

BEST-PERFORMING CITIES **2020**

Where America's Jobs Are Created and Sustained

Michael C.Y. Lin, PhD, Joe Lee, and Perry Wong





BEST-PERFORMING CITIES **2020**

Where America's Jobs Are Created and Sustained

Michael C.Y. Lin, PhD, Joe Lee, and Perry Wong

ABOUT THE MILKEN INSTITUTE

The Milken Institute is a nonprofit, nonpartisan think tank.

For the past three decades, the Milken Institute has served as a catalyst for practical, scalable solutions to global challenges by connecting human, financial, and educational resources to those who need them. Guided by a conviction that the best ideas, underresourced, cannot succeed, we conduct research and analysis and convene top experts, innovators, and influencers from different backgrounds and competing viewpoints. We leverage this expertise and insight to construct programs and policy initiatives.

These activities are designed to help people build meaningful lives in which they can experience health and well-being, pursue effective education and gainful employment, and access the resources required to create ever-expanding opportunities for themselves and their broader communities.

ABOUT THE CENTER FOR REGIONAL ECONOMICS

The Center for Regional Economics produces research, programs, and events designed to inform and activate innovative economic and policy solutions to drive job creation and industry expansion.

©2020 Milken Institute

This work is made available under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License, available at http://creativecommons.org/licenses/by-nc-nd/3.0/



Table of Contents

EXECUTIVE SUMMARY1
Best-Performing Large City2 Biggest Gains
Best-Performing Small City3
INTRODUCTION
An Emphasis on Outcomes5
National Economic Conditions
Biggest Gains
Biggest Drops
TOP 25 BEST-PERFORMING LARGE CITIES9
COMPLETE RESULTS: 2020 BEST-PERFORMING LARGE CITIES
TOP 10 BEST-PERFORMING SMALL CITIES
COMPLETE RESULTS: 2020 BEST-PERFORMING SMALL CITIES
ENDNOTES
ACKNOWLEDGMENTS
ABOUT THE AUTHORS

 \mathbf{x}

Executive Summary

How did US regional economies perform recently? What are the key factors driving their growth and decline? The Milken Institute's Best-Performing Cities series has tracked the economic performance of US metros for two decades using job, wage and salary, and high-tech gross domestic product (GDP) indicators. Metros are ranked on their performance, while indicators help identify the drivers behind their success or failure. With this publication, we hope metros will learn from others' experiences and enhance urban economies in the long run.

Here are the highlights of the 2020 rankings:

- San Francisco-Redwood City-South San Francisco, CA, regains the crown as the best-performing large metro after 2014. The skilled workforce, abundant venture capital (VC), and innovation and entrepreneurial culture support regional high value-added industries, including the expanding tech and biotech industries. The metro's excellent performance in our five-year high-tech GDP growth (ranked first) illustrates this point.
- Twenty-one top-performing large metros return from our 2018 Best-Performing Large Cities Index. A substantial number of them are metros with dynamic tech sectors, including San Francisco-Redwood City-South San Francisco, CA; Provo-Orem, UT; Austin-Round Rock, TX; and San Jose-Sunnyvale-Santa Clara, CA. Others, like Reno, NV, continue to develop a diverse industrial base while experiencing rapid growth in the advanced manufacturing and technology sectors.
- California secured four (San Francisco-Redwood City-South San Francisco, CA; San Jose-Sunnyvale-Santa Clara, CA; Oakland-Hayward-Berkeley, CA; and Riverside-San Bernardino-Ontario, CA) of the Top 25 spots among large metros. The Bay Area in Northern California consistently shows economic excellence powered by high value-added industries.
- For the fourth straight year, Bend, OR, ranks first in our Best-Performing Small Cities list. Compared with other small metros, the region has a rather diverse industrial composition with a well-developed, niche tech scene in e-commerce and vehicle technology. Bend's entrepreneurial community has also helped grow its tech sector.

EXECUTIVE SUMMARY

1

WHERE AMERICA'S JOBS ARE CREATED AND SUSTAINED

Overall, metros with strong tech industries remain the superstars of regional economies. One key factor in the success of these tech powerhouses is their ability to engage in new technologies. For instance, metros in the Bay Area/Silicon Valley area of California (San Francisco-Redwood City-South San Francisco, CA, and San Jose-Sunnyvale-Santa Clara, CA) lead tech innovation.

In contrast, other top-ranked metros like Reno, NV, take part in the new wave of the tech-driven economy, albeit with different approaches. The arrival of Tesla's Gigafactory 1 transformed that metro's economic landscape. And while the metro is far from becoming a hub for developing new technologies, it hosts an emerging cluster of data centers. Still others, like Charleston-North Charleston, SC, and Spartanburg, SC, prosper through advanced manufacturing and a heavy reliance on international trade. However, the ongoing trade tensions between the US and China and other countries may soon present challenges for those export-oriented metros.

Best-Performing Large City: San Francisco-Redwood City-South San Francisco, CA

San Francisco-Redwood City-South San Francisco, CA, is the US tech powerhouse, consistently appearing in our top-performing list. The region performs particularly well in the one- and five-year wage growth and high-tech GDP concentration, all ranking second. Its five-year high-tech GDP growth tops all large metropolitan statistical areas (MSAs) in our index. The information industry continues to add jobs to the metro, while the region's biotech industry also has expanded due to strong research and development (R&D) capacity from the University of California, San Francisco, and Genentech, Inc.

TABLE 1. TOP 25 BEST-PERFORMING LARGE CITIESRank according to 2020 index

Metropolitan Statistical Area / Metropolitan Division	2020 Rank	2018 Rank	Change
San Francisco-Redwood City-South San Francisco, CA	1	4	3
Provo-Orem, UT	2	1	-1
Austin-Round Rock, TX	3	3	Steady
Reno, NV	4	11	7
San Jose-Sunnyvale-Santa Clara, CA	5T	2	-3
Orlando-Kissimmee-Sanford, FL	5T	7	2
Boise, ID	7	12	5
Seattle-Bellevue-Everett, WA	8	8	Steady
Dallas-Plano-Irving, TX	9	5	-4
Palm Bay-Melbourne-Titusville, FL	10	57	47
Raleigh, NC	11	6	-5
Phoenix-Mesa-Scottsdale, AZ	12	20	8
Charleston-North Charleston, SC	13	16	3
Nashville-Davidson-Murfreesboro- Franklin, TN	14	25	11
Spartanburg, SC	15	28	13
Charlotte-Concord-Gastonia, NC-SC	16	13	-3
Oakland-Hayward-Berkeley, CA	17	14	-3
Denver-Aurora-Lakewood, CO	18	24	6
Olympia-Tumwater, WA	19	19	Steady
Greeley, CO	20	42	22
Fort Collins, CO	21	9	-12
Ogden-Clearfield, UT	22	21	-1
Cape Coral-Fort Myers, FL	23	46	23
Portland-Vancouver-Hillsboro, OR-WA	24	33	9
Riverside-San Bernardino-Ontario, CA	25T	15	-10
Salt Lake City, UT	25T	10	-15

Source: Milken Institute (2020)

2

EXECUTIVE SUMMARY

BEST-PERFORMING CITIES 2020

Biggest Gains

Recent rising demand in energy and natural resources, such as coal and natural gas, uplifts several resourcedependent metros in our index, including Tuscaloosa, AL; Grand Junction, CO; Odessa, TX; and Wheeling, WV-OH. The Wheeling, WV-OH, metro is the biggest gainer among all metro areas in our index, jumping 111 spots to 70th place. Other big gainers include California-Lexington Park, MD, and Clarksville, TN-KY, two regional economies anchored by the defense industry. Still, other big gainers, including Sebring, FL; Carson City, NV; and Kingston, NY, have health care, retirement communities, and tourism driving their economic growth.

Best-Performing Small City: Bend-Redmond, OR

The Bend-Redmond, OR, metro is the best-performing small city for the fourth year running. Its one- and fiveyear job and wage growth are all strong in our index, and the five-year (2012-2017) wage growth tops all small metros. The region performs impressively in five-year high-tech GDP growth (2013-2018) and high-tech GDP concentration (2018), both ranking fifth. The metro's collaborative environment facilitates entrepreneurial activities, particularly for high-tech startups. Meanwhile, Oregon State University-Cascades and Central Oregon Community College provide a skilled workforce to the local labor markets.

ON THE WEB Visit best-cities.org



EXECUTIVE SUMMARY

WHERE AMERICA'S JOBS ARE CREATED AND SUSTAINED

Introduction

America's metropolitan areas are the nation's economic growth engines. They drive US economic growth by upgrading industries and creating jobs through policy choices and industrial, workforce, and innovation assets. However, not all metro areas grow equally. Some parts of the country are thriving while others are failing to keep up. The Milken Institute's Best-Performing Cities Index provides an objective benchmark to examine the factors underlying growth in these metros while identifying their unique economic characteristics.

Our Best-Performing Cities Index uses an outcomesbased set of metrics—including job creation, wage gains, and technological developments—to evaluate the relative growth of metropolitan areas. While national and international political and economic forces beyond a region's control can affect nearterm performance, the top-performing metros have cohesive strategies allowing them to weather economic storms and leverage their assets more effectively. These metros offer important lessons that are helpful to peer regions.

The Best-Performing Cities Index's goal is to help academics, businesses, development agencies, government officials, industry associations, investors, and public-policy groups monitor and evaluate how well their metro promotes economic vitality relative to the rest of the country. The index also provides benchmarking data that can inform approaches to improving a region's performance over time. The index can serve as a tool for understanding real estate, consumer, and business opportunities by indicating where employment is stable and expanding, wages and salaries are increasing, and economies and businesses are thriving.¹

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

Knowledge-based economies—those with innovation industries and skilled labor at their core—have done well on the Best-Performing Cities Index by adapting to economic and political changes. They take different forms, with some innovation hubs excelling despite high housing costs and a heavy regulatory burden, while others have attracted workers and firms away from the coasts with lower costs of living and doing business.

This 2020 edition of the Best-Performing Cities Index applies the same methodology used in prior years.

INTRODUCTION

BEST-PERFORMING CITIES 2020

We employ the geographic terms and definitions used by the Office of Management and Budget (OMB), most recently updated after the 2010 US census. The OMB defines a metropolitan statistical area (MSA) as a region generally comprising 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 MSAs.

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 (MDs), of which there are currently 31 in the country. For example, the MSA of Philadelphia-Camden-Wilmington, DE-MD-NJ, comprises three MDs (Camden, NJ; Philadelphia, PA; and Wilmington, DE). 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 for jobs and technology output (2013-2018) and for wages and salaries (2012-2017) to adjust for extreme variations in business cycles. It also incorporates the latest available year's performance in these areas. In addition, the rankings include a measure of 12-month job growth (August 2018-August 2019) to capture recent momentum among metropolitan economies.²

TABLE 2. COMPONENTS OF THE BEST-PERFORMING CITIES INDEX

Component	Weight
Job growth (I=2013)	0.143
Job growth (I=2017)	0.143
Wage and salary growth (I=2012)	0.143
Wage and salary growth (I=2016)	0.143
Short-term job growth (Aug 18-Aug 19)	0.143
High-tech GDP growth (I=2013)	0.071
High-tech GDP growth (I=2017)	0.071
High-tech GDP location quotient (2018)	0.071
Number of high-tech industries with GDP LQ>1 (2018)	0.071

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

Source: Milken Institute (2020)

Employment and wage and salary growth are heavily weighted because of their critical importance to community vitality. These metrics signal 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 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-ofliving components, and quality-of-life conditions like commute times and crime rates). These measures, although important, are prone to wide variations and can be highly subjective.

WHERE AMERICA'S JOBS ARE CREATED AND SUSTAINED

National Economic Conditions

Long-term regional economic development and the temporary rise and fall of a metropolitan economy's performance are often shaped by the fundamentals of regional economic structures and policies and the conditions of US and global macroeconomics. 2018 and 2019 were turbulent years for economies globally. While the US economy continues to be the leading growth center among developed nations, trade disputes and supply-chains disruptions presented challenges in 2018 and 2019. As the International Monetary Fund (IMF)'s World Economic Outlook 2019 describes, the world economy is at a stage of "subdued momentum, weak trade and industrial production."³ Global growth shrank to 3.6 percent in 2018 and is expected to slide further to 3 percent in 2019. On the domestic front, the US economy grew at 2.9 percent in 2018 and a slower 2.1 percent increase in the third guarter of 2019. The pace of economic expansion in the US has trailed downward since the fourth quarter of 2018.4

Despite weaker growth in the last 12 months, US macroeconomic fundamentals are solid and job gains stable. The September 2019 unemployment rate is 3.5 percent, reflecting a low level not seen since May 1969.⁵ The US labor market also is tight. Many economists considered that the US economy was at nearly full employment at that time. However, demand for skilled professionals remains high-a trend since early 2012. US nonfarm payroll jobs grew by 266,000 in the latest reporting in November.⁶ It is, however, worth noting that labor force growth in 2019 is at its lowest level since 2009.7 Despite a robust job market at this late stage of economic expansion, pressure on raising wage levels is subdued. Personal income only recently increased. In the last few months, disposable personal income grew at 0.3 percent and declined in October by 0.3 percent.⁸

In this mixed economic picture, technologies and innovations are clear leaders in terms of growth and job creation. Demand for skilled labor in information and professional/technical services remains strong, showing a healthy pace of job increase by 277,000 in 12 months—an average of 34,000 jobs per month. Other major indicators, such as the Consumer Price Index and Producer Price Index, point to a subdued inflationary environment, though the national average of hourly earnings has moved very little in the last 18 months.

Considering recent US macro and international settings, regional economic growth in the US could be affected differently and disproportionally due to its industrial mix and orientation to the global market. The trade disputes between the United States and China since 2018 have curbed US agricultural products and automobile parts exports. From January to September 2019, US exports to China declined from \$93 billion to \$78 billion.⁹

The trade disputes could affect metro areas in states that export agricultural products, fish, and hogs, such as Alaska, Arkansas, California, Iowa, and Massachusetts, as well as automobile-producing states, such as Michigan and Ohio. The selection of categories of products and production for retaliation by the Chinese government could also produce negative externalities on economic performance in some US regional economies, though the impact on the latest 12-month employment would likely be small.

INTRODUCTION

6

BEST-PERFORMING CITIES 2020

Biggest Gains

The biggest gainers this year (as shown in Table 3) can be categorized into three major groups. The first group contains resource-dependent metros, including Tuscaloosa, AL; Grand Junction, CO; Odessa, TX; and Wheeling, WV-OH. Among them, the Wheeling, WV-OH, metro is the biggest gainer among all metro areas in our index, jumping 111 spots to 70th place. Although each of these four metros has other industrial sectors, the rising demand for natural gas domestically and coal internationally played a key role in driving these economies.

The second camp features cities with a large defense industry presence, fueled by increased spending in the sector. Palm Bay-Melbourne-Titusville, FL; Savannah, GA; California-Lexington Park, MD; Ocean City, NJ; Las Cruces, NM; and Clarksville, TN-KY, fall into this camp. The third category comprises metros with a large presence of health care, retirees, and tourism. Representatives of this group include Hot Springs, AR; Sebring, FL; Carson City, NV; and Kingston, NY. The remaining metros in the biggest gain list have other industrial mixes.

TABLE 3. BIGGEST GAINS AMONG ALL CITIES(Based on change in rankings)

Metropolitan Statistical Area / Metropolitan Division	2020 Rank	2018 Rank	Change
Wheeling, WV-OH	70	181	111
Midland, MI	43	148	105
Odessa, TX	47	138	91
Florence, SC	26	111	85
Winston-Salem, NC	82	160	78
Hot Springs, AR	85	160	75
Las Cruces, NM	102	173	71
Clarksville, TN-KY	110	178	68
Tuscaloosa, AL	41	107	66
State College, PA	28	83	55
Kingston, NY	54	108	54
Sebring, FL	78	130	52
Grand Junction, CO	81	131	50
Palm Bay-Melbourne-Titusville, FL	10	57	47
Salinas, CA	41	88	47
Lebanon, PA	40	86	46
Bloomington, IN	69	115	46
California-Lexington Park, MD	112	158	46
Dubuque, IA	120	164	44
Savannah, GA	66	108	42
Carson City, NV	21	63	42
Vineland-Bridgeton, NJ	110	152	42
Brunswick, GA	31	72	41
Ocean City, NJ	95	136	41
Rockford, IL	144	184	40

Source: Milken Institute (2020)

INTRODUCTION

7

BEST-PERFORMING CITIES 2020

WHERE AMERICA'S JOBS ARE CREATED AND SUSTAINED

Biggest Drops

The metros falling the furthest in this edition of the index have public-sector money playing an outsized role in their economies relative to other industries. The other feature common to the group is that 14 of the 25 experienced population loss.

Agriculture, logistics, and manufacturing are all sectors represented in the metro areas seeing the most significant declines. The trade war has apparently hurt these sectors, since they are interconnected not only to each other but also to the ups and downs of international markets. Metros experiencing large declines are, for the most part, small cities—only five large metros made this list. In many of these small cities, local universities or state governments are the largest employer. Dover, DE; lowa City, IA; Lansing-East Lansing, MI; Manhattan, KS; and Montgomery, AL, are all prime examples. Metros reliant on public spending from both the state and federal levels are also represented on this list, including Dover, DE; Albany, GA; and Jacksonville, NC.

TABLE 4. BIGGEST DECLINES AMONG ALL CITIES(Based on change in rankings)

Metropolitan Statistical Area / Metropolitan Division	2020 Rank	2018 Rank	Change
Iowa City, IA	150	57	-93
Manhattan, KS	156	76	-80
Kokomo, IN	126	51	-75
Hammond, LA	132	61	-71
Lawrence, KS	116	46	-70
Appleton, WI	139	69	-70
Bowling Green, KY	108	39	-69
Dover, DE	118	49	-69
Lansing-East Lansing, MI	154	89	-65
Albany, GA	160	98	-62
Battle Creek, MI	181	120	-61
Jacksonville, NC	183	122	-61
Pittsfield, MA	142	86	-56
Kahului-Wailuku-Lahaina, HI	88	34	-54
Monroe, MI	152	99	-53
Grand Forks, ND-MN	192	140	-52
Hagerstown-Martinsburg, MD-WV	169	119	-50
Montgomery, AL	174	127	-47
Kankakee, IL	72	26	-46
St. Cloud, MN	104	58	-46
Panama City, FL	117	71	-46
Lubbock, TX	131	86	-45
Grand Rapids-Wyoming, MI	73	29	-44
Indianapolis-Carmel-Anderson, IN	106	63	-43
Columbia, MO	93	50	-43

Source: Milken Institute (2020)

INTRODUCTION

8

BEST-PERFORMING CITIES 2020

SAN FRANCISCO-REDWOOD CITY-SOUTH SAN FRANCISCO, CA MSA

GAINED 3 RANKS	Job growth (2013-18)	13 th
	Job growth (2017-18)	22 nd
	Wage growth (2012-17)	2 nd
	Wage growth (2016-17)	2 nd
	Short-term job growth (8/2018-8/2019)	11 th
	High-tech GDP growth (2013-18)	1 st
	High-tech GDP growth (2017-18)	8 th
	High-tech GDP concentration (2018)	2 nd
	Number of high-tech industries (LQ>=1) (2018)	17 th

ASSETS:

- Innovative capacity, unparalleled creative ecosystem, and entrepreneurial spirit propel the region's economic growth.
- The region's universities, R&D infrastructure, and workforce help advance its hold on the development of technology-driven services in the world.
- The region's legacy in innovation remains a strong draw for global talents and startups from across the nation, if not globally.

LIABILITIES:

 Low housing affordability and scarcity in new commercial property development can hamper business expansion in the region.
 This shortcoming will limit regional development as talent and business retention becomes a never-ending issue.

San Francisco-Redwood City-South San Francisco, CA, advances three spots this year to take the top position, after holding steady in fourth place for three years (2016-2018). Like Silicon Valley to its south, the San Francisco-Redwood City-South San Francisco metro consistently ranks among the top performers in our rankings. The region's ongoing strong performance is backed by the creation of high-paying jobs and phenomenal income growth. Similar to the national trend, the labor market in the region is tight, with a low unemployment rate at below 2.5 percent in the last three months, while its core high-value-added sectors (information technology and professional/design services) posted strong gains at 4.5 percent and 3.9 percent over the 12-month period ending in October 2019, respectively.¹⁰ The region's wage income growth in the five-year benchmark and the recent period exhibit exceptional strength (ranked second among large MSAs). Besides the region's robust growth in job creation and income, it also commands the highest rank of five-year high-tech GDP growth among large metropolitan areas in the nation. More importantly, the high-tech content as a share of the regional economy is increasing.

The San Francisco-Redwood City-South San Francisco, CA, MSA is already home to many global household names. Those technology-driven service firms, such as Airbnb, Amazon, Salesforce, and Uber, are not only trophies but also the anchors of the regional technology cluster.¹¹ However, tech services startups are shaping the current and future growth of the region. They are the dynamic force that elevate San Francisco-Redwood City-South San Francisco to the top rank this year. These startups cover areas in data analytics, financing/banking, gaming, logistics, markets, and sales.¹²

The San Francisco Bay Area is also an emerging financing and logistics center for global commerce. The region's innovative capacity blends well with the heightened demand in blockchain, financial technology, and other data analytic technologies that are reshaping global commerce. The phenomenon is by no means unique in this period to San Francisco but illustrates the richness of the region and its ability to attract and retain talent, despite lackluster commercial space development and low housing affordability.

Residential development is consistently a weaker spot in the regional economy. Housing shortages and a lack of affordability continue to cast a shadow over long-term growth prospects of the region. The Bay Area's median home price is \$1,355,200,¹³ while median household income is only \$110,000.¹⁴ Recent news stories illustrate the dilemma of high-tech growth and housing needs, as the average tech worker pays \$2,000 for a room for boarding.¹⁵ Reasons for the severe housing shortage include strict zoning laws, cumbersome regulations, and high construction costs. Homeownership in the San Francisco Bay Area also continues to be a development challenge. It would take a concerted effort by the public and private sectors to address this challenge.

BEST-PERFORMING CITIES 2020

10

WHERE AMERICA'S JOBS ARE CREATED AND SUSTAINED

PROVO-OREM, UT MSA

LOST 1 RANK	Job growth (2013-18)	1 st
	Job growth (2017-18)	2 nd
	Wage growth (2012-17)	3 rd
	Wage growth (2016-17)	9 th
	Short-term job growth (8/2018-8/2019)	29 th
	High-tech GDP growth (2013-18)	5 th
	High-tech GDP growth (2017-18)	10 th
	High-tech GDP concentration (2018)	14 th
	Number of high-tech industries (LQ>=1) (2018)	25 th

ASSETS:

- The region has gained a solid reputation for hosting young startups due to strong support from local educational institutions and an accommodating lifestyle.
- Logistics and transportation services efficiently facilitate the region's access to the West Coast technology centers.
- As the receiving end of the tech out-migration from the expensive coastal regions to the West, the region continues to expand its tech sector and build up the local skilled workforce.

LIABILITIES:

• Challenges include a tight job market and a shortage of skilled labor.

Provo-Orem, UT, falls one spot from the top place in 2018 to second in 2020. Despite the drop, the regional economy has been one of the best in the nation in the last several years, reflected in its rapid pace of job creation and rising incomes (ranking first in job growth). The self-proclaimed "Silicon Slopes" has a high concentration of high-tech industries relative to the size of the economy. Indeed, the region's economic growth is driven by a rapid increase in the information sector employment, with 5.3 percent job growth from 2018 to 2019, leading to an overall total employment growth of 3.3 percent. This pace of high-tech output growth has solidified the region's efforts to build up the technology contents of the economy. As such, Provo-Orem has consistently outperformed other large tech centers in the Best-Performing Cities report.

However, as the regional job market expands, its growth momentum has slowed in the last 12 months (ranked 29th). In the same period, Provo-Orem's unemployment rate dropped to 1.7 percent.¹⁶ The topline employment figures strongly suggest that the tight labor pool constrains the region's strong economic growth. A key advantage of the technology economy in Provo is the comparatively lower wage rate for similar occupations versus key competitors such as the Bay Area and Seattle. Had wages grown due to the persistently tight labor market, Provo's competitive advantage might be softened.¹⁷

Compared with other famed innovation centers like the Bay Area, Silicon Valley, Boston, and Los Angeles, Provo-Orem, UT, is relatively new and has a limited breadth. However, the region offers an unparalleled lifestyle and amenities in the mountain region, where it is still close to major venture capital and angel fund networks on the West Coast. A quicker build-up in promoting, nurturing, and training talent will lead to more robust technology-driven growth.



AUSTIN-ROUND ROCK, TX MSA

HELD STEADY	Job growth (2013-18)	9 th
	Job growth (2017-18)	13 th
	Wage growth (2012-17)	4 th
	Wage growth (2016-17)	8 th
	Short-term job growth (8/2018-8/2019)	43 rd
	High-tech GDP growth (2013-18)	17 th
	High-tech GDP growth (2017-18)	12 th
	High-tech GDP concentration (2018)	9 th
	Number of high-tech industries (LQ>=1) (2018)	25 th

ASSETS:

- Ample space for business and commercial property development and low cost of living still richly reward this high-tech city. Its low tax and cost of living can attract technology firms and others from the East and West coastal regions.
- Strong academic and industry R&D are the fixtures and traditions of the region, where engineering and ideas fuse to create a platform for the expansion of a diverse regional economy.

LIABILITIES:

• The region is strong in hardware making but relatively weak in information-content generation compared to technology clusters in the West Coast and Northeast regions.

Austin-Round Rock, TX, holds steady at third place, continuing a stretch of strong performances in the Best-Performing Cities ranking. Economic development in Austin-Round Rock is like that of the state's, offering a low tax rate and abundant space for further expansion and development. And, while Austin's hightech sector has taken off, the region still maintains a lower cost of living compared to coastal technology centers, although wage rates in key occupation categories are lower than the national average.¹⁸ So far, the region's consistently strong economic performance in the last decade and a half of rankings support the "Austin Model" for which the area is known.

The Austin-Round Rock area is a diverse economy with many globally renowned corporations such as Dell, Resideo Technologies Inc., Apple Inc., IBM, AMD, and Applied Materials.¹⁹ True to the nickname "Silicon Hills," the region ranks ninth overall for high-tech GDP concentration because of these tech heavyweights. Information and professional/engineering service sectors are the two high-growth areas, commanding one-year growth rates of 3.3 percent and 3.8 percent, respectively. Further, as the state capital of Texas and home of the University of Texas at Austin, the region offers ample support for academic and industry R&D. The sizable public sector is a strong stabilizer during economic and technological cycles and helps to explain the remarkable consistency of the regional economy.

Austin-Round Rock MSA, like the state of Texas, successfully continues to brand itself as a friendly place for business. In the last few years, domestic firms such as Oracle have expanded their footprint in Austin. In addition, Samsung and others often consider the region when expanding their operations.

BEST-PERFORMING CITIES 2020

11

GAINED 7 RANKS	Job growth (2013-18)	2 nd
	Job growth (2017-18)	1 st
	Wage growth (2012-17)	14 th
	Wage growth (2016-17)	4 th
	Short-term job growth (8/2018-8/2019)	1 st
	High-tech GDP growth (2013-18)	3 rd
	High-tech GDP growth (2017-18)	2 nd
	High-tech GDP concentration (2018)	101 st
	Number of high-tech industries (LQ>=1) (2018)	102 nd

ASSETS:

- Strong job growth fuels the region's economic growth.
- A diverse industrial mix sets the foundation for a healthier regional economy.

LIABILITIES:

Declining housing affordability challenges further economic development.

Reno, NV, moves up seven spots to secure fourth place. Its job growth, wage growth, and high-tech GDP growth are among the best of the large metros. Even more impressive, Reno's one-year job growth and short-term job growth top all large metros in our rankings. Although traditionally known for its gaming industry, the trade, transportation, and utilities (11,400 jobs); professional and business services (9,000 jobs); manufacturing (8,400 jobs); construction (7,900 jobs); and education sectors (3,700 jobs) drove the majority of employment added in the past five years.²⁰

This recent job growth is illustrative of the region's changing economic landscape. Most notably, Tesla's Gigafactory 1 recently arrived in Reno and is the largest factory in the world. Reno is also a transportation and logistics sub-center with a thriving logistics and drone sector, including an Amazon fulfillment center, the first commercial drone delivery company in the US (Flirtey), and National Aeronautics and Space Administration (NASA) and the University of Nevada Reno's NUANCE Lab, which collaborate on drone traffic management.

The area is also an emerging data center hub. Apple, for instance, has a data center in Reno with plans for expansion in the Reno-Sparks region. Another tech giant, Google, is building a 1,210-acre data center.²¹ In addition, Switch's Tahoe Reno 1 in the Citadel Campus is the world's largest data center campus.²² Affordable renewable energy in the region is recognized as one of the major reasons behind Apple and Google's site selection for data centers in the area.²³

One side effect of the region's rapid economic growth is deteriorating housing affordability. Reno has been identified as one of the least affordable places in the US relative to median income.²⁴ In June 2019, median home prices in Reno reached an all-time high record of \$420,000.²⁵ The issue of housing affordability poses challenges to workforce retention and further economic growth.

#5 TIED ORLANDO-KISSIMMEE-SANFORD, FL MSA

GAINED 2 RANKS	Job growth (2013-18)	6 th
	Job growth (2017-18)	7 th
	Wage growth (2012-17)	11 th
	Wage growth (2016-17)	18 th
	Short-term job growth (8/2018-8/2019)	5 th
	High-tech GDP growth (2013-18)	29 th
	High-tech GDP growth (2017-18)	30 th
	High-tech GDP concentration (2018)	72 nd
	Number of high-tech industries (LQ>=1) (2018)	49 th

ASSETS:

- The expansion of the leisure/hospitality and high-tech sectors creates more jobs.
- The growth of the high-tech sector creates more high-paying jobs.

LIABILITIES:

• Heavy reliance on tourism makes the metro vulnerable to the impact of recessions and economic downturns.

Orlando-Kissimmee-Sanford, FL, inches up two spots to tie for fifth place. The region performed particularly well in five-year job growth (sixth), one-year job growth (seventh), and short-term job growth (fifth). The metro added 41,800 jobs in 2018, signifying a 3.3 percent annual growth in employment and topping all US metros with more than 1 million total jobs.²⁶ The professional and business services, construction, and leisure and hospitality fields experienced the largest sector growth in 2018.²⁷

Orlando is particularly well known for its leisure and hospitality sector, which accounts for 21 percent of the metro's 2018 total employment. In 2017, Disney and Universal Orlando employment alone includes approximately 95,000 people.²⁸ The region's amusement parks also are expanding: Universal opened a new Harry Potter ride, Hagrid's Magical Creatures Motorbike, in June 2019, Walt Disney World's Hollywood Studios opened Star Wars: Galaxy's Edge in August 2019, and Universal Orlando will expand its territory by building an Epic Universe theme park. The project is expected to create 14,000 new jobs in the region.²⁹

The high-tech sector is another industrial pillar of the region. Lockheed Martin and Siemens, two leading tech employers, are expanding their facilities in Orlando. In early 2019, Lockheed Martin opened a new R&D facility in Orlando to provide engineering, program management, and business operations support for its Missiles and Fire Control's Orlando site.³⁰ In October 2019, Siemens opened an innovation center to support Siemens Gas and Power customers in Orlando.³¹ University of Central Florida (UCF) provides a highly educated workforce and R&D support to local companies. In October 2018, UCF and Siemens announced a new collaboration applying big data to smart infrastructure to improve the performance and efficiency of buildings and the energy grid.³²

12

TIED SAN JOSE-SUNNYVALE-SANTA CLARA, CA MSA

LOST 3 RANKS	Job growth (2013-18)	29 th
	Job growth (2017-18)	76 th
	Wage growth (2012-17)	1 st
	Wage growth (2016-17)	3rd
	Short-term job growth (8/2018-8/2019)	18 th
	High-tech GDP growth (2013-18)	4 th
	High-tech GDP growth (2017-18)	14 th
	High-tech GDP concentration (2018)	1 st
	Number of high-tech industries (LQ>=1) (2018)	1 st

ASSETS:

- Legacy resources like the abundance of venture capital, entrepreneurial milieu, and a deep talent pool help maintain the economic strength of the region.
- Companies in the metro lead the world in technological innovation.

LIABILITIES:

• Low housing affordability presents challenges for talent attraction and retention.

San Jose-Sunnyvale-Santa Clara, CA, while remaining one of the top performers in the Best-Performing Cities rankings, slips three spots this year to tie for fifth place. The Silicon Valley is home to many of the world's most famous tech companies, including Adobe, Apple, Alphabet/Google, Cisco, eBay, Facebook, HP, Intel, LinkedIn, Oracle, and Tesla. With these firms in residence, not surprisingly, the region ranks high in all high-tech sector-related metrics, including high-tech GDP concentration and the number of high-tech industries LQ, topping all large MSAs.

Many of the aforementioned companies, like Apple and Google, are at the forefront of technological innovation in the high-tech and information services industries. Moreover, the metro is also strong in semiconductor product and equipment design and manufacturing, which are essential to next-generation technologies like artificial intelligence chips. As of 2018, four out of the world's top-10 integrated circuit design firms (i.e., Broadcom, NVIDIA, AMD, and Xilinx) are based in the region.³³ GlobalFoundries, a major pure-play foundry around the globe, has its headquarters in Santa Clara. In addition, the region is home to three of the world's major semiconductor equipment manufacturers, totaling 42 percent of global market share.³⁴

The abundance of venture capital, an entrepreneurial milieu, and a deep talent pool have been widely recognized as major factors for the thriving high-tech ecosystem. Although other emerging tech hubs in the US have been recipients of venture capital, Silicon Valley received 18.1 percent of total VC dollars in 2018, second only to San Francisco.³⁵ And with San Jose State University, Stanford University, and the University of California, Berkeley in residence, the region boasts a highly educated workforce. Over half of the population 25 years and older have a bachelor's degree or higher.³⁶ BOISE, ID MSA

GAINED 5 RANKS	Job growth (2013-18)	7 th
	Job growth (2017-18)	3 rd
	Wage growth (2012-17)	9 th
	Wage growth (2016-17)	5 th
	Short-term job growth (8/2018-8/2019)	23 rd
	High-tech GDP growth (2013-18)	23 rd
	High-tech GDP growth (2017-18)	22 nd
	High-tech GDP concentration (2018)	43 rd
	Number of high-tech industries (LQ>=1) (2018)	123 rd

ASSETS:

- Less congestion, low cost of living and of doing business, and natural amenities attract people and businesses.
- Industries, including health care, food and beverage, and high-tech manufacturing and services, form a diversified economy.

LIABILITIES:

 Semiconductor chip manufacturing and export are vulnerable to global electronics market conditions and geopolitics, putting risk on major local employer Micron.

Boise, ID, performs well in job, wage, and high-tech GDP growth, earning seventh place in this year's rankings. In particular, Boise's one-year job growth and wage growth rank third and fifth in the nation, while the metro's 2.7 percent unemployment rate in 2018 was its lowest point since 2007.³⁷ The city in the Treasure Valley also topped Forbes' "America's Fastest Growing Cities" list, which recognizes the metro's recent strong performance in economic growth.³⁸

The Boise metro area is recognized as one of the hottest destinations for domestic migrants. Most recent in-movers hailed from the West Coast states of California, Oregon, and Washington.³⁹ Affordable housing prices, low living costs, short commute times, and proximity to nature are among the main factors enticing movers to the metro. However, the recent population growth has also driven up median house prices in the metro from \$209,990 in October 2014 to \$324,950 in December 2018.⁴⁰

The health-care sector, where St. Luke's Medical Center is a leading employer, is one of the major pillars of the local economy. In 2018, the center began its facilities expansion in downtown Boise, which will bring more jobs to the region.⁴¹ And with the presence of Albertsons, J.R. Simplot, and microbreweries, the food and beverage and retail sectors also form important elements of the metro's economic landscape. However, the high-tech sector is the main driver of regional economic growth. The low costs of business operation attract many tech startups, including Clearwater Analytics, Cradlepoint, and MetaGeek, to the metro. Boise is also home to Micron, a major global player in the semiconductor industry, the second-largest employer in the metro with approximately 6,000 people.⁴²

However, the US government's ban on exporting memory chips to Huawei, Micron's major customer, has hurt the firm.⁴³ In addition, overreliance on service-based sectors such as health care means relatively lower salary levels compared with other US tech metropolises, and its undersupplied, highly educated pool poses obstacles for the metro's future economic growth.⁴⁴

BEST-PERFORMING CITIES 2020

13

SEATTLE-BELLEVUE-EVERETT, WA MD

HELD STEADY	Job growth (2013-18)	40 th
	Job growth (2017-18)	49 th
	Wage growth (2012-17)	8 th
	Wage growth (2016-17)	6 th
	Short-term job growth (8/2018-8/2019)	13 rd
	High-tech GDP growth (2013-18)	62 nd
	High-tech GDP growth (2017-18)	18 th
	High-tech GDP concentration (2018)	3 rd
	Number of high-tech industries (LQ>=1) (2018)	25 th

ASSETS:

- Strong high-tech, high value-added industries provide high-paying jobs.
- Amazon and Microsoft's dominance in cloud computing fuels a new growth engine for the region's economy.

LIABILITIES:

• The recent incidents involving the grounding of the Boeing 737 Max fleet and the US-China trade war may erode the longstanding aerospace sector of the metro.

Seattle-Bellevue-Everett, WA, remains in eighth place this year, matching its 2018 performance. The overall wage in the metro has increased, which is reflected in its one-year and fiveyear wage growth rankings. As in the San Francisco Bay Area, the high-tech sector has been fueling the region's economy; the presence of tech giants, including Amazon, Boeing, and Microsoft, explains the region's solid performance (third) in our high-tech GDP concentration metric.

Boeing, the largest employer in the metro with approximately 64,300 workers,⁴⁵ is facing severe challenges. Recent incidents involving Boeing 737 Max aircraft have eroded the aviation giant's reputation and revenues. As of October 23, 2019, the incidents have cost Boeing \$9.2 billion.⁴⁶ Moreover, it is estimated that China will become the world's largest aviation market with approximately \$3 trillion in aircraft business over the next two decades.⁴⁷ The escalating trade war between the US and China also threatens the company's sales in commercial airplanes to the Chinese market.

Seattle, known as "Cloud City," boasts the presence of many cloud computing and storage companies, for instance, Amazon, Igneous, Microsoft, and Qumulo. Two of the most valuable US companies, Amazon and Microsoft, dominated the lucrative cloud computing markets in 2018. By the fourth quarter, Amazon and Microsoft owned 32 and 17 percent of world market share in cloud computing, respectively.⁴⁸ This expanding of the cloud computing sector has helped the metro to maintain its growth momentum. In addition to a high-quality workforce, 46 percent of the population 25 and older possess a bachelor's degree or higher.⁴⁹

DALLAS-PLANO-IRVING, TX MD

LOST 4 RANKS	Job growth (2013-18)	16 th
	Job growth (2017-18)	43 rd
	Wage growth (2012-17)	23 rd
	Wage growth (2016-17)	46 th
	Short-term job growth (8/2018-8/2019)	8 th
	High-tech GDP growth (2013-18)	28 th
	High-tech GDP growth (2017-18)	46 th
	High-tech GDP concentration (2018)	23 rd
	Number of high-tech industries (LQ>=1) (2018)	9 th

ASSETS:

- The concentration and new additions of corporate headquarters provide job opportunities in professional services.
- The region has diverse industries, low taxes and housing costs, and a high-quality talent pool compared with other major US metros.

LIABILITIES:

• Rising housing prices erode the metro's long-standing competitive advantages.

Although the **Dallas-Plano-Irving, TX**, metro falls from fifth to ninth place in our 2020 rankings, the region enjoyed strong employment growth in recent years. In the 12 months before August 2019, the region owned the eighth-highest job growth rate among large metro economies in the nation. The metro's unemployment rate also trended down in the recent decade, reaching 2.7 percent in May 2019, the lowest point in the past decade.⁵⁰

The region is headquarters for a variety of companies, including AT&T, Baylor Scott & White Health, Boeing's Global Services division, Southwest Airlines, Texas Instruments, and Toyota Motor North America. The Dallas metro is also a regional hub for the financial, health-care, high-tech, and logistics sectors. For instance, in late 2017, Liberty Mutual opened a new regional hub in Plano, which is expected to employ 5,000 people in the next few years.⁵¹ Around the same time, JPMorgan Chase also opened a new campus, which will eventually house approximately 10,500 employees.⁵²

In addition to Baylor Scott & White Health, the region is home to several large medical facilities such as UT Southwestern Medical Center and Cook Children's Health Care System. Tech companies like Boeing, Raytheon, and Uber form a vital part of a high-tech cluster, while the metro's pivotal location and the Dallas/Fort Worth International Airport constitute the backbone of the metro's logistics hub.

Among its attractive offerings, the metro can boast about lower tax rates, cheaper living costs, and a high-quality talent pool when compared with other major US metros.⁵³ Several major universities are also key to attracting businesses, for instance, the University of Dallas and the University of North Texas at Dallas, which supply a skilled workforce to the local labor markets. Among the total population aged 25 years or older, 37 percent possess a bachelor's degree or higher, greater than both the state (29 percent) and US (32 percent) averages.⁵⁴

BEST-PERFORMING CITIES 2020

14

PALM BAY-MELBOURNE-TITUSVILLE, FL MSA

GAINED 47 RANKS	Job growth (2013-18)	33rd
	Job growth (2017-18)	5 th
	Wage growth (2012-17)	98 th
	Wage growth (2016-17)	16 th
	Short-term job growth (8/2018-8/2019)	15 th
	High-tech GDP growth (2013-18)	18 th
	High-tech GDP growth (2017-18)	17 th
	High-tech GDP concentration (2018)	10 th
	Number of high-tech industries (LQ>=1) (2018)	9 th

ASSETS:

- Strong aerospace and national defense sectors grow the metro's high-tech industries.
- Nice weather and aerospace and port infrastructure attract people to the region.

LIABILITIES:

 Many industries in the region are cyclical and may be vulnerable to economic downturns.

Palm Bay-Melbourne-Titusville, FL, leaps 47 spots to secure 10th place in our Best-Performing Cities 2020 rankings. The metro has strong performances in several of our indicators, including one-year job growth (fifth), one-year wage growth (16th), short-term job growth (fifth), one- and five-year hightech GDP growth (17th and 18th, respectively), high-tech GDP concentration (10th), and high-tech industries LQ (ninth).

The region's strong performance in the high-tech sector is attributed to the thriving aerospace and national defense industries, including several important US Air Force and Navy bases and the Kennedy Space Center (KSC) Visitor Complex. The KSC, a major launch site for most NASA missions, draws other players in the aerospace industry such as Blue Origin, Boeing, and SpaceX. Additionally, the recent merger of Harris Technologies and L3 creates the largest aerospace and defense company, L3Harris. With a headquarters in Melbourne, FL, L3Harris employs approximately 7,000 people.⁵⁵ Lockheed Martin also recently moved its Fleet Ballistic Missile Headquarters from Sunnyvale, CA, to Titusville, FL.⁵⁶

The region has also been a destination for tourists because of its warm climate, aerospace facilities, and modern port infrastructure. Port Canaveral is the world's second-busiest cruise port by number of passengers. In 2018, the port saw nearly 2.1 million cruise line embarkations, accounting for roughly 16 percent of total US embarkations.⁵⁷ In recent years, KSC has hosted roughly 1.5 million visitors per year.⁵⁸ The region is also a retiree haven; the large concentration of the elderly provides economic activity for the health-care sector.

The education sector, health services, and leisure and hospitality services together accounted for 28.7 percent of the region's total employment.⁵⁹ The major industries of health services, hospitality, and defense tend to be more vulnerable to business cycles. Further diversifying the region's economy and deepening the local talent pool would help the region to be more resilient to future economic downturns (only 30 percent of the population aged 25 or older had at least a bachelor's degree in 2017).⁶⁰

RALEIGH, NC

GAINED 5 RANKS	Job growth (2013-18)	22 nd
	Job growth (2017-18)	35 th
	Wage growth (2012-17)	12 th
	Wage growth (2016-17)	31 st
	Short-term job growth (8/2018-8/2019)	84 th
	High-tech GDP growth (2013-18)	22 nd
	High-tech GDP growth (2017-18)	38 th
	High-tech GDP concentration (2018)	8 th
	Number of high-tech industries (LQ>=1) (2018)	9 th

ASSETS:

- The metro has diverse industrial sectors feeding high-paying jobs.
- Talented and young demographics help build up a strong workforce.

LIABILITIES:

 The ongoing US-China trade war may have an impact on the tech sector.

Raleigh, **NC**, known as a strong regional tech hub, falls five spots in this year's rankings to 11th place. Its high-tech GDP concentration and number of high-tech industries LQ rank eighth and ninth, respectively, and its growing high value-added industries supply high-paying jobs to the region. This has helped the metro's wage growth in recent years, which is reflected in its five-year wage growth indicator ranking (12th).

Research Triangle Park, originating from the three universities in the area—Duke University in Durham, University of North Carolina at Chapel Hill, and North Carolina State University in Raleigh—hosts a large concentration of tech companies, including Cisco, IBM, Lenovo, and SAS. Xerox also recently chose the metro as the new site for its Center of Excellence, which is expected to add 600 jobs over the next five years.⁶¹

As the name Research Triangle Park might suggest, clean technology, life sciences, and advanced manufacturing are pillar industries in the region. The Research Triangle region boasts more than 350 clean-tech companies related to smart grid, smart water, and smart transportation.⁶² Nearly 600 life science companies operate in the region, and the industry employs 2.5 percent of the area's workforce, with an average annual wage of \$142,900.⁶³ Roughly 200 advanced manufacturing firms, such as 3M, Caterpillar, and GE Aviation, employ more than 12,500 people with an average annual wage of \$86,000.⁶⁴

The concentration of higher education institutions also equips the region with a large talent pool. In 2017, 46 percent of residents aged 25 and older had an undergraduate degree or more, which is greater than the state (31 percent) and national levels (32 percent).⁶⁵ In addition to its deep talent pool, the metro is young: The population aged 18 to 64 accounted for 64 percent of the total population in 2018, while the median age was 36.9 years.⁶⁶ The state also recently lowered its corporate tax rate from 3 percent to 2.5 percent in early 2019, which is the lowest in the nation.⁶⁷ Access to a talented and young workforce and a business-friendly environment give the region competitive advantages over many of its counterparts.

BEST-PERFORMING CITIES 2020

15

WHERE AMERICA'S JOBS ARE CREATED AND SUSTAINED

#12

PHOENIX-MESA-SCOTTSDALE, AZ MSA

GAINED 8 RANKS	Job growth (2013-18)	28 th
	Job growth (2017-18)	12 th
	Wage growth (2012-17)	51 st
	Wage growth (2016-17)	27 th
	Short-term job growth (8/2018-8/2019)	22 nd
	High-tech GDP growth (2013-18)	41 st
	High-tech GDP growth (2017-18)	26 th
	High-tech GDP concentration (2018)	52 nd
	Number of high-tech industries (LQ>=1) (2018)	49 th

ASSETS:

- Favorable demographics help the metro to grow.
- A diverse industrial mix fosters long-term economic health.

LIABILITIES:

 Average wage in the region is relatively low compared with other metros in the western US.

Phoenix-Mesa-Scottsdale, AZ, climbs eight spots to 12th place. The Valley of the Sun is a hotbed for employment growth; from 2015 to 2018, annual employment growth ranged from 3 to 3.4 percent.⁶⁸ One-year job growth (2017-2018) in the region ranks 12th among all large MSAs in this year's report.

In addition to its employment growth, the region remains a popular destination for retirees and is one of the fastest-growing US metros. From 2017 to 2018, the metro enjoyed a 2.5 percent population growth, putting it ninth among all US metros.⁶⁹ Since 2010, more than 200,000 people have moved to the city of Phoenix.⁷⁰ Both employment and population growth have driven up housing prices. Despite this, new home construction and vacant units helped meet new demand⁷¹ and kept the Valley's housing relatively affordable compared to other big metros. New housing growth also generates significant construction demand—the number of construction jobs grew from 81,163 in August 2010 to 136,545 in August 2019.⁷²

The metro also has a diverse industrial composition: Professional and business services and education and health services are the two leading sectors in the region, accounting for 16.8 percent and 15.4 percent of all employment in 2018.⁷³ Major financial institutions (e.g., Bank of America, JPMorgan Chase, and Wells Fargo), insurance companies (e.g., Progressive, State Farm, and USAA), and airlines (e.g., American Airlines and US Airways) also have their back offices in the region. Phoenix is also home to aerospace and high-tech manufacturing companies like Apollo Education Group, Honeywell Aerospace, Raytheon Missile Systems, and Intel. This industrial diversity helps the region to maintain a healthy economy.



GAINED 3 RANKS	Job growth (2013-18)	21 st
	Job growth (2017-18)	15 th
	Wage growth (2012-17)	26 th
	Wage growth (2016-17)	28 th
	Short-term job growth (8/2018-8/2019)	57 th
	High-tech GDP growth (2013-18)	15 th
	High-tech GDP growth (2017-18)	19 th
	High-tech GDP concentration (2018)	58 th
	Number of high-tech industries (LQ>=1) (2018)	81 st

ASSETS:

 Modern port facilities provide aerospace and automotive industries strong support in importing and exporting products.

LIABILITIES:

 The US-China trade war and the import tariffs on Mexican parts may impact the growth of the transportation manufacturing sector.

Charleston-North Charleston, SC, ascends three spots to 13th place in this year's rankings. It is 15th in one-year job growth and performed well in one- and five-year high-tech GDP growth, ranked 19th and 15th, respectively. Firms like Blackbaud, Blue Acorn, iQor, and Science Applications International Corp. (SAIC) comprise the region's high-tech cluster, earning Charleston the nickname "Silicon Harbor." Indeed, high-tech firms continue to flock to the region: In 2018, SAIC started building its Platform Innovation Center and expects to add roughly 200 jobs to the region.⁷⁴

The national defense sector, another pillar industry in the region, includes Joint Base Charleston and the Naval Information Warfare Center. Boeing's second 787 Dreamliner final assembly and delivery plant is also located in the metro. Charleston is known as a hub for automotive component manufacturing, vehicle assembly, and remanufacture/maintenance parts, including factories for Bosch, Mercedes-Benz, and Volvo, while the port provides these manufacturers a convenient conduit to import and export products. However, the US-China trade war and the tariffs on Mexican parts may impose barriers to the continued growth of the automotive original equipment manufacturer and component companies in the metro.

In addition to Charleston's prime location as a historically important port, the metro's charming waterfront and warm weather attract retirees. The retiree population helps sustain a strong health-care cluster, where three major medical providers—Ralph H. Johnson VA Medical Center, Roper St. Francis, and Trident Health—employ over 10,000 people as of 2018.⁷⁵ Tourism is another important economic sector for the metro. The region has boutique hotels, fabulous restaurants, and a charming urban landscape. *Travel + Leisure Magazine* named Charleston the number one city for tourists to visit in the US seven years in a row (2013-2019).⁷⁶

16

[#]14

NASHVILLE-DAVIDSON-MURFREESBORO-FRANKLIN, TN MSA

GAINED 11 RANKS	Job growth (2013-18)	14 th
	Job growth (2017-18)	17 th
	Wage growth (2012-17)	21 st
	Wage growth (2016-17)	33rd
	Short-term job growth (8/2018-8/2019)	42 nd
	High-tech GDP growth (2013-18)	12 th
	High-tech GDP growth (2017-18)	24 th
	High-tech GDP concentration (2018)	115 th
	Number of high-tech industries (LQ>=1) (2018)	65 th

ASSETS:

- Growing tech and business services sectors provide high-paying jobs to the region.
- A business-friendly environment, cheaper living and business costs, high quality of life, nice amenities, and a quality talent pool attract business to the metro.

LIABILITIES:

• A growing demand for labor may drive up housing and business costs in the future.

Nashville-Davidson-Murfreesboro-Franklin, TN, leaps 11 places to rank 14th among US metros this year. The region performs well in both one- and five-year job growth indicators and ranked 17th and 14th, respectively. Highlighting this job growth, more than 23,000 jobs were added to the health-care, construction, and leisure and hospitality sectors in the Nashville metro area from 2016 to 2018.⁷⁷

Although known primarily as "The Country Music Capital of the World," Nashville's economy also comprises an emerging tech hub and a hot spot for corporate and entrepreneurial relocations and expansions. The region has recently attracted startups like Framework, Made in Network, and XOi Technologies, placing the metro and its vibrant tech scene at ranks 12th and 24th in our five- and one-year high-tech GDP growth indicators, respectively.

Many large companies also recently expanded their businesses in the metro, including retail giant Amazon, which announced in 2018 that it would set its Operations Center of Excellence in downtown Nashville. The center is expected to open in the first half of 2021.⁷⁸ This project will bring 5,000 high-paying, fulltime jobs with an average hourly pay of \$76.32 to the metro.⁷⁹ In May 2019, AllianceBernstein announced its newly established private wealth group expects to add 1,050 high-paying jobs to Nashville.⁸⁰ The inflow of corporations and startups to Nashville has also attracted the co-working space company WeWork to open more locations.⁸¹

A business-friendly environment, cheaper living and business costs, a high quality of life, nice amenities, and a quality talent pool are among the key factors that attract companies to "Music City."⁸² In 2017, 36 percent of the population aged 25 and above had at least a bachelor's degree,⁸³ surpassing both the state (27 percent) and nation (32 percent). Belmont University, Middle Tennessee State University, and Vanderbilt University provide an educated workforce to the region.

15 / s

SPARTANBURG, SC MSA

GAINED 13 RANKS	Job growth (2013-18)	23 rd
	Job growth (2017-18)	14 th
	Wage growth (2012-17)	31 st
	Wage growth (2016-17)	22 nd
	Short-term job growth (8/2018-8/2019)	30 th
	High-tech GDP growth (2013-18)	10 th
	High-tech GDP growth (2017-18)	3rd
	High-tech GDP concentration (2018)	172 nd
	Number of high-tech industries (LQ>=1) (2018)	81 st

ASSETS:

- The region, together with the Charleston-North Charleston metro area, is a strong automotive cluster.
- A rising tourism industry adds more job opportunities to the metro.

LIABILITIES:

• The trade wars between the US, China, and Mexico present challenges to the region's automobile industry.

Spartanburg, SC, moves up 13 spots to 15th place on our 2020 index. The metro performs particularly well in one-year job growth (14th), five-year high-tech GDP growth (10th), and one-year high-tech GDP growth (third).

Known as "Hub City," Spartanburg hosts a vibrant automotive industry—one in 10 people in the metro earns a living in the industry.⁸⁴ The region's auto industry has close ties with the Charleston-North Charleston metro area, ranked 13th in our index this year. Car products manufactured in Spartanburg, including BMWs and products from auto suppliers DRÄXLMAIER and Michelin North America, export their products via the Port of Charleston.⁸⁵ However, the ongoing US-China trade dispute and the import tariffs on Mexican parts have the potential to slow the growth of the region's auto industry.

In addition, the region is home to many manufacturers, including Adidas, which has close to 1,800 employees in Spartanburg.⁸⁶ Other major manufacturers include AFL, BMC Manufacturing, Spartanburg Stainless Products, and Spartanburg Steel Products.

In 2017, the Greenville-Spartanburg International Airport registered over 2.1 million passengers, the highest in its history.⁸⁷ The record-breaking number of visitors were drawn to the outdoor attractions, including the Adidas Uprising Gauntlet, a premiere showcase for elite youth basketball teams.⁸⁸ The growth in the tourism industry also helps grow the retail sector, for instance, local restaurants. Despite the region's recent strong economic performance, the metro's automotive and tourism sectors are more vulnerable to business cycles. The region needs to diversify its industrial base to create a healthier economy.

BEST-PERFORMING CITIES 2020

17

#16

CHARLOTTE-CONCORD-GASTONIA, NC-SC MSA

LOST 3 RANKS	Job growth (2013-18)	20 th
	Job growth (2017-18)	44 th
	Wage growth (2012-17)	16 th
	Wage growth (2016-17)	30 th
	Short-term job growth (8/2018-8/2019)	36 th
	High-tech GDP growth (2013-18)	26 th
	High-tech GDP growth (2017-18)	84 th
	High-tech GDP concentration (2018)	75 th
	Number of high-tech industries (LQ>=1) (2018)	40 th
	Number of high-tech industries (LQ>=1) (2018)	40 th

ASSETS

• Home to a highly skilled workforce, which can support industries poised for growth.

LIABILITIES

Uncertainty about international trade may impede gains made in manufacturing.

Charlotte-Concord-Gastonia, NC-SC, ranks 16th on the Best-Performing Large Cities Index for the second time. The metro's five-year indicators support its top 20 placement this year: Five-year job growth ranks 20th and demonstrates the metro's employment growth of 7.2 percent over that time. Wage growth over the five years is even better, ranking 16th and growing 10.2 percent. Charlotte-Concord-Gastonia, like its neighbors in the Research Triangle, has seen massive growth in its hightech sectors. Five-year high-tech GDP growth ranks 26th and clocks in with a growth of 12.8 percent. The one-year variables show signs the metro's growth is slowing, but short-term job growth has picked up from last year, increasing 68 positions and providing a good sign for the coming year.

The Charlotte-Concord-Gastonia banking sector has seen gains, with a net total of 2,430 jobs added in the last year and 10,440 jobs added over the last five. Employment growth is led by credit intermediation and related activities, adding 5,400 jobs in the last five years. The metro's banking sector is one of the largest in the nation and has benefited greatly from FinTech activity.⁸⁹ In the last five years, professional, scientific, and technical services have also added 20,400 jobs. The metro's access to talent from the Research Triangle, as well as gains in its high-tech sector, should provide a platform for this anchor industry to see continued growth.



LOST 3 RANKS	Job growth (2013-18)	49 th
	Job growth (2017-18)	78 th
	Wage growth (2012-17)	22 nd
	Wage growth (2016-17)	15 th
	Short-term job growth (8/2018-8/2019)	62 nd
	High-tech GDP growth (2013-18)	27 th
	High-tech GDP growth (2017-18)	23 rd
	High-tech GDP concentration (2018)	15 th
	Number of high-tech industries (LQ>=1) (2018)	2 nd

ASSETS

- The metro is well positioned to take advantage of spillover effects from the Bay Area's regional economy because of lower costs.
- Local universities can provide talent that will have increasing options to stay in the metro.

LIABILITIES

• The Port of Oakland will face headwinds because of the trade war, further impacting the metro's manufacturers.

Oakland-Hayward-Berkeley, CA, ranks 17th this year, a decline of three places from the last rankings. The one-year wage growth ranked 15th with a 2 percent increase; five-year wage growth ranked 22nd while seeing 8.7 percent growth. The metro also boasts the 15th highest ranked location quotient with 1.7. As an integral part of the Bay Area, the metro ranks second in the number of above-average high-tech industries concentrated in the metro with 15. Oakland-Hayward-Berkley ranked 17th in five-year high-tech GDP growth, clocking in 12.7 percent growth over that period.

Oakland continues to benefit from broader Bay Area growth and regional spillover effects. The area is still lower cost when compared with San Francisco and San Jose, which provides a continuing competitive advantage as businesses relocate to the Bay Area. Square recently leased office space in downtown Oakland, which continues the trend of large companies looking to the East Bay for lower costs.⁹⁰

Among the high-tech sector, the data processing, hosting, and related services subsector stand out, adding 1,160 jobs in the past year and demonstrating continued investment by firms in cloud-related technologies and services. The largest private-sector professional, scientific, and technical services firm in the metro added 800 jobs in the past year.

BEST-PERFORMING CITIES 2020

WHERE AMERICA'S JOBS ARE CREATED AND SUSTAINED

#18

DENVER-AURORA-LAKEWOOD, CO MSA

GAINED 6 RANKS	Job growth (2013-18)	32 nd
	Job growth (2017-18)	37 th
	Wage growth (2012-17)	32 th
	Wage growth (2016-17)	20 th
	Short-term job growth (8/2018-8/2019)	63 rd
	High-tech GDP growth (2013-18)	93 rd
	High-tech GDP growth (2017-18)	32 nd
	High-tech GDP concentration (2018)	33rd
	Number of high-tech industries (LQ>=1) (2018)	17 th

ASSETS:

 The metro has a highly educated workforce for high value-adding sectors and is a much cheaper alternative to traditional coastal clusters.

LIABILITIES:

• The increases in cost of living erode the affordability advantage of the metro.

Denver-Aurora-Lakewood, CO, climbs eight spots to 18th place this year, bouncing back into the top 20. One-year wage growth and the concentration of high-tech GDP bolstered the metro's rank this year. One-year wage growth saw a 1.6 percent increase and has a 1.3 high-tech location quotient.

"The Mile High City" metro is known for high-value jobs because of the engineering occupations, but the metro has also taken its place in the IT space. In 2018, 120 tech companies formed in Denver.⁹¹ In addition, Amazon plans to increase its total employee count to over 750, while Lockheed Martin is relocating 550 jobs to the region for production of the US Navy's Fleet Ballistic Missile Program.⁹² However, the unemployment rate has been below 4 percent since 2015, and the population continues to grow, meaning that the region may lose the competitive advantage of affordability. Median household income in the metro increased by 25.1 percent from 2013 to 2018, showing the metro's economic ability to add high-value jobs.⁹³

The metro's housing prices have also seen massive growth since 2013. Issuance of single-family home permits continued to increase in 2018, but multifamily housing permits decreased by 1,836, signaling that the housing market might be slowing.⁹⁴ Net-migration has been slowing since 2015, while the population has increased 8.6 percent over the last five years. With vacancy rates in the metro below 1 percent for homeowners, renters face vacancy rates of just over 5 percent. The decrease in multifamily housing permits may be an aberration if population growth continues.

OLYMPIA-TUMWATER, WA MSA

HELD STEADY	Job growth (2013-18)	19 th
	Job growth (2017-18)	8 th
	Wage growth (2012-17)	27 th
	Wage growth (2016-17)	10 th
	Short-term job growth (8/2018-8/2019)	68 th
	High-tech GDP growth (2013-18)	2 nd
	High-tech GDP growth (2017-18)	5 th
	High-tech GDP concentration (2018)	123 rd
	Number of high-tech industries (LQ>=1) (2018)	180 th

ASSETS:

- Local universities provide talent.
- The lower cost of doing business and living helps the metro compete with larger metros.

LIABILITIES:

• Lack of economic diversity and dependence on public-sector jobs pose risks and challenges for economic growth.

Olympia-Tumwater, WA, ranks 19th this year, maintaining its rank from the last index. The metro ranks eighth for one-year job growth, increasing 1.8 percent. Its five-year job growth of 7.5 percent helped it rise 10 places to 19th in this year's rankings. One-year high-tech GDP ranks second due to an increase of 45.3 percent, while five-year high-tech GDP ranks fifth with a growth rate of 13.4 percent.

Olympia, Washington's state capital, accounts for a large segment of the growth in the metro. The recently passed state budget increased by \$447 million due to higher-than-expected revenues. This benefits the metro, given that the state employs 32.5 percent of the population, totaling 25,370 staff.⁹⁵

The total number of jobs added in the metro in the last year was 4,004; 300 of these positions were in the professional, scientific, and technical sectors, and 690 were in the health-care sector. The other major job generator in the metro is construction, which added 730 jobs in the past year. However, the lack of industrial diversity hinders this metro. One in five residents commutes outside of Olympia to larger metros like Seattle and Tacoma for work, which increases disposable incomes in Olympia but means residents are finding employment elsewhere.

GREELEY, CO MSA

GAINED	Job growth (2013-18)	8 th
22 RANKS	Job growth (2017-18)	4 th
	Wage growth (2012-17)	6 th
	Wage growth (2016-17)	1 st
	Short-term job growth (8/2018-8/2019)	45 th
	High-tech GDP growth (2013-18)	52 nd
	High-tech GDP growth (2017-18)	57 th
	High-tech GDP concentration (2018)	187 th
	Number of high-tech industries (LQ>=1) (2018)	151 st

ASSETS:

 The core commodity industries have strong domestic consumption rather than being totally dependent on exports.

LIABILITIES:

 Large population growth with lower educational attainment decreases the potential of diversifying the region's economy.

Greeley, CO, ranks 20th and returns to the top 25 after several years on the outside looking in. The metro moved up 22 spots from the last index and saw top-10 ranks in four of the nine indicators. The metro's one- and five-year job growth rank fourth (2.6 percent) and eighth (10.8 percent), respectively. Greeley's one-year wage growth reached 5.9 percent and ranked number one, beating out all other large metros in this year's index. The metro's five-year wage growth grew 14.9 percent and ranked sixth overall this year.

The metro has benefited from the energy boom in the US. The oil industry provides high-wage employment, and its related extraction services contribute to employment and wage growth. Greeley added 1,030 jobs in the past year in the extractionrelated industries and 960 jobs in specialty contractors or heavy engineering construction. The energy boom in the metro has also seen a 16.3 percent increase in population since 2013, and over that same period, single-family housing permits have increased by 97.6 percent.

Beef-related industries, ranging from ranching to meat processing, is another major industry in the metro. The domestic demand has bolstered jobs in Greeley and made up for a slowing export market. The beef industry is not as exposed to the trade war as other export-related industries. As such, the beef industry and the extraction sector lead the metro's growth and unemployment rates, both of which have remained below 4 percent since 2015.⁹⁶



FORT COLLINS, CO MSA

	Job growth (2013-18)	17 th
12 RANKS	Job growth (2017-18)	31 st
	Wage growth (2012-17)	10 th
	Wage growth (2016-17)	7 th
	Short-term job growth (8/2018-8/2019)	102 nd
	High-tech GDP growth (2013-18)	92 nd
	High-tech GDP growth (2017-18)	122 nd
	High-tech GDP concentration (2018)	26 th
	Number of high-tech industries (LQ>=1) (2018)	17 th

ASSETS:

 Colorado State University provides a highly educated workforce to the metro.

LIABILITIES:

 Low population growth and net migration will keep the labor market tight as the metro searches for talent in the short term.

Fort Collins, CO, drops 12 ranks to land at No. 21 in this year's Best-Performing Large Cities Index. The metro's one-year wage growth ranks seventh with a 2.4 percent increase, while five-year wage growth ranked sixth with 12.7 percent growth. The metro's high-tech concentration and the number of high-tech industries helped to maintain its growth this year, ranking 26th and 17th, respectively. The presence of the high-tech sector in the metro has provided a base for high-value jobs where people can take advantage of the area's comparative affordability.

Fort Collins is home to one of the many high-tech clusters that have developed outside coastal regions. The city is investing in the necessary infrastructure to support this critical sector of the economy. Fort Collins will build public broadband to be rolled out in the coming years.⁹⁷ This will support startups with faster and more reliable internet access. Fort Collins is not the only place in Colorado investing in such infrastructure, but, given the importance of the high-tech sector to the metro's development, such an investment will undoubtedly have long-term benefits. Professional, scientific, and technical services employ 10,900 people, including 300 new jobs over the past year. The metro is also able to provide local talent through Colorado State University, providing a long-term advantage for the metro to continue to develop its high-tech industry through maintaining a highly skilled workforce.

WHERE AMERICA'S JOBS ARE CREATED AND SUSTAINED

OGDEN-CLEARFIELD, UT MSA

LOST 1	Job growth (2013-18)	25 th
RANK	Job growth (2017-18)	24 th
	Wage growth (2012-17)	38 th
	Wage growth (2016-17)	39 th
	Short-term job growth (8/2018-8/2019)	7 th
	High-tech GDP growth (2013-18)	94 th
	High-tech GDP growth (2017-18)	31 st
	High-tech GDP concentration (2018)	99 th
	Number of high-tech industries (LQ>=1) (2018)	102 nd

ASSETS:

• The metro has a lower cost of business and stable employment that provide higher wages from the federal government and related professional services in the area.

LIABILITIES:

• Lack of a large educated workforce will hinder faster growth.

Ogden-Clearfield, UT, comes in 22nd this year on the Best-Performing Cities Large index, a decline of one rank. The metro has returned to the top 25 thanks to job growth; Ogden-Clearfield one- and five-year job growth ranks 25th and 24th, respectively. The metro's job growth is expected to continue, as its best-performing indicator is short-term hiring, which grew 2.4 percent between August 2017 and August 2018.

The Ogden metro capitalizes on being a part of the Silicon Slopes region and the already entrenched talent Hill Air Force Base creates. A recently opened \$35 million facility for military software development for the F-22 and F-35 technology requirements will eventually house some 3,000 staff.⁹⁸ Along with this investment to support technology activities in the metro, Weber State University received a \$50 million state grant for a new technology building. The new investment in the area will expand the high-tech sector's capacity to sustain growth.⁹⁹ Currently, the metro supports 13,400 professional, scientific, and technical service occupations, 800 of which have been added over the last year.

The construction industry in Ogden has added 1,240 jobs in the last year. The increase in construction jobs should continue as Ogden redevelops its downtown. The city recently approved a \$236 million investment, including residential, retail, and office space in the city, in hopes of attracting people and businesses.



CAPE CORAL-FORT MYERS, FL MSA

	Job growth (2013-18)	3 rd
RANKS	Job growth (2017-18)	20 th
	Wage growth (2012-17)	5 th
	Wage growth (2016-17)	44 th
	Short-term job growth (8/2018-8/2019)	9 th
	High-tech GDP growth (2013-18)	56 th
	High-tech GDP growth (2017-18)	81 st
	High-tech GDP concentration (2018)	174 th
	Number of high-tech industries (LQ>=1) (2018)	123 rd

ASSETS:

• The health-care sector will continue to be a major economic driver and will be supported by an aging population.

LIABILITIES:

• The metro needs tourism to support its economy and will continue to have problems due to changes in the environment.

Cape Coral-Fort Myers, FL, jumps into the top 25 this year at 23rd, gaining 23 spots and returning to the top 25 after a fouryear absence. The five-year wage and job indicators rank fifth and third, respectively. One-year job growth ranked 20th this year, and this should continue to be a strength with short-term job growth ranking ninth. Job and wage growth are in part due to reconstruction after the damage from Hurricane Irma in 2017. The metro added 3,080 jobs in construction-related industries.

Cape Coral, also known as "Waterfront Wonderland," is a wellknown retiree haven with a strong health-care industry and housing market. Lee Health recently opened a \$140 million facility of outpatient care in the metro in addition to a children's hospital in Fort Myers.¹⁰⁰ The hospital operator plans to spend a total of \$1.34 billion by 2027 to expand its operations in the region,¹⁰¹ of which \$348 million will serve to expand the Gulf Coast Medical Center's footprint.

Cape Coral-Fort Myers also relies heavily on tourism. The arts, entertainment, and recreation sectors currently support 40,990 jobs in the metro, 28,300 of those in restaurants and bars. However, Hurricane Irma, along with the red tide and other algae blooms, negatively impact tourism. Despite these challenges, tourists spent \$3.1 billion in 2018, exceeding 2017 expenditures.¹⁰²

#24

PORTLAND-VANCOUVER-HILLSBORO, OR-WA MSA

GAINS 9	Job growth (2013-18)	45 th
RANKS	Job growth (2017-18)	74 th
	Wage growth (2012-17)	24 th
	Wage growth (2016-17)	34 th
	Short-term job growth (8/2018-8/2019)	71 st
	High-tech GDP growth (2013-18)	47 th
	High-tech GDP growth (2017-18)	28 th
	High-tech GDP concentration (2018)	17 th
	Number of high-tech industries (LQ>=1) (2018)	25 th

ASSETS:

• Portland has a highly educated workforce and is a lower cost major tech hub.

LIABILITIES:

• Tariffs are a major issue for many of the larger employers like Nike, Adidas, and Intel.

Portland-Vancouver-Hillsboro, OR-WA, gains nine ranks to reach number 24 this year, breaking back into the top 25. The metro's five-year wage and high-tech GDP growth rank 24th and 28th, respectively. The metro has long been home to a large hightech sector, reflected in its 17th place ranking in the high-tech concentration. The metro also supports a diverse set of hightech sectors, ranking No. 25 for the number of LQs above one in the metro. Downtown Portland has been designated as an Opportunity Zone, created by the Tax Cuts and Jobs Act of 2017 to spur economic development and job creation in distressed communities.¹⁰³

Intel and IBM are among Portland's long-term tech residents that have allowed the metro to draw companies away from the Bay Area and Seattle. Twistlock recently relocated to Portland and sold for \$410 million in 2019.¹⁰⁴ Portland has also attracted other tech giants like Amazon, which recently leased a space downtown and is looking to add 400 new jobs.¹⁰⁵

The metro has also recently experienced large-scale investments in the health-care sector and its supporting infrastructure. Oregon Health and Science University recorded \$175 million in profit, saw a 46 percent increase in enrollment, and increased faculty 24 percent.¹⁰⁶ As such, the metro's health-care sector has expanded, adding 4,600 jobs in the past year.

25 TIED RIVERSIDE-SAN BERNARDINO-ONTARIO, CA MSA

	Job growth (2013-18)	5 th
10 RANKS	Job growth (2017-18)	10 th
	Wage growth (2012-17)	15 th
	Wage growth (2016-17)	36 th
	Short-term job growth (8/2018-8/2019)	56 th
	High-tech GDP growth (2013-18)	87 th
	High-tech GDP growth (2017-18)	60 th
	High-tech GDP concentration (2018)	128 th
	Number of high-tech industries (LQ>=1) (2018)	102 nd

ASSETS:

 The population has been growing rapidly, fueling demand in the metro.

LIABILITIES:

• A lack of economic diversity and the dependence on exportrelated industries will be an issue as tariffs affect trade.

Riverside-San Bernardino-Ontario, CA, slides to a tie for 25th in this year's Best-Performing Large Cities Index. The one- and five-year job growth indicators rank fifth and 10th, growing 1.8 percent and 11.6 percent, respectively. The metro's five-year wage growth also helped the metro stay in the top 25 with a strong 10.3 percent increase. The Riverside metro has seen growth as a bedroom community for neighboring counties, allowing the housing market to grow. The other source of new jobs is the development of the logistics hub in the metro. Recent job growth contributes to a tight labor market and higher wages. Many new jobs are at the lower end of the wage distribution, which will provide headwinds for future growth.¹⁰⁷

The metro also continues to see job gains thanks to a combination of its low cost of commercial space, proximity to both Los Angeles and Long Beach ports, connection to transportation routes, and continued growth as the region's logistics hub. San Bernardino County Transportation Authority received a \$225 million loan from the federal government to fund a \$929 million project to expand I-10 and other major highways in the county.¹⁰⁸ The metro has added 4,890 construction and related occupations in the last year, and with investment into infrastructure projects, this should continue.

WHERE AMERICA'S JOBS ARE CREATED AND SUSTAINED

#25^{TIED} SALT LAKE CITY, UT MSA

	Job growth (2013-18)	43 rd
15 RANKS	Job growth (2017-18)	40 th
	Wage growth (2012-17)	35 th
	Wage growth (2016-17)	45 th
	Short-term job growth (8/2018-8/2019)	78 th
	High-tech GDP growth (2013-18)	36 th
	High-tech GDP growth (2017-18)	47 th
	High-tech GDP concentration (2018)	42 nd
	Number of high-tech industries (LQ>=1) (2018)	14 th

ASSETS:

• The metro's large financial hub can support the growth of the area.

LIABILITIES:

• A tight labor market will put downward pressure on growth.

Salt Lake City, UT, ties for 25th this year, dropping 15 ranks from the last index. The metro supports a total of 11 high-tech sectors with an LQ above one, ranking 14th. Salt Lake City has been growing at a breakneck pace in recent years, with unemployment below 3.5 percent since 2014.¹⁰⁹ The metro is a regional tech cluster as well as a regional financial center. The jobs created in both sectors provide higher wages, which will continue to increase due to tight labor market conditions.

The Salt Lake metro is one of two innovation zones designated by the Federal Communications Commission for research on 5G networks. This investment should help support the high-tech sector for the future as the new broadband spectrum becomes more widespread in the US.¹¹⁰ The metro also continues to attract technology companies away from traditional clusters. Brex, for instance, is opening operations in the metro and seeks to create around 1,000 new jobs.¹¹¹

The metro's diverse knowledge-based economy has not deterred more traditional companies from beginning operations in the region. Tyson Foods has announced a \$300 million beef and pork processing plant in the Salt Lake Valley, set to create up to 1,200 jobs in the next few years.¹¹² The larger manufacturing sector adds 3,560 jobs in the metro, with 1,200 of those in computer and electronic product manufacturing in the past year.

ON THE WEB Visit best-cities.org



BEST-PERFORMING CITIES 2020

23

Complete Results: 2020 Best-Performing Large Cities

2020 Rank	2018 Rank	Rank Change	Metropolitan Statistical Area/Metropolitan Division	Job Growth 2017-2018	Job Growth US 2013-2018	Wage Growth US 2016-2017	Wage Growth 2012-2017	12-month Job Growth	High-tech GDP 2017-2018	High-tech GDP 2013-2018	High-tech Concentration	LQ Count (2018)
1	4	3	San Francisco-Redwood City-South San Francisco, CA	22	13	2	2	11	8	1	2	17
2	1	-1	Provo-Orem, UT	2	1	9	3	29	10	5	14	25
3	3	0	Austin-Round Rock, TX	13	9	8	4	43	12	17	9	25
4	11	7	Reno, NV	1	2	4	14	1	2	3	101	102
5T	7	2	Orlando-Kissimmee-Sanford, FL	7	6	18	11	5	30	29	72	49
5T	2	-3	San Jose-Sunnyvale-Santa Clara, CA	76	29	3	1	18	14	4	1	1
7	12	5	Boise, ID	3	7	5	9	23	22	23	43	123
8	8	0	Seattle-Bellevue-Everett, WA	49	40	6	8	13	18	62	3	25
9	5	-4	Dallas-Plano-Irving, TX	43	16	46	23	8	46	28	23	9
10	57	47	Palm Bay-Melbourne-Titusville, FL	5	33	16	98	15	17	18	10	9
11	6	-5	Raleigh, NC	35	22	31	12	84	38	22	8	9
12	20	8	Phoenix-Mesa-Scottsdale, AZ	12	28	27	51	22	26	41	52	49
13	16	3	Charleston-North Charleston, SC	15	21	28	26	57	19	15	58	81
14	25	11	Nashville-Davidson-Murfreesboro-Franklin, TN	17	14	33	21	42	24	12	115	65
15	28	13	Spartanburg, SC	14	23	22	31	30	3	10	172	81
16	13	-3	Charlotte-Concord-Gastonia, NC-SC	44	20	30	16	36	84	26	75	40
17	14	-3	Oakland-Hayward-Berkeley, CA	78	49	15	22	62	23	27	15	2
18	24	6	Denver-Aurora-Lakewood, CO	37	32	20	32	63	32	93	33	17
19	19	0	Olympia-Tumwater, WA	8	19	10	27	68	5	2	123	180
20	42	22	Greeley, CO	4	8	1	6	45	57	52	187	151
21	9	-12	Fort Collins, CO	31	17	7	10	102	122	92	26	17
22	21	-1	Ogden-Clearfield, UT	24	25	39	38	7	31	94	99	102
23	46	23	Cape Coral-Fort Myers, FL	20	3	44	5	9	81	56	174	123
24	33	9	Portland-Vancouver-Hillsboro, OR-WA	74	45	34	24	71	28	47	17	25
25T	15	-10	Riverside-San Bernardino-Ontario, CA	10	5	36	15	56	60	87	128	102
25T	10	-15	Salt Lake City, UT	40	43	45	35	78	47	36	42	14
27	40	13	Salem, OR	57	31	17	13	72	13	9	162	102
28	62	34	Boulder, CO	29	57	26	54	83	55	142	5	7
29	17	-12	Atlanta-Sandy Springs-Roswell, GA	58	34	57	36	69	145	13	24	25
30	32	2	San Antonio-New Braunfels, TX	82	44	63	41	32	15	81	77	25
31	51	20	Myrtle Beach-Conway-North Myrtle Beach, SC-NC	11	30	13	34	44	25	84	179	180
32	37	5	Fresno, CA	21	24	50	45	10	40	70	175	151
33	26	-7	Jacksonville, FL	27	25	24	58	53	106	54	95	123
34	18	-16	Santa Rosa, CA	86	41	41	20	103	48	43	59	25
35	71	36	Port St. Lucie, FL	6	10	79	44	16	96	95	155	123

24

COMPLETE RESULTS: 2020 BEST-PERFORMING LARGE CITIES

ł	ł	lange		wth 018	Job Growth US 2013-2018	Wage Growth US 2016-2017	Wage Growth 2012-2017	12-month Job Growth	High-tech GDP 2017-2018	High-tech GDP 2013-2018	High-tech Concentration	ıt
2020 Rank	2018 Rank	Rank Change		Job Growth 2017-2018	Job Growth 2013-2018	Wage Grov 2016-2017	/age G 012-2(12-mon Growth	igh-te 017-20	igh-te 013-20	High-tech Concentra	LQ Count (2018)
ъ	30	ŝ	Metropolitan Statistical Area/Metropolitan Division	4 %	9 X				ΈX		Ξŭ	
36	58	22	Colorado Springs, CO	59	46	32	110	12	49	161	27	25
37	27	-10	Fayetteville-Springdale-Rogers, AR-MO	56	11	12	7	19	177	75	180	151
38	45	7	San Diego-Carlsbad, CA	53	60	89	85	76	37	38	12	2
39 40	47 30	8	Lakeland-Winter Haven, FL	19 28	35 69	37 75	49 95	51 17	70	19	186	180
40 41	30 88	-10 47	Bremerton-Silverdale, WA Salinas, CA	28	55	23	95 63	2	7 63	8 127	116 185	151 151
41	51	47	Greenville-Anderson-Mauldin, SC	23 66	66	23 83	59	2 67	-03 -45	127	70	49
42	39	-4	Fort Lauderdale-Pompano Beach-Deerfield Beach, FL	67	50	48	37	91	119	24	70	65
44	23	-21	Las Vegas-Henderson-Paradise, NV	18	15	97	47	74	113	7	144	123
45	55	10	Wilmington, NC	84	48	19	28	115	152	45	39	65
46	56	10	Anaheim-Santa Ana-Irvine, CA	62	59	65	61	128	82	42	19	2
47	49	2	West Palm Beach-Boca Raton-Delray Beach, FL	75	27	61	25	66	159	44	93	102
48	30	-18	Tampa-St. Petersburg-Clearwater, FL	47	37	105	52	95	79	50	68	40
49	59	10	Huntsville, AL	51	80	85	125	25	53	123	7	14
50	64	14	Sacramento-Roseville-Arden-Arcade, CA	16	36	66	62	88	117	134	76	81
51	41	-10	Rockingham County-Strafford County, NH	150	94	67	53	27	78	35	41	17
52	36	-16	Santa Cruz-Watsonville, CA	147	76	43	39	31	115	73	55	40
53	81	28	Los Angeles-Long Beach-Glendale, CA	94	90	35	67	104	85	67	20	7
54	31	-23	San Luis Obispo-Paso Robles-Arroyo Grande, CA	104	53	29	46	108	77	59	79	65
55	60	5	Asheville, NC	41	65	74	57	4	192	116	125	49
56	70	14	Fort Worth-Arlington, TX	33	72	49	77	81	4	149	67	123
57	94	37	New York-Jersey City-White Plains, NY-NJ	85	73	42	82	113	51	20	60	65
58	93	35	Naples-Immokalee-Marco Island, FL	9	4	136	18	38	140	101	160	180
59	74	15	Miami-Miami Beach-Kendall, FL	68	54	88	50	34	80	40	149	151
60	38	-22	Merced, CA	91	58	11	30	6	54	169	200	195
61	44	-17	Crestview-Fort Walton Beach-Destin, FL	38	64	78	90	46	68	131	82	102
62	22	-40	North Port-Sarasota-Bradenton, FL	46	12	73	17	176	123	48	124	81
63 64	68 48	5 -16	McAllen-Edinburg-Mission, TX Boston, MA	42 133	67 85	127 38	92 40	35 144	1 39	6 21	184 53	123 49
65	40 35	-30	Deltona-Daytona Beach-Ormond Beach, FL	69	39	92	40 48	144 89	37 141	83	110	49
66	108	-30 42	Savannah, GA	34	42	72	40 66	112	141	79	62	123
67	75	8	Tacoma-Lakewood, WA	30	38	52	89	70	76	140	143	151
68	103	35	Spokane-Spokane Valley, WA	45	78	51	76	58	97	146	109	102
69	85	16	Kennewick-Richland, WA	26	47	103	96	3	166	168	71	123
70	53	-17	Modesto, CA	61	51	54	42	77	107	32	181	195
71	104	33	Santa Maria-Santa Barbara, CA	117	137	40	103	24	153	72	18	5
72	96	24	Gainesville, FL	64	63	53	75	125	44	71	151	81
73	29	-44	Grand Rapids-Wyoming, MI	63	62	82	29	145	50	66	132	102
74	82	8	Tallahassee, FL	50	83	76	116	14	173	85	98	81
75	83	8	Springfield, MO	83	101	108	86	75	6	16	88	123
76	34	-42	Stockton-Lodi, CA	32	18	14	19	179	131	109	188	195
77	102	25	Tucson, AZ	111	150	47	157	28	71	46	40	40

25

BEST-PERFORMING CITIES 2020

COMPLETE RESULTS: 2020 BEST-PERFORMING LARGE CITIES

7

WHERE AMERICA'S JOBS ARE CREATED AND SUSTAINED

2020 Rank	2018 Rank	Rank Change	Mature alitan Chatistical Area (Mature alitan Division	Job Growth 2017-2018	Job Growth US 2013-2018	Wage Growth US 2016-2017	Wage Growth 2012-2017	12-month Job Growth	High-tech GDP 2017-2018	High-tech GDP 2013-2018	High-tech Concentration	LQ Count (2018)
			Metropolitan Statistical Area/Metropolitan Division									
78 79	107 69	29 -10	Philadelphia, PA Des Moines-West Des Moines, IA	65 87	108 77	99 87	120 60	65 59	35 83	31 60	56 148	151 180
80	43	-37	Ocala, FL	48	61	187	81	21	110	65	133	123
81	87	6	Ann Arbor, MI	97	103	56	83	172	64	58	36	49
82	160	78	Winston-Salem, NC	103	124	25	94	20	180	111	146	65
83	78	-5	Cambridge-Newton-Framingham, MA	140	112	77	78	126	69	91	4	5
84	73	-11	Manchester-Nashua, NH	102	109	144	97	98	62	68	16	9
85	65	-20	Chattanooga, TN-GA	77	86	55	101	130	21	39	158	151
86	49	-37	Vallejo-Fairfield, CA	72	56	60	43	169	163	126	34	151
87	105	18	Portland-South Portland, ME	127	116	71	88	94	86	76	102	49
88	114	26	Salisbury, MD-DE	80	84	93	68	110	42	160	131	102
89	54	-35	Visalia-Porterville, CA	131	70	101	33	49	89	96	194	180
90	61	-29	Waco, TX	158	87	68	70	129	9	121	73	102
91	84	-7	Warren-Troy-Farmington Hills, MI	92	81	58	65	194	112	97	61	102
92	95	3	Augusta-Richmond County, GA-SC	81	89	86	119	80	125	55	118	151
93	72	-21	Madison, WI	143	110	117	55	154	104	30	29	49
94	66	-28	Trenton, NJ	39	71	192	149	37	185	132	32	49
95	97	2	Kansas City, MO-KS	119	91	131	102	79	87	156	57	40
96	135	39	Lake County-Kenosha County, IL-WI	95	119	128	121	54	126	155	22	49
97	98	1	Lancaster, PA	70	82	95	80	157	138	57	121	102
98	79	-19	Minneapolis-St. Paul-Bloomington, MN-WI	126	104	64	79	195	121	82	47	17
99	122	23	Knoxville, TN	123	105	142	108	60	59	104	92	81
100	99	-1	Columbus, OH	93	74	69	71	147	127	165	104	123
101	76	-25	Kalamazoo-Portage, MI	105	93	113	72	181	75	98	65	65
102	77	-25	Durham-Chapel Hill, NC	71	75	94	109	180	165	180	6	25
103	80	-23	Pensacola-Ferry Pass-Brent, FL	36	52	109	104	118	154	175	152	123
104	100	-4	Washington-Arlington-Alexandria, DC-VA-MD-WV	115	114	104	136	97	105	117	28	81
105	131	26 -43	Cincinnati, OH-KY-IN	109	102 88	116 59	113 74	50 151	179 189	130 195	97 38	81
106 107	63 92	-43	Indianapolis-Carmel-Anderson, IN Worcester, MA-CT	120 174	00 129	59 84	74 93	186	72	195 37	30 30	65 17
107	92 67	-15	Eugene, OR	1/4	68	90		167	169	37 143	30 120	81
100	124	15	Elgin, IL	73	135	133	99	82	107	137	107	102
110	178	68	Clarksville, TN-KY	54	98	118	195	40	29	80	199	195
111	118	7	Fort Wayne, IN	79	115	98	128	73	144	183	119	81
112	90	-22	Hickory-Lenoir-Morganton, NC	151	121	21	73	170	199	103	108	40
113	130	17	St. Louis, MO-IL	178	138	141	137	55	16	129	63	25
114	116	2	Montgomery County-Bucks County-Chester County, PA	128	127	134	131	134	94	108	13	17
115	101	-14	Allentown-Bethlehem-Easton, PA-NJ	98	113	129	115	137	160	102	49	49
116	147	31	Oklahoma City, OK	55	126	112	153	107	34	51	176	180
117	119	2	Houston-The Woodlands-Sugar Land, TX	60	100	178	133	26	135	150	122	151
118	132	14	Chicago-Naperville-Arlington Heights, IL	138	120	123	112	123	116	77	86	49
119	129	10	Albany-Schenectady-Troy, NY	145	142	149	106	164	61	25	31	65

BEST-PERFORMING CITIES 2020

COMPLETE RESULTS: 2020 BEST-PERFORMING LARGE CITIES

WHERE AMERICA'S JOBS ARE CREATED AND SUSTAINED

2020 Rank	2018 Rank	Rank Change	Metropolitan Statistical Area/Metropolitan Division	Job Growth 2017-2018	Job Growth US 2013-2018	Wage Growth US 2016-2017	Wage Growth 2012-2017	12-month Job Growth	High-tech GDP 2017-2018	High-tech GDP 2013-2018	High-tech Concentration	LQ Count (2018)
120	128	8	Richmond, VA	114	96	72	100	140	156	157	138	102
121	115	-6	Springfield, MA	162	136	157	130	39	36	119	135	81
122	152	30	Green Bay, WI	89	122	121	122	127	43	110	169	151
123	144	21	Syracuse, NY	130	177	175	173	85	67	33	48	17
124	109	-15	Baltimore-Columbia-Towson, MD	122	134	139	132	133	118	113	54	40
125	152	27	Newark, NJ-PA	135	158	125	124	139	74	151	37	25
126	110	-16	Oxnard-Thousand Oaks-Ventura, CA	107	125	146	155	171	134	74	25	9
127	134	7	Omaha-Council Bluffs, NE-IA	163	145	143	91	41	124	112	112	151
128	111	-17	Columbia, SC	132	79	152	84	178	99	49	147	123
129	140	11	South Bend-Mishawaka, IN-MI	154	107	166	129	47	183	90	113	81
130	137	7	Providence-Warwick, RI-MA	159	140	122	114	114	98	125	91	65
131	86	-45	Lubbock, TX	161	99	110	64	111	157	188	126	123
132	91	-41	Louisville/Jefferson County, KY-IN	148	92	138	69	124	164	86	156	151
133	151	18	Harrisburg-Carlisle, PA	110	123	96	123	190	147	135	78	81
134	150	16	Pittsburgh, PA	125	179	107	161	138	88	69	46	102
135	117	-18	York-Hanover, PA	171	147	62	126	177	137	88	81	65
136	165	29	Birmingham-Hoover, AL	99	149	111	144	93	143	138	145	123
137	112	-25	Lexington-Fayette, KY	197	111	168	87	48	172	173	111	65
138	162	24	Bakersfield, CA	25	131	164	175	52	103	186	182	180
139	126	-13	Lincoln, NE	108	146	148	105	188	73	147	90	49
140	106	-34	Camden, NJ	190	118	119	138	185	52	99	83	25
141 142	113 164	-28 22	El Paso, TX Evansville, IN-KY	90 101	97 133	137 91	148 141	132 148	151 120	172 200	134 103	102 151
142	164	16	Killeen-Temple, TX	101	106	80	141	148 33	58	200 199	183	191
144	184	40	Rockford, IL	52	171	126	165	143	33	174	159	151
145	139	-6	Reading, PA	121	144	163	134	96	128	152	114	123
146	143	-3	Buffalo-Cheektowaga-Niagara Falls, NY	177	170	162	139	141	27	63	89	81
147	154	7	Flint, MI	139	181	165	146	109	92	89	85	102
148	158	10	Rochester, NY	149	169	173	156	175	91	61	44	14
149	136	-13	Laredo, TX	116	95	153	147	131	133	53	198	195
150	181	31	Wichita, KS	118	173	193	186	161	66	11	11	123
151	138	-13	Tulsa, OK	96	151	170	181	197	20	64	141	65
152	145	-7	Memphis, TN-MS-AR	113	130	154	166	106	102	164	164	123
153	161	8	Wilmington, DE-MD-NJ	136	143	102	158	105	158	197	127	123
154	89	-65	Lansing-East Lansing, MI	157	117	158	111	149	65	115	157	180
155	120	-35	Silver Spring-Frederick-Rockville, MD	144	160	150	163	182	139	105	21	40
156	166	10	Dutchess County-Putnam County, NY	164	164	114	182	120	149	136	51	81
157	174	17	Columbus, GA-AL	88	190	115	188	192	101	114	105	49
158	142	-16	Dayton, OH	175	139	120	150	156	184	159	69	25
159	121	-38	Detroit-Dearborn-Livonia, MI	124	128	151	118	184	174	122	106	123
160	157	-3	Milwaukee-Waukesha-West Allis, WI	153	154	167	151	152	114	107	96	65
161	125	-36	Albuquerque, NM	134	156	177	167	142	168	158	45	49

27

BEST-PERFORMING CITIES 2020

COMPLETE RESULTS: 2020 BEST-PERFORMING LARGE CITIES

2020 Rank	2018 Rank	Rank Change	Metropolitan Statistical Area/Metropolitan Division	Job Growth 2017-2018	Job Growth US 2013-2018	Wage Growth US 2016-2017	Wage Growth 2012-2017	12-month Job Growth	High-tech GDP 2017-2018	High-tech GDP 2013-2018	High-tech Concentration	LQ Count (2018)
162	156	-6	Greensboro-High Point, NC	179	161	106	135	162	193	176	84	40
163	133	-30	Nassau County-Suffolk County, NY	185	152	159	127	153	161	139	66	65
164	149	-15	Cedar Rapids, IA	170	180	160	140	183	132	118	50	25
165	145	-20	Baton Rouge, LA	146	132	174	107	160	129	148	173	123
166	172	6	Duluth, MN-WI	189	176	124	142	168	150	34	150	102
167	141	-26	Urban Honolulu, HI	183	157	161	117	136	95	120	168	151
168	177	9	Mobile, AL	176	162	155	162	100	186	163	130	81
169	119	-50	Hagerstown-Martinsburg, MD-WV	172	175	135	169	117	130	154	154	102
170	175	5	Bridgeport-Stamford-Norwalk, CT	186	183	199	190	146	100	141	35	25
171	190	19	Canton-Massillon, OH	156	178	81	164	158	93	170	195	180
172	183	11	Davenport-Moline-Rock Island, IA-IL	169	191	100	184	87	167	167	167	151
173	173	0	Virginia Beach-Norfolk-Newport News, VA-NC	129	159	145	171	166	162	166	129	123
174	127	-47	Montgomery, AL	198	168	186	178	99	175	128	87	81
175	167	-8	Cleveland-Elyria, OH	137	166	130	160	135	191	190	142	151
176	171	-5	Hartford-West Hartford-East Hartford, CT	180	174	171	170	155	148	144	64	102
177	155	-22	Little Rock-North Little Rock-Conway, AR	142	153	169	176	159	195	194	100	81
178	180	2	Utica-Rome, NY	188	189	132	179	196	170	78	94	65
179	186	7	Kingsport-Bristol-Bristol, TN-VA	191	192	176	192	61	41	198	166	151
180	185	5	Roanoke, VA	160	185	194	183	92	146	181	136	102
181	189	8	New Orleans-Metairie, LA	167	165	185	177	86	136	179	177	151
182	148	-34	Scranton-Wilkes-Barre-Hazleton, PA	166	167	147	145	198	187	191	117	81
183	169	-14	Jackson, MS	195	155	184	159	90	171	153	170	180
184	191	7	Beaumont-Port Arthur, TX	106	172	183	168	121	181	187	192	180
185	188	3	Corpus Christi, TX	181	187	179	172	101	90	171	190	151
186	194	8	Fayetteville, NC	155	184	140	196	116	194	178	153	151
187	196	9	Lafayette, LA	141	200	196	200	122	108	145	165	123
188	176	-12	New Haven-Milford, CT	192	182	172	174	187	142	177	80	81
189	199	10	Peoria, IL	100	199	200	199	173	56	184	163	151
190	195	5	Gulfport-Biloxi-Pascagoula, MS	182	193	191	187	64	196	192	161	123
191	163	-28	Akron, OH	196	163	180	154	174	178	106	140	180
192	187	-5	Huntington-Ashland, WV-KY-OH	199	195	182	194	191	11	133	178	123
193	179	-14	Toledo, OH	152	148	189	143	193	198	185	171	180
194	167	-27	Brownsville-Harlingen, TX	184	141	190	152	165	188	162	196	180
195	182	-13	Gary, IN	165	186	156	191	163	182	182	193	151
196	193	-3	Erie, PA	173	194	197	193	150	176	189	137	123
197T	198	1	Shreveport-Bossier City, LA	168	196	188	198	200	111	124	191	151
197T	192	-5	Fort Smith, AR-OK	187	188	181	185	189	197	100	197	123
199	197	-2	Anchorage, AK	200	197	198	197	119	190	193	139	151
200	200	0	Youngstown-Warren-Boardman, OH-PA	194	198	195	189	199	200	196	189	151

28

TOP 10BEST-PERFORMINGSMALL CITIES

TABLE 5. TOP 10 BEST-PERFORMING SMALL CITIESRank according to 2020 index

Metropolitan Statistical Area / Metropolitan Division	2020 Rank	2018 Rank	Change
Bend-Redmond, OR	1	1	Steady
Grants Pass, OR	2	23	21
Logan, UT-ID	3	10	7
St. George, UT	4	2	-2
Coeur d'Alene, ID	5T	5	Steady
The Villages, FL	5T	20	15
Idaho Falls, ID	7	24	17
Gainesville, GA	8	3	-5
Sebastian-Vero Beach, FL	9	13	4
Bellingham, WA	10	17	7

Source: Milken Institute (2020)

The 2020 edition of the Best-Performing Small Cities Index ranks 201 US metros. The Best-Performing Small Cities Index sees retiree communities, tourism, medical services, and manufacturing sectors delivering growth. Not only do retiree communities benefit medical centers, but they also provide their communities with stable high-wage employment. In many of these metros, recent population gains have also helped the construction and housing sectors to continue growing. Tourism to these metros typically focuses on outdoor recreation. The small cities index also includes metros with universities, high-tech, logistics, and agriculture sectors as economic drivers in the top 10. No new metros are added to the list of cities ranked this year. Five of the top 10 metros are returning to the top 10 from the 2018 index. Six of the top 10 metros are retiree communities. Bend-Redmond, OR; St. George, UT; Grants Pass, OR; Coeur d'Alene, ID; Sebastian-Vero Beach, FL; and The Villages, FL, are experiencing economic growth and are anchored by the retiree community. Tourist destinations and medical services hubs form half of the top 10. Tourism and health services are driving growth in Bend-Redmond, OR; St. George, UT; Coeur d'Alene, ID; Sebastian-Vero Beach, FL; Gainesville, GA; Bellingham, WA; Grants Pass, OR; and The Villages, FL. Gainesville, GA; Bellingham, WA; Grants Pass, OR; and Logan, UT, all have manufacturing as a core economic driver in their metro. Idaho Falls, ID, and Bend-Redmond, OR, have high-tech sectors that deepen their economic dynamism.

BEST-PERFORMING CITIES 2020

TOP 10 BEST-PERFORMING SMALL CITIES

WHERE AMERICA'S JOBS ARE CREATED AND SUSTAINED



HELD	Job growth (2013-18)	2 nd
STEADY	Job growth (2017-18)	9 th
	Wage growth (2012-17)	1 st
	Wage growth (2016-17)	11 th
	Short-term job growth (8/2018-8/2019)	16 th
	High-tech GDP growth (2013-18)	5 th
	High-tech GDP growth (2017-18)	10 th
	High-tech GDP concentration (2018)	5 th
	Number of high-tech industries (LQ>=1) (2018)	29 th

ASSETS:

 A collaborative, diverse economic make-up with a highly educated workforce provide an excellent platform for long-term growth.

LIABILITIES:

The rising cost of living will erode current competitive advantages.

For the fourth year in a row, **Bend-Redmond**, **OR**, ranks first on the Best-Performing Small Cities Index. All of its indicators rank in the top 30. Clear standouts are the first-place ranking for fiveyear wage growth, second-place ranking on five-year job growth, and fifth-place rankings on five-year high-tech GDP growth and high-tech concentration. Once more, the metro posted high ranks in its five-year metrics with consistent high ranks in its one-year indicators. The metro's five-year ranks should remain a source of strength for the near term. While the metro has lost a few spots on the number of concentrated high-tech industries (LQ > 1), its diverse economy is anchored by more traditional industries.

The Bend, OR, metro built its diverse economy on the backs of three pillars. The first is a regional hospital supported not just by other parts of eastern Oregon but also a deeply entrenched retiree community within the metro, the second of the three pillars. The Tykeson Family Foundation donated \$1 million to help expand the St. Charles Medical Center, which is the largest employer in the metro with 3,361 staff.¹¹³ The third source of strength is tourism, which has helped in various facets. Tourist amenities have made Bend-Redmond a regional travel destination for both summer and winter outdoor recreation. Pronghorn Resorts is planning a 600-room expansion of its operations in the metro in the next two years.¹¹⁴ Interest in tourism to Bend-Redmond has also drawn new residents, helping population growth and directly growing the diversity of the metro's economy. Bend-Redmond has also developed its niche in the technology landscape. Employment in high-wage, outdoors goods e-commerce, and online marketing has grown in the metro, while the abundance of land has attracted vehicle technology over the years. This includes a long-standing experimental airplane industry and unmanned aerial vehicle and driverless car testing facilities operations. Dutchie obtained a \$15 million Series A funding round with money coming from companies that had previously provided seed funding like Casa Verde and 35 Ventures.¹¹⁵ Lora Dicarlo raised another \$2 million in funding in addition to its initial capital to continue operations.¹¹⁶ The recent influx of tech-related jobs is also changing the metro's demographics. The retiree community now has a section of younger professionals as a part of the 12,650 new individuals who migrated into the metro.¹¹⁷

The passage of the Farm Bill in 2018 also opened up a market in the US to grow hemp; the metro has become the third-largest producer of hemp in the state.¹¹⁸ Bend-Redmond should see long-term benefits from this new market, especially as producers take advantage of cheaper land. This land availability, in combination with cheap costs of doing business, provides an amenable business climate for a sizeable manufacturing sector. For example, Laird Superfoods Inc. acquired \$32 million in private equity funding to expand its packaging operations in Bend.¹¹⁹ Overall, 2,125 manufacturing jobs have been created in the metro in the past year. Bend-Redmond has had an unprecedented run of growth on the small cities index and should maintain growth in the near term.

GRANTS PASS, OR MSA

	Job growth (2013-18)	12 th
RANKS	Job growth (2017-18)	6 th
	Wage growth (2012-17)	14 th
	Wage growth (2016-17)	25 th
	Short-term job growth (8/2018-8/2019)	21 st
	High-tech GDP growth (2013-18)	29 th
	High-tech GDP growth (2017-18)	6 th
	High-tech GDP concentration (2018)	28 th
	Number of high-tech industries (LQ>=1) (2018)	70 th

ASSETS:

Stable employment through health care and the retiree community.

LIABILITIES:

International trade disputes are sources of uncertainty.

Grants Pass, OR, breaks back into the top 10 Best-Performing Small Cities Index at second place—a gain of 21 ranks. The metro's one-year job growth ranks sixth, as does one-year high-tech GDP growth, highlighting the metro's rise. The five-year wage and job growth indicators also show the longer-term ascent of the metro, with ranks of 14th and 12th, respectively. The 21st place ranking in the short-term employment number demonstrates Grants Pass' potential for future growth.

The health-care sector plays a vital role in the metro's economy and population—one-third of the metro's residents are over 60.¹²⁰ The overall health-care sector grew 5.8 percent over the last year, adding a total of 290 jobs.

Grants Pass historically relies on the timber industry. The furniture and wood production industries continue to employ 1,090 people and remains one of the stable sources of employment for the area. However, uncertainty around the North American trade agreement could have a massive impact on the metro. The other trade agreement still being negotiated is the Softwood Lumber Agreement with Canada, which will have a definite effect on the metro regardless of the outcome of broader trade negotiations.



LOGAN, UT-ID MSA

	Job growth (2013-18)	18 th
RANKS	Job growth (2017-18)	15 th
	Wage growth (2012-17)	18 th
	Wage growth (2016-17)	36 th
	Short-term job growth (8/2018-8/2019)	21 th
	High-tech GDP growth (2013-18)	52 nd
	High-tech GDP growth (2017-18)	16 th
	High-tech GDP concentration (2018)	13 th
	Number of high-tech industries (LQ>=1) (2018)	5 th

ASSETS:

Utah State University provides a highly educated workforce.

LIABILITIES:

• Tariffs will create headwinds for the metro because of the concentration of food manufacturing.

Logan, UT-ID, jumps up seven ranks to land at number two on this edition of the Best-Performing Small Cities Index. The metro's job growth indicators for both one- and five-year job growth ranks 15th and 18th, respectively. One-year high-tech GDP growth and high-tech GDP concentration show similar excellence, ranking 18th and 13th, respectively. Logan has established above-average concentrations of seven different industries that constitute the high-tech sector, giving them a fifth place ranking for the number of high-tech industries with an LQ over one. Short-term job growth has provided a boost to the metro—ranking 21st—and should help the metro in the coming year.

Two of Logan's vital industrial sectors, professional and scientific services, are the fastest growing in the metro, along with technical services and food manufacturing. During 2018, the professional, scientific, and technical services sector added 480 jobs, a growth of 12 percent over the previous year, representing 36.6 percent of jobs added in this sector in the last five years. In addition, the metro has developed one of the most concentrated dairy product manufacturing industries in the nation. Food manufacturing in the metro added 150 new jobs in the last year, which is 24.6 percent of the sector's jobs created during the previous five years.

BEST-PERFORMING CITIES 2020

ST. GEORGE, UT MSA

LOST 2	Job growth (2013-18)	1 st
RANKS	Job growth (2017-18)	3 rd
	Wage growth (2012-17)	12 th
	Wage growth (2016-17)	4 th
	Short-term job growth (8/2018-8/2019)	9 th
	High-tech GDP growth (2013-18)	6 th
	High-tech GDP growth (2017-18)	79 th
	High-tech GDP concentration (2018)	71 st
	Number of high-tech industries (LQ>=1) (2018)	92 nd

ASSETS:

 Population growth will help the main anchor industries in the metro.

LIABILITIES:

 Most of the main industries in the metro generate lower-wage employment.

St. George, UT, known as "Utah's Dixie," loses two ranks to land at fourth this year. Job growth in the metro is excellent overall, with a five-year growth rate of 20.9 percent, ranking first for small metros. One-year job growth ranked third overall and grew 4.8 percent. Job growth also continues to be a bright spot—oneyear employment grew 1.8 percent from August 2018 to August 2019, ranking ninth overall. One-and five-year wage growth rank similarly well, coming in at fourth and 12th, respectively. While one-year high-tech GDP growth has cooled, five-year metrics rank sixth overall with growth of 36.9 percent.

From 2017 to 2018, the metro experienced a population growth of 3.5 percent, which was ranked third in population growth in the US¹²¹ and supported its consumer-driven sectors. Population growth due to a net in-migration of 3,136 people has fueled construction in the metro, adding 780 specialty contractor jobs and 1,050 jobs overall. The other major contributor to the growth of consumer industries in St. George is tourism to Zion National Park and Bryce Canyon. Accommodations, along with food and beverage services, added 270 jobs this year.

The metro recently annexed about 800 acres of land near the St. George Regional Airport with the intent to develop the land into an attractive Megasite for large companies looking to relocate.¹²² This annexation and the establishment of an Opportunity Zone in the metro are intended to create ripple effects for the area's entire economy.¹²³

TIED COEUR D'ALENE, ID MSA

HELD	Job growth (2013-18)	11 th
STEADY	Job growth (2017-18)	16 th
	Wage growth (2012-17)	8 th
	Wage growth (2016-17)	14 th
	Short-term job growth (8/2018-8/2019)	40 th
	High-tech GDP growth (2013-18)	89 th
	High-tech GDP growth (2017-18)	38 th
	High-tech GDP concentration (2018)	77 th
	Number of high-tech industries (LQ>=1) (2018)	28 th

ASSETS:

Population gains will help keep the metro growing.

LIABILITIES:

- Jobs being created are on the lower end of the wage distribution.

Coeur d'Alene, ID, maintains its fifth-place rankings in this year's Best-Performing Small Cities Index. The metro's five-year wage growth of 11.6 percent is the standout among the indicators this year, ranking eighth. Wages in the "Heart of an Awl" metro grew 2.8 percent in 2018, ranking 14th, while employment grew 1.3 and 7.4 percent over the short- and medium-term—ranking 16th and 11th in these indicators, respectively. An encouraging sign for the metro is the 28th place ranking for the number of hightech industries with an LQ one or greater, which demonstrates both a diverse economy and a number of high value-adding jobs.

Coeur d'Alene continues to benefit from the development of its business service sector, which takes advantage of the lower cost of doing business in the metro relative to the surrounding area. The growth of this sector adds a new dimension to a metro known for being a retiree community and tourist destination. Job growth in the metro has also caused the unemployment rate to drop to 3 percent, which will boost wages in a tight labor market.¹²⁴

The metro's population growth has resulted in a construction boom. Single-family housing permits have increased 109 percent since 2013, and construction activities in the metro have added 400 new jobs, the majority of which are specialty contractors.¹²⁵ Even still, the metro continues to benefit from its comparative housing affordability.

GAINED	Job growth (2013-18)	4 th
15 RANKS	Job growth (2017-18)	4 th
	Wage growth (2012-17)	5 th
	Wage growth (2016-17)	8 th
	Short-term job growth (8/2018-8/2019)	20 th
	High-tech GDP growth (2013-18)	11 th
	High-tech GDP growth (2017-18)	25 th
	High-tech GDP concentration (2018)	155 th
	Number of high-tech industries (LQ>=1) (2018)	137 th

ASSETS:

- Recent population growth facilitates the growth of several industries and salaries.
- Retiree purchasing power helps support local retail and health-care sectors.

LIABILITIES:

• Local industries are less diverse and are susceptible to business cycles.

The Villages, FL, climbs 15 spots to tie for fifth place in this year's rankings. The region has recently experienced phenomenal job and wage growth. Both its one- and five-year job growth rank fourth among all small metro areas. Its one- and five-year wage growth stand at eighth and fifth places, respectively, and even ranks 11th in our five-year high-tech GDP growth indicator. The metro's recent economic prosperity has largely to do with its strong population growth. From 2017 to 2018, the metro's population grew by 3.1 percent, the sixth-highest percentage increase among all US metros.¹²⁶

This inflow of new residents drives local economic growth in construction, retail, and health care. Compared with 2016, the new permits for homes in the region grew by 93 percent in 2017.¹²⁷ Publix Super Markets, Walmart, and Winn-Dixie are major retail employers. The Villages metro is also known as a central Florida retirement community. In 2018, the population age 65 and above accounted for 79 percent of the metro's total population.¹²⁸ Central Florida Health, The Villages Regional Hospital, and The Villages are three major employers providing medical and retirement services in the region. In addition to the aforementioned sectors, the metro is also known for correctional facilities. The Federal Correctional Complex, Coleman, is the largest employer in the region. It, together with the Sumter Correctional Institution, employ over 1,700 staff members.¹²⁹

Although the population- and retiree-driven growth contribute to the upswing of the region's recent economic prosperity, the construction, retail, and health-care industries are more susceptible to economic fluctuations. The region needs to diversify its industries to have more sustained economic development.



IDAHO FALLS, ID MSA

GAINED 17 RANKS	Job growth (2013-18)	13 th
	Job growth (2017-18)	5 th
	Wage growth (2012-17)	22 nd
	Wage growth (2016-17)	15 th
	Short-term job growth (8/2018-8/2019)	2 nd
	High-tech GDP growth (2013-18)	152 nd
	High-tech GDP growth (2017-18)	74 th
	High-tech GDP concentration (2018)	9 th
	Number of high-tech industries (LQ>=1) (2018)	92 th

ASSETS:

- Idaho National Laboratory provides high-paying, stable jobs.
- Population growth helps nurture the retail sector.

LIABILITIES:

Industrial composition is less diverse.

Idaho Falls, ID, jumps 17 spots to secure seventh place in this year's Best-Performing Small Cities Index. The region performs particularly well in one-year job growth (fifth), short-term job growth (second), and 2018 high-tech GDP concentration (ninth). Idaho Falls' cultural amenities and low crime rates attract newcomers: The metro experienced a net in-migration of 1,636 and 1,757 people in 2016 and 2017, respectively.¹³⁰

Idaho National Laboratory (INL) Battelle Energy Alliance, LLC, is the largest employer in the region with over 4,000 workers.¹³¹ However, in 2018 INL announced plans to lay off nearly 100 workers.¹³² Despite this cut, the regions' other scientific R&D services, such as Northwest Cosmetic Labs, employed 400 full-time and 250 supplemental workers in 2018. Northwest Cosmetic Labs plans to expand its presence in the region.¹³³ The region's largest industrial sector in 2018 was professional and business services, accounting for roughly 21 percent of total employment. Education and health services was the second largest sector in 2018, accounting for 15 percent of the job market. Another important sector is retail, taking 13 percent of the 2018 employment share.¹³⁴ In the spring of 2019, Costco also announced that it would open a new store in northeast Idaho Falls, which is expected to open in August 2020.¹³⁵

Although the low cost, safety, and cultural amenities are among the factors attracting migrants to Idaho Falls, the region faces several challenges in maintaining competitiveness. Only 29 percent of its population aged 25 and above had at least a bachelor's degree, lower than the US average of 32 percent.¹³⁶ In addition, industrial diversity in the metro is relatively low compared with other metros. Diversifying the metro's industrial compositions would help the region to strengthen its long-term economic health.

WHERE AMERICA'S JOBS ARE CREATED AND SUSTAINED

GAINESVILLE, GA MSA

LOST 5	Job growth (2013-18)	6 th
RANKS	Job growth (2017-18)	12 th
	Wage growth (2012-17)	6 th
	Wage growth (2016-17)	9 th
	Short-term job growth (8/2018-8/2019)	3rd
	High-tech GDP growth (2013-18)	66 th
	High-tech GDP growth (2017-18)	166 th
	High-tech GDP concentration (2018)	131 th
	Number of high-tech industries (LQ>=1) (2018)	28 th

ASSETS:

- The region's proximity to Atlanta helps fuel population and economic growth.
- Low living and business costs help attract new businesses to the region.

LIABILITIES:

• The major industries in the metro are more susceptible to business cycles.

Gainesville, GA, falls five spots in 2020, finishing eighth overall. It performs well in five-year job and wage growth (both rank sixth) and in short-term job growth (third). The region is close to the Atlanta metro area, which allows it to take advantage of the Hartsfield-Jackson Atlanta International Airport for logistics. Due to this geographic advantage, the region is a popular destination for company relocation, which also benefits local labor markets. In 2018, Fox Factory announced the relocation of its headquarters from California to the region, which is expected to create around 800 jobs in Gainesville.¹³⁷ In the same year, Auto Metal Direct announced it would build a fulfillment center in the region.¹³⁸ The region's proximity to Atlanta and lower cost of living also attract residents. Nearly one-fourth of the region's population work in Atlanta.¹³⁹

The region is well known for its poultry industry, including Fieldale Farms, Pilgrim's Pride Corp., and Victory Processing. In 2018, the local government approved an expansion plan for Fieldale Farms' Murrayville plant.¹⁴⁰ In addition to the food-processing sector, the education and health services sector accounted for nearly 18 percent of the region's total employment in 2018.¹⁴¹ In 2017, the region's largest employer, Northeast Georgia Health System (NGHS), had approximately 7,900 employees.¹⁴² In July 2019, NGHS opened its new medical center in the region.¹⁴³ The region also hosts some manufacturing, including Kubota Manufacturing of America Corporation (KMA), a tractor maker. After its 2017 expansion, KMA announced it would create an \$85-million, 300-acre engineering and design center in Gainesville.¹⁴⁴

SEBASTIAN-VERO BEACH, FL MSA

GAINED 4	Job growth (2013-18)	15 th
RANKS	Job growth (2017-18)	20 th
	Wage growth (2012-17)	35 th
	Wage growth (2016-17)	102 nd
	Short-term job growth (8/2018-8/2019)	8 th
	High-tech GDP growth (2013-18)	40 th
	High-tech GDP growth (2017-18)	20 th
	High-tech GDP concentration (2018)	54 th
	Number of high-tech industries (LQ>=1) (2018)	55 th

ASSETS:

- Population growth helps support the region's consumption-based industries.
- The aerospace industry diversifies the metro's economic composition.

LIABILITIES:

Most local industries are subject to business cycles.

Sebastian-Vero Beach, FL, climbs four spots to ninth place this year, with 20th place and 15th place performances in the one-year and five-year measures for employment gain. The region comes in eighth for the short-term job growth.

Sebastian-Vero Beach boasts museums, scenic views, cozy shopping, dining facilities, and beautiful beachside hotels that attract tourists and retirees. In 2018, the metro's median age was 54.5, which is 1.4 times older than the US average (38.2).¹⁴⁵ Even so, the region has enjoyed fast population growth—from 2015 to 2018, the metro's population grew by at least 2 percent.¹⁴⁶

Recent population growth and tourist inflows help to support the industries in the region, including education and health services, retail trade, leisure and hospitality services, and professional and business services. The Cleveland Clinic Indian River Hospital is the single largest employer in the metro, with over 2,000 employees.¹⁴⁷ The region also hosts a burgeoning aerospace industry, including airplane manufacturers Piper Aircraft and Velocity Aircraft and aviation training institution FlightSafety Academy. The presence of the aerospace industry helps to diversify the region's industries and improve economic health.

BEST-PERFORMING CITIES 2020

#10 BELLINGHAM, WA MSA

GAINED 7	Job growth (2013-18)	23 rd
RANKS	Job growth (2017-18)	22 nd
	Wage growth (2012-17)	42 nd
	Wage growth (2016-17)	19 th
	Short-term job growth (8/2018-8/2019)	44 th
	High-tech GDP growth (2013-18)	151 st
	High-tech GDP growth (2017-18)	57 th
	High-tech GDP concentration (2018)	26 th
	Number of high-tech industries (LQ>=1) (2018)	2 nd

ASSETS:

- The concentration of tech companies helps to provide highpaying jobs.
- Local educational institutions supply a highly educated workforce.

LIABILITIES:

• Retail and leisure and hospitality sectors are more susceptible to inconsistent business cycles.

Bellingham, WA, moves up seven spots to round off our top 10 list of small cities. It has impressive performance in one-year wage growth (19th) and excellent performance on the number of high-tech industries LQ (second). Tech companies located in Bellingham span various industries, including Conversica, an artificial intelligence-based software company; Safran, an aircraftengine maker; and Emergency Reporting (ER), a cloud-based reporting and records management software company. Safran operates a plant in Bellingham manufacturing aircraft interior products, employing around 500 workers, while ER expects to grow its Bellingham office from 65 employees to 120 in the next few years with investments from Polaris Growth Fund.¹⁴⁸

The metro's location between Vancouver and Seattle allows it to operate as a logistics sub-center, complete with an international airport and port. The main industries in Bellingham include government and education and health-care services. PeaceHealth St. Joseph Medical Center, the largest employer in the region, employed around 2,300 workers in 2018¹⁴⁹ and recently announced that it would build a medical clinic in the metro with an expected 2021 opening.¹⁵⁰ Retail and leisure and hospitality are two other major sectors for the region's economy.

The region is also home to several educational institutions, including Bellingham Technical College, Charter College Bellingham, Northwest Indian College, Trinity Western University at Bellingham, Western Washington University, and Whatcom Community College. The concentration of educational institutions provides the region with a highly educated population. In 2018, approximately 45 percent of the population age 25 years or over possessed at least a bachelor's degree.¹⁵¹

ON THE WEB Visit best-cities.org



TOP 10 BEST-PERFORMING SMALL CITIES

BEST-PERFORMING CITIES 2020

Complete Results: 2020 Best-Performing Small Cities

2020 Rank	2018 Rank	Rank Change	Metropolitan Statistical Area/Metropolitan Division	Job Growth US 2017-2018	Job Growth 2013-2018	Wage Growth US 2016-2017	Wage Growth 2012-2017	12-month Job Growth	High-tech GDP 2017-2018	High-tech GDP 2013-2018	High-tech Concentration	LQ Count (2018)
1	1	0	Bend-Redmond, OR	9	2	11	1	16	10	5	29	5
2	23	21	Grants Pass, OR	6	12	25	14	21	6	29	70	28
3	10	7	Logan, UT-ID	15	18	36	18	15	16	52	13	5
4	2	-2	St. George, UT	3	1	12	4	9	79	6	71	92
5T	5	0	Coeur d'Alene, ID	16	11	14	8	40	38	89	77	28
5T	20	15	The Villages, FL	4	4	8	5	20	25	11	155	137
7	24	17	Idaho Falls, ID	5	13	15	22	2	74	152	9	92
8	3	-5	Gainesville, GA	12	6	9	6	3	166	66	131	28
9	13	4	Sebastian-Vero Beach, FL	20	15	102	35	8	20	40	54	55
10	17	7	Bellingham, WA	22	23	19	42	44	57	151	26	2
11	15	4	Charlottesville, VA	73	28	24	25	37	95	24	30	28
12	7	-5	Medford, OR	37	20	46	12	28	63	109	78	28
13	16	3	Wenatchee, WA	19	10	59	20	69	7	10	109	92
14	11	-3	Daphne-Fairhope-Foley, AL	29	8	27	10	18	100	55	160	92
15	37	22	Mount Vernon-Anacortes, WA	35	34	10	13	89	14	14	120	92
16	22	6	College Station-Bryan, TX	8	22	28	29	95	31	59	58	92
17	31	14	Missoula, MT	65	47	32	31	34	44	44	75	28
18	12	-6	Prescott, AZ	21	16	26	16	68	117	53	127	55
19	9	-10	Albany, OR	18	14	110	27	53	28	26	136	55
20	27	7	Madera, CA	25	40	20	32	48	15	137	152	92
21	63	42	Carson City, NV	113	43	7	50	6	122	73	65	28
22	14	-8	Hilton Head Island-Bluffton-Beaufort, SC	7	9	129	37	10	59	9	141	137
23	19	-4	Auburn-Opelika, AL	63	17	13	9	97	152	33	115	55
24	21	-3	Sioux Falls, SD	61	37	76	24	11	82	51	67	137
25	44	19	Winchester, VA-WV	71	44	42	43	12	78	20	140	137
26	111	85	Florence, SC	17	52	86	103	35	40	15	105	55
27	35	8	Janesville-Beloit, WI	86	45	70	60	55	75	18	47	55
28	83	55	State College, PA	40	81	79	63	71	46	90	16	9
29	62	33	Napa, CA	32	29	38	11	62	138	123	88	137
30	47	17	Sherman-Denison, TX	30	57	33	84	57	53	78	51	137
31	72	41	Brunswick, GA	39	36	116	76	25	111	13	83	55
32	67	35	Midland, TX	1	5	2	19	111	22	174	199	179
33	18	-15	Mankato-North Mankato, MN	99	80	22	45	101	91	41	23	15
34	8	-26	Athens-Clarke County, GA	42	27	63	23	93	139	56	89	92
35	32	-3	Redding, CA	81	33	29	36	59	158	57	103	92
36	36	0	Chico, CA	52	30	18	15	115	71	70	110	179

37

BEST-PERFORMING CITIES 2020

COMPLETE RESULTS: 2020 BEST-PERFORMING SMALL CITIES

h	ank	nange		wth US 018	wth 018	Wage Growth US 2016-2017	rowth 017	th Job	ch GDP 018	ch GDP 018	High-tech Concentration	LQ Count (2018)
2020 Rank	2018 Rank	Rank Change	Metropolitan Statistical Area/Metropolitan Division	Job Growth US 2017-2018	Job Growth 2013-2018	Wage Grow 2016-2017	Wage Growth 2012-2017	12-month Job Growth	High-tech GDP 2017-2018	High-tech GDP 2013-2018	High-te Concent	LQ Coul
37	33	-4	Lake Charles, LA	45	3	6	2	139	76	107	183	137
38	6	-32	San Rafael, CA	104	78	153	33	43	66	8	2	2
39	40	1	Punta Gorda, FL	46	21	69	21	13	185	34	168	179
40	86	46	Lebanon, PA	44	103	66	148	46	62	21	4	9
41	107	66	Tuscaloosa, AL	49	38	60	108	33	1	4	171	179
42	60	18	Corvallis, OR	94	26	54	69	180	18	67	1	1
43	148	105	Midland, MI	60	132	1	7	187	45	25	34	55
44	25	-19	Yuba City, CA	38	19	30	41	155	153	122	96	28
45	4	-41	Elkhart-Goshen, IN	14	7	3	3	176	157	184	164	55
46	73	27	Burlington, NC	59	72	55	74	26	198	154	43	5
47	138	91	Odessa, TX	2	48	4	169	24	5	98	197	179
48	55	7	Lake Havasu City-Kingman, AZ	11	25	21	62	65	173	124	172	137
49	27	-22	Barnstable Town, MA	120	79	99	53	84	32	45	21	28
50	45	-5	Hattiesburg, MS	87	46	92	89	4	108	32	167	55
51	75	24	Chambersburg-Waynesboro, PA	33	75	97	104	75	42	81	60	55
52	43	-9	Jonesboro, AR	62	24	34	39	45	192	120	150	137
53	79	26	Valdosta, GA	88	92	47	102	64	146	3	18	55
54	108	54	Kingston, NY	78	88	111	112	36	8	47	57	55
55	54	-1	Ames, IA	123	58	37	40	92	118	74	74	55
56	77	21	Ithaca, NY	117	116	41	82	5	147	133	20	15
57	80	23	Staunton-Waynesboro, VA	82	97	127	87	41	49	102	48	9
58	81	23	Rochester, MN	77	77	48	52	113	110	162	37	55
59	74	15	Jackson, MI	90	69	148	55	102	3	12	130	28
60	41	-19	Longview, WA	126	41	44	49	158	23	54	97	92
61	29	-32	Yakima, WA	31	42	95	61	118	48	111	147	137
62	42	-20	Sheboygan, WI	69 7(68	73	44	52	181	143	151	55
63	52	-11	Columbus, IN	76	50	103	99	19	165	187	72	28
64	94 65	30	Yuma, AZ	34 58	56 54	117 137	98 105	50 81	36 101	164 62	112 73	137
65 66	48	0 -18	Tyler, TX Morgantown, WV	109	102	137	46	01 197	50	62	73 56	55 55
67	85	-18	Jackson, TN	83	61	88	88	38	29	60	188	179
68	37	-31	Lewiston, ID-WA	189	76	65	26	- 30 99	81	31	100	55
69	115	46	Bloomington, IN	95	120	31	59	120	87	193	5	55
70	181	111	Wheeling, WV-OH	26	152	5	38	74	121	141	186	179
71	64	-7	Greenville, NC	72	89	81	83	141	141	92	3	55
72	26	-46	Kankakee, IL	98	101	53	94	157	114	37	12	55
73	92	19	Rome, GA	66	62	130	116	26	184	108	82	55
74	104	30	Hanford-Corcoran, CA	10	35	61	93	86	191	97	196	179
75	88	13	Lafayette-West Lafayette, IN	43	53	64	71	199	84	188	87	15
76	70	-6	Fond du Lac, WI	55	130	120	79	191	13	35	36	9
77	66	-11	Pocatello, ID	125	66	52	64	7	177	128	178	137
	130	52		1		90		90		39	173	
78	130	52	Sebring, FL	105	31	90	91	90	92	39	173	137

BEST-PERFORMING CITIES 2020

38

COMPLETE RESULTS: 2020 BEST-PERFORMING SMALL CITIES

2020 Rank	2018 Rank	Rank Change	Metropolitan Statistical Area/Metropolitan Division	Job Growth US 2017-2018	Job Growth 2013-2018	Wage Growth US 2016-2017	Wage Growth 2012-2017	12-month Job Growth	High-tech GDP 2017-2018	High-tech GDP 2013-2018	High-tech Concentration	LQ Count (2018)
79	91	12	Wausau, WI	102	85	84	75	58	93	46	175	137
80	96	16	Eau Claire, WI	110	107	35	70	158	72	142	59	28
81	131	50	Grand Junction, CO	28	73	17	149	29	156	178	159	179
82	56	-26	Dalton, GA	57	51	195	77	80	109	119	25	92
83	109	26	Sumter, SC	27	71	112	156	158	85	38	68	28
84	59	-25	Walla Walla, WA	68	70	150	106	51	104	79	142	55
85	160	75	Hot Springs, AR	47	133	56	111	30	196	156	79	92
86	100	14	Morristown, TN	114	55	40	81	128	35	80	190	137
87	84	-3	Flagstaff, AZ	75	59	49	47	195	77	153	66	137
88	34	-54	Kahului-Wailuku-Lahaina, HI	116	32	23	17	158	179	91	195	137
89	90	1	Rapid City, SD	91	82	78	68	125	65	115	139	92
90	110	20	Warner Robins, GA	24	60	105	161	47	136	191	90	92
91	68	-23	Fargo, ND-MN	128	63	128	34	167	124	68	50	28
92	93	1	Harrisonburg, VA	107	65	87	92	63	128	145	123	92
93	50	-43	Columbia, MO	156	135	100	51	140	33	61	33	28
94	52	-42	Gettysburg, PA	138	117	58	66	138	107	88	85	15
95	136	41	Ocean City, NJ	85	84	158	132	1	61	17	179	179
96	132	36	Johnson City, TN	118	96	74	136	123	106	76	52	28
97	133	36	Macon, GA	130	95	71	90	78	189	95	63	92
98	97	-1	Muskegon, MI	53	67	91	109	121	119	125	157	92
99	78	-21	Pueblo, CO	151	74	62	78	130	170	65	64	92
100	139	39	Abilene, TX	50	106	45	126	146	30	159	111	137
101	105	4	Champaign-Urbana, IL	149	105	141	123	60	98	84	32	15
102	173	71	Las Cruces, NM	36	118	167	144	126	21	148	31	15
103	116	13	Cape Girardeau, MO-IL	74	159	172	152	79	12	42	81	28
104	58	-46	St. Cloud, MN	157	87	50	30	117	174	158	133	92
105	102	-3	Decatur, AL	23	131	151	168	14	167	94	154	55
106	133	27	Burlington-South Burlington, VT	158	109	160	117	82	99	99	11	9
107	114	7	Lewiston-Auburn, ME	131	111	146	118	56	58	23	137	137
108T	39	-69	Bowling Green, KY	129	49	106	28	76	154	183	194	179
108T	113	5	Wichita Falls, TX	92	139	114	160	105	4	129	41	92
110	152	42	Vineland-Bridgeton, NJ	135	142	179	151	22	2	27	113	92
111	101	-10	St. Joseph, MO-KS	178	147	85	101	119	9	173	27	28
112	158	46	California-Lexington Park, MD	41	124	132	154	156	96	166	8	28
113	123	10	Lynchburg, VA	112	144	89	135	100	135	161	46	15
114	154	40	Carbondale-Marion, IL	158	129	159	140	54	69	36	106	28
115	137	22	Gadsden, AL	140	91	162	137	17	123	50	170	92
116	46	-70	Lawrence, KS	158	86	126	67 57	200	143	1	24	92
117	71	-46	Panama City, FL	70	39	170	57	196	126	176	84	92 55
118	49	-69	Dover, DE	127	104	140	95	38	190	136	165	55
119	125	6	Altoona, PA	137	153	98	139	106	168	93 190	14	15
120	164	44	Dubuque, IA	84	119	93	130	91	105	180	148	92

BEST-PERFORMING CITIES 2020

				SL		h US	<u> </u>	<u>م</u>	dC	PC	<u> </u>	018)
h	ank	Rank Change		Job Growth US 2017-2018	Job Growth 2013-2018	Wage Growth US 2016-2017	Wage Growth 2012-2017	12-month Job Growth	High-tech GDP 2017-2018	High-tech GDP 2013-2018	High-tech Concentration	Count (2018)
2020 Rank	2018 Rank	с К) Gro) Gro	lge G 16-2(ige G 12-2(12-moni Growth	;h-te 17-2(;h-te 13-2(;h-te nceni	Coul
202	201	Rar	Metropolitan Statistical Area/Metropolitan Division	Job 201	Job 20	Wa 201	201 201	12- Gro	Hig 201	Hig 201	Hig Cor	ğ
121	135	14	Joplin, MO	134	166	107	141	94	11	134	108	28
122	106	-16	Sioux City, IA-NE-SD	51	134	201	56	112	41	118	169	137
123	82	-41	Oshkosh-Neenah, WI	155	98	123	85	133	180	117	62	28
124	161	37	Hinesville, GA	64	94	139	197	42	68	169	146	137
125	103	-22	El Centro, CA	106	112	51	100	169	52	113	185	179
126	51	-75	Kokomo, IN	199	110	144	80	23	186	196	61	55
127	95	-32	Amarillo, TX	121	128	156	119	122	17	77	100	137
128	117	-11	Blacksburg-Christiansburg-Radford, VA	115	140	133	121	129	140	150	53	15
129	167	38	Racine, WI	79	100	124	155	182	97	71	134	55
130 131	151 89	21 -42	San Angelo, TX La Crosse-Onalaska, WI-MN	48 142	113 137	135 113	131 73	77 104	183 169	195 114	116 129	137 92
131	69 61	-42	Hammond, LA	142	137 90	57	73 163	104 145	109	114 2	129	92 137
132	129	-71	East Stroudsburg, PA	135	93	109	162	145	145	132	114	137
134	127	-6	Grand Island, NE	144	175	80	96	158	145	58	181	92
135	120	-11	Elizabethtown-Fort Knox, KY	97	63	175	190	85	164	105	117	55
136	171	35	Bangor, ME	101	167	122	127	116	39	101	122	137
137	162	25	Topeka, KS	150	145	174	153	31	80	30	119	137
138	149	11	Dothan, AL	100	126	101	120	103	163	87	187	137
139	69	-70	Appleton, WI	124	83	131	65	181	150	177	125	55
140	141	1	Cumberland, MD-WV	141	171	165	146	158	56	19	19	28
141	112	-29	Niles-Benton Harbor, MI	186	108	157	54	107	94	127	156	92
142	86	-56	Pittsfield, MA	177	164	169	110	73	55	139	28	92
143	127	-16	Glens Falls, NY	183	149	83	134	178	70	63	22	92
144	121	-23	Jefferson City, MO	193	163	115	115	153	26	75	45	92
145	118	-27	Billings, MT	154	114	118	72	177	159	49	102	137
146	123	-23	Norwich-New London, CT	152	146	96	157	170	120	135	6	15
147	170	23	Atlantic City-Hammonton, NJ	13	186	176	187	135	125	43	104	55
148	166	18	Binghamton, NY	132	178	136	166	127	88	140	7	9
149	175	26	Longview, TX	67	183	143	191	158	37	106	86	15
150	57	-93	Iowa City, IA	175	99	94	58	190	130	185	94	92
151 152	176 99	25 -53	Homosassa Springs, FL Monroe, MI	119 108	121 136	147 173	171 113	88 172	112 132	112 16	126 93	92 92
152	177	-33	Williamsport, PA	169	188	75	183	1/2	89	126	73 44	28
153	142	-12	Cheyenne, WY	146	154	119	145	96	142	86	-44 98	20 92
155	126	-29	Monroe, LA	153	158	185	143	174	43	7	38	28
155	76	-80	Manhattan, KS	56	123	105	143	201	43 60	, 72	121	55
157	169	12	Mansfield, OH	133	156	72	147	109	199	199	69	55
158	146	-12	Bloomsburg-Berwick, PA	145	177	104	133	61	113	197	91	137
159	184	25	Springfield, IL	158	127	168	142	144	151	28	35	92
160	98	-62	Albany, GA	179	138	138	159	131	155	48	42	92
161	182	21	Sierra Vista-Douglas, AZ	158	190	155	198	49	133	82	40	92
162	190	28	Waterloo-Cedar Falls, IA	80	172	82	158	171	103	116	177	137

BEST-PERFORMING CITIES 2020

40

COMPLETE RESULTS: 2020 BEST-PERFORMING SMALL CITIES

5

2020 Rank	2018 Rank	Rank Change	Metropolitan Statistical Area/Metropolitan Division	Job Growth US 2017-2018	Job Growth 2013-2018	Wage Growth US 2016-2017	Wage Growth 2012-2017	12-month Job Growth	High-tech GDP 2017-2018	High-tech GDP 2013-2018	High-tech Concentration	LQ Count (2018)
163	172	9	Lawton, OK	188	176	145	178	66	24	22	162	179
164	159	-5	Anniston-Oxford-Jacksonville, AL	147	150	67	189	132	197	138	135	55
165	201	36	Beckley, WV	111	195	39	200	142	54	186	153	137
166	150	-16	Santa Fe, NM	103	151	192	170	150	131	96	95	55
167	191	24	Decatur, IL	93	161	177	165	136	83	182	144	55
168	144	-24	Owensboro, KY	148	122	171	97	179	102	83	189	137
169	147	-22	Saginaw, MI	172	157	163	125	149	149	100	76	92
170	145	-25	Bismarck, ND	195	162	184	48	147	127	160	118	92
171	153	-18	Terre Haute, IN	184	165	121	164	137	176	198	39	15
172	187	15	Watertown-Fort Drum, NY	158	170	149	195	108	64	131	80	137
173T	170	-3	Florence-Muscle Shoals, AL	158	143	154	124	98	194	64	184	179
173T	155	-18	Lima, OH	170	148	68	128	148	200	171	143	137
175	156	-19	Great Falls, MT	139	169	77	114	151	144	194	161	179
176	168	-8	New Bern, NC	171	115	198	181	154	67	110	149	28
177	194	17	Casper, WY	89	200	134	199	67	162	157	193	137
178	165	-13	Texarkana, TX-AR	181	160	180	173	70	47	168	180	137
179	189	10	Springfield, OH	185	187	43	138	87	201	201	200	179
180	178	-2	Rocky Mount, NC	158	179	183	185	186	137	130	17	5
181	120	-61	Battle Creek, MI	192	141	190	122	158	27	103	163	179
182	180	-2	Michigan City-La Porte, IN	158	173	152	167	193	116	163	124	15
183	122	-61	Jacksonville, NC	158	155	199	182	134	86	144	128	92
184	143	-41	Muncie, IN	191	168	108	129	189	178	167	99	92
185	196	11	Victoria, TX	54	182	178	180	173	90	146	158	179
186	157	-29	Cleveland, TN	200	125	182	107	83	148	200	191	179
187	185	-2	Elmira, NY	173	185	187	186	152	115	149	55	28
188	183	-5	Goldsboro, NC	180	180	142	179	124	188	170	132	55
189	188	-1	Parkersburg-Vienna, WV	182	199	164	188	175	34	147	92	92
190	193	3	Danville, IL	201	192	189	176	32	195	179	138	92
191	163	-28	Johnstown, PA	194	196	191	192	168	182	121	10	2
192	140	-52	Grand Forks, ND-MN	196	174	186	86	184	175	104	145	137
193	186	-7	Charleston, WV	190	198	181	194	185	73	85	107	137
194	197	3	Fairbanks, AK	158	184	188	184	183	51	165	182	179
195	199	4	Weirton-Steubenville, WV-OH	143	197	125	172	194	161	192	192	179
196	174	-22	Farmington, NM	197	193	161	193	72	187	189	201	179
197	179	-18	Bay City, MI	174	191	197	177	192	172	175	49	137
198	192	-6	Alexandria, LA	187	181	196	175	158	134	172	176	137
199	195	-4	Bloomington, IL	198	189	194	174	143	171	155	174	137
200	198	-2	Pine Bluff, AR	96	194	166	196	188	193	190	198	179
201	200	-1	Houma-Thibodaux, LA	122	201	200	201	198	160	181	166	92

ENDNOTES

- 1. This report draws on text and methodology from previous editions of the Milken Institute's Best-Performing Cities series.
- 2. The latest 12-month job performance calculates the percentage change from the same month in the previous year (e.g., the change in jobs from August 2018 to August 2019). The percentage change is a measure of recent momentum, capturing which metropolitan areas have improved their performance in recent months. Except in the case of the wage-related indicators, the annual growth rate measures the percentage change from calendar year 2017 to 2018. 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 Bureau of Labor Statistics, the Bureau of Economic Analysis, and the US Census Bureau. More detailed coverage on individual sectors is derived from Moody's Analytics at economy.com.
- 3. "World Economic Outlook 2019," International Monetary Fund, October 15, 2019.
- 4. "US Economy at a Glance," Bureau of Economic Analysis, accessed January 10, 2020, https://www.bea.gov/news/glance.
- 5. "US Unemployment Rate Falls to 50-Year Low," The White House, October 4, 2019, https://www.whitehouse.gov/articles/u-s-unemployment-rate-falls-50-year-low/.
- 6. "Employment Situation Summary," Bureau of Labor Statistics, accessed January 10, 2020, <u>https://www.bls.gov/news.</u> release/empsit.nr0.htm.
- 7. "Unemployment Rate 5.0 Percent in Construction, 1.9 Percent in Information Industry, in December 2019," Bureau of Labor Statistics, accessed January 13, 2020, https://www.bls.gov/opub/ted/.
- 8. "Personal Income and Outlays, October 2019," Bureau of Economic Analysis, <u>https://www.bea.gov/news/2019/personal-income-and-outlays-october-2019</u>.
- 9. US Department of Commerce's International Trade Administration, accessed January 13, 2020, <u>http://tse.export.gov/tse/</u><u>MapDisplay.aspx</u>.
- 10. "San Francisco," Bureau of Labor Statistics, accessed January 13, 2020, <u>https://www.bls.gov/regions/west/ca_</u>sanfrancisco_msa.htm.
- 11. Ahalya Srikant, "Tech Employers in San Francisco," *San Francisco Business Times*, August 2, 2019, https://www.bizjournals.com/sanfrancisco/subscriber-only/2019/08/02/tech-employers-in-san-francisco.html.
- 12. Caleb Kaiser, "32 Fastest Growing Startups in San Francisco–Hiring Now," *angel.co*, accessed January 13, 2020, https://angel.co/job-collections/fastest-growing-startups-in-san-francisco-hiring-now.
- Libertina Brandt, "San Francisco's Housing Market Is So Expensive That the Median Million-dollar Home Has Less Than 1,200 Square Feet of Space," *Business Insider*, October 28, 2019, <u>https://www.businessinsider.com/san-francisco-housing-market-expensive-million-dollar-homes-space-2019-10.
 </u>
- 14. "Estimate of Median Household Income for San Francisco County/City," FRED Economic Data, Federal Reserve Bank of St. Louis, December 20, 2018, https://fred.stlouisfed.org/series/MHICA06075A052NCEN.
- 15. Katie Canales, "San Francisco's Housing Market Is So Dire That Tech Workers Are Spending over \$2,000 a Month to Rent Rooms in Vacant Victorian Homes," *Business Insider*, July 22, 2019, <u>https://www.businessinsider.com/bungalow-co-living-</u>photos-san-francisco-housing-crisis-2019-7.
- 16. "Provo Area Economic Summary," Bureau of Labor Statistics, December 6, 2019, <u>https://www.bls.gov/regions/mountain-</u>plains/summary/blssummary_provo.pdf.
- 17. "Occupational Employment and Wages in Provo-Orem—May 2018," Bureau of Labor Statistics, accessed January 13, 2020, https://www.bls.gov/regions/mountain-plains/news-release/occupationalemploymentandwages_provo.htm; "Provo Area Economic Summary," Bureau of Labor Statistics, December 6, 2019, https://www.bls.gov/regions/mountain-plains/news-release/occupationalemploymentandwages_provo.htm; "Provo Area Economic Summary," Bureau of Labor Statistics, December 6, 2019, https://www.bls.gov/regions/mountain-plains/summary/summary_provo.pdf.

42

ENDNOTES

18. "Austin Area Economic Summary," Bureau of Labor Statistics, December 6, 2019, <u>https://www.bls.gov/regions/</u> southwest/summary/blssummary_austin.pdf.

BEST-PERFORMING CITIES 2020

- 19. Patricia Rogers, "The List: Largest Austin-area Tech Employers," *Austin Business Journal*, March 22, 2019, https://www.bizjournals.com/austin/subscriber-only/2019/03/22/the-list-largest-austin-area-tech.html.
- 20. Jason Hildalgo, "Reno No. 1 for Job Growth in 2018, but Good Luck Finding a House," *Reno Gazette Journal*, February 7, 2019, <u>https://www.rgj.com/story/money/business/2019/02/07/reno-no-1-job-growth-2018-but-good-luck-finding-house/2801812002/.</u>
- 21. Jason Hildalgo, "Google Investing \$13 Billion in Data Centers in 2019, Including in Nevada," *Reno Gazette Journal*, February 13, 2019, <u>https://www.rgj.com/story/money/business/2019/02/13/google-investing-13-b-data-centers-2019-including-nevada/2861826002/.</u>
- 22. Jason Hildalgo, "Apple Completes Downtown Reno Warehouse, Eyes Data Center and Solar Facility Expansion," *Reno Gazette Journal*, February 14, 2019, <u>https://www.rgj.com/story/money/business/2019/02/14/apple-completes-data-center-east-campus-downtown-reno-warehouse/2865236002/.</u>
- 23. Rich Miller, "Reno Rising: Region Attracts Cluster of Cloud Campuses," *Data Center Frontier*, April 18, 2017, https://datacenterfrontier.com/reno-rising-region-attracts-cluster-of-cloud-campuses/.
- 24. Peter O'Dowd and Serena McMahon, "Facing an Affordable Housing Crisis, Reno Looks to Build 1,000 New Homes in 120 Days," WBUR, October 4, 2019, https://www.wbur.org/hereandnow/2019/10/04/reno-nevada-housing-crisis.
- 25. Ryan Canaday, "\$420,000 Marks a New Record High for Median Home Prices in Reno," *KTVN (2 News)*, June 10, 2019, https://www.ktvn.com/story/40622853/420000-marks-a-new-record-high-for-median-home-prices-in-reno.
- 26. "MSAs over 1 Million Jobs," Arizona State University, Bureau of Labor Statistics, November 21, 2019, https://seidmaninstitute.com/job-growth/msas-over-1-million/.
- 27. "Orlando Leads the Nation in Job Growth for 4th Straight Year," Visium Resources, April 11, 2019, https://www.visiumresources.com/2019/04/11/orlando-leads-the-nation-in-job-growth-for-4th-straight-year/.
- 28. "Orlando-Kissimmee-Sanford, FL," Précis Metro, Moody's Analytics, August 2019.
- 29. Richard Bilbao, "Meeting Sheds More Light on Universal's Future Epic Universe Theme Park," *Orlando Business Journal*, October 30, 2019, <u>https://www.bizjournals.com/orlando/news/2019/10/30/meeting-sheds-more-light-on-universals-future-epic.html</u>.
- 30. "Lockheed Martin Opens \$50 Million R&D Complex in Orlando, Florida," *Area Development News*, February 14, 2019, https://www.areadevelopment.com/newsltems/2-14-2019/lockheed-martin-orlando-florida.shtml.
- 31. Archie Robb, "Siemens Opens New Innovation Center in Orlando," *Power*, October 24, 2019, https://www.powermag.com/siemens-opens-new-innovation-center-in-orlando/?pagenum=2.
- 32. "Siemens and UCF to Establish Big Data Collaboration Focused on Advancing Smart Infrastructure Technologies," *BusinessWire*, October 19, 2018, <u>https://www.businesswire.com/news/home/20181019005078/en/Siemens-UCF-</u> Establish-Big-Data-Collaboration-Focused.
- 33. C.Y. Yao, "Global Top Ten IC Design Companies Ranked by Revenue; Only Qualcomm and MediaTek Suffered Decreases, Says TrendForce," *TrendForce*, February 27, 2019, https://press.trendforce.com/press/20190227-3216.html.
- 34. Robert Castellano, "Semiconductor Equipment Revenues to Drop 17% in 2019 on 29% Capex Spend Cuts," *Seeking Alpha*, March 27, 2019, <u>https://seekingalpha.com/article/4251198-semiconductor-equipment-revenues-drop-17-percent-2019-29-percent-capex-spend-cuts.</u>
- 35. Justin Fox, "Venture Capital Keeps Flowing to the Same Places," *Bloomberg*, January 8, 2019, <u>https://www.bloomberg</u>. com/opinion/articles/2019-01-08/venture-capital-still-flowing-to-silicon-valley-and-bay-area.
- 36. "San Jose-Sunnyvale-Santa Clara, CA," Précis Metro, Moody's Analytics, July 2019.
- 37. Moody's Analytics' Data Buffet.
- 38. Samantha Sharf, "Full List: America's Fastest-Growing Cities 2018," *Forbes*, February 28, 2018, <u>https://www.forbes.com/</u> sites/samanthasharf/2018/02/28/full-list-americas-fastest-growing-cities-2018/#63a11f337feb.

ENDNOTES

- 39. Patrick Sisson, "As Boise Booms, a City Faces the Curse of 'Californication," *Curbed*, January 22, 2019, https://www.curbed.com/2019/1/22/18193112/boise-real-estate-housing-downtown.
- 40. Ibid.

- 41. Margaret Carmel, "Following Road Work, St. Luke's Readies for Expansion," *Idaho Press*, November 30, 2018, <u>https://www.idahopress.com/news/local/following-road-work-st-luke-s-readies-for-expansion/article_4e02b25d-41c8-55f4-a877-095bb1bac41a.html</u>.
- 42. "Boise City, ID," Précis Metro, Moody's Analytics, July 2019.
- 43. Ari Levy, "Micron Shares Plunge 11% as Trade War Diminishes its Sales to Huawei," *CNBC*, September 27, 2019, https://www.cnbc.com/2019/09/27/micron-shares-drop-as-trade-war-diminishes-its-sales-to-huawei.html.
- 44. Marcela Escobari, Ian Seyal, José Morales-Arilla, and Chad Shearer, "Growing Cities That Work for All: A Capabilitybased Approach to Regional Economic Competitiveness," Brookings Institution, May, 2019, <u>https://www.brookings.edu/</u> research/growing-cities-that-work-for-all-a-capability-based-approach-to-regional-economic-competitiveness/.
- 45. "Seattle-Bellevue-Everett, WA," Précis Metro, Moody's Analytics, August 2019.
- 46. Natasha Frost, "The 737 Max Has Cost Boeing \$9.2 Billion and Continuing," *Quartz*, October 24, 2019, https://qz.com/1734220/the-737-max-has-cost-boeing-9-2-billion-and-counting/.
- 47. David Reid, "Boeing Values China's Aircraft Business at Almost \$3 Trillion over the Next Two Decades," *CNBC*, September 17, 2019, https://www.cnbc.com/2019/09/17/boeing-says-china-needs-to-spend-almost-3-trillion-on-new-planes.html.
- 48. "Cloud Market Share Q4 2018 and Full Year 2018," Canalys, February 4, 2019, <u>https://www.canalys.com/newsroom/</u>cloud-market-share-q4-2018-and-full-year-2018.
- 49. "Seattle-Bellevue-Everett, WA," Précis Metro, Moody's Analytics, August 2019.
- 50. "Local Area Unemployment Statistics," Bureau of Labor Statistics, December 5, 2019, <u>https://data.bls.gov/timeseries/</u>LAUDV481912400000003?amp%253bdata_tool=XGtable&output_view=data&include_graphs=true.
- 51. Conor Shine, "Liberty Mutual's New Plano Campus to Welcome Thousands of New Employees in January," *The Dallas Morning News*, November 29, 2017, <u>https://www.dallasnews.com/business/economy/2017/11/29/liberty-mutual-s-new-plano-campus-to-welcome-thousands-of-new-employees-in-january/.</u>
- 52. Steve Brown, "JPMorgan Chase Will Bring 4,000 More Workers to Plano with New Tower Project," *The Dallas Morning News*, June 5, 2019, <u>https://www.dallasnews.com/business/real-estate/2019/06/05/jpmorgan-chase-will-bring-4000-more-workers-to-plano-with-new-tower-project/.</u>
- 53. Mitchell Schnurman, "Why Jobs Are Following the Talent in Dallas' Financial Sector," *The Dallas Morning News*, August 11, 2016, https://www.dallasnews.com/business/2016/08/11/why-jobs-are-following-the-talent-in-dallas-financial-sector/.
- 54. "Dallas-Plano-Irving, TX," Précis Metro, Moody's Analytics, August 2019.
- 55. Marco Santana, "L3, Harris Technologies Merger Creates Florida's Largest Aerospace, Defense Firm," *Orlando Sentinel*, July 1, 2019, https://www.orlandosentinel.com/business/os-bz-l3harris-merger-20190701-jl4s2obzlrgmxoc7pls6ao2e7a-story.html.
- 56. "Lockheed Martin Celebrates FBM Headquarters Move to Florida's Space Coast," Lockheed Martin, July 30, 2019, <u>https://news.lockheedmartin.com/2019-07-30-Lockheed-Martin-Celebrates-FBM-Headquarters-Move-To-Floridas-Space-Coast.</u>
- 57. Richard Bilbao, "Study: Here's How Port Canaveral Ranks in Cruise Biz Traffic," *Orlando Business Journal*, December 6, 2019, https://www.bizjournals.com/orlando/news/2019/12/06/study-heres-how-port-canaveral-ranks-in-cruise-biz.html.
- 58. Mike Wall, "NASA's Kennedy Space Center (KSC) Information," SPACE, January 9, 2018, <u>https://www.space.com/17705-nasa-kennedy-space-center.html</u>.
- 59. "Palm Bay-Melbourne-Titusville, FL," Précis Metro, Moody's Analytics, August 2019.
- 60. "S1501 Educational Attainment, 2017 American Community Survey 1-Year Estimates," American FactFinder, US Census Bureau.
- 61. Lauren Ohnesorge, "Atlanta Loses Bid for Xerox's New 'Center for Excellence'," *Atlanta Business Chronicle*, August 13, 2019, https://www.bizjournals.com/atlanta/news/2019/08/13/atlanta-loses-bid-for-xeroxs-new-center-of.html.
- 62. "Who We Are," Research Triangle Cleantech Cluster, accessed January 13, 2020, <u>http://www.researchtrianglecleantech.</u> <u>org/</u>.
- 63. "Life Sciences," Research Triangle Regional Partnership, accessed January 13, 2020, https://www.researchtriangle.org/industries/life-sciences/.

ENDNOTES

64. "Advanced Manufacturing," Research Triangle Regional Partnership, accessed January 13, 2020, https://www.researchtriangle.org/industries/manufacturing/.

BEST-PERFORMING CITIES 2020

- 65. "Raleigh, NC," Précis Metro, Moody's Analytics, August 2019.
- 66. "Raleigh, NC Metro Area," Census Reporter, US Census Bureau, accessed January 13, 2020, <u>https://censusreporter.org/</u> profiles/31000US39580-raleigh-nc-metro-area/.
- 67. Satta Sarmah, "From Microbreweries to Biotech: In North Carolina, Business Calls," *FiveThirtyEight*, July 25, 2019, https://fivethirtyeight.com/sponsored/north-carolina-business/.
- 68. "Phoenix-Mesa-Scottsdale, AZ," Précis Metro, Moody's Analytics, August 2019.
- 69. Authors' calculations using data from American Community Survey and Moody's Analytics.
- 70. Tim Gallen, "Phoenix Leads US in Population Growth, New Census Data Shows," *Phoenix Business Journal*, May 23, 2019, https://www.bizjournals.com/phoenix/news/2019/05/23/phoenix-leads-us-in-population-growth-new-census.html.
- 71. "Comprehensive Housing Market Analysis: Phoenix-Mesa-Scottsdale, Arizona," US Department of Housing and Urban Development, August 1, 2018, https://www.huduser.gov/portal/publications/pdf/PhoenixAZ-CHMA-18.pdf.
- 72. "All Employees: Construction in Phoenix-Mesa-Scottsdale, AZ (MSA)," Federal Reserve Bank of St. Louis, November 19, 2019, https://fred.stlouisfed.org/series/SMU0438060200000001SA.
- 73. "Phoenix-Mesa-Scottsdale, AZ," Précis Metro, Moody's Analytics, August 2019.
- 74. "SAIC Breaks Ground on New Platform Innovation Center in South Carolina," SAIC, May 11, 2018, https://s24.q4cdn.com/675544626/files/doc_news/archive/47730f07-e5cb-47de-8361-056630c21581.pdf.
- 75. "Charleston-North Charleston, SC," Précis Metro, Moody's Analytics, August 2019.
- 76. Richelle Szypulski, "Travel + Leisure Readers Ranked This Southern City No.1 in the US for the 7th Year in a Row," *Travel + Leisure*, July 10, 2019, https://www.travelandleisure.com/trip-ideas/city-vacations/charleston-best-city-us-worlds-best.
- 77. Dylan Skye Aycock, "Nashville Job Growth on Track to Outpace Population," *Community Impact Newspaper*, May 31, 2019, https://communityimpact.com/nashville/city-county/2019/05/31/nashville-job-growth-on-track-to-outpace-population/.
- 78. Melanie Layden, "Amazon Already Expanding in Nashville Ahead of Official Move," WSMV, July 26, 2019, <u>https://www.wsmv.com/news/amazon-already-expanding-in-nashville-ahead-of-official-move/article_4cb626a2-afd5-</u> <u>11e9-b409-c3896b23b38c.html</u>.
- 79. "Amazon in Nashville: What Is an Operations Center of Excellence?," WTVF News Channel 5 Nashville, November 13, 2018, https://www.newschannel5.com/news/amazon-in-nashville-what-is-an-operations-center-of-excellence.
- Jamie McGee, "AllianceBernstein to Bring Private Wealth Group to Nashville, Considers Local Investment Team, CEO Says," *The Tennessean*, January 28, 2019, <u>https://www.tennessean.com/story/entertainment/2019/01/28/</u> alliancebernstein-bring-private-wealth-group-nashville-considers-local-investment-team-ceo-says/2702244002/.
- Getahn Ward, "WeWork Coworking Spaces Coming to Downtown Tower, East Nashville," Nashville Tennessean, May 4, 2017, <u>https://www.tennessean.com/story/money/real-estate/2017/05/04/wework-coworking-spaces-coming-downtown-tower-east-nashville/100983618/.</u>
- 82. Jamie McGee, "AllianceBernstein to Bring Private Wealth Group to Nashville, Considers Local Investment Team, CEO Says," *Nashville Tennessean*, January 28, 2019, <u>https://www.tennessean.com/story/entertainment/2019/01/28/</u> alliancebernstein-bring-private-wealth-group-nashville-considers-local-investment-team-ceo-says/2702244002/.
- 83. "Nashville-Davidson-Murfreesboro-Franklin, TN," Précis Metro, Moody's Analytics, August 2019.
- 84. Natalie Kitroeff, "Tariffs Imperial a Hometown Business in South Carolina: BMW," *The New York Times*, July 19, 2018, https://www.nytimes.com/2018/07/19/business/economy/tariffs-south-carolina-bmw.html.
- 85. David Wren, "Upstate SC BMW Plant Will Be Home to Production of Latest Sport-Utility Coupe," *The Post and Courier*, July 6, 2019, <u>https://www.postandcourier.com/business/upstate-sc-bmw-plant-will-be-home-to-production-of/</u> article_7a0ea9a6-9da3-11e9-a73e-1ba63d14b080.html.
- 86. "Spartanburg, SC," Précis Metro, Moody's Analytics, August 2019.
- 87. Elise Franco, "2018 Economic Forecast Is Bright, Spartanburg Industry Leaders Say," *GoUpstate*, January 31, 2018, https://www.goupstate.com/news/20180131/2018-economic-forecast-is-bright-spartanburg-industry-leaders-say.
- Naomi Sargent, "Tourism: A Powerhouse Driving Spartanburg's Economy," Spartanburg Area Chamber of Commerce, July 23, 2018, <u>https://www.spartanburgchamber.com/news/2018/07/23/featured-news/tourism-a-powerhouse-driving-spartanburg-s-economy/</u>.

ENDNOTES

BEST-PERFORMING CITIES 2020

- 89. Carolyn Duren and Armughan Khawaja, "Charlotte, NC, Outpacing Nationwide Growth in Banking, Set for Further Expansion," *S&P Global Market Intelligence*, May 16, 2019, <u>https://www.spglobal.com/marketintelligence/en/news-insights/trending/kdZchEwDkYSXozJJ7Z8gQA2.</u>
- 90. Sam Levin, "'There's No Way to Stop This': Oakland Braces for the Arrival of Tech Firm Square," *The Guardian*, July 2, 2019, https://www.theguardian.com/cities/2019/jul/02/theres-no-way-to-stop-this-oakland-braces-for-the-arrival-of-techfirm-square.
- 91. Joe Rubino, "Downtown Denver, by the Numbers: 26,000 Residents, 120 New Tech Companies, \$3 Billion in Investment," *The Denver Post*, May 17, 2019, https://www.denverpost.com/2019/05/17/downtown-denver-economic-boom-continues/.
- 92. Lauren Feiner, "Amazon Plans to Create 400 Tech Jobs in Denver with New Office Expansion," *CNBC*, April 30, 2019, <u>https://www.cnbc.com/2019/04/30/amazon-to-create-400-new-tech-jobs-in-denver-with-new-office-expansion.html</u>; Allison Sylte, "Lockheed Martin Bringing 550 New Jobs to Jefferson County," *9news.com*, December 26, 2018, <u>https://www.9news.com/article/money/business/lockheed-martin-bringing-550-new-jobs-to-jefferson-county/73-672d85af-8b02-44ae-8b56-3c87611f1738</u>.
- 93. "Denver, CO," Précis Metro, Moody's Analytics, August 2019.
- 94. "Denver, CO," Précis Metro, Moody's Analytics, August 2019.
- 95. "Olympia, WA," Moody's Analytics, July 2019.
- 96. "Greeley, CO," Précis Metro, Moody's Analytics, July 2019.
- 97. Karl Bode, "Colorado Town Offers 1 Gbps for \$60 After Years of Battling Comcast," *Techdirt*, September 17, 2019, <u>https://www.techdirt.com/articles/20190904/08392642916/colorado-town-offers-1-gbps-60-after-years-battling-comcast.shtml</u>.
- 98. "Hill Air Force Base Opening New \$35 Million Software Facility," *KSL.com*, February 11, 2019, <u>https://www.ksl.com/</u> article/46486777/hill-air-force-base-opening-new-35-million-software-facility.
- 99. Jessica Kokesh, "Weber State Granted \$50 Million from State for the Construction of a New Technology Building," *Standard-Examiner*, March 18, 2019, <u>https://www.standard.net/news/education/weber-state-granted-million-from-state-for-the-construction-of/article_ffed386c-49f8-5d60-afec-3747a7a1b1f0.html</u>.
- 100. "Cape Coral-Fort Myers, FL," Précis Metro, Moody's Analytics, April 2019.
- 101. Frank Gluck, "Lee Health Eyeing \$1.3 Billion for Building, Equipment Costs Through 2027," *News-Press USA Today*, June 2019, <u>https://www.news-press.com/story/news/2017/06/28/lee-health-eyeing-1-3-billion-building-equipment-costs-through-2027/431572001/.</u>
- 102. Laura Layden, "Tourism Took a Hit in Lee County in 2018 Thanks to Toxic Algae Crisis," Naples Daily News, February 18, 2019, <u>https://www.naplesnews.com/story/money/business/local/2019/02/18/lee-county-tourism-took-hit-2018-due-water-crisis/2882999002/</u>.
- 103. Noah Buhayar and Lauren Leatherby, "Welcome to Tax Breaklandia," *Bloomberg Businessweek*, accessed January 13, 2020, https://www.bloomberg.com/graphics/2019-portland-opportunity-zones/.
- 104. Mike Rogoway, "Oregon Tech Accelerates; Broader Job Market Slows," *Oregonlive*, May 30, 2019, https://www.oregonlive.com/silicon-forest/2019/05/oregon-tech-accelerates-broader-job-market-slows.html.
- 105. Mike Rogoway, "Amazon Will Hire 400 for Expanded Portland Office," *Oregonlive*, August 21, 2019, https://www.oregonlive.com/silicon-forest/2019/08/amazon-will-hire-400-for-expanded-portland-office.html.
- 106. "Portland-Vancouver-Hillsboro, OR," Précis Metro, Moody's Analytics, August 2019; Christian Wihtol, "OHSU Profits Even Higher than Expected," *The Lund Report*, September 24, 2019, <u>https://www.thelundreport.org/content/ohsu-profits-even-higher-expected</u>.
- 107. "Riverside-San Bernardino-Ontario, CA," Précis Metro, Moody's Analytics, August 2019.
- 108. "\$225 Million in Funding Approved for I-10 Corridor Project," *InlandEmpire.US*, May 2, 2019, <u>https://inlandempire.us/225-</u>million-in-funding-approved-for-i-10-corridor-project/.

ENDNOTES

109. "Salt Lake City, UT," Précis Metro, Moody's Analytics, July 2019.

BEST-PERFORMING CITIES 2020

- 110. Angelyn Ramos, "Salt Lake City to Become Innovative Zone Alongside New York City," *The Daily Utah Chronicle*, September 28, 2019, https://dailyutahchronicle.com/2019/09/28/salt-lake-city-to-become-innovative-zone-alongside-new-york-city/.
- 111. "Bay Area-based Brex to Set up Shop in Salt Lake Valley," *KSL.com*, September 13, 2019, <u>https://www.ksl.com/</u> article/46637566/bay-area-based-brex-to-set-up-shop-in-salt-lake-valley.
- 112. Kim Souza, "Tyson Foods to Invest \$300 Million in New Beef Plant in Salt Lake City," *Talk Business*, May 10, 2019, https://talkbusiness.net/2019/05/tyson-foods-to-invest-300-million-in-new-beef-plant-in-salt-lake-city/.
- 113. "Bend-Redmond, OR," Précis Metro, Moody's Analytics, July 2019; Mike Allen, "St. Charles Gets \$1 Million 'Cap Challenge Grant' for New Tower," *KTVZ*, February 22, 2019, <u>https://ktvz.com/news/2019/02/22/st-charles-gets-1-million-cap-challenge-grant-for-new-tower/.</u>
- 114. Suzanne Roig, "Hotel Developers Plan 600 New Rooms for Bend, Redmond," *The Bulletin*, February 8, 2019, https://www.bendbulletin.com/business/6906218-151/hotel-developers-plan-600-new-rooms-for-bend.
- 115. Luisa Beltran, "Dutchie Raises \$15 Mln," *PE Hub*, September 11, 2019, <u>https://www.pehub.com/2019/09/dutchie-raises-15-mln/;</u> Jessica Jackson, Joe Lee, Michael C.Y. Lin, and Minoli Ratnatunga, *Best-Performing Cities 2018: Where America's Jobs are Created and Sustained* (Milken Institute, January 2019), <u>http://www.best-cities.org/2018/best-performing-cities-report-2018.pdf</u>.
- 116. Mike Rogoway, "Bend Robotic Sex Toy Company Gets Tech Award Back, Lands \$2 Million Investment," *Oregonlive*, May 8, 2019, <u>https://www.oregonlive.com/silicon-forest/2019/05/bend-robotic-sex-toy-company-gets-tech-award-back-lands-2-million-investment.html.</u>
- 117. "Bend-Redmond, OR," Précis Metro, Moody's Analytics, July 2019.
- 118. Suzanne Roig, "Deschutes County Is Oregon's Third-largest Hemp Growing County," *The Bulletin*, March 18, 2019, https://www.bendbulletin.com/business/7009591-151/deschutes-county-is-oregons-third-largest-hemp-growing-county.
- 119. Kathleen McLaughlin, "Sisters Company Raises \$32 Million for Expansion," *The Bulletin*, December 12, 2018, https://www.bendbulletin.com/business/6762567-151/sisters-company-raises-32-million-for-expansion.
- 120. "Grants Pass, OR," Précis Metro, Moody's Analytics, March 2019.
- 121. JJ DeForest, "St. George Area Ranked Third in US for Population Growth," *The Spectrum*, April 18, 2019, https://www.thespectrum.com/story/news/2019/04/18/st-george-utah-population-growth/3511212002/.
- 122. Mori Kessler, "Washington City Hopes to Draw \$1 Billion 'Mega Site' Investment with 800-acre Annexation," *St. George News*, May 17, 2019, <u>https://www.stgeorgeutah.com/news/archive/2019/05/17/mgk-washington-city-hopes-to-draw-</u> 1-billion-mega-site-investment-with-800-acre-annexation/#.XZex40ZKiUk.
- 123. Joseph Witham, "Downtown St. George Among Country's Most Economically Distressed Areas that Could Get 'Opportunity Zone' Boost," *St. George News*, June 2, 2019, <u>https://www.stgeorgeutah.com/news/archive/2019/06/02/</u> jcw-bsn-downtown-st-george-among-countrys-most-economically-distressed-areas-that-could-get-opportunity-zoneboost/#.XZe4v0ZKiUk.
- 124. "Coeur d'Alene, ID," Précis Metro, Moody's Analytics, July 2019.
- 125. Ibid.
- 126. Jim Ross, "The Villages' Growth Still Strong," *Ocala.com*, April 18, 2019, <u>https://www.ocala.com/news/20190418/villages-</u>growth-still-strong.
- 127. David R. Corder, "New Home Construction Soars in 2017 in Villages: Growth up 93 Percent, Value at \$446M," *The Villages Daily Sun*, January 29, 2018, <u>https://www.thevillagesdailysun.com/growth/new-home-construction-soars-in-in-villages-growth-up-percent/article_12ad1eda-04fe-11e8-b71c-5b878bbf6a56.html</u>.
- 128. "The Villages, FL," Census Reporter, US Census Bureau, 2018, https://censusreporter.org/profiles/16000US1271625-the-villages-fl/.
- 129. "The Villages, FL," Précis Metro, Moody's Analytics, April 2019.
- 130. "Idaho Falls, ID," Précis Metro, Moody's Analytics, March 2019.
- 131. Ibid.
- 132. Nathan Brown, "INL Looks to Downsize by Nearly 100 Workers," *Idaho State Journal*, June 17, 2018, https://www.idahostatejournal.com/news/local/inl-looks-to-downsize-by-nearly-workers/article_e561f8fa-9ea8-5a0f-88bc-62cc7f6fea50.html.

ENDNOTES

BEST-PERFORMING CITIES 2020

- 133. Marc Basham, "Northwest Cosmetic Labs Looks to Continue Expansion Under New CEO," *Magicvalley.com*, April 15, 2018, <u>https://magicvalley.com/news/local/northwest-cosmetic-labs-looks-to-continue-expansion-under-new-ceo/article_4b5cfccd-39c8-5f30-be40-07a7d0c43316.html</u>.
- 134. "Idaho Falls, ID," Précis Metro, Moody's Analytics, March 2019.
- 135. Ryan Suppe, "Costco Expected to Spur Economic Development in Northeast Idaho Falls, Ammon," *Idaho State Journal*, April 29, 2019, <u>https://www.idahostatejournal.com/news/local/costco-expected-to-spur-economic-development-in-northeast-idaho-falls/article_3f81fb6e-e7a7-524a-813b-d465026d7132.html.</u>
- 136. "Idaho Falls, ID," Précis Metro, Moody's Analytics, March 2019.
- 137. Megan Reed, "Fox Relocating Headquarters to Gainesville, Creating up to 800 Jobs," *Gainesville Times*, October 31, 2018, https://www.gainesvilletimes.com/news/fox-relocating-headquarters-gainesville-creating-800-jobs/.
- 138. B.J. Williams, "AMD to Build Fulfillment Center in Gateway Industrial Centre," *accessWDUN*, December 5, 2018, https://accesswdun.com/article/2018/12/741560/amd-to-build-fulfillment-center-in-gateway-industrial-centre.
- 139. "Gainesville, GA," Précis Metro, Moody's Analytics, April 2019.
- 140. Megan Reed, "What Fieldale Farms Plans over the Next 20 Years," *Gainesville Times*, August 8, 2018, https://www.gainesvilletimes.com/news/what-fieldale-farms-plans-over-next-20-years/.
- 141. "Gainesville, GA," Précis Metro, Moody's Analytics, April 2019.
- 142. Ibid.
- 143. "Northeast Georgia Medical Center Opens Lumpkin County Campus," *The Georgia Sun*, July 16, 2019, https://www.underthegeorgiasun.com/2019/07/16/northeast-georgia-medical-center-opens-lumpkin-county-campus/.
- 144. Jessica Saunders, "Kubota Plans \$85M, 300-acre Expansion in Gainesville, GA," *Atlanta Business Chronicle*, July 24, 2019, https://www.bizjournals.com/atlanta/news/2019/07/24/kubota-plans-85m-300-acre-expansion-in-gainesville.html.
- 145. "Sebastian-Vero Beach, FL Metro Area," Census Reporter, US Census Bureau, accessed January 13, 2020, https://censusreporter.org/profiles/31000US42680-sebastian-vero-beach-fl-metro-area/.
- 146. Data Buffet, Moody's Analytics.
- 147. "Cleveland Clinic Indian River Hospital," *VeroBeach.com*, accessed January 13, 2020, <u>https://verobeach.com/vero-beach-</u>directories/indian-river-medical-center.
- 148. Dave Gallagher, "Bellingham-based High-tech Firm Receives Major Investment, Expects to Hire Workers," *The Bellingham Herald*, April 23, 2019, https://www.bellinghamherald.com/news/business/article229552194.html.
- 149. "Bellingham, WA," Précis Metro, Moody's Analytics, July 2019.
- 150. "PeaceHealth Announces Plans to Open a Medical Clinic in Lynden to Serve North Whatcom County," *Whatcom Talk*, accessed January 13, 2020, <u>https://www.whatcomtalk.com/2019/02/20/peacehealth-announces-plans-to-open-a-medical-clinic-in-lynden-to-serve-north-whatcom-county/.</u>
- 151. "Bellingham, WA," Census Reporter, US Census Bureau, accessed January 13, 2020, <u>https://censusreporter.org/</u> profiles/16000US5305280-bellingham-wa/.

WHERE AMERICA'S JOBS ARE CREATED AND SUSTAINED

ENDNOTES

ACKNOWLEDGMENTS

The authors thank Ross DeVol, the creator of the Best-Performing Cities Index, for providing the strong foundation on which they built this report. We are also grateful to Kevin Klowden, Eugene Cornelius, Jr., and Misael Galdamez in the Institute's Center for Regional Economics for their ideas and input.

ABOUT THE AUTHORS

MICHAEL C.Y. LIN, PHD, associate director and economist at the Milken Institute's Center for Regional Economics. His current research focuses on evaluating urban and regional economic performance and exploring the determinants of their growth and decline. He was also involved in writing several policy reports on green buildings, sustainable community development, and informal housing. Lin published articles in Annals of Regional Science and two book chapters on community planning and shrinking cities. He has also been participating in peer reviews for various academic journal articles. In addition to being an urban and regional economist, Lin is a data analyst utilizing both econometric and machine learning methods in his research, which grants him to teach students in using Python, R, SAS, and SPSS for data analysis at the University of Southern California (USC). Lin holds a bachelor's degree in architecture and a master's degree in urban design, both from the National Taipei University of Technology in Taiwan. He also earned a certificate in real estate with a concentration in investments from the University of California, Los Angeles Extension and a PhD in policy, planning, and development with a specialization in urban development from USC.

JOE LEE was a research analyst with the Milken Institute on the regional economics team. He specialized in labor economics with a focus on human capital and regional competitiveness. At the Milken Institute, Lee focused on how the US was impacted by changes in technology, geography, and opportunity. Lee's work contributed to the Center for Regional Economics research on how human capital develops regional economic clusters in the US. He has a focus on commercialization of R&D, the development of local labor, and geographic mobility. He recently presented research at the 2018 Western Economic Association International conference, where he showcased work on academic research and development of local high-tech labor. Lee received his master's in economics from California State University, Long Beach, and his undergraduate degree is from The Evergreen State College.

PERRY WONG is managing director of research at the Milken Institute. He is an expert in regional economics, development, and econometric forecasting and specializes in analyzing the structure, industry mix, development, and public policies of a regional economy. He designs, manages, and performs research on labor and workforce issues, the relationship between technology and economic development, and trade and industry, with a focus on policy development and implementation of economic policy in both leading and disadvantaged regions. Wong is actively involved in projects aimed at increasing access to technology and regional economic development in California and the rest of the United States. His work extends to the international arena, where he is involved in regional economic development in greater China and other parts of Asia. Prior to joining the Institute, Wong was a senior economist and director of regional forecasting at Global Insight Inc. (formerly Wharton Econometric Forecasting Associates Inc.), where he managed regional quarterly state and metropolitan area forecasts and provided consultation. There, he designed regional modeling systems and contributed to regional economic impact studies on such topics as budget reduction and health-care reform. Wong has conducted many research studies regarding regional economic development and policy impacts on the public and private spheres. These include the impact of US budget and trade policy on key US industries and regions, health-care reform and its implications for the federal budget, the Kyoto Agreement and its impact on the well-being of US regional economies, and the pharmaceutical industry's contribution to Pennsylvania's economy.

BEST-PERFORMING CITIES 2020

ACKNOWLEDGMENTS

WHERE AMERICA'S JOBS ARE CREATED AND SUSTAINED ABOUT THE AUTHORS





SANTA MONICA | WASHINGTON | NEW YORK | LONDON | ABU DHABI | SINGAPORE