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MARCH 2023

# MOST DYNAMIC METROS 2022

HEARTLANDFORWARD.ORG



**HEARTLAND  
FORWARD**

AN INSTITUTE FOR ECONOMIC RENEWAL

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## HEARTLAND FORWARD

AN INSTITUTE FOR ECONOMIC RENEWAL

### ABOUT HEARTLAND FORWARD

Heartland Forward’s mission is to improve economic performance in the center of the United States by advocating for fact-based solutions to foster job creation, knowledge-based and inclusive growth and improved health outcomes. We conduct independent, data-driven research to facilitate action-oriented discussion and impactful policy recommendations.

The views expressed in this report are solely those of Heartland Forward.





# EXECUTIVE SUMMARY

America's top metropolitan areas are joined by at least one common thread – an affinity for innovation. Whether their business is building cars or showing off their natural wonders, these thriving areas are meeting the future with open arms and a cutting-edge mindset.

Larger areas consistently turn innovation into firms where high-paying jobs support an enviable quality of life. Smaller metros offering access to prime outdoor amenities and tourism also are performing well, and several long-stagnant heartland giants are on the rebound behind a fresh focus that emphasizes innovative capacity and lifestyle over industrial recruitment.

Heartland Forward and others have hypothesized that global supply chain issues would cause companies to recalculate the cost of overseas manufacturing<sup>1</sup>, and our index supports that hypothesis: a group of American car makers is experiencing an economic renaissance—in many cases attributable to electric vehicles and supplies of new components, such as batteries. Intel has broken ground on two new computer-chip plants in New Albany, Ohio, just east of Columbus—the country's first chip-production facility east of the Mississippi River. The most significant development over last year involves oil-dependent metros, where elevated gas prices have reversed the fortunes of communities hardest hit at the outset of the COVID-19 pandemic. Only seven metros experienced positive job growth from 2019 to 2020; however, 367 posted gains in 2021, as the economy regained much of what was lost a year earlier as the world grappled with the pandemic.

Which metros occupied our top five positions? San Jose-Sunnyvale-Santa Clara, California (Silicon Valley), retained the top spot based upon our metrics, largely due to its No. 1 rating for young-firm knowledge intensity and bold environment that includes serial entrepreneurs and venture capital.

Elkhart-Goshen, Indiana is raking in the proceeds of the rapid expansion in travel, tourism and outdoor recreation and comes in second highest among heartland metros. Record-setting sales in 2021 confirmed its position as the recreation vehicle (RV) capital of the world and boosted its gross metro product growth by 25.3%, best in the nation.

San Francisco-Oakland-Berkeley, California, rates third. It has the nation's densest high-tech service economy and the second-highest five-year average annual wage growth, which stands to reason given that 36.7% of its young-firm labor force holds a bachelor's degree or higher.

Austin-Round Rock, Texas, ranks fourth and is the heartland's top tech hub. Its business-friendly and forward-thinking environment make this fast-growing metro—employment swelled by 7.8% between June 2021 and June 2022—highly desirable to innovative firms.

The Villages, Florida, is rated fifth overall. It is a retirement mecca where rapid growth is fueled by construction and health-care expansion to meet the needs of the growing retiree population. The Villages boast the fastest five-year average annual employment growth in the nation.

Table ES1 provides the top 25 metros for this year. Other observations from that list include:

- Florida has five metros in the top 25, leading all states.
- The Mountain states have eight metros in the Top 25, led by Utah with three.
- Heartland states claim three of the top six metros and four of the top 11.
- More than half of the top 25 have benefitted from a post-COVID recovery in tourism and outdoor recreation.
- Roughly one-third of the top 25 are innovation hubs.

## ES 1 - TOP 25 METROPOLITAN AREAS

1. San Jose-Sunnyvale-Santa Clara, California
2. Elkhart-Goshen, Indiana
3. San Francisco-Oakland-Berkeley, California
4. Austin-Round Rock-Georgetown, Texas
5. The Villages, Florida
6. Midland, Texas
7. Boulder, Colorado
8. Naples-Marco Island, Florida
9. Provo-Orem, Utah
10. St. George, Utah
11. Nashville-Davidson-Murfreesboro-Franklin, Tennessee
12. Logan, Utah-Idaho
13. Reno, Nevada
14. Seattle-Tacoma-Bellevue, Washington
15. Bend, Oregon
16. Ocean City, New Jersey
17. Punta Gorda, Florida
18. North Port-Sarasota-Bradenton, Florida
19. Raleigh-Cary, North Carolina
20. Boise City, Idaho
21. Las Vegas-Henderson-Paradise, Nevada
22. Boston-Cambridge-Newton, Massachusetts-New Hampshire
23. Salt Lake City, Utah
24. Orlando-Kissimmee-Sanford, Florida
25. Fort Collins, Colorado

While this annual report ranks 382 metros nationwide, Heartland Forward's primary purpose is to help accelerate economic performance in the middle United States; therefore, we have a vested interest in understanding how heartland metros are ranked and why.

The region continues to stand out, posting some of the largest jumps from last year. Springfield, Ohio, gained 190 spots to stand 146<sup>th</sup> overall, making it the nation's second-most improved metro.

Table ES-2 provides the 10 most-improved metros in the heartland, several of which reflect the region's rebound in automotive manufacturing.

## ES-2 TOP 10 MOST IMPROVED HEARTLAND METRO AREAS

Metro Name	State	2021 Rank	2022 Rank	Improvement
Springfield, OH	Ohio	336	146	190
Columbus, IN	Indiana	360	184	176
Morristown, TN	Tennessee	322	158	164
Kalamazoo-Portage, MI	Michigan	261	119	142
Dubuque, IA	Iowa	294	154	140
Detroit-Warren-Dearborn, MI	Michigan	234	111	123
Battle Creek, MI	Michigan	324	203	121
Waterloo-Cedar Falls, IA	Iowa	328	211	117
Victoria, TX	Texas	380	267	113
Kingsport-Bristol, TN-VA	Tennessee	351	240	111

# INTRODUCTION

The 2022 edition of Most Dynamic Metropolitans analyzes the economic performance of America's metros as they restabilize in a post-COVID-19 world. By tracking employment, income, economic production and young firms, this index captures both historic and forward-looking indicators that enable cities to evaluate policies impacting local economic performance. Additionally, we provide insights regarding industrial and contextual trends that can inform policy development in underperforming metropolitans.

The characteristics of successful metros have changed in some ways over the past year; in other ways, they have not. Smaller metros offering access to high-quality outdoor amenities continue to perform well, and America's innovation hubs are mainstays in the upper echelon of our rankings. Even long-dormant heartland giants are among the most-improved metros, as their economic development strategies focus more on innovative capacity and quality of life. Heartland Forward and others have hypothesized that global supply chain issues would prompt companies to recalculate the cost of offshore manufacturing,<sup>2</sup> and our index supports that hypothesis: A group of American car-manufacturing hubs is experiencing an economic renaissance. The most significant deviation from last year is among oil-dependent metros, where elevated gas prices have reversed the fortunes for the communities hardest hit early on in the pandemic period.

Overall, our data indicates that the past two years brought very different economic conditions than 2020. Only seven metros experienced positive job growth from 2019 to 2020, but 367 posted gains from 2020 to 2021. And while inflation has hampered economic recovery from the 2020 recession, 357 metros still added jobs from June 2021 to June 2022.

Focusing on the top metros in our 2022 index, San Jose-Sunnyvale-Santa Clara, California, is the most dynamic metropolitan for the second year in a row. Its Silicon Valley counterpart, San Francisco-Oakland-Berkeley, is again third. Neither should come as a surprise since those areas thrive on innovation. What

may be surprising is that Elkhart-Goshen, Indiana—known as the RV Capital of the World—continues to support America's re-established love of road trips by supplying the requisite teardrop campers, camper vans and motor homes. Austin-Round Rock-Georgetown, Texas, has improved to fourth and continues to earn media predictions as the nation's next great innovation hub. The Top 25 again are dominated by the Mountain West and Pacific Northwest, although not quite as heavily as 2021; the combined region has 11 of the Top 25 in 2022 versus 15 in 2021.

The most improved metro is Kahului-Wailuku-Lahaina, Hawaii, which saw significant short-term growth following the reopening of the Hawaiian tourism industry. The second-most improved metro is Springfield, Ohio, which leads a group of rising heartland automotive manufacturers. Meanwhile, the automotive powerhouse that is Detroit-Warren-Dearborn, Michigan, experienced the 15<sup>th</sup>-largest jump, reflecting the rising tide of the biggest heartland metros. In the southern heartland, communities such as Chattanooga, Tennessee-Georgia, are improving because they have created a quality of life competitive with anywhere in the country.

In summary, the 2022 edition has four heartland communities within the Top 25, including Elkhart-Goshen at No. 2 overall. Seven heartland metros are in the Top 50, including 34<sup>th</sup>-ranked Fayetteville-Springdale-Rogers, Arkansas; and 17 landed among the Top 100. This reflects marked improvement over last year's edition, when Austin-Round Rock-Georgetown, Texas, was the only heartland metro in the Top 10, and there were only four heartland metros in the Top 50 and 17 in the Top 100.

As with previous reports in this series, we first describe our methodology and then provide a more detailed look into themes that emerged from the analysis. Not only do readers get a look at the industries that are leading the post-COVID economy, but we attempt to identify what these cities are doing to foster the highlighted results. Our hope is that these case studies and metrics provide communities with insights to advance their local economies.

# METHODOLOGY

The 2022 Most Dynamic Metropolitans are ranked using values calculated from six economic growth measures for all metropolitan statistical areas in the United States :

- Average annual wage
- Employment
- Real gross domestic product (GDP; measured in 2012 dollars)
- Per-capita personal income
- Share of total employment at firms ages 5 years and under (young-firm employment share)
- Share of employees at young firms with a bachelor's degree or higher (young-firm knowledge intensity).<sup>3</sup>

We then separate these measurements into time-sensitive categories, such as short- and medium-term growth, to look at the economic performance of each metropolitan statistical area (MSA) in the nation. Short-term growth is defined by annual changes in our metrics like 2020-21 real GDP growth, 2020-21 employment growth, 2020-21 average annual wage growth, and employment growth over a 12-month period from June 2021-June 2022. The medium-term economic growth measurements are defined as five-year changes: 2016-21 employment growth, 2016-21 average annual wage growth and 2016-21 real GDP growth. The 2021 level of per-capita personal income is also a medium-term economic growth measurement because it represents the stock of all previous welfare improvements.

Lastly, we include the forward-looking indicators of young-firm employment share and young-firm knowledge intensity. Young-firm employment share allows us to understand the ability of entrepreneurs to start new firms in a region, while young-firm knowledge intensity provides insights into potential innovation driven by educational attainments within these young firms.<sup>4</sup>

The 2022 rankings utilize the most recent MSA delineations by the federal Office of Management and Budget (OMB); Bulletin No. 20-01 and its delineation file as released in March 2020. Data availability allows us to analyze 382 MSAs for the 2022 rankings. Bulletin 20-01 denotes 384 metropolitan statistical areas in the United States. (Cape Girardeau, Missouri-Illinois, and St. Joseph, Missouri-Kansas, are the only two metros excluded due to a lack of young-firm data from the U.S. Census Bureau. They were excluded a year ago for the same reason.)

We also implemented regional price parity (RPP) from the Bureau of Economic Analysis (BEA) to adjust per-capita personal income and average annual wages to control for cost-of-living variations. Specifically, nominal per-capita personal income and average annual wages are divided by regional price parity corresponding with each MSA. This adjustment demonstrates whether an area's prices of goods and services are above or below the national average. By using RPP in our calculations, we can successfully account for inflation and purchasing power for each MSA.

All data gathered and calculated from the Bureau of Labor Statistics (BLS), the Bureau of Economic Analysis (BEA) and the Census Bureau are summarized as a standardized z-score.

This z-score is useful for several reasons. Each MSA will have a unique value indicating its proximity to the sample mean. Z-scores also have an intuitive interpretation: the value indicates a measurement's distance from the mean in standard deviations. A positive z-score value for each measurement generally indicates a better economic performance against the average. MSAs are ranked according to their average z-score across all metrics. Figure 1 shows how the z-score is computed for a given metric in each MSA.

**FIGURE 1: HOW A Z-SCORE IS COMPUTED IN EACH MSA FOR A SPECIFIC METRIC**

$$\text{Z-Score} = \frac{(x - \text{mean})}{\text{standard deviation}}$$

X corresponds to a particular community's value of a specific metric

**TABLE 1: METRICS BY DATA SOURCE**

Measurements Table		
Measure	Time Period	Source
Young Firm Employment Ratio	2020	Census Bureau
Young Firm Knowledge Intensity	2020	Census Bureau
Per-Capita Personal Income	2021	Bureau of Economic Analysis
Medium-Term Job Growth	2016-2021	Bureau of Labor Statistics
Short-Term Job Growth	2020-2021	Bureau of Labor Statistics
Short-Term Job Growth Momentum	Jun. 2021-Jun. 2022	Bureau of Labor Statistics
Medium-Term Average Annual Pay Growth	2016-2021	Bureau of Labor Statistics
Short-Term Average Annual Pay Growth	2020-2021	Bureau of Labor Statistics
Medium-Term GDP Growth	2016-2021	Bureau of Economic Analysis
Short-Term GDP Growth	2020-2021	Bureau of Economic Analysis

# DATA TRENDS

## TOP-RANKED METROS

**San Jose-Sunnyvale-Santa Clara, California** (Silicon Valley) retained the top spot from a year ago. It has a unique combination of technology anchor firms and the ability to launch and scale knowledge-intensive companies that can be its future champions. Nearly 40% of employees at firms less than six years old hold bachelor's degrees—best in the nation. Its serial entrepreneurs have access to venture capital (VC) and all the support services needed to excel. Despite a decline in VC placements in 2022, Silicon Valley received \$1 for every \$3 invested across the nation. The Valley even managed to benefit from remote work, even though it was a victim of the disintermediation. Deel, a human resources management platform firm serving companies with remote workers spread globally, raised \$500 million in investments in less than a year. Recent tech layoffs do not portend a retrenchment in long-term prospects, as the industry is inherently volatile.

**Elkhart-Goshen, Indiana** is a beneficiary of rapid expansion in travel, tourism and outdoor recreation and comes in second—best among heartland metros. Elkhart is known as the recreational vehicle (RV) capital of the world and was seeing strong growth in demand even before the pandemic that only increased

as outdoor recreation was substituted for other forms of travel and tourism. RV sales hit a record in 2021, buoying a local economy where motor vehicle body and trailer manufacturing represent 26.6% of total metro employment, which is more than 200 times as important to its economy as to the nation. Gross metro product rose by 25.3% (highest in the nation), while employment jumped 10.1% (third highest nationally). As RV sales slowed in 2022, unemployment edged up to 2.1% but remains one of the lowest measures in the U.S.

The RV local supply chain is extensive and highly integrated and, compared with other manufacturing operations, accounts for 51.5% of employment in Elkhart versus 8.5% for the nation—highest of any metro area. The downside is that Elkhart's economy is very cyclical. Community leaders are working to upskill the workforce and address labor shortages by forming the RV Technical Institute.

Launch Elkhart is an initiative to support the formation and growth of new businesses, and to diversify the area's economy. Frontier Communications is providing high-speed internet access to many startups in hopes of boosting entrepreneurial success. Social capital in the area is deep, built by established trust and cohesion.

*Elkhart, Indiana*



**San Francisco-Oakland-Berkeley, California** ranks third on the strength of being the world's densest high-tech service economy. Recent layoffs at Twitter, Meta, Salesforce and other softer-tech service giants only moderately dented its growth rate. Remarkably, San Francisco had the second-highest growth in average annual pay from 2016-2021 and is eclipsed only by its neighbor to the south (Silicon Valley) in percentage of employees (36.7%) at young firms with a bachelor's degree or above. Biotechnology remains a major component of the economy, thanks in part to the area being home to Genentech, the world's first biotech firm.

**Austin-Round Rock, Texas** is the heartland's top tech hub and comes in fourth overall in our Most Dynamic Metros. Austin is a dual threat to competing areas, combining a business-friendly environment attractive to highly innovative firms from the coasts (mainly Silicon Valley) with a dense entrepreneurial ecosystem of its own. Austin is among eight metros that rank in our top 60 on share of employment at young firms and for employee percentage at those firms with a bachelor's degree or above. Its employment growth of 7.8% was third-fastest overall between June 2021 and June 2022.

The maturation of Austin's entrepreneurial ecosystem is exhibited by the doubling of venture capital investments in 2021, when placements reached \$6.6

billion, a modest decline in 2022 in step with the national pattern. One prominent startup is Wheel, a multichannel digital health care platform providing a comprehensive patient-experience system. Professional and business services jobs—among the highest paying—recorded growth of 6.9% over the most recent 12-month period.

Tesla is undergoing a massive expansion, with employment reaching 10,000 in 2022. Tesla's target is to produce 500,000 electric vehicles in 2023 at its Gigafactory and become the largest power cell factory for the firm. Samsung, with nearly 9,000 employees in Austin, has announced a new \$17 billion chip plant in Taylor and has discussed the possibility of 11 more plants. Austin is a talent magnet with net migration of 35,900 in 2022—representing 1.5% of the existing population base. It has one of the nation's highest levels of educational attainment, with 47% of its population 25 and older holding at least a bachelor's degree.

**The Villages, Florida** was fifth overall on the strength of rapid population growth among retirees. In fact, it leads our rankings in terms of portion of individuals 65 and older—more than 50% of its total population. Yet, at 28%, it had the fastest employment growth in the nation between 2016 and 2021. Construction and health care have seen exceptional growth, as well as retail expansion.



*San Francisco, California*

**Midland, Texas** rebounded from 38<sup>th</sup> to sixth, courtesy of a recovery in oil prices and resurgence of exploration. However, the upturn in energy fortunes has not translated into a commensurate surge in jobs and overall economic activity. Producers have redirected much of the improved cash flow towards debt reduction and share repurchases rather than tapping new reservoirs. Nevertheless, Midland saw job growth of 9.1% from June 2021 to June 2022—best across all metros—and even surpassed Silicon Valley with the highest per capita income when adjusted for regional price parity.

Midland is more closely tied to the fortunes of the oil industry than any other U.S. metro area. It is capital of the Permian Basin, which produces one in five barrels of oil in the country. Support activities for mining, along with oil and gas extraction, are 102.6 and 86.6 times more concentrated than for the nation overall, respectively. Mining represents 23.2% of total employment in Midland and has average annual earnings of \$173,000. As oil prices began to recover and sanctions were placed on Russian oil exports, demand for Permian Basin production has climbed. In January 2023, the basin produced a record 5.6 million barrels of oil per day, and improved transportation has the Permian exerting more influence on global oil pricing than ever before.

Other important sectors include health care, ranching and agriculture. Economic development officials are attempting to diversify Midland's economy, as aerospace is being targeted for expansion. It has a niche in testing and qualification of payloads, space and pressure suits, and trains new flight crews. Midland has a high level of entrepreneurship, ranking sixth in the proportion of jobs at firms in business less than six years.

**Boulder, Colorado** has a unique combination of attributes propelling it from ninth in 2021 to seventh this year. It is home to the University of Colorado, Boulder, and has several other research centers, along with a renowned entrepreneurial culture and scaleup ecosystem. Boulder ranks fourth in knowledge intensity of its young firms and 35<sup>th</sup> overall in proportion of jobs that are at young firms. Boulder has operations of medical technology firms such as Medtronic, along with

other tech firms like Google, Seagate Technology and IBM. High-tech jobs are nearly four times as important in Boulder as in the nation as a whole. Access to premier outdoor recreation bolsters the quality of life and attractiveness of the region. Its steady economic performance is underscored by its posting of the third-fastest growth in average annual pay in the nation over the past five years.

**Naples-Immokalee-Marco Island, Florida** joins our Most Dynamic Metropolitan list at No. 8. However, the metrics in our evaluation system all precede Hurricane Ian making landfall in Florida on Sept. 28, 2022, causing widespread devastation in this area. Naples' economy is highly dependent on the leisure and hospitality sector. A mixture of scenic beaches and well-known wetland forests makes it a haven for tourists and wealthy retirees. High-tech firms are growing in the region, including Arthrex, a developer of advanced medical devices and surgical techniques and one of the area's biggest firms.

**Utah** metros **Provo-Orem and St. George** log in at ninth and 10<sup>th</sup>, respectively. Provo-Orem has been among the nation's top performers over the past two decades. Home to Brigham Young University, which produces many graduates in STEM fields, the area now has double the concentration of high-tech jobs as compared with the nation. Provo's economy is entrepreneurial, ranking ninth in proportion of total jobs at young firms and 48<sup>th</sup> in knowledge intensity. St. George benefits from Zion National Park, Red Bull Ramage (a premier mountain-biking event) and other world-class outdoor recreation options, resulting in a distinctive tourism setting. Its economic fortunes benefited from remote work during COVID-19, but strong demand drove housing prices above the national average.

**Nashville-Davidson-Murfreesboro-Franklin, Tennessee** joins its heartland neighbors in enjoying a dynamic economy at 11<sup>th</sup> overall, a significant jump from 95<sup>th</sup> last year. As a tourism and entertainment center, its economy was hit hard by the pandemic, as many venues closed. Nashville has a mix of educational assets (Vanderbilt University and its medical center), health care facilities, auto manufacturing plants (Nissan and General Motors) and logistics and supply-



chain fulfillment (think Amazon) that are propelling employment and wage gains. Nashville recorded the fourth-highest growth in real GDP in 2021 and was 14th in job growth between June 2021 and June 2022.

The area has benefited from a number of corporate relocations and expansions over the past decade—a testament to its business-friendly environment and talented workforce. An indicator of that talent is that 42% of its adult population hold a bachelor's degree or above. Professional and business-service jobs are surging, with robust growth in management, scientific and technical consulting services.

Nashville's medical and health-care complex is among the largest in the nation. Greater Nashville has 250 health care firms; 17 are publicly traded, directly and indirectly employing 250,000 people while generating \$46 billion (one of every three dollars in the region) in local economic impact. Software giant Oracle has announced a \$1.2 billion investment that is expected to create more than 8,000 jobs in the metro area over the next decade.

**Logan, Utah-Idaho** remains in the upper tier of performers this year at 12<sup>th</sup>. Utah State University is a major asset, and the area's low business costs provide a strong underpinning for its economy. Economic

drivers range from dairy farming to biotech, with Piece Biotechnology being a major employer. Logan is home to Space Dynamics Laboratory, HyClone Laboratory and TMM Technologies. Although wages remain relatively low overall, the area has posted the nation's seventh-fastest growth in average annual pay over the past five years.

**Reno, Nevada**, at 13<sup>th</sup>, has long been dependent on gaming and related tourism. However, its economic structure is changing, as Tesla built a Gigafactory and Google established a data center in recent years. Logistics and distribution are becoming important components of the local economy. Average annual pay growth ranked 10th in the nation over the past five years.

**Seattle-Bellevue-Everett, Washington** is consistently among the top innovation hubs in America and is 14<sup>th</sup> this year. The University of Washington is one of the most advanced public universities in the world. Home to ever-growing Microsoft, the metro area now has more than 78,000 employees in software publishing. Amazon has 80,000 employees in the region, and Boeing still has major aerospace operations there. The entrepreneurial ecosystem is quite diverse, contributing to a national rating of 13<sup>th</sup> in young-firm intensity.

**Bend, Oregon**, at 15<sup>th</sup>, is another smallish outdoor recreation hub. It ranks eighth in real GDP growth over the past five years and 19<sup>th</sup> in young-firm employment share. Well-crafted and articulated strategic planning has led to expansion in aviation/aerospace, automotive, biomedical, brewing, IT hardware (including data centers) and software.

A recovery in travel and tourism propelled **Ocean City, New Jersey** (16<sup>th</sup>), **Punta Gorda, Florida** (17<sup>th</sup>) and **North Port-Sarasota-Bradenton, Florida** (18<sup>th</sup>) to rankings among the national leaders. Ocean City took advantage of its proximity to Northeast population centers and saw a rebound in its heavily tourism-dependent economy. It posted the fourth-largest gain in employment in 2021 and continued that trend in 2022. Punta Gorda's growth has been fueled by retirees moving in and tourists returning after COVID. Health care has witnessed strong gains. Although much larger than Punta Gorda, North Port's economy is driven by the same features.

**Raleigh-Cary, North Carolina** is a rapidly rising tech hub that sits 19<sup>th</sup> this year. The Research Triangle has a diverse set of IT firms, along with biopharmaceutical and scientific research operations. SAS Institute is a homegrown statistical software leader. Low business and living costs relative to other coastal tech hubs keep it among the national leaders in job creation.

**Boise City, Idaho**, although not as well established as Raleigh, is an emerging tech hub and ranks 20<sup>th</sup>. Micron Technology has long been a major tech employer in the community and has repositioned itself as a research and development center rather than just a chip manufacturer. It has been a major beneficiary of remote work. Boise City has been a steady generator of jobs, only experiencing a decline of 0.3% in 2020 and ranking fourth overall over the past five years. In-migration rates are among the highest in the nation.

**Las Vegas-Henderson-Paradise, Nevada** is the gaming and tourism capital of the country and is 21<sup>st</sup> in our rankings. Las Vegas has benefited from a substitution of domestic travel for international visitation. Additionally, it is experiencing a boom in e-commerce-related logistics and warehousing.

**Boston-Cambridge-Newton, Massachusetts** climbs back among the Most Dynamic Metros at 22<sup>nd</sup> behind its strength as a long-standing innovation hub. MIT and Harvard are among institutions of higher education that call the greater metro area home. Boston has leading IT hardware and software firms, the top life-science cluster in the nation and a large financial-services sector, all of which provide high-paying jobs.

**Salt Lake City, Utah** has reached elite status among tech hubs, placing 23<sup>rd</sup> in our rankings. Although costs have risen in recent years, they remain favorable in comparison to West Coast metros and have helped the area land expansion facilities of tech firms. Salt Lake is 17<sup>th</sup> in young-firm intensity and has tech "unicorns" such as Podium and Pluralsight. Financial services add diversity to the economy, including major operations of Goldman Sachs and Wells Fargo.

**Orlando-Kissimmee-Sanford, Florida's** tourism-dependent economy has bounced back from COVID-19 and joins our list at 24<sup>th</sup>. Theme parks saw a strong increase in visitation in 2022, and the area's economy is 36 times more tied to tourism than the nation overall. Furthermore, professional services and finance are supporting the addition of high-paying jobs, and aerospace giant Lockheed Martin has many unfilled positions after securing new federal defense contracts.

**Fort Collins, Colorado** is 25<sup>th</sup> and has a thriving entrepreneurial tech scene with lower costs than Boulder, its neighbor to the south. Broadcom has chip production based there, and given incentives, should expand. Colorado State University provides a steady stream of talent.

**Cape Coral-Fort Myers, Florida** is another tourism-fueled economy and ranks 26<sup>th</sup>. Hurricane Ian disrupted its strong growth, but rebuilding is under way.

**Coeur d'Alene, Idaho** joins its Mountain States colleagues at 27<sup>th</sup>. Its economy is primarily driven by outdoor recreation and amenities.

**Santa Rosa-Petaluma, California** is 28<sup>th</sup> and is known worldwide for its wineries and breweries. It is within easy driving distance of San Francisco and San Jose, and is seeing a rebound in tourism.

Another metro that is strongly driven by leisure and hospitality is 29<sup>th</sup>-ranked **Crestview-Fort Walton Beach-Destin, Florida. Miami-Fort Lauderdale-Pompano Beach, Florida**, at 30<sup>th</sup>, benefitted from a return of tourists but also has a thriving financial-services and tech scene.

At 31<sup>st</sup> and 34<sup>th</sup>, respectively, are heartland metros **Daphne-Fairhope-Foley, Alabama** and **Fayetteville-Springdale-Rogers, Arkansas**. Daphne is a tourist destination known for its white beaches and saltwater fishing. Fayetteville would have been in the Top 30 if not for rapidly rising costs. This metro area had the biggest jump in median home prices in the nation in 2022 and also experienced dramatic increases in utility costs. After adjusting for inflation, Northwest Arkansas' real economic gains were muted.

## MOTOR VEHICLE PARTS MANUFACTURING

The most-improved heartland metros in this year's report have mostly found common ground in their manufacturing sectors—more precisely, the making of motor vehicle parts. The pandemic slowed automobile production and, therefore, economic productivity in metros that rely on this sector. A severe shortage of semiconductors and other components, mandatory factory closures and worker illnesses limited auto production throughout the pandemic. According to the United States International Trade Commission (USITC), total car production in the nation was cut by nearly 9.2 million units, or 7.5 million units fewer than in 2019.<sup>5</sup> In addition, the nationwide closure of offices due to COVID reduced the demand for automobiles, though not enough to avert significant price increases for both new and used cars. Increased household incomes during the pandemic—from higher wages, reduced expenditures and government payments, combined with a decrease in deferred gratification—appeared to offset any demand reductions for vehicles. With production hampered and demand rising in online-car shopping, the relative supply of vehicles was fixed, and shortages resulted in price increases. Such price increases, particularly on used cars, along with a need for contactless purchasing, contributed to a rise in online car buying from platforms such as Vroom and Carvana, forcing brick-and-mortar dealerships to up their online presence.

Vehicle manufacturing slowly recovered as the pandemic faded and supply chain issues were resolved. Regions dependent upon auto manufacturing eventually started to relax. In the heartland, many metros of small to medium size experienced a robust rebound after contact restrictions were lifted, largely due to their lack of economic diversity. Smaller heartland metros where motor vehicle-related assembly lines were reopened saw extraordinary advances in their rankings. Springfield, Ohio; Columbus, Indiana; and Morristown, Tennessee are the three most-improved metros among all others that share the same DNA in motor vehicle parts manufacturing. All three took heavy losses in the 2021 rankings, all coming in lower than 320 among 382 metros ranked. Nevertheless, their resilience proved encouraging for other heartland metros—Springfield, Columbus and Morristown now stand 146<sup>th</sup>, 184<sup>th</sup> and 158<sup>th</sup>, respectively.

Vehicle manufacturers also demonstrated ingenuity by finding innovative ways to retool their machines to handle chip shortages. Per an article by MIT, car companies used their current stock of chips and built an adaptive process so that their own machines could better handle production.<sup>6</sup> Also, certain features were minimized, such as touchscreens as part of the infotainment systems, assisted auto drive, assisted-parking packages, and more.

The revival of auto manufacturing is strongly underscored in the 2022 Most Dynamic Metros. Springfield, Ohio was 336<sup>th</sup> in the 2021 rankings but 146<sup>th</sup> this year—most improved in the heartland and second-most improved overall behind Kahului-Wailuku-Lahaina, Hawaii, which advanced 311 spots to stand 59<sup>th</sup> overall. The Springfield metro area's average annual pay growth over five years (2016-2021) is 30.3%, which ranks 42<sup>nd</sup> against all other metros for medium-term average annual pay. Its one-year average annual wage growth of 8.7% (18<sup>th</sup> overall) is quite significant, as is its one-year real GDP growth (2020-2021) of 7.1%. Not surprisingly, Springfield's five-year growth in employment was at a negative level (-5.1%), like many other manufacturing metros. Evidently, the rebound effect can be found in their short-term rates for employment growth. With one-year employment growth (2020-2021) of 2.2% and one-year momentum growth rate (June 2021-June 2022) of 2.5%, it seems



that Springfield's rebound has been fueled in part by productivity gains. A metropolitan statistical area with a population of just 135,633, this relatively small community certainly impressed by climbing back into the top 150 overall.

Springfield's success, in part, stems from recent investments in new manufacturing capacity. Topre America Corp. specializes in making pressed and steel auto parts, along with air conditioning and electronic equipment. Parent company Topre of Japan decided to invest \$10 million in a 30-acre plant in 2016 to augment production at the nearby Honda of America facility.<sup>7</sup> It would also connect the Springfield location with Honda and Toyota plants in neighboring Indiana and Kentucky. Topre invested again in November 2017, pushing its Springfield spread to a total of 315,000 square feet. The post-pandemic outlook of economic prosperity through auto manufacturing should provide great opportunity and hope to the people of Springfield.

About 2 1/2 hours southwest of Springfield by car sits another auto manufacturing hub that ranks 184<sup>th</sup> overall, up 176 spots from 360<sup>th</sup> in 2021. Columbus, Indiana is second-most improved overall among heartland metros. Per capita income in 2021, after adjusting for regional price parity, was \$66,457, which

ranks 60<sup>th</sup> overall. Columbus' five-year employment declined similarly to Springfield, Ohio at -5.0%. Short-term momentum employment (June 2021-June 2022) and one-year real GDP growth both were positive at 3.3% and 8.5%, respectively. Columbus is one of the smallest metropolitan statistical areas in the country with 82,475 people, according to 2021 statistics from the U.S. Census Bureau.

Despite its size, Columbus is home to a few international automotive companies. Faurecia is an automotive supplier headquartered in the suburbs of Paris. It is one of the largest global suppliers of automotive interior components such as seats, dashboards and center console systems, door panels and more. It participates in the Euronext Paris stock exchange. Several other Columbus facilities primarily focus on emission-control design and development, as well as exhaust system components.<sup>8</sup> Furthermore, Toyota Industrial Equipment has an impressive facility that covers more than 1 million square feet and has produced upwards of half a million forklifts since opening in 1990.<sup>9</sup>

Other international players with facilities in the Columbus area include Japan-based Hisada America Inc., which produces interior parts like car seat rails and

headrests, and Baldor Dodge Reliance from Canada, whose expertise lies in motor generator production. It is not an exaggeration to regard Columbus as a major auto parts manufacturing hub. This smallish metro and its hardworking labor force immensely contribute to the global automobile market.

Two eastern Tennessee metro areas located just an hour apart by car performed admirably in this year's rankings by also providing a home to makers of auto parts. The Morristown MSA, with a population a bit short of 144,000, is the third-most improved heartland metro, jumping 164 spots from 322<sup>nd</sup> to 158<sup>th</sup> overall. Its much larger neighbor to the southwest, Knoxville, population 890,000-plus, climbed 69 spots from its 2021 ranking of 145<sup>th</sup> to 76<sup>th</sup> in 2022. Toyota and Honda both have facilities there, while the Mahle Group has a plant in Morristown. Both metros work together seamlessly to supply each other with automotive components.

The Mahle Group in Morristown specializes in engine manufacturing.

Morristown's real GDP growth in five-year and one-year periods shows commendable effort at 14.6% and 8.2%, respectively; its post-pandemic employment growth from June 2021 to June 2022 reached 3.1%.

Just like the Morristown MSA, Knoxville posted an impressive real GDP growth of 15.9% from 2016-2021 and 8.5% from 2020-2021. Although the area's largest employers are within the health care industry, the community rebounded through automobile manufacturing, as did Morristown. As a medium-sized metro (population range of 500,000 to 1 million), the Knoxville region is large enough that its economic diversity can offset shocks that only affect specific industries.

Pent-up demand for cars, along with inflated savings due to pandemic-related policies and lower household expenditures, led to a swift and refreshing rebound in vehicle manufacturing. As the beating heart of the southern automotive center, Tennessee metros continue the trend of recruiting, training and maintaining a skilled workforce to supply products for numerous automobile needs locally, nationally and internationally. The big-picture result is an area that has established itself as a reliable partner for automotive corporations worldwide.

It would be unjust to tell the story of motor vehicle manufacturing without introducing superstar metro Elkhart-Goshen, Indiana. This bustling MSA ranked 356<sup>th</sup> overall in the 2020 edition of Most Dynamic Metros, 81<sup>st</sup> in 2021 and bolted all the way to No. 2 for 2022. Only San Jose-Sunnyvale-Santa Clara, California has done better, taking the top overall spot for the past two years. Indiana is well known as an auto manufacturing powerhouse, alongside states including Michigan, California and Texas. Because of the relatively expensive cost of conducting business in California, recreational vehicle (RV) makers like Fleetwood Enterprises moved production to Decatur, Indiana, as a subsidiary named Fleetwood Motor Homes of Indiana, Inc. In the same timeframe—around 10 years ago—Heartland RV, founded by Brian Brady, was acquired by Thor Industries.<sup>10</sup> As a result, these Indiana communities saw their RV heritage grow even larger. Dubbed the “RV Capital of the World,” Elkhart is without peer in RV production; it is believed that around 80% of RVs on the road are produced in the Elkhart-Goshen metro.<sup>11</sup> There is even a museum dedicated to RVs.

During the pandemic, people took to RVs to travel and explore the outdoors to boost their well-being. This naturally had Elkhart-Goshen busy working to meet the rising demand for RVs. By the time COVID subsided, many people already had embraced the outdoor living style and continued a remote work-life style.

Elkhart-Goshen's success is relevant and evident in our research. The pandemic-driven increase in RV production and supplies was reflected in the one-year employment growth of 10.1%, third-highest in this category. Short-term productivity increased tremendously, as indicated by a real GDP that was up 25.3% from 2020-21—best in this category. Average annual pay from 2020-21 grew by 20.8%, also tops in the nation. Over the five-year span of 2016-21, the area experienced mighty economic gains in average wage growth (40.1%, fifth-highest) and real GDP growth (31.4%, ninth-highest). A relatively small MSA of roughly 206,000 people in 2021, Elkhart-Goshen's rapid growth has made it the clear champion of heartland metros in this year's rankings.

## THE COMEBACK OF LARGE HEARTLAND METROS

We define large metropolitan statistical areas as those with a population greater than 1 million. The 20 heartland states are home to 22 such metros. Among them, two are in the top 11 of our 2022 overall rankings (Austin-Round Rock-Georgetown, Texas at fourth and Nashville-Davidson-Murfreesboro-Franklin, Tennessee at 11<sup>th</sup>). Furthermore, the five most-improved large metros in the heartland are among the top 150 overall, and all have improved more than 80 spots from a year ago. They are:

- Nashville-Davidson-Murfreesboro-Franklin, Tennessee (95<sup>th</sup> in 2021, 11<sup>th</sup> in 2022)
- Detroit-Warren-Dearborn, Michigan (234<sup>th</sup> to 111<sup>th</sup>)
- Chicago-Naperville-Elgin, Illinois-Indiana-Wisconsin (218<sup>th</sup> to 121<sup>st</sup>)
- Birmingham-Hoover, Alabama (228<sup>th</sup> to 132<sup>nd</sup>)
- Memphis, Tennessee-Mississippi-Arkansas (219<sup>th</sup> to 135<sup>th</sup>)

These large heartland metros, along with many others in the medium and small categories, witnessed a rebound effect in the post-pandemic period. COVID-19 lockdown policies forced most offices and restaurants to limit contact, resulting in people becoming isolated, and some even moved to less-populated areas. The absence of the usual dine-in crowd created difficulty for downtown restaurants. The shrewdest stores never closed, but pivoted to online and curbside pickup business models. Some industries, such as tech, adopted remote-working environments to ensure business continued without major disruptions. Austin-Round Rock-Georgetown, Texas, for example, developed an ecosystem that breeds entrepreneurship in the tech industry with relatively lower costs than the coastal areas like California. Evidently, the migration of Fortune 500 companies to the Austin metro eventually attracted Tesla and Oracle. Industries that continuously rely on in-person attendance began to rebound as tourism-related businesses entered a recovery phase. Large cities with multiple concert venues and sporting events/related businesses reopened to foot traffic. Air travel and transportation seemed to rebound, as well, behind an influx of visitors. Chicago, Memphis, Nashville and Dallas all used this reopening phase to advance through the rankings.

Travel destinations such as Motor City (Detroit) finally welcomed back spectators to its annual auto show. Motown Museum and the Fox Theatre were among some of the many venues that attracted an influx of nonlocals. The Windy City (Chicago) ended a two-year hiatus in welcoming back its annual tradition of dyeing the Chicago River green on St. Patrick's Day—a 60-year tradition dating back to 1962. Spectators once again flooded the streets to celebrate like they did before COVID-19. Music City (Nashville) witnessed a rousing reception for the return of various music festivals and downtown nightlife. Butch Spyridon, who will retire June 30 as CEO of the Nashville Convention and Visitors Corp. (NCVC), said direct visitor spending in 2019 was \$7.5 billion but dipped to \$3 billion in 2020, a \$4.5 billion net loss.<sup>12</sup> In 2022, it was estimated that the economic rebound provided \$8.8 billion.<sup>13</sup> Still, city officials are hopeful that with everything reopened, tourism will return to normal at Ryman Auditorium (former home of the Grand Ole Opry), the luxurious Hermitage Hotel, water parks and the airport. Memphis—the Home of the Blues and also the Birthplace of Rock 'n Roll—welcomed back ample numbers of music fans and artists alike.

Heartland NFL fans also were delighted in 2021 by the reopenings of Ford Field for the Detroit Lions, Soldier Field for the Chicago Bears and Nissan Stadium for the Tennessee Titans. These teams—along with their NBA, NHL, MLB and MLS counterparts—provided a morale boost for locals and travelers alike. Attendance in Nashville, Chicago and Detroit all reached at least 97% capacity on average during the 2022 NFL season, as was the case with the entire league.<sup>14</sup> The full reopening stimulated employment in the sports sector for occupations like employees of vendors and in-stadium bars/restaurants, as well as those for ground transportation (shuttles). The influx of visiting fans would also boost demand for lodging. Hotels in Nashville registered an unforeseen record of 9.5 million room nights in 2022, the most ever sold in that city.<sup>15</sup>

Economic growth is associated with various factors, including the ability to innovate and invent through entrepreneurship. Large metropolitan areas ease the process of attracting highly skilled workers and ambitious entrepreneurs to build and grow their startup adventures. Detroit-Warren-Dearborn, Michigan is certainly reaping the benefits of the auto

manufacturing full-scale comeback, as described in the previous section. While Elkhart is dubbed the RV Capital of the World, Detroit is known simply as Motor City. The state of Michigan is one of the largest locations for manufacturing—Detroit metro leads the motor vehicle manufacturing race, thanks to the longtime presence of America’s biggest automobile companies. Ford, General Motors and FCA US (a subsidiary of Stellantis N.V., formerly Chrysler) have been the pillars to support Motor City’s economic stability. As the most-improved metro in the heartland, its rebound is characterized by 4.2% employment growth in 2020-21, followed by 2.8% growth in June 2021-June 2022. This correlates to real GDP growth in 2020-21 of 8.7% (26<sup>th</sup> highest in this category).

Detroit also welcomed entrepreneurial activities in sectors that showed a trend of hiring employees with bachelor’s degrees; it registered a relatively high young-firm knowledge intensity of 28.1%, which ranks 25<sup>th</sup> on this metric. The city’s entrepreneurial diversity seems to be in tech-related and finance startups. Companies such as Our Next Energy, which promoted its next-generation batteries to extend the range of electric vehicles, finished their Series B funding of \$25

million. Founded less than five years ago, this company has already attracted investors such as Bill Gates’ Breakthrough Energy Ventures, which led the Series B round of funding, and BMW’s own venture fund organization.<sup>16</sup> In contrast to attracting big funders for multibillion-dollar businesses in Detroit, some smaller startups were created, to support small business owners’ online banking needs such as Autobooks, which aids in cash-flow management and financial reporting for small-business owners.<sup>17</sup>

The Chicago-Naperville-Elgin, Illinois-Indiana-Wisconsin Metropolitan Statistical Area claimed the 115<sup>th</sup> spot overall this year. The region boasts a relatively high per capita income adjusted for regional price parity in 2021 of \$68,293. After taking a hit in five-year employment growth (2016-21), Chicago witnessed a slow but steady climb in one-year employment growth of 1.9% (2020-21) and 12-month growth from June 2021 to June 2022 (3.2%). A positive real GDP growth reflected a rebound effect, registering 6.4% in the short run (2020-21). Its 29.7% young-firm knowledge intensity (16<sup>th</sup>-best among metros) is because many startups employ a highly skilled workforce with bachelors’ degrees or above. Tech startups are the most common, and they

*Detroit, Michigan*



represent a diversity of industries, including health care, real estate and finance. Health-tech startups like PatientIQ raised \$25 million in Series B funding from August Capital and Health Enterprise Partners to transform patient data into actionable intelligence and have been working with 5,000-plus providers and more than 1.5 million patients.<sup>18</sup> Real estate tech startups like Cohesion used their systems to aid property owners and managers with day-to-day tasks. They already have 2.2 million square feet of Class A office space and expect 5 million more to be contracted and built after raising the first round of seed funding to scale operations.<sup>19</sup> Chicago, with an MSA population of more than 9.5 million in 2021, has no issues attracting highly skilled workers for entrepreneurial activities.

In addition to being the “Birthplace of Rock’ n’ Roll,” Memphis is also home to one of the largest courier and express delivery services in the United States: FedEx. As a result, Memphis also now has the nation’s busiest cargo airport. The rise in online purchasing and the reshoring of manufacturing also helped this logistics hub gain ground. Although the transportation sector required time to recover in the early stages of the post-pandemic era, its subsectors—air and inland transportation services—actually expanded. In the last edition of our Most Dynamic Metros, Memphis advanced 51 spots, largely because of its ability to connect water, land and air transportation networks seamlessly, thereby stimulating job growth. During the period of 2016-21, Memphis registered job growth of 1.9%. Although not significant by any means, its growth rate of 2.6% between June 2021 and June 2022 showed a promising upward trend fueled by rising demand for moving products around the country. The Memphis, Tennessee-Mississippi-Arkansas metropolitan statistical area, with a little over 1.3 million population, is growing slowly but steadily, as born out by its one-year, 2020-21 real GDP growth of 5.9%.

The well-documented supply chain bottleneck persisted in the Memphis area. E-commerce took flight during the pandemic, presenting both opportunities and hurdles to transportation hubs like Memphis. As demands of online shopping soared, transport hubs required more storage space for goods in transit. Fuel-related inflation spikes also figured into the rise of transportation costs. Trucking businesses, for

example, faced not only the ever-increasing cost of labor but fuel, as well. Local economic developers started to gather and discuss contingency plans to highlight ideas to increase storage capacity for transportation needs. Commercial bankers like Blake Elliot commented that firms in Memphis had been adapting and adjusting their business model from a “just-in-time” to a “just-in-case” mindset, which meant creating a path to have enough supplies for whichever economic downturn may come next.<sup>20</sup> He highlighted that storage capacity must increase before—not during or after—the next downturn hits.

The comeback of large metros—not just in the heartland, but anywhere in the nation—could focus on further stimulating innovative activities across various sectors. Policies such as the American Rescue Plan (ARP) include \$1.9 trillion in nationwide support for entrepreneurship and small business. The plan also expands the State Small Business Credit Initiative (SSBCI), which provided \$10 billion to create a more flexible, equitable program under which state and local governments help with the creation of small businesses. Additionally, attracting highly skilled workers could directly or indirectly boost economic growth potential through expanded research, innovation and development. Additionally, firms must be able to retain those workers, especially young professionals. Despite the rising cost of living everywhere, large metros in the heartland are still relatively cheap. These areas tend to maintain their traditional charm for visitors and newcomers alike, and the pairing of strong manufacturing with a smooth transportation network could help maintain and accelerate productivity and, in turn, ensure the well-being of populations residing in these metros.

## INNOVATION HUBS

Innovation drives economic growth, but how? The basic premise is that innovation will increase the productivity of workers and capital (i.e., buildings, manufacturing equipment, computers), which boosts the value of outputs per worker and per capital asset. Perhaps a new product is more valuable than a company’s previous offering but can be made with the same amount of labor and capital. Or maybe a new algorithm or machine increases employee output.

Either way, innovation generates more output for a given input, thereby leading to economic growth. Innovation often arises in existing companies that conduct research and development to advance their products or operating efficiencies. It can also come from a startup that brings a new product to market. The innovative capacity of startups is a key reason we include the young-firm employment share and young-firm knowledge intensity in our index, as we are attempting to capture the amount of future economic growth resulting from startups bringing their creations to market in a given metropolitan area.

Therefore, it is not surprising that America's innovation hubs perform well in our Most Dynamic Metropolitans. Among dominant hubs in recent history—the two Silicon Valley metros, San Jose-Sunnyvale-Santa Clara and San Francisco-Oakland-Berkeley—are again first and third, respectively, in 2022. Additionally, the Seattle and Boston metros placed in the Top 25, with each finishing in the Top 15 for young-firm knowledge intensity, a measure of innovative capacity for young companies. Two of the nation's burgeoning innovation hubs also ranked high: the innovation engine that is Austin, Texas, has risen to fourth in our current ranking iteration, while the Miami metro jumped from 140<sup>th</sup> in 2021 to 30<sup>th</sup> in 2022. The most surprising innovation success story may be the re-emergence of two Midwestern metros that were on the forefront of American innovation in the 20th century: Detroit, which jumped from 234<sup>th</sup> in 2021 to 111<sup>th</sup> in 2022, and Chicago, which leapt from 218<sup>th</sup> to 121<sup>st</sup>.

The two returning Silicon Valley metros employed a similar formula to last year. They had moderate medium- and short-term employment growth as they battled small, high-outdoor-amenity metros for talent post-March 2020. However, their nation-leading wage and GDP growth data reflect Silicon Valley's unique ability to innovate and boost worker productivity, thereby generating economic growth. This capacity does not seem to be diminishing, as San Jose-Sunnyvale-Santa Clara and San Francisco-Oakland-Berkeley ranked first and second, respectively, in young-firm knowledge intensity.

One way to quantify Silicon Valley's innovation output relative to the rest of the country is to analyze venture capital investments in its startups. Such dollars declined

to \$75 billion in 2022 after reaching a record \$122 billion in 2021, but one of every three venture capital dollars spent nationwide still flowed into the valley in 2022.<sup>21</sup> That capital went into companies at the frontier of innovation in their respective industries, such as Deel, a human resources management platform designed for companies with remote workers spread across the world. Deel raised \$500 million dollars in investments from October 2021 to May 2022.<sup>22</sup>

While job growth has effectively stabilized in Silicon Valley, that is not the case in Austin. Over the past three years, the Texas capital city metro has successfully recruited headquarters and expansions for some of the world's most innovative corporations and has greeted an influx of talent from the coasts. Our data reflects this growth in both innovative capacity and labor force, as Austin is a national leader in job, GDP and wage growth. Beyond the metrics included in our index, we can look at growth in STEM jobs particularly. One way to do this is to measure employment growth in professional, scientific, and technical services, which captures nonmedical STEM jobs ranging from engineers to software developers to statisticians. Not only is Austin's labor force among the country's densest in this employment group (169% of the share nationwide), it also experienced the third-largest share increase of any metro in 2020-21, increasing from 160%.

Austin's STEM labor force should continue to grow, as Tesla's employment footprint has consistently expanded since the company relocated there in October 2021.<sup>23</sup> Further, additions such as the under-construction Samsung chip plant will require a significant influx of STEM jobs.<sup>24</sup>

On the startup front, Austin is one of eight metros nationwide that rank in the Top 60 for both young-firm employment share and young-firm knowledge intensity, indicating the area is producing innovative startups at a uniquely high rate for its size. Austin's growing startup ecosystem is also reflected in the amount of venture capital dollars flowing into the metro, which, after more than doubling from 2020 to 2021 and reaching a record \$6.6 billion, was a respectable \$4.9 billion in 2022. That does reflect a 26% drop, but Austin's decline was less than the 31% dip nationwide.<sup>25</sup> The dollars flowed to impressive startups such as Wheel, provider of a multichannel digital health care platform that

combines virtual and in-person visits, test results, and text communications for a comprehensive patient-experience system that also provides guidance on patient triaging and optimal patient-provider matching. The company raised \$150 million in an early 2022 funding round.<sup>26</sup>

An even more recent development is at the southern tip of Florida, where Miami has parlayed a COVID-era influx of talent from the nation's largest innovation hubs into an economic transformation.<sup>27</sup> This sudden success is reflected in our data; while the Miami metro has seen only moderate mid-term growth in GDP, wages and jobs, it has been a leader in growth from the start of the pandemic. Further, Miami is another area that performs well in both young-firm metrics: 51<sup>st</sup> in employment share and 88<sup>th</sup> in knowledge intensity.

Media coverage of Miami's success has attributed significant credit to eMerge Americas, a local organization focused on connecting the metro's own innovation and entrepreneurship ecosystem of government organizations, universities, investors, and innovators with external funders and Miami's unique business opportunities.<sup>28</sup> An example of the strategic business opportunities, which is suggested by the organization's name, has been the acknowledgment that Miami is situated as the U.S. gateway to Latin and South America and often hosts conventions that connect local leaders and innovators with corporations, investors and government leaders from across the Americas.<sup>29</sup>

Another recognized niche of Miami is cryptocurrency, and while the future of crypto is unclear following the collapse of crypto exchange FTX Labs, local company Yuga Labs has been an overnight success in the related space of NFTs (non-fungible tokens), bringing in nearly half a billion dollars in investments in an early 2022 seed-funding round.<sup>30</sup> Their initial success was the result of forming a club around owners of Yuga Labs' digital collectible images, and offering exclusive event and merchandise access to this increasingly popular group. The organization has since begun developing a metaverse gaming platform that will further expand the ecosystem surrounding Yuga's NFTs.<sup>31</sup>

Yuga Labs' massive seed-funding round played a major role in a record-breaking 2022 for Miami startups, with a total inflow of \$5.5 billion into the broader South Florida region, which Miami anchors. South Florida was one of the few major startup ecosystems to experience an increase in investments from 2021 to 2022, growing by 13%.<sup>32</sup>

While further discussed elsewhere in the report, it is worth acknowledging the newfound success of Detroit and Chicago. In many ways, Chicago has been the stagnant innovation and entrepreneurship giant of the Midwest, producing a stable-but-high number of successful startups and retaining headquarters for many of the nation's largest companies. However, the Windy City saw one of the largest ranking gains of any metro over the past year, with notable improvements in short-term growth. On the startup front, Chicago has generally performed very well in young-firm knowledge intensity. Yet, there may be hope for even greater success, given that Chicago-area startups contrasted the nationwide decline in venture capital investments from 2021 to 2022 with a 54% increase.<sup>33</sup>

Detroit was once a global leader in automotive and manufacturing innovations, but the region's innovative capacity had diminished over the 70 years following its peak in the mid-20<sup>th</sup> century. However, Detroit still has outsized numbers of STEM workers and corporate headquarters and is now experiencing a renaissance. Its 123-spot improvement from 2021 to 2022 is the 15<sup>th</sup>-largest jump out of 382 metros and, like Chicago, it is largely due to strong short-term GDP, wage and job growth. Our index is certainly not alone in capturing Detroit's rebound, as Startup Genome recently named the Detroit area the top emerging startup ecosystem in the world, ahead of communities such as Hong Kong, the North Carolina research triangle and Houston.<sup>34</sup> Detroit's success is the result of diligent efforts by local and state leaders to return the metro and the state of Michigan to its former innovative glory. Statewide efforts are highlighted by the fact that venture capital investment in Michigan startups grew 243% from 2017 to 2022, compared to 164% nationwide.<sup>35</sup>

It should be noted that the recent tech layoffs, which have impacted many of the nation's most innovative companies and brightest startups, are not captured by our data. Thus, many of the communities we have highlighted may not perform as well in our 2023 index. However, the tech industry has weathered much more severe downturns than what has occurred up to the time of this writing, and we expect the nation's tech hubs to remain among the strongest regional economies moving forward.

## OUTDOOR RECREATION HUBS

Our 2021 iteration of this report highlighted the success of smaller metropolitans offering direct access to the outdoors. These areas were again successful in our 2022 index. However, the Western metros that had jumped up the rankings from 2020 to 2021 have now stabilized or fallen slightly. Meanwhile, Southeastern metros located near major outdoor amenities experienced significant jumps.

Many Western metros are still performing very well, but their short-term growth numbers are not as strong as last year. One reason is that they weathered the early pandemic so well. While the rest of the country recovered from the early-COVID recession and, therefore, posted strong short-term growth rates, many smaller Western metros saw their economies grow from 2019 to 2020 and had nothing to rebound from. For example, Provo-Orem, Utah ranked 12<sup>th</sup> last year in short-term GDP growth, up 1.5% from 2019 to 2020. However, its 8.3% GDP growth from 2020 to 2021 was only good enough for 36<sup>th</sup>.

Another reason is that the post-March 2020 swell of remote workers increased the cost of housing and other goods and services, resulting in somewhat of an arbitrage effect, as rising prices reduced the incentive for families to relocate from large metros. Indeed, communities like Coeur d'Alene, Idaho and St. George, Utah saw housing costs jump from well below the national average in 2019 to roughly equal to the national average in 2020.<sup>36</sup> Census Bureau data indicate that Idaho, Montana and Utah were first, second and third, respectively, in population growth from April 2020 through July 2022, but that growth cooled as the pandemic persisted. From July 2021 through July 2022, the same states ranked second, sixth, and 10<sup>th</sup>.<sup>37</sup>

We have thoroughly discussed the success of the smaller Western metros, as well as Florida metros of similar size, in prior reports; however, there are some rising Southeastern metros we have not discussed. This group includes, in order of their ranking:

- Daphne-Fairhope-Foley, Alabama
- Myrtle Beach-Conway-North Myrtle Beach, S.C.-N.C.
- Gainesville, Georgia
- Charleston-North Charleston, South Carolina
- Asheville, North Carolina
- Knoxville, Tennessee
- Savannah, Georgia
- Blacksburg-Christianburg, Virginia
- Chattanooga, Tennessee-Georgia
- Johnson City, Tennessee

Boise, Idaho



While generally not to the level of their Mountain West and Florida counterparts, these communities have experienced sizable population growth since the beginning of COVID-19. Within this group, the coastal communities were the fastest-growing metros from April 2020 through June 2021, with Myrtle Beach and Daphne fourth and 14<sup>th</sup> among all metros.<sup>38</sup> Overall, these Southeast metros' recipe for economic success has been similar to the recipe for Mountain West and Florida metros: bring in remote workers and other COVID-era migrants from the nation's largest cities and show them the quality of life and economic opportunities available there.

Daphne-Fairhope-Foley's population growth is reflected in strong GDP and employment growth; the area is ranked 31<sup>st</sup> overall and is among the top 20 nationally for short-term and medium-term GDP growth. Central to its appeal are the Gulf Coast and Mobile Bay. The region is famous for its white-sand beaches, but possibly even better known for its fishing. While data are not yet available for 2021, data for 2020 show nearly 7 million recreational saltwater fishing trips in Alabama. That implies a significant number of fishing trips in the Daphne-Fairhope-Foley metro, given that it is home to nearly all of Alabama's beachfront and saltwater fishing charters.<sup>39</sup> This is an area long centered on coastal tourism and commercial fishing; however, the expansion of remote work at the beginning of the pandemic allowed a more diverse set of workers to be drawn in by the region's high quality of life.<sup>40</sup> Like other metros that attracted remote workers, the challenge may be to sustain growth as remote work opportunities decline. That may explain the recent announcement of a state-of-the-art aluminum recycling plant that will create 1,000 jobs with an average salary of \$65,000.<sup>41</sup>

Six hours northeast of the Alabama coast is the mountain town of Chattanooga, Tennessee, which jumped 67 spots to 95<sup>th</sup> in this year's rankings. After relative economic stagnation in the latter part of the 20<sup>th</sup> century due to a broad decline in American manufacturing, this Southern manufacturing hub has experienced well-earned economic revitalization over the past 20 years. Its strategy has effectively been two-pronged:

1. Market and enhance its unique outdoor recreation opportunities as a community built along the Tennessee River and surrounded by the southern Appalachian Mountains to potential newcomers.
2. Build sufficient physical infrastructure so that innovative companies are also attracted.

Regarding the former, whitewater paddling, rock-climbing and fishing opportunities have long existed. Meanwhile, mountain-biking opportunities continue to expand—the region's newest trail system, Walden's Ridge Park, is garnering national attention even before its anticipated opening later this year.<sup>42</sup> The park will also offer top-notch climbing and hiking opportunities, but the 800 feet of vertical relief for the mountain-bike trails makes this a unique urban trail system.<sup>43</sup> The combination of outdoor activities is highlighted by the community being recognized multiple times by "Outside Magazine" in its Best Towns Ever list.<sup>44</sup>

The region's most significant infrastructure investment has likely been fiber internet deployment. In 2020, Chattanooga became first in the nation to receive communitywide gig-speed internet (speeds over 1 gigabit per second). It has since become first with 10-gig and 25-gig speeds communitywide.<sup>45</sup> The fast speeds have made Chattanooga a perfect location for high-speed, internet-dependent logistics and advanced manufacturing facilities. Therefore, it is no surprise that its most successful recent startup is FreightWaves, is a real-time freight analytics company.<sup>46</sup>

Four spots below and 220 miles north of Chattanooga is another Appalachian community, Johnson City, Tennessee. This small metro near some of Appalachia's highest mountains did not see an influx of remote workers as large as Chattanooga or nearby Knoxville, but it has still experienced strong wage, job and GDP growth over the past few years. Additionally, local leaders believe they can be the next great remote work destination if they can simply get on those workers' radar. Indeed, the Johnson City metro is situated near some of the nation's best fly-fishing, on the South Holston and Watauga Rivers<sup>47</sup>; is home to Roan Mountain, the fourth-tallest mountain in the Appalachians<sup>48</sup>; and is near Beech Mountain Ski Resort and Bike Park. Their current strategy for attracting

remote workers is one popularized by Tulsa: cash incentives combined with fast internet. They are offering up to \$5,000 to successful applicants who migrate to—and work remotely in—the Johnson City area, and they have already accepted an initial cohort.<sup>49</sup> Local leaders and outdoor recreation enthusiasts also recognize that many of their best outdoor assets are a bit of a drive, and they have made significant efforts to create new amenities closer to Johnson City. One such project, Tannery Knobs Bike Park, was conveniently finished within months of the initial COVID lockdown. The trail system has garnered attention as a well-designed, urban mountain-bike layout.<sup>50</sup>

Our metrics suggest that Johnson City can improve in the realm of entrepreneurship. And yet again, community leaders have demonstrated their forward-thinking tendencies. The metro has taken part in Heartland Forward's Idea Accelerator program, which, in partnership with investment firm Builders and Backers, provides funding and guidance to community members with a business idea. As part of the program preparations, Katie Milligan, HF program officer for innovation and entrepreneurship, visited Johnson City and saw their economic development efforts firsthand. The following is her description of the experience.

"The Eastern part of Tennessee Appalachia, better known as the Tri-Cities, is quickly carving out a place for itself among competing entrepreneurial ecosystems like Chattanooga, Nashville and Memphis. Leading the effort is the Niswonger Foundation, located in Greeneville, Tennessee. Started by logistics entrepreneur Scott Niswonger, with the mantra of "learn-earn-return," the foundation led the charge to bring the Builders and Backers Idea Accelerator to the region. Idea Accelerator is a cohort-based program that teaches participants how to put their ideas into action and provides them with a \$5,000 pebble grant to actively execute their idea through experimentation. With 10 participating entrepreneurs, or builders, ideas ranged from dental-wound dressing solutions, economic development databases and algae-growth systems for carbon capture. What struck me was the range of ideas, proving once again that varied innovation is happening in metros of all sizes.

When visiting the Tri-Cities, I was able to meet with the other leaders in the entrepreneurship space. What impressed me most was the collaborative nature of organizations. The area was pooling resources, collaborating across communities and positioning itself as a cohesive region.

East Tennessee States Research Corporation is leading one of these charges in partnership with Ballard Health and building upon existing entrepreneurial training programs known as the Appalachian Highlands Rural Innovation and Entrepreneurship Alliance. This alliance looks to find rural-health solutions for eastern Tennessee, western Virginia and southeast Kentucky. This type of collaboration brings together organizations with different methods of inspiring innovation, leveraging resources and attracting talent and ideas. It is this level of collaboration, not competition, that provides the opportunity for smaller metropolitans to improve their rankings."

## OIL AND GAS

The energy-related industries experienced a volatile roller-coaster ride during the pandemic. Gas prices dropped as demand decreased drastically when the lockdown policy was implemented and people no longer drove to work, shopped in stores, etc. When gas producers cut production in response, the supply of gasoline decreased and drove prices slowly up. It wasn't until spring 2021 that Texas crude oil prices improved, moving from \$16.55 per barrel in April 2020 to \$61.70 in April 2021. The recovery of oil prices allowed Texas metros dependent on oil and gas production to recover economically. Oil and gas prices fluctuated again when Russia invaded Ukraine on Feb. 24, 2022. Spot prices of WTI crude oil in the futures market rose and a barrel of crude shot up to more than \$120 per barrel in March 2022. In states like California, the average price of gasoline was more than \$6 per gallon in June 2022.

In the 2021 Most Dynamic Metros report, Texas metros that are dependent on energy production suffered in comparison to 2019. Midland dropped from No. 1 in the 2020 rankings to 38<sup>th</sup> in 2021 as the pandemic wreaked its havoc. It has since made a comeback to take the sixth spot overall for 2022. Midland continues to register the highest per capita personal income in the nation after adjusting for regional price parity at more than \$120,000. This measurement, along with five-year growth in average annual pay of 31.6%, helped it regain a top 10 ranking. Its economic growth is also reflected in the 9.1% one-year momentum employment growth between June 2021 and June 2022, when the energy sector reopened and demand for oil and gas increased. This growth rate is also highest in the nation within the same period and is a significant improvement over 18<sup>th</sup> a year earlier. In terms of real GDP, the Midland metro recovered in the short run. For 2019-20, its rate was -11.8%; for 2020-21, it was -3.5%. A metro with more than 170,000 in population, Midland continues to rely on the energy sector and therefore will always face the chance of extreme volatility in its economy, as will other small-sized metros such as Greeley, Colorado and Odessa, Texas. The bottom line is, if oil production rebounds and stabilizes in the short run, Midland and its citizens will enjoy economic benefits.

Among metros that are the most dependent on oil and gas (highest share of employment versus the national average), all experienced a small rebound over last year's report. Greeley jumped 27 spots to 205<sup>th</sup> overall, while Odessa leapt 77 spots to 305<sup>th</sup>. Of course, Midland is the best-known energy metro with a nation-leading share of employment in the oil and gas-extraction sector of 91.76 times the national average. Odessa and Greeley rank third and fourth, respectively, in the same sector—both more than 10 times as concentrated as the national baseline.

A growth rate of 7.1% is the main driver of Midland's post-pandemic rebound, as it ranks sixth in that category. Greeley registered 4.5% in employment growth from June 2021 to June 2022. And just as in the previous edition of the Most Dynamic Metros, Odessa and Greeley rank far behind Midland. One possible reason is that oil and gas extraction companies are still looking for maximum cost efficiency and productivity. The Permian Basin, home to Midland, is the most popular hotbed, with deposits of rocks that scientists estimate have aged nearly 300 million years. It's located on the western side of the sprawling state. A Permian Basin oil production record was broken in January 2023, when production rose by 12% to 5.6 million barrels per day.<sup>51</sup>

Houston, Dallas and Oklahoma City metros fared relatively better than the smaller oil-and-gas metros. Their overwhelmingly larger populations translate to economic diversity, a theme that has been reintroduced multiple times. Houston sits at 194<sup>th</sup>, and although not in the top 150, that's still 80 spots up from last year. Dallas-Fort Worth is 57<sup>th</sup>, up 53 spots from 2021. Both metros are somewhat dependent on oil and gas, although employment concentration levels are not as high as Midland and Odessa. Houston and Dallas do have the advantage of diversity, in that they possess attractions in arts and entertainment, finances, entrepreneurial activities and transportation. The post-pandemic reopening of popular activities allowed Houston and Dallas to recover and resume growth. Air transportation services contributed to these two metros, as they started to pick up the pace and slowly meet the demands of air travel and air shipping. Dallas metro showed consistency in employment numbers as

2020-21 employment growth was 9.1% and June 2021-June 2022 employment growth was 4.7%, both ranking in the top 50 in their respective categories.

City officials are confident that crude oil should remain around \$80-\$90 per barrel in the next few years as Texas producers drill new and profitable wells. In the grand scheme of the Texas oil and gas industry, recovery efforts appear to be more promising in the short term, as the state already registered a net gain of more than 24,000 jobs created in direct gas industry employment in 2022, to a total of 347,828 jobs.<sup>52</sup> This

also translates to highly skilled workers in this industry being rewarded with high wages (the Midland metro, for example). However, the economic boom in oil and gas appears to only be applicable in the Permian Basin, while smaller metros in other oil-dependent areas of Texas did not bounce back as well as Midland.

*Dallas, Texas*



# CONCLUSION

The 2022 Most Dynamic Metros takes a similar approach to the previous edition. We examined the data to identify characteristics of metros that thrive under the current economic situations. These data trends reveal that industries like automobile manufacturing gave life to metros that rely heavily upon this sector. Therefore, it was no surprise that these metros improved most among all U.S. metros.

The tech sector was still king, as the giants of Silicon Valley remain at the top. Massive tech layoffs recently in Silicon Valley metros are sure to affect a few economic indicators, such as employment, in tech-savvy metros like San Francisco and Santa Clara. An expected decrease in tech-related demand translates to a drop in overall profits, which is why Fortune 500 tech companies in Silicon Valley have been cutting employees as of January 2023.

Yet, as discussed earlier, large metros have the advantage of economic diversity over smaller ones. Even if the tech sector might be impacted in next year's report, it can still rely on other sectors, such as tourism. The large metros in the heartland recovered nicely because of the reopenings of tourism venues featuring live music and sports, along with movie theaters. Moreover, the ability to cultivate entrepreneurial activities will always provide an edge for sustainable economic growth. The fact that economic diversity comes harder for smaller metros than big ones generally suggests that many of these smaller metros will experience boom-and-bust

cycles. This was demonstrated in the motor vehicle-producing metros as the pandemic restrictions were lifted and assembly lines resumed productivity to meet increasing demand for autos. These metros ranked low when the pandemic arrived (a bust cycle). The million-dollar questions remain the same: How can metros be more economically diverse? If metros only rely on single industries and unplanned turmoil occurs again soon, how confident will they be to navigate through it?

Places that rely on oil and gas industries produce the most volatile economies of all—so much that the inflation index called Core Personal Consumption Expenditure (Core PCE) excludes this category when tracking inflation over time. Metros like Midland, Texas, rise and fall in the rankings over the years because of this volatility. Economic stability through maintaining their identity and stimulating innovation should be the core value of every metropolitan statistical area. When it comes to stability, metros with natural amenities continue to shine, although they dropped back a bit, mostly due to their growth in equilibrium. The spike in economic growth during the pandemic made them a success. Now, they are growing steadily. Community leaders and economic developers must ensure they have enough resources to expand their capacities in productivity across various sectors. Generating enough momentum to sustain entrepreneurship will, in the long run, construct a diversified ecosystem and eventually become its own identity.

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# APPENDIX

TABLE 2 - OVERALL TABLE

	OVERALL RANKING	2021 POPULATION	Young Firm Employment Share	Young Firm Knowledge Intensity	2021 PER CAPITA PERSONAL INCOME	2016-2021 EMPLOYMENT GROWTH	2020-2021 EMPLOYMENT GROWTH	June-2021-June-2022 EMPLOYMENT GROWTH	2016-2021 AVERAGE ANNUAL PAY GROWTH	2020-2021 AVERAGE ANNUAL PAY GROWTH	2016-2021 GDP GROWTH	2020-2021 GDP GROWTH
San Jose-Sunnyvale-Santa Clara, CA	1	1,952,185	9.9%	39.7%	\$122,119	2.3%	1.9%	4.8%	62.6%	16.0%	45.7%	13.3%
Elkhart-Goshen, IN	2	206,921	6.1%	19.5%	\$62,602	7.7%	10.1%	4.0%	40.1%	20.8%	31.4%	25.3%
San Francisco-Oakland-Berkeley, CA	3	4,623,264	12.2%	36.7%	\$103,237	-0.8%	2.4%	5.8%	50.0%	12.2%	29.1%	10.1%
Austin-Round Rock-Georgetown, TX	4	2,352,426	14.1%	26.3%	\$71,341	16.0%	7.3%	7.8%	40.4%	9.6%	31.2%	10.5%
The Villages, FL	5	135,638	14.3%	20.4%	\$66,912	28.0%	10.3%	6.6%	26.9%	3.0%	60.7%	10.4%
Midland, TX	6	173,180	16.8%	15.8%	\$128,201	16.4%	3.9%	9.1%	31.6%	1.0%	65.6%	-3.5%
Boulder, CO	7	329,543	14.2%	34.9%	\$88,430	5.5%	4.1%	3.7%	41.1%	8.2%	22.8%	7.9%
Naples-Marco Island, FL	8	385,980	14.5%	24.9%	\$115,461	7.8%	5.3%	4.4%	36.6%	6.0%	17.1%	8.8%
Provo-Orem, UT	9	697,141	16.5%	26.8%	\$52,811	24.3%	7.9%	4.6%	32.5%	3.5%	42.0%	8.3%
St. George, UT	10	191,226	16.0%	22.3%	\$50,085	26.5%	7.9%	4.3%	30.4%	5.5%	36.2%	7.6%
Nashville-Davidson-Murfreesboro-Franklin, TN	11	2,012,476	10.1%	25.4%	\$73,302	10.2%	4.6%	5.8%	31.2%	8.2%	21.1%	12.0%
Logan, UT-ID	12	152,083	13.0%	25.7%	\$50,973	16.2%	5.8%	2.4%	39.7%	9.7%	28.3%	8.1%
Reno, NV	13	497,535	11.5%	26.0%	\$73,386	11.4%	4.7%	3.5%	36.5%	9.8%	17.4%	8.8%
Seattle-Tacoma-Bellevue, WA	14	4,011,553	10.3%	30.6%	\$77,922	3.9%	2.2%	5.4%	37.7%	6.8%	31.2%	7.7%
Bend, OR	15	204,801	15.5%	23.8%	\$65,932	11.7%	5.2%	2.2%	33.5%	8.8%	31.4%	9.1%
Ocean City, NJ	16	95,661	12.4%	25.0%	\$76,175	0.4%	9.9%	3.1%	31.2%	11.9%	6.1%	6.4%
Punta Gorda, FL	17	194,843	13.0%	23.8%	\$53,661	6.2%	3.9%	5.0%	34.2%	13.2%	23.8%	7.8%
North Port-Sarasota-Bradenton, FL	18	859,760	14.0%	25.3%	\$69,861	7.5%	5.1%	3.2%	31.0%	8.4%	22.9%	8.5%
Raleigh-Cary, NC	19	1,448,411	10.3%	27.9%	\$68,075	10.1%	5.6%	5.4%	30.0%	4.0%	22.1%	9.0%
Boise City, ID	20	795,268	13.0%	23.1%	\$59,122	18.9%	6.1%	2.9%	27.4%	5.5%	29.0%	9.0%
Las Vegas-Henderson-Paradise, NV	21	2,292,476	12.6%	24.4%	\$60,994	3.0%	7.6%	7.5%	26.1%	7.5%	11.9%	9.2%
Boston-Cambridge-Newton, MA-NH	22	4,899,932	9.0%	35.5%	\$84,138	-1.1%	3.4%	3.9%	30.6%	7.7%	14.9%	7.3%
Salt Lake City, UT	23	1,263,061	10.2%	29.1%	\$63,961	10.6%	4.5%	3.7%	31.4%	7.0%	24.2%	7.1%
Orlando-Kissimmee-Sanford, FL	24	2,691,925	10.1%	24.0%	\$53,200	5.2%	5.8%	8.4%	29.6%	5.5%	18.6%	10.9%
Fort Collins, CO	25	362,533	14.1%	26.7%	\$65,583	7.6%	4.2%	3.8%	30.8%	5.1%	28.3%	7.0%
Cape Coral-Fort Myers, FL	26	787,976	15.7%	23.6%	\$62,906	9.3%	6.1%	5.0%	28.7%	3.8%	16.5%	8.9%
Coeur d'Alene, ID	27	179,789	15.0%	21.1%	\$58,023	14.8%	5.2%	0.6%	35.4%	8.1%	23.8%	8.5%
Santa Rosa-Petaluma, CA	28	485,887	13.7%	24.9%	\$73,769	-2.1%	2.4%	5.4%	39.9%	9.3%	10.1%	6.4%
Crestview-Fort Walton Beach-Destin, FL	29	293,324	14.8%	22.8%	\$66,732	9.8%	5.3%	2.5%	30.5%	4.8%	23.8%	8.7%
Miami-Fort Lauderdale-Pompano Beach, FL	30	6,091,747	13.5%	25.0%	\$66,886	2.1%	4.3%	4.5%	27.5%	9.1%	14.7%	9.4%
Daphne-Fairhope-Foley, AL	31	239,294	13.4%	22.0%	\$59,355	9.2%	4.7%	3.0%	35.1%	4.9%	25.0%	9.6%

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	OVERALL RANKING	2021 POPULATION	Young Firm Employment Share	Young Firm Knowledge Intensity	2021 PER CAPITA PERSONAL INCOME	2016-2021 EMPLOYMENT GROWTH	2020-2021 EMPLOYMENT GROWTH	June.2021-June.2022 EMPLOYMENT GROWTH	2016-2021 AVERAGE ANNUAL PAY GROWTH	2020-2021 AVERAGE ANNUAL PAY GROWTH	2016-2021 GDP GROWTH	2020-2021 GDP GROWTH
Bridgeport-Stamford-Norwalk, CT	32	959,768	9.3%	34.8%	\$120,407	-6.8%	3.6%	2.8%	25.2%	7.1%	-1.1%	5.0%
Denver-Aurora-Lakewood, CO	33	2,972,566	11.3%	28.7%	\$71,595	5.8%	3.8%	4.7%	24.2%	6.6%	19.2%	7.0%
Fayetteville-Springdale-Rogers, AR	34	560,709	9.2%	22.8%	\$75,660	8.8%	3.2%	4.2%	29.5%	5.7%	25.7%	8.5%
Sebastian-Vero Beach, FL	35	163,662	14.9%	22.8%	\$96,894	5.2%	3.5%	4.9%	22.2%	5.2%	12.6%	5.7%
Phoenix-Mesa-Chandler, AZ	36	4,946,145	10.4%	24.1%	\$58,792	11.2%	3.9%	3.0%	29.2%	10.0%	22.3%	6.9%
Trenton-Princeton, NJ	37	385,898	7.4%	34.8%	\$76,464	2.5%	2.0%	4.2%	26.4%	5.1%	22.7%	6.7%
Olympia-Lacey-Tumwater, WA	38	297,977	14.5%	26.1%	\$58,944	6.4%	3.7%	5.1%	32.6%	4.8%	17.2%	5.8%
Myrtle Beach-Conway-North Myrtle Beach, SC-NC	39	509,794	14.1%	21.5%	\$51,942	7.8%	6.5%	4.8%	28.7%	5.7%	14.7%	8.5%
Santa Cruz-Watsonville, CA	40	267,792	13.5%	24.9%	\$78,432	-3.9%	2.3%	4.0%	36.1%	6.1%	18.7%	6.8%
Barnstable Town, MA	41	232,411	12.2%	27.2%	\$82,254	-5.1%	6.5%	4.0%	33.2%	3.8%	4.6%	6.8%
Idaho Falls, ID	42	162,786	11.0%	21.4%	\$60,786	17.2%	5.4%	3.0%	28.0%	3.6%	34.6%	5.0%
Wilmington, NC	43	291,833	13.4%	24.8%	\$57,139	9.0%	5.0%	5.3%	27.9%	3.3%	17.9%	7.9%
Gainesville, GA	44	207,369	9.1%	22.5%	\$57,339	10.6%	3.5%	5.6%	23.3%	7.1%	26.9%	8.8%
San Diego-Chula Vista-Carlsbad, CA	45	3,286,069	12.7%	27.1%	\$63,081	1.3%	4.0%	5.8%	26.6%	5.5%	14.1%	7.8%
Tampa-St. Petersburg-Clearwater, FL	46	3,219,514	11.0%	25.1%	\$58,924	6.6%	4.0%	4.1%	23.6%	8.8%	17.0%	7.8%
New York-Newark-Jersey City, NY-NJ-PA	47	19,768,458	10.9%	33.0%	\$74,303	-2.8%	2.9%	5.7%	26.0%	5.6%	7.5%	5.8%
Sioux Falls, SD	48	281,958	14.7%	27.1%	\$76,924	6.1%	3.5%	3.1%	26.6%	4.4%	8.8%	5.9%
Colorado Springs, CO	49	762,793	13.6%	24.6%	\$60,653	8.7%	4.0%	3.1%	28.4%	6.7%	18.0%	5.1%
Durham-Chapel Hill, NC	50	654,012	8.3%	28.3%	\$66,021	9.1%	4.1%	3.0%	29.3%	2.9%	17.3%	7.8%
Los Angeles-Long Beach-Anaheim, CA	51	12,997,353	13.6%	27.7%	\$66,614	-1.6%	3.5%	5.6%	24.0%	5.6%	11.6%	7.6%
Port St. Lucie, FL	52	503,521	15.2%	22.0%	\$67,618	9.9%	4.3%	3.2%	27.3%	6.7%	11.7%	4.6%
Santa Maria-Santa Barbara, CA	53	446,475	17.8%	21.7%	\$66,180	7.5%	4.2%	5.8%	17.7%	6.2%	13.3%	5.3%
Atlantic City-Hammonton, NJ	54	274,966	11.1%	23.1%	\$60,006	-6.0%	8.5%	5.1%	30.2%	6.5%	0.7%	8.8%
Napa, CA	55	136,207	12.1%	23.9%	\$80,852	-3.9%	2.9%	6.2%	29.2%	6.9%	3.8%	6.2%
Atlanta-Sandy Springs-Alpharetta, GA	56	6,144,050	10.2%	27.6%	\$63,783	5.8%	3.6%	4.7%	22.0%	5.0%	16.2%	8.0%
Dallas-Fort Worth-Arlington, TX	57	7,759,615	11.0%	25.7%	\$64,252	9.1%	4.7%	4.9%	15.1%	5.6%	18.0%	6.9%
Ogden-Clearfield, UT	58	706,696	11.7%	25.9%	\$55,855	11.7%	3.5%	2.3%	27.0%	6.5%	23.3%	4.6%
Kahului-Wailuku-Lahaina, HI	59	164,221	8.8%	27.8%	\$52,232	-7.2%	13.2%	3.9%	15.7%	3.9%	-2.1%	13.5%
Manchester-Nashua, NH	60	424,079	7.8%	30.9%	\$70,329	-1.4%	2.2%	1.2%	30.9%	6.8%	15.3%	9.1%
Charleston-North Charleston, SC	61	813,052	12.0%	24.4%	\$61,278	6.4%	3.7%	4.0%	26.7%	4.8%	13.9%	7.6%
Spokane-Spokane Valley, WA	62	593,466	11.9%	23.0%	\$53,975	6.9%	5.2%	3.7%	24.2%	6.7%	17.8%	6.7%

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Portland-Vancouver-Hillsboro, OR-WA	63	2,511,612	10.0%	28.0%	\$64,888	2.2%	2.4%	3.8%	25.0%	7.6%	16.5%	6.2%
Fargo, ND-MN	64	252,136	16.0%	25.8%	\$66,994	2.1%	3.4%	2.9%	26.0%	4.5%	11.1%	6.9%
Missoula, MT	65	119,533	11.5%	22.7%	\$65,330	4.5%	4.2%	1.9%	28.4%	5.2%	18.4%	8.2%
Asheville, NC	66	472,341	11.5%	25.4%	\$57,899	3.3%	5.2%	4.0%	25.0%	3.8%	16.4%	7.6%
Grants Pass, OR	67	88,346	17.5%	18.9%	\$55,219	12.1%	3.8%	2.3%	21.1%	2.2%	31.7%	8.3%
College Station-Bryan, TX	68	272,041	14.0%	21.0%	\$50,257	9.3%	4.7%	6.8%	26.0%	5.5%	13.9%	2.6%
Portland-South Portland, ME	69	556,893	9.7%	27.4%	\$67,383	2.4%	4.7%	0.7%	25.3%	5.7%	18.3%	7.6%
Deltona-Daytona Beach-Ormond Beach, FL	70	685,344	13.1%	22.4%	\$54,741	5.3%	4.9%	3.5%	26.3%	5.4%	14.9%	6.9%
Riverside-San Bernardino-Ontario, CA	71	4,653,105	14.5%	19.5%	\$47,743	11.5%	5.4%	5.5%	22.6%	4.2%	15.1%	6.2%
Stockton, CA	72	789,410	11.3%	22.2%	\$55,239	10.3%	4.5%	5.0%	19.5%	6.2%	16.8%	6.1%
Jacksonville, FL	73	1,637,666	10.5%	24.0%	\$60,032	9.5%	3.9%	3.7%	24.3%	2.9%	20.2%	6.8%
Charlotte-Concord-Gastonia, NC-SC	74	2,701,046	9.5%	25.5%	\$64,240	8.4%	3.8%	4.0%	23.9%	2.4%	17.5%	6.6%
Bellingham, WA	75	228,831	13.4%	25.2%	\$55,514	-0.6%	2.7%	4.9%	23.5%	4.3%	23.4%	7.5%
Knoxville, TN	76	893,412	7.9%	23.5%	\$61,695	3.6%	3.2%	3.8%	28.2%	5.6%	15.9%	8.5%
Palm Bay-Melbourne-Titusville, FL	77	616,628	12.6%	25.1%	\$56,061	12.0%	4.5%	1.5%	24.5%	2.2%	21.8%	6.6%
Blacksburg-Christiansburg, VA	78	165,293	8.1%	26.7%	\$48,709	0.0%	4.6%	6.6%	23.9%	5.3%	10.7%	8.5%
Charlottesville, VA	79	222,688	12.5%	26.6%	\$76,856	0.8%	2.6%	2.3%	24.6%	4.9%	11.2%	6.5%
Santa Fe, NM	80	155,201	11.5%	23.4%	\$74,447	-5.0%	3.1%	3.4%	29.4%	10.1%	-1.6%	6.4%
Savannah, GA	81	410,008	12.4%	21.8%	\$56,144	8.3%	5.3%	4.1%	22.8%	1.8%	12.3%	8.8%
Sacramento-Roseville-Folsom, CA	82	2,411,428	13.6%	26.1%	\$62,067	5.8%	3.7%	4.0%	17.3%	5.2%	13.8%	5.7%
Jacksonville, NC	83	206,160	10.7%	20.4%	\$56,711	5.2%	5.4%	4.4%	29.9%	2.2%	13.9%	6.8%
Huntsville, AL	84	502,728	9.3%	25.6%	\$63,178	10.1%	4.1%	2.5%	26.1%	0.5%	18.9%	5.9%
Albany-Schenectady-Troy, NY	85	899,286	8.0%	28.3%	\$68,365	-4.4%	1.6%	2.8%	29.6%	6.5%	12.6%	7.2%
Hilton Head Island-Bluffton, SC	86	222,072	15.7%	24.0%	\$66,871	7.0%	3.2%	1.7%	20.9%	0.4%	18.9%	8.0%
Ocala, FL	87	385,915	12.4%	21.1%	\$48,057	8.9%	3.7%	3.3%	23.5%	5.0%	19.4%	7.5%
Burlington, NC	88	173,877	8.9%	22.6%	\$53,725	5.2%	4.9%	1.3%	31.3%	6.4%	9.1%	8.1%
Rapid City, SD	89	141,979	10.0%	19.0%	\$66,678	4.6%	5.2%	3.3%	24.8%	7.0%	10.7%	5.0%
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	90	6,228,601	9.6%	28.0%	\$72,955	-1.2%	3.0%	3.9%	25.6%	5.8%	3.0%	4.8%
Yuba City, CA	91	182,484	16.6%	24.4%	\$50,398	9.2%	2.3%	4.5%	18.1%	6.4%	12.9%	3.8%
Bremerton-Silverdale-Port Orchard, WA	92	274,314	14.1%	25.5%	\$65,433	2.4%	1.4%	3.4%	31.8%	3.9%	9.6%	2.9%
Worcester, MA-CT	93	978,447	9.8%	27.8%	\$64,539	-1.1%	3.6%	3.5%	28.3%	4.8%	4.6%	4.8%
Allentown-Bethlehem-Easton, PA-NJ	94	865,310	7.4%	26.2%	\$63,693	0.7%	4.5%	3.8%	24.2%	5.8%	6.2%	5.9%
Chattanooga, TN-GA	95	567,641	8.6%	23.2%	\$59,744	3.4%	1.9%	3.5%	29.4%	6.1%	10.3%	7.0%
Salem, OR	96	436,283	14.9%	21.1%	\$52,015	5.1%	3.0%	3.2%	23.5%	5.5%	17.6%	5.5%
Columbus, OH	97	2,151,017	8.4%	27.3%	\$63,002	3.4%	3.2%	3.1%	21.3%	3.3%	14.3%	7.7%
Longview, WA	98	111,524	11.8%	21.3%	\$55,217	4.2%	3.3%	3.9%	25.7%	7.2%	14.9%	3.1%

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Johnson City, TN	99	208,068	8.3%	20.5%	\$55,307	2.1%	3.9%	2.0%	28.5%	6.3%	17.3%	8.4%
Auburn-Opelika, AL	100	177,218	13.4%	23.3%	\$50,178	4.6%	3.5%	4.6%	25.5%	3.3%	12.0%	5.2%
Lancaster, PA	101	553,652	8.7%	25.2%	\$63,366	2.2%	4.1%	3.3%	26.5%	5.2%	6.4%	4.7%
Lakeland-Winter Haven, FL	102	753,520	9.3%	21.0%	\$45,291	16.4%	6.2%	3.6%	21.5%	0.2%	21.6%	5.5%
Grand Junction, CO	103	157,335	13.1%	19.3%	\$56,366	6.1%	4.4%	1.9%	27.7%	6.6%	12.5%	3.7%
San Luis Obispo-Paso Robles, CA	104	283,159	13.9%	23.0%	\$61,367	0.2%	4.8%	4.4%	21.6%	5.7%	4.6%	3.5%
Homosassa Springs, FL	105	158,083	11.8%	20.9%	\$48,015	0.0%	3.5%	4.0%	23.1%	6.1%	19.8%	7.6%
New Haven-Milford, CT	106	863,700	7.4%	27.5%	\$63,845	-1.2%	3.2%	3.7%	27.6%	6.3%	5.5%	4.3%
Prescott Valley-Prescott, AZ	107	242,253	14.3%	21.2%	\$52,187	6.5%	3.6%	0.2%	31.5%	4.0%	15.6%	5.8%
Des Moines-West Des Moines, IA	108	719,146	8.0%	27.3%	\$66,256	1.9%	3.0%	2.8%	24.4%	4.0%	9.3%	6.2%
Poughkeepsie-Newburgh-Middletown, NY	109	701,637	9.4%	27.8%	\$56,706	-1.6%	3.3%	3.8%	24.3%	4.1%	13.1%	6.0%
Kingston, NY	110	182,951	10.8%	27.7%	\$60,504	-7.7%	1.8%	2.3%	29.9%	8.0%	8.9%	5.9%
Detroit-Warren-Dearborn, MI	111	4,365,205	8.9%	28.1%	\$63,433	-2.7%	4.2%	2.8%	18.2%	5.5%	5.7%	8.7%
Indianapolis-Carmel-Anderson, IN	112	2,126,804	7.9%	25.7%	\$69,249	3.5%	3.7%	3.1%	22.9%	3.1%	11.3%	5.0%
Washington-Arlington-Alexandria, DC-VA-MD-WV	113	6,356,434	9.1%	32.6%	\$72,591	-0.6%	2.3%	1.1%	23.4%	3.9%	8.0%	5.0%
Mount Vernon-Anacortes, WA	114	130,696	14.4%	23.4%	\$63,847	0.8%	2.3%	2.4%	29.9%	7.9%	-4.1%	3.9%
Springfield, MO	115	481,483	9.2%	21.3%	\$54,614	4.5%	3.2%	3.3%	26.2%	5.8%	12.4%	6.5%
Ann Arbor, MI	116	369,390	8.6%	31.4%	\$68,858	0.3%	2.3%	3.2%	19.6%	1.6%	13.0%	6.0%
San Antonio-New Braunfels, TX	117	2,601,788	11.7%	18.3%	\$55,665	4.0%	3.4%	4.2%	25.5%	4.9%	12.7%	5.9%
Madison, WI	118	683,183	8.2%	27.6%	\$71,455	1.4%	2.4%	0.7%	25.9%	4.3%	11.4%	5.7%
Kalamazoo-Portage, MI	119	261,108	6.5%	23.6%	\$62,773	-0.9%	2.8%	3.8%	22.3%	8.0%	11.1%	6.2%
Columbia, MO	120	213,123	8.5%	24.2%	\$59,859	1.2%	3.7%	0.8%	30.3%	5.4%	12.5%	5.3%
Chicago-Naperville-Elgin, IL-IN-WI	121	9,509,934	8.6%	29.7%	\$68,293	-3.9%	1.9%	3.2%	23.1%	5.1%	5.0%	6.4%
Rochester, MN	122	227,151	6.7%	24.0%	\$68,581	2.5%	2.6%	0.0%	25.4%	9.6%	12.6%	4.7%
Tallahassee, FL	123	385,776	10.2%	23.9%	\$55,047	6.0%	4.2%	3.3%	26.1%	2.3%	9.1%	4.5%
Corvallis, OR	124	96,017	10.9%	25.1%	\$53,217	-1.1%	1.9%	2.8%	24.3%	8.0%	14.5%	4.8%
Lake Havasu City-Kingman, AZ	125	217,692	11.1%	18.3%	\$46,132	14.0%	7.7%	-1.4%	27.7%	1.4%	13.5%	7.5%
Kansas City, MO-KS	126	2,199,490	9.2%	24.3%	\$65,565	0.5%	2.1%	2.6%	26.2%	5.7%	10.0%	4.3%
Louisville/Jefferson County, KY-IN	127	1,284,566	7.1%	24.8%	\$64,725	0.2%	3.4%	2.3%	26.1%	4.2%	9.7%	5.9%
Tyler, TX	128	237,186	12.1%	20.9%	\$63,610	2.4%	2.8%	3.1%	24.2%	5.7%	11.1%	2.7%
St. Cloud, MN	129	200,406	5.9%	23.0%	\$64,002	-2.9%	1.1%	1.5%	35.1%	10.3%	5.8%	4.5%
Carson City, NV	130	58,993	12.4%	22.9%	\$64,196	5.7%	2.6%	0.3%	23.4%	3.8%	18.1%	4.1%
Gainesville, FL	131	341,756	11.9%	23.7%	\$52,781	4.5%	2.9%	1.3%	27.2%	1.4%	18.2%	6.1%
Birmingham-Hoover, AL	132	1,114,262	8.5%	24.4%	\$65,056	1.5%	2.9%	1.5%	26.2%	5.1%	7.8%	5.4%
Pittsfield, MA	133	128,657	10.4%	25.2%	\$67,804	-9.1%	3.9%	5.1%	26.3%	5.6%	-5.6%	3.8%
Jonesboro, AR	134	134,878	11.1%	20.5%	\$51,034	6.1%	2.9%	2.5%	24.8%	3.9%	18.4%	5.4%
Memphis, TN-MS-AR	135	1,336,103	8.6%	20.3%	\$62,425	0.3%	1.9%	2.6%	31.4%	6.7%	5.2%	5.9%
Providence-Warwick, RI-MA	136	1,675,774	8.8%	26.4%	\$63,801	-2.4%	4.1%	3.5%	21.4%	3.4%	4.2%	5.7%

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	OVERALL RANKING	2021 POPULATION	Young Firm Employment Share	Young Firm Knowledge Intensity	2021 PER CAPITA PERSONAL INCOME	2016-2021 EMPLOYMENT GROWTH	2020-2021 EMPLOYMENT GROWTH	June.2021-June.2022 EMPLOYMENT GROWTH	2016-2021 AVERAGE ANNUAL PAY GROWTH	2020-2021 AVERAGE ANNUAL PAY GROWTH	2016-2021 GDP GROWTH	2020-2021 GDP GROWTH
Cincinnati, OH-KY-IN	137	2,259,935	8.4%	25.5%	\$66,901	1.3%	3.2%	2.1%	20.9%	3.1%	11.7%	6.0%
Greenville-Anderson, SC	138	940,774	10.2%	24.2%	\$54,439	3.6%	3.3%	4.1%	20.9%	1.4%	11.6%	6.6%
Ames, IA	139	126,195	9.1%	28.2%	\$54,041	-2.2%	3.1%	1.6%	24.6%	6.8%	9.0%	4.5%
Burlington-South Burlington, VT	140	226,611	8.0%	30.3%	\$63,408	-3.7%	3.2%	0.8%	23.8%	5.9%	5.7%	5.3%
Minneapolis-St. Paul-Bloomington, MN-WI	141	3,690,512	8.4%	29.6%	\$69,425	-1.1%	2.4%	2.0%	20.4%	2.9%	7.5%	5.9%
Richmond, VA	142	1,324,062	9.3%	26.4%	\$67,233	-0.6%	1.8%	2.7%	25.5%	2.5%	9.2%	5.0%
Panama City, FL	143	179,168	11.9%	20.7%	\$55,752	-1.9%	5.1%	1.3%	25.9%	3.5%	10.1%	6.8%
Bloomington, IN	144	161,321	9.2%	25.1%	\$55,144	3.8%	3.0%	2.4%	25.1%	5.2%	7.3%	3.7%
Medford, OR	145	223,734	11.7%	20.3%	\$55,661	3.9%	2.4%	0.5%	22.5%	7.7%	13.5%	6.1%
Springfield, OH	146	135,633	9.1%	20.8%	\$54,993	-5.1%	2.2%	2.5%	30.3%	8.7%	2.9%	7.1%
Omaha-Council Bluffs, NE-IA	147	971,637	9.0%	24.7%	\$68,593	-0.8%	1.4%	1.6%	25.7%	5.5%	10.4%	4.0%
Pensacola-Ferry Pass-Brent, FL	148	516,388	8.9%	21.8%	\$54,841	7.2%	2.5%	2.7%	24.9%	2.9%	12.4%	5.8%
Tucson, AZ	149	1,052,030	9.1%	20.5%	\$56,975	2.7%	1.9%	2.3%	31.0%	5.1%	11.8%	4.3%
Jackson, MI	150	160,050	7.3%	21.4%	\$50,643	-4.2%	5.1%	4.8%	19.2%	1.6%	17.8%	9.0%
Grand Rapids-Kentwood, MI	151	1,091,620	7.3%	24.3%	\$59,642	-0.6%	4.0%	4.4%	21.1%	1.2%	8.7%	6.8%
Salinas, CA	152	437,325	16.1%	19.3%	\$58,066	0.2%	2.8%	6.4%	15.5%	5.7%	5.2%	1.8%
Winston-Salem, NC	153	681,438	7.9%	22.1%	\$57,956	2.3%	3.1%	2.3%	25.4%	4.2%	3.7%	7.7%
Dubuque, IA	154	98,718	5.1%	22.8%	\$64,577	-2.1%	1.5%	1.6%	28.7%	6.3%	16.6%	5.3%
Redding, CA	155	182,139	14.9%	20.3%	\$55,302	1.7%	2.1%	2.2%	26.4%	7.2%	8.1%	1.6%
Iowa City, IA	156	177,239	8.9%	27.7%	\$64,981	-3.5%	1.7%	2.3%	24.2%	6.5%	5.4%	3.2%
Norwich-New London, CT	157	268,805	7.6%	26.0%	\$63,857	-9.1%	3.1%	2.8%	26.1%	5.9%	4.3%	5.4%
Morristown, TN	158	143,855	7.8%	19.1%	\$52,342	4.0%	2.0%	3.1%	22.6%	5.4%	14.6%	8.2%
Clarksville, TN-KY	159	328,304	10.9%	21.1%	\$52,472	5.4%	2.9%	3.3%	26.3%	2.4%	7.4%	5.2%
Salisbury, MD-DE	160	429,223	12.2%	21.9%	\$59,281	3.3%	5.3%	2.0%	19.0%	1.0%	5.7%	6.3%
Modesto, CA	161	552,999	12.4%	21.6%	\$50,840	2.9%	2.6%	3.5%	19.2%	6.1%	11.9%	3.7%
Fresno, CA	162	1,013,581	15.7%	20.0%	\$50,634	4.7%	3.4%	4.5%	17.6%	5.4%	8.2%	1.2%
Albuquerque, NM	163	918,259	8.6%	17.9%	\$56,646	0.3%	2.8%	4.0%	27.5%	5.5%	8.4%	5.1%
Lebanon, PA	164	143,493	7.1%	22.3%	\$58,094	1.3%	3.5%	1.6%	26.3%	4.4%	9.6%	6.0%
Brunswick, GA	165	113,963	12.3%	22.3%	\$57,022	0.6%	4.5%	3.6%	19.1%	3.1%	4.5%	4.5%
Oxnard-Thousand Oaks-Ventura, CA	166	839,784	12.6%	24.6%	\$65,865	-1.2%	2.0%	4.0%	19.6%	3.4%	5.3%	3.0%
Sherman-Denison, TX	167	139,336	12.0%	20.9%	\$55,875	6.8%	2.9%	-1.5%	26.0%	6.1%	10.7%	5.0%
Winchester, VA-WV	168	145,155	7.1%	25.5%	\$58,136	7.0%	2.9%	2.6%	21.8%	1.5%	11.3%	4.7%
Fort Wayne, IN	169	423,038	6.8%	21.4%	\$59,284	2.3%	3.0%	3.1%	25.3%	3.6%	7.6%	6.1%
Lincoln, NE	170	342,117	9.1%	26.5%	\$61,136	-1.1%	1.1%	1.2%	24.9%	6.9%	10.8%	3.1%
Vallejo, CA	171	451,716	13.2%	24.3%	\$59,834	-2.3%	0.3%	4.6%	21.3%	-0.4%	30.0%	2.1%
Billings, MT	172	187,037	9.0%	18.8%	\$64,538	2.7%	3.2%	3.0%	24.0%	3.8%	5.9%	5.1%
Springfield, MA	173	695,305	9.5%	23.8%	\$62,914	-3.0%	4.3%	3.5%	20.8%	3.8%	1.6%	4.2%
Lansing-East Lansing, MI	174	540,281	8.5%	25.1%	\$53,495	-3.8%	2.8%	3.7%	21.7%	3.5%	8.9%	6.8%
Abilene, TX	175	177,314	11.5%	18.1%	\$60,368	6.1%	2.2%	2.2%	25.9%	1.1%	19.6%	3.4%
Cleveland-Elyria, OH	176	2,075,662	7.4%	25.1%	\$65,761	-3.5%	1.7%	1.6%	25.4%	4.4%	7.7%	6.5%
Visalia, CA	177	477,054	16.0%	16.5%	\$48,481	1.3%	3.7%	7.6%	18.2%	4.7%	7.8%	-0.4%
Twin Falls, ID	178	116,905	11.9%	18.9%	\$49,918	8.7%	3.9%	0.9%	27.4%	2.5%	14.3%	2.6%
Waco, TX	179	280,428	10.6%	18.5%	\$51,909	5.0%	4.1%	3.2%	21.1%	1.8%	13.1%	5.5%
Glens Falls, NY	180	126,574	8.0%	22.0%	\$58,584	-7.8%	2.9%	1.7%	29.4%	5.1%	10.3%	6.4%

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Eugene-Springfield, OR	181	383,189	10.0%	22.5%	\$54,810	-0.5%	2.1%	2.0%	22.5%	6.3%	10.1%	5.3%
Lexington-Fayette, KY	182	517,846	10.2%	25.5%	\$62,519	-1.6%	2.4%	2.0%	22.6%	3.8%	6.4%	4.2%
Harrisburg-Carlisle, PA	183	596,305	8.0%	28.3%	\$62,048	-0.5%	2.5%	2.6%	22.9%	1.6%	4.8%	4.5%
Columbus, IN	184	82,475	5.3%	27.1%	\$66,457	-5.0%	0.7%	3.3%	17.6%	5.0%	7.4%	8.5%
Eau Claire, WI	185	173,317	7.8%	23.2%	\$59,631	-0.2%	3.0%	2.0%	25.8%	3.9%	6.9%	4.7%
Baltimore-Columbia-Towson, MD	186	2,838,327	8.2%	28.4%	\$67,126	-2.5%	1.9%	1.4%	23.9%	3.5%	3.8%	4.4%
Hickory-Lenoir-Morganton, NC	187	366,441	8.5%	20.0%	\$54,374	0.8%	2.3%	3.2%	27.5%	4.6%	3.5%	6.4%
York-Hanover, PA	188	458,696	6.9%	22.3%	\$59,752	-1.8%	3.2%	3.3%	23.0%	6.0%	2.1%	5.1%
Greenville, NC	189	172,169	8.6%	21.0%	\$59,361	1.9%	2.8%	3.3%	25.5%	2.2%	4.4%	5.8%
Jackson, TN	190	180,799	7.8%	19.4%	\$56,991	1.5%	2.5%	2.2%	23.2%	4.1%	11.4%	7.7%
Brownsville-Harlingen, TX	191	423,029	10.4%	13.3%	\$42,850	4.6%	5.3%	3.9%	24.9%	3.2%	10.9%	6.0%
Dover, DE	192	184,149	9.0%	20.6%	\$52,590	1.3%	3.0%	0.8%	29.0%	1.5%	19.0%	6.0%
Champaign-Urbana, IL	193	222,696	8.9%	24.2%	\$59,170	1.3%	2.7%	3.0%	22.9%	3.6%	1.5%	4.0%
Houston-The Woodlands-Sugar Land, TX	194	7,206,841	11.4%	23.5%	\$65,007	2.5%	2.4%	4.7%	16.3%	2.7%	3.0%	1.9%
Pocatello, ID	195	96,213	10.8%	20.4%	\$50,933	5.3%	3.2%	3.3%	22.6%	3.5%	8.1%	2.7%
Bloomington, IL	196	170,889	6.4%	26.2%	\$62,855	-5.1%	2.2%	6.9%	22.2%	1.5%	-2.2%	4.1%
Binghamton, NY	197	245,220	6.1%	24.1%	\$54,213	-8.6%	1.6%	1.6%	33.8%	8.0%	3.4%	5.2%
Buffalo-Cheektowaga, NY	198	1,162,336	7.6%	25.3%	\$59,727	-7.0%	2.2%	2.6%	28.5%	3.3%	4.9%	5.3%
Syracuse, NY	199	658,281	7.3%	24.5%	\$60,250	-5.7%	1.5%	1.7%	28.6%	5.5%	5.0%	5.4%
Athens-Clarke County, GA	200	217,759	12.2%	27.0%	\$51,183	3.9%	3.9%	0.1%	19.3%	-0.3%	10.6%	5.6%
Bowling Green, KY	201	182,594	8.5%	22.5%	\$48,939	0.7%	4.3%	2.5%	16.3%	4.4%	11.8%	5.8%
Dothan, AL	202	151,618	9.3%	20.2%	\$57,241	3.1%	1.8%	2.1%	24.6%	5.3%	7.7%	4.1%
Battle Creek, MI	203	133,819	7.1%	21.9%	\$52,752	-9.9%	2.3%	3.2%	21.9%	3.5%	11.7%	11.4%
Kennewick-Richland, WA	204	308,293	13.4%	23.2%	\$51,820	5.7%	3.6%	1.0%	18.7%	3.0%	8.3%	2.9%
Greeley, CO	205	340,036	14.0%	21.1%	\$59,189	6.8%	0.0%	4.5%	31.1%	4.9%	7.6%	-6.7%
Pueblo, CO	206	169,622	12.8%	15.8%	\$51,616	2.7%	1.1%	2.9%	27.5%	2.9%	10.1%	6.6%
Ithaca, NY	207	105,162	5.3%	31.2%	\$50,196	-8.0%	0.9%	1.4%	29.3%	5.2%	4.4%	7.1%
Sioux City, IA-NE-SD	208	149,265	6.4%	21.7%	\$66,657	-4.3%	2.1%	3.1%	17.7%	5.0%	11.1%	6.5%
McAllen-Edinburg-Mission, TX	209	880,356	11.7%	13.6%	\$39,317	7.2%	4.0%	3.7%	22.0%	5.5%	10.9%	4.5%
Utica-Rome, NY	210	290,211	6.7%	24.7%	\$57,043	-5.9%	1.2%	0.8%	30.1%	8.1%	5.6%	4.6%
Waterloo-Cedar Falls, IA	211	167,796	5.4%	22.7%	\$60,283	-3.4%	1.8%	1.2%	24.9%	6.0%	8.6%	7.0%
East Stroudsburg, PA	212	169,273	10.8%	23.2%	\$54,281	-2.9%	4.5%	2.2%	22.3%	2.8%	4.7%	3.8%
State College, PA	213	157,527	9.5%	27.7%	\$57,428	-6.4%	0.6%	2.0%	30.7%	5.9%	0.7%	2.2%
South Bend-Mishawaka, IN-MI	214	323,695	6.7%	23.7%	\$61,076	-5.5%	0.9%	0.9%	25.6%	7.3%	6.8%	6.4%
Pittsburgh, PA	215	2,353,538	7.8%	26.1%	\$69,077	-4.8%	1.2%	0.7%	22.4%	5.6%	6.2%	4.4%
Hammond, LA	216	135,217	10.9%	19.7%	\$53,209	4.7%	3.0%	0.9%	23.1%	3.8%	15.2%	2.5%
Spartanburg, SC	217	335,864	8.6%	21.4%	\$54,600	11.7%	1.8%	0.9%	16.8%	0.8%	18.0%	6.8%
San Angelo, TX	218	122,344	12.0%	16.1%	\$65,380	-1.4%	1.1%	3.9%	26.2%	5.7%	15.2%	-1.4%
Scranton--Wilkes-Barre, PA	219	567,750	7.5%	24.5%	\$57,040	-4.8%	1.9%	4.0%	24.7%	4.9%	0.4%	3.9%
California-Lexington Park, MD	220	114,468	8.6%	25.9%	\$68,185	7.6%	2.6%	-0.5%	20.6%	1.7%	8.6%	1.8%

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Toledo, OH	221	644,217	8.1%	23.2%	\$60,124	-5.0%	2.1%	2.1%	22.0%	4.4%	5.2%	6.7%
El Centro, CA	222	179,851	22.0%	9.8%	\$49,797	1.1%	5.1%	2.6%	23.4%	5.7%	3.0%	-0.4%
Lubbock, TX	223	325,245	12.4%	17.9%	\$54,333	3.5%	3.4%	2.5%	22.6%	2.8%	8.4%	2.9%
Milwaukee-Waukesha, WI	224	1,566,487	8.2%	23.7%	\$68,822	-3.7%	1.5%	0.6%	24.6%	4.7%	4.3%	4.9%
Lawrence, KS	225	119,363	9.6%	24.2%	\$55,782	-5.6%	2.1%	1.4%	29.0%	5.6%	3.8%	2.8%
Bloomsburg-Berwick, PA	226	82,959	7.5%	22.8%	\$59,375	-1.9%	1.7%	1.9%	22.2%	5.6%	3.0%	6.2%
Flagstaff, AZ	227	145,052	11.5%	19.5%	\$59,562	-2.7%	4.5%	2.4%	19.7%	2.4%	5.0%	4.8%
Anniston-Oxford, AL	228	115,972	7.3%	21.0%	\$50,839	-0.6%	1.7%	0.0%	31.1%	5.9%	10.4%	5.4%
Killeen-Temple, TX	229	486,101	11.4%	18.9%	\$51,040	3.5%	2.7%	2.0%	24.1%	2.9%	11.0%	3.6%
Flint, MI	230	404,208	11.0%	21.8%	\$55,405	-5.6%	3.7%	2.0%	19.0%	3.5%	4.2%	7.2%
Oklahoma City, OK	231	1,441,647	12.2%	22.7%	\$61,612	2.7%	2.2%	3.2%	20.1%	3.2%	0.8%	0.9%
Grand Island, NE	232	76,175	7.3%	18.5%	\$59,024	-2.0%	3.2%	2.0%	23.4%	7.5%	2.0%	4.5%
Lewiston-Auburn, ME	233	111,034	7.8%	21.5%	\$52,948	-2.8%	1.2%	-1.1%	26.0%	10.5%	11.7%	4.5%
Warner Robins, GA	234	195,246	11.4%	21.6%	\$52,352	6.5%	2.1%	1.9%	17.5%	3.2%	10.4%	3.7%
Yuma, AZ	235	206,990	11.5%	11.7%	\$49,473	2.2%	2.9%	4.5%	33.8%	4.6%	7.7%	-0.4%
Monroe, MI	236	155,274	7.1%	22.6%	\$58,031	-10.3%	1.9%	6.0%	19.6%	4.9%	-1.0%	6.8%
St. Louis, MO-IL	237	2,809,299	8.2%	22.7%	\$67,295	-2.2%	1.7%	2.5%	21.0%	3.0%	3.6%	5.0%
Albany-Lebanon, OR	238	129,839	8.9%	18.3%	\$51,764	5.1%	3.7%	3.5%	16.9%	4.7%	7.6%	3.2%
Dayton-Kettering, OH	239	813,516	8.2%	24.4%	\$60,055	-2.3%	1.0%	1.4%	22.9%	3.6%	10.9%	4.8%
Kingsport-Bristol, TN-VA	240	308,661	8.3%	20.0%	\$55,063	-4.3%	0.9%	3.6%	26.8%	4.7%	5.6%	5.6%
Hartford-East Hartford-Middletown, CT	241	1,211,906	7.2%	28.1%	\$68,774	-3.9%	1.9%	2.0%	16.6%	3.3%	0.8%	5.0%
Springfield, IL	242	206,898	7.8%	24.6%	\$62,191	-2.9%	2.4%	2.0%	18.7%	2.4%	3.6%	7.0%
Great Falls, MT	243	84,511	8.3%	19.1%	\$61,673	-1.3%	2.8%	2.3%	27.3%	3.8%	3.9%	3.0%
Urban Honolulu, HI	244	1,000,890	7.1%	31.7%	\$55,702	-11.1%	3.1%	2.6%	23.1%	2.9%	-4.7%	5.3%
Akron, OH	245	700,015	8.2%	24.2%	\$62,663	-4.2%	1.3%	0.7%	21.3%	5.5%	5.6%	5.8%
Lewiston, ID-WA	246	64,851	7.9%	19.1%	\$60,318	0.3%	2.2%	1.6%	26.1%	2.6%	8.2%	5.5%
Rochester, NY	247	1,084,973	7.3%	24.8%	\$59,886	-6.1%	1.7%	2.6%	23.7%	4.1%	4.3%	4.9%
Bismarck, ND	248	134,417	14.7%	24.0%	\$68,055	-2.1%	3.4%	1.9%	17.1%	0.4%	-4.3%	3.7%
El Paso, TX	249	871,234	11.4%	13.5%	\$47,306	3.2%	2.5%	3.5%	24.3%	4.1%	13.5%	3.7%
Lafayette-West Lafayette, IN	250	224,709	8.4%	22.9%	\$50,762	2.4%	3.8%	4.5%	16.4%	-0.9%	10.4%	4.6%
Little Rock-North Little Rock-Conway, AR	251	750,936	9.4%	21.9%	\$57,801	-0.5%	2.2%	2.5%	23.3%	2.7%	5.6%	3.9%
Appleton, WI	252	244,084	7.6%	23.2%	\$62,395	-0.9%	1.8%	0.6%	21.2%	4.2%	8.7%	5.0%
Gulfport-Biloxi, MS	253	418,082	10.8%	18.4%	\$49,869	0.9%	3.9%	1.2%	20.5%	3.4%	7.1%	6.4%
Harrisonburg, VA	254	135,824	8.1%	23.3%	\$50,192	0.2%	2.9%	1.9%	20.5%	-1.8%	16.4%	7.9%
Altoona, PA	255	121,767	7.9%	21.7%	\$60,816	-3.6%	2.7%	1.2%	25.2%	4.1%	5.4%	4.0%
Muskegon, MI	256	176,511	7.7%	19.4%	\$50,703	-4.6%	5.4%	4.5%	14.8%	5.1%	0.3%	5.5%
Amarillo, TX	257	269,703	10.1%	18.3%	\$59,970	1.2%	2.7%	-1.7%	26.0%	5.1%	11.4%	4.4%
Virginia Beach-Norfolk-Newport News, VA-NC	258	1,803,328	9.3%	22.0%	\$57,999	-1.5%	1.6%	1.2%	26.1%	2.1%	3.8%	6.3%
Wenatchee, WA	259	123,342	13.5%	18.3%	\$56,258	-1.6%	3.0%	-0.4%	21.8%	5.9%	6.6%	4.2%
Bangor, ME	260	152,765	7.1%	20.7%	\$52,206	-1.4%	2.9%	2.3%	21.3%	4.1%	10.8%	4.9%
Evansville, IN-KY	261	313,946	7.7%	21.7%	\$62,740	-2.3%	2.0%	2.0%	21.2%	2.6%	14.4%	3.3%
Decatur, AL	262	156,758	7.2%	19.7%	\$53,951	6.1%	1.1%	1.8%	22.5%	6.0%	7.8%	2.9%
Topeka, KS	263	232,670	8.7%	22.1%	\$60,141	-2.4%	2.4%	1.8%	20.8%	5.0%	5.4%	2.8%

\*Shaded rows denote heartland metropolitan statistical areas.

	OVERALL RANKING	2021 POPULATION	Young Firm Employment Share	Young Firm Knowledge Intensity	2021 PER CAPITA PERSONAL INCOME	2016-2021 EMPLOYMENT GROWTH	2020-2021 EMPLOYMENT GROWTH	June.2021-June.2022 EMPLOYMENT GROWTH	2016-2021 AVERAGE ANNUAL PAY GROWTH	2020-2021 AVERAGE ANNUAL PAY GROWTH	2016-2021 GDP GROWTH	2020-2021 GDP GROWTH
Columbia, SC	264	838,250	9.6%	23.1%	\$57,101	-0.1%	2.2%	2.2%	21.7%	0.7%	7.0%	4.4%
Wichita Falls, TX	265	149,013	12.0%	20.1%	\$55,857	-0.7%	1.4%	1.3%	21.0%	6.3%	8.2%	2.3%
Elmira, NY	266	83,045	5.1%	23.3%	\$55,155	-8.1%	0.2%	3.6%	25.8%	8.6%	-0.9%	4.9%
Victoria, TX	267	98,127	12.6%	16.5%	\$63,300	-7.6%	1.2%	3.5%	22.6%	7.6%	-1.0%	2.6%
Las Cruces, NM	268	221,508	11.4%	15.2%	\$52,292	-0.3%	2.1%	2.7%	27.4%	4.7%	4.4%	3.0%
Cheyenne, WY	269	100,863	10.3%	19.0%	\$63,159	1.9%	2.0%	-0.8%	24.2%	2.5%	9.5%	4.7%
Mankato, MN	270	103,612	8.2%	24.5%	\$60,647	-2.5%	1.3%	0.3%	26.7%	7.2%	0.3%	0.5%
Hagerstown-Martinsburg, MD-WV	271	298,227	7.2%	22.2%	\$53,649	-2.3%	3.2%	-0.8%	30.8%	2.5%	3.7%	5.4%
Vineland-Bridgeton, NJ	272	153,627	7.6%	22.2%	\$49,111	-2.6%	3.3%	4.2%	20.7%	2.8%	1.7%	3.8%
Kankakee, IL	273	106,601	9.1%	20.2%	\$57,660	-3.7%	-2.2%	2.0%	27.6%	3.7%	18.5%	4.7%
Bakersfield, CA	274	917,673	18.7%	18.0%	\$45,535	4.0%	3.5%	4.0%	14.9%	2.6%	3.5%	-1.1%
Gettysburg, PA	275	104,127	10.2%	19.5%	\$58,303	-3.5%	2.9%	-0.8%	26.2%	5.5%	-1.0%	5.1%
Walla Walla, WA	276	62,682	20.6%	20.0%	\$54,296	2.7%	2.4%	2.7%	18.0%	-0.1%	-3.6%	0.8%
Greensboro-High Point, NC	277	778,848	7.1%	23.2%	\$55,882	-1.3%	2.5%	2.2%	22.9%	1.5%	1.1%	5.2%
Chambersburg-Waynesboro, PA	278	156,289	6.4%	22.8%	\$57,933	-0.3%	1.6%	2.9%	20.9%	2.4%	4.9%	3.9%
Shreveport-Bossier City, LA	279	389,155	8.8%	20.3%	\$61,115	-6.1%	2.1%	1.8%	26.4%	2.3%	5.4%	3.8%
Owensboro, KY	280	121,227	7.4%	22.2%	\$57,059	-2.5%	2.9%	-0.2%	26.6%	5.2%	-0.5%	3.4%
Bay City, MI	281	102,985	8.8%	20.0%	\$54,984	-5.2%	3.7%	1.3%	23.3%	1.2%	1.8%	7.4%
Fort Smith, AR-OK	282	245,459	8.5%	18.7%	\$51,262	-3.1%	1.6%	2.3%	23.2%	4.5%	7.6%	4.9%
Davenport-Moline-Rock Island, IA-IL	283	381,568	7.8%	20.6%	\$61,491	-3.8%	2.0%	1.7%	22.6%	2.8%	5.1%	4.3%
Racine, WI	284	196,896	9.8%	19.7%	\$61,707	-2.5%	2.1%	0.6%	24.7%	5.4%	-3.4%	3.3%
Fayetteville, NC	285	524,588	8.6%	20.2%	\$49,674	0.9%	3.1%	2.3%	20.9%	1.6%	2.6%	5.3%
Reading, PA	286	429,342	6.2%	23.3%	\$60,188	-4.0%	1.6%	3.3%	23.8%	3.4%	-0.1%	2.4%
Macon-Bibb County, GA	287	233,883	7.6%	23.3%	\$53,630	-2.4%	1.0%	1.0%	26.7%	3.2%	-1.0%	5.9%
Hinesville, GA	288	82,863	8.3%	19.0%	\$43,825	7.9%	4.9%	2.4%	16.4%	-0.5%	5.9%	5.3%
New Orleans-Metairie, LA	289	1,261,726	8.8%	22.6%	\$64,953	-6.9%	2.0%	1.4%	26.2%	5.0%	-2.0%	0.7%
Mobile, AL	290	428,220	8.3%	20.2%	\$52,850	0.4%	3.3%	-0.4%	26.4%	3.9%	4.0%	2.8%
Wichita, KS	291	647,919	8.1%	20.8%	\$62,018	-1.5%	2.2%	2.1%	18.9%	3.4%	4.1%	2.8%
Hot Springs, AR	292	100,330	12.6%	19.8%	\$52,569	0.5%	2.4%	1.8%	19.1%	0.6%	8.0%	3.8%
Sebring-Avon Park, FL	293	103,296	12.3%	19.6%	\$46,178	-2.1%	2.8%	1.9%	22.0%	4.8%	4.8%	1.5%
Florence-Muscle Shoals, AL	294	151,517	8.6%	22.0%	\$52,166	-1.9%	1.8%	2.4%	23.2%	1.7%	3.9%	4.3%
New Bern, NC	295	122,273	8.2%	21.2%	\$58,922	-0.3%	2.9%	1.8%	16.7%	-0.7%	9.6%	5.8%
Tuscaloosa, AL	296	268,191	10.5%	19.7%	\$49,221	-1.4%	0.5%	2.6%	24.8%	2.6%	7.6%	3.9%
Mansfield, OH	297	125,195	6.7%	21.2%	\$52,336	-6.0%	2.5%	0.6%	24.6%	4.8%	4.0%	5.8%
Hattiesburg, MS	298	173,078	9.6%	19.0%	\$50,265	1.9%	1.8%	2.5%	20.6%	1.8%	4.3%	5.2%
Montgomery, AL	299	385,798	8.6%	21.2%	\$55,679	-2.5%	2.1%	1.0%	26.2%	2.2%	2.1%	4.1%
Laredo, TX	300	267,945	12.3%	13.6%	\$45,420	0.8%	1.9%	3.6%	26.5%	6.7%	1.0%	0.0%
Fond du Lac, WI	301	104,362	7.2%	21.1%	\$61,137	-1.9%	1.9%	1.1%	18.2%	3.8%	4.7%	4.5%
La Crosse-Onalaska, WI-MN	302	139,211	6.5%	23.9%	\$61,549	-2.3%	2.9%	0.3%	22.0%	-1.4%	8.4%	5.0%
Watertown-Fort Drum, NY	303	116,295	7.9%	21.2%	\$56,547	-6.7%	3.5%	1.7%	29.2%	1.4%	-4.8%	3.4%
Janesville-Beloit, WI	304	164,381	7.8%	19.2%	\$56,727	0.2%	2.2%	0.3%	23.3%	1.9%	10.6%	4.1%
Odessa, TX	305	161,091	13.3%	13.8%	\$55,545	2.4%	-1.0%	7.1%	21.4%	4.2%	6.9%	-2.9%
Carbondale-Marion, IL	306	132,907	6.6%	21.3%	\$56,194	-4.0%	1.4%	3.1%	17.7%	6.2%	0.7%	3.4%

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	OVERALL RANKING	2021 POPULATION	Young Firm Employment Share	Young Firm Knowledge Intensity	2021 PER CAPITA PERSONAL INCOME	2016-2021 EMPLOYMENT GROWTH	2020-2021 EMPLOYMENT GROWTH	June 2021-June 2022 EMPLOYMENT GROWTH	2016-2021 AVERAGE ANNUAL PAY GROWTH	2020-2021 AVERAGE ANNUAL PAY GROWTH	2016-2021 GDP GROWTH	2020-2021 GDP GROWTH
Merced, CA	307	286,461	13.6%	17.4%	\$46,443	4.1%	2.6%	4.7%	14.2%	2.8%	6.2%	-0.9%
Saginaw, MI	308	189,591	6.1%	20.3%	\$54,071	-8.5%	2.4%	1.9%	23.3%	2.7%	6.7%	6.5%
Oshkosh-Neenah, WI	309	171,623	5.2%	23.0%	\$59,642	-2.5%	1.2%	1.2%	16.9%	3.9%	7.0%	5.5%
Joplin, MO	310	182,541	8.0%	17.5%	\$50,331	0.1%	3.4%	1.8%	21.0%	4.7%	-0.7%	3.8%
Manhattan, KS	311	133,932	11.1%	22.1%	\$56,475	-3.4%	1.4%	2.2%	17.1%	4.5%	-2.1%	2.9%
Florence, SC	312	199,259	9.2%	19.2%	\$55,599	2.5%	1.4%	2.7%	18.9%	0.5%	4.1%	4.5%
Canton-Massillon, OH	313	400,525	8.4%	20.8%	\$57,937	-3.9%	1.8%	0.5%	23.1%	3.6%	-0.4%	5.1%
Augusta-Richmond County, GA-SC	314	615,933	9.1%	20.7%	\$53,753	2.6%	1.6%	1.0%	23.7%	0.4%	6.5%	3.1%
Wausau-Weston, WI	315	166,189	6.0%	21.4%	\$63,296	-1.7%	1.6%	0.9%	21.1%	3.0%	1.7%	4.5%
Michigan City-La Porte, IN	316	112,390	6.9%	20.9%	\$54,443	-4.2%	1.7%	2.0%	19.6%	8.1%	-2.7%	2.6%
Parkersburg-Vienna, WV	317	88,687	8.9%	19.4%	\$57,758	-7.2%	3.7%	0.3%	29.2%	0.3%	-0.3%	4.5%
Tulsa, OK	318	1,023,988	9.0%	21.8%	\$65,140	-0.7%	0.8%	1.9%	20.4%	2.8%	2.9%	0.3%
Jackson, MS	319	587,202	9.6%	19.9%	\$58,421	-4.5%	0.6%	1.4%	23.7%	4.0%	1.2%	3.7%
Cleveland, TN	320	127,938	7.6%	21.4%	\$51,587	0.8%	-2.8%	2.6%	25.0%	4.5%	4.5%	4.2%
Grand Forks, ND-MN	321	103,462	7.1%	20.4%	\$64,706	-6.7%	1.0%	0.8%	23.6%	4.7%	3.0%	2.9%
Rockford, IL	322	336,278	5.6%	23.7%	\$54,742	-8.3%	0.5%	4.4%	18.9%	2.9%	-0.3%	5.5%
Elizabethtown-Fort Knox, KY	323	156,766	10.1%	20.6%	\$57,208	-6.1%	0.4%	0.1%	19.8%	4.8%	7.6%	4.9%
Chico, CA	324	208,309	12.7%	20.9%	\$53,351	-4.8%	2.5%	0.9%	22.4%	3.9%	0.1%	0.1%
Erie, PA	325	269,011	8.1%	23.3%	\$57,219	-6.4%	2.1%	2.5%	19.9%	2.6%	-3.6%	3.4%
Yakima, WA	326	256,035	16.1%	18.6%	\$52,059	0.8%	1.4%	1.1%	19.6%	1.8%	7.2%	-0.2%
Roanoke, VA	327	314,496	7.3%	24.0%	\$57,510	-4.0%	1.2%	1.6%	19.6%	1.2%	2.2%	4.8%
Baton Rouge, LA	328	871,905	9.7%	21.2%	\$60,518	-2.9%	3.4%	2.8%	19.7%	2.1%	-10.5%	0.9%
Youngstown-Warren-Boardman, OH-PA	329	538,069	8.7%	21.0%	\$55,949	-9.3%	1.8%	2.2%	22.4%	3.2%	-0.8%	4.3%
Sheboygan, WI	330	117,747	7.4%	20.2%	\$62,620	-1.9%	1.0%	0.7%	22.0%	3.3%	-0.6%	4.0%
Hanford-Corcoran, CA	331	153,443	14.9%	16.1%	\$43,799	2.0%	0.1%	4.1%	20.3%	4.1%	6.8%	-1.0%
Green Bay, WI	332	329,490	6.8%	21.6%	\$63,060	-1.4%	1.5%	0.7%	20.4%	2.6%	1.0%	2.9%
Sumter, SC	333	135,782	7.8%	17.4%	\$53,762	-1.9%	1.5%	0.0%	24.5%	0.6%	9.8%	6.8%
Morgantown, WV	334	140,745	8.6%	24.5%	\$52,345	0.5%	4.0%	1.3%	19.8%	-2.2%	-0.2%	1.8%
Valdosta, GA	335	149,152	9.1%	22.0%	\$48,237	-1.6%	0.9%	0.8%	24.1%	1.1%	9.5%	2.4%
Niles, MI	336	153,101	8.2%	21.7%	\$64,749	-7.2%	2.4%	2.7%	18.1%	0.6%	-0.2%	2.3%
Huntington-Ashland, WV-KY-OH	337	356,581	10.6%	21.6%	\$53,651	-3.0%	2.1%	1.2%	21.5%	0.5%	0.3%	3.1%
Alexandria, LA	338	150,890	9.3%	19.6%	\$58,069	-4.3%	2.0%	0.6%	24.8%	1.7%	1.4%	2.6%
Lima, OH	339	101,670	5.7%	23.4%	\$56,545	-4.0%	1.3%	0.6%	18.2%	4.4%	-0.7%	4.8%
Rome, GA	340	98,771	8.4%	22.2%	\$49,276	0.6%	2.9%	1.8%	14.0%	0.7%	-4.1%	6.1%
Columbus, GA-AL	341	327,536	10.1%	21.8%	\$53,206	-1.3%	0.4%	1.0%	22.1%	1.5%	4.5%	2.4%
Corpus Christi, TX	342	422,778	10.6%	15.6%	\$55,490	-4.6%	1.1%	2.8%	19.9%	3.4%	6.6%	1.9%
Madera, CA	343	159,410	16.6%	17.5%	\$45,714	7.0%	4.1%	3.0%	16.3%	-2.6%	3.2%	-2.9%
Midland, MI	344	83,457	9.1%	21.8%	\$67,705	-5.1%	4.6%	2.5%	16.2%	-3.4%	-0.3%	0.6%
Decatur, IL	345	102,432	5.4%	18.6%	\$62,989	-9.5%	-0.2%	1.2%	21.5%	6.8%	-7.4%	7.6%
Cedar Rapids, IA	346	275,435	6.2%	23.6%	\$64,311	-3.5%	1.5%	1.3%	16.4%	1.3%	-0.1%	2.9%
Duluth, MN-WI	347	290,780	6.3%	20.7%	\$60,489	-4.9%	2.5%	0.3%	26.2%	-2.0%	3.8%	4.1%
Staunton, VA	348	125,774	8.1%	21.7%	\$55,937	-1.1%	1.1%	3.0%	12.3%	-0.6%	4.2%	5.1%
Longview, TX	349	287,868	11.9%	18.2%	\$52,691	-3.5%	0.8%	3.1%	16.2%	3.3%	1.4%	1.7%
Anchorage, AK	350	398,807	8.1%	21.8%	\$63,130	-5.2%	2.9%	3.0%	19.3%	-1.9%	-3.5%	1.6%

\*Shaded rows denote heartland metropolitan statistical areas.

	OVERALL RANKING	2021 POPULATION	Young Firm Employment Share	Young Firm Knowledge Intensity	2021 PER CAPITA PERSONAL INCOME	2016-2021 EMPLOYMENT GROWTH	2020-2021 EMPLOYMENT GROWTH	June 2021-June 2022 EMPLOYMENT GROWTH	2016-2021 AVERAGE ANNUAL PAY GROWTH	2020-2021 AVERAGE ANNUAL PAY GROWTH	2016-2021 GDP GROWTH	2020-2021 GDP GROWTH
Terre Haute, IN	351	184,910	8.1%	20.8%	\$52,107	-5.8%	1.1%	0.3%	20.0%	4.1%	0.0%	5.0%
Williamsport, PA	352	113,605	7.3%	19.7%	\$54,992	-6.5%	0.4%	1.5%	22.6%	6.1%	-0.4%	1.2%
Casper, WY	353	79,555	11.3%	17.4%	\$76,825	-4.6%	0.7%	2.3%	18.4%	3.3%	-8.3%	-1.7%
Jefferson City, MO	354	150,706	8.4%	19.7%	\$58,145	-0.9%	0.0%	1.6%	16.9%	4.1%	3.5%	0.9%
Cumberland, MD-WV	355	94,586	8.9%	21.0%	\$52,143	-6.5%	2.6%	3.7%	23.4%	-0.4%	-6.3%	0.6%
Johnstown, PA	356	132,167	10.1%	22.9%	\$57,128	-10.5%	0.9%	1.3%	22.3%	2.7%	-2.0%	0.5%
Lafayette, LA	357	479,212	10.2%	21.1%	\$57,577	-3.9%	2.1%	1.0%	15.4%	1.8%	-1.5%	1.4%
Goldsboro, NC	358	116,835	7.0%	19.9%	\$55,344	-4.3%	0.1%	-1.4%	27.9%	-0.2%	7.0%	5.7%
Dalton, GA	359	142,799	8.8%	19.0%	\$49,214	-5.4%	2.9%	2.4%	12.6%	-1.6%	3.3%	6.9%
Lynchburg, VA	360	262,258	8.4%	23.0%	\$51,905	-3.5%	0.6%	1.0%	18.4%	-0.1%	3.4%	3.1%
Muncie, IN	361	111,871	6.9%	21.8%	\$50,852	-4.6%	0.5%	0.0%	25.8%	2.0%	3.3%	1.8%
Weirton-Steubenville, WV-OH	362	115,585	6.1%	22.6%	\$54,440	-5.5%	2.4%	2.1%	15.7%	0.8%	9.0%	-1.1%
Peoria, IL	363	398,224	6.7%	20.8%	\$61,645	-6.8%	1.3%	3.9%	11.7%	0.5%	-7.4%	4.7%
Lawton, OK	364	127,543	10.3%	18.7%	\$54,648	-6.3%	-0.1%	0.0%	27.4%	2.2%	-3.0%	1.4%
Texarkana, TX-AR	365	147,174	11.1%	17.0%	\$50,976	-3.8%	1.5%	-0.3%	21.3%	2.9%	-1.7%	1.3%
Danville, IL	366	73,095	6.1%	21.2%	\$55,764	-8.7%	-0.5%	3.6%	12.5%	2.2%	1.6%	3.4%
Albany, GA	367	147,773	7.8%	18.1%	\$51,041	-2.0%	0.6%	0.7%	23.6%	0.0%	1.4%	1.5%
Rocky Mount, NC	368	143,535	6.4%	19.5%	\$55,577	-4.4%	2.1%	-2.2%	22.3%	2.0%	-18.3%	8.1%
Charleston, WV	369	255,020	9.2%	22.9%	\$56,942	-9.4%	1.5%	-0.4%	20.9%	-0.7%	-5.7%	2.8%
Beckley, WV	370	113,698	8.2%	21.3%	\$51,860	-4.8%	1.3%	-0.6%	16.8%	-1.6%	7.1%	3.5%
Fairbanks, AK	371	95,593	9.1%	22.1%	\$62,841	-4.3%	1.2%	0.8%	12.9%	-3.2%	-1.7%	2.9%
Sierra Vista-Douglas, AZ	372	126,050	16.5%	15.1%	\$55,707	0.5%	-2.1%	-2.8%	28.5%	0.3%	4.7%	-0.7%
Lake Charles, LA	373	210,362	9.2%	19.9%	\$56,605	-11.4%	0.0%	-3.1%	24.2%	5.9%	-5.4%	1.5%
Pine Bluff, AR	374	86,412	7.2%	19.3%	\$47,128	-7.8%	-1.3%	-1.3%	21.9%	1.4%	-1.9%	8.2%
Monroe, LA	375	204,884	8.7%	20.1%	\$54,230	-6.0%	1.2%	1.7%	17.8%	-1.4%	-6.7%	0.2%
Kokomo, IN	376	83,687	7.5%	30.6%	\$51,790	-11.4%	-2.3%	-4.7%	6.9%	0.9%	4.4%	10.5%
Gadsden, AL	377	103,162	7.9%	20.7%	\$50,328	-12.5%	-1.1%	1.3%	22.6%	1.9%	-7.4%	1.5%
Houma-Thibodaux, LA	378	206,212	7.7%	18.8%	\$56,293	-9.6%	-1.2%	-1.2%	21.5%	8.2%	-12.1%	-3.4%
Wheeling, WV-OH	379	137,740	6.9%	18.7%	\$56,813	-8.2%	2.1%	-0.8%	21.2%	-0.2%	2.6%	-6.7%
Farmington, NM	380	120,993	8.2%	14.4%	\$46,651	-12.1%	-0.2%	3.6%	21.7%	5.3%	-15.7%	-4.1%
Beaumont-Port Arthur, TX	381	395,419	11.3%	18.7%	\$52,518	-7.4%	-1.3%	4.0%	11.7%	-1.8%	-12.3%	-3.2%
Enid, OK	382	61,926	9.3%	19.5%	\$55,846	-12.5%	-0.6%	-0.7%	5.1%	4.6%	-31.1%	5.7%
Cape Girardeau, MO-IL		97,699	8.1%		\$54,708	-1.8%	0.6%	1.3%	18.1%	4.6%	-0.3%	2.6%
St. Joseph, MO-KS		120,424	6.3%		\$52,238	-5.8%	-0.3%	-0.4%	23.4%	3.9%	3.3%	2.0%

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