#### **OVERVIEW**

The Nevada Housing Stability Index (NHSI) is intended to monitor the overall health of Nevada's housing market as opposed to simply the movement in home prices. While directional movements in median home prices are a critical component to evaluating the housing sector, they only depict part of the picture. Pricing may move up or down for any number of reasons. In situations where availability is artificially limited, prices may rise. Similarly, when prices extend well beyond consumers' ability to pay commensurate mortgage payments, the market may be viewed as unstable.

In an effort to assess the market's overall stability, a series of ratios and performance metrics have been developed. Each of these 12 independent series has been consolidated to create the NHSI. These measures have been weighted based on their relevance and importance to the housing market's performance. The weighted average of the above indices is then calculated to formulate a grade point average (GPA) for the housing market. Given concerns about stability in the housing market throughout recent history, it has been impracticable to achieve a 4.0 GPA, or a perfect score. An aggregate grade of a "C" represents an average quality housing market. It is important to understand the directional movements in the composite score, including the driving forces behind the changes quarter-to-quarter. This analysis is intended to provide additional insight into Nevada's housing market stability.

## ABOUT BUSINESS & INDUSTRY

The Nevada State Department of Business and Industry is a cabinet level agency in Nevada State government. Our objective is to encourage and promote the development and growth of business and to ensure the legal operation of business in order to protect consumers by maintaining a fair and competitive regulatory environment. The Director's office at B&I manages a number of programs and initiatives to address the needs of small businesses, homeowners and consumers including small business advocacy, bond programs, access to capital, housing retention programs, constituent services and fraud prevention and education.

Funding provided by the Housing Data and Index Project, a joint initiative of







## **Current Assessment**

The Nevada housing market experienced marked improvements through the third quarter of 2013. The Nevada Housing Stability Index (NHSI) jumped from a composite score of 1.59 at the close of the second quarter to 2.04 in the third quarter. Measuring the score on a four-point grading scale suggests the market reached a C grade, up from the D+ posted three months prior and one year ago. Nine out of twelve indices that comprise the overall score posted improvements during the third quarter. This most recent score also marks the highest NHSI performance since January 2007. The overall gains were largely sourced to continued price increases, a slowdown in investor purchasing and a more balanced supply-demand environment. While additional expansion is welcome, recent legislative action (e.g., Homeowner Bill of Rights) and significant mortgage delinquencies have the potential to impact the timing and intensity of the housing market's recovery.



## Positive Signs

The share of purchases made by investors fell from 54.2 percent in the second quarter of 2013 to 44.6 percent in the most recent reporting period, providing more buyers looking to finance properties an opportunity to enter the Nevada housing market. Recent price increases have shortened the gap between the cost of ownership versus the cost of renting. The gap between new and resale prices is also more equitable. Relatively recent mortgage rate increases have also impacted affordability as mortgage costs as a percentage of wages rose to 22.7 percent, suggesting housing costs are more in-line with what residents earn on the job. Other key improvement areas included the share of homes with negative equity (39.3 percent), foreclosure volume (3.6 percent), resale housing availability (4.7 months), and employment and housing construction stability (2.12).



## Negative **Signs**

One area that offset gains in other performance measures was the community borrowing ratio, which reported a value of 42.7 percent (share of employees with a loan outstanding). With the share of residents with homes financed shrinking, this ratio suggests residents have become increasingly cautious in their home buying decision or simply are unable to qualify for a mortgage. Regardless of the reasons behind the trend, the community is moving further away from its longer-run average in this regard. Other areas that did not see significant improvements during the last quarter included the pace of sales (housing turnover ratio) and delinquency rates that remained concerning with 8.4 percent of borrowers being 90-plus-days delinquent.

1	Underwater Loan Percentage 39.3%	C	<b>A</b>
2	Community Borrowing Ratio 42.7%	C-	•
3	Foreclosure Volume 3.6%	D	_
4	Distressed Home Sales 33.2%	B-	<b>_</b>
5	Investor Purchase Share 44.6%	D+	<b>A</b>
6	Delinquency Rate 8.4%	D	<b>4</b>
7	Housing Turnover Rate 0.4%	D	<b>4</b>
8	New-to-Resale Price Ratio 138.9%	C	<b>_</b>
9	Resale Housing Availability <b>4.7</b>	D	_
10	Rent vs Cost to Own 114.9%	<b>B</b> +	_
11	Housing Affordability Ratio <b>22.7%</b>	A-	<b>A</b>
12	New Construction Supply-Demand Ba 2.12	alance <b>A</b> -	•
	AGGREGATE INDEX VALUE 2.04	С	<b>A</b>

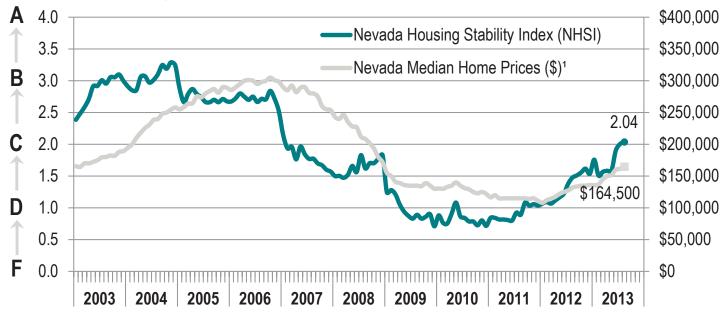


# Nevada Housing Stability Index

	INDEX VALUE			GRADE		
	Current Period	Preceding Period	Prior Year Period	Current Period	Preceding Period	Prior Year Period
Index Component	Q3 2013	Q2 2013	Q3 2012	Q3 2013	Q2 2013	Q3 2012
1. Underwater Loan Percentage (Share of Loans with Negative Equity)	39.3%	47.5%	59.4%	С	C-	D+
2. Community Borrowing Ratio (Loans-to-Employment Ratio)	42.7%	43.8%	47.1%	C-	C+	В+
3. Foreclosure Volume (Share of Mortgages in Foreclosure)	3.6%	4.1%	4.9%	D	D-	D-
4. Distressed Home Sales (Distressed Sales as a Percentage of Total)	33.2%	37.7%	48.3%	B-	C+	C-
5. Investor Purchase Share (Cash Purchases as a Percentage of Total)	44.6%	54.2%	48.6%	D+	D-	D
6. Delinquency Rate (Share of 90 + Day Delinquencies to Total Loans)	8.4%	9.4%	11.9%	D	D	D-
7. Housing Turnover Rate (Resales Closings as a Percentage of Total Homes)	0.4%	0.4%	0.3%	D	D	F
8. New-to-Resale Price Ratio (New Home Prices as a Percentage of Resale Prices)	138.9%	147.2%	155.5%	С	D+	D
9. Resale Housing Availability (Effective Months of Availabilty)	4.7	4.4	5.4	D	D-	D+
10. Rent vs. Cost to Own (Average Rents as a Percentage of Mortgage Costs)	114.9%	133.6%	154.7%	B+	C+	C-
11. Housing Affordability Ratio (Mortgage Costs as a Percentage of Average Wages)	22.7%	18.9%	16.4%	A-	C-	D
12. New Construction Supply-Demand Balance (Employment Change-to-Permits)	2.12	1.74	2.18	A-	B+	А
Aggregate Index Value (4-Point Grading Scale)	2.04	1.59	1.48	C	D+	D+

Note: Data from prior reports are subject to revision based on the latest information available.

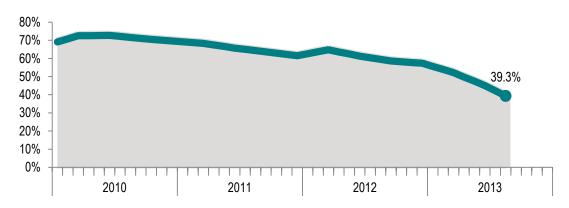
## Nevada Housing Stability Index



<sup>1</sup> Source: CoreLogic

### Underwater Loan Percentage

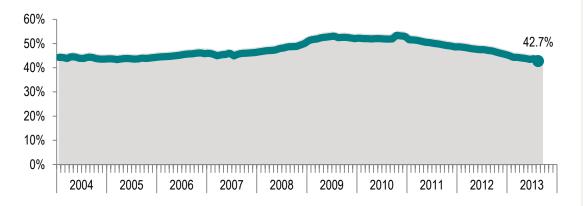
Share of Loans with Negative Equity



The ratio of homes with negative equity compared to the total number of loans in Nevada. The higher this ratio, the worse off the housing market is with more homeowners underwater on their loans.

## Community Borrowing Ratio

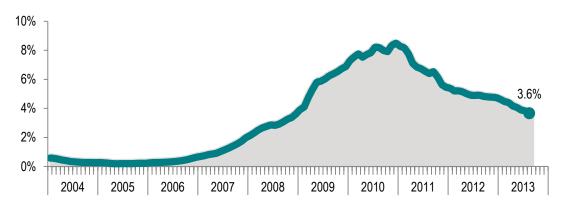
Loans-to-Employment Ratio



Measures the ratio of the total number of first home loans outstanding relative to the non-farm employment in Nevada. Ratios closest to the historical average are graded higher suggesting more balanced levels of borrowing, while a ratio too high or too low relative to the historical average suggests an unstable housing market.

### Foreclosure Volume

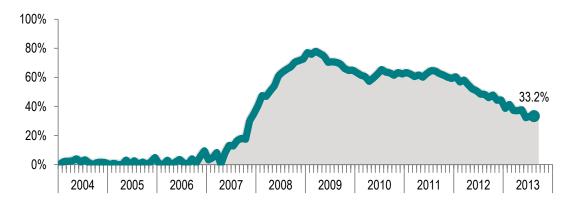
Share of Mortgages in Foreclosure



The ratio of the total number of foreclosures compared to the total number of loans in Nevada. This is graded on an exponential scale, meaning the jump from a B+ to A- is smaller than the jump from A- to A. The grading scale allows a drop in the foreclosures to be recognized with a better grade while still recognizing the market is not as healthy as it once was.

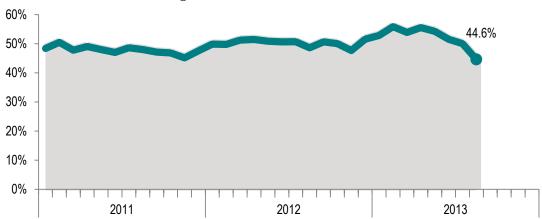
#### Distressed Home Sales

Distressed Sales as a Percentage of Total Sales

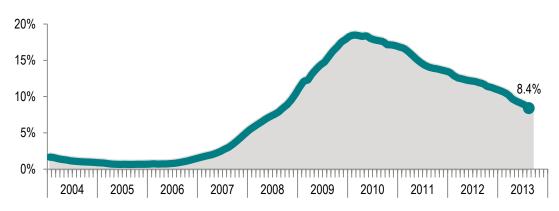


### Investor Purchase Share

Cash Purchases as a Percentage of Total



# Delinquency Rate Share of 90+ Day Delinquencies to Total Loans

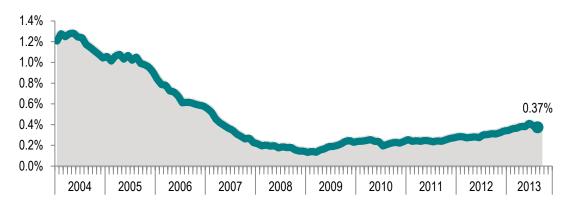


The percentage of all sales considered distressed (i.e., auction sales, short sales and bank sales). A higher percentage of homes sold in distress suggests increased instability as fewer homes are being sold without the involvement of lenders' approval. A lower rate of distressed home sales suggests conditions are trending toward increased stability.

The percentage of homes that are acquired with cash (not financed). Although investor activity in the market has some positive impacts, a higher ratio suggests fewer enduser purchases are taking place, which can create instability in the longer-run.

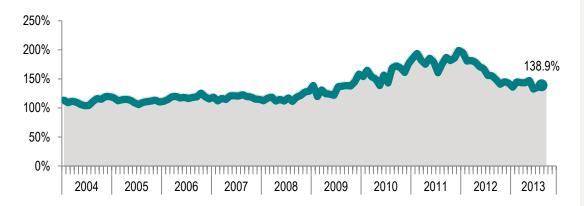
The percentage of homes which are more than 90 days delinquent in mortgage payments. The ratio is an important indicator both of the homeowner's equity in the house and of their income, as an underwater or unemployed homeowner is less likely to make payments. This is graded on an exponential scale, meaning the jump from a B+ to A- is larger than the jump from A- to A.

# Housing Turnover Rate Resale Closings as a Percentage of Total Homes



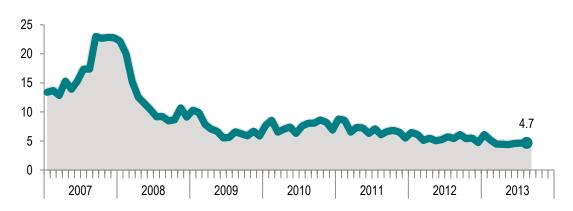
## New-to-Resale Price Ratio

New Home Prices as a Percentage of Resale Prices



## Resale Housing Availability

Effective Months of Availability



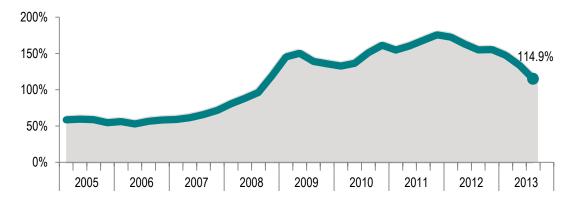
The ratio of total resale closings to the total number of homes in Nevada. The ratio gauges housing turnover in the market and suggest whether or not homeowners feel confident enough to sell in the current environment. Measured in an exponential scale; the change in ratio from an F to a D- is greater than that from an A- to an A.

The ratio between new and resale median prices in Nevada. Historically, new home prices are 1.25 times the resale value. When the ratio is higher or lower than the long-run average, a supply and demand imbalance in the housing market is likely present.

Measures the general availability in the housing market. Specifically, how many months of housing inventory are currently listed as available or contracted on the Multiple Listing System (MLS) at the current rate that existing homes are closing within the market. A number that is too high or too low represents a potential imbalance between supply and demand for housing.

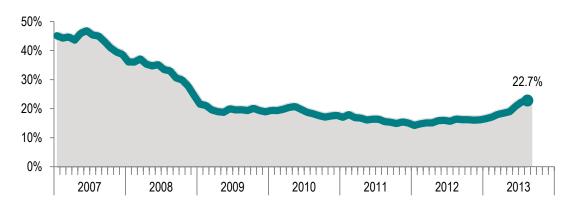
#### Rent vs. Cost to Own

Average Apartment Rents as a Percentage of Mortgage Costs



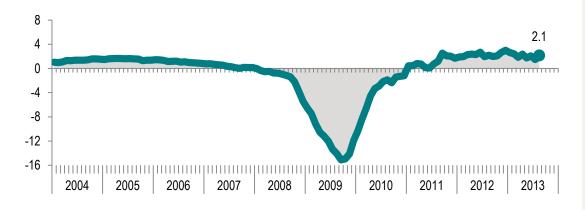
## Housing Affordability Ratio

Mortgage Costs as a Percentage of Average Wages



#### New Construction Supply-Demand Balance

Annual Employment Change-to-Home Permitting Volumes



Measures the average apartment rent for the quarter and compares this to the quarterly average monthly payment of a 30-year mortgage at current rates for 80 percent of the median house price. A ratio too high or low indicates a potential imbalance between forrent and owner-occupied housing alternatives.

The ratio of a 30-year mortgage payment at current rates for 80 percent of a median home price in the market, divided by monthly average income (converted from average weekly wages for the private sector). Ratios suggesting housing costs are at or below approximately one-third of income tend to suggest higher affordability.

Measures growth in potential demand for housing (employment) compared to the change in new supply for housing (permitting) using 12-month totals. Any negative figure (when employment change is negative) should be viewed as largely a negative performance metric and is assigned a grade of at most a D. For values above zero, the grades are scaled normally to an A for the highest level.



#### **SOURCES**

The data utilized to develop the various performance metrics have been obtained from a number of sources. Due to the proprietary nature of the data and restrictions on their release, the underlying data is not available for broad distribution. The following summarizes the sources of information:

- » Applied Analysis: Average apartment rents
- » Bureau of Labor Statistics: Average weekly earnings and Nevada employment
- » CoreLogic: Total loan volumes, delinquent loans, negative equity, foreclosures, REO properties, distressed sales, housing price, and housing volume by category (volume data has been seasonally adjusted)
- » Greater Las Vegas Association of Realtors (GLVAR): Cash home purchases and Clark County availability

- » Reno/Sparks Association of Realtors: Cash home purchases
- St. Louis Federal Reserve: 30-year conventional mortgage rate and new private housing units authorized in Nevada
- » University of Nevada, Reno Center for Regional Studies: Washoe County availability

#### APPLIED ANALYSIS

Applied Analysis (AA) was retained by the State of Nevada Department of Business and Industry to evaluate Nevada's housing market stability. Relevant data were obtained from a number of sources, including national, regional and local data providers. In some instances, the underlying data are proprietary and subject to distribution restrictions. AA assumes the provided report format is sufficient to meet these distribution restrictions while providing sufficient detail to evaluate market conditions. While we have no reason to doubt the accuracy of any of the data reported, we have not performed an audit or assurance procedures on these data, and as such, we cannot attest to their completeness.