128.28 (0.96)       | 140.01 (4.30)       |
| 1985        | 4          | 111.02 (0.55) | 114.98 (1.18)   | 97.84 (1.20)  | 129.79 (0.98)       | 148.69 (4.58)       |
| 1986        | 1          | 112.51 (0.56) | 116.44 (1.16)   | 98.86 (1.17)  | 132.76 (1.00)       | 152.78 (4.70)       |
| 1986        | 2          | 114.04 (0.55) | 117.97 (1.12)   | 99.55 (1.12)  | 136.67 (1.02)       | 160.19 (4.89)       |
| 1986        | 3          | 115.85 (0.56) | 113.72 (1.11)   | 100.16 (1.13) | 141.21 (1.05)       | 171.27 (5.23)       |
| 1986        | 4          | 117.46 (0.58) | 112.27 (1.10)   | 98.60 (1.12)  | 145.79 (1.09)       | 187.39 (5.73)       |
| 1987        | 1          | 119.55 (0.59) | 111.88 (1.10)   | 100.61 (1.15) | 150.71 (1.13)       | 201.41 (6.17)       |
| 1987        | 2          | 122.05 (0.59) | 109.23 (1.07)   | 101.00 (1.15) | 156.82 (1.17)       | 212.22 (6.50)       |
| 1987        | 3          | 124.50 (0.62) | 103.82 (1.08)   | 99.96 (1.16)  | 164.53 (1.24)       | 228.35 (7.06)       |
| 1987        | 4          | 125.72 (0.65) | 100.77 (1.10)   | 99.25 (1.18)  | 170.21 (1.31)       | 236.44 (7.32)       |
| 1988        | 1          | 127.85 (0.66) | 99.54 (1.10)    | 101.24 (1.20) | 173.35 (1.33)       | 245.53 (7.59)       |
| 1988        | 2          | 130.58 (0.65) | 100.17 (1.02)   | 102.28 (1.17) | 180.30 (1.36)       | 248.73 (7.63)       |
| 1988        | 3          | 131.74 (0.66) | 97.82 (1.01)    | 105.73 (1.21) | 185.32 (1.40)       | 251.13 (7.73)       |
| 1988        | 4          | 132.97 (0.67) | 99.21 (1.03)    | 106.67 (1.22) | 187.24 (1.42)       | 253.33 (7.79)       |
| 1989        | 1          | 134.55 (0.68) | 98.95 (1.04)    | 108.57 (1.26) | 189.45 (1.44)       | 254.73 (7.84)       |
| 1989        | 2          | 135.99 (0.68) | 100.68 (1.03)   | 111.22 (1.26) | 190.75 (1.44)       | 256.47 (7.87)       |
| 1989        | 3          | 138.82 (0.68) | 102.15 (1.03)   | 114.37 (1.28) | 194.93 (1.46)       | 262.42 (8.03)       |
| 1989        | 4          | 139.75 (0.69) | 101.03 (1.02)   | 117.39 (1.31) | 197.31 (1.48)       | 263.75 (8.07)       |
| 1990        | 1          | 141.34 (0.70) | 101.17 (1.03)   | 121.65 (1.36) | 197.45 (1.49)       | 260.80 (8.00)       |
| 1990        | 2          | 142.64 (0.70) | 102.52 (1.02)   | 127.86 (1.42) | 197.80 (1.48)       | 256.18 (7.85)       |
| 1990        | 3          | 144.63 (0.71) | 101.89 (1.00)   | 132.66 (1.46) | 198.53 (1.49)       | 256.56 (7.86)       |
| 1990        | 4          | 144.94 (0.71) | 101.81 (1.02)   | 134.94 (1.50) | 198.03 (1.49)       | 251.75 (7.73)       |
| 1991        | 1          | 146.62 (0.72) | 103.39 (1.03)   | 137.28 (1.52) | 199.40 (1.50)       | 252.26 (7.73)       |
| 1991        | 2          | 148.74 (0.72) | 105.05 (1.01)   | 140.35 (1.54) | 201.07 (1.50)       | 246.53 (7.54)       |
| 1991        | 3          | 149.70 (0.73) | 105.14 (1.01)   | 142.74 (1.57) | 201.29 (1.51)       | 244.02 (7.47)       |
| 1991        | 4          | 151.92 (0.74) | 107.26 (1.03)   | 145.94 (1.60) | 204.79 (1.53)       | 246.90 (7.54)       |
| 1992        | 1          | 153.59 (0.74) | 107.89 (1.01)   | 148.79 (1.63) | 205.96 (1.53)       | 245.31 (7.49)       |
| 1992        | 2          | 154.61 (0.75) | 107.94 (1.02)   | 150.76 (1.65) | 205.68 (1.53)       | 242.28 (7.40)       |
| 1992        | 3          | 156.70 (0.76) | 109.52 (1.03)   | 154.42 (1.69) | 207.58 (1.54)       | 242.25 (7.40)       |
| 1992        | 4          | 158.28 (0.76) | 109.87 (1.03)   | 157.38 (1.72) | 208.86 (1.55)       | 243.23 (7.42)       |
| 1993        | 1          | 159.00 (0.77) | 110.30 (1.05)   | 159.52 (1.75) | 208.46 (1.56)       | 241.91 (7.40)       |
| 1993        | 2          | 160.84 (0.77) | 112.13 (1.05)   | 162.73 (1.78) | 210.02 (1.56)       | 242.22 (7.39)       |
| 1993        | 3          | 162.76 (0.78) | 113.81 (1.06)   | 166.63 (1.82) | 210.90 (1.57)       | 241.49 (7.37)       |
| 1993        | 4          | 164.74 (0.79) | 115.44 (1.07)   | 170.18 (1.86) | 212.68 (1.58)       | 243.79 (7.44)       |
| 1994        | 1          | 166.64 (0.81) | 116.16 (1.09)   | 174.45 (1.91) | 212.64 (1.59)       | 242.33 (7.41)       |
| 1994        | 2          | 169.39 (0.82) | 118.60 (1.13)   | 180.58 (1.98) | 211.62 (1.59)       | 235.90 (7.23)       |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| Year | Qtr | Ohio          | Oklahoma      | Oregon        | Pennsylvania  | Rhode Island   |
|------|-----|---------------|---------------|---------------|---------------|----------------|
| 1994 | 3   | 170.32 (0.83) | 118.84 (1.14) | 185.37 (2.04) | 209.89 (1.58) | 231.91 (7.13)  |
| 1994 | 4   | 171.74 (0.84) | 118.61 (1.15) | 188.38 (2.07) | 207.98 (1.58) | 229.29 (7.06)  |
| 1995 | 1   | 172.80 (0.85) | 119.07 (1.16) | 191.69 (2.11) | 206.95 (1.57) | 230.54 (7.09)  |
| 1995 | 2   | 176.14 (0.86) | 121.09 (1.16) | 196.79 (2.16) | 210.72 (1.59) | 233.27 (7.15)  |
| 1995 | 3   | 179.20 (0.87) | 122.80 (1.17) | 201.57 (2.21) | 214.36 (1.61) | 237.21 (7.26)  |
| 1995 | 4   | 181.37 (0.88) | 124.01 (1.18) | 205.20 (2.25) | 215.50 (1.62) | 239.68 (7.34)  |
| 1996 | 1   | 184.05 (0.89) | 125.46 (1.18) | 209.23 (2.29) | 218.55 (1.64) | 242.28 (7.42)  |
| 1996 | 2   | 185.53 (0.90) | 126.28 (1.19) | 212.05 (2.32) | 215.81 (1.62) | 237.41 (7.28)  |
| 1996 | 3   | 186.78 (0.91) | 127.17 (1.21) | 215.47 (2.36) | 214.94 (1.62) | 233.54 (7.17)  |
| 1996 | 4   | 188.72 (0.92) | 127.91 (1.22) | 219.03 (2.40) | 216.67 (1.63) | 235.13 (7.22)  |
| 1997 | 1   | 191.24 (0.93) | 128.40 (1.23) | 222.64 (2.44) | 218.06 (1.65) | 236.82 (7.28)  |
| 1997 | 2   | 192.55 (0.93) | 129.29 (1.23) | 224.95 (2.46) | 217.80 (1.64) | 235.54 (7.22)  |
| 1997 | 3   | 195.37 (0.95) | 131.04 (1.24) | 229.88 (2.51) | 219.94 (1.65) | 239.88 (7.35)  |
| 1997 | 4   | 197.87 (0.96) | 133.15 (1.26) | 232.50 (2.54) | 222.40 (1.67) | 243.33 (7.45)  |
| 1998 | 1   | 200.27 (0.97) | 134.76 (1.26) | 235.81 (2.57) | 225.90 (1.69) | 247.24 (7.55)  |
| 1998 | 2   | 202.09 (0.98) | 135.61 (1.27) | 237.46 (2.59) | 226.24 (1.69) | 246.24 (7.52)  |
| 1998 | 3   | 204.53 (0.99) | 137.55 (1.29) | 239.99 (2.62) | 227.26 (1.70) | 248.65 (7.60)  |
| 1998 | 4   | 206.87 (1.00) | 139.72 (1.30) | 242.42 (2.64) | 230.31 (1.71) | 251.39 (7.68)  |
| 1999 | 1   | 208.97 (1.01) | 140.34 (1.31) | 243.31 (2.66) | 231.94 (1.73) | 253.40 (7.75)  |
| 1999 | 2   | 210.63 (1.02) | 141.68 (1.33) | 244.54 (2.67) | 232.15 (1.73) | 255.46 (7.81)  |
| 1999 | 3   | 211.26 (1.03) | 143.44 (1.35) | 245.23 (2.69) | 233.14 (1.74) | 259.99 (7.96)  |
| 1999 | 4   | 212.52 (1.03) | 143.83 (1.36) | 245.92 (2.70) | 234.37 (1.76) | 264.76 (8.11)  |
| 2000 | 1   | 214.68 (1.04) | 145.35 (1.38) | 248.86 (2.73) | 236.88 (1.78) | 273.06 (8.37)  |
| 2000 | 2   | 217.25 (1.05) | 146.79 (1.37) | 250.23 (2.74) | 240.06 (1.79) | 281.20 (8.60)  |
| 2000 | 3   | 219.81 (1.06) | 149.43 (1.40) | 252.53 (2.76) | 242.48 (1.81) | 290.55 (8.88)  |
| 2000 | 4   | 222.82 (1.08) | 150.16 (1.41) | 255.65 (2.80) | 245.39 (1.83) | 295.61 (9.03)  |
| 2001 | 1   | 227.27 (1.10) | 153.89 (1.43) | 262.73 (2.87) | 251.88 (1.87) | 302.36 (9.23)  |
| 2001 | 2   | 229.57 (1.11) | 155.45 (1.44) | 265.14 (2.89) | 255.92 (1.90) | 313.00 (9.55)  |
| 2001 | 3   | 231.74 (1.12) | 156.84 (1.46) | 267.41 (2.92) | 259.21 (1.93) | 324.55 (9.91)  |
| 2001 | 4   | 233.78 (1.13) | 158.82 (1.47) | 269.78 (2.94) | 262.52 (1.95) | 331.71 (10.12) |
| 2002 | 1   | 235.60 (1.14) | 159.27 (1.48) | 273.31 (2.98) | 266.63 (1.98) | 344.53 (10.51) |
| 2002 | 2   | 237.17 (1.14) | 160.72 (1.49) | 274.96 (3.00) | 271.04 (2.01) | 361.06 (11.02) |
| 2002 | 3   | 239.74 (1.15) | 163.01 (1.51) | 279.81 (3.05) | 276.67 (2.05) | 375.10 (11.44) |
| 2002 | 4   | 241.43 (1.16) | 165.12 (1.53) | 282.01 (3.07) | 281.47 (2.09) | 387.09 (11.81) |
| 2003 | 1   | 243.25 (1.17) | 166.31 (1.54) | 285.09 (3.11) | 284.72 (2.11) | 398.27 (12.15) |
| 2003 | 2   | 245.04 (1.18) | 168.23 (1.55) | 287.53 (3.13) | 288.31 (2.14) | 407.99 (12.44) |
| 2003 | 3   | 247.02 (1.19) | 169.41 (1.56) | 291.75 (3.18) | 294.12 (2.18) | 424.61 (12.95) |
| 2003 | 4   | 250.13 (1.21) | 171.34 (1.60) | 299.56 (3.27) | 302.94 (2.25) | 451.79 (13.79) |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| Year | Qtr | Ohio          | Oklahoma      | Oregon        | Pennsylvania  | Rhode Island   |
|------|-----|---------------|---------------|---------------|---------------|----------------|
| 2004 | 1   | 251.95 (1.22) | 173.25 (1.62) | 303.21 (3.31) | 308.26 (2.29) | 462.99 (14.14) |
| 2004 | 2   | 253.35 (1.23) | 174.97 (1.63) | 312.21 (3.41) | 316.38 (2.35) | 484.13 (14.78) |
| 2004 | 3   | 256.40 (1.25) | 175.90 (1.65) | 325.71 (3.56) | 329.61 (2.46) | 516.59 (15.78) |
| 2004 | 4   | 259.34 (1.26) | 179.53 (1.69) | 333.99 (3.65) | 337.53 (2.52) | 529.98 (16.19) |
| 2005 | 1   | 261.75 (1.28) | 180.28 (1.70) | 343.88 (3.76) | 344.93 (2.58) | 542.21 (16.57) |
| 2005 | 2   | 264.30 (1.29) | 183.63 (1.73) | 361.98 (3.96) | 356.85 (2.66) | 564.03 (17.24) |
| 2005 | 3   | 266.89 (1.30) | 186.81 (1.75) | 381.94 (4.17) | 368.48 (2.75) | 576.59 (17.62) |
| 2005 | 4   | 267.02 (1.31) | 189.47 (1.79) | 399.36 (4.37) | 377.82 (2.82) | 585.37 (17.90) |
| 2006 | 1   | 267.79 (1.31) | 190.71 (1.81) | 414.64 (4.54) | 385.68 (2.89) | 592.62 (18.13) |
| 2006 | 2   | 267.00 (1.30) | 193.86 (1.83) | 431.40 (4.72) | 391.35 (2.92) | 596.22 (18.24) |
| 2006 | 3   | 266.28 (1.30) | 195.63 (1.85) | 443.59 (4.86) | 396.42 (2.96) | 593.36 (18.15) |
| 2006 | 4   | 268.44 (1.31) | 198.67 (1.88) | 452.45 (4.96) | 402.29 (3.01) | 596.98 (18.26) |
| 2007 | 1   | 268.98 (1.32) | 201.49 (1.91) | 458.14 (5.02) | 406.81 (3.04) | 597.83 (18.30) |
| 2007 | 2   | 268.55 (1.31) | 202.30 (1.90) | 465.75 (5.10) | 409.39 (3.06) | 587.52 (17.98) |
| 2007 | 3   | 266.55 (1.30) | 206.54 (1.95) | 466.41 (5.11) | 410.86 (3.07) | 578.82 (17.72) |
| 2007 | 4   | 268.05 (1.32) | 208.92 (1.98) | 469.93 (5.15) | 413.68 (3.10) | 579.91 (17.76) |
| 2008 | 1   | 270.59 (1.32) | 209.86 (1.99) | 468.62 (5.13) | 416.71 (3.11) | 577.89 (17.69) |
| 2008 | 2   | 267.90 (1.32) | 212.88 (2.03) | 463.99 (5.09) | 414.34 (3.10) | 557.86 (17.11) |
| 2008 | 3   | 260.87 (1.34) | 212.21 (2.10) | 454.04 (5.04) | 408.30 (3.11) | 532.54 (16.50) |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996.](#)

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>South Carolina</b> | <b>South Dakota</b> | <b>Tennessee</b> | <b>Texas</b>  | <b>Utah</b>   |
|-------------|------------|-----------------------|---------------------|------------------|---------------|---------------|
| 1985        | 1          | 121.66 (1.67)         | 109.40 (5.27)       | 120.85 (1.51)    | 128.07 (0.62) | 117.45 (1.61) |
| 1985        | 2          | 122.08 (1.64)         | 108.21 (4.66)       | 123.17 (1.51)    | 129.12 (0.61) | 116.39 (1.55) |
| 1985        | 3          | 123.31 (1.61)         | 110.97 (4.64)       | 125.73 (1.51)    | 128.95 (0.60) | 116.64 (1.50) |
| 1985        | 4          | 123.60 (1.63)         | 111.90 (4.74)       | 127.37 (1.55)    | 128.04 (0.61) | 115.32 (1.49) |
| 1986        | 1          | 127.06 (1.66)         | 115.39 (4.79)       | 129.51 (1.56)    | 130.48 (0.61) | 119.40 (1.53) |
| 1986        | 2          | 127.53 (1.61)         | 116.85 (4.72)       | 131.72 (1.54)    | 132.93 (0.59) | 119.12 (1.50) |
| 1986        | 3          | 129.12 (1.65)         | 113.55 (4.65)       | 134.10 (1.58)    | 130.08 (0.59) | 118.51 (1.50) |
| 1986        | 4          | 131.34 (1.68)         | 116.56 (4.73)       | 135.96 (1.61)    | 127.85 (0.58) | 118.30 (1.50) |
| 1987        | 1          | 133.79 (1.71)         | 119.20 (4.82)       | 138.87 (1.64)    | 128.10 (0.58) | 119.63 (1.52) |
| 1987        | 2          | 134.67 (1.72)         | 117.59 (4.83)       | 141.51 (1.67)    | 125.16 (0.57) | 118.49 (1.52) |
| 1987        | 3          | 134.99 (1.76)         | 116.48 (5.01)       | 141.62 (1.70)    | 119.53 (0.56) | 114.17 (1.50) |
| 1987        | 4          | 135.53 (1.79)         | 117.78 (5.09)       | 143.08 (1.75)    | 116.00 (0.57) | 113.05 (1.52) |
| 1988        | 1          | 137.96 (1.83)         | 114.41 (5.45)       | 144.85 (1.77)    | 116.02 (0.56) | 113.00 (1.52) |
| 1988        | 2          | 139.89 (1.81)         | 113.96 (4.77)       | 145.89 (1.74)    | 117.66 (0.55) | 113.98 (1.50) |
| 1988        | 3          | 141.05 (1.82)         | 117.20 (4.95)       | 146.07 (1.75)    | 114.84 (0.54) | 112.22 (1.48) |
| 1988        | 4          | 141.39 (1.83)         | 115.20 (4.93)       | 145.49 (1.75)    | 113.93 (0.54) | 112.30 (1.48) |
| 1989        | 1          | 144.00 (1.88)         | 119.60 (5.38)       | 146.25 (1.78)    | 114.16 (0.54) | 113.47 (1.55) |
| 1989        | 2          | 143.76 (1.85)         | 116.19 (4.87)       | 147.50 (1.77)    | 115.15 (0.54) | 113.59 (1.51) |
| 1989        | 3          | 147.39 (1.89)         | 120.59 (4.93)       | 147.71 (1.75)    | 117.43 (0.54) | 115.96 (1.50) |
| 1989        | 4          | 147.65 (1.89)         | 117.81 (4.77)       | 148.32 (1.76)    | 116.99 (0.54) | 115.84 (1.50) |
| 1990        | 1          | 149.04 (1.91)         | 118.82 (4.94)       | 148.71 (1.77)    | 116.67 (0.54) | 116.91 (1.51) |
| 1990        | 2          | 150.54 (1.92)         | 124.03 (4.98)       | 148.74 (1.76)    | 117.47 (0.54) | 118.28 (1.51) |
| 1990        | 3          | 151.49 (1.92)         | 124.89 (4.97)       | 148.27 (1.74)    | 118.23 (0.54) | 119.31 (1.51) |
| 1990        | 4          | 150.44 (1.92)         | 124.07 (4.94)       | 148.04 (1.75)    | 117.30 (0.54) | 119.38 (1.51) |
| 1991        | 1          | 152.29 (1.93)         | 127.03 (5.06)       | 149.30 (1.75)    | 118.75 (0.55) | 123.01 (1.54) |
| 1991        | 2          | 153.89 (1.94)         | 130.32 (5.13)       | 150.00 (1.75)    | 120.01 (0.54) | 125.01 (1.56) |
| 1991        | 3          | 154.67 (1.95)         | 128.87 (5.07)       | 150.11 (1.75)    | 120.01 (0.54) | 125.16 (1.56) |
| 1991        | 4          | 157.32 (1.98)         | 131.72 (5.16)       | 152.53 (1.77)    | 121.40 (0.55) | 128.05 (1.59) |
| 1992        | 1          | 158.04 (1.98)         | 135.25 (5.29)       | 154.04 (1.78)    | 123.41 (0.55) | 129.92 (1.60) |
| 1992        | 2          | 158.42 (1.99)         | 135.28 (5.29)       | 153.29 (1.78)    | 122.84 (0.55) | 131.98 (1.63) |
| 1992        | 3          | 160.73 (2.01)         | 139.08 (5.44)       | 156.95 (1.82)    | 125.02 (0.55) | 134.27 (1.66) |
| 1992        | 4          | 161.34 (2.02)         | 140.76 (5.50)       | 156.60 (1.81)    | 125.58 (0.55) | 137.69 (1.70) |
| 1993        | 1          | 161.48 (2.03)         | 142.31 (5.57)       | 157.40 (1.83)    | 125.96 (0.56) | 140.71 (1.74) |
| 1993        | 2          | 162.92 (2.04)         | 145.85 (5.70)       | 159.60 (1.85)    | 127.05 (0.56) | 145.10 (1.79) |
| 1993        | 3          | 165.01 (2.07)         | 148.82 (5.81)       | 161.69 (1.87)    | 128.48 (0.56) | 150.39 (1.86) |
| 1993        | 4          | 165.64 (2.07)         | 150.81 (5.89)       | 163.37 (1.89)    | 129.77 (0.57) | 155.97 (1.92) |
| 1994        | 1          | 166.56 (2.09)         | 154.70 (6.07)       | 165.09 (1.92)    | 130.41 (0.58) | 162.57 (2.01) |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>South Carolina</b> | <b>South Dakota</b> | <b>Tennessee</b> | <b>Texas</b>  | <b>Utah</b>   |
|-------------|------------|-----------------------|---------------------|------------------|---------------|---------------|
| 1994        | 2          | 167.69 (2.12)         | 156.83 (6.16)       | 167.22 (1.95)    | 130.84 (0.58) | 171.51 (2.13) |
| 1994        | 3          | 168.29 (2.14)         | 158.12 (6.21)       | 169.70 (1.98)    | 130.80 (0.59) | 176.91 (2.20) |
| 1994        | 4          | 168.85 (2.15)         | 161.59 (6.35)       | 170.81 (2.00)    | 130.06 (0.59) | 180.28 (2.24) |
| 1995        | 1          | 170.11 (2.17)         | 158.34 (6.23)       | 173.00 (2.02)    | 130.06 (0.59) | 184.54 (2.29) |
| 1995        | 2          | 172.18 (2.18)         | 165.00 (6.47)       | 176.26 (2.05)    | 132.45 (0.60) | 189.99 (2.35) |
| 1995        | 3          | 174.46 (2.20)         | 165.66 (6.49)       | 179.01 (2.08)    | 133.99 (0.60) | 196.50 (2.43) |
| 1995        | 4          | 176.71 (2.23)         | 168.83 (6.61)       | 181.67 (2.11)    | 134.82 (0.61) | 200.68 (2.48) |
| 1996        | 1          | 179.29 (2.26)         | 171.86 (6.73)       | 184.70 (2.14)    | 136.30 (0.61) | 205.35 (2.53) |
| 1996        | 2          | 179.93 (2.27)         | 171.35 (6.71)       | 186.24 (2.16)    | 136.04 (0.61) | 207.31 (2.56) |
| 1996        | 3          | 181.20 (2.29)         | 172.92 (6.77)       | 188.18 (2.19)    | 136.25 (0.61) | 210.86 (2.61) |
| 1996        | 4          | 184.04 (2.33)         | 172.65 (6.77)       | 190.08 (2.21)    | 136.83 (0.62) | 214.84 (2.66) |
| 1997        | 1          | 185.01 (2.34)         | 175.16 (6.88)       | 192.51 (2.24)    | 137.41 (0.62) | 218.54 (2.70) |
| 1997        | 2          | 187.36 (2.36)         | 178.19 (6.97)       | 194.01 (2.25)    | 138.41 (0.62) | 219.54 (2.71) |
| 1997        | 3          | 190.58 (2.40)         | 180.43 (7.06)       | 196.63 (2.28)    | 139.87 (0.62) | 224.28 (2.77) |
| 1997        | 4          | 192.98 (2.43)         | 182.47 (7.14)       | 199.40 (2.31)    | 141.47 (0.63) | 227.99 (2.81) |
| 1998        | 1          | 196.09 (2.46)         | 185.48 (7.24)       | 203.24 (2.35)    | 143.74 (0.64) | 230.73 (2.84) |
| 1998        | 2          | 198.15 (2.48)         | 186.59 (7.29)       | 204.53 (2.37)    | 144.66 (0.64) | 232.80 (2.87) |
| 1998        | 3          | 201.06 (2.52)         | 187.81 (7.34)       | 207.09 (2.40)    | 146.97 (0.65) | 235.08 (2.90) |
| 1998        | 4          | 203.76 (2.55)         | 187.68 (7.32)       | 209.56 (2.42)    | 148.60 (0.65) | 237.21 (2.92) |
| 1999        | 1          | 206.62 (2.59)         | 190.75 (7.45)       | 211.49 (2.45)    | 149.83 (0.66) | 238.49 (2.94) |
| 1999        | 2          | 209.22 (2.63)         | 192.86 (7.54)       | 212.02 (2.45)    | 152.76 (0.67) | 237.26 (2.93) |
| 1999        | 3          | 211.32 (2.66)         | 193.69 (7.57)       | 213.03 (2.47)    | 155.12 (0.69) | 234.29 (2.90) |
| 1999        | 4          | 212.89 (2.68)         | 194.52 (7.61)       | 213.86 (2.48)    | 157.01 (0.70) | 235.22 (2.92) |
| 2000        | 1          | 215.17 (2.71)         | 196.10 (7.68)       | 215.68 (2.50)    | 159.23 (0.71) | 236.64 (2.93) |
| 2000        | 2          | 217.79 (2.73)         | 199.42 (7.79)       | 216.81 (2.51)    | 161.81 (0.71) | 236.15 (2.92) |
| 2000        | 3          | 220.48 (2.77)         | 203.05 (7.93)       | 219.04 (2.53)    | 164.19 (0.72) | 239.02 (2.96) |
| 2000        | 4          | 223.45 (2.80)         | 203.32 (7.94)       | 221.35 (2.56)    | 166.24 (0.74) | 242.30 (2.99) |
| 2001        | 1          | 229.65 (2.87)         | 208.00 (8.11)       | 226.89 (2.62)    | 171.03 (0.75) | 248.02 (3.06) |
| 2001        | 2          | 231.99 (2.90)         | 211.26 (8.24)       | 228.02 (2.63)    | 173.16 (0.76) | 248.34 (3.06) |
| 2001        | 3          | 233.83 (2.93)         | 212.81 (8.30)       | 229.51 (2.65)    | 174.42 (0.77) | 248.60 (3.07) |
| 2001        | 4          | 236.73 (2.96)         | 213.96 (8.34)       | 232.34 (2.68)    | 176.48 (0.77) | 251.47 (3.10) |
| 2002        | 1          | 237.73 (2.97)         | 217.03 (8.46)       | 233.33 (2.69)    | 176.97 (0.78) | 251.04 (3.10) |
| 2002        | 2          | 238.96 (2.99)         | 219.84 (8.58)       | 233.78 (2.70)    | 178.36 (0.78) | 250.35 (3.09) |
| 2002        | 3          | 243.03 (3.04)         | 222.30 (8.67)       | 237.26 (2.74)    | 181.11 (0.79) | 253.61 (3.13) |
| 2002        | 4          | 245.23 (3.06)         | 223.81 (8.72)       | 239.41 (2.76)    | 183.14 (0.80) | 255.06 (3.14) |
| 2003        | 1          | 246.47 (3.08)         | 225.86 (8.80)       | 241.08 (2.78)    | 184.01 (0.81) | 255.78 (3.15) |
| 2003        | 2          | 249.02 (3.11)         | 226.76 (8.84)       | 243.12 (2.80)    | 185.20 (0.81) | 256.65 (3.16) |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996](#).

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| <b>Year</b> | <b>Qtr</b> | <b>South Carolina</b> | <b>South Dakota</b> | <b>Tennessee</b> | <b>Texas</b>  | <b>Utah</b>   |
|-------------|------------|-----------------------|---------------------|------------------|---------------|---------------|
| 2003        | 3          | 250.41 (3.13)         | 230.92 (9.00)       | 244.56 (2.82)    | 185.78 (0.81) | 257.32 (3.17) |
| 2003        | 4          | 252.75 (3.17)         | 235.77 (9.21)       | 247.31 (2.86)    | 186.94 (0.83) | 257.58 (3.18) |
| 2004        | 1          | 255.76 (3.21)         | 236.65 (9.24)       | 249.29 (2.88)    | 187.91 (0.83) | 259.79 (3.21) |
| 2004        | 2          | 258.14 (3.24)         | 241.39 (9.42)       | 252.04 (2.91)    | 189.86 (0.84) | 262.16 (3.24) |
| 2004        | 3          | 262.90 (3.31)         | 246.62 (9.63)       | 255.91 (2.96)    | 191.22 (0.85) | 265.59 (3.29) |
| 2004        | 4          | 267.62 (3.37)         | 249.54 (9.75)       | 259.26 (3.00)    | 193.58 (0.87) | 270.74 (3.35) |
| 2005        | 1          | 273.03 (3.44)         | 254.03 (9.93)       | 262.78 (3.05)    | 194.80 (0.87) | 275.80 (3.42) |
| 2005        | 2          | 277.32 (3.49)         | 260.30 (10.17)      | 268.36 (3.11)    | 197.88 (0.88) | 285.06 (3.53) |
| 2005        | 3          | 284.30 (3.57)         | 263.96 (10.31)      | 274.25 (3.17)    | 200.98 (0.90) | 295.02 (3.65) |
| 2005        | 4          | 290.49 (3.66)         | 268.41 (10.49)      | 278.57 (3.23)    | 203.25 (0.91) | 305.29 (3.78) |
| 2006        | 1          | 295.30 (3.72)         | 268.77 (10.53)      | 283.57 (3.29)    | 205.95 (0.93) | 315.43 (3.91) |
| 2006        | 2          | 300.17 (3.78)         | 273.66 (10.70)      | 289.33 (3.35)    | 209.46 (0.94) | 330.01 (4.08) |
| 2006        | 3          | 304.89 (3.84)         | 279.50 (10.93)      | 293.30 (3.40)    | 212.96 (0.95) | 344.92 (4.26) |
| 2006        | 4          | 312.17 (3.94)         | 281.44 (11.01)      | 299.89 (3.48)    | 216.46 (0.98) | 358.25 (4.43) |
| 2007        | 1          | 315.79 (3.98)         | 284.94 (11.16)      | 303.52 (3.52)    | 219.59 (0.99) | 369.87 (4.57) |
| 2007        | 2          | 319.06 (4.02)         | 287.95 (11.26)      | 307.96 (3.57)    | 223.76 (1.00) | 380.30 (4.70) |
| 2007        | 3          | 319.45 (4.02)         | 291.27 (11.38)      | 309.53 (3.59)    | 225.60 (1.01) | 386.42 (4.78) |
| 2007        | 4          | 325.48 (4.11)         | 295.56 (11.56)      | 312.58 (3.63)    | 228.83 (1.04) | 390.65 (4.83) |
| 2008        | 1          | 328.03 (4.12)         | 297.50 (11.62)      | 315.44 (3.65)    | 230.24 (1.03) | 390.49 (4.82) |
| 2008        | 2          | 328.67 (4.15)         | 298.89 (11.69)      | 315.96 (3.67)    | 231.75 (1.05) | 387.54 (4.80) |
| 2008        | 3          | 327.18 (4.20)         | 302.60 (11.92)      | 313.80 (3.68)    | 232.79 (1.09) | 380.06 (4.75) |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996.](#)

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| Year | Qtr | Vermont       | Virginia      | Washington    | West Virginia | Wisconsin     | Wyoming       |
|------|-----|---------------|---------------|---------------|---------------|---------------|---------------|
| 1985 | 1   | 128.83 (5.06) | 126.99 (1.10) | 111.09 (0.85) | 97.11 (4.14)  | 106.57 (1.04) | 97.88 (2.66)  |
| 1985 | 2   | 132.79 (5.17) | 129.18 (1.09) | 111.34 (0.83) | 99.21 (3.94)  | 108.21 (1.04) | 96.70 (2.41)  |
| 1985 | 3   | 135.16 (5.25) | 131.00 (1.09) | 112.00 (0.81) | 98.35 (3.89)  | 109.15 (1.04) | 95.08 (2.31)  |
| 1985 | 4   | 137.86 (5.39) | 131.92 (1.11) | 112.72 (0.84) | 93.27 (3.77)  | 109.32 (1.05) | 95.39 (2.32)  |
| 1986 | 1   | 143.11 (5.58) | 133.93 (1.13) | 113.99 (0.83) | 98.57 (3.98)  | 110.78 (1.06) | 98.16 (2.40)  |
| 1986 | 2   | 145.32 (5.60) | 136.56 (1.12) | 114.63 (0.81) | 100.78 (3.77) | 112.02 (1.06) | 99.17 (2.25)  |
| 1986 | 3   | 151.48 (5.86) | 139.62 (1.14) | 115.09 (0.82) | 99.65 (3.77)  | 112.41 (1.07) | 95.72 (2.20)  |
| 1986 | 4   | 156.60 (6.09) | 141.82 (1.16) | 116.26 (0.83) | 101.86 (3.86) | 113.00 (1.08) | 92.01 (2.16)  |
| 1987 | 1   | 162.37 (6.32) | 144.98 (1.19) | 117.44 (0.84) | 102.58 (3.91) | 113.66 (1.08) | 94.02 (2.20)  |
| 1987 | 2   | 168.30 (6.54) | 148.97 (1.22) | 118.24 (0.85) | 103.66 (3.95) | 115.01 (1.10) | 89.39 (2.13)  |
| 1987 | 3   | 172.90 (6.76) | 155.94 (1.29) | 118.88 (0.87) | 99.68 (3.87)  | 116.41 (1.14) | 84.42 (2.14)  |
| 1987 | 4   | 179.05 (7.11) | 159.51 (1.34) | 119.94 (0.90) | 100.87 (4.09) | 117.91 (1.18) | 81.55 (2.05)  |
| 1988 | 1   | 185.03 (7.39) | 164.09 (1.39) | 122.05 (0.91) | 101.36 (4.19) | 118.83 (1.18) | 82.21 (2.15)  |
| 1988 | 2   | 194.16 (7.60) | 169.71 (1.40) | 123.86 (0.90) | 104.34 (4.11) | 120.36 (1.16) | 77.76 (1.96)  |
| 1988 | 3   | 199.77 (7.83) | 173.72 (1.44) | 126.37 (0.92) | 103.83 (4.09) | 122.68 (1.20) | 82.97 (2.03)  |
| 1988 | 4   | 202.07 (7.94) | 177.42 (1.48) | 127.92 (0.93) | 101.70 (4.08) | 123.50 (1.21) | 82.76 (2.08)  |
| 1989 | 1   | 205.41 (8.10) | 180.58 (1.51) | 132.29 (0.97) | 104.18 (4.23) | 125.55 (1.24) | 78.76 (2.07)  |
| 1989 | 2   | 211.07 (8.27) | 184.13 (1.52) | 137.90 (0.99) | 107.47 (4.19) | 126.96 (1.23) | 85.53 (2.11)  |
| 1989 | 3   | 214.92 (8.37) | 186.76 (1.54) | 144.44 (1.03) | 105.75 (4.05) | 129.16 (1.24) | 84.70 (2.05)  |
| 1989 | 4   | 217.20 (8.46) | 188.30 (1.55) | 153.13 (1.08) | 105.89 (4.06) | 129.99 (1.25) | 85.19 (2.09)  |
| 1990 | 1   | 213.78 (8.37) | 188.17 (1.56) | 164.34 (1.17) | 108.71 (4.22) | 132.01 (1.27) | 89.81 (2.31)  |
| 1990 | 2   | 214.92 (8.39) | 188.58 (1.55) | 173.44 (1.23) | 108.11 (4.15) | 134.14 (1.28) | 86.82 (2.08)  |
| 1990 | 3   | 214.30 (8.35) | 187.83 (1.54) | 176.19 (1.24) | 110.92 (4.21) | 136.00 (1.30) | 92.39 (2.19)  |
| 1990 | 4   | 214.83 (8.40) | 185.84 (1.54) | 177.66 (1.26) | 108.57 (4.17) | 136.31 (1.30) | 91.03 (2.17)  |
| 1991 | 1   | 212.45 (8.26) | 187.21 (1.54) | 181.92 (1.28) | 112.06 (4.27) | 138.20 (1.31) | 90.55 (2.12)  |
| 1991 | 2   | 212.80 (8.23) | 187.84 (1.53) | 183.38 (1.28) | 113.37 (4.26) | 140.23 (1.33) | 94.64 (2.14)  |
| 1991 | 3   | 212.69 (8.24) | 186.30 (1.52) | 184.20 (1.29) | 112.18 (4.21) | 142.33 (1.35) | 96.54 (2.17)  |
| 1991 | 4   | 212.81 (8.23) | 189.86 (1.55) | 187.99 (1.31) | 115.64 (4.34) | 143.70 (1.36) | 97.27 (2.20)  |
| 1992 | 1   | 212.92 (8.22) | 191.02 (1.55) | 188.87 (1.31) | 115.39 (4.27) | 145.35 (1.37) | 98.18 (2.17)  |
| 1992 | 2   | 214.19 (8.27) | 189.26 (1.54) | 190.55 (1.33) | 117.79 (4.37) | 147.97 (1.40) | 99.67 (2.21)  |
| 1992 | 3   | 215.08 (8.31) | 191.67 (1.55) | 193.23 (1.35) | 119.44 (4.43) | 149.77 (1.42) | 101.72 (2.25) |
| 1992 | 4   | 215.98 (8.34) | 192.38 (1.56) | 195.26 (1.36) | 119.54 (4.42) | 151.72 (1.43) | 103.58 (2.28) |
| 1993 | 1   | 216.24 (8.38) | 191.85 (1.56) | 195.98 (1.37) | 120.12 (4.47) | 152.89 (1.45) | 104.04 (2.33) |
| 1993 | 2   | 216.41 (8.36) | 193.01 (1.56) | 198.20 (1.38) | 122.34 (4.51) | 155.06 (1.47) | 106.85 (2.35) |
| 1993 | 3   | 217.46 (8.40) | 193.45 (1.57) | 200.87 (1.40) | 125.16 (4.62) | 157.31 (1.49) | 109.40 (2.40) |
| 1993 | 4   | 218.27 (8.43) | 194.53 (1.57) | 203.13 (1.41) | 124.83 (4.60) | 159.32 (1.51) | 112.07 (2.45) |
| 1994 | 1   | 218.94 (8.49) | 194.91 (1.59) | 205.68 (1.43) | 127.51 (4.73) | 163.53 (1.55) | 114.67 (2.53) |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996.](#)

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| Year | Qtr | Vermont        | Virginia      | Washington    | West Virginia | Wisconsin     | Wyoming       |
|------|-----|----------------|---------------|---------------|---------------|---------------|---------------|
| 1994 | 2   | 216.03 (8.42)  | 194.46 (1.59) | 209.29 (1.47) | 128.94 (4.80) | 169.52 (1.61) | 117.56 (2.61) |
| 1994 | 3   | 215.42 (8.42)  | 194.20 (1.61) | 210.80 (1.49) | 132.09 (4.95) | 173.21 (1.65) | 121.41 (2.70) |
| 1994 | 4   | 216.80 (8.51)  | 194.03 (1.62) | 210.31 (1.49) | 130.83 (4.92) | 173.29 (1.66) | 122.07 (2.73) |
| 1995 | 1   | 213.27 (8.42)  | 193.06 (1.61) | 211.90 (1.50) | 131.27 (4.95) | 175.24 (1.67) | 124.55 (2.77) |
| 1995 | 2   | 219.24 (8.58)  | 195.84 (1.62) | 214.40 (1.51) | 134.58 (5.02) | 179.15 (1.70) | 127.26 (2.82) |
| 1995 | 3   | 219.10 (8.52)  | 198.42 (1.63) | 217.69 (1.53) | 136.72 (5.08) | 181.70 (1.72) | 128.64 (2.84) |
| 1995 | 4   | 221.29 (8.61)  | 199.04 (1.64) | 219.26 (1.54) | 137.32 (5.11) | 184.04 (1.75) | 131.49 (2.91) |
| 1996 | 1   | 224.82 (8.73)  | 201.40 (1.65) | 221.47 (1.55) | 139.14 (5.17) | 185.53 (1.76) | 133.42 (2.94) |
| 1996 | 2   | 221.65 (8.61)  | 200.77 (1.65) | 221.39 (1.55) | 140.39 (5.21) | 187.23 (1.78) | 133.88 (2.95) |
| 1996 | 3   | 220.08 (8.58)  | 199.66 (1.64) | 222.47 (1.56) | 139.81 (5.20) | 189.13 (1.80) | 135.32 (3.00) |
| 1996 | 4   | 219.81 (8.58)  | 201.84 (1.66) | 224.42 (1.58) | 140.19 (5.22) | 191.48 (1.82) | 135.45 (3.01) |
| 1997 | 1   | 224.45 (8.78)  | 202.97 (1.67) | 226.09 (1.59) | 141.94 (5.28) | 193.52 (1.84) | 136.75 (3.04) |
| 1997 | 2   | 222.52 (8.67)  | 203.27 (1.67) | 228.59 (1.60) | 143.72 (5.32) | 195.21 (1.85) | 138.01 (3.05) |
| 1997 | 3   | 224.25 (8.71)  | 205.46 (1.68) | 233.78 (1.64) | 144.63 (5.35) | 198.07 (1.88) | 138.78 (3.07) |
| 1997 | 4   | 224.27 (8.70)  | 207.70 (1.70) | 236.93 (1.66) | 147.06 (5.44) | 200.21 (1.90) | 141.11 (3.12) |
| 1998 | 1   | 228.42 (8.83)  | 209.55 (1.70) | 241.39 (1.68) | 149.80 (5.52) | 201.46 (1.91) | 143.55 (3.15) |
| 1998 | 2   | 228.33 (8.84)  | 210.63 (1.71) | 244.95 (1.71) | 149.67 (5.51) | 203.77 (1.93) | 143.17 (3.14) |
| 1998 | 3   | 228.46 (8.85)  | 211.95 (1.72) | 249.47 (1.74) | 151.98 (5.60) | 206.13 (1.95) | 143.80 (3.15) |
| 1998 | 4   | 232.00 (8.97)  | 213.92 (1.74) | 252.49 (1.76) | 153.70 (5.65) | 206.97 (1.96) | 144.15 (3.15) |
| 1999 | 1   | 234.47 (9.07)  | 216.13 (1.76) | 254.65 (1.78) | 154.98 (5.71) | 210.65 (1.99) | 144.85 (3.18) |
| 1999 | 2   | 235.91 (9.13)  | 218.39 (1.78) | 259.16 (1.81) | 154.04 (5.69) | 213.82 (2.03) | 147.80 (3.25) |
| 1999 | 3   | 241.50 (9.36)  | 222.13 (1.81) | 261.74 (1.84) | 154.30 (5.71) | 216.44 (2.06) | 148.01 (3.27) |
| 1999 | 4   | 243.42 (9.45)  | 224.95 (1.84) | 263.87 (1.86) | 153.24 (5.67) | 217.94 (2.07) | 148.53 (3.30) |
| 2000 | 1   | 249.56 (9.70)  | 228.61 (1.87) | 268.79 (1.89) | 154.48 (5.72) | 224.58 (2.13) | 150.97 (3.34) |
| 2000 | 2   | 253.28 (9.80)  | 233.16 (1.90) | 271.40 (1.90) | 155.82 (5.74) | 225.46 (2.14) | 151.88 (3.35) |
| 2000 | 3   | 258.45 (10.00) | 237.09 (1.93) | 275.10 (1.92) | 157.07 (5.78) | 228.87 (2.17) | 153.11 (3.37) |
| 2000 | 4   | 263.27 (10.18) | 241.26 (1.96) | 278.68 (1.95) | 158.55 (5.84) | 231.78 (2.19) | 156.70 (3.46) |
| 2001 | 1   | 268.41 (10.37) | 247.57 (2.01) | 285.60 (1.99) | 163.35 (6.01) | 235.58 (2.23) | 157.75 (3.46) |
| 2001 | 2   | 273.34 (10.55) | 253.22 (2.05) | 289.38 (2.01) | 164.89 (6.05) | 238.70 (2.26) | 161.06 (3.52) |
| 2001 | 3   | 279.92 (10.81) | 258.72 (2.10) | 292.29 (2.04) | 165.30 (6.07) | 241.79 (2.29) | 163.50 (3.57) |
| 2001 | 4   | 283.68 (10.95) | 262.55 (2.12) | 294.44 (2.05) | 167.53 (6.15) | 243.77 (2.30) | 165.31 (3.60) |
| 2002 | 1   | 289.24 (11.17) | 267.71 (2.17) | 298.07 (2.07) | 168.71 (6.20) | 247.73 (2.34) | 168.75 (3.68) |
| 2002 | 2   | 295.66 (11.42) | 274.96 (2.23) | 301.49 (2.10) | 169.77 (6.23) | 250.96 (2.37) | 171.10 (3.74) |
| 2002 | 3   | 300.71 (11.61) | 281.98 (2.28) | 305.46 (2.12) | 172.10 (6.32) | 253.76 (2.40) | 174.26 (3.80) |
| 2002 | 4   | 303.39 (11.71) | 286.02 (2.31) | 307.99 (2.14) | 174.34 (6.40) | 255.64 (2.42) | 175.95 (3.83) |
| 2003 | 1   | 306.83 (11.84) | 290.23 (2.35) | 310.52 (2.16) | 175.00 (6.42) | 258.26 (2.44) | 177.75 (3.88) |
| 2003 | 2   | 311.55 (12.02) | 294.83 (2.38) | 313.10 (2.18) | 177.26 (6.50) | 260.38 (2.46) | 182.13 (3.97) |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996.](#)

**FHFA House Price Indexes: 2008 Q3**  
**Census Division and State Indexes (1980 Q1 =100)**  
*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| Year | Qtr | Vermont        | Virginia      | Washington    | West Virginia | Wisconsin     | Wyoming       |
|------|-----|----------------|---------------|---------------|---------------|---------------|---------------|
| 2003 | 3   | 319.45 (12.33) | 301.79 (2.44) | 316.95 (2.20) | 179.06 (6.57) | 264.38 (2.50) | 184.44 (4.02) |
| 2003 | 4   | 336.55 (13.01) | 314.07 (2.55) | 325.02 (2.27) | 180.67 (6.65) | 273.00 (2.58) | 187.71 (4.11) |
| 2004 | 1   | 340.13 (13.15) | 322.26 (2.61) | 329.82 (2.30) | 183.21 (6.74) | 275.07 (2.60) | 191.73 (4.20) |
| 2004 | 2   | 351.12 (13.57) | 334.02 (2.71) | 339.78 (2.37) | 186.62 (6.86) | 280.79 (2.66) | 196.61 (4.30) |
| 2004 | 3   | 373.53 (14.44) | 355.52 (2.89) | 353.76 (2.47) | 189.75 (6.98) | 291.25 (2.76) | 204.40 (4.49) |
| 2004 | 4   | 380.87 (14.73) | 367.74 (2.99) | 362.14 (2.53) | 193.95 (7.14) | 294.99 (2.79) | 208.51 (4.58) |
| 2005 | 1   | 392.03 (15.18) | 382.61 (3.11) | 373.71 (2.62) | 197.39 (7.27) | 300.43 (2.85) | 213.13 (4.69) |
| 2005 | 2   | 406.64 (15.73) | 403.93 (3.28) | 393.39 (2.75) | 203.93 (7.51) | 306.15 (2.90) | 219.24 (4.81) |
| 2005 | 3   | 421.25 (16.29) | 423.31 (3.44) | 410.44 (2.87) | 210.10 (7.73) | 312.36 (2.96) | 227.97 (5.00) |
| 2005 | 4   | 430.18 (16.66) | 437.04 (3.56) | 428.47 (3.00) | 214.17 (7.89) | 316.43 (3.00) | 234.63 (5.16) |
| 2006 | 1   | 439.40 (17.04) | 448.09 (3.65) | 443.83 (3.11) | 219.07 (8.08) | 319.49 (3.04) | 241.49 (5.32) |
| 2006 | 2   | 450.24 (17.44) | 457.48 (3.72) | 460.49 (3.22) | 218.08 (8.04) | 320.34 (3.04) | 249.28 (5.48) |
| 2006 | 3   | 451.65 (17.48) | 460.99 (3.75) | 474.74 (3.32) | 222.83 (8.21) | 322.59 (3.06) | 258.49 (5.68) |
| 2006 | 4   | 459.24 (17.78) | 468.44 (3.82) | 484.95 (3.40) | 224.57 (8.28) | 327.67 (3.11) | 266.65 (5.87) |
| 2007 | 1   | 465.64 (18.04) | 471.01 (3.84) | 494.75 (3.47) | 227.79 (8.40) | 329.26 (3.12) | 272.19 (6.00) |
| 2007 | 2   | 465.52 (18.02) | 473.41 (3.85) | 501.97 (3.51) | 227.09 (8.37) | 329.93 (3.13) | 280.00 (6.15) |
| 2007 | 3   | 469.09 (18.16) | 471.45 (3.84) | 505.72 (3.54) | 229.51 (8.46) | 330.42 (3.13) | 285.54 (6.27) |
| 2007 | 4   | 470.22 (18.21) | 471.16 (3.84) | 510.88 (3.58) | 231.35 (8.54) | 333.54 (3.16) | 287.44 (6.34) |
| 2008 | 1   | 475.30 (18.39) | 469.88 (3.82) | 509.56 (3.56) | 233.37 (8.60) | 335.14 (3.18) | 288.95 (6.34) |
| 2008 | 2   | 472.87 (18.34) | 461.08 (3.77) | 504.72 (3.54) | 235.12 (8.68) | 333.05 (3.16) | 292.61 (6.45) |
| 2008 | 3   | 468.98 (18.33) | 452.89 (3.76) | 495.12 (3.54) | 229.54 (8.55) | 326.44 (3.14) | 290.20 (6.50) |

Standard error of index number in parentheses. For details on index methodology and derivation of standard errors see: [OFHEO House Price Index: Technical Description, Office of Federal Housing Enterprise Oversight, Washington, D.C., 1996.](#)

## 2008 Q3 Volatility Parameter Estimates

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| Division/State       | A Parameter  | B Parameter   | Annualized Volatility Estimate (Year 1) |
|----------------------|--------------|---------------|---|
| East North Central   | 0.0017290683 | -0.0000030361 | 0.0828715560                            |
| East South Central   | 0.0014459179 | -0.0000019408 | 0.0758460159                            |
| Middle Atlantic      | 0.0020936617 | -0.0000009075 | 0.0914337317                            |
| Mountain             | 0.0024673879 | -0.0000145275 | 0.0981687930                            |
| New England          | 0.0021531220 | -0.0000102975 | 0.0919115264                            |
| Pacific              | 0.0024231963 | -0.0000137641 | 0.0973270789                            |
| South Atlantic       | 0.0022304451 | -0.0000077416 | 0.0937971980                            |
| West North Central   | 0.0017837700 | -0.0000054405 | 0.0839525616                            |
| West South Central   | 0.0017899132 | -0.0000057709 | 0.0840673439                            |
| Alaska               | 0.0016413983 | -0.0000130691 | 0.0797275885                            |
| Alabama              | 0.0015683456 | -0.0000026386 | 0.0789377237                            |
| Arkansas             | 0.0013857947 | -0.0000004892 | 0.0743999467                            |
| Arizona              | 0.0016604869 | -0.0000073689 | 0.0807715643                            |
| California           | 0.0017849412 | -0.0000081210 | 0.0837247226                            |
| Colorado             | 0.0018865935 | -0.0000096478 | 0.0859767906                            |
| Connecticut          | 0.0017482649 | -0.0000080751 | 0.0828484027                            |
| District of Columbia | 0.0026898773 | -0.0000147120 | 0.1025871178                            |
| Delaware             | 0.0014114263 | -0.0000076862 | 0.0743150445                            |
| Florida              | 0.0019423354 | -0.0000045558 | 0.0877294084                            |
| Georgia              | 0.0014705643 | 0.0000008435  | 0.0767838133                            |
| Hawaii               | 0.0022336454 | -0.0000127574 | 0.0934369454                            |
| Iowa                 | 0.0014559105 | -0.0000055182 | 0.0757321000                            |
| Idaho                | 0.0019221438 | -0.0000115611 | 0.0866233114                            |
| Illinois             | 0.0012999576 | 0.0000063174  | 0.0728073423                            |
| Indiana              | 0.0016948969 | -0.0000060150 | 0.0817517401                            |
| Kansas               | 0.0013070300 | -0.0000032605 | 0.0719440843                            |
| Kentucky             | 0.0013241908 | -0.0000034508 | 0.0723985518                            |
| Louisiana            | 0.0016155314 | -0.0000070275 | 0.0796849089                            |
| Massachusetts        | 0.0019551911 | -0.0000111374 | 0.0874217737                            |
| Maryland             | 0.0015101998 | -0.0000069680 | 0.0770020206                            |
| Maine                | 0.0022266183 | -0.0000105854 | 0.0934724878                            |
| Michigan             | 0.0018583494 | -0.0000086990 | 0.0854061673                            |

## 2008 Q3 Volatility Parameter Estimates

*(Estimates use all-transactions HPI which includes purchase and refinance mortgages)*

| Division/State | A Parameter  | B Parameter   | Annualized Volatility Estimate (Year 1) |
|----------------|--------------|---------------|---|
| Minnesota      | 0.0017995051 | -0.0000075357 | 0.0841275807                            |
| Missouri       | 0.0015347785 | -0.0000041179 | 0.0779309118                            |
| Mississippi    | 0.0017161149 | -0.0000066940 | 0.0822031348                            |
| Montana        | 0.0019342966 | -0.0000088748 | 0.0871503814                            |
| North Carolina | 0.0016144253 | -0.0000024579 | 0.0801147568                            |
| North Dakota   | 0.0010660999 | -0.0000016197 | 0.0651036487                            |
| Nebraska       | 0.0012566657 | -0.0000030996 | 0.0705483478                            |
| New Hampshire  | 0.0020324379 | -0.0000164750 | 0.0886913299                            |
| New Jersey     | 0.0020026640 | -0.0000107597 | 0.0885353042                            |
| New Mexico     | 0.0015467161 | -0.0000060851 | 0.0780352720                            |
| Nevada         | 0.0012745025 | -0.0000066542 | 0.0706508546                            |
| New York       | 0.0022882469 | 0.0000018235  | 0.0958236080                            |
| Ohio           | 0.0014565246 | -0.0000028757 | 0.0760268883                            |
| Oklahoma       | 0.0017313635 | -0.0000098688 | 0.0822651411                            |
| Oregon         | 0.0018720350 | -0.0000087486 | 0.0857214236                            |
| Pennsylvania   | 0.0016021810 | 0.0000006728  | 0.0801217164                            |
| Rhode Island   | 0.0017510242 | -0.0000109267 | 0.0826393927                            |
| South Carolina | 0.0017825894 | -0.0000024791 | 0.0842062485                            |
| South Dakota   | 0.0014715882 | -0.0000035810 | 0.0763482610                            |
| Tennessee      | 0.0013472510 | -0.0000006810 | 0.0733355883                            |
| Texas          | 0.0017840863 | -0.0000045397 | 0.0840458793                            |
| Utah           | 0.0014396010 | -0.0000059465 | 0.0752546336                            |
| Virginia       | 0.0016122586 | -0.0000063870 | 0.0796670732                            |
| Vermont        | 0.0017513718 | -0.0000117287 | 0.0825701352                            |
| Washington     | 0.0017199161 | -0.0000041671 | 0.0825408433                            |
| Wisconsin      | 0.0015767015 | -0.0000060066 | 0.0788080014                            |
| West Virginia  | 0.0022510251 | -0.0000106511 | 0.0939876771                            |
| Wyoming        | 0.0019163279 | -0.0000114335 | 0.0865007286                            |