# U.S. Home Price Insights Report

FEATURING CORELOGIC HPI™

Through September 2016 with Forecasts From October 2016

# CoreLogic HPI
# National Overview

▸ With the September release, the CoreLogic HPI posted a gain of 1.1 percent for the national single family combined tier, including distressed sales, over the prior month.

▸ CoreLogic HPI also recorded a year-over-year gain of 6.3 percent nationally for the single family combined tier, including distressed sales.

▸ Per the CoreLogic HPI Forecasts™, national home prices for single-family homes, including distressed sales, are forecasted to rise by 0.3 percent in October 2016.

▸ Year-over-year, national home prices for single-family homes, including distressed sales, are forecasted to rise by 5.2 percent by September 2017.

## ⬆ 1.1%
### Month-over-Month Percent Change

Home prices, including distressed sales, rose by 1.1 percent since last month. Excluding distressed sales, prices rose by 1.0 percent.

## ⬆ 6.3%
### Year-over-Year Percent Change

Home prices, including distressed sales, rose by 6.3 percent from September 2015 to September 2016. Excluding distressed sales, prices rose by 5.8 percent.

## ⬆ 0.3%
### Forecasted Month-over-Month Percent Change

Next month's home prices, including distressed sales, are expected to rise by 0.3 percent over this month. Excluding distressed sales, the forecasted month-over-month house price gain for next month is expected to rise by 0.3 percent.

## ⬆ 5.2%
### Forecasted Year-over-Year Percent Change

Home prices, including distressed sales, are projected to rise by 5.2 percent from September 2016 to September 2017. Excluding distressed sales, prices are expected to rise by 5.0 percent.

Source: CoreLogic
National CoreLogic HPI Single Family Combined Tier, data through September 2016.
National CoreLogic HPI Forecast Single Family Combined Tier, starting in October 2016.

CoreLogic®

# CoreLogic HPI and CoreLogic Case-Shiller Indexes National Trends

**Year-over-Year Percent Change**

Legend:
- CoreLogic HPI
- CoreLogic HPI Forecast
- CoreLogic Case-Shiller Index
- Case-Shiller Home Price Index Forecast
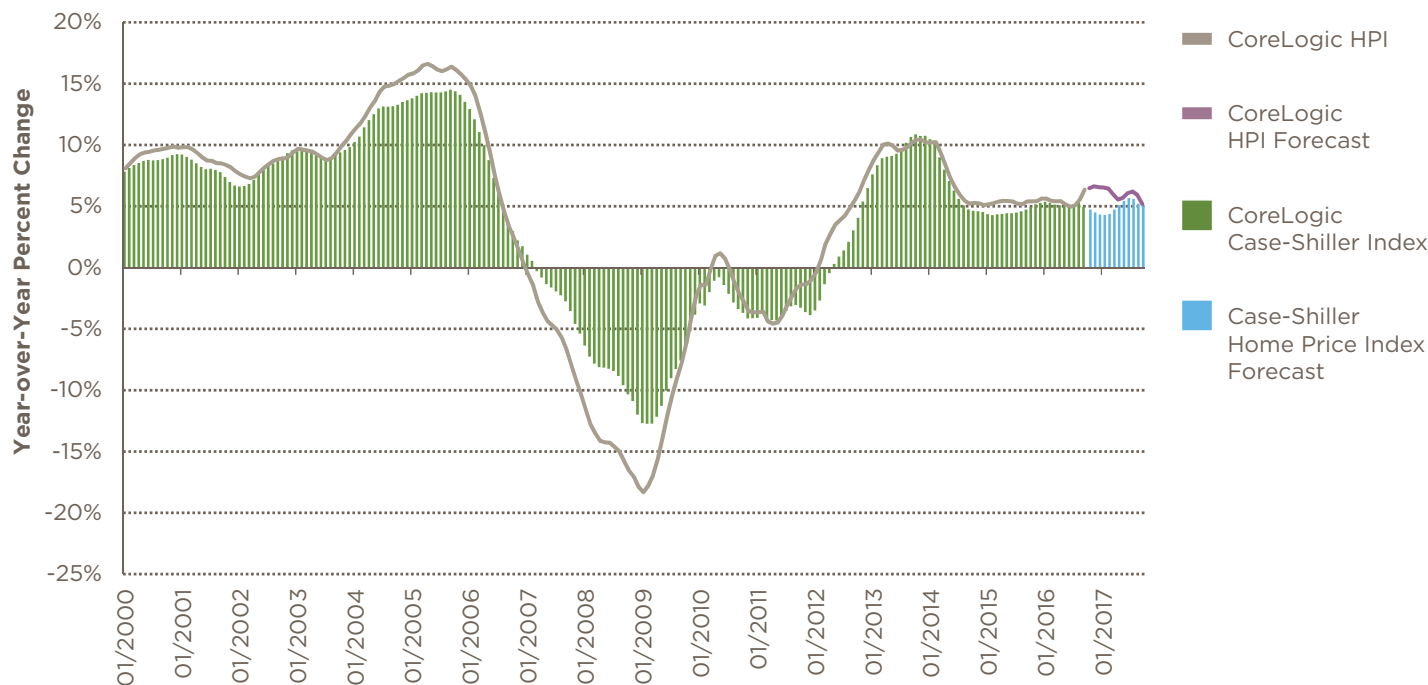
Sources:  CoreLogic, Moody's Analytics
National CoreLogic HPI Single Family Combined Tier, data through September 2016
National CoreLogic HPI Forecast Single Family Combined Tier, starting in October 2016
National CoreLogic Case-Shiller Index (not seasonally adjusted), data through August 2016
National Case-Shiller Home Price Index Forecasts (not seasonally adjusted), starting in September 2016

The graph above shows a comparison of the national year-over-year percent change for the CoreLogic HPI and CoreLogic Case-Shiller Index from 2000 to present month with forecasts one year into the future.  We note that both the CoreLogic HPI Single Family Combined tier and the CoreLogic Case-Shiller Index are posting positive, but moderating year-over-year percent changes, and forecasting gains for the next year.

> " Home-equity wealth has doubled during the last five years to $13 trillion, largely because of the recovery in home prices. Nationwide during the past year, the average gain in housing wealth was about $11,000 per homeowner, but with wide geographic variation. "
>
> **Dr. Frank Nothaft,** chief economist for CoreLogic

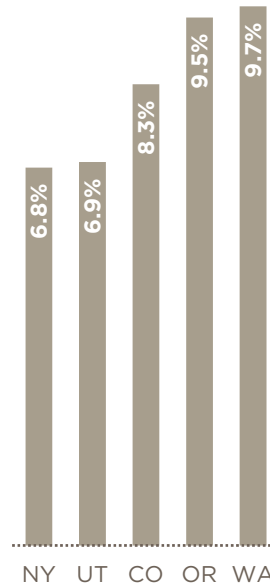# CoreLogic HPI
# State Highlights

## 15

Fifteen states and the District of Columbia have reached new highs this month: Arkansas, Colorado, Iowa, Indiana, Kansas, Kentucky, Louisiana, North Carolina, Nebraska, New York, Oregon, Tennessee, Texas, Utah and Washington.

Two states showed negative home price appreciation: (Alaska −0.3%) and (Connecticut −1.4%).

## 2
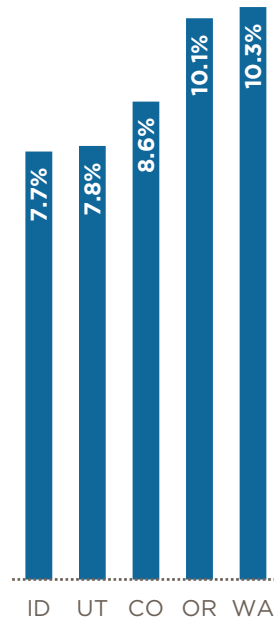
**Chart 1 (blue bars):**

| ID | UT | CO | OR | WA |
|----|----|----|----|----|
| 7.7% | 7.8% | 8.6% | 10.1% | 10.3% |

Including distressed sales, five states registering largest year-over-year home price appreciation in September

**Chart 2 (tan bars):**

| NY | UT | CO | OR | WA |
|----|----|----|----|----|
| 6.8% | 6.9% | 8.3% | 9.5% | 9.7% |

Excluding distressed sales, five states registering largest year-over-year home price appreciation in September
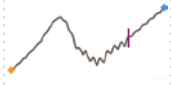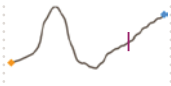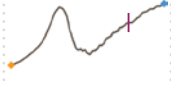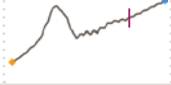
Five states remaining furthest from peak values in September
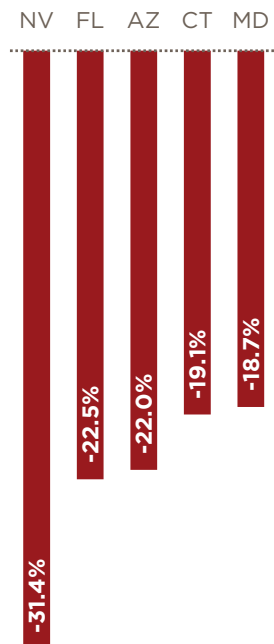
**Chart 3 (red bars):**

| NV | FL | AZ | CT | MD |
|----|----|----|----|----|
| -31.4% | -22.5% | -22.0% | -19.1% | -18.7% |

Source: CoreLogic
CoreLogic HPI Single Family Combined Tier, data through September 2016.
CoreLogic HPI Single Family Combined Excluding Distressed Tier, data through September 2016.

CoreLogic®

# CoreLogic HPI
# Metropolitan Area Highlights

| METROPOLITAN AREA | HPI SPARKLINES | MONTH-OVER-MONTH PERCENT CHANGE | YEAR-OVER-YEAR PERCENT CHANGE | MARKET CONDITION INDICATORS | FORECASTED MONTH-OVER-MONTH PERCENT CHANGE | FORECASTED YEAR-OVER-YEAR PERCENT CHANGE |
|---|---|---|---|---|---|---|
| Boston MA Metropolitan Division | | 0.4% | 5.3% | Normal | 0.3% | 4.5% |
| Chicago-Naperville-Arlington Heights IL Metropolitan Division | | 0.2% | 4.2% | Normal | 0.3% | 5.2% |
| Denver-Aurora-Lakewood CO Metropolitan Statistical Area | | 0.3% | 9.4% | Overvalued | 0.3% | 5.8% |
| Houston-The Woodlands-Sugar Land TX Metropolitan Statistical Area | | -0.1% | 3.9% | Overvalued | 0.0% | 1.2% |
| Las Vegas-Henderson-Paradise NV Metropolitan Statistical Area | | 0.9% | 6.0% | Normal | 0.8% | 9.4% |
| Los Angeles-Long Beach-Glendale CA Metropolitan Division | | 0.4% | 6.9% | Overvalued | 0.4% | 7.8% |
| Miami-Miami Beach-Kendall FL Metropolitan Division | | 0.5% | 6.3% | Overvalued | 0.2% | 5.4% |
| San Diego-Carlsbad CA Metropolitan Statistical Area | | 0.5% | 5.9% | Normal | 0.4% | 9.9% |
| San Francisco-Redwood City-South San Francisco CA Metropolitan Division | | 0.1% | 2.2% | Normal | 0.2% | 10.4% |
| Washington-Arlington-Alexandria DC-VA-MD-WV Metropolitan Division | | 0.7% | 3.1% | Overvalued | 0.3% | 4.0% |

Source: CoreLogic
CoreLogic HPI Single Family Combined Tier, data through September 2016.
CoreLogic HPI Forecasts Single Family Combined Tier, starting in October 2016.

Month-over-Month represents the change in home prices from August 2016 to September 2016
Year-over-Year represents the change in home prices from September 2015 to September 2016
Forecasted Month-over-Month represents the forecasted change in home prices from September 2016 to October 2016
Forecasted Year-over-Year represents forecasted change in home prices from September 2016 to September 2017
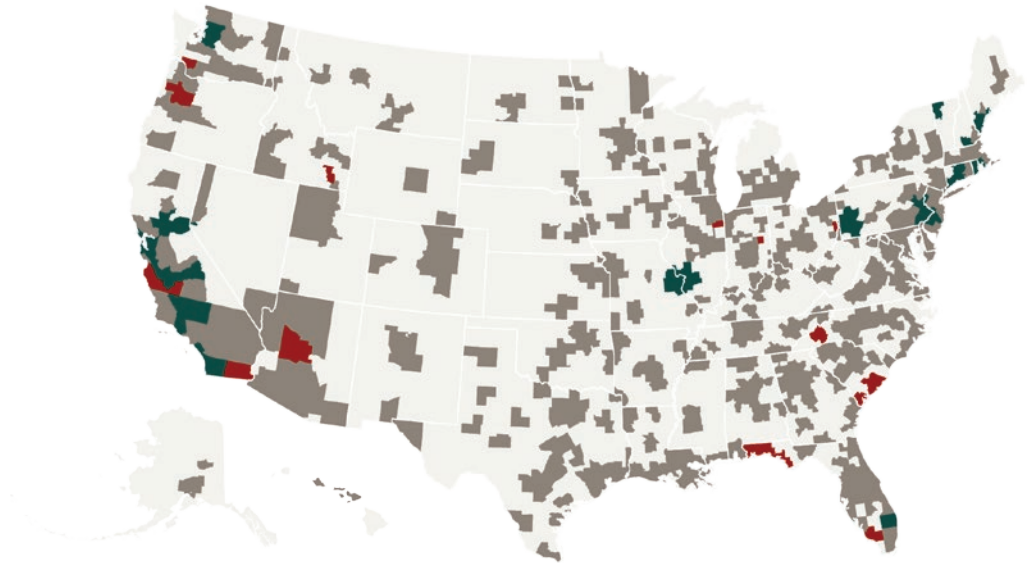
Sparkline Legend   ◆ January 2000   | Current   ◆ Five Year Forecast

# CoreLogic HPI
# Market Condition Overview
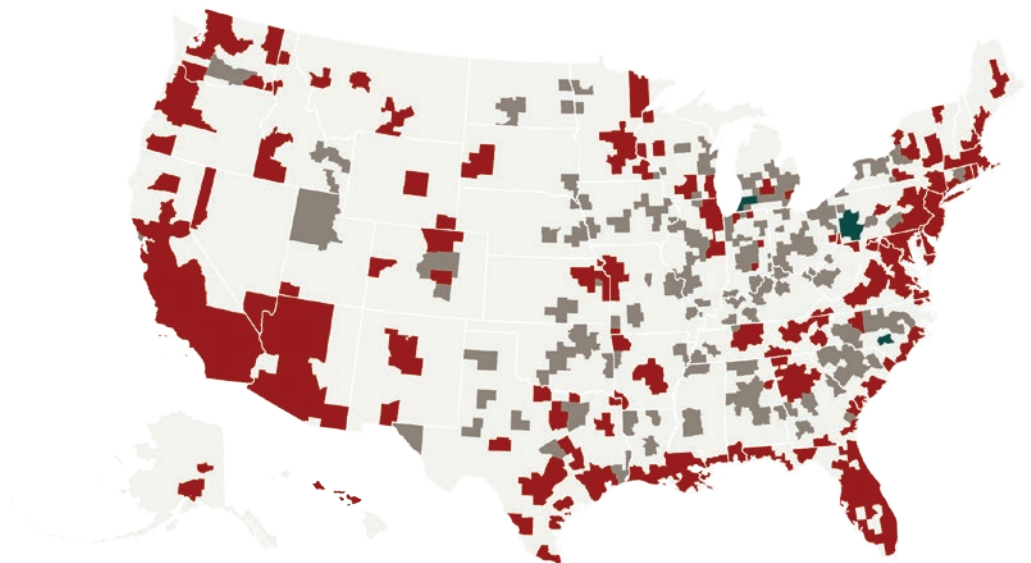
## January 2000

**25%**

By 2006, home prices for the weighted average of the top 100 markets were more than twenty-five percent above the long-run sustainable levels.

## January 2006

### Legend

- Normal
- Overvalued
- Undervalued

Market Condition Indicators compare the distance between a market's long-term fundamental value and HPI. An overvalued or undervalued market is defined as having a current Home Price Index of 10 percent above or below the long-term fundamental value for that market. Market Condition Indicators are available for most Metropolitan areas.

## September 2016
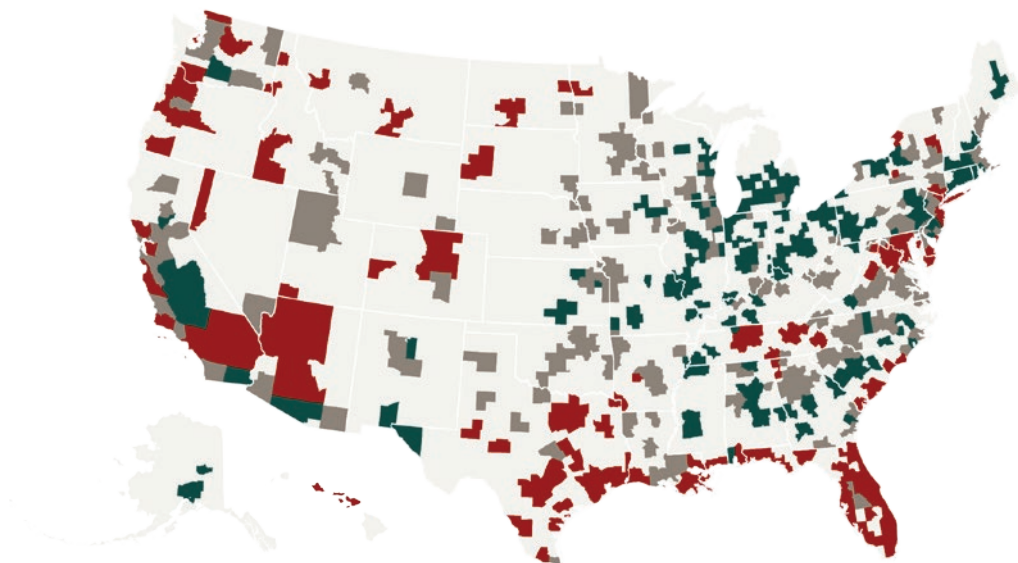


# 112

In September 2016, one-hundred and twelve markets are overvalued, nineteen of them in Texas.

## September 2021 Forecast
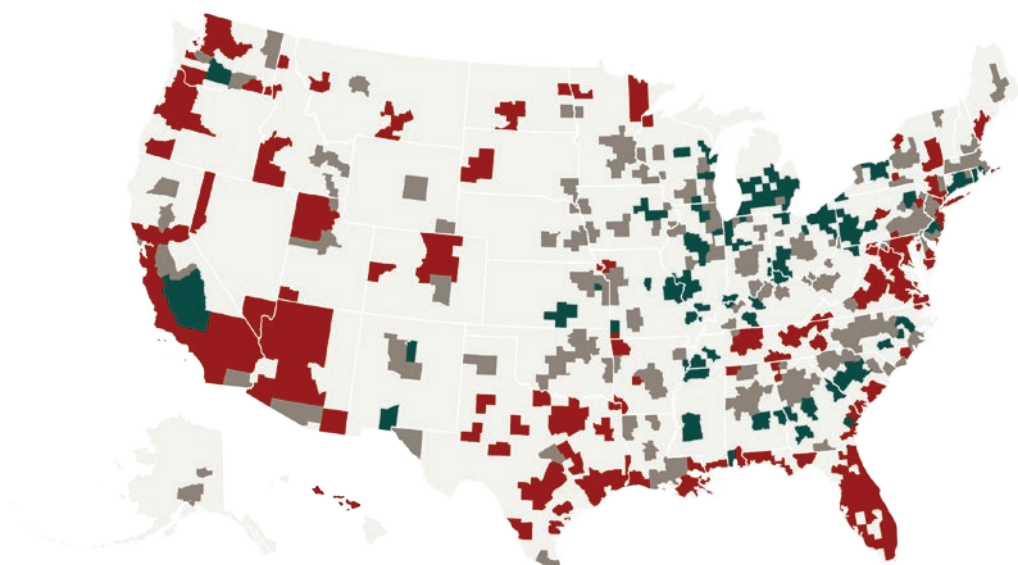


**Legend**

◼ Normal

◼ Overvalued

◼ Undervalued

Source: CoreLogic
CoreLogic HPI Single Family Combined Tier, data through September 2016..
CoreLogic HPI Forecasts Single Family Combined Tier, starting in October 2016.

# CoreLogic HPI State-Level Detail
## Combined Single Family Including Distressed

## National HPI

| | |
|---|---|
| MoM change: | **1.1%** |
| YoY change: | **6.3%** |
| Forecasted MoM change: | **0.3%** |
| Forecasted YoY Change: | **5.2%** |

### Sparkline Legend

◆ January 2000

| Current

◆ Five Year Forecast

| STATE | HPI SPARKLINES | MONTH-OVER-MONTH PERCENT CHANGE | YEAR-OVER-YEAR PERCENT CHANGE | FORECASTED MONTH-OVER-MONTH PERCENT CHANGE | FORECASTED YEAR-OVER-YEAR PERCENT CHANGE |
|---|---|---|---|---|---|
| Alabama | | −0.3% | 3.8% | 0.2% | 4.5% |
| Alaska | | −0.9% | −0.3% | −0.1% | 5.4% |
| Arizona | | 0.6% | 5.6% | 0.3% | 6.6% |
| Arkansas | | 0.1% | 2.8% | 0.3% | 5.2% |
| California | | 0.1% | 5.8% | 0.3% | 9.0% |
| Colorado | | 0.5% | 8.6% | 0.2% | 5.7% |
| Connecticut | | −0.8% | −1.4% | 0.0% | 4.8% |
| Delaware | | 0.7% | 1.4% | 0.3% | 3.8% |
| District of Columbia | | 0.5% | 3.1% | 0.3% | 3.8% |
| Florida | | 0.7% | 7.5% | 0.4% | 7.0% |
| Georgia | | 0.2% | 5.1% | 0.2% | 4.2% |
| Hawaii | | 0.1% | 4.3% | 0.2% | 5.1% |
| Idaho | | 0.3% | 7.7% | 0.2% | 4.9% |

CoreLogic®

# CoreLogic HPI State-Level Detail

Combined Single Family Including Distressed (continued)

| STATE | HPI SPARKLINES | MONTH–OVER–MONTH PERCENT CHANGE | YEAR-OVER-YEAR PERCENT CHANGE | FORECASTED MONTH–OVER–MONTH PERCENT CHANGE | FORECASTED YEAR–OVER–YEAR PERCENT CHANGE |
|---|---|---|---|---|---|
| Illinois | | 0.2% | 3.8% | 0.3% | 4.8% |
| Indiana | | 0.8% | 4.7% | 0.3% | 4.9% |
| Iowa | | 0.1% | 3.7% | 0.2% | 4.2% |
| Kansas | | 0.3% | 5.4% | 0.2% | 4.1% |
| Kentucky | | 0.1% | 4.6% | 0.2% | 4.3% |
| Louisiana | | 0.7% | 2.8% | 0.2% | 3.4% |
| Maine | | 1.4% | 2.6% | 0.4% | 5.3% |
| Maryland | | 0.7% | 2.5% | 0.3% | 4.5% |
| Massachusetts | | 0.0% | 4.5% | 0.2% | 5.1% |
| Michigan | | 0.2% | 5.9% | 0.3% | 6.3% |
| Minnesota | | 0.1% | 5.0% | 0.2% | 3.8% |
| Mississippi | | −0.2% | 1.5% | 0.1% | 3.1% |
| Missouri | | 0.3% | 4.6% | 0.3% | 4.5% |

## National HPI

| | |
|---|---|
| MoM change: | 1.1% |
| YoY change: | 6.3% |
| Forecasted MoM change: | 0.3% |
| Forecasted YoY Change: | 5.2% |

### Sparkline Legend

◆ January 2000

❘ Current

◆ Five Year Forecast

# CoreLogic HPI State-Level Detail

Combined Single Family Including Distressed (continued)

## National HPI

| | |
|---|---|
| MoM change: | **1.1%** |
| YoY change: | **6.3%** |
| Forecasted MoM change: | **0.3%** |
| Forecasted YoY Change: | **5.2%** |

| STATE | HPI SPARKLINES | MONTH–OVER–MONTH PERCENT CHANGE | YEAR–OVER–YEAR PERCENT CHANGE | FORECASTED MONTH–OVER–MONTH PERCENT CHANGE | FORECASTED YEAR–OVER–YEAR PERCENT CHANGE |
|---|---|---|---|---|---|
| Montana | | −0.1% | 4.9% | −0.1% | 2.8% |
| Nebraska | | 0.9% | 5.5% | 0.3% | 4.1% |
| Nevada | | 0.9% | 6.4% | 0.8% | 8.9% |
| New Hampshire | | 1.0% | 5.6% | 0.7% | 7.1% |
| New Jersey | | 0.0% | 1.1% | 0.4% | 4.8% |
| New Mexico | | 0.9% | 5.3% | 0.4% | 4.6% |
| New York | | 3.2% | 6.5% | 0.7% | 5.0% |
| North Carolina | | 0.5% | 5.1% | 0.3% | 4.3% |
| North Dakota | | −0.3% | 0.9% | 0.1% | 1.7% |
| Ohio | | −0.5% | 4.1% | 0.2% | 4.8% |
| Oklahoma | | −0.1% | 1.2% | 0.1% | 3.1% |
| Oregon | | 0.3% | 10.1% | 0.3% | 6.1% |
| Pennsylvania | | −0.1% | 2.5% | 0.2% | 4.4% |

### Sparkline Legend

◆ January 2000

❘ Current

◆ Five Year Forecast

CoreLogic®

# CoreLogic HPI State-Level Detail
Combined Single Family Including Distressed (continued)

| STATE | HPI SPARKLINES | MONTH–OVER–MONTH PERCENT CHANGE | YEAR-OVER-YEAR PERCENT CHANGE | FORECASTED MONTH–OVER–MONTH PERCENT CHANGE | FORECASTED YEAR–OVER–YEAR PERCENT CHANGE |
|---|---|---|---|---|---|
| Rhode Island |  | 0.7% | 5.5% | 0.1% | 3.3% |
| South Carolina |  | −0.1% | 4.7% | 0.2% | 4.1% |
| South Dakota |  | 0.3% | 6.8% | 0.3% | 3.8% |
| Tennessee |  | 0.7% | 6.4% | 0.2% | 3.8% |
| Texas |  | 0.7% | 6.7% | 0.1% | 2.6% |
| Utah |  | 1.1% | 7.8% | 0.4% | 5.1% |
| Vermont |  | 0.0% | 2.2% | 0.0% | 4.2% |
| Virginia |  | −0.2% | 2.1% | 0.3% | 4.2% |
| Washington |  | 0.8% | 10.3% | 0.3% | 5.8% |
| West Virginia |  | −0.1% | 7.2% | 0.1% | 4.4% |
| Wisconsin |  | 0.0% | 5.1% | 0.2% | 4.2% |
| Wyoming |  | −0.9% | 1.3% | −0.2% | 1.7% |

## National HPI

| | |
|---|---|
| MoM change: | **1.1%** |
| YoY change: | **6.3%** |
| Forecasted MoM change: | **0.3%** |
| Forecasted YoY Change: | **5.2%** |

### Sparkline Legend

◆ January 2000

| Current

◆ Five Year Forecast

Source: CoreLogic
  CoreLogic HPI Single Family Combined Tier, data through September 2016.
  CoreLogic HPI Forecasts Single Family Combined Tier, starting in October 2016.

Month–over–Month represents the change in home prices from August 2016 to September 2016
Year–over–Year represents the change in home prices from September 2015 to September 2016
Forecasted Month–over–Month represents the forecasted change in home prices from September 2016 to October 2016
Forecasted Year–over–Year represents forecasted change in home prices from September 2016 to September 2017

# MORE INSIGHTS

For additional perspectives on house price indices, forecasts, and market trends, visit the blog post and other featured insights publications located on the corelogic.com website.

# Methodology

CoreLogic HPI and CoreLogic Case-Shiller Indexes both utilize the repeat-sale method to track increases and decreases in sales prices for the same home over time. By analyzing data on homes with two or more recorded sales transactions, these indexes provide accurate 'constant-quality' views of pricing trends.

The **CoreLogic HPI™** is built on industry-leading public record, servicing and securities real-estate databases and incorporates more than 40 years of repeat-sales transactions for analyzing home price trends. Generally released on the first Tuesday of each month with an average five-week lag, the CoreLogic HPI is designed to provide an early indication of home price trends by market segment and for the Single-Family Combined tier representing the most comprehensive set of properties (including all sales for Single-Family Attached and Single-Family Detached properties). The indexes are fully revised with each release and employ techniques to signal turning points sooner. The CoreLogic HPI provides measures for multiple market segments, referred to as tiers, based on property type, price, time between sales, loan type (conforming vs. non-conforming) and distressed sales. Broad national coverage is available from the national level down to ZIP Code, including non-disclosure states.

**CoreLogic HPI Forecasts™** are based on a two-stage, error-correction econometric model that combines the equilibrium home price—as a function of real disposable income per capita—with short-run fluctuations caused by market momentum, mean-reversion, and exogenous economic shocks like changes in the unemployment rate. With a thirty-year forecast horizon, CoreLogic HPI Forecasts project CoreLogic HPI levels for two tiers—Single-Family Combined (both Attached and Detached) and Single-Family Combined excluding distressed sales. As a companion to the CoreLogic HPI Forecasts, Stress-Testing Scenarios align with Comprehensive Capital Analysis and Review (CCAR) national scenarios to project five years of home prices under baseline, adverse and severely adverse scenarios at state, CBSA and ZIP Code-levels. The forecast accuracy represents a 95-percent statistical confidence interval with a +/− 2.0 percent margin of error for the index.

As part of the CoreLogic HPI and HPI Forecasts offerings, **Market Condition Indicators** are available for all metropolitan areas and identify individual markets as "overvalued", "at value", or "undervalued." These indicators are derived from the long-term fundamental values, which are a function of real disposable income per capita. Markets are labeled as overvalued if the current home price indexes exceed their long-term values by greater than 10%, and undervalued where the long-term values exceed the index levels by greater than 10%.

**CoreLogic Case-Shiller Indexes**, the longest-standing, most highly recognized brand of home price indexes, were originally designed to serve as the basis for the settlement of financial instruments. As such, the estimation techniques employed limit volatility as well as revisions, which is typically limited to 24 months. Released monthly, the CoreLogic Case-Shiller Indexes leverage CoreLogic public record data and are supplemented by FHFA indexes to extend coverage into regions where sufficient public record data is not available. Where sufficient quality and quantity of sale pair data exist, CoreLogic Case-Shiller Indexes are segmented into tiers based on price and property type. Available both as seasonally adjusted and not seasonally adjusted, the full set of CoreLogic Case-Shiller Indexes includes thousands of series at the Census Division, State, CBSA, County and ZIP-code levels in addition to the national index. A custom set of indexes, known as the S&P/Case-Shiller Indices, are produced by CoreLogic and published by S&P Dow Jones Indices.

CoreLogic, together with Moody's Analytics, offers the **Case-Shiller Home Price Index Forecasts** to provide clients with enhanced home-price forecasting capabilities. With a 30-year forecast horizon, Case-Shiller Home Price Index Forecasts are updated monthly and are available under standard alternative scenarios, regulatory scenarios and a constant severity scenario independent of current business cycle conditions.

CoreLogic Case-Shiller Indexes and CoreLogic HPI provide the foundation to the **Real Estate Analytics Suite** of products which also include market-level data and analytics that provide complementary insights to the indexes and forecasts. These products include MarketTrends, Cash Investor Trends, ListingTrends, RentalTrends, and CommercialTrends.

**CONTACT**

For more information, please email *mceppetelli@corelogic.com*.

For an expanded perspective on housing economies and property markets, visit **corelogic.com/insights** and follow us on:

CoreLogic                 CoreLogic Econ

CoreLogic Insights – On The Go. Download our free App now:

Insights

CoreLogic®

corelogic.com