LinkedIn Workforce Report | United States | December 2017

Over 143 million workers in the U.S. have LinkedIn profiles; over 20,000 companies in the U.S. use LinkedIn to recruit; over 3 million jobs are posted on LinkedIn in the U.S. every month; and members can add over 50,000 skills to their profiles to showcase their professional brands. This gives us unique insights into U.S. workforce trends.

The LinkedIn Workforce Report is a monthly report on employment trends in the U.S. workforce, and this month's report, a retrospective on 2017, looks at our latest data through November 2017. It's divided into two sections: a National section that provides insights into hiring, skills gaps, and migration trends across the country, and a City section that provides insights into localized employment trends in 20 of the largest U.S. metro areas: Atlanta, Austin, Boston, Chicago, Cleveland-Akron, Dallas-Ft. Worth, Denver, Detroit, Houston, Los Angeles, Miami-Ft. Lauderdale, Minneapolis-St. Paul, Nashville, New York City, Philadelphia, Phoenix, San Francisco Bay Area, Seattle, St. Louis, and Washington, D.C.

Our vision is to create economic opportunity for every worker in the global workforce. Whether you're a worker, an employer, a new grad, or a policymaker, we hope you'll use insights from our report to better understand and navigate the dynamics of today's labor market.

Key Insights | 2017 Year in Review Edition

- **U.S. hiring was 10.4% higher in 2017 than in 2016 –** Since skyrocketing this past May, hiring in 2017 has stayed consistently strong, without great variation month over month. Year-to-date, U.S. hiring has been 10.4% higher in 2017 than in 2016. In November, hiring across the U.S. was 26.0% higher than in November 2016. Seasonally-adjusted hiring (hiring that excludes seasonal hiring variations) was 2.2% lower in November than in October this year. The industries that experienced the biggest year-over-year increases in hiring in November were financial services and insurance (26.8% higher); oil and energy (25.4% higher); and manufacturing and industrial (25.0% higher).

- **In 2017, skills gaps widened in Salt Lake City, Raleigh-Durham, and Philadelphia –** Over the past year, skills gaps—the gaps between the skills workers have and the skills employers need—have widened in Salt Lake City, Raleigh-Durham, and Philadelphia. Skills shortages have intensified the most in Salt Lake City, San Antonio, and West Palm Beach. Skills abundances have intensified the most in Raleigh-Durham, Columbus, and Boston. And the cities where skills

gaps narrowed the most over the past year are Oklahoma City, Greenville, and Jacksonville. Read on for the skills in shortage and skills in excess in each of these cities.

- **Yes, Americans are still moving –** Seattle, Denver, and Austin consistently topped our list of cities gaining the most people in 2017. Denver climbed from #3 in January to #1 in November, representing a 5% increase in arrivals and displacing Seattle from the top spot. We also saw Las Vegas move from #9 to #5 over the course of the year, representing a 37% increase in arrivals. Of cities losing the most workers, Hartford continues to see a decline: from #2 in cities losing the most people in January to #1 in November, Hartford's outflows have increased 5% since the start of the year. Other cities which have lost workers throughout 2017 seem to be improving their retention: Providence, which fell from #1 in net outflows in January to #2 in November, has seen a 19% decline in outflows, and Baltimore, which fell from #7 to #8 in the same period, has seen a 27% decline in outflows.

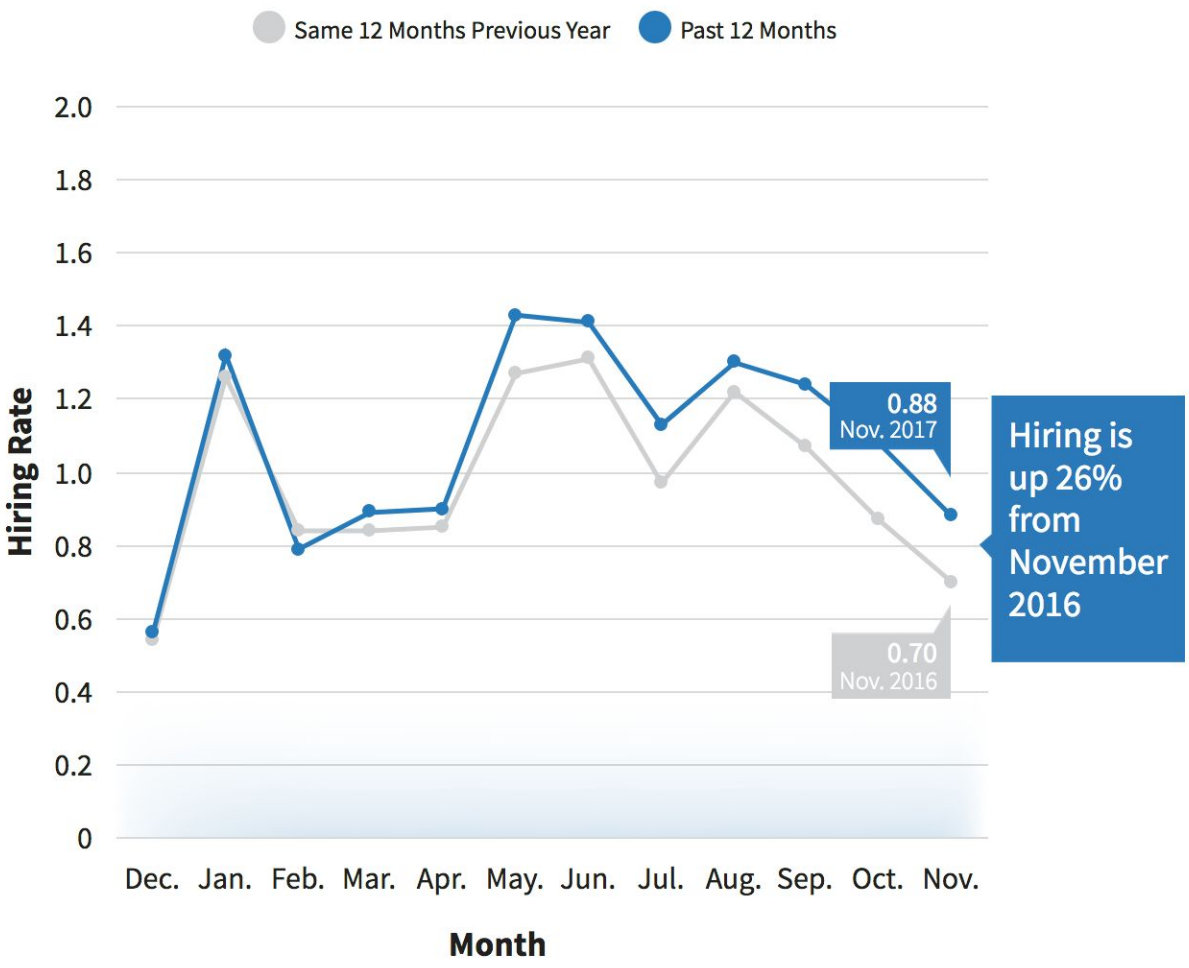
U.S. hiring was 10.4% higher in 2017 than in 2016

Since skyrocketing this past May, hiring in 2017 has stayed consistently strong, without great variation month over month. Year-to-date, U.S. hiring has, on average, been 10.4% higher in 2017 than in 2016.

In November, hiring across the U.S. was 26.0% higher than in November 2016.

December 2017

Hiring on LinkedIn in the United States



"Hiring Rate" is the percentage of LinkedIn members who changed the name of their new employer on their profile the same month they began their new job, divided by the total number of LinkedIn members in the U.S. This number is indexed to the average month in 2015-2016 (for example, an index of 1.05 indicates a hiring rate that is 5% higher than the average month in 2015-2016). Hiring in Nov. 2017 is up 26% YoY (non-seasonally adjusted) and down 2.2% MoM (seasonally adjusted).

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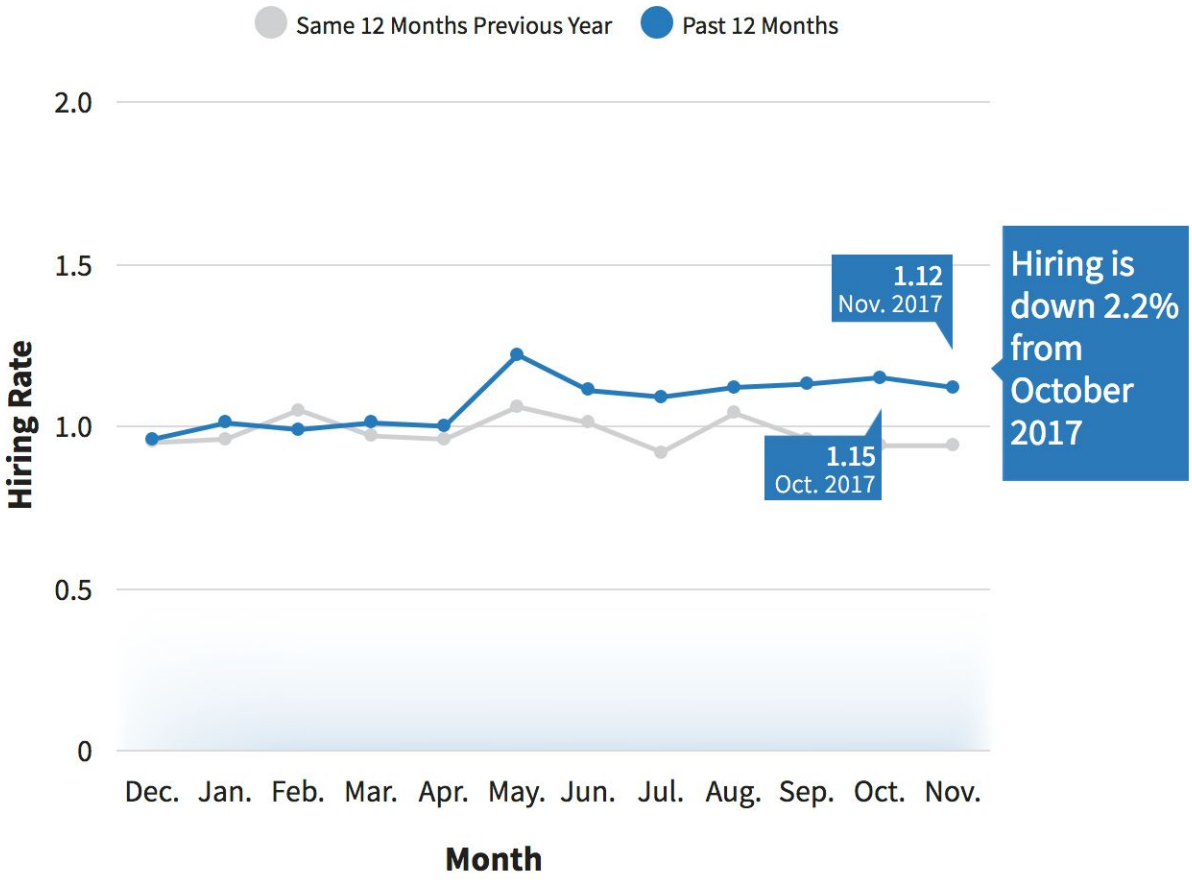
Seasonally-adjusted hiring (hiring that excludes seasonal hiring variations—like companies hiring less in December due to the holiday season) was 2.2% lower in November than in October this year.

December 2017

Seasonally Adjusted Hiring on LinkedIn in the United States

Adjusted for seasonal variations, like the spike in hiring that occurs every summer due to seasonal work and student internships. Removing seasonal variations allows for easier comparison between different months.



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LinkedIn

Industry Hiring

Hiring in 2017 was up, on average, for all industries we track, but the gains were not distributed equally. Oil and energy showed the most overall growth (30.0% higher), followed by manufacturing and industrial (15.7% higher), and aerospace, automotive, and transportation (13.7% higher).

The industries with the least growth in hiring in 2017 were media and communications (2.2% higher), healthcare and pharmaceuticals (4.9% higher), and telecommunications (6.7% higher).

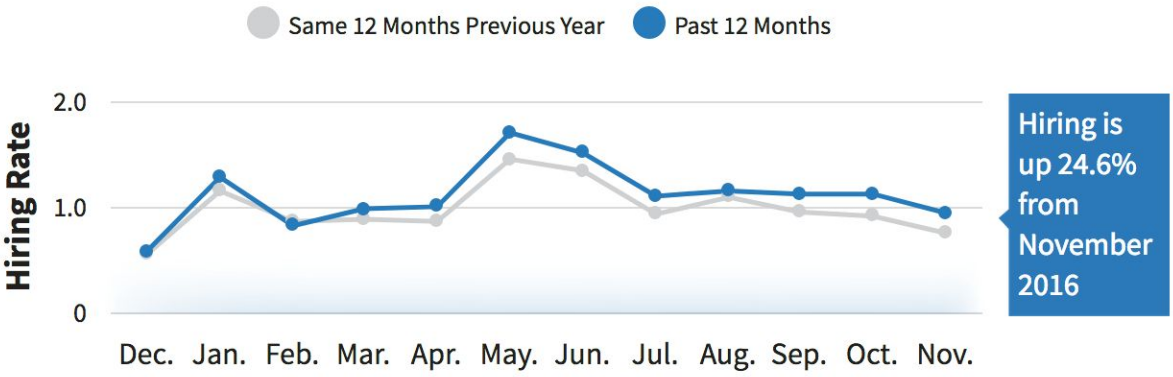
The industries that experienced the biggest year-over-year increase in hiring in November 2017 alone were financial services and insurance (26.8% higher); oil and energy (25.4% higher); and manufacturing and industrial (25.0% higher).

December 2017

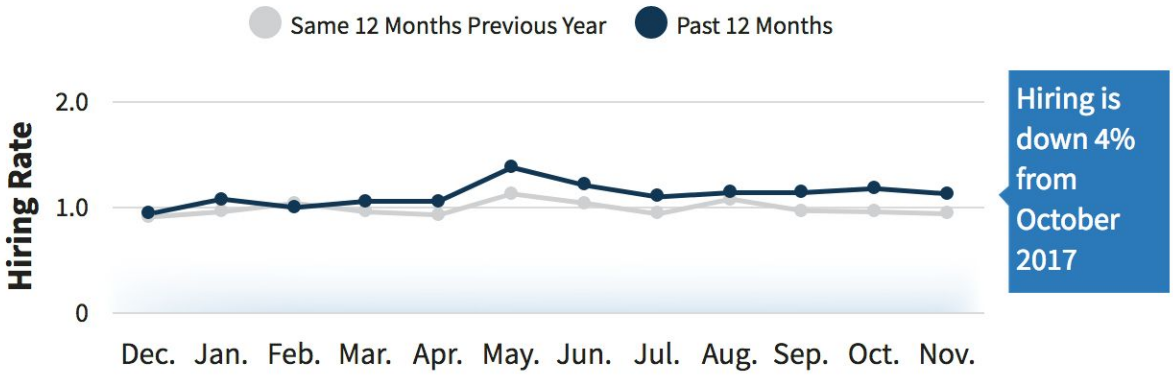
Hiring on LinkedIn by Industry

Aerospace / Automotive / Transportation

Hiring Rate



Seasonally Adjusted Hiring Rate



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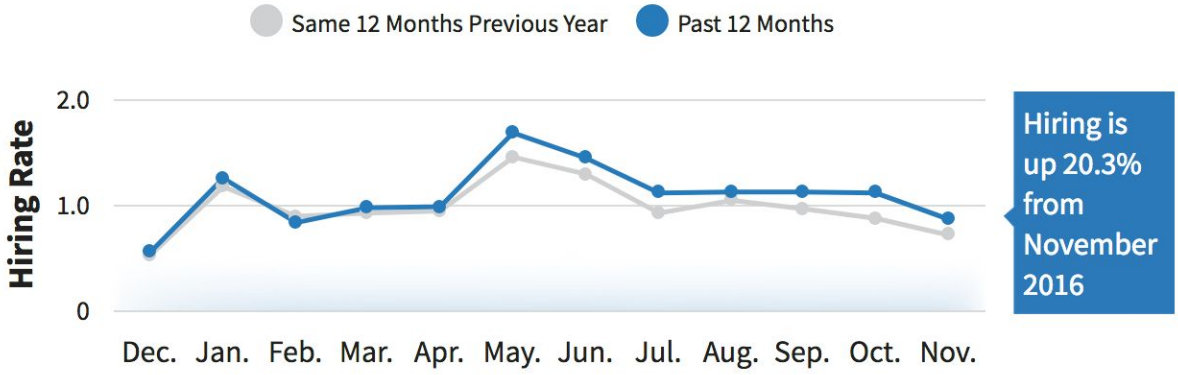
December 2017

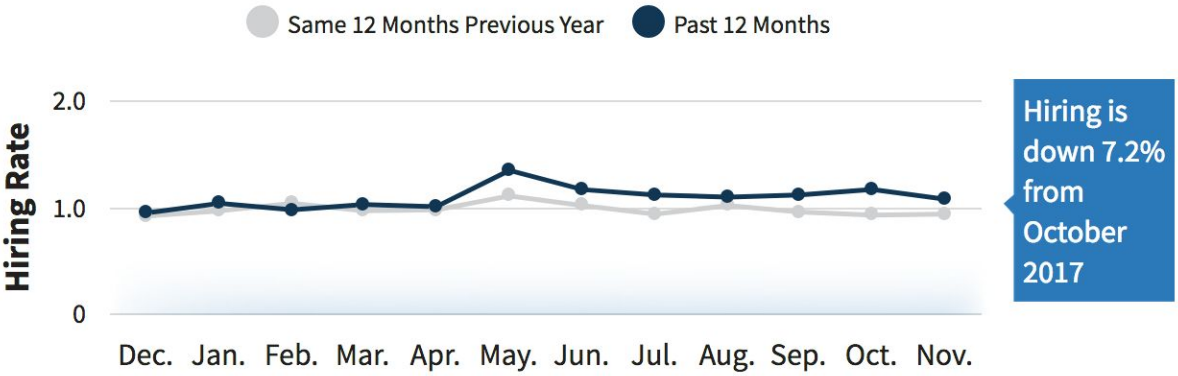
Hiring on LinkedIn by Industry

Architecture / Engineering

Hiring Rate



Seasonally Adjusted Hiring Rate



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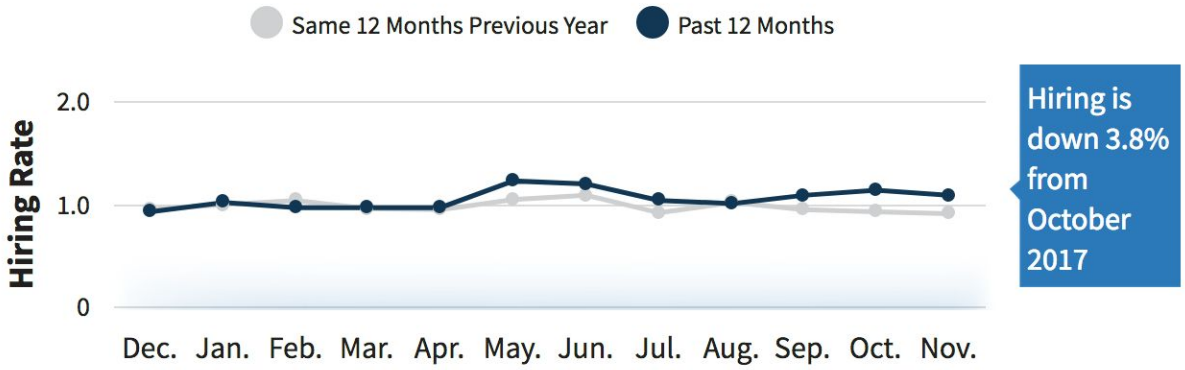
December 2017

Hiring on LinkedIn by Industry

Financial Services / Insurance

Hiring Rate

Seasonally Adjusted Hiring Rate



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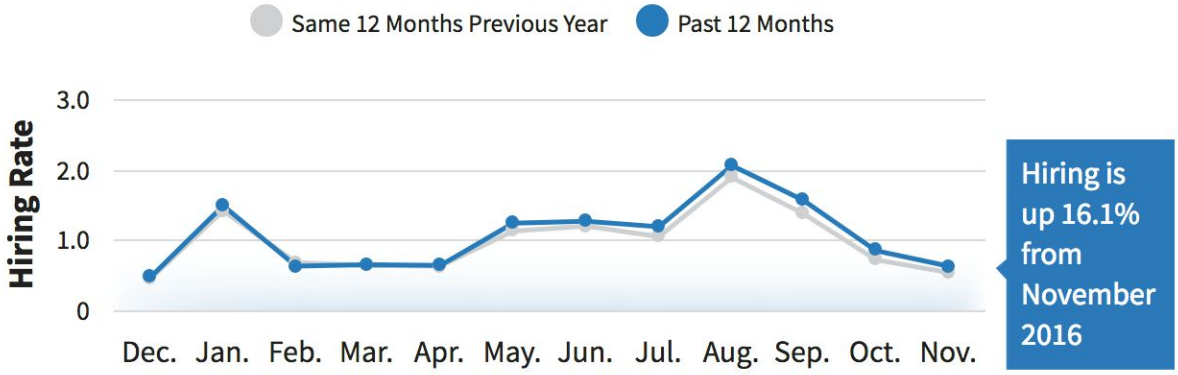
December 2017

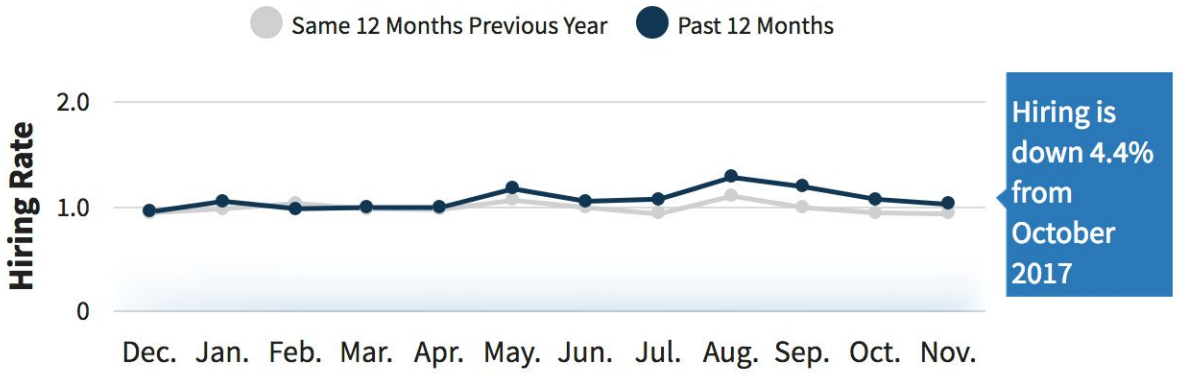
Hiring on LinkedIn by Industry

Government / Education / Non-profit

Hiring Rate



Seasonally Adjusted Hiring Rate



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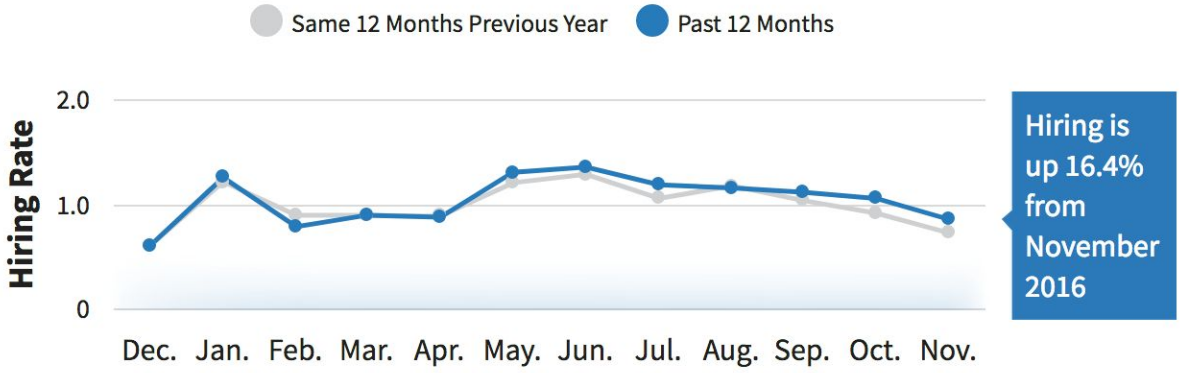
December 2017

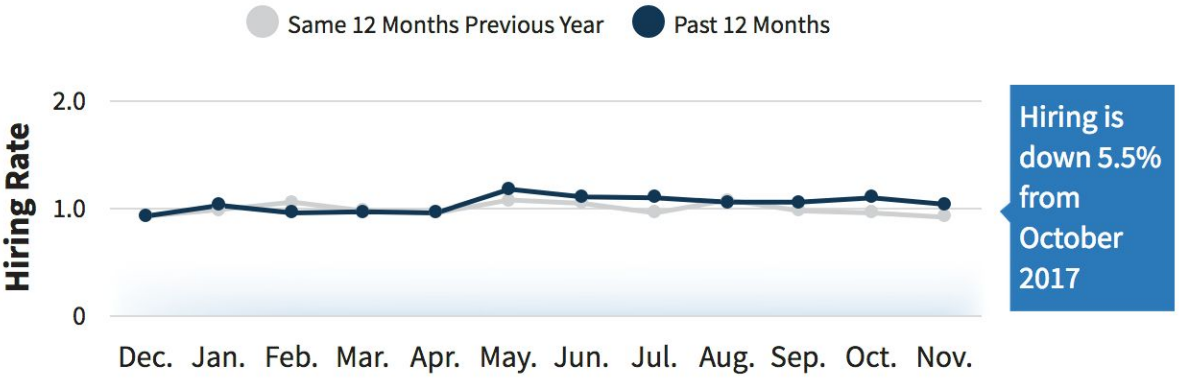
Hiring on LinkedIn by Industry

Healthcare / Pharmaceutical

Hiring Rate



Seasonally Adjusted Hiring Rate



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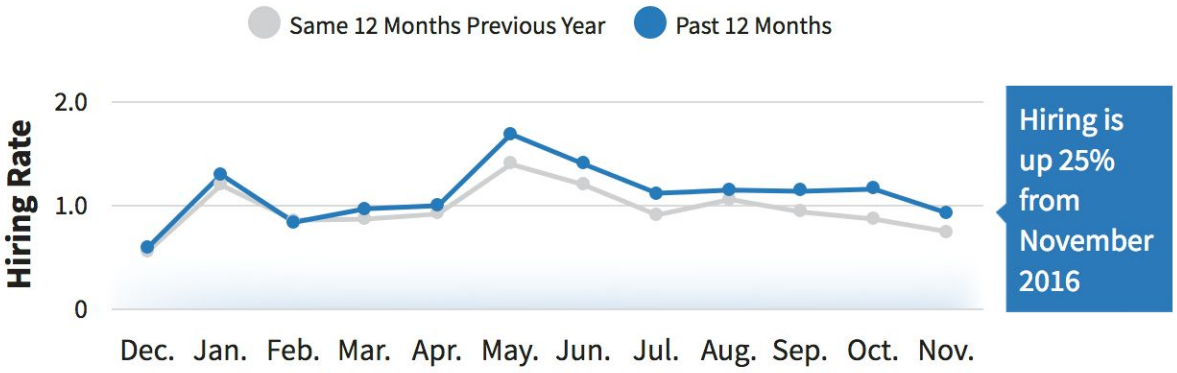
December 2017

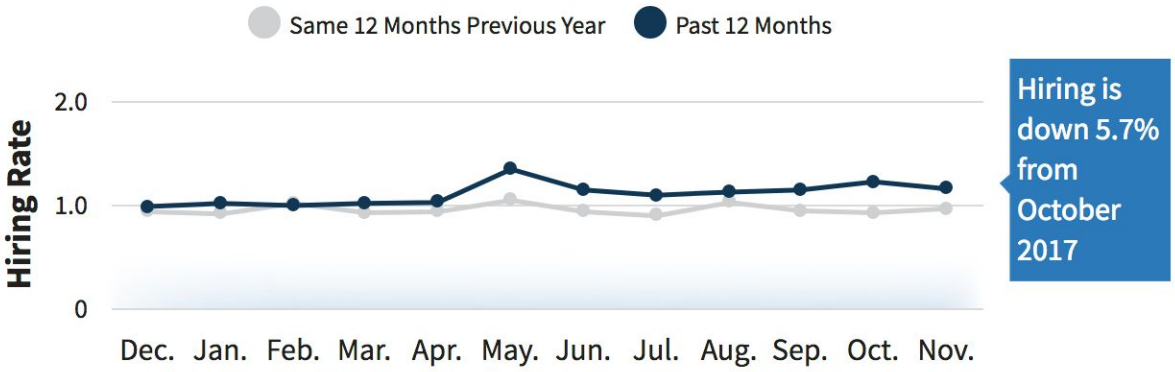
Hiring on LinkedIn by Industry

Manufacturing / Industrial

Hiring Rate



Seasonally Adjusted Hiring Rate



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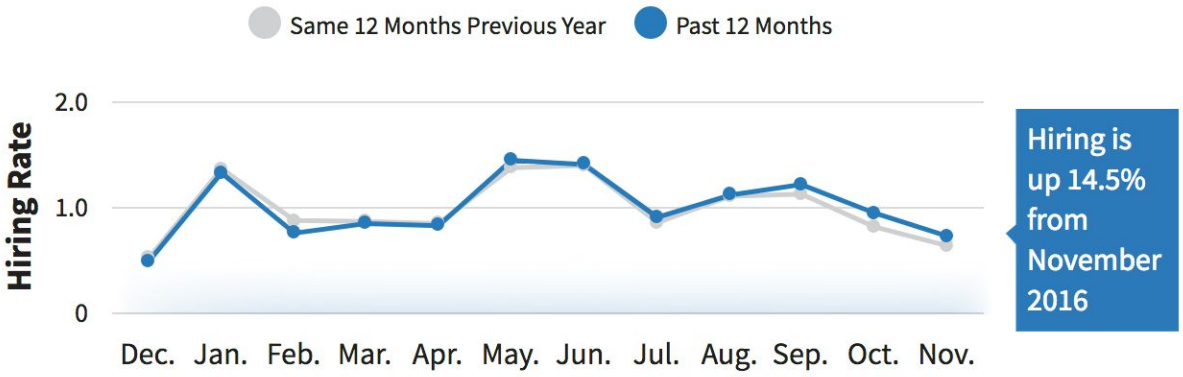
December 2017

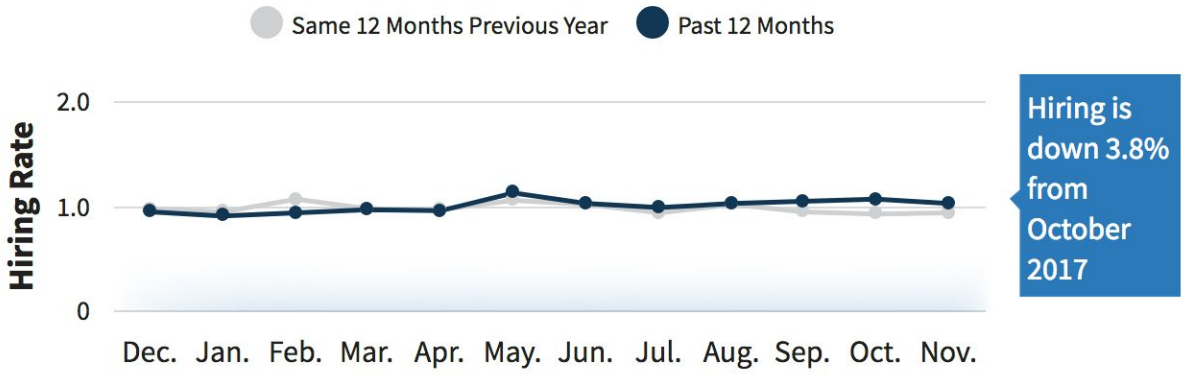
Hiring on LinkedIn by Industry

Media / Entertainment

Hiring Rate



Seasonally Adjusted Hiring Rate



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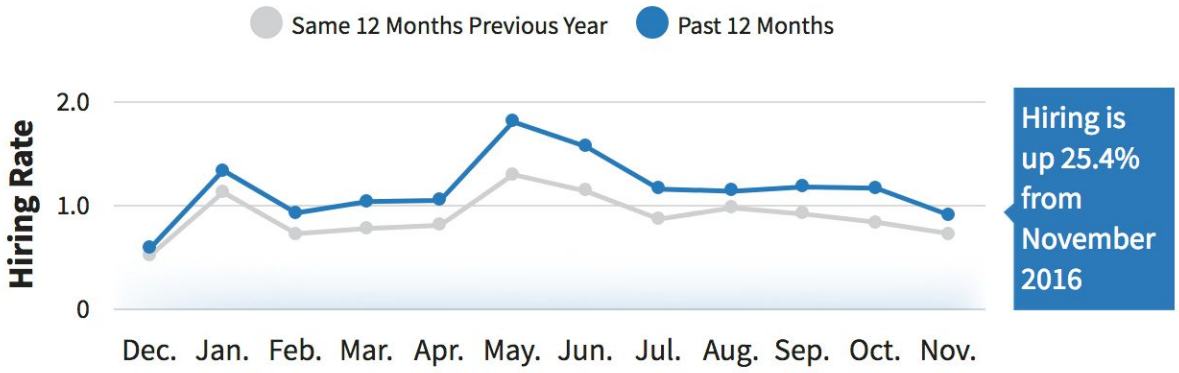
December 2017

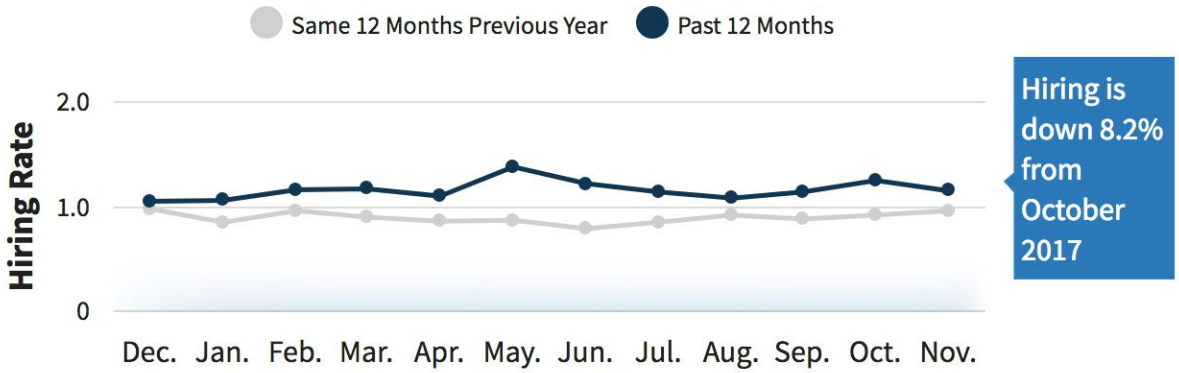
Hiring on LinkedIn by Industry

Oil / Energy

Hiring Rate



Seasonally Adjusted Hiring Rate



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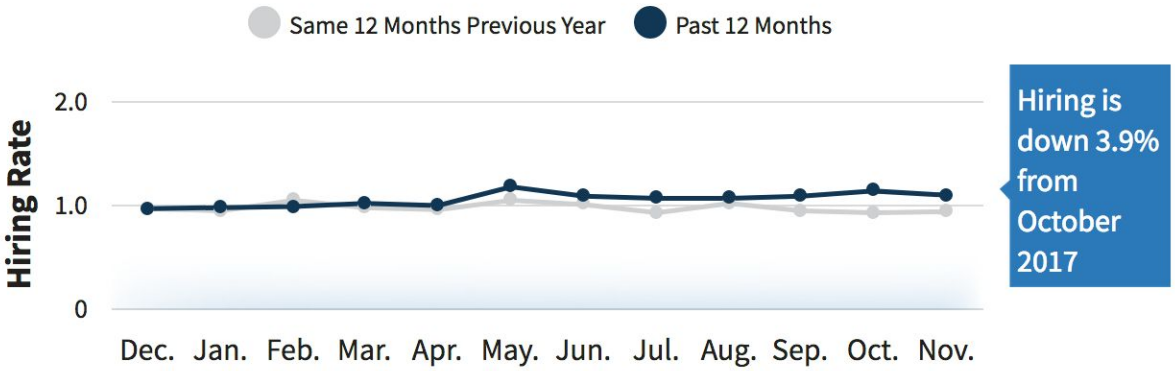
December 2017

Hiring on LinkedIn by Industry

Professional Services

Hiring Rate

Seasonally Adjusted Hiring Rate



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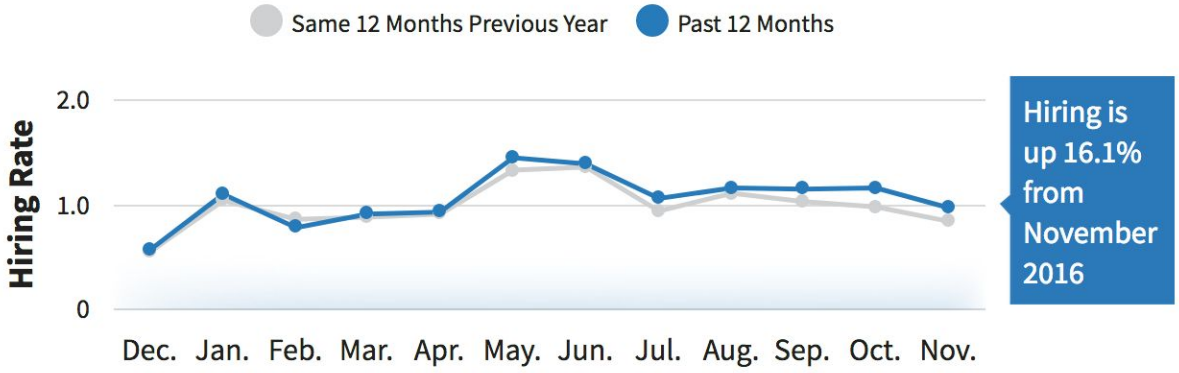
December 2017

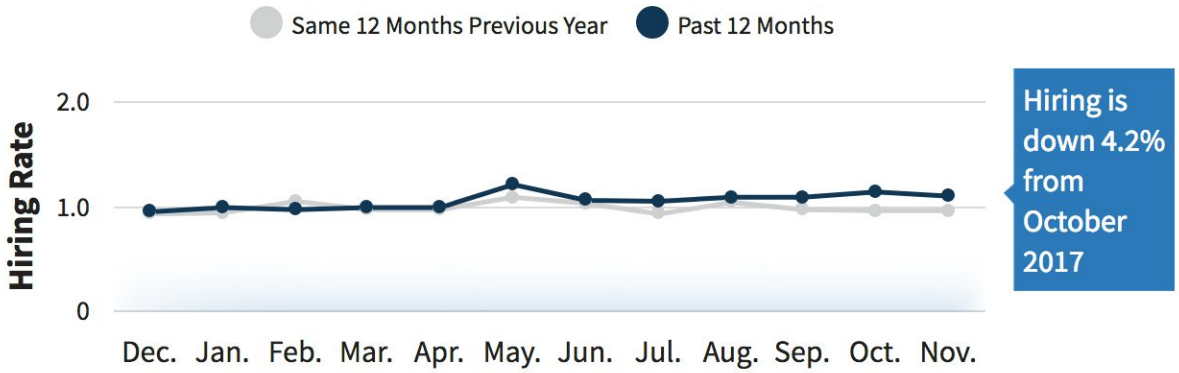
Hiring on LinkedIn by Industry

Retail / Consumer Products

Hiring Rate



Seasonally Adjusted Hiring Rate



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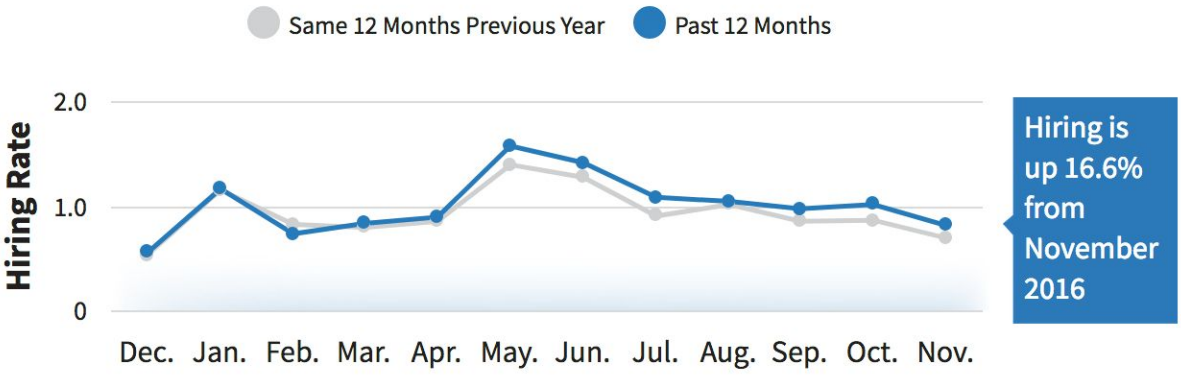
December 2017

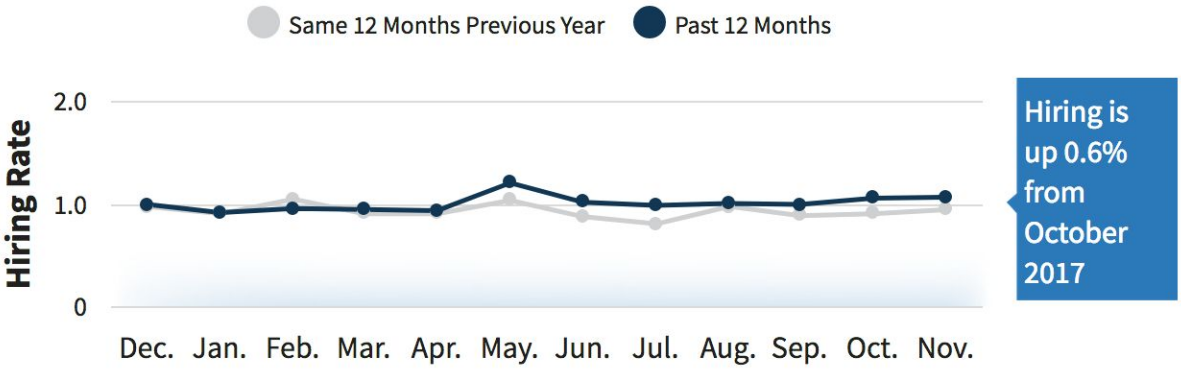
Hiring on LinkedIn by Industry

Technology - Hardware

Hiring Rate



Seasonally Adjusted Hiring Rate



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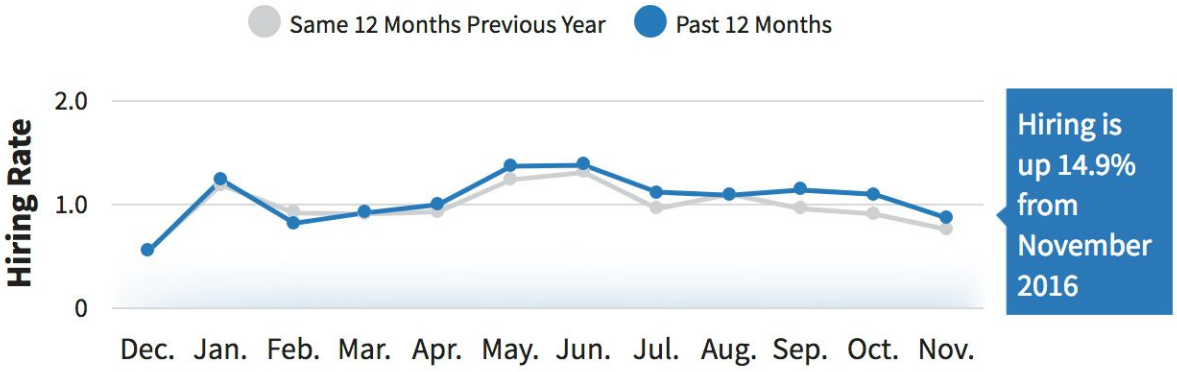
December 2017

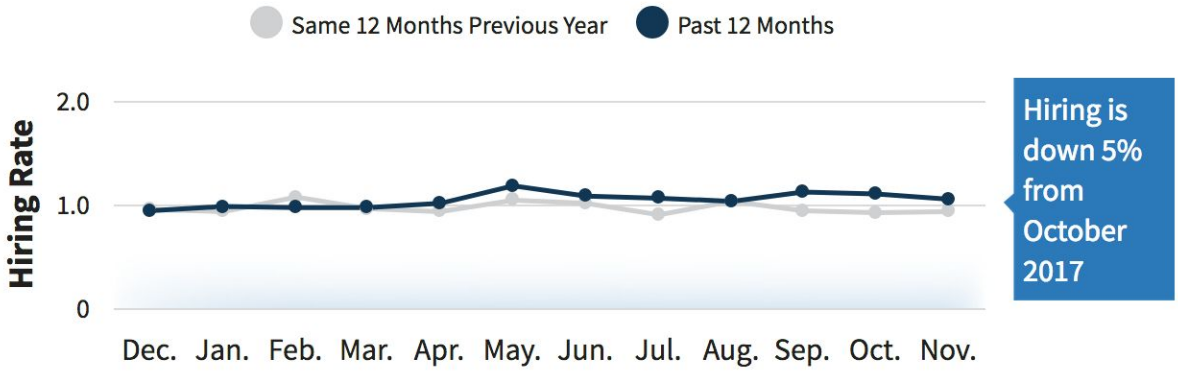
Hiring on LinkedIn by Industry

Technology - Software

Hiring Rate



Seasonally Adjusted Hiring Rate



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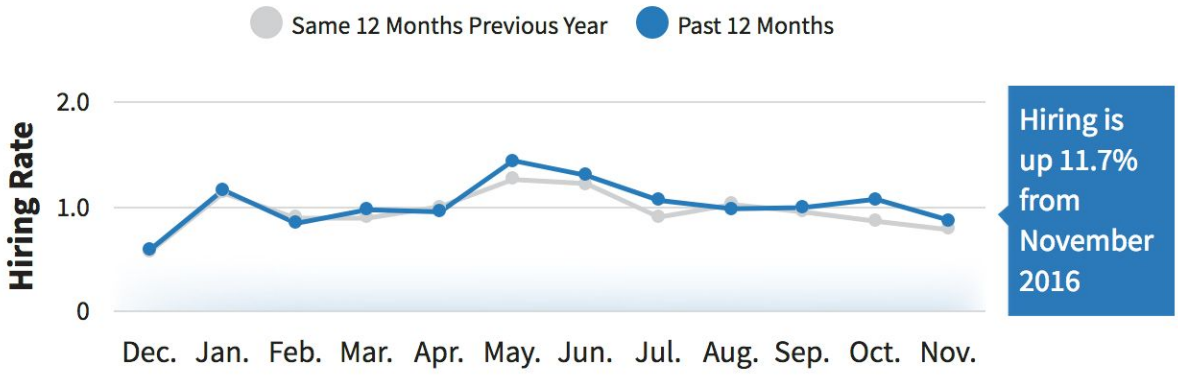
December 2017

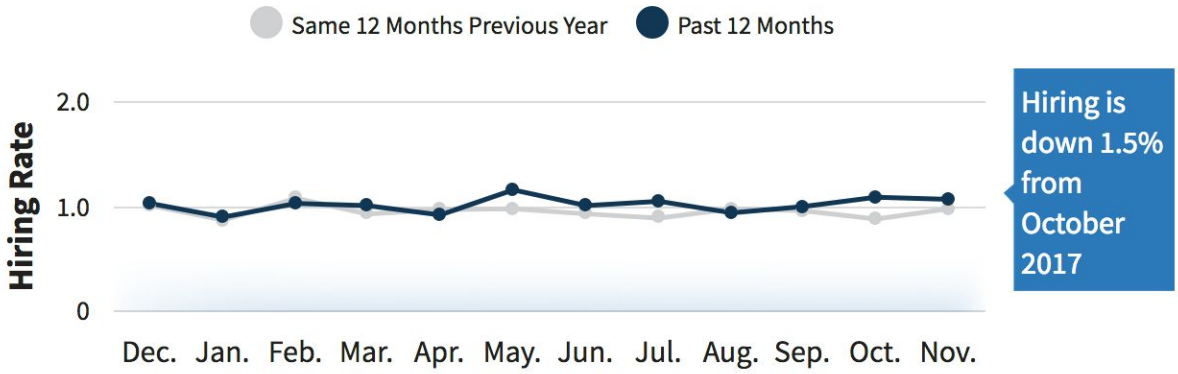
Hiring on LinkedIn by Industry

Telecommunications

Hiring Rate



Seasonally Adjusted Hiring Rate



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In 2017, skills gaps widened in Salt Lake City, Raleigh-Durham, and Philadelphia

A skills gap is a misalignment between the skills people have (supply) and the skills employers need (demand). Skills gaps are fundamentally local, and specific to the supply and demand of individual skills. There is an abundance, or surplus, of skills when supply exceeds demand. There is a scarcity, or shortage, of skills when demand exceeds supply. A city with a scarcity of skills needs more people with certain skills, while a city with an abundance of skills has too many people with certain skills.

Over the past year, skills gaps have widened in Salt Lake City, Raleigh-Durham, and Philadelphia. Salt Lake City's skills gap is driven almost entirely by scarcity as its labor market tightens; its biggest relative skills shortages, in descending order, are in electricity power generation and management; SAP enterprise resource planning systems; food and beverage; business intelligence; management consulting; and business strategy & analytics.

Skills shortages have intensified the most in Salt Lake City, San Antonio, and West Palm Beach over the past year, meaning skills in scarcity have only become more scarce in these cities. In San Antonio, for instance, the most scarce skills are lean manufacturing and quality management; database and direct marketing; business development and relationship management; marketing; and brand strategy and management.

In contrast, skills abundances have intensified the most in Raleigh-Durham, Columbus, and Boston over the past year, meaning these cities have growing excesses of certain abundant skills. Raleigh-Durham has relative abundances of people skilled in computer network and network administration; pharmaceuticals; clinical trials; statistical analysis and data mining; and IT infrastructure and system management. Columbus has relative abundances of IT infrastructure and system management; general finance; logistics and supply chain management; HR recruiting; and HR.

On the positive side, the cities where skills gaps narrowed the most over the past year are Oklahoma City, Greenville, and Jacksonville. That means these cities have improved alignment between the skills local employers are hiring for, and the skills held by their local workforces. Skills gaps can be narrowed by people moving to cities where their skills are in demand; by businesses opening up shop in cities where there's an abundance of the skills they need; by training people to learn the skills that are in demand from employers; and by employers offering higher pay for in-demand skills. In order to narrow skills gaps, cities should seek to understand the dynamics of their own labor markets and create policies to align education and training with employer needs.

The cities with the largest skills gaps overall are still San Francisco, Washington, D.C., and Austin. Each of these cities has a scarcity-driven skills gap, which means there is a high unfilled demand for workers with certain skillsets such as healthcare management, or education and teaching. To see which other skills are in scarcity, check out the San Francisco, Washington, D.C., and Austin City Reports.

December 2017

Cities with the Largest Skills Gaps

1 San Francisco Bay Area, CA
2 Washington, D.C.
3 Austin, TX
4 New York City, NY
5 Seattle, WA
6 Los Angeles, CA
7 Houston, TX
8 Miami-Ft. Lauderdale, FL
9 Raleigh-Durham, NC
10 Boston, MA

A skills gap is a mismatch between the skills employers need (demand) and the skills workers have (supply). We measure demand as the frequency with which members in a city with a certain skill are hired, and supply as the number of members in a city who have listed a certain skill on their profiles. To develop the list of cities with the largest skills gaps we calculated 50 of the largest U.S. cities' (in terms of LI membership) total skills gaps, and then compared them relative to each other.

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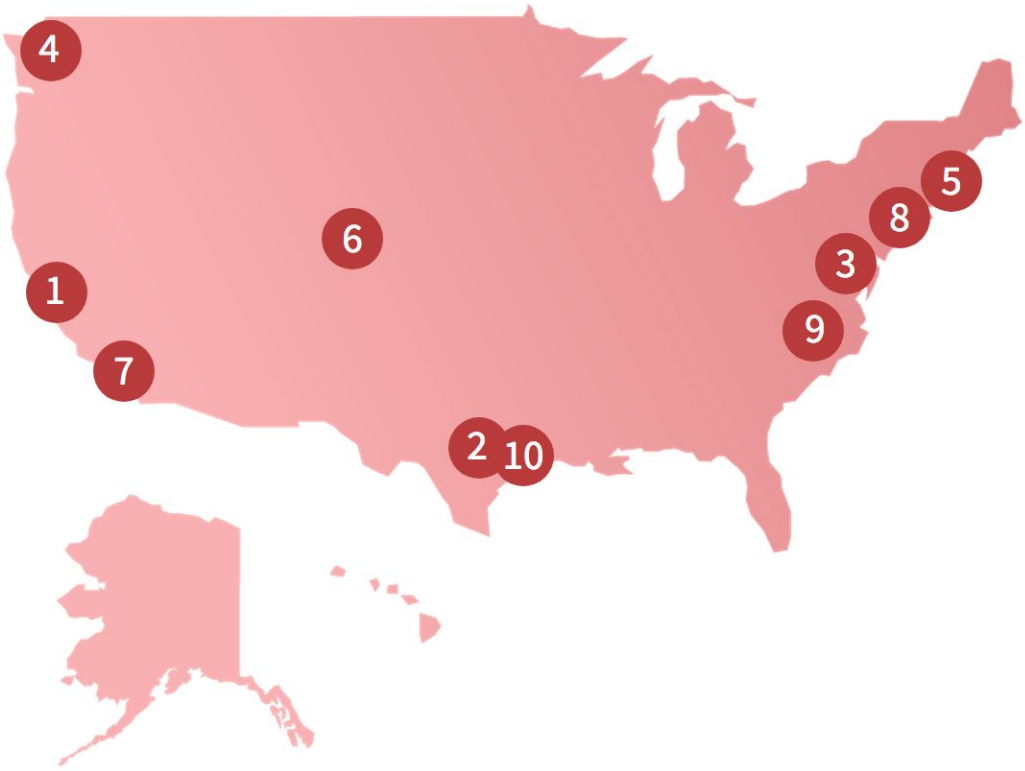
The San Francisco Bay Area, Austin, and Washington, D.C. continue to have the greatest scarcity of skills. For details on which skills are in high demand, check out their City Reports.

December 2017

Cities with the Largest Scarcity of Skills

1 San Francisco Bay Area, CA
2 Austin, TX
3 Washington, D.C.
4 Seattle, WA
5 Boston, MA
6 Denver, CO
7 Los Angeles, CA
8 New York City, NY
9 Raleigh-Durham, NC
10 Houston, TX



"Scarcity" is when employer demand for a certain skill exceeds worker supply of that skill. To develop the list of cities with the largest scarcity of skills we calculated 50 of the largest U.S. cities' (in terms of LI membership) total skills gaps, determined what percentage of their skills gaps are caused by a scarcity of skills, and then compared each city's skills scarcity relative to each other.

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The cities with the greatest abundance of skills are West Palm Beach, Miami-Ft. Lauderdale, and Hartford.

December 2017

Cities with the Largest Abundance of Skills

1. West Palm Beach, FL
2. Miami-Ft. Lauderdale, FL
3. Hartford, CT
4. Houston, TX
5. Cleveland-Akron, OH
6. Philadelphia, PA
7. San Francisco Bay Area, CA
8. Orange County, CA
9. New York City, NY
10. Washington, D.C.

"Abundance" is when worker supply of a certain skill exceeds employer demand for that skill. To develop the list of cities with the largest abundance of skills we calculated 50 of the largest U.S. cities' (in terms of LI membership) total skills gaps, determined what percentage of their skills gaps are caused by an abundance of skills, and then compared each city's skills abundance relative to each other.

LinkedIn

Check out the City Reports for Atlanta, Austin, Boston, Chicago, Cleveland-Akron, Dallas-Ft. Worth, Denver, Detroit, Houston, Los Angeles, Miami-Ft. Lauderdale, Minneapolis-St. Paul, Nashville, New York City, Philadelphia, Phoenix, San Francisco Bay Area, Seattle, St. Louis, and Washington, D.C. to see which skills are most scarce in those cities, and which jobs are open.

Yes, Americans are still moving

Seattle, Denver, and Austin consistently topped our list of cities gaining the most people in 2017. Denver climbed from #3 at the beginning of the year to #1 in November, representing a 5% increase in arrivals. For every 10,000 LinkedIn members in Denver, 64.8 arrived in the last 12 months.

We also saw Las Vegas move from #9 to #5 in the same timeframe, representing a 37% increase in arrivals. For every 10,000 LinkedIn members in Las Vegas, 47.2 arrived in the last 12 months. Interested in moving to Las Vegas? The top skills in demand locally are HR recruiting; education and teaching; software engineering management; HR; and logistics and supply chain management.

December 2017

Cities that Gained the Most Workers

Population Gain per 10,000 Members

We define migration as a member changing their location on their LinkedIn profile. To develop the list of cities that gained the most workers we analyzed migration of LinkedIn members in and out of 50 of the largest U.S. cities (in terms of LI membership) for the past 12 months. So for every 10,000 LinkedIn members in Denver, 65 arrived in the past 12 months.

Linked in

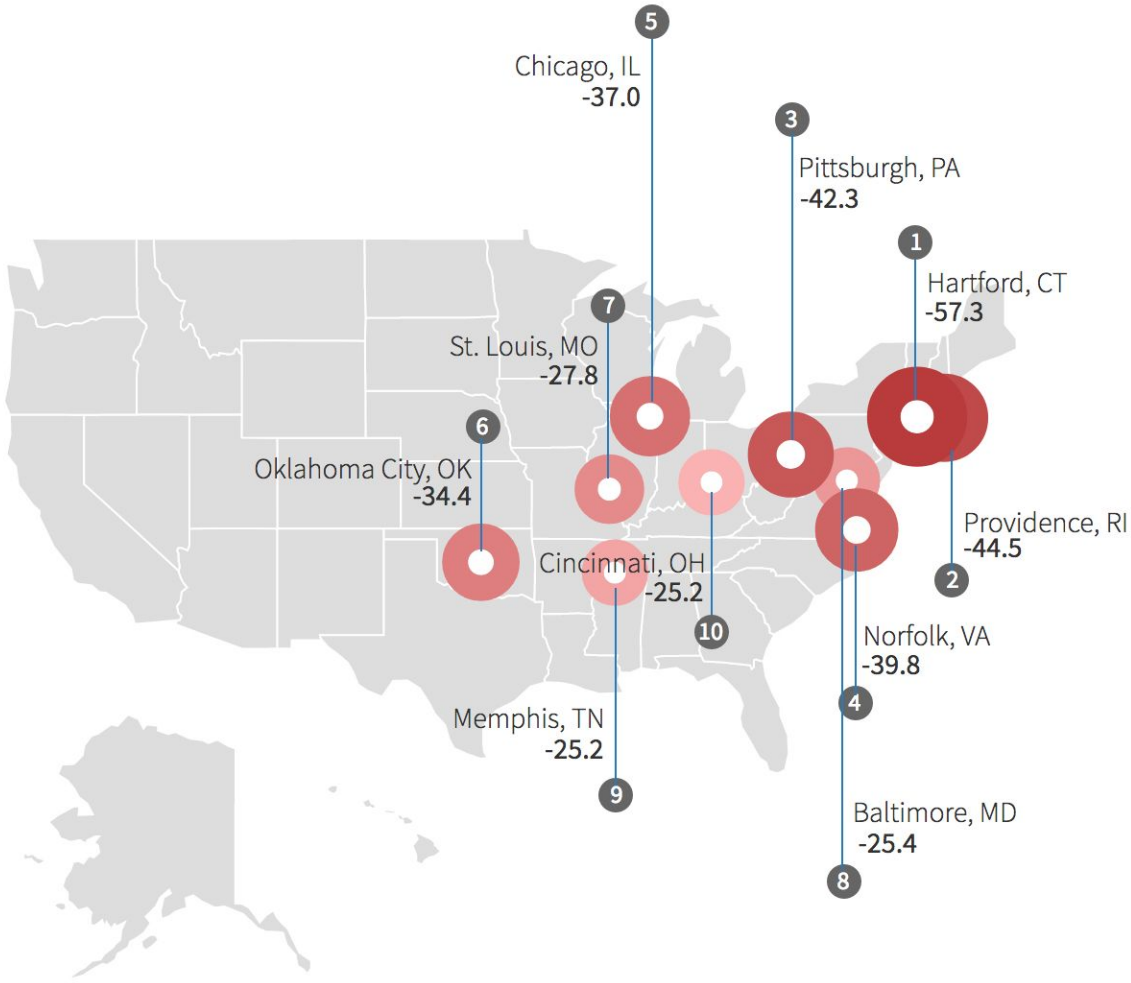
Of cities losing the most workers, Hartford continues to see a decline: from #2 in January to #1 in November, Hartford's outflows have increased 5% since the start of the year. For every 10,000 LinkedIn members in Hartford, 57.3 left the city in the last 12 months.

Other cities which have lost workers throughout 2017 seem to be improving their retention: Providence, which fell from #1 in net outflows in January to #2 in November, has seen a 19% decline in outflows, and Baltimore, which fell from #7 to #8 in the same period, has seen a 27% decline in outflows.

December 2017

Cities that Lost the Most Workers

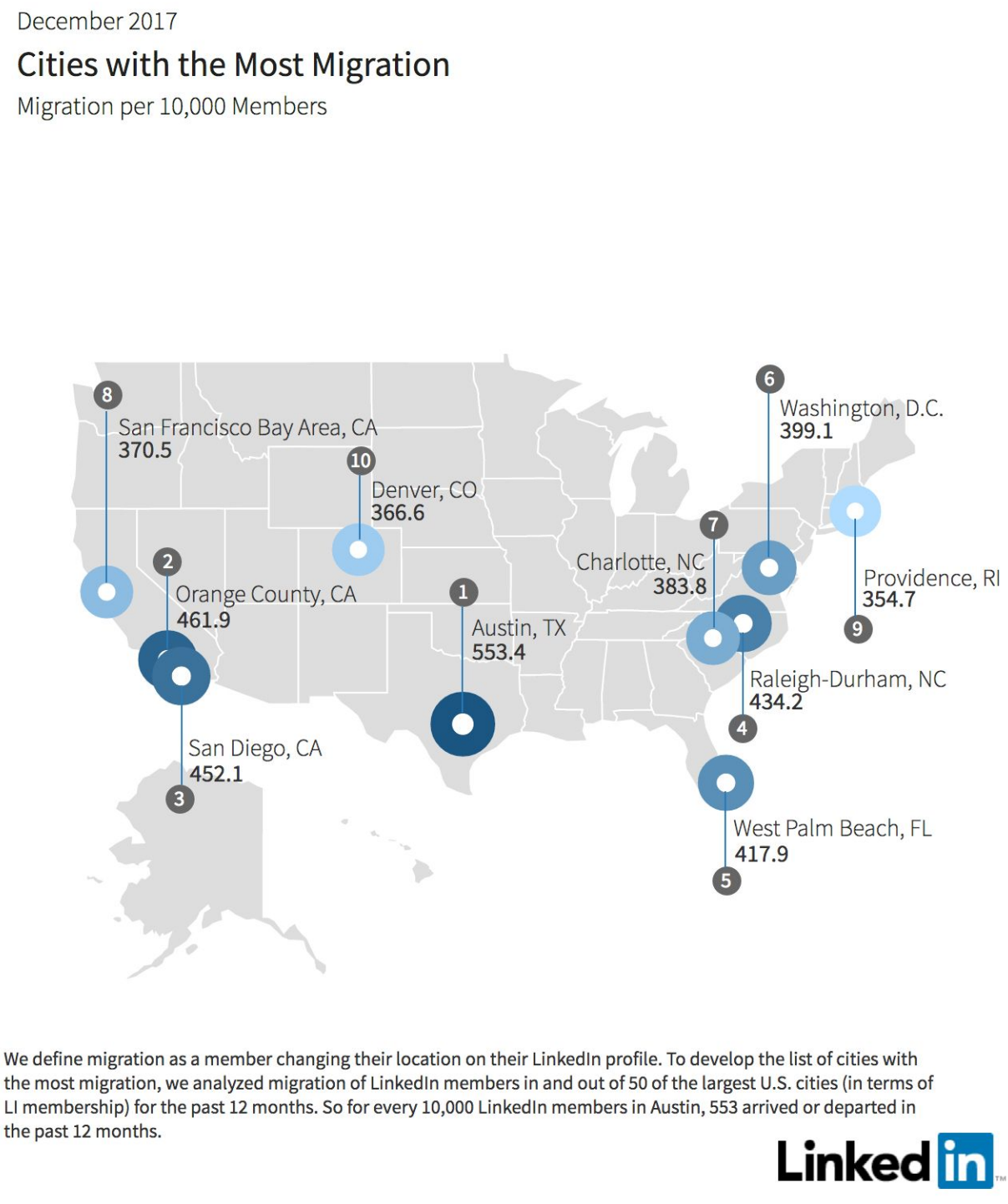
Population Loss per 10,000 Members



We define migration as a member changing their location on their LinkedIn profile. To develop the list of cities that lost the most workers we analyzed migration of LinkedIn members in and out of 50 of the largest U.S. cities (in terms of LI membership) for the past 12 months. So for every 10,000 LinkedIn members in Hartford, 57 left in the past 12 months.

LinkedIn

Austin, Orange County, and San Diego remain atop our list of cities experiencing the most total migration (workers moving into and out of a city). This list captures the most transient cities. For every 10,000 LinkedIn members in Austin, 553.4 arrived in or left the city in the last 12 months.



Check out the City Reports for Atlanta, Austin, Boston, Chicago, Cleveland-Akron, Dallas-Ft. Worth, Denver, Detroit, Houston, Los Angeles, Miami-Ft. Lauderdale, Minneapolis-St. Paul, Nashville, New York

City, Philadelphia, Phoenix, San Francisco Bay Area, Seattle, St. Louis, and Washington, D.C. to see which skills are most scarce in those cities, and which jobs are open.