

December 2015

#1

San Jose

2015

Best-Performing Cities

Where America's jobs are created and sustained

#2

San Francisco

California's tech titans top the charts

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MILKEN INSTITUTE

2015

Best-Performing Cities

Where America's jobs are
created and sustained



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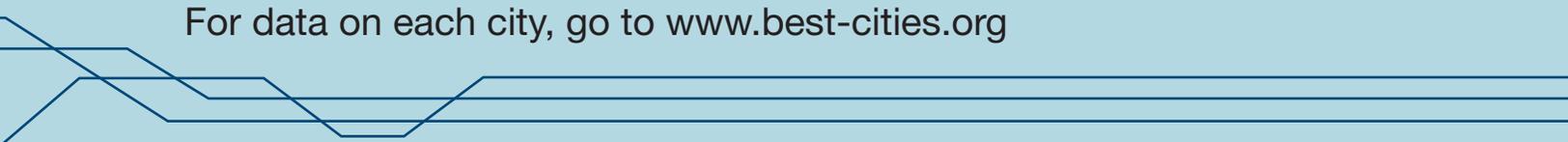
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ON THE WEB

For data on each city, go to www.best-cities.org

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Executive Summary

What drives the economic momentum of the most dynamic metros in the United States? Each year, the Milken Institute's Best-Performing Cities report identifies the latest trends and most relevant factors powering regional growth. Our index uses a comprehensive, fact-based set of criteria to rank the nation's metropolitan areas. Among them are job creation, wage gains, and technology trends that shape current and potential patterns of growth. For metros looking to craft cohesive economic strategies, the report provides valuable data and insight.

Here are highlights of the 2015 rankings:

- » **San Jose-Sunnyvale-Santa Clara, CA**, reclaimed the No. 1 spot among large metros after having placed No. 4 for two years in a row (2013 and 2014). Research, patenting, and commercial application aided by early-stage risk capital are key elements of this metro's thriving ecosystem for entrepreneurship.
- » California secured six of the Top 25 slots among large metros, the most in any one state. Four of them are in the tech-driven San Francisco Bay Area.
- » Colorado captured four spots in the Top 25 large metros, while Texas has three (compared with seven in 2014). Several Texas metros fell in the rankings because of the slowdown in shale-oil exploration. Nevertheless, the state still posted a strong showing, with two metros in the Top 5: **Austin-Round Rock** and **Dallas-Plano-Irving**.
- » Southern states (excluding Texas) held six Top 25 slots, with **Raleigh, NC**, leading them at No. 6. **Madison, WI**, and **Grand Rapids-Wyoming, MI**, are the only two Midwestern metros in the Top 25.
- » **Fargo, ND-MN**, retained its No. 1 position among small metros for a second year. Its well-diversified economy with strength in finance, insurance, health care, and higher education helped offset declines in shale-oil exploration.
- » Eight of the 25 biggest gainers were Florida metros, with **Port St. Lucie** climbing 98 spots from last year, the most of any metro. It placed No. 80 among large metros, aided by an influx of retirees and an increase in tourism.

This year's findings reveal how technology and oil again played significant roles in regional economies but in vastly different ways as those industries moved in opposite directions. The nation's tech centers are prominent among the index's top performers, as are cities that have experienced high technology growth rates. Conversely, the slashing of oil prices has undercut the economic performance of several metros whose fortunes are tied to shale-oil extraction.

In the United States overall, business and consumer spending on technology products and services is a powerful force in economic growth. Metros involved in designing and creating these products and services are growing most rapidly. Specifically, the composition of growth has shifted toward software and social media, and away from information and communication technology (ICT) equipment. In fact, businesses now spend more on software than on ICT equipment. This softer, creative side of high tech is spurring a renewal of many urban cores. Look to San Francisco, Seattle, Denver, and even New York City to see the extent

of this phenomenon. Witness, too, the contributions of science-based industries such as biotechnology, medical devices, and diagnostic and semiconductor equipment manufacturing.

These thriving sectors are in contrast to the shale-oil exploration industry. The decline in oil prices from roughly \$100 per barrel in September 2015 to around \$45 currently has rubbed the economic sheen off communities that benefited from the surge in hydraulic fracturing-driven oil exploration. Oil production has remained at elevated levels, but new exploration has dropped by more than 50 percent. The economics of U.S. shale-oil exploration are such that, for most projects to cover capital costs, prices needed to be around \$70 per barrel. Some oil deposits could be economically developed at oil prices substantially below \$70 and remain active areas of exploration. On the other hand, the lower price regime reveals the value of diversification: Several metros that branched out to other industries even when they were formally dependent on oil now continue to thrive. Here, think of Dallas, Denver, and San Antonio, among others.

Changes in the sources of national economic growth are affecting the relative performance of metropolitan areas of the nation. The macroeconomic story for 2015 has been stronger consumer spending and an acceleration in housing market activity largely offsetting the drag exerted by exports and energy-related capital spending. In the second quarter, consumers began to exercise the additional discretionary purchasing power afforded by lower gasoline prices. Consumer spending advanced at an annual rate of 3.6 percent in this period, followed by 3.2 percent in the third quarter. Housing market activity has experienced the most pronounced improvement thus far in 2015. Stronger job and wage gains, continued low mortgage rates, and slower home price appreciation are aiding affordability. Housing starts in September hit their second-highest level since October 2007, just prior to the financial crisis, at an annual rate of 1.206 million.

Despite some signs of slowing job gains over the past several months, labor markets are strengthening. Manufacturing employment has stalled in reaction to the rising dollar and the moderating growth overseas. However, professional and business services, construction, transportation and utilities, and leisure and hospitality services all have experienced more rapid employment gains. Professional and business services include scientific research, engineering, accounting, and legal services. In September, jobs in professional and business services were 3.8 percent above September 2014. These are high-skilled positions that command higher compensation and aid gains in wages. With new-home construction and commercial building recovering, construction employment rose 3.7 percent year-over-year in September. Consumers are purchasing more travel and tourism services, and leisure and hospitality witnessed year-over-year job gains of 2.9 percent. These influences are evident in the best-performing cities and biggest gainers.

2015 BEST-PERFORMING LARGE CITY

San Jose-Sunnyvale-Santa Clara, CA, reclaims the top spot, which it last held in 2012. The economy of the San Jose metro division has been red-hot, demonstrating how an innovation-fueled ecosystem can overcome high costs of doing business and a restrictive regulatory environment. San Jose had the highest job growth rate in the nation in 2014 (4.6 percent) among metro areas with a population exceeding 1 million. Its relative job growth has accelerated in 2015. In the 12 months ending August 2015, San Jose's job growth was the second-highest among the nation's 200 largest metropolitan economies.

High-tech hardware continues to play a prominent role in the metro's success, contributing to the rise in manufacturing employment of 25 percent since the recovery from the Great Recession began. However, it is the high-tech service sector that has been the primary source of job growth in the region. Professional, scientific, and technical services added 8,700 jobs (7.0 percent growth) in 2014. Recent data suggests that

the pace of growth accelerated in 2015. Other information services had a job gain of 6,400 (23.6 percent) in 2014 and saw employment double in the five-year period measured. Data processing, hosting, and related services recorded job growth of 5.1 percent in 2014. Patent registrations hit 17,000 in 2014—reaching a new record. Venture capital investments increased to \$9.8 billion—the highest total since 2000. Average annual earnings were \$116,000 versus just \$61,500 for the nation overall. The metro also had 23 initial public offerings and 8,600 startups in 2014.

TABLE 1. TOP 25 BEST-PERFORMING LARGE CITIES

Rank according to 2015 index

Metropolitan statistical area (MSA)	2015 rank	2014 rank	Change
San Jose-Sunnyvale-Santa Clara, CA	1	4	+3
San Francisco-Redwood City-South San Francisco, CA	2	1	-1
Provo-Orem, UT	3	3	0
Austin-Round Rock, TX	4	2	-2
Dallas-Plano-Irving, TX	5	9	+4
Raleigh, NC	6	5	-1
Seattle-Bellevue-Everett, WA	7	11	+4
Portland-Vancouver-Hillsboro, OR-WA	8	16	+8
Greeley, CO	9	14	+5
San Luis Obispo-Paso Robles-Arroyo Grande, CA	10	24	+14
Salt Lake City, UT	11	6	-5
San Antonio-New Braunfels, TX	12	10	-2
Charlotte-Concord-Gastonia, NC-SC	13	23	+10
Fort Collins, CO	14	17	+3
Naples-Immokalee-Marco Island, FL	15	60	+45
Denver-Aurora-Lakewood, CO	16	12	-4
Charleston-North Charleston, SC	17	39	+22
Nashville-Davidson—Murfreesboro—Franklin, TN	18	15	-3
San Diego-Carlsbad, CA	19	22	+3
Madison, WI	20	30	+10
Grand Rapids-Wyoming, MI	21	25	+4
Boulder, CO	22	13	-9
San Rafael, CA	23	(new)	N/A
Fayetteville-Springdale-Rogers, AR-MO	24	49	+25
Santa Rosa, CA	25	121	+96

Note: List includes metropolitan divisions, the smaller geographic areas within the largest MSAs.
Source: Milken Institute

BIGGEST GAINERS

For the second year in a row, Florida and California have the highest number of metros that jumped the most in rankings. The single-largest factor for the improvement continues to be the recovery from the Great Recession's housing collapse, especially because the 2015 index's five-year performance measure now begins in 2009, dropping the 2008-2009 housing crisis period. Eight of the 25 biggest gainers this year are Florida metros, with **Port St. Lucie** climbing 98 spots from last year, the most of any metro.

These metros all had experienced high home foreclosure rates, severe declines in home values, and a halt to new construction. Plus, as the economy began to recover, many retirees who had deferred moving to Florida have chosen to do so over the past couple of years. An expansion in travel and tourism spending also boosted the Florida metros. **Las Vegas-Henderson-Paradise** and **Reno, NV**, both also among the 25 biggest gainers, fit this pattern as well. Seven of the 25 biggest gainers are in California, with four in the Central Valley. Among them is Modesto, which had the highest foreclosure rate in the nation and was the epicenter of the sub-prime mortgage crisis.

2015 BEST-PERFORMING SMALL CITY

Fargo, ND-MN, maintained its first-place ranking among best-performing small cities. While more recent job growth moderated in the metro, Fargo outpaced the national average in both job and income gains, most notably in the five years ending in 2014. The metro, which had benefited tremendously from North Dakota's decade-long oil boom, has relied on its diverse industry mix to help sustain growth in the region.

While the oil boom may have come to an end, it left behind abundant spillover in industries such as manufacturing and business services. Investors that had flocked to the metro to tap into the state's oil boom have engaged in startup opportunities across tech-related fields. Additionally, increased collaboration between universities in Minnesota and North Dakota has supported startup investment and new business partnerships. Even larger firms such as Microsoft are taking advantage of lower business costs in the state. Recently, the company announced plans to expand its existing facility in Fargo to promote its cloud-based services.



Introduction

The Best-Performing Cities index was designed to measure objectively which U.S. metropolitan areas are promoting economic vitality based on job creation and retention, the quality of new jobs, and other criteria. The index shows where employment is stable and expanding, wages and salaries are increasing, and economies and businesses are thriving.

Its goal is to help businesses, investors, industry associations, development agencies, government officials, academics, and public-policy groups monitor and evaluate the performance of metros where they work and do business relative to the rest of the country. The index also provides benchmarking data that can inform approaches to improving a region's performance. In addition, the index serves as a tool for understanding consumer markets and business opportunities.

With a shared understanding of their region's competitiveness, communities may create a strategic economic vision focused on industries with the capacity to stimulate sustained economic growth and prosperity. By targeting sectors where they have a robust competitive advantage, communities can seek to reduce the impact of future dips in the business cycle on local employment and economic activity. Regions that better link education and training programs to the workforce needs of employers can attract businesses and create more opportunities for residents. Developing new industries and companies will also require fostering entrepreneurship and innovation, through research institutions, incubators, and funding programs.

This 2015 edition applies the methodology used previously. We employ the geographic terms and definitions used by the Office of Management and Budget (OMB), updated to reflect changes made after the 2010 U.S. Census. The OMB defines a metropolitan statistical area (MSA) as a region generally consisting of a large population nucleus and adjacent territory with a high degree of economic and social integration, as measured by community ties. With these parameters, the agency identifies 381 metropolitan statistical areas. County population growth accounts for the creation of new MSAs. If specific criteria are met, an MSA with a single nucleus and a population of 2.5 million or more is further divided into geographic areas called metropolitan divisions (MD), of which there are currently 31 in the country. For example, three metropolitan divisions (Camden, NJ; Philadelphia, PA; and Wilmington, DE-MD-NJ) comprise the Philadelphia-Camden-Wilmington MSA. We include the smaller MDs in the index to reflect more detailed geographic growth patterns.

AN EMPHASIS ON OUTCOMES

Table 2 shows the components used to calculate the Best-Performing Cities rankings. The index measures growth in jobs, wages, salaries, and technology output over five years (2009-2014 for jobs and technology output, and 2008-2013 for wages and salaries) to adjust for extreme variations in business cycles. It also incorporates the latest available year's performance in these areas (2013-2014 for jobs and technology output, and 2012-2013 for wages and salaries). In addition, it includes a measure of 12-month job growth (August 2014-August 2015) to capture recent momentum among metropolitan economies.¹

TABLE 2. COMPONENTS OF THE BEST-PERFORMING CITIES INDEX

Component	Weight
Job growth (I=2009)	0.143
Job growth (I=2013)	0.143
Wage and salary growth (I=2008)	0.143
Wage and salary growth (I=2012)	0.143
Short-term job growth (Aug 2014-Aug 2015)	0.143
High-tech GDP growth (I=2009)	0.071
High-tech GDP growth (I=2013)	0.071
High-tech GDP location quotient (2014)	0.071
Number of high-tech industries with GDP LQ>1 (2014)	0.071

Note: I refers to the beginning year of index. Weights do not add up to 1 due to rounding.
Source: Milken Institute

Employment growth is weighted more heavily because of its critical importance to community vitality, as is growth in wages and salaries because it signals the quality of the jobs being created and retained. Other measures reflect the concentration and diversity of technology industries within the MSAs and MDs. High-tech location quotients (LQs), which measure the industry's concentration in a particular metro relative to the national average, are included to gauge an area's participation in the knowledge-based economy. We also measure the number of specific high-tech fields (out of a possible 19) whose concentrations in an MSA or MD are higher than the national average. Best-Performing Cities is solely an outcomes-based index. It does not incorporate input measures (business costs, cost-of-living components, and quality-of-life conditions such as commute times and crime rates). These measures, although important, are prone to wide variations and can be highly subjective.

NATIONAL ECONOMIC CONDITIONS

In the second half of 2014, the U.S. economy appeared ready to break out of the lethargic growth range (2.0 percent to 2.5 percent) that had been plaguing it since the recovery began in late 2009. Subsequent revisions to the national income and product accounts revealed the U.S. economy hadn't grown as previously estimated at an annual rate exceeding 4 percent during the second half of 2014. Further, GDP growth fell to just 2.3 percent in the fourth quarter.

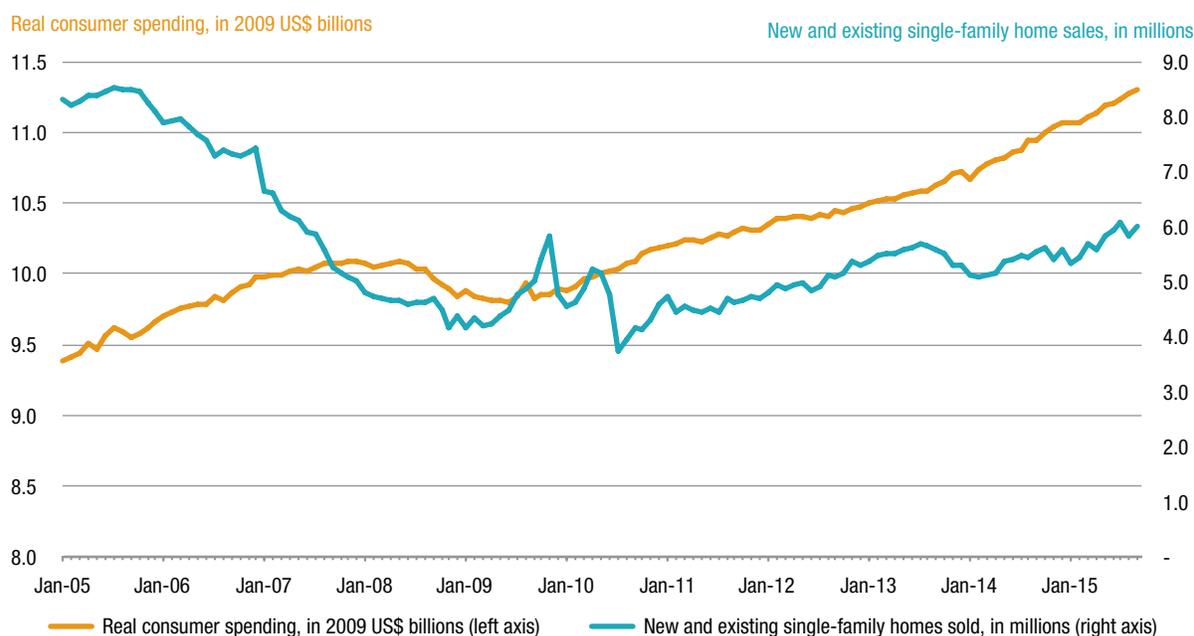
Many signs pointed to growth moving above 3 percent for a sustained period: recovering house prices resulting in fewer households upside-down on their mortgages, falling oil prices, lower household debt burdens (the lowest level since the American Bankers Association began keeping records), and higher business investment supported by healthy balance sheets. Consider the stronger labor market and lower mortgage rates, and conditions were highly favorable.

Nevertheless, real GDP rose just 0.6 percent, given several factors: Severe winter weather harmed economic performance in the first quarter of 2015, combined with the immediate decline in investment in shale oil-related exploration from plunging oil prices and the initial impact of the rising dollar that hurt export gains and depressed dollar-denominated profits as earnings were repatriated from abroad. Many of the shale projects required oil prices above \$70 per barrel to cover their cost of capital.² This slashed active operating rigs by 50 percent in a period of just several months. Investment in oil-exploration equipment and

structures declined at annual rates of almost 50 percent during the first half of 2015, knocking about 0.5 percent off of real GDP growth. Non-energy investment was impaired by weaker exports related to slowing global growth and the appreciation of the dollar.

In a nutshell, the macroeconomic story for 2015 has been how consumer spending and an acceleration in housing-market activity have largely offset the drag exerted by exports and energy-related capital spending (see Figure 1). Consumers began to exercise the additional discretionary purchasing power afforded by lower gasoline prices in the second quarter of 2015. It usually takes six months or so of lower prices before consumers believe that they aren't transitory. Consumer spending advanced at an annual rate of 3.6 percent in the second quarter. Consumer durable spending rose at an annual rate of 8.0 percent. Much of that growth was attributable to light-vehicle sales hitting the highest levels since before the Great Recession as pent-up demand from postponed purchases was realized.³

FIGURE 1. REAL CONSUMER SPENDING AND SINGLE-FAMILY HOME SALES



Sources: Milken Institute, National Association of Realtors, Federal Reserve Bank of St. Louis.

Housing market activity has experienced the most pronounced improvement thus far in 2015. Stronger job and wage gains, continued low mortgage rates, and slower home-price appreciation are aiding affordability. Housing starts in September hit their second-highest level since October 2007, just prior to the financial crisis, at an annual rate of 1.206 million, falling just below July's figure.⁴ Nevertheless, recent data confirms that the underlying trend is improving. Single-family starts jumped to an annual rate of 740,000, a 17.5 percent gain from the previous September. The multi-family market has experienced a stronger rate of recovery during this cycle overall, but doesn't add as much economic growth as the single-family market.

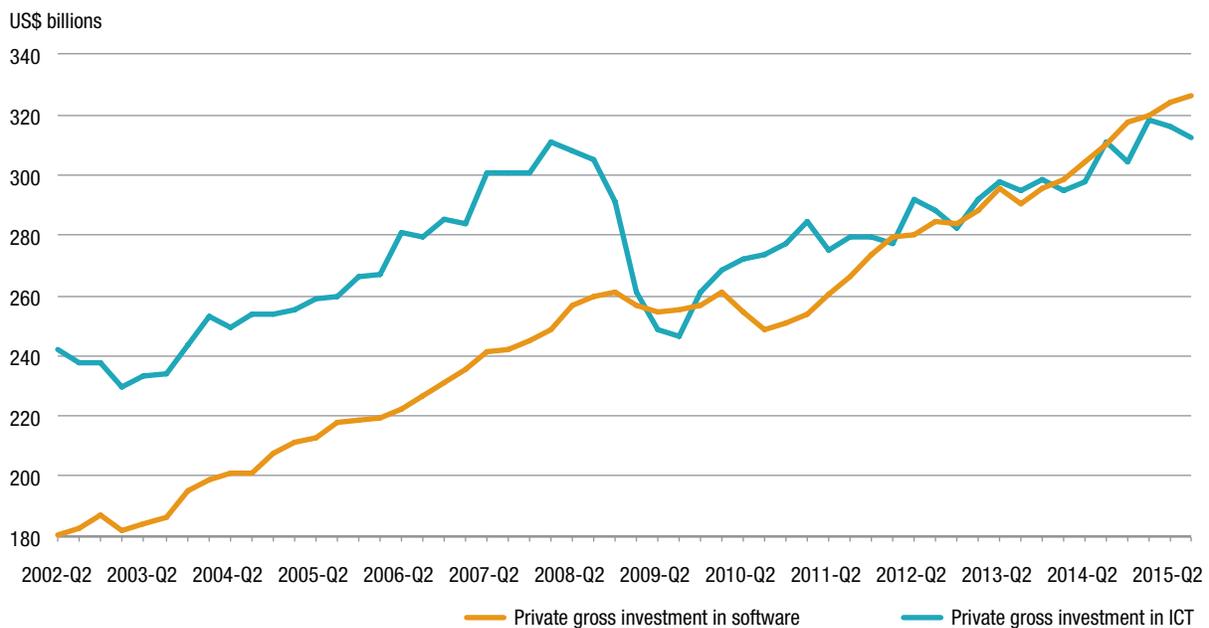
Despite some signs that job gains have been slowing over the past several months, labor markets are strengthening. The economy added 142,000 jobs in September, but year-to-date monthly gains have averaged 198,000. While manufacturing employment has stalled in reaction to the rising dollar and the moderating growth outside the U.S., several other sectors have made rapid gains in employment.

These include professional and business services, construction, transportation and utility, and leisure and hospitality services. The professional and business services sector includes scientific research, engineering, accounting, and legal services. In September, jobs in this sector were up 3.8 percent over September 2014. These high-skill positions command greater compensation, aiding gains in wages. In addition, with new-home construction and commercial building recovering, construction employment rose 3.7 percent year-over-year in September. Consumers are also buying more travel and tourism services, and the leisure and hospitality sector witnessed year-over-year job gains of 2.9 percent.

The first estimate of real GDP growth for the third quarter of 2015 came in at 1.5 percent.⁵ This topline reading was held back by a deceleration in the rate of inventory investment by U.S. businesses. A slowdown in inventory replenishment cut 1.4 percent off real GDP growth. Final sales to private domestic purchases rose at a healthy 3.2 percent, supported by a solid consumer spending gain of 3.2 percent. Another substantial decline in energy exploration investment harmed growth as well. However, the inventory correction should prove transitory, indicating that overall economic growth should settle in a range between 2.5 to 2.9 percent.

Business investment and consumer purchases of technology products and services are a powerful force for U.S. economic growth. The composition of growth has shifted toward software and social media and away from information and communication technology (ICT) equipment. Businesses now spend more on software than ICT equipment (see Figure 2). Households are spending more of their time and budget on social media and other forms of digital content, yet this shift is not fully captured in the GDP statistics.⁶

FIGURE 2. RISE IN BUSINESS SPENDING ON SOFTWARE AND INFORMATION AND COMMUNICATION TECHNOLOGY



Sources: Milken Institute, IHS Global Insight.

More sophisticated software is offering advanced algorithms processing with greater ease of use. The U.S. Bureau of Economic Analysis (BEA) faces a challenge in correctly measuring the performance enhancements and improvements to quality. Additionally, many new social-media applications such as Instagram and Yik Yak are providing software services without a direct expense to consumers. The BEA measures services provided at market prices. Based on the BEA's price measures for software, it doesn't seem to be capturing this dynamic properly. In other words, nominal GDP might be measured appropriately, but price-adjusted real spending is being understated. This biases the reported productivity estimates downward as well.⁷

However, firms providing these software application services are hiring at a brisk pace, compensating their employees, and purchasing other inputs. The production side of the economy is witnessing these gains and the metropolitan areas that specialize in software, social media, and other digital content are experiencing the most rapid growth. It is quite likely that the BEA will find a way to account for this more fully in the future and real GDP will be corrected to show that the economy has been growing at a faster rate.

BIGGEST GAINERS

Until a couple of years ago, the effects of the sub-prime mortgage and housing bubble significantly affected the economic performance of many metros on our index, pushing down rankings particularly in Florida and California. The continued housing recovery has resulted in vast improvements in rankings. This year, the index's five-year performance period begins in 2009, dropping the 2008-2009 period that covered the most severe housing downturn. Eight of the 25 biggest gainers were Florida metros led by Port St. Lucie, which climbed 98 spots from last year, the most of any metro. These metros all had high home foreclosure rates, severe declines in home values, and a halt to new construction. Further aiding the Florida metros were an influx of retirees in the past couple of years and an expansion in travel and tourism spending. These factors apply to Las Vegas-Henderson-Paradise and Reno, NV, as well. Seven of the Top 25 biggest gainers are in California, with four in the Central Valley. Among them is Modesto, which had the highest foreclosure rate in the nation and was the epicenter of the sub-prime mortgage crisis. Housing markets are regaining some normalcy and new homes and multifamily units are being constructed.

TABLE 3. 25 BIGGEST GAINERS AMONG LARGE MSAs (BASED ON CHANGE IN RANKINGS)

Metropolitan statistical area (MSA)	2015 rank	2014 rank	Change
Port St. Lucie, FL	80	178	+98
Santa Rosa, CA	25	121	+96
Gainesville, FL	91	182	+91
Lakeland-Winter Haven, FL	101	184	+83
Salinas, CA	56	138	+82
Olympia-Tumwater, WA	63	142	+79
Ocala, FL	114	190	+76
Reno, NV	99	167	+68
Stockton-Lodi, CA	89	155	+66
Fresno, CA	54	113	+59
Las Vegas-Henderson-Paradise, NV	86	144	+58
Worcester, MA-CT	37	94	+57
Spokane-Spokane Valley, WA	81	138	+57
Visalia-Porterville, CA	79	134	+55
Lexington-Fayette, KY	42	96	+54
Fort Lauderdale-Pompano Beach-Deerfield Beach, FL	41	92	+51
Palm Bay-Melbourne-Titusville, FL	145	195	+50
Boise City, ID	33	81	+48
Cape Coral-Fort Myers, FL	40	88	+48
Riverside-San Bernardino-Ontario, CA	60	106	+46
Modesto, CA	85	131	+46
Naples-Immokalee-Marco Island, FL	15	60	+45
Salem, OR	72	117	+45
Tacoma-Lakewood, WA	61	103	+42
Eugene, OR	106	147	+41

Source: Milken Institute

BIGGEST DECLINERS

Look no further than the changing fortunes of the oil exploration and servicing industry to understand which metros most heavily populate this list. The biggest decliner, **Lafayette, LA**, fell 116 spots in 2015 from the previous year. By many measures, no metro area in the country is more closely tied to the fate of the oil industry than Lafayette. Five Texas metros are on the list as well, all with some degree of dependency on the oil exploration industry. Others listed had a great deal of exposure to the reduction in exports of heavy capital goods. **Peoria, IL**, home to equipment manufacturer Caterpillar, is on the list again, falling 40 spots further after having been the biggest decliner in 2014, when it fell 102 spots from the previous year. And with waning international trade, the metro with the largest port complex in the country, **Los Angeles-Long Beach-Glendale, CA**, is also among the biggest decliners this year.

TABLE 4. 25 BIGGEST DECLINERS AMONG LARGE MSAs (BASED ON CHANGE IN RANKINGS)

Metropolitan statistical area (MSA)	2015 rank	2014 rank	Change
Lafayette, LA	135	19	-116
Killeen-Temple, TX	172	91	-81
New Orleans-Metairie, LA	146	67	-79
Huntsville, AL	140	66	-74
Tulsa, OK	138	69	-69
El Paso, TX	121	53	-68
Gary, IN	185	119	-66
Nassau County-Suffolk County, NY	141	76	-65
Fayetteville, NC	193	129	-64
Anchorage, AK	132	74	-58
Baltimore-Columbia-Towson, MD	93	38	-55
Lubbock, TX	73	20	-53
Lincoln, NE	78	31	-47
St. Louis, MO-IL	170	127	-43
Peoria, IL	197	157	-40
Laredo, TX	57	18	-39
Richmond, VA	147	108	-39
Cedar Rapids, IA	142	105	-37
Memphis, TN-MS-AR	182	145	-37
Bakersfield, CA	64	28	-36
Corpus Christi, TX	69	33	-36
Trenton, NJ	87	51	-36
Springfield, MO	67	32	-35
Los Angeles-Long Beach-Glendale, CA	77	42	-35
Pittsburgh, PA	113	79	-34

Source: Milken Institute



TOP 25

Best-Performing Large Cities



San Jose-Sunnyvale-Santa Clara, CA

(gained 3 spots)

JOB GROWTH (2009-14)	7TH
JOB GROWTH (2013-14)	7TH
WAGE GROWTH (2008-13)	2ND
WAGE GROWTH (2012-13)	4TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	2ND
HIGH-TECH GDP GROWTH (2009-14)	4TH
HIGH-TECH GDP GROWTH (2013-14)	14TH
HIGH-TECH GDP CONCENTRATION (2014)	1ST
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	1ST

ASSETS

- » Innovative activities such as research, patenting, and commercial application aided by early-stage risk capital.
- » Tech-savvy talent supported by local universities and fueled by immigrants with dynamic international connections.

LIABILITIES

- » Rising business and housing costs—amid a restrictive regulatory environment as well as the lure of generous incentives being offered abroad and domestically—could prompt tech firms to move or expand high-paying research functions elsewhere.

San Jose-Sunnyvale-Santa Clara, California, returns to No. 1 among large metros, a position it last held in the 2012 index. The San Jose metro division edged out its neighbor to the north, San Francisco-Redwood City-South San Francisco, which ranked first in 2014. This past year, the San Jose metro division's economy has been red-hot, demonstrating how an innovation-fueled ecosystem can overcome high costs of doing business and restrictive state regulations. Among the 200 largest metropolitan areas in the nation, San Jose ranked seventh in job growth both in 2014 and over the most recent five years (2009-2014). Even more impressive, San Jose had the highest job growth rate in the nation in 2014 (4.6 percent) among metro areas with a population exceeding 1 million. San Jose's relative job growth has accelerated in 2015. In the 12 months ending in August, it had the second-highest job growth among the 200 largest metropolitan economies in the nation.

San Jose's tech boom continues unabated. For example, despite having the highest concentration of high-tech employers, the metro area was fourth in the growth of high-tech output in the nation in the five-year period ending 2014. That is a phenomenal rate of growth for an economy already so dependent on technology. The San Jose metro area leads the nation in the concentration of jobs in computer and peripheral equipment manufacturing. It also holds an influential position in semiconductor and other electronic component manufacturing as well. Throw in routers, switches, and many other types of networking and telecommunications gear, and you have an economy with the densest concentration of high-tech manufacturing in the country.

Though San Jose lost manufacturing employment during the last recession, its recovery has vastly exceeded that of the nation. Manufacturing jobs here have increased 25 percent from the depths of the recession, in contrast to the 10 percent gain witnessed nationwide.⁸ Large tech firms such as Hewlett-Packard and Intel have been hurt by declining PC sales and forced to cut employment, but others have more than made up for the deficit. Computer and electronic product manufacturers added 1,900 jobs (2.5 percent growth) in 2014.

The high-tech service sector has been the primary source of job growth in the region. Professional, scientific, and technical services added 8,700 jobs (7.0 percent growth) in 2014. Recent data suggests that the pace of growth has accelerated in 2015.⁹ Other information services had a job gain of 6,400 (23.6 percent) in 2014 and saw employment double over

the five years ending in 2014. Data processing, hosting, and related services recorded job growth of 5.1 percent in 2014.

Innovation is the long-term driver of growth in the region. Recent performance indicators in innovation-related activities display renewed vigor. Patent registrations hit 17,000 in 2014, a new record. As recently as 2012, patent registrations were 15,500. Venture capital investments increased to \$9.8 billion—the highest total since 2000, with software receiving more than half of the total. Average annual earnings were \$116,000 versus just \$61,500 for the nation overall.¹⁰ Wage growth was second in the nation over the last five years and fourth in 2013, the last year data is available. Joint Venture Silicon Valley reported that there were 23 initial public offerings and 8,600 startups in 2014. High-skilled human capital provides the fuel for much of this business activity. In the San Jose metro division, 21 percent of adults aged 25 and older have a graduate degree, in contrast to only 11 percent nationally. Over 46 percent of adults in the metro hold a bachelor's degree or higher. Many of the entrepreneurs and technical degree holders are immigrants.

Technology-based high-wage jobs have an enormous multiplier on the region's economy. They stimulate jobs in landscaping, restaurants, and at retail stores. Foreign and domestic net in-migration is pushed higher, which further increases the demand for services and housing. The region's builders have been struggling to construct new units to keep pace with demand. Most of the new units added in recent years have been multi-family dwellings, increasing housing density. For example, 8,200 of the total 10,100 units added were multi-family in 2014. The downside is that housing prices are rising at a rapid pace and now exceed the previous pre-housing bust peak, causing home affordability to decline. The median home price reached \$758,000 in 2014, a jump of 7.5 percent. Further, the average rental rate rose 11 percent in 2014.¹¹

The high rate of job growth has been absorbing commercial space at a strong clip. Google and Apple appear to be in a battle to absorb the most office space. New construction is attempting to keep pace with rising demand. During the third quarter of this year, roughly 6 million square feet of office space was under construction in the metro area.¹² Cupertino will be home to the futuristic Apple Campus 2, and Apple is also absorbing space throughout the metro area. New-office construction is moving south down the peninsula from Palo Alto and Mountain View into North San Jose and the center of San Jose.



San Francisco-Redwood City-South San Francisco, CA

(dropped 1 spot)

JOB GROWTH (2009-14)	5TH
JOB GROWTH (2013-14)	6TH
WAGE GROWTH (2008-13)	1ST
WAGE GROWTH (2012-13)	7TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	3RD
HIGH-TECH GDP GROWTH (2009-14)	2ND
HIGH-TECH GDP GROWTH (2013-14)	4TH
HIGH-TECH GDP CONCENTRATION (2014)	7TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	12TH

ASSETS

- » Deep pool of entrepreneurs focused on social media, mobile applications, cloud-based software, and the science-based biotech industry supported by local risk capital.
- » Residents with high educational attainment, and the ability to attract talent from around the world.

LIABILITIES

- » Limits to commercial construction and new expensive housing may curb growth amid concerns over gentrification and rising costs.

San Francisco-Redwood City-South San Francisco,

California, slipped to No.2 this year, barely eclipsed by nearby San Jose. It is the closest second-place finish in the 16-year history of the Best-Performing Cities index. The San Francisco metro division's economy remains one of the most vibrant in the nation. Its tech-fueled growth is drawing young knowledge workers from around the country and the world. Even with the high rate of in-migration, its unemployment rate has fallen to a very tight 3.5 percent, among the lowest in the nation. Perhaps even more impressive, San Francisco's labor force participation rate stands 10 percentage points higher than the national average. Just a decade ago, it matched the overall U.S. rate. Population growth has been the highest in 40 years.¹³ It attracted nearly as much venture capital as Silicon Valley in 2014.

The surge in tech services such as mobile applications and social media, computer systems design and processing, cloud-based software applications, and Internet publishing has propelled much of San Francisco's economic rejuvenation. However, it also has been aided by the science-based industries of biotechnology and medical research. Biotech pioneer Genentech is the anchor for this growth, but a number of biotech startups are thriving in the Mission Bay district, where commercial development is taking place. In addition, the University of California, San Francisco, has advanced its medical research capabilities and encouraged more commercialization through startup and licensing activities.

The contribution of the professional, scientific, and technical services sector to San Francisco's economic performance over the past few years is dramatic and continues to this day. This is a broad category that includes everything from

computer systems and design to biomedical research and accounting services. Between 2009 and 2014, this sector added 45,700 jobs, growing by 41.4 percent. In 2014, it added 12,500 jobs, which translated into a growth rate of 8.3 percent. The pace of growth is accelerating in 2015. Over the 12 months through September, the professional, scientific, and technical services sector has added 23,900 jobs (a 15.1 percent gain), accounting for an astonishing 53.3 percent of all private-sector jobs added over the period.¹⁴ Most of these positions command six-figure salaries. The gains in these high-wage and usually equity-holding jobs explain why San Francisco led the nation in wage growth over the most recent five-year period.

In terms of growth, however, the sector for other information services, where many of the Internet applications jobs are reported, has seen even more remarkable gains. In 2014, this sector created 3,300 jobs, an increase of 23.2 percent. Over the last five years, it has witnessed remarkable growth: 267.3 percent. The ripple effects of these gains are witnessed in the food services and drinking places sector, which, at 5,400, added the second-highest number of new jobs in 2014. The hospitality sector is thriving as well.¹⁵ Office construction, too, is booming as these new professional jobs are absorbing space. Salesforce, for one, has started construction on a skyscraper. On the residential front, the housing market is sizzling. The median price of an existing home was \$1.04 million in the first quarter of 2015 on a seasonally adjusted basis. Rents are rising at a rapid clip. Housing supply has not kept pace with rising demand. Over the next few years, high housing prices and the insufficient number of new units will likely apply a brake on growth.



Provo-Orem, UT

(held steady)

JOB GROWTH (2009-14)	3RD
JOB GROWTH (2013-14)	11TH
WAGE GROWTH (2008-13)	10TH
WAGE GROWTH (2012-13)	5TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	1ST
HIGH-TECH GDP GROWTH (2009-14)	15TH
HIGH-TECH GDP GROWTH (2013-14)	6TH
HIGH-TECH GDP CONCENTRATION (2014)	18TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	26TH

ASSETS

- » Business-friendly and low-cost climate provides a great environment for national information technology firms to expand and local indigenous firms to form and grow.
- » Brigham Young University turns out a large pool of college graduates whom local firms hire; it also provides much of the intellectual property for its entrepreneurs.

LIABILITIES

- » High exposure to volatility, as many information technology hardware firms are vulnerable to global forces such as the rising dollar.

Provo-Orem, Utah, remains in third place this year, matching its 2014 performance. However, the metro area could reasonably claim that its economy has been accelerating at the fastest pace in the nation in recent months. During the past 12 months through August, job growth was 6.6 percent, the highest of any large metro area in the nation. As in the San Francisco Bay Area, technology and related business services have been driving the region's economy. Greater Provo provides a friendly business climate with low taxes and costs, creating fertile ground for indigenous startups and expansions by large tech firms headquartered elsewhere. The high wage growth associated with technology jobs is having large spillover effects to the broader economy.

The high-technology sector is experiencing rapid expansion on multiple dimensions. Based on our measure of GDP in high-tech industries, Provo posted the sixth-fastest growth in the nation in 2014. In many respects, its high-tech industry mix resembles Silicon Valley, with semiconductor and other electrical components manufacturing 3.3 times more concentrated than the nation overall. IM Flash Technologies is a major employer in the metro area, for example. However, among all the 19 industries included in our high-tech definition, software publishers have the highest concentration in the metro, exceeding the national average by over seven times. Novell is the largest private sector employer in the metro area. Professional, scientific, and technical services employment in the metro area rose 9.5 percent in 2014. The broader category of professional and business services has seen an acceleration in 2015 with job growth of 17.5 percent between July 2014 and July 2015. Ancestry.com

and Domo have been adding jobs at a strong pace.¹⁶ Telecommunication services employment grew 18 percent, while data processing, hosting and related services recorded an 11 percent job gain in 2014. With this momentum, it is quite possible that Provo will leap to the top of the Best-Performing Cities list next year.

The spillovers are evident in the housing market: The specialty trade contractors sector, where housing construction jobs reside, saw employment rise 1,400 in 2014, the largest gain of any three-digit employment category. The high affordability of homes and creation of technology jobs have caused a surge in the purchase of residences. Provo's housing market affords millennials the opportunity to enter homeownership. Thus far in 2015, 48 percent of first-time home purchases with a mortgage attached to them were made by individuals aged 25 to 34 in Provo. Nationally, the average was 37 percent.¹⁷ Brigham Young University provides a large talent pool of college graduates who join the local workforce, as well as much of the intellectual property for the metro's entrepreneurs.



Austin-Round Rock, TX

(dropped 2 spots)

JOB GROWTH (2009-14)	2ND
JOB GROWTH (2013-14)	12TH
WAGE GROWTH (2008-13)	3RD
WAGE GROWTH (2012-13)	25TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	27TH
HIGH-TECH GDP GROWTH (2009-14)	10TH
HIGH-TECH GDP GROWTH (2013-14)	19TH
HIGH-TECH GDP CONCENTRATION (2014)	9TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ \geq 1) (2014)	12TH

ASSETS

- » Diversification away from energy and chip dependence, with expansion in leisure and hospitality, biotechnology, and social networking.
- » University of Texas provides knowledge workers, and the metro's lower costs and ease of recruitment attract many large and small international and domestic firms, many from California.

LIABILITIES

- » Tax receipts might fall more precipitously as oil prices remain low for longer, harming state budgets and employment.

Austin-Round Rock, Texas, remains among the Top 5 best-performing large metros at fourth place, slipping from second last year. It accomplished this feat despite a couple of shocks to its economy. The first was the plunge in oil prices that reduced exploration activity, especially shale-related, as many projects couldn't cover capital costs. Throughout Texas, exploration-related employment is down. And while Austin doesn't have much direct exposure to weak oil prices, the oil-related and broader tax collections in the state have been affected as oil-field service companies reduced supply-chain purchases. The second shock was the high value of the dollar constraining exports of electronic components, computers, and related equipment. Further, some loss of domestic market share to imports dampened local production. Nevertheless, the metro's job growth through the latest 12 months ending in August 2015 came in at respectable 27th in the nation. This reflects how much Austin has diversified its economy over recent decades. Much of this stems from the rapidly expanding leisure and hospitality sector, in addition to health services and medical research. In fact, Austin had the second-fastest job growth in the nation over the past five years.

In addition, several large festivals have expanded in recent years. The South by Southwest Festival is a major driver. It drew 13,300 hotel reservations, with an average stay of five nights and 60,254 nights of bookings overall, according to a recent study. In total, the 2015 festival injected \$317.2 million into the city's economy.¹⁸ Other attractions include Austin City Limits Music Festival, Formula 1 Grand Prix, and the Fun Fun Fun Fest. Leisure and hospitality services employment was up 6 percent for the 12 months ending in August and by

one-third since 2010.¹⁹ Strong business travel related to the expansion of technology jobs has also pushed up demand for hotel rooms. As in other leading tech centers, Austin's professional, scientific, and technical services sector recorded rapid job gains in recent years: 39.4 percent from 2010 to 2014. In 2014 alone, 7,100 jobs were created, a gain of 9.3 percent and the largest number in any industry sector.

Apple has expanded rapidly in Austin, with an estimated 4,000 employees at its new Americas Operations Center. It is the technology giant's largest employment outside of Silicon Valley. Smaller tech firms such as Web-sense, HID Global, and Roku are fueling growth, too. The metro has a rich landscape of talent for employers, thanks to the University of Texas at Austin. UT Austin has nearly 500,000 living alumni, 124,000 of whom live in the Austin area.²⁰ Because Austin retains so many local graduates and draws many technically skilled people from outside the region, it has the highest net in-migration relative to its population in the nation. In 2014, 33,000 more domestic migrants moved into the Austin area than left. Population growth was a whopping 3 percent in 2014, more than four times the national average gain. Housing demand has returned to pre-housing crisis levels despite prices rising at an 8 percent year-over-year pace in recent months. Robust gains in professional jobs and the high rate of in-migration are boosting new-home and apartment construction. Commercial construction is growing at a brisk pace and new office space is absorbed at a high rate. With all this activity, Austin seems poised to remain among the best performers in the years ahead.



Dallas-Plano-Irving, TX

(gained 4 spots)

JOB GROWTH (2009-14)	11TH
JOB GROWTH (2013-14)	14TH
WAGE GROWTH (2008-13)	30TH
WAGE GROWTH (2012-13)	48TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	17TH
HIGH-TECH GDP GROWTH (2009-14)	34TH
HIGH-TECH GDP GROWTH (2013-14)	47TH
HIGH-TECH GDP CONCENTRATION (2014)	29TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ \geq 1) (2014)	12TH

ASSETS

- » Central location and low cost of doing business attract logistics and distribution operations, and the metro is an important hub for financial services.
- » Incentives and recruitment make it a magnet for national and regional corporate headquarters.

LIABILITIES

- » Prolonged low oil prices may cause oil-service supply firms to cut jobs more aggressively and harm its economy despite industry diversification.

Dallas-Plano-Irving, Texas, would have been devastated by the magnitude of the recent oil price decline had it been three decades ago, but instead the metro finished fifth overall in 2015—a marked improvement from last year and a testament to its resiliency. The Dallas metro division has diversified its economy in part by becoming a regional financial services hub, with major operations of Bank of America, J.P. Morgan Chase, and Citibank in residence. In addition, it is now a key logistics and distribution center with significant fulfillment operations of Amazon.com and UPS. Total employment is rising twice as quickly as the national average and the metro ranks 17th in job growth for the one-year period ending in August. Further, it has one of the most vibrant housing markets in the country. Combined with the rising importance of technology in the area, all these factors have helped Dallas stand strong amid the collapse in oil prices.

Dallas has also become a magnet for corporate relocations. Among the most prominent are Toyota, which is building its new U.S. headquarters in Plano, with most of the employees moving from Southern California. Liberty Mutual Insurance and FedEx Corp, too, are building new towers in the same office park.²¹ Financial services firms such as State Farm, Suntrust, and BB&T are expanding in the metro area as well. The financial activities sector has a strong presence in the metro division, accounting for 9.1 percent of total employment, in contrast to only 5.7 percent nationally. Furthermore, average annual earnings are \$5,000 more in Dallas than the nation overall, demonstrating that these are largely professional positions. The professional, scientific, and professional services sector contributed the largest job

increase in the metro in 2014, adding 10,900 positions—a growth rate of 6.3 percent.

In 2014, Dallas had the highest absolute in-migration in the nation, hitting 146,700.²² At 2.1 percent, its population growth was double the national average that year. Despite this high rate, the labor market has tightened in the metro, with its unemployment rate falling to 3.9 percent. Commercial construction continues to be a key driver in the region, while the housing market is exerting a higher degree of stimulus as developers add multi-family units at a rate matching the pre-housing crisis level. Home price gains are in the high single digits as there remains a shortage of new supply. Two new hospital complexes are being constructed and health-care employment is increasing at twice the national rate.²³ All this is promising for Dallas, which appears poised to remain in the top-tier of performers next year.



Raleigh, NC

(dropped 1 spot)

JOB GROWTH (2009-14)	17TH
JOB GROWTH (2013-14)	22ND
WAGE GROWTH (2008-13)	13TH
WAGE GROWTH (2012-13)	21ST
SHORT-TERM JOB GROWTH (8/2014-8/2015)	68TH
HIGH-TECH GDP GROWTH (2009-14)	38TH
HIGH-TECH GDP GROWTH (2013-14)	57TH
HIGH-TECH GDP CONCENTRATION (2014)	10TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	8TH

ASSETS

- » Competitive business climate encourages investment in the Research Triangle.
- » Educated workforce is a draw for businesses offering high-wage manufacturing jobs, and these job opportunities, in turn, attract additional migrants.

LIABILITIES

- » Continuing growth may eventually place strain on infrastructure.

Raleigh, North Carolina, slipped one spot this year to sixth place. The region has consistently ranked among the top performers and this year improved in the measures for one- and five-year job and wage growth. However, its most recent short-term job growth (August 2014 to August 2015) slowed, and the metro plummeted from fourth to 68th in that category when compared with the largest 200 metros.

Innovation is a key driver of Raleigh's success. The region ranks 10th in the importance of high-tech industries to its economy and eighth in the diversity of its high-tech industry base. Software company SAS, originally spun out of North Carolina State University, is an example of the important contributions research institutions make to economic growth in the Raleigh region. SAS routinely earns accolades as a great place to work²⁴ and has 5,500 employees at its global headquarters in Cary.²⁵ The industry classification that includes software publishers added more than 1,800 jobs in the metro from 2009 to 2014, more than in all but three metros in the nation.

Employers looking for a highly skilled workforce and low business costs are attracted to the region's Research Triangle, along with North Carolina's competitive tax and regulatory climate. Economic opportunity has also drawn people to the region—the metro, which doubled in size between 1990 and 2010, continues to grow. Local clusters in clean technology, life sciences, software, and information technology yield high-quality jobs; for example, employment in the professional, scientific, and technical services sector has increased by more than 10,500 jobs over the past five years.



Seattle-Bellevue-Everett, WA

(gained 4 spots)

JOB GROWTH (2009-14)	37TH
JOB GROWTH (2013-14)	37TH
WAGE GROWTH (2008-13)	14TH
WAGE GROWTH (2012-13)	23RD
SHORT-TERM JOB GROWTH (8/2014-8/2015)	22ND
HIGH-TECH GDP GROWTH (2009-14)	21ST
HIGH-TECH GDP GROWTH (2013-14)	90TH
HIGH-TECH GDP CONCENTRATION (2014)	2ND
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	19TH

ASSETS

- » High wages in tech industries support consumption-related jobs in the rest of the local economy.
- » Well-educated and highly skilled workforce attracts technology firms and advanced manufacturers.

LIABILITIES

- » Demand for commercial airplanes may decline if slowdown in China continues.

Seattle-Bellevue-Everett, Washington, is back in the Top 10, climbing four spots to seventh place. Much of its success can be traced to the technology sector. The region ranks second in the nation for the importance of high-tech industries to the local economy, up from fourth in last year's index. They are key contributors to the metro's strong wage and job gains in recent years. Further, the improved short-term job growth ranking—at 22nd, compared with 35th last year—indicates that economic momentum remains strong.

The metro's wage growth between 2008 and 2013 outpaced the nation by 7.5 percent, supporting consumer spending and creating jobs in such industries as the food services and drinking places sector—which added more than 16,000 jobs over the past five years. Transportation equipment manufacturing remains a regional strength, anchored by Boeing; the sector employed more than 93,000 people directly, plus many more in the supply chain.

With industry clusters in data storage and cloud computing, the Seattle-Bellevue-Everett metro has benefitted from surging demand for these services. Companies such as HP, Amazon, Microsoft, Google, and Vertafore Inc. all have cloud computing operations based in the city.²⁶ Joining a wide variety of California-based companies with offices in Seattle,²⁷ Dropbox announced in late 2014 it was opening an engineering-focused office in Seattle²⁸ and subsequently opened it in June 2015.²⁹ E-commerce, anchored by Amazon.com, also continues to fuel Seattle's growth. Non-store retailers—the industry category that includes internet retailers—in the metro added almost 5,000 jobs in 2014, more than anywhere else in the country.



Portland-Vancouver-Hillsboro, OR-WA
(gained 8 spots)

JOB GROWTH (2009-14)	41ST
JOB GROWTH (2013-14)	38TH
WAGE GROWTH (2008-13)	37TH
WAGE GROWTH (2012-13)	40TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	13TH
HIGH-TECH GDP GROWTH (2009-14)	29TH
HIGH-TECH GDP GROWTH (2013-14)	42ND
HIGH-TECH GDP CONCENTRATION (2014)	5TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	26TH

ASSETS

- » Surplus in state revenues, resulting from economic growth, will allow additional public investment in education and possible tax rebates for citizens, boosting consumer spending.
- » Quality of life attracts an educated and growing workforce, which is a draw for high-tech employers.

LIABILITIES

- » Exports from the region and through its port are vulnerable to any further appreciation of the dollar.

Portland-Vancouver-Hillsboro, Oregon-Washington, climbed eight spots to eighth place this year. Solid job and wage growth supported the metro's exceptional performance in the index's high-tech measures. It came in fifth for the concentration of its high-tech sectors, which continue to expand faster than the national average, though the gap has closed in recent years.

The region's educated workforce continues to attract employers offering high-quality job opportunities, and technology companies are driving up demand for office space in Portland.³⁰ Construction employment is recovering, and some speculative office projects are underway.³¹ Wages for high-skill workers and electricity costs both compare favorably with those in Silicon Valley, making the Portland region an enticing alternative location. In 2014, the region added 1,900 jobs in the management of companies and enterprises sector, the sixth-most in the nation.

Portland's food manufacturing industry added 2,500 jobs over the past five years, ranking second in the nation over this period. The state is trying to facilitate further growth in the food-processing sector, promoting it on trade missions to East Asia in October 2015.³²



Greeley, CO
(gained 5 spots)

JOB GROWTH (2009-14)	1ST
JOB GROWTH (2013-14)	1ST
WAGE GROWTH (2008-13)	5TH
WAGE GROWTH (2012-13)	1ST
SHORT-TERM JOB GROWTH (8/2014-8/2015)	4TH
HIGH-TECH GDP GROWTH (2009-14)	66TH
HIGH-TECH GDP GROWTH (2013-14)	70TH
HIGH-TECH GDP CONCENTRATION (2014)	181ST
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	144TH

ASSETS

- » Oil extraction from the nearby Niobrara shale has created significant new employment in the five years ending in 2014, attracting investment to the region.

LIABILITIES

- » High dependence on the energy industry will drag growth as employers restructure to account for lower oil prices.

Greeley, Colorado, ranks ninth overall on the basis of unrivalled job growth. It took first place in both the one-year and five-year measures for employment gains, as well as the one-year measure for wage growth. The extraction of oil from the neighboring Niobrara shale has stimulated the metro's wage increases, which were 11 percent higher than the national average in 2008 to 2013.

In the shorter term, Greeley's job growth slowed from its earlier blistering pace—dropping from 17 percent higher than the national average over the last five years, to just under 2.5 percent higher in the past 12 months. This still put the metro in fourth place among large cities for short-term job growth, but the persistence of low oil prices seems likely to depress employment in industries such as support activities for mining as well as heavy and civil engineering construction, which were major contributors to job numbers in recent years. The former added more than 2,100 jobs in 2014 and 5,200 in the past five years; the latter rose by more than 900 jobs in 2014.

The lack of industrial diversity in Greeley could prove challenging. The region has the lowest concentration of high-tech industries of any region in the Top 25 on our 2015 index and it is missing out on recent gains in these sectors. However, the manufacturing and agricultural industries are enjoying lower input costs and may be able to mitigate some of the effects of the slowdown in the oil industry. One example is Vestas Wind Systems, which announced in March 2015 that it would be hiring for 400 new positions to help fulfill orders for wind turbines at its plants at Windsor in the Greeley metro.³³ The company was profitable in 2014, with worldwide orders 10 percent higher than in 2013³⁴ despite the expiration of the U.S. Wind Energy Production Tax Credit.



San Luis Obispo-Paso Robles-Arroyo Grande, CA

(gained 14 spots)

JOB GROWTH (2009-14)	18TH
JOB GROWTH (2013-14)	17TH
WAGE GROWTH (2008-13)	66TH
WAGE GROWTH (2012-13)	33RD
SHORT-TERM JOB GROWTH (8/2014-8/2015)	7TH
HIGH-TECH GDP GROWTH (2009-14)	13TH
HIGH-TECH GDP GROWTH (2013-14)	26TH
HIGH-TECH GDP CONCENTRATION (2014)	93RD
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	74TH

ASSETS

» California Polytechnic State University provides stable employment and attracts talent to the region.

LIABILITIES

» Ongoing drought threatens agricultural production and wine-country tourism.

San Luis Obispo-Paso Robles-Arroyo Grande, California, rose 14 places to join the Top 10 this year, building on its impressive climb up the rankings last year. Experiencing strong job gains over all three periods evaluated, the region ranked seventh for employment growth over the most recent 12 months, placing 2 percent higher than the national average.

The region is expanding its small high-tech base, but agriculture, tourism, and government employment remain its key industries. State government employment continued its recovery through 2014, rising slightly above 2008 levels after dipping during the recession. Local government employment is recovering more slowly, and remains below 2008 levels, acting as a drag on overall economic growth.

California Polytechnic State University in San Luis Obispo is investing in its campus and will stimulate employment in the construction sector in coming years. Cal Poly began construction of new student housing in September 2015³⁵; the \$198-million project will add about 1,500 new student beds to campus housing when it is completed in 2018. Cal Poly has also leased space in downtown San Luis Obispo for its Center for Innovation and Entrepreneurship to house and encourage student entrepreneurs to learn, collaborate, and create businesses in the local community.³⁶ Programs like these draw on Cal Poly's emphasis on "Learn by Doing"³⁷ and contribute to the institution being one of the five most competitive public universities in the nation.³⁸



Salt Lake City, UT

(dropped 5 spots)

JOB GROWTH (2009-14)	23RD
JOB GROWTH (2013-14)	64TH
WAGE GROWTH (2008-13)	21ST
WAGE GROWTH (2012-13)	46TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	20TH
HIGH-TECH GDP GROWTH (2009-14)	49TH
HIGH-TECH GDP GROWTH (2013-14)	40TH
HIGH-TECH GDP CONCENTRATION (2014)	50TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	12TH

ASSETS

» Educated population attracts high-skill jobs from traditional tech and finance hubs.

LIABILITIES

» Lower than average per-capita income inhibits consumer spending.

Salt Lake City, Utah, just missed out on the Top 10 this year, dropping five spots to 11th. The region has a diverse high-tech industry, ranking 12th in that measure, and has experienced strong job and wage growth in the five-year period. While its performance in the one-year job and wage components slipped significantly from the previous year, Salt Lake City's more recent short-term job growth compares well with its peers, indicating stronger performance in 2015.

The region has a strong medical-device manufacturing industry, and the past five years have seen 1,800 additional jobs in the miscellaneous manufacturing sector—which includes medical devices—more than in any other region evaluated. Five hundred of these jobs were created in 2014, signaling continuing expansion. Varian Medical Systems, a manufacturer of X-ray products, announced in 2014 that it would hire 1,000 new employees over the next 20 years at its expanded facility in Salt Lake City.³⁹

In 2014, Salt Lake City gained 2,100 jobs in the professional, scientific, and technical services sector; in the past five years, the total figure is 9,100—an increase of more than 24 percent. It also added 600 jobs in credit intermediation and related activities in 2014, continuing to benefit from the relocation of financial-service jobs from high-cost regions such as New York to lower-cost cities. With its highly skilled workforce and immigration, Salt Lake City can absorb these jobs and attract more as it builds on its status as a financial hub.



San Antonio-New Braunfels, TX
(dropped 2 spots)



Charlotte-Concord-Gastonia, NC-SC
(gained 10 spots)

JOB GROWTH (2009-14)	15TH
JOB GROWTH (2013-14)	30TH
WAGE GROWTH (2008-13)	8TH
WAGE GROWTH (2012-13)	51ST
SHORT-TERM JOB GROWTH (8/2014-8/2015)	32ND
HIGH-TECH GDP GROWTH (2009-14)	41ST
HIGH-TECH GDP GROWTH (2013-14)	87TH
HIGH-TECH GDP CONCENTRATION (2014)	82ND
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	37TH

JOB GROWTH (2009-14)	25TH
JOB GROWTH (2013-14)	23RD
WAGE GROWTH (2008-13)	36TH
WAGE GROWTH (2012-13)	34TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	9TH
HIGH-TECH GDP GROWTH (2009-14)	76TH
HIGH-TECH GDP GROWTH (2013-14)	79TH
HIGH-TECH GDP CONCENTRATION (2014)	96TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	37TH

ASSETS

» Relatively affordable housing makes San Antonio appealing to workers seeking to relocate.

LIABILITIES

» Exposure to lower energy prices will result in slower growth in coming years.

ASSETS

» Educated workforce in combination with lower business costs than in peer regions help create an inviting business climate.

LIABILITIES

» Demand for manufacturing output reduced by the high dollar.

San Antonio-New Braunfels, Texas, dropped back to 12th place after breaking into the Top 10 last year. Job growth over the past five years has been impressive, but the one-year measures indicate that it is slowing. Wages grew 9 percent faster from 2008 to 2013 in the region than in the nation as a whole.

The exploration of the Eagle Ford shale contributed to the 2,000 new jobs in the region added over the past five years in the support activities for mining category, quadrupling employment in that sector over this period. However, with lower oil prices persisting, development of the shale has slowed significantly and rig counts are down. The 2015 employment figures are expected to be lower in this sector as companies such as Halliburton and Schlumberger make cuts across the country that also affect employment in the San Antonio region.⁴⁰

Meanwhile, national firms have expanded their San Antonio-New Braunfels back-office and customer-service operations. Employment in the insurance industry, for example, has grown by 32 percent over the five years ending in 2014, adding more than 7,600 jobs over this period, more than in all but one of the metros nationwide. Administrative and support services employment in the region rose by close to 20 percent over the past five years, gaining 4,700 jobs in 2014 alone.

With consistent in-migration and low unemployment, the San Antonio-New Braunfels region has also seen growth in consumer-facing sectors such as general merchandise stores, which added 2,100 jobs in 2014, and food services and drinking places, which added 2,000 jobs in 2014.

Charlotte-Concord-Gastonia, North Carolina-South Carolina, leaped 10 spots to claim 13th place on the basis of strong one-year and five-year job growth. Performance over the most recent 12 months suggests that the region's upward trajectory could continue into next year. However, other metros outperformed the region on high-tech growth, and its position slipped on these measures.

Reductions to business taxes, including to the corporate income tax rate, in North Carolina in recent years have been effective in attracting firms to the region. The cuts demonstrate state government's continuing commitment to maintaining a competitive business climate. The number of workers in the management of companies and enterprises sector has increased steadily since 2009, with more than 5,200 jobs added in the past five years and increasing by 10 percent in 2014 alone. Albemarle Corp., a specialty chemicals company, committed to move its corporate headquarters to Charlotte in 2016, citing the city's strategic location and Charlotte International Airport as key factors for relocating.⁴¹

The Charlotte-Concord-Gastonia financial hub has largely recovered from the recession and is experiencing growth, thanks to its lower costs and its highly skilled and specialized workforce. In July 2015, Dimensional Fund Advisors, a financial-services firm based in Texas, announced that it was moving its regional headquarters to Charlotte.⁴² This investment, which includes more than 300 new jobs and the construction of a new office building, was influenced in part by incentives from the state and local governments.⁴³



Fort Collins, CO (gained 3 spots)

JOB GROWTH (2009-14)	21ST
JOB GROWTH (2013-14)	44TH
WAGE GROWTH (2008-13)	28TH
WAGE GROWTH (2012-13)	29TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	55TH
HIGH-TECH GDP GROWTH (2009-14)	81ST
HIGH-TECH GDP GROWTH (2013-14)	53RD
HIGH-TECH GDP CONCENTRATION (2014)	31ST
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	26TH

ASSETS

- » Colorado State University helps develop an educated workforce and fosters entrepreneurship.
- » High quality of life attracts and retains young professionals.

LIABILITIES

- » Rising housing prices may erode some of the cost-of-living advantages in the short term.

Fort Collins, Colorado, jumped another three spots this year to rank 14th, a repeat performance of gains the metro made in the 2014 index. This time around, Fort Collins' wage growth improved in the one- and five-year measures, but job gains slowed, and short-term indications are that 2015 will not match the impressive expansion experienced during the recovery. In the past five years, the region has increased employment 5 percent faster than the nation as a whole.

Although not growing quickly, the region's high-tech sector is relatively large and diverse. The region's workforce is a major asset: Forty percent of its population over 25 has at least a bachelor's degree.

Colorado State University (CSU) is key to developing the region's educated workforce. It is also a large, stable employer and works to foster high-tech growth. One recent example of this is Prieto Battery, spun off from CSU's Cenergy program, which aims to commercialize clean-energy research developed at the university.⁴⁴ The startup is developing an innovative battery technology and aims to get it into consumer products by 2016.⁴⁵

The city is also home to the Fort Collins Design Center, where Intel manufactures silicon chips for servers and employs 350 people.⁴⁶

Growth and demand from new residents have driven up both house prices and homebuilding in the Fort Collins region, helping to revive the building trades. Construction employment was up by 10 percent in 2014, and is on track to return to 2008 levels in the coming year.



Naples-Immokalee-Marco Island, FL (gained 45 spots)

JOB GROWTH (2009-14)	4TH
JOB GROWTH (2013-14)	3RD
WAGE GROWTH (2008-13)	103RD
WAGE GROWTH (2012-13)	2ND
SHORT-TERM JOB GROWTH (8/2014-8/2015)	29TH
HIGH-TECH GDP GROWTH (2009-14)	25TH
HIGH-TECH GDP GROWTH (2013-14)	12TH
HIGH-TECH GDP CONCENTRATION (2014)	157TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	144TH

ASSETS

- » High quality of life and warm weather beckons retirees and tourists.

LIABILITIES

- » Employment in lower-wage leisure and tourism industry is highly volatile.

Naples-Immokalee-Marco Island, Florida, soared 45 spots to 15th place on our 2015 index. Exceptional performance on job and recent wage growth fueled this rise up the rankings. It ranks third for job gains in 2014, experiencing growth of 10 percent over the past five years. The region also ranked second for wage increases on the one-year measure. Recent high-tech GDP expansion has been 6 percent above the national average and 10 percent higher over the past five years. Since these large percentage changes are to a low base, the overall high-tech sector still remains relatively small.

Tourism is a key driver of the regional economy, and as consumer sentiment improves in the U.S. and in Europe, the number of visitors and their contributions to the local economy are increasing. In 2014, 100,000 more tourists visited the region than in the previous year, and direct visitor expenditures were up by 12 percent.⁴⁷ Hotel construction and renovation projects in 2015 and 2016 are underway to serve this increased demand.⁴⁸

The region is seeing a steady stream of new residents, as those who delayed retirement because of the recession are making the move south. This population growth is boosting the construction industry and fueling demand for leisure services—the food services and drinking places sector added more than 3,100 jobs in the past five years, with more than 800 in 2014 alone. Demand for housing has increased, after having dipped during the recession, with four times as many single-family building permits issued in 2014 than in 2009.



Denver-Aurora-Lakewood, CO

(dropped 4 spots)



Charleston-North Charleston, SC

(gained 22 spots)

JOB GROWTH (2009-14)	16TH
JOB GROWTH (2013-14)	18TH
WAGE GROWTH (2008-13)	32ND
WAGE GROWTH (2012-13)	55TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	81ST
HIGH-TECH GDP GROWTH (2009-14)	99TH
HIGH-TECH GDP GROWTH (2013-14)	97TH
HIGH-TECH GDP CONCENTRATION (2014)	27TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	19TH

JOB GROWTH (2009-14)	12TH
JOB GROWTH (2013-14)	34TH
WAGE GROWTH (2008-13)	24TH
WAGE GROWTH (2012-13)	59TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	93RD
HIGH-TECH GDP GROWTH (2009-14)	12TH
HIGH-TECH GDP GROWTH (2013-14)	30TH
HIGH-TECH GDP CONCENTRATION (2014)	72ND
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	89TH

ASSETS

» Well-educated population is attractive to knowledge-based industries seeking a highly skilled workforce.

LIABILITIES

» High-tech manufacturing sector is very vulnerable to the business cycle.

ASSETS

» The Port of Charleston is essential to the manufacturing and export-oriented industries.

LIABILITIES

» Concentration in lower-skill industries limits local wealth generation.

Denver-Aurora-Lakewood, Colorado, slipped four spots to place 16th, overtaken by Greeley and Fort Collins after having topped the quartet of Colorado metros in last year's Top 25. With a robust and diverse high-tech sector, the metro has experienced strong job gains in the one-year and five-year measures. Short-term employment and high-tech output growth have slowed, however, and contributed to the region's slightly weaker performance on our index this year.

With a steady stream of new residents drawn to a robust job market, the region's population has grown steadily through the recession, increasing by 2 percent annually. This has put pressure on the housing market and driven up the cost of both residential and commercial buildings. Developers are acting to address this undersupply; building permits for single-family dwellings exceeded 8,000 in 2014, with multi-family dwelling permits five times higher in 2014 than in 2009. Construction activity has rebounded along with employment in some of its subsectors. The specialty trade contractors category added 5,800 jobs in 2014 (ranking second in the country for new jobs in this sector), while 2,000 jobs were added in the construction of buildings category (fourth nationwide in this sector).

The region has also gained 1,500 jobs in the air transportation sector in the past five years, ranking third in the country, even as the sector has shrunk in most other peer regions. At Denver International Airport, passengers flying into or out of Denver on Delta increased by 19 percent in the past year.⁴⁹ The city is investing in making the airport a more connected asset; its transit agency will begin light-rail service from the city center to Denver International in April 2016.⁵⁰

Charleston-North Charleston, South Carolina, leaped 22 places to rank 17th this year. Strong job and high-tech growth contributed to this rise. Wages rose 5 percent faster than the national average between 2008 and 2013. Although the metro's high-tech sector is still relatively small, it grew 16 percent faster than the national average over the past five years, ranking 12th in this measure.

Transportation-related industries were also key to the region's employment gains. The transportation equipment manufacturing sector added 4,000 jobs in the five years ending in 2014, an increase of nearly 60 percent. With easy access to the Port of Charleston and attractive incentives, the region has been able to secure multimillion-dollar investment commitments from major auto manufacturers. In March 2015, Daimler committed \$500 million to expand its operations in North Charleston, building a manufacturing facility that will add 1,360 new jobs once operations begin.⁵¹ The plant will produce Mercedes-Benz Sprinter vans. Then in May, Volvo announced that it had chosen Charleston as the location of its first U.S. production facility, an investment of \$500 million over the next three years that will create up to 2,000 jobs once operational.⁵²

Connected to consumers by Interstate 95 and the Port of Charleston, the region is an increasingly important hub for companies supplying the East Coast. Employment in the truck transportation sector has seen a boost of more than 1,100 jobs over the past five years. Gerber Childrenswear is building a 477,000-square-foot warehouse in the region, both to supply retailers and to ship directly to consumers through e-commerce.⁵³

In addition, employment in the administrative and support services sector has increased steadily in recent years. It added 2,000 jobs in 2014 and close to 6,000 over the past five years (32 percent growth).



Nashville-Davidson-Murfreesboro-Franklin, TN

(dropped 3 spots)



San Diego-Carlsbad, CA

(gained 3 spots)

JOB GROWTH (2009-14)	6TH
JOB GROWTH (2013-14)	20TH
WAGE GROWTH (2008-13)	20TH
WAGE GROWTH (2012-13)	87TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	40TH
HIGH-TECH GDP GROWTH (2009-14)	125TH
HIGH-TECH GDP GROWTH (2013-14)	24TH
HIGH-TECH GDP CONCENTRATION (2014)	127TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	56TH

ASSETS

» Lower cost of doing business appeals to firms seeking to relocate and/or expand.

LIABILITIES

» Stronger dollar may weaken international demand for goods manufactured in the region.

Nashville-Davidson-Murfreesboro-Franklin, Tennessee, dropped three spots to land at 18th place. Job growth in the metro remains strong, and over the past five years it has outpaced the nation by 9.5 percent, ranking sixth. Wage growth over the five years from 2008 to 2013 was 6 percent over the U.S. average, but fell to the national average in the one-year measure.

Of the Top 25 large metros, the Nashville-Davidson-Murfreesboro-Franklin area has benefited the least from the high-tech industry resurgence over the past five years. Its high-tech GDP growth was 10 percent slower than the nation's as a whole.

However, the region's business climate and low office rents help attract firms to the area. In late 2014, tire manufacturer Bridgestone announced it was moving its U.S. headquarters to Nashville. In addition to creating 600 jobs in the region, the company will have a new office building in downtown Nashville, contributing to the ongoing revitalization of the area.⁵⁴

Professional and business services have contributed significantly to the metro economy. In 2014, more than 4,100 jobs were added in the professional, scientific, and technical services category, the most of any single sector. Over the past five years, the region has shared in the growth of this industry, with employment increasing by 36 percent. The Greater Nashville region also increased employment in the administrative and support services sector over the past five years, adding almost 19,500 jobs, with 3,500 in 2014 alone.

Demand for vehicles received a boost from lower gas prices, and auto manufacturers in the metro have expanded their operations in response. The Franklin-based division of Nissan sold a record number of cars in the first three quarters of 2015.⁵⁵

JOB GROWTH (2009-14)	51ST
JOB GROWTH (2013-14)	71ST
WAGE GROWTH (2008-13)	50TH
WAGE GROWTH (2012-13)	70TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	38TH
HIGH-TECH GDP GROWTH (2009-14)	63RD
HIGH-TECH GDP GROWTH (2013-14)	56TH
HIGH-TECH GDP CONCENTRATION (2014)	14TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	1ST

ASSETS

» Strong emphasis on R&D-related industries and commercialization of new ideas anchor this innovation hub.

LIABILITIES

» High cost of doing business and lofty real estate costs hinder competitiveness.

San Diego-Carlsbad, California, built on last year's climb into the Top 25 and moved up three spots to 19th place on our 2015 index. The metro has the nation's most diverse high-tech sector, whose performance compares favorably with that on last year's index. The region ranked more highly in the recent job growth measure than in the one- and five-year measures, but it was far outpaced by the other California metros higher on the index.

High wages support consumer spending, which includes discretionary spending at restaurants and bars. In 2014, the food services and drinking places sector added more than 7,000 jobs in the region. As in other tech-heavy metros, professional, scientific, and technical services have also contributed significantly to economic vitality. The sector added 4,700 jobs in 2014, and employment is now above pre-recession levels.

The region is recognized as a hub for research, and strong partnerships between industry and research institutions foster commercialization and entrepreneurship. The San Diego Regional Economic Development Corp. estimates that the university and independent research centers have a \$4.6-billion economic impact (both directly and through the ripple effects of supply-chain and consumption spending and employment).⁵⁶

With this research focus and the highly skilled workforce that it attracts, the region is well-positioned to capitalize on emerging industries such as consumer and military drones, data mining, and cybersecurity. Firms from the region attract venture capital to the local economy, and based on a strong third quarter rebound, the metro is on track to attract more venture capital in 2015 than in the previous year.⁵⁷ One example is Nervana Systems, a developer of "deep learning" adaptive data analysis tools, which secured \$20.5 million in venture funding in June 2015.⁵⁸



Madison, WI (gained 10 spots)



Grand Rapids-Wyoming, MI (gained 4 spots)

JOB GROWTH (2009-14)	77TH
JOB GROWTH (2013-14)	94TH
WAGE GROWTH (2008-13)	19TH
WAGE GROWTH (2012-13)	9TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	73RD
HIGH-TECH GDP GROWTH (2009-14)	11TH
HIGH-TECH GDP GROWTH (2013-14)	27TH
HIGH-TECH GDP CONCENTRATION (2014)	39TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	74TH

ASSETS

» High consumer spending is supported by high per-capita income and consistent in-migration.

LIABILITIES

» Cuts to state funding for the University of Wisconsin-Madison may affect the institution's ability to retain top academic talent.

Madison, Wisconsin, placed 20th on our 2015 index, 10 spots higher than in 2014. Improving on its 2014 performance, Madison ranked ninth in the country for one-year wage growth and, over the past five years, has outpaced the nation by 6 percent in this measure. In 11th place for high-tech growth, Madison's tech sector expanded 18 percent more than the U.S. average between 2009 and 2014. After acting as a stable base during the recession, Madison's large public sector limits potential for job growth.

In 2014, Madison gained just under 2,000 jobs in the management of companies and enterprises sector, with employment in this area surging more in Madison than in all but four metros on the entire list of both large and small cities.

University of Wisconsin-Madison lost significant state funding support under the 2015-2017 Wisconsin budget as part of cuts being made to the entire University of Wisconsin system. To address the \$86-million structural budget deficit, academic and administrative units are reducing their spending. The university has launched a \$3.2-billion fundraising campaign.⁵⁹ While 400 layoffs were projected at the time the cuts were announced,⁶⁰ the university is aware that retaining top-tier academics and staff will be essential to maintaining its reputation as a leading research institution.

JOB GROWTH (2009-14)	9TH
JOB GROWTH (2013-14)	47TH
WAGE GROWTH (2008-13)	38TH
WAGE GROWTH (2012-13)	24TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	5TH
HIGH-TECH GDP GROWTH (2009-14)	103RD
HIGH-TECH GDP GROWTH (2013-14)	108TH
HIGH-TECH GDP CONCENTRATION (2014)	142ND
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	114TH

ASSETS

» Diverse and growing manufacturing base attracts skilled workers.

LIABILITIES

» Relatively high cost of living remains a challenge.

Grand Rapids-Wyoming, Michigan, advanced four places to rank 21st on this year's index. Over the last five years, the region ranked ninth for job growth, with employment in Grand Rapids expanding 8 percent faster than the U.S. average. Relative performance slipped in 2014. However, considering its fifth-place finish in short-term employment growth—in which it outpaced the nation by 2 percent—the region looks poised to improve in 2015. Wage gains have been solid, but the region underperforms in the high-tech components.

The metro's existing manufacturing base has recovered employment lost during the recession, with 11,000 more jobs in 2014 than in 2008. Fabricated Metal Product Manufacturing expanded by 4,000 jobs between 2009 and 2014, helping place the Grand Rapids-Wyoming metro third in the nation for growth in this sector; current employment is at more than 10 percent above pre-recession levels. In July 2015, Mico Industries, a metal stamping firm, announced that it would double its workforce and invest \$8.2 million to expand its facilities in the region.⁶¹

After holding steady through the recession, the metro's health-care sector is surging. Employment at hospitals is up by 4,300 in the five years from 2009 to 2014, and outpatient service jobs rose by 3,000 in the same period. The region is also investing in its position as a medical hub. The so-called Medical Mile in Grand Rapids will see \$88 million in investment from the construction of the Michigan State University Grand Rapids Research Center, which will include a research program and laboratory space for scientists from its College of Human Medicine.⁶² An additional \$30 million will be spent as Grand Valley State University relocates its health-sciences campus to the area.⁶³ Hotel, retail, and housing developments are also in progress.



Boulder, CO

(dropped 9 spots)

JOB GROWTH (2009-14)	26TH
JOB GROWTH (2013-14)	48TH
WAGE GROWTH (2008-13)	41ST
WAGE GROWTH (2012-13)	39TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	156TH
HIGH-TECH GDP GROWTH (2009-14)	46TH
HIGH-TECH GDP GROWTH (2013-14)	73RD
HIGH-TECH GDP CONCENTRATION (2014)	3RD
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	6TH

ASSETS

» Educated workforce and diverse tech sector, which make the metro a lower-cost alternative for Silicon Valley companies looking to expand or relocate.

LIABILITIES

» High cost of living relative to neighboring regions may push some gains out of the metro.

Boulder, Colorado, fell nine spots to 22nd in this year's index, continuing its slide after having peaked at ninth place in 2013. Boulder's exceptional high-tech sector remains a strength—it is the sixth-most diverse and ranks third for its importance to the regional economy. Because of its large, established tech presence, dramatic growth rates are harder to come by. Job gains in the most recent 12 months have slowed, with tech layoffs causing some concern.

The city's professional, scientific, and technical services category added 1,000 new jobs in 2014, a growth rate of more than 4 percent. The sector expanded by 18 percent in the five years between 2009 and 2014, boosting employment by 4,000 positions. State and local governments have remained a steady influence on the economy, especially during the recession. Government employment is also likely to contribute to expansion through innovation emerging from the University of Colorado-Boulder.

Consumer spending in Boulder is supported by the high wages paid in the tech industry, as well as the large student population. There were 2,100 more jobs in 2014 than in 2009 in the sector for food services and drinking places.

Although Boulder is the lowest-ranked Colorado metro in the Top 25, it secured four of the Top 5 venture capital investments in the state in the third quarter of 2015.⁶⁴ These deals, for a variety of software and hardware companies, raised \$45 million and should stimulate new hires. Boulder continues to add jobs in both computer and electronic product manufacturing, as well as in telecommunications, even as these industries have shrunk nationally.



San Rafael, CA

JOB GROWTH (2009-14)	30TH
JOB GROWTH (2013-14)	107TH
WAGE GROWTH (2008-13)	101ST
WAGE GROWTH (2012-13)	49TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	51ST
HIGH-TECH GDP GROWTH (2009-14)	3RD
HIGH-TECH GDP GROWTH (2013-14)	1ST
HIGH-TECH GDP CONCENTRATION (2014)	32ND
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	37TH

ASSETS

» Educated workforce allows metro to absorb high-skill jobs from nearby San Francisco.

LIABILITIES

» Tightening of venture funding nationally could inhibit growth in the metro.

San Rafael, California, debuts at 23rd place. It is a new metro on our index, added as part of the adjustment after the 2010 census. The city has enjoyed exceptionally fast high-tech growth, benefiting from the tech boom in the Bay Area.

In 2014, tech growth was 19 percent faster in San Rafael than in the nation as a whole, and as rents in San Francisco continue to rise, the metro is poised to absorb more spillover jobs and investment. With an educated population and established players in the software industry such as Autodesk located in the metro, San Rafael is well-positioned to claim its share of the explosive growth in the industry.⁶⁵

San Rafael also houses a lively biotech cluster, which includes the headquarters of innovative companies such as BioMarin and Raptor Pharmaceutical Corp. BioMarin, which develops and commercializes biopharmaceuticals for rare diseases, recently received City Council approval to expand its footprint and build a new office complex in downtown San Rafael.⁶⁶

The health-care sector is also seeing investment that will result in more services and jobs once completed. The metro's Marin General Hospital is scheduled to begin its \$394-million expansion in January 2016, and the construction is expected to boost employment in the building trades.⁶⁷



Fayetteville-Springdale-Rogers, AR-MO

(gained 25 spots)



Santa Rosa, CA

(gained 96 spots)

JOB GROWTH (2009-14)	14TH
JOB GROWTH (2013-14)	9TH
WAGE GROWTH (2008-13)	4TH
WAGE GROWTH (2012-13)	3RD
SHORT-TERM JOB GROWTH (8/2014-8/2015)	95TH
HIGH-TECH GDP GROWTH (2009-14)	77TH
HIGH-TECH GDP GROWTH (2013-14)	95TH
HIGH-TECH GDP CONCENTRATION (2014)	163RD
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	175TH

ASSETS

» With rising enrollment as well as higher numbers of graduates, the University of Arkansas in Fayetteville is key to expanding the local talent pool.

LIABILITIES

» Exposure to fluctuation in commodity prices puts key industries at risk.

Fayetteville-Springdale-Rogers, Arkansas-Missouri, placed 24th in 2015, improving its performance by 25 spots. The region made significant gains in jobs and wages over the one- and five-year periods measured. In 2013, total wages paid in the metro increased 4 percent faster than the U.S. average, earning third place. In the five years between 2008 and 2013, wages rose 12 percent faster than the national average. Unlike most other cities that top the 2015 index, Fayetteville-Springdale-Rogers' expansion is not linked to the high-tech sectors, which are small and growing relatively slowly in the metro.

Much more relevant to the local economy's vitality is the location of corporate headquarters and service firms. Employment in the management of companies and enterprises sector increased by 6,500 over the past five years, more than in all but five metros in the country, with 1,600 jobs added in 2014 alone. Administrative and support services added 2,900 jobs over the last five years—an increase of 45 percent, while professional, scientific, and technical services added 2,000 workers to their payrolls over this period.

Walmart is by far the region's largest employer, with its headquarters in Bentonville attracting supplier operations to the area, but it is only one of several major companies headquartered in the area. Tyson Foods Inc., a Fortune 100 food production company, is based in Springdale, where it employs about 6,000 people. In October 2015, the firm announced it would construct a new building in the downtown area.⁶⁸

JOB GROWTH (2009-14)	29TH
JOB GROWTH (2013-14)	5TH
WAGE GROWTH (2008-13)	178TH
WAGE GROWTH (2012-13)	12TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	30TH
HIGH-TECH GDP GROWTH (2009-14)	104TH
HIGH-TECH GDP GROWTH (2013-14)	78TH
HIGH-TECH GDP CONCENTRATION (2014)	60TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	19TH

ASSETS

» Combination of shifting preferences and increasing disposable income boost demand for wine produced in the region.

LIABILITIES

» Strong dollar could increase imports and drive down prices for lower-end wines.

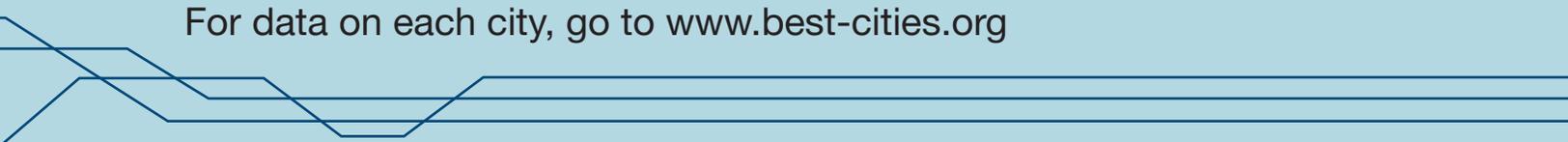
Santa Rosa, California, enters the Top 25 for the first time in more than a decade, leaping 96 spots to 25th. Employment increased 4 percent faster in the region than in the nation overall over the past five years, and 2.7 percent faster in 2014, placing it fifth in this measure. Strong performance in one-year wage growth and in jobs added over the last 12 months also contributed to Santa Rosa's high ranking this year. Situated in the booming Bay Area, the region may also attract companies and new residents seeking relatively more affordable real estate.

Despite the ongoing California drought, the metro's core local wine industry is doing well. While the 2013 and 2014 crops were very large, some vintners are estimating that 2015 yields will be 25 percent below the average.⁶⁹ This should help stabilize grape prices, and demand for wine is rising both because of shifting preferences among U.S. consumers, and because these consumers have more money to spend than a few years ago. Beverage and tobacco product manufacturing employment grew by 400 jobs in 2014.

Lower gas prices and rising wages in the Bay Area also encourage locals in the region to make trips out to wine country. More than 1,100 jobs were added in the metro's food services and drinking places sector in 2014. There is some concern that tourism will suffer if the drought continues, as landscapes would be less appealing and water conservation measures could affect restaurant and hotel offerings.

ON THE WEB

For data on each city, go to www.best-cities.org

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Complete Results

2015 Best-Performing Large Cities

RANKINGS BY COMPONENT

Rank change	2014 rank	2015 rank	Metropolitan statistical area / metropolitan division	Job growth (2009-14)	Job growth (2013-14)	Wage growth (2008-13)	Wage growth (2012-13)	Short-term job growth (8/2014-8/2015)	High-tech GDP growth (2009-14)	High-tech GDP growth (2013-14)	High-tech GDP concentration (2014)	Number of high-tech industries with LQ>=1 (2014)
3	4	1	San Jose-Sunnyvale-Santa Clara, CA	7	7	2	4	2	4	14	1	1
-1	1	2	San Francisco-Redwood City-South San Francisco, CA	5	6	1	7	3	2	4	7	12
0	3	3	Provo-Orem, UT	3	11	10	5	1	15	6	18	26
-2	2	4	Austin-Round Rock, TX	2	12	3	25	27	10	19	9	12
4	9	5	Dallas-Plano-Irving, TX	11	14	30	48	17	34	47	29	12
-1	5	6	Raleigh, NC	17	22	13	21	68	38	57	10	8
4	11	7	Seattle-Bellevue-Everett, WA	37	37	14	23	22	21	90	2	19
8	16	8	Portland-Vancouver-Hillsboro, OR-WA	41	38	37	40	13	29	42	5	26
5	14	9	Greeley, CO	1	1	5	1	4	66	70	181	144
14	24	10	San Luis Obispo-Paso Robles-Arroyo Grande, CA	18	17	66	33	7	13	26	93	74
-5	6	11	Salt Lake City, UT	23	64	21	46	20	49	40	50	12
-2	10	12	San Antonio-New Braunfels, TX	15	30	8	51	32	41	87	82	37
10	23	13	Charlotte-Concord-Gastonia, NC-SC	25	23	36	34	9	76	79	96	37
3	17	14	Fort Collins, CO	21	44	28	29	55	81	53	31	26
45	60	15	Naples-Immokalee-Marco Island, FL	4	3	103	2	29	25	12	157	144
-4	12	16	Denver-Aurora-Lakewood, CO	16	18	32	55	81	99	97	27	19
22	39	17	Charleston-North Charleston, SC	12	34	24	59	93	12	30	72	89
-3	15	18	Nashville-Davidson-Murfreesboro-Franklin, TN	6	20	20	87	40	125	24	127	56
3	22	19	San Diego-Carlsbad, CA	51	71	50	70	38	63	56	14	1
10	30	20	Madison, WI	77	94	19	9	73	11	27	39	74
4	25	21	Grand Rapids-Wyoming, MI	9	47	38	24	5	103	108	142	114
-9	13	22	Boulder, CO	26	48	41	39	156	46	73	3	6
N/A	New	23	San Rafael, CA	30	107	101	49	51	3	1	32	37
25	49	24	Fayetteville-Springdale-Rogers, AR-MO	14	9	4	3	95	77	95	163	175
96	121	25	Santa Rosa, CA	29	5	178	12	30	104	78	60	19
-19	7	26	Houston-The Woodlands-Sugar Land, TX	10	24	6	22	138	57	67	118	144
23	50	27	Atlanta-Sandy Springs-Roswell, GA	47	19	88	83	52	30	66	41	74
28	56	28	Orlando-Kissimmee-Sanford, FL	22	10	119	42	8	136	85	85	89
14	43	29	Vallejo-Fairfield, CA	128	85	44	11	12	67	25	36	114
28	58	30	Savannah, GA	40	27	99	84	58	1	3	43	144
-23	8	31	Fort Worth-Arlington, TX	24	68	25	43	88	40	81	54	144
-5	27	32	Santa Maria-Santa Barbara, CA	62	79	60	112	21	20	104	22	6
48	81	33	Boise City, ID	31	35	102	6	109	56	28	33	144
38	72	34	Rockingham County-Strafford County, NH	93	104	51	95	26	19	18	49	12
-1	34	35	Cambridge-Newton-Framingham, MA	67	113	27	102	60	44	62	6	3

RANKINGS BY COMPONENT

Rank change	2014 rank	2015 rank	Metropolitan statistical area / metropolitan division	Job growth (2009-14)	Job growth (2013-14)	Wage growth (2008-13)	Wage growth (2012-13)	Short-term job growth (8/2014-8/2015)	High-tech GDP growth (2009-14)	High-tech GDP growth (2013-14)	High-tech GDP concentration (2014)	Number of high-tech industries with LO>=1 (2014)
18	54	36	Santa Cruz-Watsonville, CA	63	49	71	13	180	16	8	56	37
-2	35	37	McAllen-Edinburg-Mission, TX	28	56	18	86	31	36	29	197	175
57	94	37	Worcester, MA-CT	72	117	73	30	44	78	76	40	9
-4	35	39	Oakland-Hayward-Berkeley, CA	53	52	85	56	101	58	118	21	3
48	88	40	Cape Coral-Fort Myers, FL	8	2	140	16	72	28	33	185	175
51	92	41	Fort Lauderdale-Pompano Beach-Deerfield Beach, FL	46	26	141	60	19	85	91	90	56
54	96	42	Lexington-Fayette, KY	43	50	74	73	39	106	123	83	37
-22	21	43	Baton Rouge, LA	81	57	33	18	84	60	32	171	114
36	80	44	North Port-Sarasota-Bradenton, FL	20	4	171	19	90	37	31	135	114
-5	40	45	Des Moines-West Des Moines, IA	57	62	22	37	78	61	65	159	144
27	73	46	Anaheim-Santa Ana-Irvine, CA	54	60	143	113	18	64	93	24	3
24	71	47	Merced, CA	42	29	52	8	161	6	9	194	175
-22	26	48	Indianapolis-Carmel-Anderson, IN	45	83	45	75	45	176	132	20	56
-14	35	49	Ogden-Clearfield, UT	44	43	79	62	28	170	50	102	144
20	70	50	West Palm Beach-Boca Raton-Delray Beach, FL	33	15	98	31	114	93	54	107	144
-7	44	51	Boston, MA	80	103	72	92	59	18	44	70	37
-11	41	52	Columbus, OH	35	74	23	66	100	87	115	99	89
-4	48	52	Greenville-Anderson-Mauldin, SC	36	67	59	53	74	53	146	95	114
59	113	54	Fresno, CA	83	25	121	15	16	141	46	176	144
23	78	55	Warren-Troy-Farmington Hills, MI	13	84	135	79	80	32	48	63	114
82	138	56	Salinas, CA	110	28	91	20	41	72	72	172	144
-39	18	57	Laredo, TX	19	78	7	123	11	5	175	200	194
28	86	58	Tampa-St. Petersburg-Clearwater, FL	52	51	105	99	47	144	113	78	26
-14	45	59	Minneapolis-St. Paul-Bloomington, MN-WI	60	96	63	91	133	33	63	55	37
46	106	60	Riverside-San Bernardino-Ontario, CA	32	8	164	26	36	161	127	132	144
42	103	61	Tacoma-Lakewood, WA	91	36	82	74	10	166	131	120	114
3	65	62	Phoenix-Mesa-Scottsdale, AZ	61	72	139	77	66	45	135	58	56
79	142	63	Olympia-Tumwater, WA	100	32	104	14	34	129	75	164	194
-36	28	64	Bakersfield, CA	27	55	12	28	181	91	167	161	114
20	85	65	Miami-Miami Beach-Kendall, FL	34	41	109	68	76	110	22	158	194
-19	47	66	Durham-Chapel Hill, NC	82	76	67	32	126	183	177	4	19
-35	32	67	Springfield, MO	88	75	77	108	130	8	5	98	89
-11	57	68	Asheville, NC	78	101	133	80	25	62	136	109	26
-36	33	69	Corpus Christi, TX	50	63	26	81	144	27	52	186	175
34	104	70	Wilmington, NC	116	39	150	47	117	74	41	47	89
-10	61	71	Louisville/Jefferson County, KY-IN	58	73	57	106	96	52	106	154	114
45	117	72	Salem, OR	148	21	144	17	63	134	129	87	74
-53	20	73	Lubbock, TX	74	110	15	38	107	127	192	101	114
-28	46	74	Oklahoma City, OK	48	111	11	50	112	172	37	178	175
-16	59	75	Ann Arbor, MI	56	135	65	89	157	42	112	51	26
-24	52	76	Lake County-Kenosha County, IL-WI	115	134	49	90	160	51	36	17	37
-35	42	77	Los Angeles-Long Beach-Glendale, CA	68	66	132	122	116	68	139	13	10

RANKINGS BY COMPONENT

Rank change	2014 rank	2015 rank	Metropolitan statistical area / metropolitan division	Job growth (2009-14)	Job growth (2013-14)	Wage growth (2008-13)	Wage growth (2012-13)	Short-term job growth (8/2014-8/2015)	High-tech GDP growth (2009-14)	High-tech GDP growth (2013-14)	High-tech GDP concentration (2014)	Number of high-tech industries with LO>=1 (2014)
-47	31	78	Lincoln, NE	70	115	40	97	120	39	155	80	89
55	134	79	Visalia-Porterville, CA	106	127	111	10	75	17	10	193	175
98	178	80	Port St. Lucie, FL	59	13	191	133	64	86	15	148	89
57	138	81	Spokane-Spokane Valley, WA	162	98	87	72	14	98	114	92	89
-18	64	82	Jacksonville, FL	73	59	126	104	49	120	98	108	114
-8	75	83	Kennewick-Richland, WA	65	65	16	160	108	180	102	44	114
5	89	84	Sacramento-Roseville-Arden-Arcade, CA	112	46	122	61	67	147	182	66	74
46	131	85	Modesto, CA	64	45	123	44	134	82	2	189	194
58	144	86	Las Vegas-Henderson-Paradise, NV	75	16	199	69	46	100	39	175	175
-36	51	87	Trenton, NJ	107	108	43	94	94	138	186	35	56
22	109	87	Springfield, MA	89	120	81	57	104	95	59	137	114
66	155	89	Stockton-Lodi, CA	94	33	176	45	65	113	13	182	175
-28	62	90	New York-Jersey City-White Plains, NY-NJ	55	69	148	127	141	35	34	76	89
91	182	91	Gainesville, FL	145	86	118	101	33	108	38	138	74
-29	63	92	Spartanburg, SC	49	87	125	27	48	188	173	183	114
-55	38	93	Baltimore-Columbia-Towson, MD	97	155	42	158	42	107	143	48	56
-26	68	94	Cincinnati, OH-KY-IN	104	105	83	150	69	54	58	100	114
31	126	95	Providence-Warwick, RI-MA	125	125	89	76	132	47	94	79	37
-14	82	96	Brownsville-Harlingen, TX	39	99	34	134	79	196	16	196	175
5	102	97	Albany-Schenectady-Troy, NY	155	147	54	54	176	55	71	52	37
-8	90	98	Colorado Springs, CO	95	97	47	152	155	128	145	15	12
68	167	99	Reno, NV	137	31	198	64	23	119	105	152	114
-5	95	100	Oxnard-Thousand Oaks-Ventura, CA	87	95	100	120	164	109	120	11	26
83	184	101	Lakeland-Winter Haven, FL	151	80	166	41	6	130	11	195	175
-9	93	102	Allentown-Bethlehem-Easton, PA-NJ	92	133	70	111	146	97	43	73	89
-26	77	103	Kansas City, MO-KS	117	93	97	115	143	126	88	42	37
26	130	104	Green Bay, WI	121	139	68	98	37	117	74	174	144
N/A	21*	105	Waco, TX	173	141	35	117	159	14	100	46	26
41	147	106	Eugene, OR	133	61	184	85	113	102	51	61	74
25	132	107	Columbia, SC	66	58	107	88	121	146	82	170	175
16	124	108	Myrtle Beach-Conway-North Myrtle Beach, SC-NC	76	54	167	63	50	101	152	192	194
19	128	109	Manchester-Nashua, NH	159	109	142	131	145	43	20	16	26
4	114	110	Duluth, MN-WI	127	173	69	35	140	48	35	162	144
12	123	111	Beaumont-Port Arthur, TX	177	42	108	197	15	26	21	179	175
0	112	112	Knoxville, TN	98	89	78	147	62	192	169	89	89
-34	79	113	Pittsburgh, PA	138	189	29	129	92	88	154	67	37
76	190	114	Ocala, FL	147	40	197	78	56	162	92	146	89
-31	84	115	Washington-Arlington-Alexandria, DC-VA-MD-WV	105	172	39	168	97	140	157	28	56
27	143	116	Kalamazoo-Portage, MI	181	91	137	52	77	179	126	74	89
-6	111	117	Harrisburg-Carlisle, PA	179	154	55	82	61	145	185	104	56
-20	98	118	Wilmington, DE-MD-NJ	118	102	106	116	154	71	125	75	89
-20	99	119	Urban Honolulu, HI	96	148	64	107	54	135	156	168	175

RANKINGS BY COMPONENT

Rank change	2014 rank	2015 rank	Metropolitan statistical area / metropolitan division	Job growth (2009-14)	Job growth (2013-14)	Wage growth (2008-13)	Wage growth (2012-13)	Short-term job growth (8/2014-8/2015)	High-tech GDP growth (2009-14)	High-tech GDP growth (2013-14)	High-tech GDP concentration (2014)	Number of high-tech industries with LO>=1 (2014)
-33	87	120	Omaha-Council Bluffs, NE-IA	102	118	62	65	151	156	174	134	114
-68	53	121	El Paso, TX	71	123	9	167	166	69	194	133	114
-25	97	122	Chicago-Naperville-Arlington Heights, IL	109	122	145	130	149	83	61	86	56
-3	120	123	Augusta-Richmond County, GA-SC	108	81	112	190	129	59	103	131	74
-8	116	124	Jackson, MS	135	126	61	96	125	116	96	167	144
40	165	125	Pensacola-Ferry Pass-Brent, FL	85	77	131	156	35	173	188	139	144
-16	110	126	Philadelphia, PA	132	121	46	121	175	114	86	94	144
23	150	127	Canton-Massillon, OH	69	146	75	58	187	111	84	198	175
-28	100	128	Little Rock-North Little Rock-Conway, AR	169	184	76	172	71	24	180	30	74
-22	107	129	Silver Spring-Frederick-Rockville, MD	150	164	84	193	89	151	101	25	26
-8	122	130	Columbus, GA-AL	130	170	48	173	128	89	111	110	56
-30	101	131	Clarksville, TN-KY	38	88	95	196	24	197	195	199	194
-58	74	132	Anchorage, AK	86	183	17	124	183	105	119	114	144
26	159	133	Winston-Salem, NC	152	128	134	141	98	143	17	147	56
24	158	134	Newark, NJ-PA	180	131	113	36	169	177	163	37	37
-116	19	135	Lafayette, LA	101	171	31	93	198	96	77	177	144
5	141	136	Rochester, NY	144	175	116	126	127	132	107	53	19
34	171	137	Deltona-Daytona Beach-Ormond Beach, FL	124	70	183	136	86	160	148	128	56
-69	69	138	Tulsa, OK	120	106	56	109	177	152	142	151	114
-24	115	139	Greensboro-High Point, NC	168	160	160	105	57	80	184	77	56
-74	66	140	Huntsville, AL	146	159	53	151	182	133	151	8	26
-65	76	141	Nassau County-Suffolk County, NY	103	152	94	140	123	158	190	57	74
-37	105	142	Cedar Rapids, IA	164	186	58	119	190	50	128	81	37
N/A	New	143	Elgin, IL	114	153	170	71	131	121	122	122	89
32	176	144	Reading, PA	119	100	129	165	110	142	109	124	114
50	195	145	Palm Bay-Melbourne-Titusville, FL	186	90	193	179	43	182	165	12	10
-79	67	146	New Orleans-Metairie, LA	90	114	86	137	191	31	176	166	144
-39	108	147	Richmond, VA	84	116	124	118	179	169	149	123	89
N/A	130*	148	Salisbury, MD-DE	160	124	159	100	87	149	170	126	74
-1	148	149	New Haven-Milford, CT	141	137	147	139	119	157	133	62	74
-25	125	150	Portland-South Portland, ME	166	181	130	110	99	118	116	116	74
N/A	New	151	Montgomery County-Bucks County-Chester County, PA	158	140	115	149	162	174	153	19	12
9	161	152	Hartford-West Hartford-East Hartford, CT	153	156	114	148	115	137	141	69	89
15	168	153	Lancaster, PA	122	82	158	128	103	164	137	150	175
-18	136	154	Chattanooga, TN-GA	113	182	92	161	82	187	55	169	144
38	193	155	Detroit-Dearborn-Livonia, MI	131	149	189	166	91	79	68	111	114
8	164	156	Flint, MI	129	168	190	125	139	23	60	97	144
-17	140	157	Fort Wayne, IN	111	130	151	174	85	184	197	103	56
36	194	158	Tallahassee, FL	187	53	192	162	135	154	7	112	114
-3	156	159	Buffalo-Cheektowaga-Niagara Falls, NY	149	163	80	135	136	178	144	91	114
29	189	160	Scranton-Wilkes-Barre-Hazleton, PA	178	143	117	142	70	190	171	115	89
-26	135	161	Lansing-East Lansing, MI	123	142	156	67	163	70	158	160	175

RANKINGS BY COMPONENT

Rank change	2014 rank	2015 rank	Metropolitan statistical area / metropolitan division	Job growth (2009-14)	Job growth (2013-14)	Wage growth (2008-13)	Wage growth (2012-13)	Short-term job growth (8/2014-8/2015)	High-tech GDP growth (2009-14)	High-tech GDP growth (2013-14)	High-tech GDP concentration (2014)	Number of high-tech industries with LO>=1 (2014)
-11	151	162	Toledo, OH	99	145	162	154	106	75	99	173	194
6	169	163	Evansville, IN-KY	126	112	163	178	53	199	200	71	144
-27	137	164	Milwaukee-Waukesha-West Allis, WI	140	129	149	138	174	115	130	106	89
-32	133	165	Cleveland-Elyria, OH	136	166	93	143	142	131	189	136	89
-13	153	166	Bridgeport-Stamford-Norwalk, CT	142	169	179	185	105	168	124	38	19
3	170	167	Hickory-Lenoir-Morganton, NC	182	151	196	132	168	9	134	105	37
-16	152	168	Akron, OH	139	119	154	164	167	92	83	143	144
22	191	169	Camden, NJ	194	187	175	114	150	139	45	84	56
-43	127	170	St. Louis, MO-IL	175	161	177	145	153	123	117	64	56
-5	166	171	South Bend-Mishawaka, IN-MI	174	92	194	186	111	165	110	130	74
-81	91	172	Killeen-Temple, TX	79	138	169	195	83	185	199	141	144
12	185	173	Montgomery, AL	190	178	187	169	122	84	49	88	89
12	186	174	Dayton, OH	163	132	168	184	148	150	159	68	37
-14	161	175	Tucson, AZ	183	176	181	144	165	94	172	59	19
4	180	176	Rockford, IL	134	136	188	163	158	65	187	155	114
10	187	177	York-Hanover, PA	165	177	136	153	172	159	147	119	56
-15	163	178	Syracuse, NY	184	190	138	170	184	124	138	65	37
-5	174	179	Mobile, AL	188	150	146	175	193	7	164	113	114
-1	179	180	Albuquerque, NM	192	165	186	181	137	148	178	26	37
-33	148	181	Birmingham-Hoover, AL	167	162	161	155	102	163	179	140	144
-37	145	182	Memphis, TN-MS-AR	170	144	153	182	186	122	69	149	114
-29	154	183	Wichita, KS	195	158	180	146	192	191	160	23	37
N/A	New	184	Dutchess County-Putnam County, NY	189	174	173	171	195	112	121	45	89
-66	119	185	Gary, IN	156	194	110	187	118	186	162	188	114
-5	181	186	Erie, PA	171	185	120	180	152	167	183	129	89
-14	173	187	Roanoke, VA	157	157	165	157	178	155	193	125	89
-16	172	188	Norwich-New London, CT	143	179	195	192	173	198	168	34	56
8	197	189	Fort Smith, AR-OK	191	167	174	188	194	22	80	180	114
-13	177	190	Kingsport-Bristol-Bristol, TN-VA	161	180	172	198	147	193	89	144	114
5	196	191	Utica-Rome, NY	198	196	152	159	170	194	150	117	74
-17	175	192	Davenport-Moline-Rock Island, IA-IL	172	192	90	176	200	153	166	165	144
-64	129	193	Fayetteville, NC	197	199	96	194	185	73	198	145	144
-34	160	194	Virginia Beach-Norfolk-Newport News, VA-NC	176	191	155	177	171	175	181	121	89
4	199	195	Youngstown-Warren-Boardman, OH-PA	154	193	182	189	124	189	140	191	144
2	198	196	Gulfport-Biloxi-Pascagoula, MS	196	195	185	103	188	181	191	153	144
-40	157	197	Peoria, IL	185	198	128	200	196	90	196	156	175
2	200	198	Atlantic City-Hammonton, NJ	200	200	200	191	199	171	23	184	114
-11	188	199	Huntington-Ashland, WV-KY-OH	193	188	127	183	189	195	161	190	175
-17	183	200	Shreveport-Bossier City, LA	199	197	157	199	197	200	64	187	144



TOP 10

Best-Performing Small Cities

In addition to ranking the 200 largest U.S. metropolitan areas, the Best-Performing Cities report includes a companion index that measures the performance of smaller cities. The 2015 index has expanded and now covers 201 small metros, accounting for 22 additional metros than in years past. The updated list reflects changes made after the 2010 U.S. Census.

Four of last year's Top 10 small cities reclaimed positions in the top tier this year, including the No. 1 metropolitan area of [Fargo, North Dakota-Minnesota](#), which took first place for the second year in a row. [Janesville-Beloit, Wisconsin](#); [Bend-Redmond, Oregon](#); and [Logan, Utah-Idaho](#), all leaped into the Top 10 this year.

TABLE 5. TOP 10 BEST-PERFORMING SMALL CITIES

Rank according to 2015 index

Metropolitan statistical area (MSA)	2015 rank	2014 rank
Fargo, ND-MN	1	1
Bismarck, ND	2	4
Ames, IA	3	14
Janesville-Beloit, WI	4	41
Odessa, TX	5	12
The Villages, FL	6	(new)
Columbus, IN	7	2
Bend-Redmond, OR	8	46
Logan, UT-ID	9	35
Auburn-Opelika, AL	10	10

Source: Milken Institute



Fargo, ND-MN

(held steady)

JOB GROWTH (2009-14)	8TH
JOB GROWTH (2013-14)	20TH
WAGE GROWTH (2008-13)	5TH
WAGE GROWTH (2012-13)	27TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	67TH
HIGH-TECH GDP GROWTH (2009-14)	26TH
HIGH-TECH GDP GROWTH (2013-14)	52ND
HIGH-TECH GDP CONCENTRATION (2014)	50TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	26TH

ASSETS

- » Fargo's well-educated workforce and lower business costs are attractive to high-value employers.
- » Expanding industrial and technology sector will support future growth.

LIABILITIES

- » The energy slowdown will restrain growth across auxiliary services.

Fargo, North Dakota-Minnesota, returned to No. 1 in our index of best-performing small cities, holding the top spot for the second year in a row. While more recent job growth tapered off in the metro, Fargo outpaced the national average in both job and income gains, most notably during the five years ending in 2014. The metro, which thrived during North Dakota's decade-long oil boom, has relied on its diverse industry mix to sustain growth in the region.

While the oil boom may have come to an end, it created an economic overflow to industries such as manufacturing and business services. For example, it indirectly supported the creation of more than 3,000 jobs combined in the ambulatory health-care sector as well as administrative and support services during the five-year period ending in 2014. Moreover, investors that had flocked to the metro to tap into the state's oil boom have engaged in startup opportunities in tech-related fields. Greater collaboration between universities in Minnesota and North Dakota also has supported startup investment and new business partnerships in the Twin Cities and Fargo, respectively, while generating a wave of entrepreneurial activity.⁷⁰ Even larger firms are taking advantage of lower business costs in North Dakota. The city's tech sector is anchored by Microsoft Business Solutions, which employs more than 850 people. Recently, Microsoft announced that

it plans to expand its existing facility in Fargo in an effort to promote its cloud-based services.⁷¹ The new center is estimated to create 200 positions.⁷² As this trend continues, growth in professional and business services will continue to spur further demand for education and health-care services.

Fargo's biggest sectors include health care, banking, and university education. Sanford Health is the metro's top employer with over 6,000 workers. North Dakota State University alone employs nearly 4,500 in the metro. Fargo's insurance-carrier industry, led by Noridian/Blue Cross Blue Shield, witnessed an increase of nearly 600 jobs in 2014. Fargo's improved rankings on this year's high-tech components of the index helped outweigh some of its recent energy-related job losses.



Bismarck, ND

(gained 2 spots)

JOB GROWTH (2009-14)	10TH
JOB GROWTH (2013-14)	58TH
WAGE GROWTH (2008-13)	4TH
WAGE GROWTH (2012-13)	8TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	12TH
HIGH-TECH GDP GROWTH (2009-14)	33RD
HIGH-TECH GDP GROWTH (2013-14)	26TH
HIGH-TECH GDP CONCENTRATION (2014)	89TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	80TH

ASSETS

- » High concentration of employment in government and health-care services provides stability.
- » Nearby shale formation encourages energy-related growth as well as the need for support infrastructure.

LIABILITIES

- » Increased foreign production of oil could place more downward pressure on oil prices.

Bismarck, North Dakota, moved up two positions to claim second place. The metro posted the fourth- and 10th-fastest performance in five-year wage and job growth, respectively. Like Fargo, Bismarck underwent increased economic activity from North Dakota's Bakken shale formation during the boom years. However, even as drilling activity has slowed, its secondary impacts have increased demand for a number of services in the area, including health care, education, and public infrastructure projects.⁷³ Construction has been a key economic contributor as the number of specialty trade contractors grew by 720 over the five years ending in 2014, accounting for the largest employment increase across all local industries. And while energy prices may have retreated, the metro is focused on building up its pipeline infrastructure, including transportation links between drilling centers, to better accommodate future activity.⁷⁴

The metro's more stable government and health-care sectors have kept the local economy afloat. As the capital city, Bismarck has already had a high concentration of employment in the state and local government sector. In the five years ending in 2014, state government employment in Bismarck gained 620 workers, while the hospital industry added more than 780 employees to meet the growing demand for health-care services. Given its proximity to the oil patch, Bismarck will likely benefit from the state's healthy tax collections, some of which have already been set aside for construction projects throughout North Dakota.⁷⁵



Ames, IA

(gained 11 spots)

JOB GROWTH (2009-14)	24TH
JOB GROWTH (2013-14)	19TH
WAGE GROWTH (2008-13)	48TH
WAGE GROWTH (2012-13)	45TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	10TH
HIGH-TECH GDP GROWTH (2009-14)	11TH
HIGH-TECH GDP GROWTH (2013-14)	53RD
HIGH-TECH GDP CONCENTRATION (2014)	103RD
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	48TH

ASSETS

- » Relatively low cost of doing business and large pool of educated workers tied to Iowa State University's presence.

LIABILITIES

- » Exposure to tight labor market and high dependence on university.

Ames, Iowa, climbed 11 spots to land at No. 3 among small metros. It ranked in the top quartile on both one-year and five-year job growth, and was 10th overall in more recent job growth over the 12 months ending in August 2015.

Iowa State University (ISU), the largest employer in the region, has been the key driver of growth in the region. In 2014, ISU's enrollment reached record numbers.⁷⁶ It rose by 1,500 students over the previous year, an increase of 4.5 percent and more than a 24 percent rise over the prior five years. The university's expanding presence bodes well for many local business and support services in the metro. Professional and scientific services created more than 500 jobs, while administrative and support services added 250 workers over the five years ending in 2014. The metro's growing population has created additional demand for multi-family housing as evidenced by the rise in permits and construction employment.⁷⁷

Ames' attractive business climate and ability to draw from a larger-than-normal talent pool are incentives in the region. In addition to ISU, Ames is also home to the USDA National Centers for Animal Health and Ames Laboratories, the nation's premier research center for rare earth materials science and technology. Both draw a healthy flow of research funding and entrepreneurial interest to the metro.



Janesville-Beloit, WI

(gained 37 spots)



Odessa, TX

(gained 7 spots)

JOB GROWTH (2009-14)	58TH
JOB GROWTH (2013-14)	56TH
WAGE GROWTH (2008-13)	63RD
WAGE GROWTH (2012-13)	3RD
SHORT-TERM JOB GROWTH (8/2014-8/2015)	22ND
HIGH-TECH GDP GROWTH (2009-14)	1ST
HIGH-TECH GDP GROWTH (2013-14)	6TH
HIGH-TECH GDP CONCENTRATION (2014)	55TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	48TH

ASSETS

- » Growing medical technologies and advanced manufacturing industries attract high-tech players.
- » Strategic location along the Interstate 39 corridor will continue to create opportunities for logistics.

LIABILITIES

- » Headwinds from a strong dollar will stall growth in local manufacturing.

Janesville-Beloit, Wisconsin, skyrocketed 37 spots to finish in fourth place on this year's index. Janesville's significant jump can be attributed to its first-place finish in high-tech GDP growth during the five years ending in 2014. In addition, the metro outperformed the national average in wage growth by more than 7 percentage points between 2012 and 2013. The income gains were largely indicative of a broad-based recovery in the local job market and, in particular, a rise in the earnings of workers primarily engaged in business and professional services.⁷⁸

High-tech growth has been driven by data-processing services and machinery manufacturing, creating over 450 and 400 jobs, respectively, over the last five years ending in 2014. Data Dimensions, a leader in business-process automation and health-care records services, operates corporate offices, a records management center, a processing facility, and a Tier III data center that opened in Janesville in 2010. The company added 350 jobs between 2012 and 2013, and was recognized for being the second-largest job creator in Wisconsin.⁷⁹ While the metro's historical ties to General Motors and more traditional manufacturing companies may have ended, the area's advanced manufacturing appears to be on a more promising path. Pratt Industries, the fifth-largest box manufacturer in the U.S., recently selected Beloit's Gateway Business Park as the location for its new 350,000-square-foot facility, which will create 140 new manufacturing jobs. In addition, A.M. Castle & Co., a global distributor of specialty metal and plastic products, value-added services, and supply-chain solutions, is building a 208,000-square-foot build-to-suit bar-processing facility in Janesville, set to house at least 90 high-skilled workers.⁸⁰

JOB GROWTH (2009-14)	2ND
JOB GROWTH (2013-14)	2ND
WAGE GROWTH (2008-13)	3RD
WAGE GROWTH (2012-13)	15TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	19TH
HIGH-TECH GDP GROWTH (2009-14)	54TH
HIGH-TECH GDP GROWTH (2013-14)	17TH
HIGH-TECH GDP CONCENTRATION (2014)	196TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	177TH

ASSETS

- » Proximity to Permian Basin allows for more cost-effective drilling.
- » Offers costs advantages over neighboring cities such as Midland.

LIABILITIES

- » High dependency on exploration increases vulnerability to business cycles.

Odessa, Texas, ranked fifth on this year's index, improving by seven positions from last year. The metro's favorable rankings in the last couple of years can be largely attributed to the decade-long energy boom. Its job growth was the second highest in the nation among all small cities during both the one-year and five-year periods. Support activities for mining led the way, creating nearly 5,500 jobs during the five-year period ending in 2014. Various construction industries added 2,100 jobs to support the metro's expanding economy. The energy-driven economy has eventually led to broad-based growth across Odessa's local economy. In fact, at one point, the rapid expansion of metro's population generated concern that overcapacity would place immense pressure on its inadequate infrastructure.⁸¹ With oil prices having retreated, however, future growth in the metro is expected to slow. Nonetheless, its low business costs, local business incentives, and industry expertise led by Saulsbury and Halliburton should draw more businesses into the region as energy prices stabilize.



The Villages, FL

JOB GROWTH (2009-14)	4TH
JOB GROWTH (2013-14)	8TH
WAGE GROWTH (2008-13)	2ND
WAGE GROWTH (2012-13)	1ST
SHORT-TERM JOB GROWTH (8/2014-8/2015)	57TH
HIGH-TECH GDP GROWTH (2009-14)	76TH
HIGH-TECH GDP GROWTH (2013-14)	22ND
HIGH-TECH GDP CONCENTRATION (2014)	175TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	125TH

ASSETS

- » Population growth driven by steady influx of retirees.
- » Opportunity to capitalize on economic spillover from neighboring Orlando.

LIABILITIES

- » Stock market correction can hamper growth given the metro's higher dependency on non-wage income.

The Villages, Florida, is a new metro in the Best-Performing Cities index this year, and it entered in sixth place among small metros. Expansion in The Villages metro area has been driven largely by population growth among people aged 64 and over. According to the U.S. Census Bureau, the metro experienced the fastest population growth in the country, marking a 5.4 percent rise during the 12-month period ending July 2014.⁸² Job growth in The Villages was fourth- and eighth-fastest in the country in terms of one-year and five-year job growth, respectively. With retirees making up a significant share of the metro's population, there has been greater dependency on non-wage income, much of it tied to less risky investment portfolios. Moreover, the metro's growing population has generated an increase in demand for many local services, with retail and health services leading the way. As a result, overall wages posted the fastest growth in the country during the one-year period between 2012 and 2013 and was second-fastest during the five-year period examined.

The Villages metro offers senior citizens a retirement haven that's more affordable than coastal areas of Florida.⁸³ The metro's warmer climate, abundant lifestyle amenities, and lower cost of living will continue to attract a steady influx of retirees.



Columbus, IN

(dropped 5 spots)

JOB GROWTH (2009-14)	5TH
JOB GROWTH (2013-14)	23RD
WAGE GROWTH (2008-13)	14TH
WAGE GROWTH (2012-13)	178TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	2ND
HIGH-TECH GDP GROWTH (2009-14)	10TH
HIGH-TECH GDP GROWTH (2013-14)	23RD
HIGH-TECH GDP CONCENTRATION (2014)	47TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	26TH

ASSETS

- » A strong manufacturing base, led by engine producer Cummins, serves U.S. and global markets.
- » Mechanical engineers make up a larger share of the workforce than in any other U.S. metro.

LIABILITIES

- » Low industrial diversity and high dependency on manufacturing.

Columbus, Indiana, fell five spots to seventh place. Led by the local manufacturing industry, job growth over the 12 months ending August 2015 was second-fastest in the nation—more than 3 percentage points above the national average. Machinery, fabricated metals, and transportation equipment manufacturing all together added 720 jobs in the one-year period ending in 2014. Those same industries also contributed to the metro recording the fifth-fastest job growth in the nation over the five years ending in 2014. Growth in local manufacturing triggered jobs in the metro's value-added services, namely professional and business services, in addition to hundreds of support-related and retail jobs.

Columbus' skilled labor force and low business costs have attracted investment as well as expansion by existing companies in the metro. Faurecia Emissions Control Technologies (FECT), a global manufacturer of automotive emissions control systems, is headquartered in the metro and plans to build a \$61-million production facility that would create an estimated 131 jobs.⁸⁴ The new building will be adjacent to FECT's existing R&D center.⁸⁵ Toyota Industrial Equipment Manufacturing, which employs over 1,100 workers in Columbus, is also reinvesting in the metro.⁸⁶ In addition to its existing forklift-manufacturing plant, the company plans to build a \$16-million facility that will facilitate a new national headquarters for its Material Handling division.⁸⁷ Cummins Inc., a producer of engines and power generation, is the metro's biggest employer and accounts for 17 percent of the local workforce.⁸⁸



Bend-Redmond, OR

(gained 38 spots)



Logan, UT-ID

(gained 26 spots)

JOB GROWTH (2009-14)	15TH
JOB GROWTH (2013-14)	3RD
WAGE GROWTH (2008-13)	160TH
WAGE GROWTH (2012-13)	6TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	3RD
HIGH-TECH GDP GROWTH (2009-14)	12TH
HIGH-TECH GDP GROWTH (2013-14)	163RD
HIGH-TECH GDP CONCENTRATION (2014)	12TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	4TH

ASSETS

- » Diversified tourism sector drives economy.
- » Outdoor and recreational lifestyle appeals to entrepreneurs, helping make it an emerging hub for high-tech startups.

LIABILITIES

- » High dependency on tourism makes the metro vulnerable to business cycles.

Bend-Redmond, Oregon, climbed 38 spots to finish in eighth place.

Led by its vibrant tourism industry, Bend finished third among small metros in one-year job growth ending in 2014, outpacing the national average by 4 percentage points during that period. More recent job momentum points to an expanding economy, with the metro recording the third-fastest overall job gains in the nation over the last 12 months ending in August 2015.

Bend's tourism sector has diversified beyond skiing. With a plethora of outdoor amenities, the metro has marketed itself successfully to vacationers across major cities on the West Coast, particularly to California's Bay Area residents. More recently, it has become a popular destination for concerts, with the Les Schwab Amphitheater drawing crowds of up to 8,000 people.⁸⁹ These translate into job gains for the lodging and retail industries. Bend's tourism sector attracts nearly 3 million visitors, who pour an estimated \$650 million into the local economy.⁹⁰

While Bend's share of high-tech employment is slightly below the national average, the metro has been a magnet for attracting high-tech start-ups. Not only has it historically been a popular destination for retirees, but its lifestyle and recreational activities have also appealed to a growing number of entrepreneurs. Notable tech-startups in the metro include Element1, G5, and Agere Pharmaceuticals⁹¹—all of which have expanded rapidly in recent years. G5, which initially provided Internet marketing for self-storage facilities, has grown to over 100 employees.⁹² High-tech output growth in the metro grew 19 percentage points above the national average between 2009 and 2014.

JOB GROWTH (2009-14)	23RD
JOB GROWTH (2013-14)	28TH
WAGE GROWTH (2008-13)	52ND
WAGE GROWTH (2012-13)	36TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	77TH
HIGH-TECH GDP GROWTH (2009-14)	69TH
HIGH-TECH GDP GROWTH (2013-14)	82ND
HIGH-TECH GDP CONCENTRATION (2014)	10TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	4TH

ASSETS

- » Utah State University drives employment growth and provides a platform for research and innovation.

LIABILITIES

- » Despite the metro's lower-cost advantages, its tech industries will continue to face stiff competition from neighboring Salt Lake City and Provo.

Logan, Utah-Idaho, leaped 26 places to finish ninth among small metros.

Job growth outperformed the national average and ranked in the upper echelon in both the one-year and five-year periods ending in 2014. The metro's young yet diverse technology industries also contributed to Logan's overall ranking. Food manufacturing, primarily related to dairy and animal processing, has historically been a catalyst of local job growth, accounting for approximately one-third of all manufacturing jobs. Key players include Gossner Foods, Schreiber Foods, and Casper's Ice Cream.⁹³ As international demand strengthens for such products, Logan's agricultural and food manufacturing industries will undergo expansion.

Utah's improved 2015 state budget should benefit Utah State University (USU), the metro's largest employer.⁹⁴ State government added nearly 750 workers to its payroll, recording the largest gains in employment between 2009 and 2014 among all sectors in the metro. Furthermore, enrollment at USU's Logan campus rose by 18 percent this year over 2014 for incoming freshmen.⁹⁵ Logan has recently been recognized as the one of the country's top destinations for career opportunities, based on its low unemployment rate and affordable housing.⁹⁶ The lower cost of living, coupled with its emerging tech base, will not only continue to drive enrollment at USU, but also attract young tech workers to the region. The Utah Science Technology and Research initiative (USTAR), a state-funded investment, has expanded USU's research capacity by forging key partnerships and helping to advance commercialization in areas of bio, energy, and earth and space innovations.⁹⁷



Auburn-Opelika, AL

(held steady)

JOB GROWTH (2009-14)	11TH
JOB GROWTH (2013-14)	25TH
WAGE GROWTH (2008-13)	61ST
WAGE GROWTH (2012-13)	44TH
SHORT-TERM JOB GROWTH (8/2014-8/2015)	16TH
HIGH-TECH GDP GROWTH (2009-14)	13TH
HIGH-TECH GDP GROWTH (2013-14)	80TH
HIGH-TECH GDP CONCENTRATION (2014)	140TH
NUMBER OF HIGH-TECH INDUSTRIES (LQ>=1) (2014)	80TH

ASSETS

- » Auburn University provides stability and creates significant demand for local services.
- » Low cost of doing business and favorable demographic trends.

LIABILITIES

- » State budgetary issues present downside risk as funds are allocated away from education.

Auburn-Opelika, Alabama, reclaimed its No. 10 position from last year. Fueled by various sectors, the metro's job growth over the five years ending in 2014 was 11th-fastest in the nation. Increased enrollment at Auburn University has created additional demand for staffing and local services. Between 2009 and 2014, administrative and support services added 2,600 jobs in the metro, while state government employed an additional 1,500 workers. Auburn's manufacturing sector, primarily catering to the automotive industry, also witnessed increases in production of transportation equipment and fabricated metals.

Auburn University was recently honored for generating a \$5.1-billion economic impact on the state economy in 2014, supporting 23,600 jobs throughout the state.⁹⁸ A local example of the university's economic relevance is the creation of GE Aviation's \$50-million 3-D printing facility, the first of its kind to mass-produce additive components for the jet propulsion industry.⁹⁹ Auburn's collaboration with GE Aviation highlights the university's importance in training and developing appropriate curriculum for engineers.¹⁰⁰

In terms of high-tech GDP growth, Auburn finished 13th overall in the five years ending in 2014. Auburn Research Park has been pivotal in attracting knowledge-based companies to the metro while forming new partnerships and business ventures.¹⁰¹ Located on the university's campus, its notable tenants include Northrop Grumman's National Work Force Center, iK9 Holding, and Auburn University's MRI Research Center.¹⁰²

Complete Results

2015 Best-Performing Small Cities

RANKINGS BY COMPONENT

Rank change	2014 rank	2015 rank	Metropolitan statistical area / metropolitan division	Job growth (2009-14)	Job growth (2013-14)	Wage growth (2008-13)	Wage growth (2012-13)	Short-term job growth (8/2014-8/2015)	High-tech GDP growth (2009-14)	High-tech GDP growth (2013-14)	High-tech GDP concentration (2014)	Number of high-tech industries with LQ>=1 (2014)
0	1	1	Fargo, ND-MN	8	20	5	27	67	26	52	50	26
2	4	2	Bismarck, ND	10	58	4	8	12	33	26	89	80
11	14	3	Ames, IA	24	19	48	45	10	11	53	103	48
37	41	4	Janesville-Beloit, WI	58	56	63	3	22	1	6	55	48
7	12	5	Odessa, TX	2	2	3	15	19	54	17	196	177
N/A	New	6	The Villages, FL	4	8	2	1	57	76	22	175	125
-5	2	7	Columbus, IN	5	23	14	178	2	10	23	47	26
38	46	8	Bend-Redmond, OR	15	3	160	6	3	12	163	12	4
26	35	9	Logan, UT-ID	23	28	52	36	77	69	82	10	4
0	10	10	Auburn-Opelika, AL	11	25	61	44	16	13	80	140	80
-5	6	11	Midland, TX	1	1	1	4	26	62	191	188	125
32	44	12	Elkhart-Goshen, IN	3	15	53	12	1	198	92	133	48
11	24	13	Sioux Falls, SD	20	46	19	49	33	74	86	71	125
29	43	14	Wenatchee, WA	77	24	50	18	20	18	10	109	177
-12	3	15	Victoria, TX	13	33	9	7	34	58	100	166	177
13	29	16	Napa, CA	12	13	83	17	23	83	187	64	80
3	20	17	Jonesboro, AR	22	52	24	75	9	16	133	74	125
18	36	18	Bellingham, WA	57	59	36	37	30	92	180	9	4
-8	11	19	Columbia, MO	25	153	10	39	62	6	91	38	26
31	51	20	St. George, UT	7	4	116	14	65	48	12	97	177
60	81	21	Chico, CA	46	41	80	25	38	29	43	100	125
-14	8	22	College Station-Bryan, TX	30	37	12	31	165	24	29	60	125
N/A	New	23	Daphne-Fairhope-Foley, AL	39	18	118	26	53	23	33	148	80
-19	5	24	Iowa City, IA	31	92	22	38	40	112	173	49	26
20	45	25	Winchester, VA-WV	16	74	49	47	17	97	78	145	80
42	68	26	Yuba City, CA	127	34	72	33	47	30	46	85	26
62	89	27	Gainesville, GA	14	22	107	22	31	150	71	121	80
63	91	28	Medford, OR	85	53	134	24	13	66	151	23	9
10	39	29	Burlington-South Burlington, VT	60	145	34	58	21	84	141	7	26
63	93	30	Monroe, MI	27	63	126	13	41	22	66	146	125
11	42	31	Charlottesville, VA	56	26	51	81	83	124	113	46	26
37	69	32	Madera, CA	49	16	55	9	178	65	38	110	80
-14	19	33	Cheyenne, WY	52	79	26	61	101	71	37	113	80
36	70	34	Lake Charles, LA	44	6	127	60	8	103	54	171	125

RANKINGS BY COMPONENT

Rank change	2014 rank	2015 rank	Metropolitan statistical area / metropolitan division	Job growth (2009-14)	Job growth (2013-14)	Wage growth (2008-13)	Wage growth (2012-13)	Short-term job growth (8/2014-8/2015)	High-tech GDP growth (2009-14)	High-tech GDP growth (2013-14)	High-tech GDP concentration (2014)	Number of high-tech industries with LO>=1 (2014)
43	78	35	Coeur d'Alene, ID	37	12	161	16	4	140	193	79	80
-6	30	36	Barnstable Town, MA	61	85	97	54	78	57	89	32	26
-12	25	37	Fond du Lac, WI	63	93	114	66	103	8	14	48	9
41	79	38	Kokomo, IN	9	48	189	34	96	32	109	31	48
53	92	39	El Centro, CA	17	9	77	40	28	120	160	185	177
27	66	39	Grand Forks, ND-MN	40	115	15	84	49	85	21	147	125
-24	17	41	San Angelo, TX	28	72	20	51	51	147	190	86	125
56	98	42	Flagstaff, AZ	112	107	78	30	54	5	58	43	125
39	82	43	Rapid City, SD	72	87	30	85	84	43	32	125	80
6	50	44	Billings, MT	108	140	31	89	18	56	3	91	80
-23	22	45	Longview, TX	32	80	21	65	82	113	102	111	125
-28	18	46	Houma-Thibodaux, LA	33	61	13	2	198	40	104	179	80
-1	46	47	Tyler, TX	73	49	103	95	63	35	123	54	48
15	63	48	Yakima, WA	136	102	43	50	15	17	55	138	125
90	139	49	Macon, GA	84	40	124	46	138	52	9	70	48
N/A	New	50	Gettysburg, PA	78	90	101	28	125	15	40	107	48
-14	37	51	State College, PA	109	125	25	74	79	67	140	16	9
-39	13	52	Dubuque, IA	34	122	18	155	87	7	159	63	9
-46	7	53	Morgantown, WV	35	126	7	53	174	94	67	72	48
21	75	54	Lewiston, ID-WA	79	66	99	20	129	14	94	99	80
44	99	55	Lawrence, KS	120	45	112	70	115	4	1	65	80
N/A	New	56	Grants Pass, OR	86	10	180	142	52	91	11	8	26
10	67	57	Mount Vernon-Anacortes, WA	54	31	111	19	171	63	70	136	48
25	83	58	Sherman-Denison, TX	71	96	42	21	137	102	76	58	125
50	109	59	Longview, WA	64	7	74	32	143	134	64	142	125
-37	23	60	Sumter, SC	62	70	23	144	105	110	27	88	80
47	107	60	Hot Springs, AR	153	118	76	111	35	2	4	41	80
-22	40	62	Crestview-Fort Walton Beach-Destin, FL	66	77	45	62	102	188	179	20	26
-54	9	63	Greenville, NC	81	104	32	102	122	64	88	5	80
60	124	64	Idaho Falls, ID	95	35	146	112	6	171	111	4	48
-6	59	65	Battle Creek, MI	55	50	113	63	42	122	16	173	177
N/A	New	66	Manhattan, KS	42	117	98	189	7	34	8	116	80
N/A	New	67	Walla Walla, WA	143	44	62	92	97	98	74	29	80
22	90	68	Sheboygan, WI	133	43	141	41	68	41	45	139	80
-16	53	69	Lafayette-West Lafayette, IN	38	73	58	151	55	173	153	62	26
-44	26	70	St. Cloud, MN	47	69	46	64	167	50	161	120	48
67	138	71	Redding, CA	83	30	187	122	37	99	18	96	48
32	104	72	Sioux City, IA-NE-SD	107	88	85	35	25	109	119	164	125
42	115	73	Prescott, AZ	92	14	190	42	27	123	188	143	26
-14	60	74	Bowling Green, KY	19	75	89	56	113	133	79	170	125
N/A	New	75	California-Lexington Park, MD	90	144	6	175	80	87	108	3	26
40	116	76	Pittsfield, MA	110	105	156	78	46	96	81	24	26

RANKINGS BY COMPONENT

Rank change	2014 rank	2015 rank	Metropolitan statistical area / metropolitan division	Job growth (2009-14)	Job growth (2013-14)	Wage growth (2008-13)	Wage growth (2012-13)	Short-term job growth (8/2014-8/2015)	High-tech GDP growth (2009-14)	High-tech GDP growth (2013-14)	High-tech GDP concentration (2014)	Number of high-tech industries with LO>=1 (2014)
11	88	77	Tuscaloosa, AL	43	21	84	123	24	191	116	198	125
N/A	New	77	Hilton Head Island-Bluffton-Beaufort, SC	51	17	175	79	111	28	25	176	125
N/A	New	79	Kahului-Wailuku-Lahaina, HI	29	65	165	43	50	135	73	193	125
34	114	80	Punta Gorda, FL	41	71	123	23	14	132	199	186	177
-44	37	81	Pueblo, CO	101	86	73	158	118	55	24	61	26
N/A	New	81	Mankato-North Mankato, MN	69	123	54	145	155	19	90	28	9
-22	61	83	Elizabethtown-Fort Knox, KY	21	109	16	171	39	137	154	114	125
-36	48	84	Abilene, TX	114	84	56	55	133	72	83	105	125
N/A	New	85	Carbondale-Marion, IL	169	173	35	93	58	38	31	119	26
19	105	86	Corvallis, OR	67	111	155	132	43	153	99	1	2
33	120	87	Sebastian-Vero Beach, FL	59	27	195	143	85	25	30	75	125
59	147	88	Jackson, MI	119	91	33	5	143	139	72	163	125
-61	28	89	Blacksburg-Christiansburg-Radford, VA	65	121	93	119	59	104	177	52	48
-33	57	90	Kankakee, IL	102	95	106	107	183	9	47	14	48
-11	80	91	Champaign-Urbana, IL	184	120	82	69	89	93	77	40	9
-59	33	92	Williamsport, PA	36	119	8	170	166	107	98	80	26
N/A	New	93	Sebring, FL	117	5	150	125	5	106	50	177	177
-63	31	94	Missoula, MT	100	108	100	88	81	77	134	102	48
33	128	95	Burlington, NC	115	116	159	108	64	49	105	37	2
-44	52	96	Jacksonville, NC	96	100	28	186	86	51	63	132	80
-13	84	97	Amarillo, TX	99	114	59	100	106	59	62	118	125
-83	15	98	Cleveland, TN	6	129	27	141	194	20	59	137	125
-72	27	99	Rochester, MN	94	168	38	73	154	45	183	27	26
3	103	100	Athens-Clarke County, GA	82	42	140	109	61	169	114	106	80
-30	71	101	Eau Claire, WI	68	112	57	131	126	101	150	53	48
-28	74	102	Appleton, WI	88	81	104	124	70	141	138	94	48
65	168	103	Niles-Benton Harbor, MI	129	76	117	11	60	148	147	155	125
-55	49	104	Lebanon, PA	80	133	47	168	193	36	68	11	4
-11	94	105	Oshkosh-Neenah, WI	116	139	64	72	100	108	122	81	80
N/A	New	106	Bloomsburg-Berwick, PA	105	200	11	29	104	130	198	101	48
14	121	107	Muskegon, MI	70	68	142	98	92	142	106	124	80
-44	64	108	Cumberland, MD-WV	157	148	60	105	116	75	95	42	9
55	164	109	Panama City, FL	75	32	164	99	119	186	84	98	48
-33	77	110	Owensboro, KY	53	171	44	57	72	128	117	192	177
-57	54	111	Casper, WY	18	101	39	94	196	89	107	199	125
-12	100	112	Florence, SC	125	159	129	48	90	115	42	134	26
N/A	New	113	Chambersburg-Waynesboro, PA	98	99	125	97	163	126	13	69	48
-59	55	114	Monroe, LA	131	136	65	91	180	42	20	83	80
N/A	New	115	Albany, OR	106	29	184	90	170	47	152	66	9
-84	32	116	Ithaca, NY	26	142	108	137	186	81	131	17	9
N/A	New	117	Midland, MI	45	38	173	148	136	201	15	67	80
-53	65	118	La Crosse-Onalaska, WI-MN	89	167	41	71	152	86	146	127	48

RANKINGS BY COMPONENT

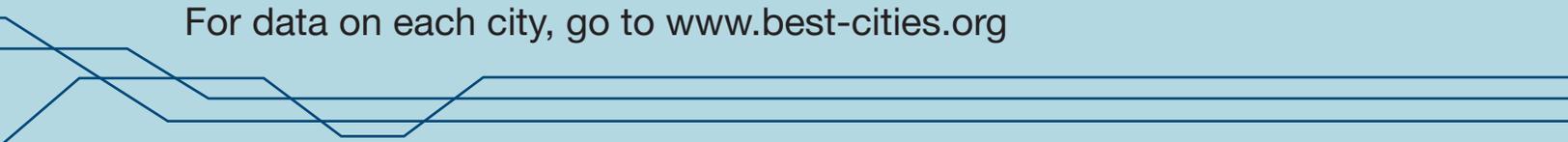
Rank change	2014 rank	2015 rank	Metropolitan statistical area / metropolitan division	Job growth (2009-14)	Job growth (2013-14)	Wage growth (2008-13)	Wage growth (2012-13)	Short-term job growth (8/2014-8/2015)	High-tech GDP growth (2009-14)	High-tech GDP growth (2013-14)	High-tech GDP concentration (2014)	Number of high-tech industries with LO>=1 (2014)
25	144	119	Wausau, WI	132	54	166	68	120	70	35	168	125
-65	55	120	Las Cruces, NM	113	162	68	106	185	61	127	25	1
-15	106	121	Jackson, TN	50	113	120	133	44	167	36	191	177
9	131	122	Lewiston-Auburn, ME	103	110	138	127	75	44	101	162	80
-27	96	123	Valdosta, GA	144	62	151	128	195	3	60	45	26
16	140	124	Rome, GA	135	39	168	150	93	82	110	59	80
-8	117	125	Saginaw, MI	76	134	119	104	94	145	148	108	48
N/A	New	126	Grand Island, NE	104	150	37	67	159	116	96	187	80
44	171	127	Dalton, GA	173	11	192	114	74	165	130	35	80
33	161	128	Pocatello, ID	123	64	178	118	48	143	44	167	125
25	154	129	Bremerton-Silverdale, WA	140	47	144	173	71	176	103	78	48
20	150	130	Ocean City, NJ	148	36	177	139	35	131	2	180	177
-73	58	131	Dover, DE	74	98	75	52	143	152	197	158	177
-19	113	132	Hattiesburg, MS	124	82	71	136	179	95	75	174	48
-21	112	133	Altoona, PA	150	157	92	113	123	138	143	26	9
-15	119	134	Glens Falls, NY	156	127	81	161	56	175	145	34	80
N/A	83*	135	Hagerstown-Martinsburg, MD-WV	48	161	91	120	128	161	189	112	48
-41	95	136	Wheeling, WV-OH	130	149	17	10	141	170	182	189	177
-35	102	137	Topeka, KS	126	94	87	153	134	111	34	157	125
-51	87	138	Waterloo-Cedar Falls, IA	87	152	29	103	173	117	118	169	125
9	148	139	Johnson City, TN	138	138	131	181	69	194	69	36	9
N/A	New	140	Staunton-Waynesboro, VA	149	143	135	83	158	136	125	44	9
N/A	New	141	Hammond, LA	134	106	110	179	98	39	7	182	177
-31	111	142	Lima, OH	168	184	95	126	45	160	49	144	80
-14	129	143	Florence-Muscle Shoals, AL	97	57	102	87	190	179	57	194	177
-19	125	144	Jefferson City, MO	185	177	132	82	156	53	41	77	48
-11	134	145	Kingston, NY	160	97	157	138	107	129	120	82	48
6	152	146	Morristown, TN	118	60	162	159	32	185	129	197	125
-2	145	147	Hanford-Corcoran, CA	155	83	154	59	76	146	192	181	125
-40	108	148	Bay City, MI	139	156	153	152	112	68	61	21	125
-48	101	149	Muncie, IN	154	194	145	86	29	181	158	104	48
N/A	New	150	Cape Girardeau, MO-IL	172	191	69	117	199	31	56	84	48
-33	118	151	Bloomington, IL	179	198	40	80	121	164	169	76	80
-136	16	152	St. Joseph, MO-KS	142	169	90	146	187	21	135	22	80
-12	141	153	Lynchburg, VA	177	135	149	110	124	149	162	39	9
-28	126	154	Springfield, IL	147	132	94	167	157	157	65	56	80
N/A	New	155	Lake Havasu City-Kingman, AZ	174	67	191	76	189	121	48	129	80
-84	72	156	Harrisonburg, VA	93	141	105	135	114	182	167	122	125
-72	85	157	Joplin, MO	141	185	115	154	95	200	121	73	26
-26	132	158	Racine, WI	122	89	147	174	175	37	126	150	80
-37	122	159	Elmira, NY	171	163	88	169	135	80	184	57	48
-1	159	160	Yuma, AZ	128	151	121	115	169	79	172	92	125

RANKINGS BY COMPONENT

Rank change	2014 rank	2015 rank	Metropolitan statistical area / metropolitan division	Job growth (2009-14)	Job growth (2013-14)	Wage growth (2008-13)	Wage growth (2012-13)	Short-term job growth (8/2014-8/2015)	High-tech GDP growth (2009-14)	High-tech GDP growth (2013-14)	High-tech GDP concentration (2014)	Number of high-tech industries with LO>=1 (2014)
-75	86	161	Bloomington, IN	165	147	79	129	197	177	176	2	48
-100	62	162	Springfield, OH	111	172	137	134	11	192	139	200	177
-26	136	162	Fairbanks, AK	137	196	66	192	66	90	137	172	125
-31	133	164	Bangor, ME	146	137	143	101	127	151	128	128	125
-2	163	165	Farmington, NM	121	51	170	147	108	119	171	201	177
-23	143	166	Gadsden, AL	91	78	169	165	88	196	185	190	125
-21	146	167	Danville, IL	178	146	152	182	73	183	51	115	80
7	175	168	Carson City, NV	198	130	198	96	131	156	144	95	9
-27	142	169	Decatur, AL	159	188	158	149	99	125	87	159	48
-73	97	170	Terre Haute, IN	175	170	130	157	153	174	170	15	9
-9	162	171	Grand Junction, CO	162	55	199	172	91	158	175	131	177
-21	151	172	Lawton, OK	166	164	70	121	200	178	19	184	177
-13	160	173	Mansfield, OH	161	124	197	156	140	155	166	51	80
-1	173	174	Michigan City-La Porte, IN	188	158	174	130	109	193	156	117	26
N/A	New	175	New Bern, NC	164	103	136	188	149	105	112	149	177
-48	127	175	Goldsboro, NC	189	187	109	176	176	46	97	126	80
-24	153	177	Santa Fe, NM	158	178	179	77	143	180	165	130	80
-29	149	178	Johnstown, PA	191	189	171	190	143	100	157	13	9
-21	158	179	Alexandria, LA	182	128	172	160	164	27	124	160	125
-23	157	180	Wichita Falls, TX	176	165	183	164	188	78	115	30	80
-15	166	181	Albany, GA	180	166	163	166	181	60	93	68	125
-6	176	182	Dothan, AL	183	174	167	116	117	166	28	178	177
-60	123	183	Parkersburg-Vienna, WV	152	181	133	183	151	144	132	93	125
-29	155	184	Brunswick, GA	187	131	193	140	160	114	142	141	80
-75	110	185	Hinesville, GA	145	160	86	162	177	197	178	151	125
N/A	New	186	Watertown-Fort Drum, NY	167	154	128	191	172	154	155	87	125
N/A	New	187	Homosassa Springs, FL	186	175	139	185	132	73	164	152	125
-112	76	188	Great Falls, MT	151	155	96	163	184	118	201	165	177
N/A	192*	189	Charleston, WV	181	183	148	195	161	162	39	123	125
-19	171	190	Binghamton, NY	195	190	194	177	162	159	181	6	4
N/A	New	191	Sierra Vista-Douglas, AZ	200	192	185	198	182	172	5	33	80
N/A	New	192	East Stroudsburg, PA	196	199	188	197	142	195	85	18	125
-56	137	193	Warner Robins, GA	163	176	122	187	191	190	200	90	125
N/A	New	194	Beckley, WV	170	195	67	196	168	184	186	156	177
-21	174	195	Rocky Mount, NC	197	180	196	193	192	187	174	19	9
-30	166	196	Decatur, IL	190	193	182	194	139	127	168	135	80
-32	165	197	Texarkana, TX-AR	192	186	186	199	150	88	136	161	125
-42	156	198	Vineland-Bridgeton, NJ	193	197	176	180	130	189	149	154	125
-20	179	199	Anniston-Oxford-Jacksonville, AL	199	182	201	201	110	199	195	153	125
-22	178	200	Weirton-Steubenville, WV-OH	194	179	200	184	143	163	194	195	177
-24	177	201	Pine Bluff, AR	201	201	181	200	201	168	196	183	177

ON THE WEB

For data on each city, go to www.best-cities.org

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Endnotes

1. The latest 12-month job performance calculates the percentage change from the same month in the previous year (i.e., the change in the number of jobs from August 2014 to August 2015). The percentage change is a measure of recent momentum, capturing which metropolitan areas have improved their performance in recent months. The annual growth rate measures the percentage change from calendar year 2013 to 2014. While the annual growth rate does not indicate whether high growth was achieved in the first or latter half of the year, the 12-month growth rate captures that aspect. Employment, wage, and gross metro product data are compiled from various government agencies, including the U.S. Bureau of Labor Statistics, the U.S. Bureau of Economic Analysis, and the U.S. Census Bureau. More detailed coverage on individual sectors is derived from Moody's Analytics at economy.com.
2. Ross DeVol, "A Trip Around the World Economy," Milken Institute, January 2015, pp4-5. <http://assets1b.milkeninstitute.org/assets/Publication/ResearchReport/PDF/A-Trip-Around-the-World.pdf> (accessed October 29, 2015).
3. Nariman Behraves, Sara Johnson, and Patrick Newport, "The Economy Keeps Chugging Along, While the Fed Holds Fire," *U.S. Executive Summary*, IHS, pp. 2-3.
4. Kurt Karl, "U.S. Economic Outlook," Swiss Re, October 2, 2015.
5. U.S. Bureau of Economic Analysis news release, "Gross Domestic Product: Third Quarter 2015," October 29, 2015. https://www.bea.gov/newsreleases/national/gdp/2015/pdf/gdp3q15_adv.pdf (accessed October 29, 2015).
6. Mark Zandi, "United States," Moody's Analytics, June 2015.
7. Allison Nathan, "Interview with Joel Mokyr: Picking Apart the Productivity Paradox," *Top of Mind*, Goldman Sachs, October 5, 2015.
8. Chris Lafakis, "San Jose-Sunnyvale-Santa Clara," Moody's Analytics, August 2015.
9. George Avalos, "Silicon Valley Leads Nation in Job Growth," Siliconbeat, May 1, 2015. <http://www.siliconbeat.com/2015/05/01/silicon-valley-leads-nation-in-job-growth/> (accessed October 22, 2015).
10. "2015 Silicon Valley Index," Joint Venture Silicon Valley, February 2015. www.siliconvalleyindicators.org.
11. Chriss W. Street, "Silicon Valley Job Growth at Highest Level Since Dot-Com Bubble Burst," Breitbart News Network, March 20, 2015. <http://www.breitbart.com/california/2015/03/20/silicon-valley-job-growth-at-highest-level-since-dot-com-bubble-burst/> (accessed October 22, 2015).
12. San Jose/Silicon Valley Research and Forecast Report, Colliers International, Third Quarter 2015.
13. Chris Lafakis, "San Francisco-Redwood City-South San Francisco," Moody's Analytics, August 2015.
14. State of California, Employment Development Department, Labor Market Information Division, San Francisco-Redwood City-South San Francisco Metropolitan Division (San Francisco and San Mateo Counties). [http://www.calmis.ca.gov/file/lfmonth/sanf\\$pds.pdf](http://www.calmis.ca.gov/file/lfmonth/sanf$pds.pdf) (accessed October 24, 2015).
15. Jordan Levine, "The Regional Outlook: San Francisco," *Beacon Economics*, July 2015. https://beaconecon.com/products/regional_outlook_san_francisco (accessed October 24, 2015).
16. Chris Velarides, "Provo-Orem," Moody's Analytics, August 2015.
17. Karissa Neely, "Provo Millennials Bucking Housing Trend, Snatching Up Property," *Provo Daily Herald*, September 30, 2015. http://www.heraldextra.com/news/local/provo-millennials-bucking-housing-trend-snatching-up-property/article_06db9460-fce0-5b72-899f-32bcm68dc52b1.html (accessed October 19, 2015).
18. Emilie Mutert and Veronica Zaragovia, "SXSW 2015 Gave Austin's Economy a \$317 Million Boost, Study Reports," Kut.org, September 15, 2015. <http://kut.org/post/sxsw-2015-gave-austins-economy-317-million-boost-study-reports> (accessed October 25, 2015).
19. Edward Friedman, "Austin-Round Rock," Moody's Analytics, July 2015.
20. Jameson Pitts, "Austin Tops List of Fastest Economic Growth," *The Daily Texan*, October 5, 2015. <http://www.dailytexanonline.com/2015/10/05/austin-tops-list-of-fastest-economic-growth> (accessed October 25, 2015).
21. Ana Campoy, "Dallas-Fort Worth Keeps Texas Engine Revving," *The Wall Street Journal*, June 17, 2015. <http://www.wsj.com/articles/dallas-fort-worth-keeps-texas-engine-revving-1434584783> (accessed October 25, 2015).
22. Edward Friedman, "Austin-Round Rock," Moody's Analytics, July 2015.
23. Trisha Riggs, "Emerging Trends: Dallas/Fort Worth and Austin Are Top Cities for 2016," *Urban Land*, October 7, 2015. <http://urbanland.uli.org/capital-markets/emerging-trends-dallasfort-worth-austin-top-cities-2016/> (accessed October 25, 2015).

24. Great Place to Work, 2015. <http://reviews.greatplacetowork.com/sas> (accessed October 13, 2015).
25. SAS Company Facts & Financials. http://www.sas.com/en_us/company-information.html#stats (accessed October 13, 2015).
26. Stephanie Forshee, "Here Are the Top Cloud Computing Companies Here in Cloud City," *Puget Sound Business Journal*, January 9, 2015. <http://www.bizjournals.com/seattle/blog/techflash/2015/01/here-are-the-top-cloud-computing-companies-here-in.html> (accessed October 14, 2015).
27. John Cook, "From Apple and Alibaba to Salesforce and Splunk: A Guide to Tech Giants With Outposts in Seattle," *Geekwire*, November 5, 2014. <http://www.geekwire.com/2014/apple-alibaba-salesforce-splunk-guide-tech-giants-setting-outposts-seattle-part-2/> (accessed October 14, 2015).
28. Aditya Agarwal, "Dropbox Lands in Seattle," *Dropbox blog*, December 4, 2014. <https://blogs.dropbox.com/dropbox/2014/12/dropbox-lands-in-seattle/> (accessed October 14, 2015).
29. Todd Bishop, "An Exclusive Peek Inside Dropbox's New Seattle Office, and Inside Details on the Company's Plans," *Geekwire*, June 17, 2015. <http://www.geekwire.com/2015/an-exclusive-peek-inside-dropboxs-new-seattle-engineering-office/> (accessed November 12, 2015).
30. Luke Hammill, "Tech Companies Have Outsized Impact on Portland Office Market, Report Finds," *The Oregonian*, September 16, 2015. http://www.oregonlive.com/business/index.ssf/2015/09/tech_companies_office_rents_po.html (accessed October 15, 2015).
31. *Ibid.*
32. Andy Giegerich, "50 Business Leaders Head Off on Asian Trade Mission With Oregon's Governor," *Portland Business Journal*, October 10, 2015. http://www.bizjournals.com/portland/morning_call/2015/10/50-business-leaders-head-off-on-asian-trade.html (accessed October 15, 2015).
33. "Vestas Upping Jobs by 400 in Windsor," *Denver Business Journal*, March 13, 2015. <http://www.bizjournals.com/denver/news/2015/03/13/vestas-upping-jobsby-400-in-windsor.html> (accessed October 19, 2015).
34. Cathy Proctor, "Wind Was at Vestas' Back in 2014," *Denver Business Journal*, February 20, 2015. <http://www.bizjournals.com/denver/print-edition/2015/02/20/wind-was-at-vestas-back-in-2014.html> (accessed October 19, 2015).
35. Nick Wilson, "Construction on New Cal Poly Dorms to Begin This Week," *San Luis Obispo Tribune*, September 21, 2015. <http://www.sanluisobispo.com/2015/09/21/3819106/construction-on-new-cal-poly-dorms.html> (accessed October 20, 2015).
36. Cynthia Lambert, "Cal Poly to Lease Space for Tech Startups, Student Housing in Downtown SLO," *San Luis Obispo Tribune*, October 14, 2015. http://www.sanluisobispo.com/2015/10/14/3854693_cal-poly-to-expand-entrepreneurship.html?rh=1 (accessed October 20, 2015).
37. Cal Poly San Luis Obispo website. <http://morethanamoto.calpoly.edu/> (accessed October 20, 2015).
38. Nick Wilson, "Record Numbers Apply to Cal Poly," *San Luis Obispo Tribune*, March 25, 2015. <http://www.sanluisobispo.com/2015/03/25/3555028/record-numbers-apply-to-cal-poly.html> (accessed October 20, 2015).
39. Mike Gorrell, "Varian Expanding, Bringing Utah High-Paying Jobs," *The Salt Lake Tribune*, August 28, 2014. <http://www.sltrib.com/sltrib/news/58344360-78/varian-utah-company-com.html.csp> (accessed October 26, 2015).
40. Jennifer Hiller, "Eagle Ford Conference Attendees Prepping for Long, Low Oil Prices," *San Antonio Express-News*, October 23, 2015. <http://www.expressnews.com/business/eagle-ford-energy/article/Eagle-Ford-conference-attendees-prepping-for-6587626.php> (accessed October 26, 2015).
41. Ken Elkins, "CLT, Lithium-Processing Operations Among Key Factors in Bringing Chemical HQ to Charlotte," *Charlotte Business Journal*, August 26, 2015. http://www.bizjournals.com/charlotte/blog/outside_the_loop/2015/08/airport-lithium-processing-operations-outweigh.html (accessed October 26, 2015).
42. Will Boye, "It's Official: Dimensional Fund Advisors to Open East Coast HQ in Charlotte," *Charlotte Business Journal*, July 8, 2015. http://www.bizjournals.com/charlotte/blog/real_estate/2015/07/its-official-dimensional-fund-advisors-to-open.html (accessed October 25, 2015).
43. Ely Portillo, "Investment Firm Dimensional Fund Advisors to Add 316 Jobs in Charlotte," *The Charlotte Observer*, July 8, 2015. <http://www.charlotteobserver.com/news/business/banking/article26722141.html> (accessed October 25, 2015).
44. Richard Martin, "New Foam Batteries Promise Fast Charging, Higher Capacity," *MIT Review*, October 26, 2015. <http://www.technologyreview.com/news/542796/new-foam-batteries-promise-fast-charging-higher-capacity/> (accessed October 26, 2015).
45. Erik Sofge, "How to Make Battery Power More Powerful," *Popular Mechanics*, August 12, 2014. <http://www.popularmechanics.com/science/energy/how-to/a11058/how-to-make-battery-power-more-powerful-17085182/> (accessed October 26, 2015).
46. Adrian D. Garcia, "Gov. Cheers Intel's Solar Investment in Fort Collins," *The Coloradoan*, May 24, 2015. <http://www.coloradoan.com/story/news/2015/05/14/intel-fort-collins/27338419/> (accessed October 26, 2015).

47. Research Data Services Inc., "2014 Tourism Impact Facts," Naples, Marco Island, Everglades Convention and Visitors Bureau website, March 2015. http://www.paradisecoast.com/master/files/media/Buzzy_Docs/2015_Visitor_Statistics/Collier_Tourism_Impact_Facts_2014_vs_2013.pdf (accessed October 27, 2015).
48. JoNell Modys, "Collier Tourism Fuels New Hotels, Crafty Cocktails Options," *The News-Press*, August 20, 2015. <http://www.news-press.com/story/life/outdoors/2015/08/19/marco-island-marriott-hyatt-house-naples-riptide-brewing-paradise-wine-jonell-modys-coller/32003625/> (accessed October 27, 2015).
49. Ed Sealover, "Delta Air Lines Picking Up Former Frontier Airlines Gates at DIA," *Denver Business Journal*, October 13, 2015. <http://www.bizjournals.com/denver/news/2015/10/13/delta-airlines-picking-up-former-frontier-gates-at.html> (accessed October 27, 2015).
50. Hsing Tseng, "RTD Rail Service to Denver International Airport Set to Begin in April 2016," KDVR, October 22, 2015. <http://kdvr.com/2015/10/22/rtd-rail-service-to-denver-international-airport-set-to-begin-in-april-2016/> (accessed October 27, 2015).
51. David Wren and Warren L. Wise, "Training, Location Key to Luring \$500M Daimler Plant to N. Charleston," *The Post and Courier*, March 6, 2015. <http://www.postandcourier.com/article/20150306/PC05/150309570> (accessed October 27, 2015).
52. Jeff Bennett and Cameron McWhirter, "Volvo Car to Build First U.S. Car Plant in South Carolina," *The Wall Street Journal*, May 11, 2015. <http://www.wsj.com/articles/volvo-car-corp-to-build-plant-in-berkeley-county-sc-1431340237> (accessed October 27, 2015).
53. David Wren, "Gerber Project Latest Development Coup for Berkeley County, Port of Charleston," *The Post and Courier*, August 8, 2015. <http://www.postandcourier.com/article/20150805/PC05/150809643/gerber-childrenswear-distribution-center-latest-development-coup-for-berkeley-county> (accessed October 27, 2015).
54. Adam Sichko, "Bridgestone's \$232.6M Downtown HQ High-Rise to Create 607 New Jobs," *Nashville Business Journal*, November 11, 2014. <http://www.bizjournals.com/nashville/blog/real-estate/2014/11/bridgestones-new-downtown-hq-high-rise-to-create.html?ana=twf> (accessed October 27, 2015).
55. Nissan Group, "Nissan Group Reports September 2015 U.S. Sales," Business Wire, October 1, 2015. http://www.businesswire.com/news/home/20151001006112/en#.Vg1MaKbYE_o (accessed October 27, 2015).
56. San Diego Regional Economic Development Corporation, "The Economic Impact of San Diego's Research Institutions," October 2015. <http://www.sandiegobusiness.org/sites/default/files/Executive%20Summary%20-%20the%20economic%20impact%20of%20San%20Diego's%20Research%20Institutions.pdf> (accessed October 27, 2015).
57. Mike Freeman, "Suja Life Leads Rebound in Venture Cap Deals," *The San Diego Union-Tribune*, October 16, 2015. <http://www.sandiegouniontribune.com/news/2015/oct/16/suja-venture-cap-deals/> (accessed October 27, 2015).
58. Bruce V. Bigelow, "MoneyTree Shows Drop in San Diego VC Funding, and Top 15 Deals," Xconomy San Diego, July 17, 2015. <http://www.xconomy.com/san-diego/2015/07/17/moneytree-shows-drop-in-san-diego-vc-funding-and-top-15-deals/> (accessed October 27, 2015).
59. Karen Herzog, "UW-Madison Launches \$3.2 Billion Fundraising Campaign," *Milwaukee Wisconsin Journal Sentinel*, October 15, 2015. <http://www.jsonline.com/news/education/university-of-wisconsin-madison-to-launch-ambitious-fund-drive-timed-to-homecoming-b99597115z1-333028731.html> (accessed October 29, 2015).
60. Meg Jones, "University of Wisconsin Regents Enact Budget Reflecting State Cuts," *Milwaukee Wisconsin Journal Sentinel*, July 9, 2015. <http://www.jsonline.com/news/education/university-of-wisconsin-regents-enact-budget-reflecting-state-cuts-b99534871z1-312964111.html> (accessed October 29, 2015).
61. "GR-Area Metal Working Company Adding 81 Jobs," WOOD TV8, July 15, 2015. <http://woodtv.com/2015/07/15/gr-area-metal-working-company-adding-81-jobs/> (accessed October 28, 2015).
62. Michigan State University press release, "Era of Discovery Begins With Groundbreaking of New MSU Research Center," June 18, 2015. <http://msutoday.msu.edu/news/2015/era-of-discovery-begins-with-groundbreaking-of-new-msu-research-center/> (accessed October 28, 2015).
63. Koco McAboy, "Development Continues Along Medical Mile in GR," WOOD TV8, October 23, 2015. <http://woodtv.com/2015/10/23/development-continues-along-medical-mile-in-gr/> (accessed October 28, 2015).
64. Monica Mendoza, "Colorado Startups See Big Dip in VC Money in 3rd Quarter," *Denver Business Journal*, October 15, 2015. http://www.bizjournals.com/denver/blog/finance_etc/2015/10/colorado-startups-see-big-dip-in-vc-money-rolling.html (October 29, 2015).
65. Jessica Bernstein-Wax, "San Rafael-based Autodesk Celebrates 30 Years in Business—and in Marin," *Marin Independent Journal*, May 5, 2012. <http://www.marini.com/general-news/20120505/san-rafael-based-autodesk-celebrates-30-years-in-business-and-in-marin> (accessed October 29, 2015).
66. Stephanie Weldy, "San Rafael Signs Off on BioMarin Expansion," *Marin Independent Journal*, October 21, 2015. <http://www.marini.com/article/NO/20151021/NEWS/151029954> (accessed October 29, 2015).

67. "\$394M Expansion Project for Marin General Hospital Begins," *The North Bay Business Journal*, June 8, 2015. <http://www.northbaybusinessjournal.com/northbay/marincounty/4025293-181/394m-expansion-project-for-marin#sZh26dTikOqf1PGY.97> (accessed October 29, 2015).
68. Northwest Arkansas Council, "Tyson Foods to Shift Portion of Workforce to New Downtown Springdale Facility," October 8, 2015. <http://www.nwacouncil.org/news/2015/oct/08/tyson-foods-shift-portion-workforce-new-downtown-s/> (accessed October 29, 2015).
69. Esther Mobley, "Years of Drought Causing Early Harvest in Wine Country," *San Francisco Chronicle*, August 15, 2015. <http://www.sfgate.com/food/article/Years-of-drought-causing-early-harvest-in-Wine-6446726.php> (accessed October 29, 2015).
70. Katherine Grayson, "Forget the Woodchipper: Fargo Spews Out High-Tech Startups," December 14, 2014. <http://upstart.bizjournals.com/companies/startups/2014/12/14/fargo-minneapolis-tech-startup-connection.html?page=all> (accessed October 19, 2015).
71. Adrian Glass Moore, "Microsoft Confirms Hiring Push at Fargo Campus," Inforum, June 17, 2015. <http://www.inforum.com/business/3768119-microsoft-confirms-hiring-push-fargo-campus> (accessed October 19, 2015).
72. Ibid.
73. Jessica Holdman, "North Dakota Counties See Rapid Business Growth," *Washington Times*, November 17, 2015. <http://www.washingtontimes.com/news/2014/nov/17/north-dakota-counties-see-rapid-business-growth/?page=all> (accessed October 19, 2015).
74. Star Spencer, "Bakken Shale Happiness, Oodles of Oil and Help Wanted, Please," *The Barrel*, May 27, 2014. <http://blogs.platts.com/2014/05/27/bakken-oil-north-dakota/> (accessed October 19, 2015).
75. Mike Nowatzki, "ND Governor Signs \$1.1 Billion 'Surge' Spending Bill to Address Oil Impacts, Roads," Inforum, February 24, 2015. <http://www.inforum.com/news/3686334-nd-governor-signs-11-billion-surge-spending-bill-address-oil-impacts-roads> (accessed October 19, 2015).
76. Anthony Capps, "Another Record Enrollment at ISU: 34,732," *Ames Tribune*, September 10, 2014. <http://amestrib.com/news/another-record-enrollment-isu-34732> (accessed October 19, 2015).
77. Vanessa Peng, "Housing and Rental Rates Continue to Rise in Ames," KCCI Des Moines, July 27, 2015. <http://www.kcci.com/news/housing-and-rental-rates-continue-to-rise-in-ames/34386608> (accessed October 20, 2015).
78. Neil Johnson, "Janesville Ranks Second in US on Income Growth," *GazetteXtra*, August 6, 2015. http://www.gazettextra.com/20150806/janesville_ranks_second_in_us_on_income_growth (accessed October 20, 2015).
79. Jim Leute, "Data Dimensions Helps Businesses Move Files Forward," *GazetteXtra*, April 6, 2014. http://www.gazettextra.com/Content/innovation2014/data_dimensions_helps_businesses_move_files_forward#sthash.l3Z4kkC7.dpuf (accessed October 20, 2015).
80. Rock County Wisconsin Development Alliance, "Construction for 208,000 SF Build-to-Suit Advances," October 20, 2015. <http://www.rockcountyalliance.com/media-room/tabid/1086/construction-for-208000-sf-build-to-suit-advances?ctl=ArticleView&mid=2455&articleId=1247> (accessed October 20, 2015).
81. Corey Paul, "Economist: Oil Price Drop to Curb Odessa Economic Growth," OA online, November 13, 2014. http://www.oaoa.com/news/business/article_4a0a26ca-6b87-11e4-b13a-832238d6ec75.html (accessed October 23, 2015).
82. Matthew Rocco, "Florida's The Villages Is the Fastest-Growing City in America," *Fox Business*, March 26, 2015. <http://www.foxbusiness.com/personal-finance/2015/03/26/florida-villages-is-fastest-growing-city-in-america/> (accessed October 23, 2015).
83. Richard Anguiano, "No Sign of Growth Slowing Down in The Villages," *Ocala Star Banner*, April 19, 2015. <http://www.ocala.com/article/20150419/ARTICLES/150419678?p=2&tc=pg> (accessed October 23, 2015).
84. Faurecia North America, "Columbus Automotive Manufacturer Announces Multi-Million Dollar Expansion, Creating 131 New Jobs," *PRNews*, May 20, 2015. <http://www.prnewswire.com/news-releases/columbus-automotive-manufacturer-announces-multi-million-dollar-expansion-creating-131-new-jobs-300086427.html> (accessed October 23, 2015).
85. Ibid.
86. Julie McClure, "\$16 Million Project Serves Needs for Company, Employees," *The Republic*, August 23, 2015. http://www.therepublic.com/view/local_story/-16-million-project-serves-nee_1440375621 (accessed October 25, 2015).
87. Ibid.
88. Clay Risen, "Cummins: An Engine Maker Bets on Clean Air—and Wins," June 8, 2015. <http://fortune.com/2015/06/08/cummins-diesel-engine/> (accessed October 25, 2015).
89. Joseph Ditzler, "Bend Is Bursting as Tourism Peaks With Phish Concerts," *The Bulletin*, July 21, 2015. <http://www.bendbulletin.com/localstate/3345904-151/phish-plays-bend-peak-of-summer-tourism> (accessed October 25, 2015).
90. Ibid.

91. Bruce Schoenfeld. "3 Tech Companies That Started in Bend, Ore.," *Entrepreneur*, August 24, 2012. <http://www.entrepreneur.com/article/223998> (accessed October 25, 2015).
92. Ibid.
93. Katie Pikes, "Logan Metropolitan Area Recognized as Second Best City Nationwide for Career Opportunities," HJnews, October 8, 2015. http://news.hjnews.com/allaccess/logan-metropolitan-area-recognized-as-second-best-city-nationwide-for/article_d9c9e7d4-cd29-550b-ac85-ed0510988112.html (accessed October 26, 2015).
94. Bob Bernick, "Utah's Budget Picture Improves Again," Utah Policy.com, June 17, 2015. <http://utahpolicy.com/index.php/features/today-at-utah-policy/6018-utah-s-budget-picture-improves-again> (accessed October 26, 2015).
95. Kevin Opsahl, "USU Sets Enrollment Records, Sees 6 Percent Increase for Full-Time Students," HJnews, October 8, 2015. http://news.hjnews.com/allaccess/usu-sets-enrollment-records-sees-percent-increase-for-full-time/article_893d90b9-46db-5670-8054-700591da4634.html (accessed October 26, 2015).
96. Pikes, "Logan Metropolitan Area Recognized as Second Best City Nationwide for Career Opportunities."
97. USTAR, <http://ustar.usu.edu> (accessed October 26, 2015).
98. Amber Sutton, "Auburn University Recognized for Its \$5.1 Billion Impact on the State Economy Last Year," AL.com, June 25, 2015. http://www.al.com/news/montgomery/index.ssf/2015/06/auburn_university_recognized_f.html (accessed October 28, 2015).
99. Made in Alabama, "GE Aviation Readies First 3-D Printed Jet Engine Nozzle at Alabama Plant," June 15, 2015. <http://www.madeinalabama.com/2015/06/ge-aviation-readies-first-3-d-printed-jet-engine-nozzle/> (accessed October 29, 2015).
100. Sutton, "Auburn University Recognized for Its \$5.1 Billion Impact on the State Economy Last Year."
101. Auburn Research and Technology Foundation. <http://www.auburnresearchpark.com> (accessed October 29, 2015).
102. Ibid.

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