

Health of Housing Markets (HoHM) Report

From Nationwide Economics

2017 Q4
(Data as of 2017 Q3)

High prices lower the housing market outlook

- The national LIHHM* declined modestly this quarter as rapid home appreciation continues to weaken the near-term outlook for the U.S. housing market. The overall ranking remains positive, however, as job and income gains spur stronger demand for single-family housing.
- While many local housing markets are at all-time highs with respect to home values, about a quarter of MSAs remain below prior price peaks. This suggests a higher share of homeowners that are underwater on their mortgages, a drag on future housing market growth.
- Several MSAs with strong ties to oil and gas extraction are among the most improved housing markets over the past year, as job growth and housing demand have recovered from the drop in oil prices during 2014-15.
- The LIHHM rankings in the majority of local housing markets continue to suggest a positive outlook for housing sector growth. There are only a few markets with negative rankings, mostly due to affordability concerns following multiple years of unsustainable home price appreciation.

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

Housing Market Health Status: **Moderating**

National LIHHM: **Positive**

106.0

The LIHHM score is still in positive territory, driven by strong housing demand.

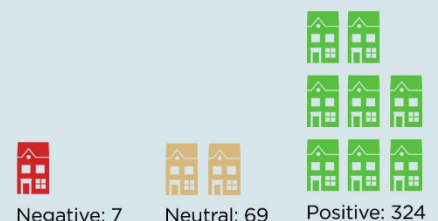
Markets: **Positive**

While job gains, household formations and mortgage markets still look good, rapid price increases are concerning.



MSA Performance: **Strong**

The vast majority of local housing markets are healthy.

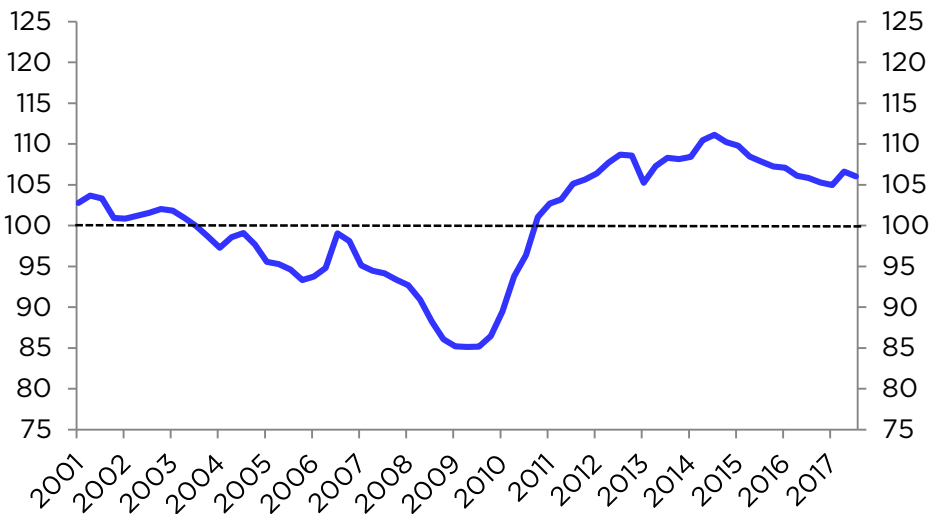


Overheated home prices continue to weigh on the housing outlook

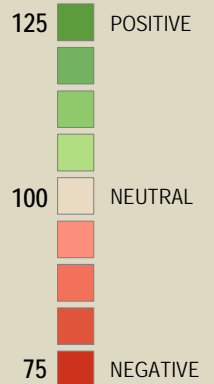
The national LIHHM is at 106.0, a modest decline from the previous quarter and well below the peak in 2014. Affordability concerns are climbing as national house price gains continue to run at a pace well above both the long-term average and income growth. Household formations have helped to offset some of the negative price impacts, however, supporting the outlook for housing demand. The backdrop for housing sector health remains positive with solid job gains, rising incomes, and a healthy mortgage market.

On a regional level, the LIHHM performance rankings suggest that the majority of metro areas across the country are healthy. The few negative rankings are primarily characterized by unsustainable home price increases, which could limit housing sector expansion in some areas. As a result of strong price gains in recent years, most local housing markets have surpassed their price peaks from the housing boom.

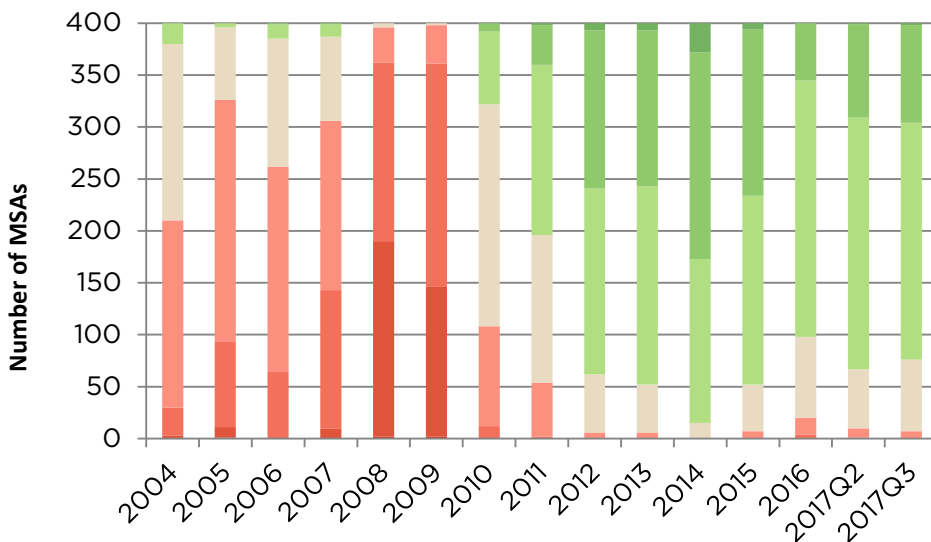
National LIHHM



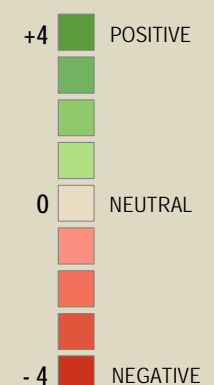
LIHHM Scores*



MSA LIHHM Performance Rankings



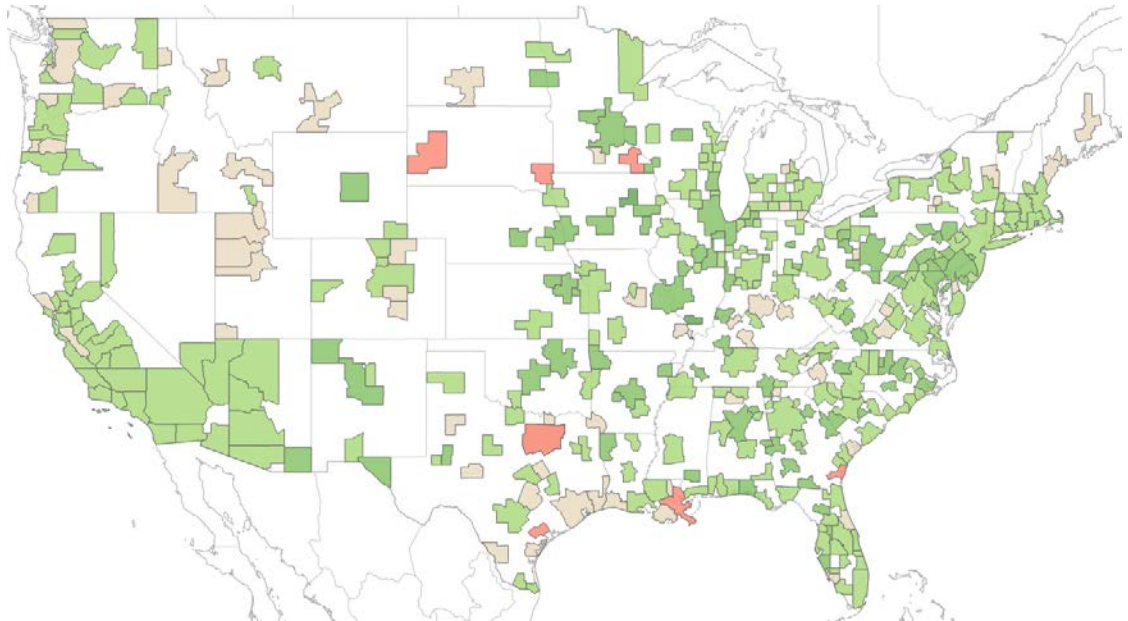
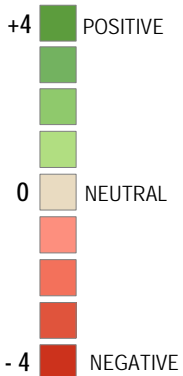
Performance Rankings*



Regional LIHHM rankings show sustainable housing trends in most housing markets

- This quarter there are two MSAs with a +3 ranking while 94 MSAs have a ranking of +2, suggesting very healthy housing fundamentals in these markets. Overall, more than 80 percent of metro areas across the country have a positive ranking.
- The bottom 10 MSAs are no longer dominated by metros within energy-intensive states as energy sector employment and production recover. The lowest-ranked MSAs are now characterized by deteriorating affordability as rapid price house gains reduce the ability of households to purchase a home.
- An additional 69 MSAs are ranked neutral, indicating a mixed outlook for near-term housing growth.

Performance Rankings[†]



Top 10 MSAs

Rank	Metropolitan Statistical Area
1	Waterloo-Cedar Falls IA
2	Carbondale-Marion IL
3	Philadelphia PA
4	Valdosta GA
5	The Villages FL
6	Canton-Massillon OH
7	Gadsden AL
8	Little Rock-North Little Rock AR
9	Trenton NJ
10	Morgantown WV

Bottom 10 MSAs

Rank	Metropolitan Statistical Area
400	Rapid City SD
399	Brunswick GA
398	Rochester MN
397	Sioux Falls SD
396	New Orleans-Metairie LA
395	Dallas-Plano-Irving TX
394	Victoria TX*
393	Morristown TN
392	Waco TX
391	Bangor ME

[†] Data as of 2017 Q3

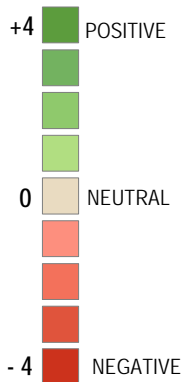
* Note that there was no measurable impact from Hurricane Harvey on this ranking



Only one of the top 40* largest MSAs has a negative LIHHM performance ranking, while an additional six are neutral. These lower scores are primarily the result of reduced housing affordability. Most of the major U.S. housing markets show sustainable trends with little chance of a downturn in the near term.

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	1	1	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	1	1	1
6	Washington-Arlington-Alexandria DC-VA	1	1	1
7	Phoenix-Mesa-Scottsdale AZ	1	1	1
8	Dallas-Plano-Irving TX	-1	-1	-1
9	Minneapolis-St. Paul-Bloomington MN-WI	2	2	1
10	Riverside-San Bernardino-Ontario CA	1	1	1
11	Tampa-St. Petersburg-Clearwater FL	1	1	1
12	San Diego-Carlsbad CA	1	1	1
13	Seattle-Bellevue-Everett WA	0	1	0
14	St Louis MO-IL	2	2	2
15	Denver-Aurora-Lakewood CO	1	1	0
16	Baltimore-Columbia-Towson MD	2	1	2
17	Anaheim-Santa Ana-Irvine CA	0	1	0
18	Warren-Troy-Farmington Hills MI	1	1	1
19	Pittsburgh PA	2	2	1
20	Oakland-Hayward-Berkeley CA	1	1	1
21	Portland-Vancouver-Hillsboro OR-WA	1	1	0
22	Nassau County-Suffolk County NY	1	1	1
23	Charlotte-Concord-Gastonia NC-SC	1	1	1
24	Miami-Miami Beach-Kendall FL	1	1	0
25	Orlando-Kissimmee-Sanford FL	1	1	1
26	Cambridge-Newton-Framingham MA	0	1	2
27	Newark NJ-PA	2	2	2
28	Fort Worth-Arlington TX	0	-1	0
29	Cleveland-Elyria OH	1	1	1
30	Cincinnati OH-KY-IN	1	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	1	1	1
35	Columbus OH	1	2	1
36	Las Vegas-Henderson-Paradise NV	1	1	1
37	Indianapolis-Carmel-Anderson IN	1	2	1
38	Boston MA	1	1	2
39	Fort Lauderdale-Pompano Beach-FL	1	1	1
40	Austin-Round Rock TX	0	0	0

[†] Data as of 2017 Q3

* Largest 40 determined by number of households



Why are some housing markets not at a price peak?

The CoreLogic National House Price Index (HPI) hit an all-time high in September, finally surpassing the peak during the housing boom of 2005-06. At a regional level, more than half of MSAs are also at all-time peaks, while another 16 percent are within 5 percent of a new high. This leaves about a quarter of MSAs that are still well below their previous peak, including a few by more than 20 percent.

Many of the markets still under their 2005-06 peak are in the “sand states” (Nevada, California, Arizona, and Florida) where the housing bubble was most pronounced and the subsequent bust in prices was most severe. Despite several years of above-average house price appreciation, home values have yet to recover completely from the housing market crash.

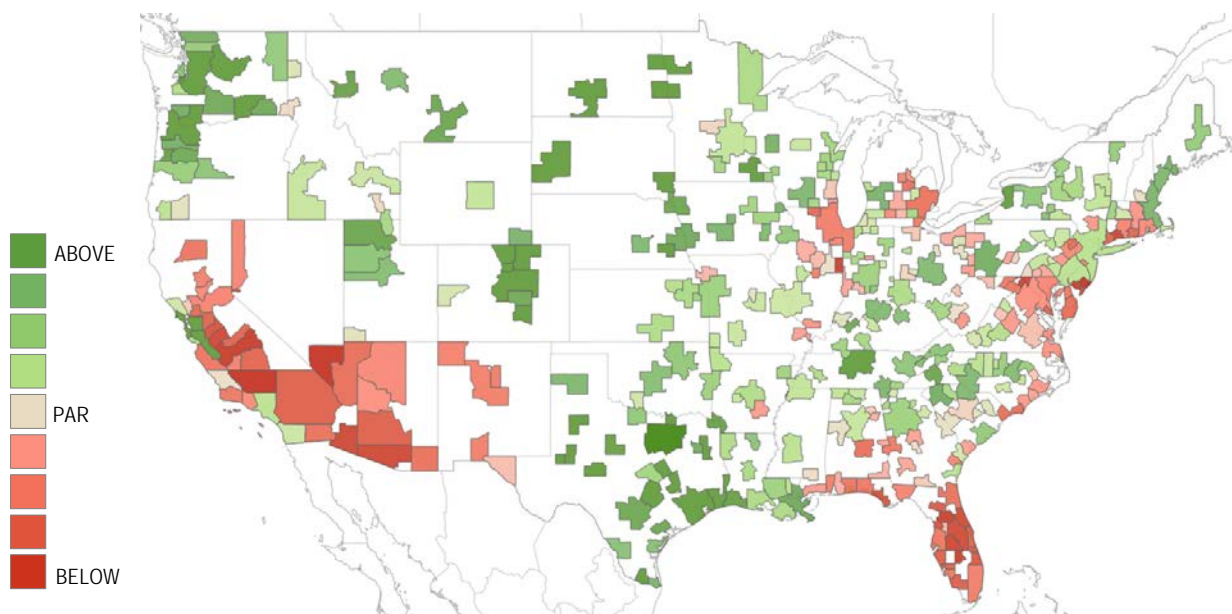
There are also a few housing markets in the Midwest and along the East Coast that did not recover as quickly from the housing market collapse and the Great Recession. In Detroit, for example, weaker job markets resulted in feeble housing demand early in the economic expansion — causing stagnant house prices gains for several years.

As a result of being below the previous price peak, a subset of homeowners in these MSAs remain underwater in their homes. While the national share of mortgages that have negative equity has fallen to about 5 percent, the share in the these areas is nearly double that. Underwater homeowners are much less likely sell at a loss, reducing housing inventory and limiting mobility.

Major MSAs below prior price peak

Metropolitan Statistical Area	Percent below peak
Las Vegas-Henderson NV	27.7%
Bakersfield CA	23.1%
Fresno CA	21.5%
Tucson AZ	20.3%
Orlando-Kissimmee FL	19.7%
Camden NJ	18.7%
Fort Lauderdale FL	16.9%
Riverside-San Bernardino CA	16.4%
Phoenix-Mesa AZ	16.2%
Naples FL	16.2%
Stockton-Lodi CA	15.8%
West Palm Beach-Boca Raton FL	14.8%
Newark NJ	14.5%
Jacksonville FL	13.1%
Detroit-Dearborn MI	12.8%

Current House Prices versus Pre-crash Peak

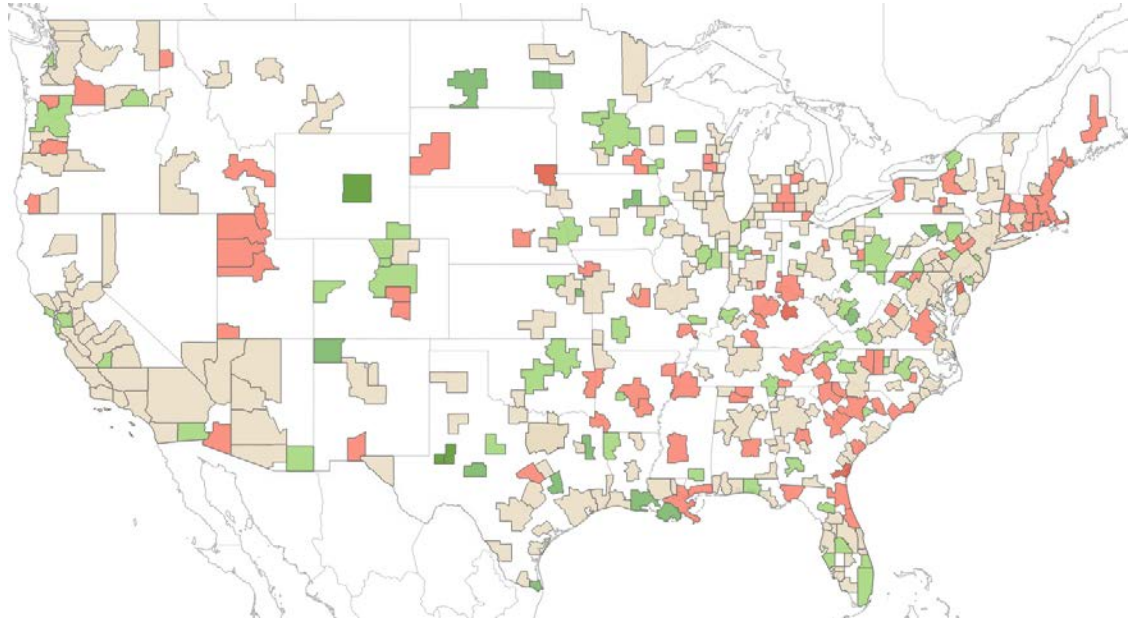
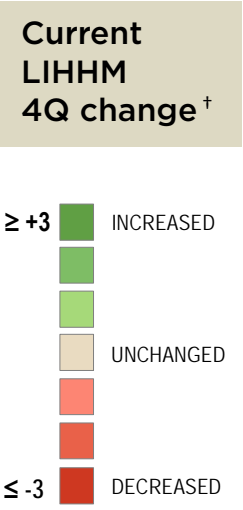


Source: CoreLogic, Nationwide Economics

See more at blog.nationwide.com/housing

LIHHM rankings in most MSAs are unchanged or have declined over the past four quarters

- The near-term sustainability of housing markets is best measured by the current LIHHM (page 3), but looking at shifts in the LIHHM over the course of a year can provide additional insights.
- While approximately one-fourth of all MSAs saw their rankings drop over the past year, the majority of these pulled back by only one ranking. There were only five MSAs that declined more sharply (down by two rankings or more), indicative of worsening housing outlooks in these local markets. The largest declines all had one common trait: reduced affordability as home price gains outpace income growth.
- More than half of the LIHHM rankings were unchanged over the past year — suggesting little change in the housing outlooks for these housing markets. Less than a quarter of MSAs saw their rankings rise.



Largest Increase

Rank	Metropolitan Statistical Area
1	Casper WY
2	Odessa TX
3	Midland TX
4	Farmington NM
5	Parkersburg-Vienna WV
6	Bismarck ND
7	San Angelo TX
8	Houma-Thibodaux LA
9	Waterloo-Cedar Falls IA
10	Lafayette LA

Largest Decrease

Rank	Metropolitan Statistical Area
400	Lexington-Fayette KY
399	Brunswick GA
398	Cambridge-Newton MA
397	Dover DE
396	Sioux Falls SD
395	Rapid City SD
394	Decatur AL
393	Buffalo-Niagara Falls NY
392	Boston MA
391	Lewiston-Auburn ME

† Change in performance ranking; Data as of 2017 Q3

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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