



# Zillow Negative Equity Report

## MARCH 2013 (Q1)

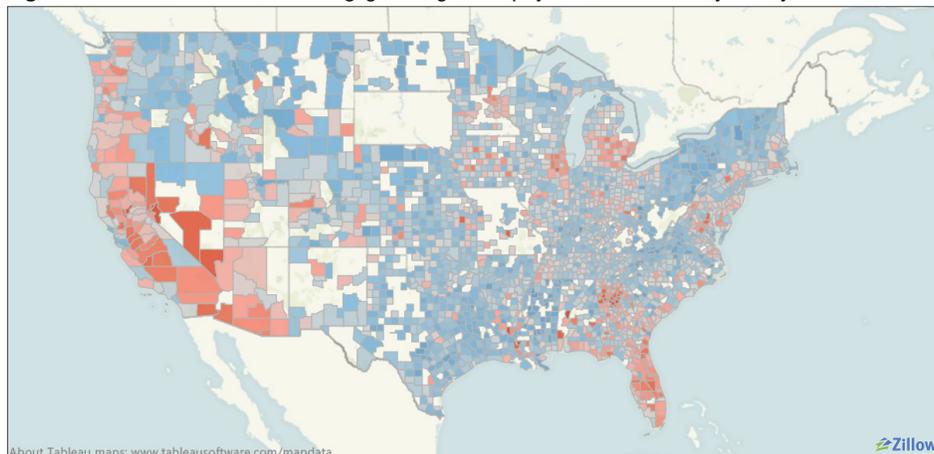
### Overview

According to the first quarter Zillow Negative Equity Report, the national negative equity rate continued to fall in the first quarter of 2013, dropping to 25.4% of all homeowners with a mortgage from 27.5% in the fourth quarter of 2012. The negative equity rate has been continually falling for the past four quarters, with the first quarter of 2013 being down significantly from the first quarter of 2012 at 31.4% – a decrease of 6 percentage points. In the first quarter of 2013, more than 730,000 American homeowners were freed from negative equity. However, 13 million homeowners with a mortgage remain underwater (Figure 1). Moreover, the effective negative equity rate nationally — where the loan-to-value ratio is more than 80%, making it difficult for a homeowner to afford the down payment on another home — is 43.6% of homeowners with a mortgage. While not all of these homeowners are underwater, they have relatively little equity in their homes, and therefore selling and buying a new home while covering all of the associated costs (real estate agent fees, closing costs and a new down payment) would be difficult (Figure 2). Of all homeowners – roughly one-third of homeowners do not have a mortgage and own their homes free and clear – 17.9% are underwater.

As home values nationally bottomed in late 2011, home value appreciation across the nation has been the main factor reducing negative equity levels. Some markets, such as Phoenix (25.5%), Las Vegas (23%) and several California markets, such as San Francisco (24.8%), Los Angeles (17.9%) and Sacramento (25.4%), are experiencing very strong appreciation. Furthermore, continued foreclosure liquidations are also driving down the negative equity rate. Despite these high rates of appreciation, negative equity is still very high and will remain high as deeply underwater homeowners are slowly being lifted toward positive equity. Figure 3 shows the loan-to-value (LTV) distribution for homeowners with a mortgage in the nation in 2013 Q1 vs. 2012 Q1. Even though many homeowners are still underwater and haven't crossed the 100% LTV threshold to enter into positive equity, they are moving in the right direction. However, the effective negative equity rate remains very high at 43.6%. In a move-up market, homeowners with less than 20% equity will effectively still be “locked” into negative equity. On average, a U.S. homeowner in negative equity owes \$73,059 more than what their house is worth, or 42% more than the home's value (Table 1). While roughly a quarter of homeowners with a mortgage are underwater, 91% of these homeowners are current on their mortgage and continue to make payments.

The Zillow Negative Equity Report incorporates mortgage data from TransUnion, a global leader in credit and information management, to calculate various statistics. The report includes, but is not limited to, negative equity, loan-to-value ratios and delinquency rates. To calculate negative equity, the estimated value of a home is matched to all outstanding mortgage debt and lines of credit associated with the home, including home equity lines of credit and home equity loans. All personally identifying information (“PII”) is removed from the data by TransUnion before delivery to Zillow. Overall, this report covers more than 870 metros, 2,500 counties and 24,200 ZIP codes across the nation.

**Figure 1: Percent of Homes with a Mortgage in Negative Equity across the Nation by County**



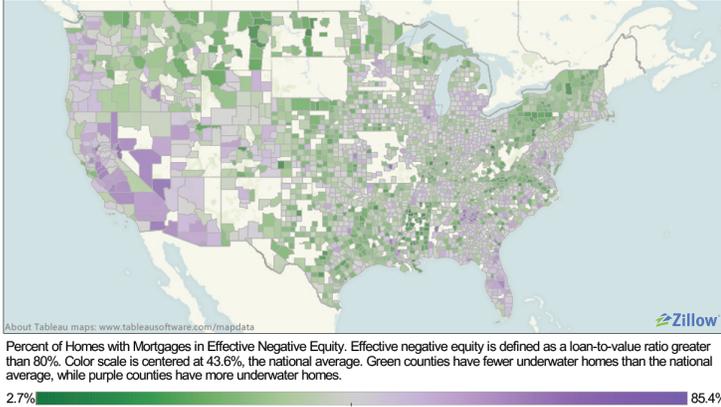
About Tableau maps: [www.tableausoftware.com/mapdata](http://www.tableausoftware.com/mapdata)

Percent of Homes with Mortgages in Negative Equity. Color scale is centered at 25.4%, the national average. Blue counties have fewer underwater homes than the national average, while red counties have more underwater homes.

1.5%

79.7%

Figure 2: Percent of Homes with a Mortgage in Effective Negative Equity across the Nation by County



## Regional Trends

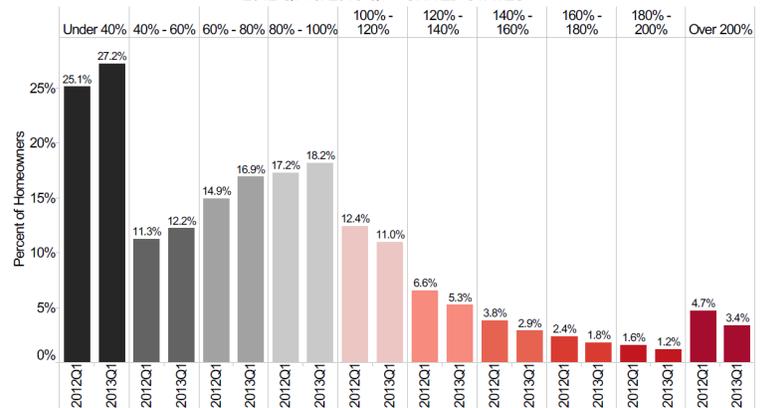
As mentioned earlier, the main factor driving down negative equity rates has been very strong home value appreciation, specifically in very hard-hit states, such as California, Florida, Nevada, Arizona and Georgia. There has been a negative equity feedback loop, as regions with high negative equity have experienced acute inventory shortages brought on in part by locked-in underwater homeowners, and these shortages in turn have produced home value appreciation spikes, which have been reducing negative equity at a fast pace. The metros that have seen the largest drop in negative equity among the largest 30 metros are Las Vegas (down 4.9 percentage points), Phoenix (4.4 percentage points), Minneapolis (down 4.3 percentage points) and Sacramento (down 4.3 percentage points). Despite these large drops in negative equity, the rates remain high, especially when considering the effective negative equity rate. Table 1 shows the effective negative equity rates for the top 30 metros, where Las Vegas has the highest rate of 71.5%, followed by Atlanta at 64.1% and Riverside at 59.7%.

In some cases high home value appreciation rates have produced only relatively small decreases in negative equity rates. However, the depth of negative equity has been significantly impacted. In the Phoenix metro, the percentage of homeowners with a mortgage who owed more than double what their houses were worth was reduced from 14.8 to 5.7% from the first quarter of 2012 to the first quarter of 2013, which can be seen in Figure 4. In the Las Vegas metro, 15.9% of homeowners with a mortgage owe more than twice the amount of their

home's value. This number compares favorably to how deeply underwater Las Vegas homeowners were a year ago. In 2012 Q1, 26.8% of homeowners with a mortgage owed more than double (see Figure 5). On the metro level there is wide variation in negative equity with the percentage of underwater borrowers ranging from 1.5 to 61.5%. Furthermore, there is wide variation in how deep homeowners are underwater. Figure 6 provides an overview of the distribution of the loan-to-value ratio for the largest metropolitan areas (a loan-to-value ratio greater than 100 % means that the homeowner is underwater).

While negative equity makes a household more vulnerable to foreclosure, most homeowners in negative equity will not end up in default. The majority of underwater homeowners continue to make regular payments on their mortgage, with only 9% (down from 10% a year ago) of underwater homeowners being delinquent. This implies that 2.3% of all homeowners with a mortgage are at high risk for foreclosure near-term. Figure 7 shows a breakdown of these numbers for the top 30 metros.

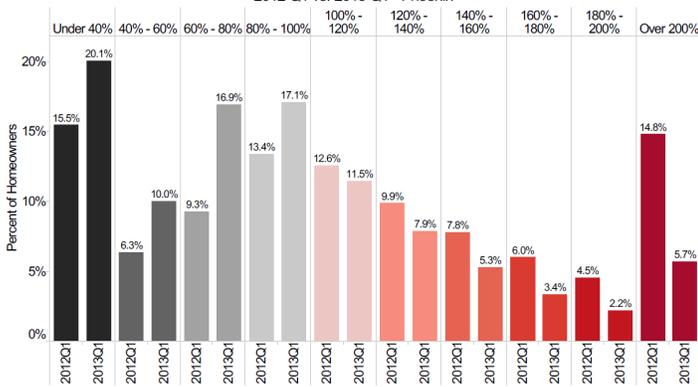
Figure 3: Loan to Value Distribution for Homeowners with a Mortgage 2012 Q1 vs. 2013 Q1 - UNITED STATES



## Forecast

The Zillow Negative Equity Forecast predicts the negative equity rate among all homeowners with a mortgage will fall to at least 23.5% by the first quarter of 2014, freeing more than 1.4 million additional underwater homeowners nationwide. Of the 30 largest metro areas, the majority of these newly freed homeowners are anticipated to come from: Los Angeles (94,642 homeowners); Riverside (74,693 homeowners); and Phoenix (51,580 homeowners).

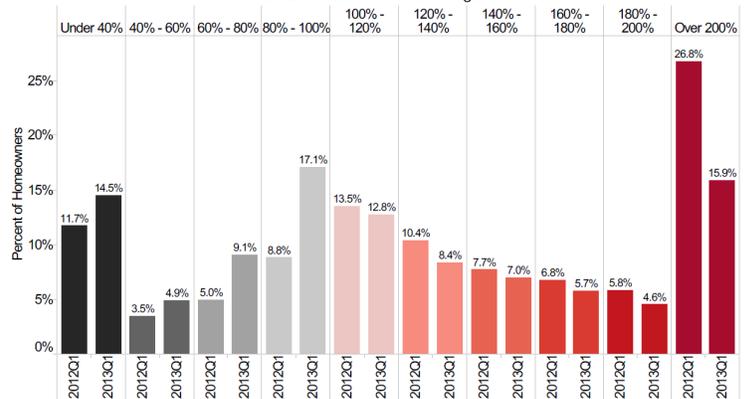
**Figure 4: Loan to Value Distribution for Homeowners with a Mortgage 2012 Q1 vs. 2013 Q1 - Phoenix**



increasingly more expensive, leading to slowing demand which, in some markets, will lead to stagnant home values or even home value depreciation. Once that occurs, negative equity will be reduced at a much slower pace and might even increase again. We expect these dynamics to unfold in two to three years from now once mortgage rates begin to return to normal levels. In the short term, home values are up 5.2 % on a year-over-year basis in April 2013, and given our forecast of an additional 4% home value appreciation over the next year (April 2013 to April 2014), we expect that negative equity rates will continue to decrease in the next year to a rate of, at most, 23.5% by the first quarter of 2014.

The Zillow Home Value Forecast is a conservative estimate of what negative equity rates will be a year from now. To forecast negative equity, we take the current home value of a house and appreciate it by the Zillow Home Value Forecast (ZHVF) for the MSA in which the home is located. In cases where there is no ZHVF available, we use the historical rate of home appreciation, and for metros that don't have a historical rate of appreciation we use the historical rate of inflation at the national level. For homes that are not located in a metropolitan area, we use the forecasted national rate of appreciation. To calculate the level of home equity a year from now, we use the forecasted home value and the current outstanding debt balance, where we make no assumptions about a homeowner's debt level a year from now. We also make no assumptions about foreclosure activity in the coming year. Therefore, this forecast is a very conservative one, as homeowners will likely continue to pay down their debt throughout the year and homes will likely continue to be foreclosed on, and both of these factors will contribute to a lower negative equity rate. The Zillow Negative Equity Forecast can therefore be considered a higher bound estimate of negative equity.

**Figure 5: Loan to Value Distribution for Homeowners with a Mortgage 2012 Q1 vs. 2013 Q1 - Las Vegas**



## Outlook

Negative equity will continue to impact the real estate market, even though the negative equity rate is continuing to drop relatively quickly, and the depth of negative equity is falling significantly. However, as home values continue to appreciate and mortgage rates increase homes will become



Figure 6: Loan to Value Distribution for Homeowners with a Mortgage

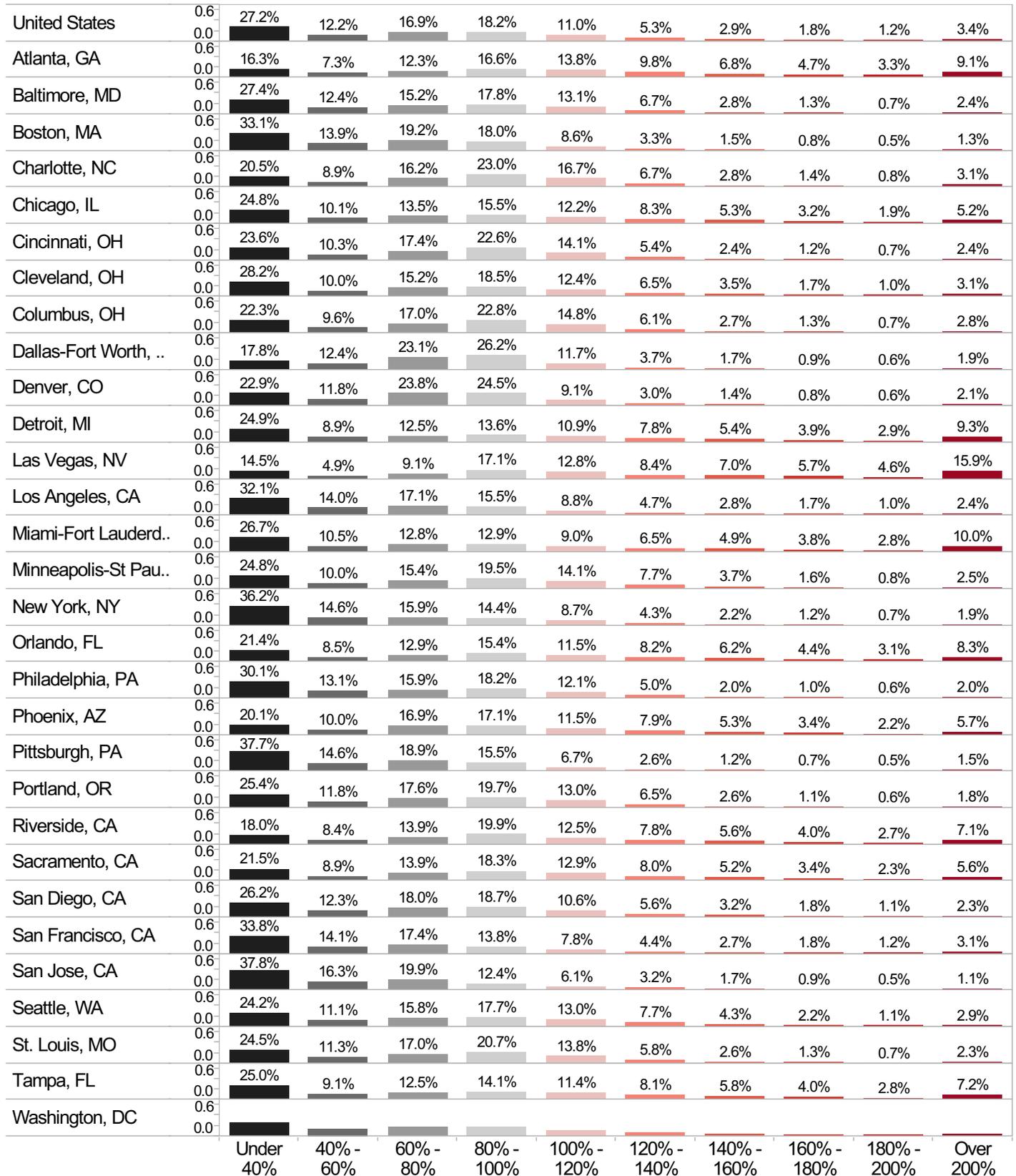
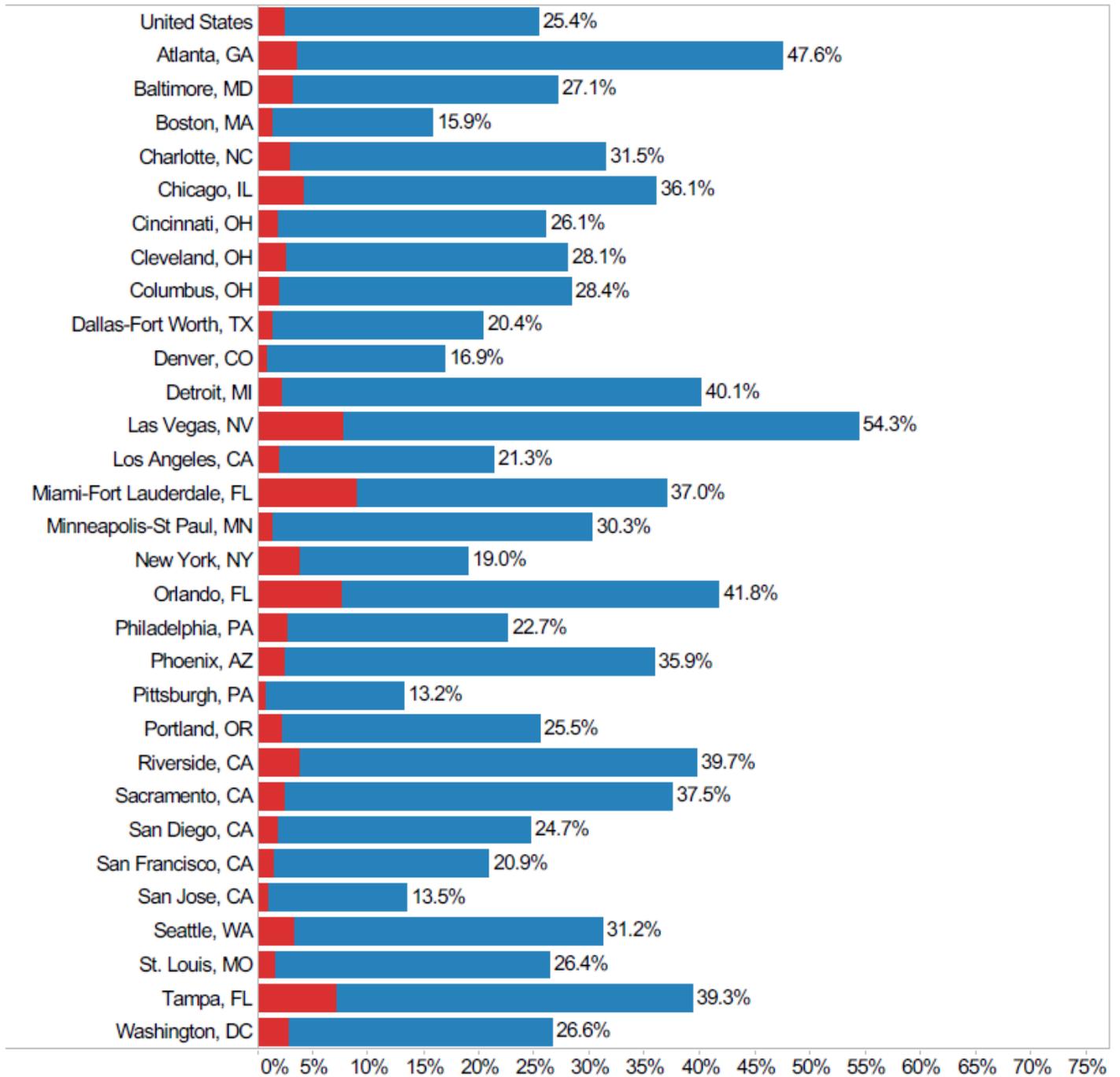


Figure 7: Percent of Delinquent Homeowners of Homes with a Mortgage in Negative Equity



The percentages in white represent the percent of delinquent underwater homeowners. For example, in the United States, 9.7 percent of underwater homeowners are delinquent, which represents 2.7 percent of homeowners with a mortgage (the length of the red bar).

Table 1: Negative Equity Snapshot



	Percent of Owner-Occupied Homes with a Mortgage in Negative Equity	Effective Negative Equity Rate	Percent by which Underwater Homeowners are in Negative Equity	Average Negative Equity Amount for Underwater Homeowners	Zillow Home Value Index	Decline in Zillow Home Value Index from Peak
United States	25.4%	43.6%	-42.0%	-\$73,059	\$157,600	-18.7%
Atlanta, GA	47.6%	64.1%	-51.0%	-\$63,467	\$117,000	-33.0%
Baltimore, MD	27.1%	45.0%	-34.1%	-\$75,823	\$222,200	-22.3%
Boston, MA	15.9%	33.9%	-33.0%	-\$90,023	\$321,700	-15.0%
Charlotte, NC	31.5%	54.4%	-35.9%	-\$52,485	\$136,800	-12.3%
Chicago, IL	36.1%	51.6%	-48.8%	-\$80,768	\$159,800	-38.5%
Cleveland, OH	28.1%	46.6%	-39.8%	-\$43,683	\$110,900	-22.2%
Columbus, OH	28.4%	51.2%	-35.9%	-\$46,350	\$127,500	-12.5%
Dallas-Fort Worth, TX	20.4%	46.7%	-34.5%	-\$46,574	\$132,700	-8.0%
Denver, CO	16.9%	41.5%	-37.5%	-\$79,320	\$234,200	0.0%
Detroit, MI	40.1%	53.7%	-52.8%	-\$56,189	\$84,700	-45.8%
Las Vegas, NV	54.3%	71.5%	-70.6%	-\$97,098	\$138,800	-54.8%
Los Angeles, CA	21.3%	36.8%	-39.1%	-\$133,893	\$439,400	-29.0%
Miami-Fort Lauderdale, FL	37.0%	50.0%	-64.0%	-\$98,471	\$159,000	-48.8%
Minneapolis-St Paul, MN	30.3%	49.8%	-35.3%	-\$62,881	\$180,500	-24.8%
New York, NY	19.0%	33.4%	-39.8%	-\$127,658	\$343,700	-24.3%
Orlando, FL	41.8%	57.2%	-54.4%	-\$75,138	\$130,800	-49.9%
Philadelphia, PA	22.7%	40.9%	-32.6%	-\$61,547	\$186,900	-18.9%
Phoenix, AZ	35.9%	53.0%	-49.8%	-\$83,112	\$165,600	-41.4%
Pittsburgh, PA	13.2%	28.8%	-39.8%	-\$48,868	\$111,700	-1.2%
Portland, OR	25.5%	45.2%	-31.7%	-\$66,183	\$237,100	-18.7%
Riverside, CA	39.7%	59.7%	-51.9%	-\$108,489	\$210,100	-48.1%
Sacramento, CA	37.5%	55.8%	-46.7%	-\$98,494	\$241,600	-42.7%
San Diego, CA	24.7%	43.5%	-36.9%	-\$119,804	\$396,800	-26.1%
Seattle, WA	31.2%	48.9%	-37.9%	-\$91,051	\$280,100	-26.2%
St. Louis, MO	26.4%	47.1%	-33.7%	-\$45,762	\$126,200	-17.9%
Tampa, FL	39.3%	53.4%	-50.7%	-\$63,278	\$117,600	-46.3%
Cincinnati, OH	26.1%	48.7%	-34.9%	-\$46,045	\$122,100	-14.7%
Washington, DC	26.6%	44.5%	-41.1%	-\$114,275	\$328,400	-24.0%

Negative Equity	Equity is the difference between the value of the house and the value the outstanding mortgage balance that the homeowner still owes. Negative equity occurs when the value of the house is less than the mortgage balance, so that the homeowners owes more on their mortgage than their house is worth.
Delinquency Rate	The number out of 10,000 homes in a given geography that have been foreclosed on in a given month. A foreclosure is when a homeowner loses their home to their lending institution or if it is sold to a third party at an auction. Reported monthly and compiled from data dating back to 1998. Each data point is a weighted average of the value in the prior three months (with the most recent month weighted highest). The historical percent of homes foreclosed is re-computed twice a month.
Loan-to-Value Ratio	This ratio compares the outstanding mortgage balance on a house to the value of that house. A loan-to-value ratio below 1 or 100 percent means that the house is in positive equity and the homeowners owes less than the house is worth, while a ratio greater than 1 or 100% means that the house is in negative equity and the homeowner owes more on his mortgage than the house is worth.
Change from Peak	The percentage change from the month that recorded the highest Zillow Home Value Index to the current month.

### About Zillow Negative Equity Reports

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#### About Dr. Stan Humphries, Zillow Chief Economist

Humphries is in charge of data and analytics. He spearheaded the creation of the Zestimate, its algorithm and, in turn, the Zillow Home Value Index. Humphries has a Bachelor of Arts from Davidson College, a Masters of Science in Foreign Service from Georgetown University, and a Ph.D. in Government from the University of Virginia.

#### About Dr. Svenja Gudell, Zillow Senior Economist

Gudell helps oversee negative equity valuations, forecasting and foreclosure research, among other research topics. She is also involved in research collaborations with other organizations and academics. Gudell holds a Ph.D. in Finance from the University of Rochester, a Masters of Arts in Economics from New York University and a Bachelor of Arts from the University of Rochester.

### About Zillow, Inc.

Zillow, Inc. (NASDAQ: Z) operates the largest home-related marketplaces on mobile and the Web, with a complementary portfolio of brands and products that help people find vital information about homes, and connect with the best local professionals. In addition, Zillow operates an industry-leading economics and analytics bureau led by Zillow’s Chief Economist Dr. Stan Humphries. Dr. Humphries and his team of economists and data analysts produce extensive housing data and research covering more than 350 markets at Zillow Real Estate Research. The Zillow, Inc. portfolio includes Zillow.com®, Zillow Mobile, Zillow Mortgage Marketplace, Zillow Rentals, Zillow Digs™, Postlets®, Diverse Solutions®, Buyfolio™, Mortech™ and HotPads™. The company is headquartered in Seattle.

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