

Nationwide's Health of Housing Markets (HoHM) Report

Nationwide Economics

2016 Q2

Data as of 2016 Q1



HoHM Report Executive Summary:

- The national LIHHM* remains above the break-even level of 100 and suggests that the overall U.S. housing market is sustainable, despite slower-than-expected household formations.
- Regionally, the LIHHM performance rankings show that the housing markets in the vast majority of metropolitan statistical areas (MSAs) and divisions are sustainable. This suggests that most local housing markets are unlikely to see declines in the near term.
- Energy sector slowdowns are weighing on job growth and housing sustainability for a number of MSAs in energy-intensive areas, especially in North Dakota, Wyoming, and Texas. MSAs in these states comprise the entire bottom 10 LIHHM performance rankings.
- Serious delinquency rates (including foreclosures) in nearly all MSAs are trending down toward pre-housing bust levels as job and mortgage market conditions steadily improve — helping to boost housing sustainability in much of the country.

* Leading Index of Healthy Housing Markets (LIHHM): A data-driven view of the near-term performance of housing markets based upon current health indicators for the national housing market and 400 metropolitan statistical areas (MSAs) and divisions across the country.



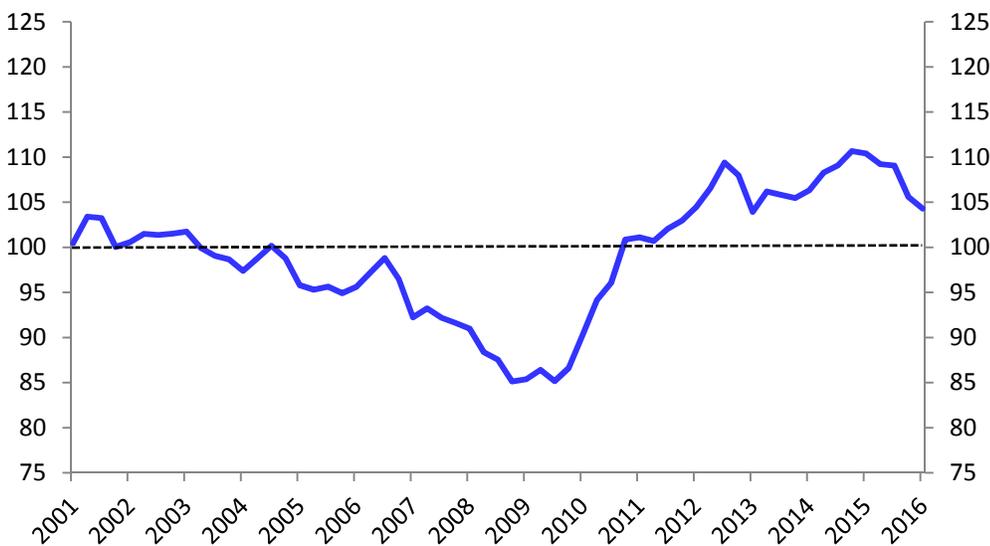
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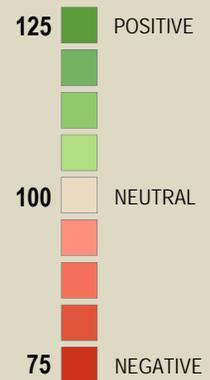
The national LIHHM remains in the healthy zone, suggesting a sustainable U.S. housing market

The current value for the national LIHHM is 104.3, the lowest level in two years. An index value over 100 suggests that the national housing market is healthy, with lower chances of a housing downturn over the next year as the index moves increasingly above the 100 break-even value. Household growth at a national level remained sluggish in the first quarter, weakening demand metrics within the national LIHHM score. National house price growth is outpacing income growth and has reduced relative housing affordability in recent quarters. Regionally, the LIHHM performance rankings show that the vast majority of metro areas across the country are healthy, indicating that few regional housing markets are vulnerable to a housing downturn. The outlook for sustainable housing activity in local markets with strong ties to the energy sector, however, continues to be worrisome, with multiple energy-intensive MSAs now negative.

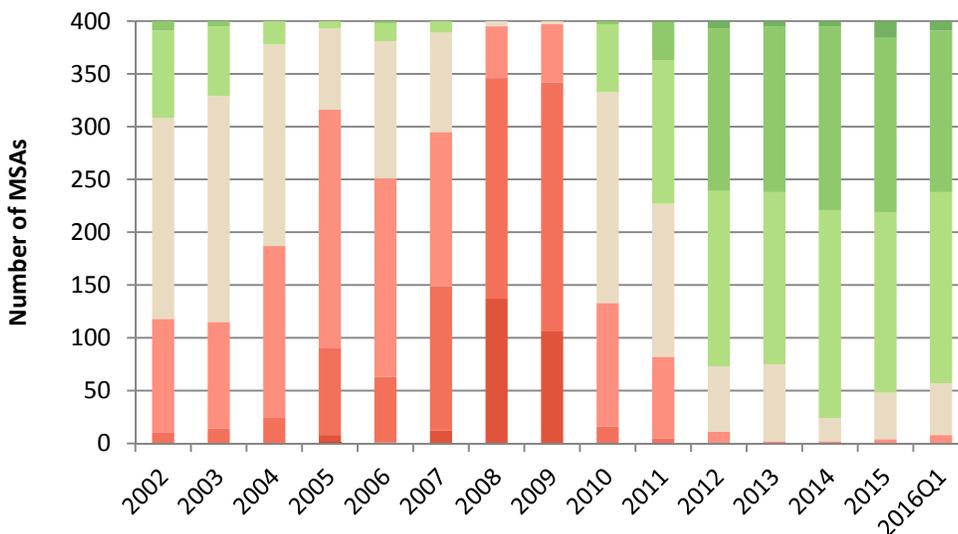
National LIHHM



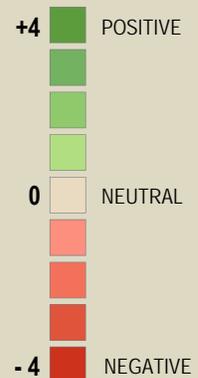
LIHHM Scores*



MSA LIHHM Performance Rankings



Performance Rankings*

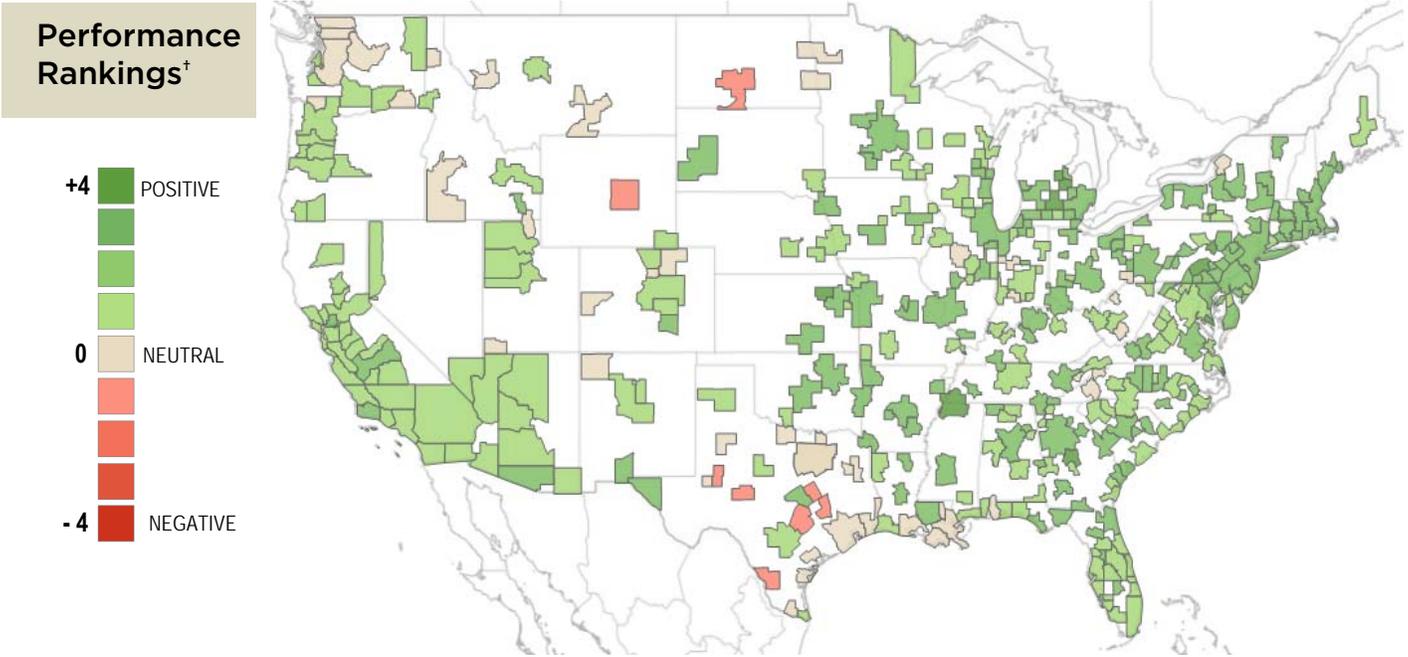


* See appendix for full descriptions

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The regional LIHHM rankings show sustained health in the majority of housing markets

- Nine MSAs have a +3 ranking with an additional 153 in the +2 ranking, meaning that just over 40 percent of all MSAs have very healthy housing markets. There are eight MSAs with a -1 ranking, indicating a modest risk of a downturn, while an additional 49 MSAs are neutral.
- The Midwest and Northeast regions are the strongest on average — solid employment growth, healthy mortgage market fundamentals, and sustainable house price gains are more widespread in these areas.
- MSAs in energy-intensive states dominate the bottom-10 list, suggesting potential housing slowdowns over the next year. A couple of metros in Texas (Austin and Waco) are slightly negative, while Dallas is close but neutral (as is Houston) because of rapid house price growth rather than energy impacts.



Top 10 MSAs

Rank	Metropolitan Statistical Area
1	Harrisburg-Carlisle PA
2	Saginaw MI
3	Lansing-East Lansing MI
4	Memphis TN-MS-AR
5	Manhattan KS
6	California-Lexington Park MD
7	Bloomsburg-Berwick PA
8	Macon GA
9	Midland MI
10	Baltimore-Columbia-Towson MD

Bottom 10 MSAs

Rank	Metropolitan Statistical Area
400	Bismarck ND
399	Casper WY
398	San Angelo TX
397	Midland TX
396	Austin-Round Rock TX
395	Waco TX
394	Laredo TX
393	College Station-Bryan TX
392	Dallas-Plano-Irving TX
391	Victoria TX

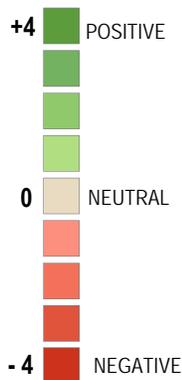
† Data as of 2016 Q1

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Only one of the top 40* MSAs by size has a LIHHM performance ranking that is negative, while four more are neutral, suggesting that most of the major U.S. housing markets are healthy with little chance of a downturn in the near term – but four of the concerning five are in Texas.

MSAs by size (Top 40), with corresponding performance rankings

Performance Rankings:



	Metropolitan Statistical Area	Performance Rankings		
		Current [†]	Prior Qtr	Prior Year
1	New York-Jersey City-White Plains NY-NJ	2	2	1
2	Los Angeles-Long Beach-Glendale CA	1	1	1
3	Chicago-Naperville-Arlington Heights IL	2	2	2
4	Houston-The Woodlands-Sugar Land TX	0	0	0
5	Atlanta-Sandy Springs-Roswell GA	2	2	2
6	Washington-Arlington-Alexandria DC-VA	1	1	0
7	Phoenix-Mesa-Scottsdale AZ	1	1	1
8	Dallas-Plano-Irving TX	0	0	0
9	Minneapolis-St. Paul-Bloomington MN-WI	2	2	2
10	Riverside-San Bernardino-Ontario CA	1	1	1
11	Tampa-St. Petersburg-Clearwater FL	1	2	2
12	San Diego-Carlsbad CA	1	1	1
13	Seattle-Bellevue-Everett WA	0	0	1
14	St Louis MO-IL	2	2	2
15	Denver-Aurora-Lakewood CO	1	1	1
16	Baltimore-Columbia-Towson MD	2	2	1
17	Anaheim-Santa Ana-Irvine CA	1	1	1
18	Warren-Troy-Farmington Hills MI	2	2	1
19	Pittsburgh PA	2	2	2
20	Oakland-Hayward-Berkeley CA	1	1	1
21	Portland-Vancouver-Hillsboro OR-WA	1	1	1
22	Nassau County-Suffolk County NY	2	1	1
23	Charlotte-Concord-Gastonia NC-SC	1	0	1
24	Miami-Miami Beach-Kendall FL	1	1	1
25	Orlando-Kissimmee-Sanford FL	1	2	2
26	Cambridge-Newton-Framingham MA	2	2	2
27	Newark NJ-PA	2	2	2
28	Fort Worth-Arlington TX	0	0	1
29	Cleveland-Elyria OH	2	3	2
30	Cincinnati OH-KY-IN	2	2	2
31	San Antonio-New Braunfels TX	1	1	1
32	Sacramento-Roseville-Arden-Arcade CA	1	1	1
33	Philadelphia PA	2	2	2
34	Kansas City MO-KS	2	2	1
35	Columbus OH	2	3	2
36	Las Vegas-Henderson-Paradise NV	1	1	1
37	Indianapolis-Carmel-Anderson IN	1	2	1
38	Boston MA	2	2	1
39	Fort Lauderdale-Pompano Beach-FL	1	2	2
40	Austin-Round Rock TX	-1	0	0

[†] Data as of 2016 Q1

* Largest 40 determined by number of households

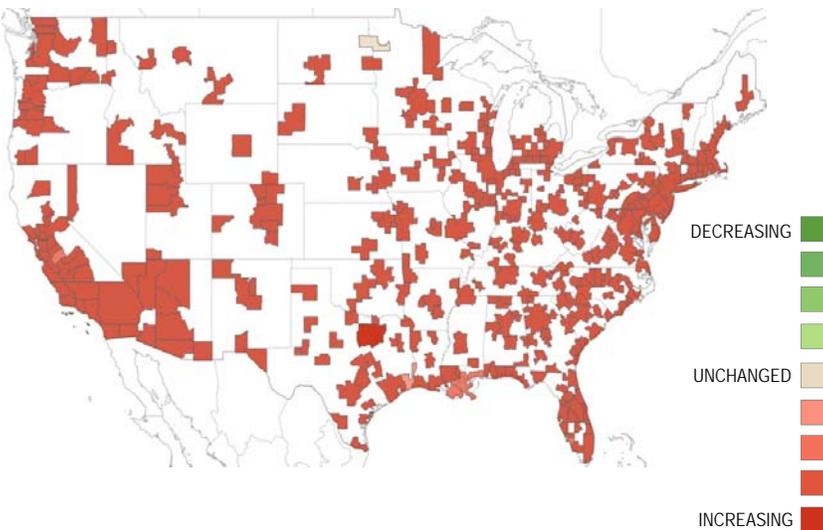
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Falling serious delinquency rates in the majority of MSAs signal better mortgage market health and improved economic conditions at the household level

The serious delinquency rate (foreclosures plus 90+ day delinquencies) is a key determinant of mortgage market health at both the national and local levels. Delinquencies occur when the borrower fails to make the required mortgage payment, and this can happen for reasons such as illness or death of an income earner, or divorce. It can also occur with job loss, so it is tied to the business cycle. Delinquencies can become foreclosures when a delinquent borrower is also in a situation where the mortgage amount owed is greater than the value of the property. In economic downturns, as unemployment rates rise, delinquencies increase as well. During the Great Recession, the combination of surging unemployment rates and falling property values led to record-high levels of mortgage defaults.

The opposite is true during economic expansions – improved job/income growth leads to declines in serious delinquency rates as well as climbing home values. Serious delinquency rates have been falling in the majority of MSAs for the past several years as the job market improves and house prices rise, but remain higher than before the housing bust. Further job market gains should allow serious delinquency rates to fall further, positively impacting the LIHHM rankings.

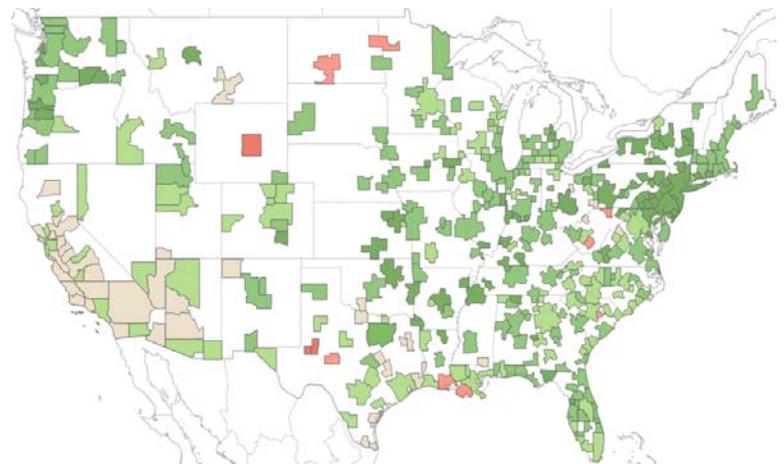
Change in Serious Delinquency 2009 Q4



Historical context

By the end of 2009, serious delinquency rates were rising sharply across the U.S. as double-digit unemployment rates and sharply falling house prices wreaked havoc on homeowners. There was only a single MSA rated as neutral, while the rest of the country was very negative. Throughout the housing recovery, the number of seriously delinquent mortgages decreased steadily – showing improved mortgage market health. By the start of 2016, the serious delinquency rates in nearly all MSAs were trending downward. There are only a few MSAs where delinquency rates have increased over the past year – mostly in metro areas with strong ties to the energy sector.

Change in Serious Delinquency 2016 Q1



Impact on the future housing market

The change in serious delinquency rates over a four-quarter period is an important component of the LIHHM rankings for each local housing market. While serious delinquency rates lag what is happening in the job market, they are leading indicators of house prices.

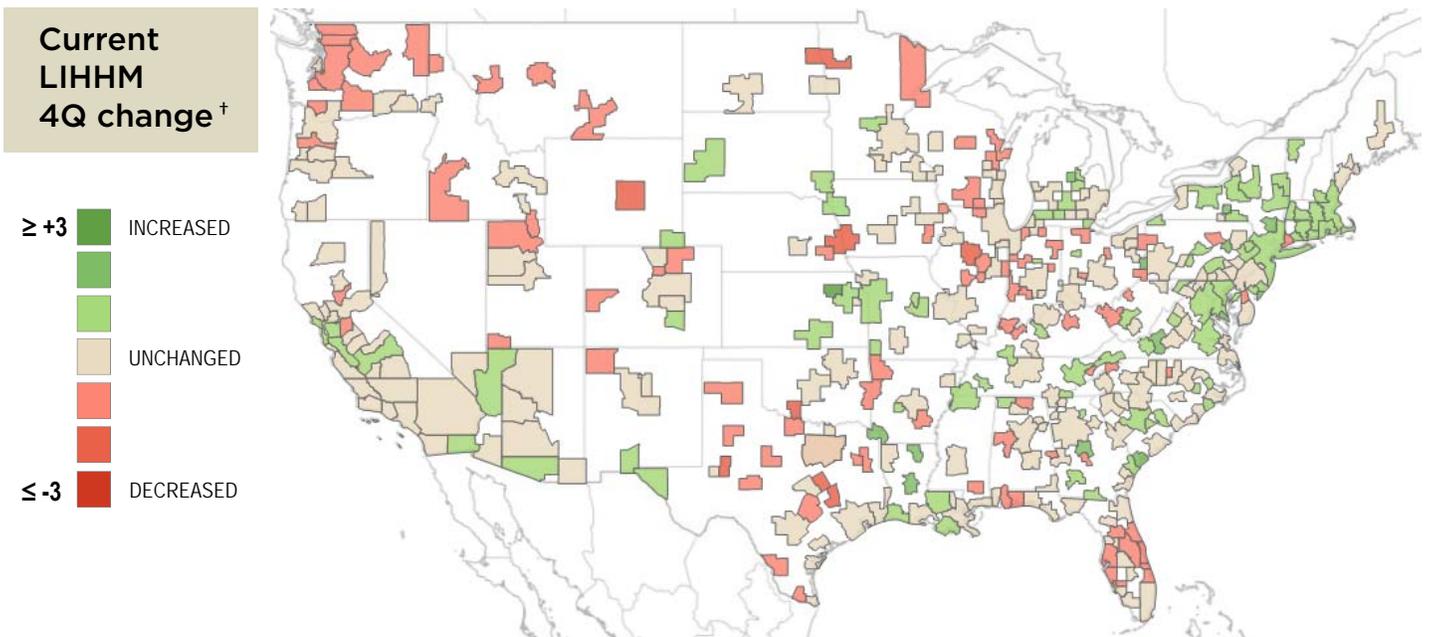
In the current environment, the large drops in serious delinquency rates in recent years signal that housing market conditions are moving closer to normal. By themselves, these declines suggest that conditions in most local housing markets will continue to be sustainable.

Source: CoreLogic

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Since the LIHHM scores in many MSAs have remained positive over the last year, roughly half of the LIHHM rankings have not changed — reflective of continued health in local housing markets

- The best measure of the near-term health of housing markets is the current LIHHM (page 3), but looking at movements in the LIHHM over the course of a year can provide useful information, as well.
- More than a quarter of MSAs saw their LIHHM performance rankings improve over the past year, with 14 local markets posting 2+ increases in their LIHHM rankings.
- Another quarter of MSAs posted declines in their rankings. The majority of the MSAs that decreased, however, fell only slightly. There were eight MSAs that declined more sharply, led by several MSAs in areas with strong in oil production and distribution.



Largest Increase

Rank	Metropolitan Statistical Area
1	Manhattan KS
2	Ithaca NY
3	Monroe LA
4	Roanoke VA
5	Texarkana TX-AR
6	Bloomsburg-Berwick PA
7	California-Lexington Park MD
8	Ocean City NJ
9	Kingston NY
10	Alexandria LA

Largest Decrease

Rank	Metropolitan Statistical Area
400	Casper WY
399	Midland TX
398	Grand Forks ND-MN
397	Lawton OK
396	Waco TX
395	Peoria IL
394	College Station-Bryan TX
393	Omaha-Council Bluffs NE-IA
392	Bloomington IL
391	Anchorage AK

[†] Change in performance ranking; Data as of 2016 Q1

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Appendix

Leading Index of Healthy Housing Markets (LIHHM)

Nationwide's LIHHM is a data-driven view of the near-term performance of housing markets based upon current health indicators for the national housing market and 400 metropolitan statistical areas (MSAs*) and divisions across the country. For each MSA, the LIHHM uses local-level data to incorporate the idiosyncratic characteristics of regional housing markets. The focus of the LIHHM is on the entire housing market's health, rather than a projection of house prices or home sales.

Nationwide Economics LIHHM methodology

The LIHHM is calculated using a number of variables that describe many of the drivers of the housing market for each MSA. In order to provide the best indicator of housing health, the included variables and corresponding weights for each provide the optimal leading perspective on future housing markets for each MSA. The drivers can be grouped into the following categories:

1. **Employment**
2. **Demographics**
3. **Mortgage Market**
4. **House Prices**

As an illustration, if job growth increases in an MSA, then the resulting rise in incomes creates additional housing demand. Consumers have a greater ability to earn and save for home purchases, increasing sales and pushing up house prices. The LIHHM measures the movements in the included employment, demographic, mortgage market, and house price variables versus the long-term trends within each MSA.

These drivers are used to derive an overall LIHHM score on a scale from 75 to 125 centered around a neutral value of 100. These values are placed into performance rankings to allow for better comparisons across MSAs. These performance rankings are the key metric in comparing the MSAs both to each other and across time. Raw LIHHM values are used for calculation purposes only and will only be shown on the national level as the national score is standalone and is not compared to other areas.

* MSA: Geographical region with high population density and close economic ties throughout the nearby area, capturing 85-90% of the U.S. population

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