

Health of Housing Markets (HoHM) Report

From Nationwide Economics

2018 Q4
(Data as of 2018 Q3)

Housing outlook still mixed heading into 2019

- The national LIHHM* has a neutral rating again this quarter, indicative of a mixed outlook for the housing sector over the next year. Despite a strong labor market and positive demographics, demand for housing is slipping in response to rising mortgage rates, which is worsening housing affordability.
- Housing activity in many regional markets is also being pressured. More than half of MSAs now have a neutral or negative ranking — mainly due to the low inventory of homes on the market and the resulting rapid home price appreciation.
- The majority of the largest cities have a neutral outlook as market demand and supply remain imbalanced. Demand is being driven by job gains and household formations, but the supply of homes on the market remains quite low.
- Household growth has accelerated above the 15-year average in over 200 metro areas, a positive sign for continued housing demand. This suggests that sales activity should not decline sharply even as financing rates climb higher.

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

Housing Market Health Status: **Moderating**

National LIHHM: **Neutral**

102.2

The LIHHM score is neutral — neither a positive or negative reading.

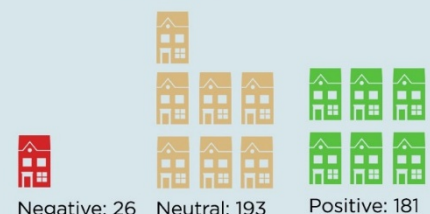
Markets: **Stable**

Job gains remain the strongest driver for the housing sector, spurring more demand from homebuyers. Affordability continues to weigh on the outlook due to previous rapid price appreciation and rising mortgage rates.



MSA Performance: **Neutral**

The largest share of local housing markets are now rated neutral.



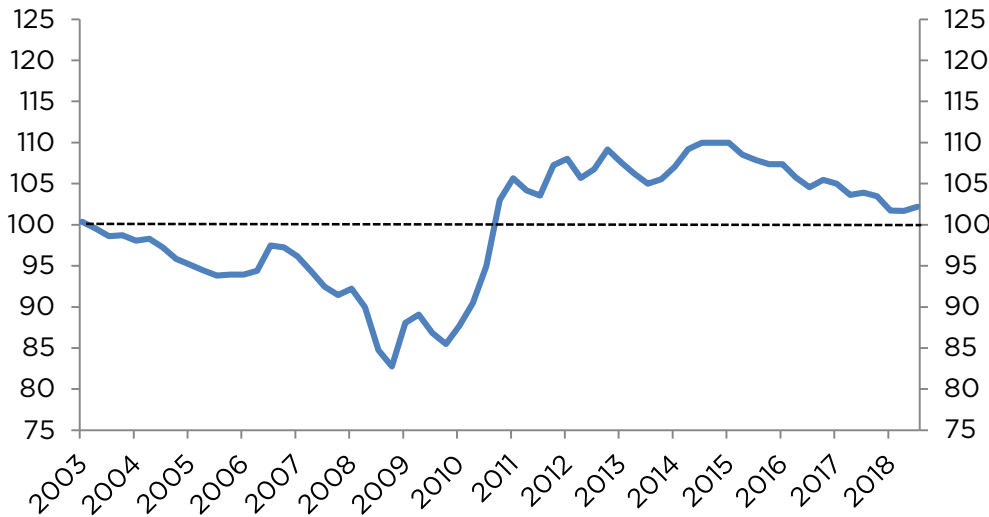


Housing sector outlook for 2019 mixed with the LIHHM in neutral territory

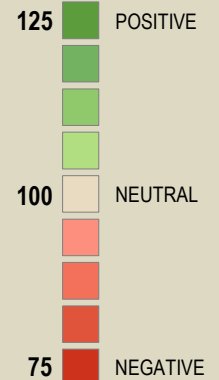
The national LIHHM was little changed at a level of 102.2 this quarter, the third consecutive neutral ranking. The demand metrics within the LIHHM remain positive with an ultra-low unemployment rate and continued solid job gains. Demographics are also supportive of housing demand as the millennial generation ages into their prime homebuying years. While house price growth has decelerated in recent quarters, poor housing affordability continues to weigh on the outlook for housing. Several years of rapid price appreciation and steadily rising mortgage rates have begun to reduce homebuyer appetite for purchases.

Regionally, nearly half of the LIHHM performance rankings show a neutral rating, suggestive of a mixed outlook for housing growth in 2019. As with the national LIHHM, demand factors are generally positive in most areas, but supply conditions remain tight while affordability is a growing concern with price appreciation still at an unsustainable pace in many local housing markets.

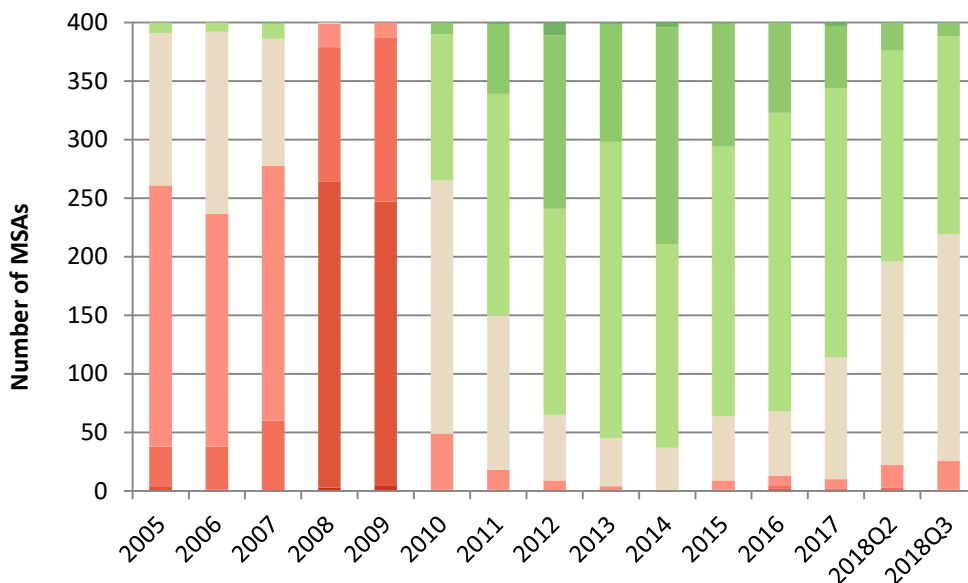
National LIHHM



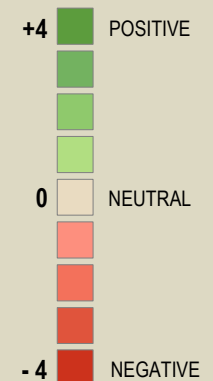
LIHHM Scores



MSA LIHHM Performance Rankings



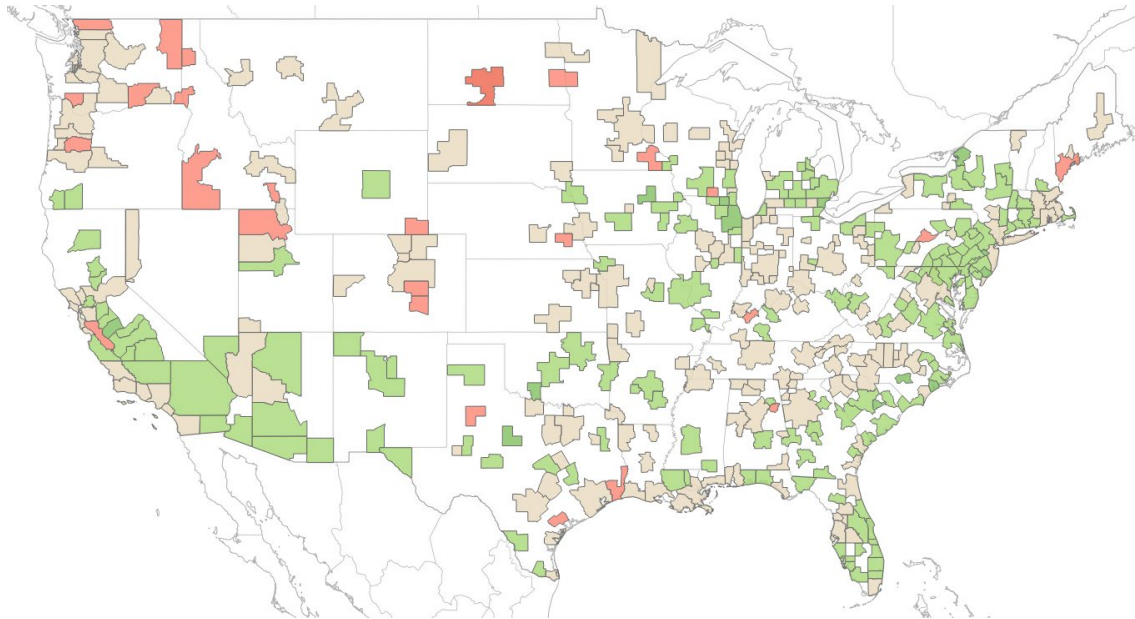
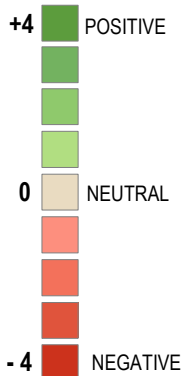
Performance Rankings



Less than half of the MSAs now have a positive rating

- The number of MSAs with a positive ranking continues to slip, down to 181 local markets this quarter. These metro areas show sustainable trends with little chance of a housing downturn in the near term.
- There are now 193 MSAs with a neutral ranking, the most since 2010. A neutral rating suggests a mixed outlook for housing activity in 2019 but is not indicative of a downturn yet.
- An additional 26 local housing markets have a negative ranking, mostly due to overheated price conditions that are negatively impacting housing affordability. All of these are only slightly negative, however, and suggest increasing concern about housing health in those markets over the next one to two years.

Performance Rankings[†]



Top 10 MSAs

| Rank | Metropolitan Statistical Area |
|------|---|
| 1 | Waterloo-Cedar Falls IA |
| 2 | Lawton OK |
| 3 | Chicago-Naperville-Arlington Heights IL |
| 4 | Fayetteville NC |
| 5 | Abilene TX |
| 6 | Sumter SC |
| 7 | Jacksonville NC |
| 8 | Watertown-Fort Drum NY |
| 9 | Atlantic City-Hammonton NJ |
| 10 | Merced CA |

Bottom 10 MSAs

| Rank | Metropolitan Statistical Area |
|------|-------------------------------|
| 400 | Bismarck ND |
| 399 | Kennewick-Richland WA |
| 398 | Victoria TX |
| 397 | Pocatello ID |
| 396 | Pueblo CO |
| 395 | Lewiston ID-WA |
| 394 | Fargo ND-MN |
| 393 | Ogden-Clearfield UT |
| 392 | Portland-South Portland ME |
| 391 | Albany OR |

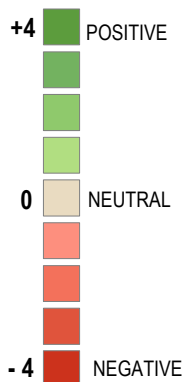
[†] Data as of 2018 Q3



None of the 40* largest MSAs have a negative LIHM performance ranking, while 27 are ranked as neutral. These lower scores are primarily the result of overly rapid house price gains. The remaining major U.S. housing markets show healthy trends with little chance of a meaningful downturn.

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

[†] Data as of 2018 Q3

* Largest 40 determined by number of households



Faster household formations a boost to demand in 2019

After years of below-average expansion of households, total formations at a national level have accelerated in recent quarters to move above the long-term trend. Solid job and income gains are putting potential homebuyers in much better financial shape for a purchase. Faster household growth is supporting further demand for both for owner-occupied and rental housing, at a time when the supply of homes on the market remains highly constrained.

Millennials are driving household growth with homeownership rates for ages 25 through 34 at the highest levels in years. This is evidence that there are more first-time homebuyers vying for entry-level homes across the country.

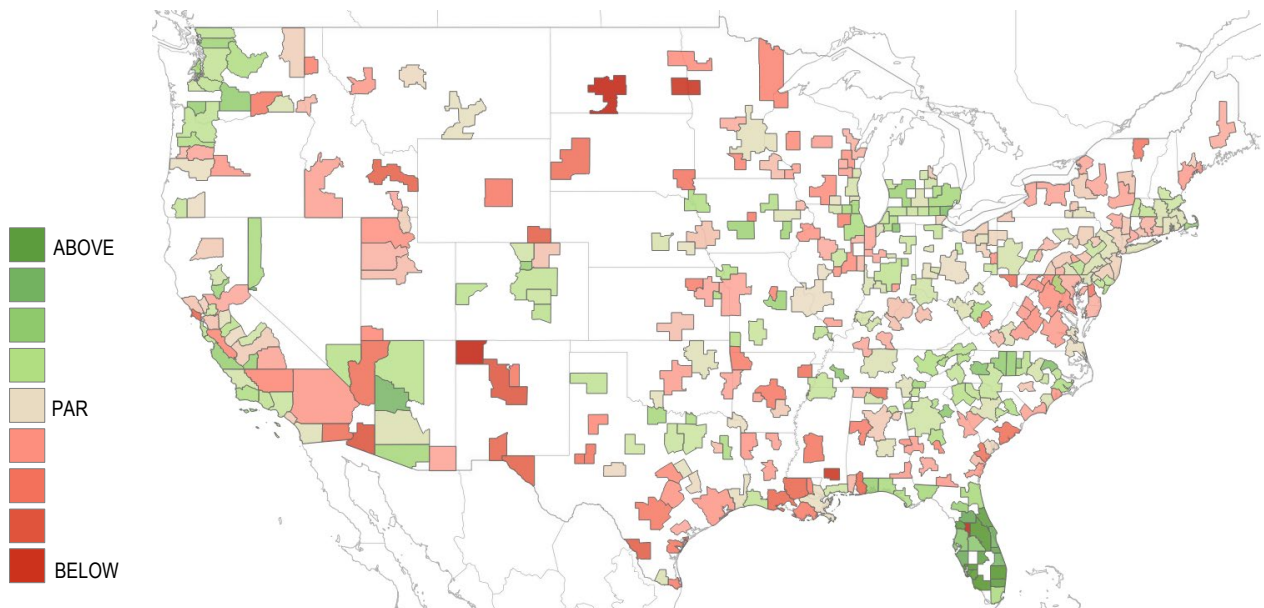
At a regional level, household growth has picked up too. Compared with the local 15-year average, more households have been formed over the past year in about 200 metro areas. Several MSAs in Florida are leading the country in household growth. Others areas above the local average include along the Pacific coast, Colorado, Arizona, and much of the Carolinas. Many of these areas are among the hottest housing markets in the country.

Despite a lull in home sales activity this year, the outlook for the housing sector in 2019 is steady. The pickup in household formations creates a solid basis for housing demand even as mortgage rates climb further. While historically low supply and higher financing rates will likely drag on sales a bit, buying should not drop off much from this year's pace. Home price gains are expected to decelerate to near the long-term trend.

MSAs with faster household growth

| Local Market | 4-quarter change |
|-------------------------------|------------------|
| Naples FL | 4.2% |
| Cape Coral-Ft. Myers FL | 4.0% |
| Orlando FL | 3.5% |
| Myrtle Beach SC | 3.0% |
| West Palm Beach-Boca Raton FL | 3.0% |
| Raleigh NC | 2.8% |
| Prescott AZ | 2.7% |
| Provo-Orem UT | 2.6% |
| Austin TX | 2.6% |
| Sarasota-Bradenton FL | 2.6% |
| Las Vegas NV | 2.5% |
| Des Moines IA | 2.2% |
| Charlotte NC | 2.2% |
| Phoenix AZ | 2.0% |
| Jacksonville FL | 2.0% |

Recent household growth versus 15-year average

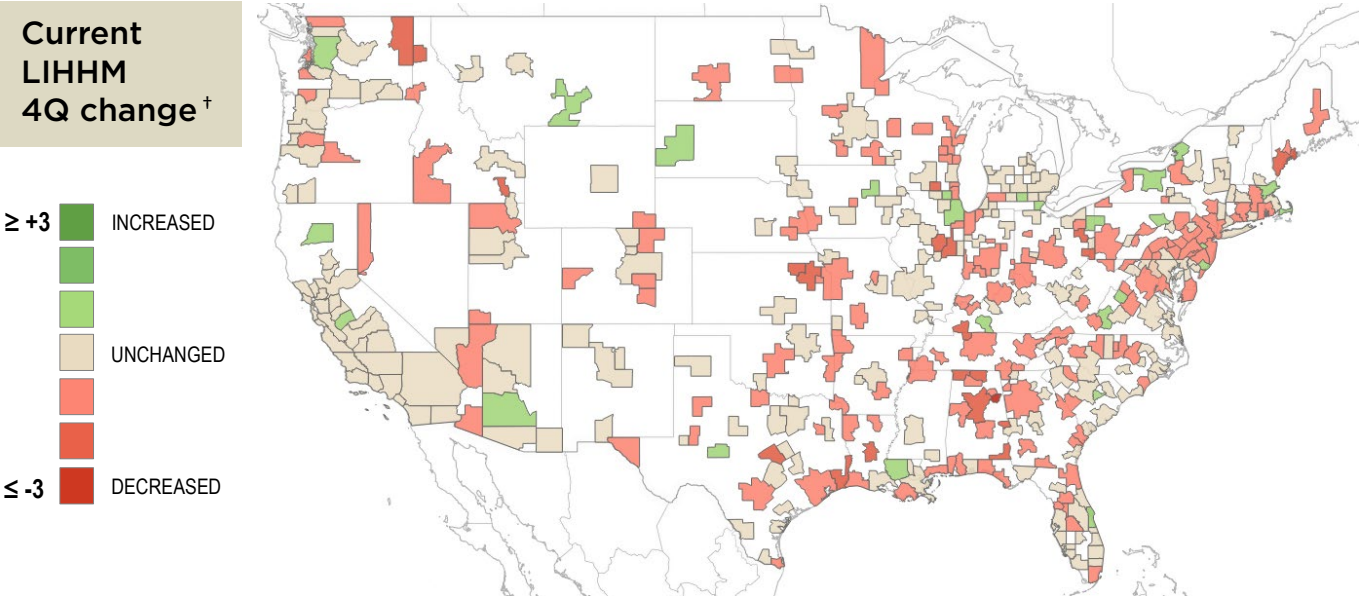


Source: Moody's Analytics

See more at blog.nationwide.com/housing

The rankings in the vast majority of MSAs fell or were unchanged over the past year

- 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.
- A little more than 40 percent of MSAs saw their rankings drop over the past year, although the majority of these pulled back by only one ranking. Twenty one local markets declined by two rankings or more, typically due to weakening affordability in response to rapid home price gains.
- About half of LIHHM rankings were unchanged over the past year — suggesting little change in the outlooks for these housing markets. Only 27 MSAs saw their rankings improve over the past year, nearly all climbing by one ranking.



Largest Increase

| Rank | Metropolitan Statistical Area |
|------|---|
| 1 | Anchorage AK |
| 2 | San Angelo TX |
| 3 | Williamsport PA |
| 4 | Rochester NY |
| 5 | Rapid City SD |
| 6 | Watertown-Fort Drum NY |
| 7 | Bowling Green KY |
| 8 | Seattle-Bellevue-Everett WA |
| 9 | Chicago-Naperville-Arlington Heights IL |
| 10 | Waterloo-Cedar Falls IA |

Largest Decrease

| Rank | Metropolitan Statistical Area |
|------|---------------------------------|
| 400 | Anniston-Oxford-Jacksonville AL |
| 399 | Alexandria LA |
| 398 | Topeka KS |
| 397 | Dothan AL |
| 396 | Pocatello ID |
| 395 | Portland-South Portland ME |
| 394 | Bloomington IL |
| 393 | Manhattan KS |
| 392 | Clarksville TN-KY |
| 391 | Killeen-Temple TX |

† Change in performance ranking; Data as of 2018 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.

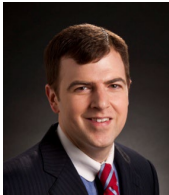
* MSA: Geographical region with high population density and close economic ties throughout the nearby area, capturing 85-90% of the U.S. population

Authored by Nationwide Economics



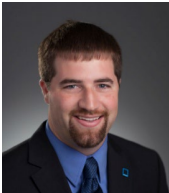
DAVID BERSON, PhD
Senior Vice President, Chief Economist

David holds a doctorate in Economics and a master's degree in Public Policy from the University of Michigan. Prior to Nationwide, David served as Chief Economist, Strategist and Head of Risk Analytics for The PMI Group, Inc., and Vice President and Chief Economist for Fannie Mae. David has also served as Chief Financial Economist at Wharton Econometrics and visiting scholar at the Federal Reserve Bank of Kansas City. His government experience has included roles with the President's Council of Economic Advisors, U.S. Treasury Department and the Office of the Special Trade Representative. He is a past President of the National Association for Business Economics.



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Bryan is a frequent author and knowledgeable source on economic topics, and has been featured in The Wall Street Journal and New York Times. Bryan holds degrees in Economics and Political Science from Miami University and has earned the Chartered Financial Analyst designation. He currently serves as Chairman of the Ohio Council on Economic Education and is a member of the Ohio Governor's Council of Economic Advisors, the National Association for Business Economics, and the Bloomberg monthly economic forecasting panel.



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Ben authors periodic economic analyses from the Nationwide Economics team, as well as commentary on key economic topics. Ben is also responsible for understanding and analyzing the enterprise business drivers to assist the strategic planning process. He holds a Master of Science in Economics from the Ohio State University, specializing in applied economic analysis, and a BSBA from the Fisher College of Business at the Ohio State University, with a focus on economics and international business.

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