# An Empirical Assessment of Richard Florida's Creative Class Theory in the United States from 2001-2020

John A. Washington III

Thesis submitted to the faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

Master of Urban and Regional Planning
In
Urban and Regional Planning

David S. Bieri, Chair
Margaret M. Cowell
Sheryl D. Bailey

November 18, 2022
Blacksburg, Virginia

Keywords: Creative Class, Richard Florida, economic development, human capital

# An Empirical Assessment of Richard Florida's Creative Class Theory in the United States from 2001-2020

John A. Washington III

## ABSTRACT

Richard Florida's Creative Class Theory made a significant mark on economic geography. Upon initial publication in 2002, reviewers lacked sufficient data to test this theory in the contemporary economy. However, 20 years have elapsed. Statistical analysis of an operationalized creative class theory in relationship to growth in real per capita GDP does not show a statistically-significant, positive relationship. In fact, depending on the variable, most analysis shows either no statistically-significant relationship or a statistically-significant and negative correlation. Instead, in keeping with endogenous growth theory and the arguments of Glaeser, presence of non-manufacturing high technology economic activity, overall levels of higher education, and immigration bear a substantial, positive, and statistically-significant relationship to growth in real per capita GDP. While Florida's theories consider these variables, Creative Class Theory depicts them as part of a broader construct with significant cultural components. The present analysis does not find evidence to support this theory in all of its details. However, the broader construct of "talent, technology, and tolerance" contributing to economic development remains valid. However, its components vary significantly from Florida's model. Findings suggest policy focus on generating creativity through culture may create less benefit than policies focused on increasing education supply, attracting and retaining educated workers, attracting and growing technology firms, and encouraging immigration. Additional research is needed to identify specific policies.

# An Empirical Assessment of Richard Florida's Creative Class Theory in the United States from 2001-2020

John A. Washington III

## GENERAL AUDIENCE ABSTRACT

Why do some cities grow and others do not? Regional leaders have long sought to identify levers to help strengthen their economies. In the 21st century United States, most economies do not revolve around farming or manufacturing. Instead, technology and professional services represent some of the most significant sectors. A disagreement exists in the scholarly literature as to how to accelerate these industries development in different places. Scholars agree education, innovation, and diversity represent important drivers. Views differ as to how to define these ideas. In the early 2000s, an urbanist named Richard Florida advanced his "Three T's" model: talent, technology, and tolerance. He focused on a group called the "Creative Class". These creative thinkers were supposed to attract technology firms to a city. Those creative thinkers were thought to like places with specific cultural characteristics. This study examines 20-years of economic data to evaluate his theory. It confirmed talent, technology, and tolerance do matter for economic outcomes. However, it finds a different way to define these ideas. Rather than "creativity", education levels represent the most important talent factor. In terms of technology, it confirmed the importance of economic output in information, professional services, and scientific services. Regarding tolerance, the most important correlation to economic growth comes from immigration from outside the United States. It did not find support for focus on a bohemian cultural milieu (among other factors). Future research should focus on what factors (such as quality of life, infrastructure, access to capital, and federal regulation) can help enhance these effects.

**Acknowledgements**

The author would like to acknowledge and thank Dr. David Bieri for his help and guidance in development of all phases of this thesis. He would also like to thank the Dr. Margaret Cowell for her instruction in urban economics and Dr. Sheryl Bailey for her instruction in public finance and her insights of contemporary political economics in-general. Finally, he would like to thank Dr. Ralph Buehler and the team in the School of Public and International Affairs (including Dr. Thomas Sanchez) for their assistance in both enrolling the author in the program and assisting him with reaching its completion (a process that began in 2017).

## Contents

## List of Figure and Tables

*List of Figures*



*List of Tables*

## Attribution

The author would like to acknowledge the contributions of Dr. David Bieri to the creation of this study. He provided significant assistance in conceptualizing the study, designing its methodology, and identifying appropriate sources of data.

## Introduction

The present study seeks to revisit Richard Florida's creative class theory 20 years after its popularization. Published in 2002, *Rise of the Creative Class* had a significant impact on the urban economic development community. Without question, a number of factors may go into creating socially and economically vibrant urban communities. Infrastructure quality, tax and regulatory environments, school districts, housing, transportation, and crime might be considered as traditional components of this model. This paper does not seek to contend with those ideas. Instead, it seeks to enter the debate regarding the role of human capital in the economic development process. Perhaps Florida's greatest success is his ability to draw attention to this role of people. However, he focuses on a certain type of people - the Creative Class. That is, those who exercise a high degree of creativity in their fields of employment. The message to mayors and other urban leaders was clear: attract creative people to your cities, and they will flourish. Policy prescriptions focused on tolerance and the arts found a wide audience. While human-capital focused theories of economic development previously existed for decades, the media did not pay them as much attention. Florida's website (creativeclass.com) lists 268 public and media appearances. Major television networks featured his theories (e.g. CNN, CBS, MSNBC, CNBC, Fox Business). Major publications also did stories on them (e.g. Wall Street Journal, The Atlantic, NPR, the Miami Herald). He spoke at universities (e.g. University of Southern California, NYU, Chapman University). He appeared on the radio (e.g. NPR, BBC, Wisconsin Public Radio). He sits at round tables with mayors of major cities to discuss pressing issues (e.g. Muriel Bowser, Washington, D.C.). His theories even crossed the Atlantic Ocean. Interviews with news organizations in Spain appear multiple times on his list of media appearances. Florida's Creative Class Group also advised over 60 economic development and government entities ranging from the City of Denver,

Colorado to the United Nations (Creative Class Group, July 2022). It is hard to think of another contemporary urbanist or economist with such a significant popular influence. Richard Florida is an extremely-accomplished scholar that has done much good by popularizing urban planning with a wider audience. However, in the spirit of science, others must evaluate his claims against reality in order to ensure the growth of knowledge in a positive direction. This is particularly true in verifying the predictive power of claims over time.

The present paper grows from the hypothesis a natural congruence may exist between his theories and broader western social discourses on the importance of creativity, tolerance, and high-technology. This paper does not seek to comment in any way on those discourses. However, it recognizes a risk exists that his findings will grow (through media and public policy implementation) into something not substantiated by his research. Given the wide spread of his ideas, and their possible influence on public perceptions and public policy, it is important to verify the empirical basis of his claims. If even parts of his theories do not accurately reflect reality, and city and regional authorities use them to plan their economies and built environments, negative consequences may occur. Primarily, they may direct resources towards policies and programs that do not represent the most efficient and effective use of public resources and public authority.

While much of his work builds on established economic theory, the popularization of which could do much good for society, his ideas emphasize certain novel components. Florida enters, and builds upon, a culturally-focused subset of the literature on human capital-focused theories of economic development. Prior to *Rise of the Creative Class*, these ideas did not represent the major consensus of the literature. His ideas, which this paper will refer to as Creative Class Theory (CCT), thus have not been without their detractors amongst his peers. The present paper seeks to enter this debate by retroactively assessing the predictive value of Florida's theory. It examines the theory's

ability to accurately predict economic growth from the 2001-2020 period. However, it first contextualizes this theory as part of the broader economic growth literature. The paper then presents economic growth data from the above-described period and statistically analyzes these outcomes in relation to metrics reflective of CCT. It concludes with a discussion of these findings and suggestions for future research.

## Literature Review

CCT may best be understood as a sub-branch of human capital theories of place-based economic development. Other thinkers in this vein would include Ed Glaeser and Jane Jacobs (among others). Place-based theories of economic development should themselves be seen within the overall framework of endogenous growth theory. The seminal thinker in this field being Paul Romer. Place-based theories of economic growth, that capture the link between geography and the economy, were themselves an innovation. Florida goes one step further. In an effort to explain the source of human capital growth, he adds a quasi-Historical School lens. Thinkers such as Polanyi described the embeddedness of social systems within their overall culture. This idea has been extended into economics to suggest that society, and socio-cultural norms, shape the marketplace. Such theories seek to weaken the paradigm introduced by the marginalist economic revolution. Instead of a rational economic model of agents and incentives, these theories introduce a degree of socio-political messiness. Agents' incentives can vary based on the socio-cultural value of, for example, pursuing profit for its own sake or lending money at interest. However, Florida's novelty is to extrapolate this idea into the realm of creativity. He seeks to embed questions of creative productivity and human capital more deeply within their social contexts. That is, that certain socio-cultural contexts promote creativity while other institutional arrangements and norms restrict it. By building on the interconnection between the social and economic realms, Florida asserts cities

can unlock the power of creativity and innovation. Past research took this approach in regards to entrepreneurialism but not to creativity per se. Figure 1 provides an overview of the literature regarding the drivers of economic growth.

| Theory | Savings & Investment | Technology | Innovation (New Ideas) | Education | Agglomeration | Creativity | Culture |
|---|---|---|---|---|---|---|---|
| Classical | + | + | | | | | |
| Keynesian | + | + | | | | | |
| Neoclassical | + | + | | | | | |
| Endogenous Growth | + | + | + | + | + | | |
| Human Capital | + | + | + | + | + | ~ | ~ |
| Creative Class | + | + | + | + | + | + | + |

**Figure 1: Drivers of Economic Growth in the Literature**

Over time, a savings plus investment view (with technology as an exogenous factor) has been replaced by innovation-centric theory. The literature has since focused on the drivers of innovation. In his endogenous growth theory, Paul Romer identifies the importance of education in this regard. This theory also introduces the importance of agglomeration in a place and its associated spillovers (currently called Marshall-Arrow-Romer externalities). Subsequent scholars, such as Glaeser and Jacobs, explored how these spillovers operate. For example, the role of economic diversification versus specialization in achieving productive spillovers and positive outcomes. Finally, Richard Florida's Creative Class theory takes these same ideas and introduces notions of creativity and culture as important to innovation. However, he has faced accusations that these ideas add nothing new to the theory of innovation and growth. His focus on creativity has been called, by Glaeser, a proxy for levels of education. Glaeser also argues culture does not affect innovation and growth in the manner Florida contends.

### *Growth and Technology*

Economists have long sought to identify the drivers of economic growth. That is, the factors that increase overall output of goods and services. Increased output raises the standard of living. For

example, if more houses are built, more people can have homes. So, what causes output to increase? By the Great Depression, growth theory had not substantially evolved beyond Adam Smith's (1776) ideas (Ucak, 2015). Economic growth comes from saving and investment. If a person saves some of their output, then invests in capital that increases their productivity, overall output will increase. For example, a farmer saves some of the year's crop (deferring consumption) and trades it for a plow. All things being equal, the farmer will produce a larger crop the next year. The ability of capital to increase the productivity of labor lies at the core of this idea and subsequent models.

From the 1930s to the 1950s, growth theory continued to develop along these lines. The Harrod-Domar model (1939) describes this type of savings-based growth according to a formula. It states total output (g) is equal to the savings ratio (s) divided by the capital-output ratio (k). That is, suppose the people of the United States save 10% of their total output (savings ratio). If five units of capital are required to create an additional unit of output (capital-output ratio), then annual growth in output equals 10% divided by 5% or 2% per year. It elaborates on, but does not significantly change, the fundamental focus on capital as the driver of growth. Robert Solow (1956) takes this model to its logical conclusion. At some point savings and investment reach a peak. When labor and capital are fully-employed, then additional saving does not increase output. A convergence occurs and long-run growth ceases.

However, this is demonstrably not the case. According to the Federal Reserve, real per capita GDP (adjusted for inflation) has increased over 300% since 1947 (Fred Economic Data, 2022). If saving and investment did not cause this increase, what did? Paul Romer (1990) elaborated on the role of technology in economic growth. Earlier theories placed technology outside of, or exogenous to, their models. In other words, economists treated the state of technology as an outside assumption.

Romer's innovation was to bring technological change inside of, or endogenous to, his model. In Solow's model, savings continue to accumulate after the maximum employment of capital and labor cease to cause growth. Romer theorized the best use for this surplus was to research and develop new technology. New technology would allow for still greater output per hour worked. Based on the promise of this competitive advantage, and increased profits, capitalists should seek to invest in research and development.

Thus, to Romer, technological improvement causes economic development. To increase long-run growth, policy should focus on maximizing innovation. However, Romer argues the economy structurally underproduces innovation. Companies require labor to sustain existing output. While capitalists may want to invest in research and development, they must first meet existing labor demands to continue producing goods and delivering services within the existing technological paradigm. What's more, individuals capable of research and development can typically find employment within existing industries. An imperfect equilibrium therefore emerges that absorbs available labor (through the wage mechanism) to maintain the full employment of capital. However, this situation does not allow for growth. Research and development thus require a surplus of human capital beyond the level the economy naturally produces. He suggests a public subsidy to achieve this outcome. As the number of individuals available to maximally-employ existing capital increases, it frees other workers to focus on changes that benefit the system as a whole.

Interestingly, human capital thus represents an indirect stimulus to innovation. Educated persons may innovate more than uneducated persons. However, Romer's theory does not contend that higher education and training levels increase per capita output on their own. That is, he does not contend more persons with bachelor's degrees or technical certifications will greatly increase

marginal productivity or more efficiently employ capital than their less-skilled counterparts. This dynamic may exist to some extent. However, Romer asserts these surplus educated persons provide the foundation from which innovation grows by freeing certain skilled individuals to create new ideas and technologies that more fundamentally alter the production process itself. This concept makes intuitive sense when considered in practice. While more skilled laborers at an automotive factory may allow for the production of more cars, computerized assembly lines allow for the production of exponentially more cars per labor hour worked. However, the problem with innovation is that it (by definition) creates ideas that are unknown. So, no specific policy can effectively target an innovative outcome. Continuing the prior example, no senator or congressman would ever have thought to publicly subsidize an automotive assembly line to increase the output of automobiles. No one had come up with the idea yet. As such, the economy requires a looser approach. Policies to promote the ability of profit-motivated individuals to pursue such innovations represent key state-controlled economic levers. This policy effort may also come in the form of monetizing non-profit-motivated discovery (e.g. university research) but profit remains the key driver. Innovation requires new ideas, but the profit motive brings innovation to the marketplace.

In summary, the literature has expanded from a savings-based view of economic development to a technology-driven view. New technology comes from research and development driven by a profit motive. However, society cannot sustain research and development on the required scale without public intervention. Without some kind of state influence, the economy will divert human capital away from innovation and into its existing operations. That is, unless public policy creates an intentional surplus of educated and skilled labor, the literature predicts innovation will not occur and growth will stagnate. The literature reviewed did not give suggestions on what these policies might look like. Theorists instead highlight the importance of human capital in producing

innovation. Practically-speaking, however, they do not speak in much detail regarding where innovation occurs and why. While subsidies of higher education and federal research grants may form part of this answer, the present analysis will focus on the spatial components of an economy and their role in generating this surplus of talent. While assuredly only a small part of the story, given these broader policy dynamics, it is necessary to focus on this facet of the literature in order to advance the discussion specifically surrounding culture and place-based economic growth.

***Technology and Place***

While not highly-focused in space and time, Romer introduce ideas with geographical and spatial implications. For example, ideas are not consumed with each use. Inputs such as fuel can only be used in one place at one time. A design for a product, however, can be replicated without making the design disappear. In addition, ideas cannot be placed under lock and key. While patents can help control access to knowledge, it is imperfectly excludable. Thus, knowledge can spill over from its point of origin. This idea takes on spatial aspects. For instance, individuals possessing knowledge can move between firms. Almeida and Kogut (1997) found evidence of this dynamic in tracing the assignment of semiconductor patents between patent-holders and firms. They found these spillovers to be (at the time) geographically confined. However, in today's day and age of remote work, this ability to transfer knowledge between firms may be less bounded to physical location. However, the literature would suggest caution in completely rejecting the value of physical proximity.

Philosophers such as Michael Polanyi (1958) suggest some knowledge cannot be easily-expressed propositionally. That is, it must be absorbed through action and experience (e.g. by directly working with a person knowledgeable or skilled in a particular area of expertise). These notions have spatial dimensions. If knowledge is essential, nonrival, and not perfectly expressible, then it

may best transfer through personal contact. That is, where knowers can most clearly manifest nonverbal meanings. Thus, thinkers such as Jacobs (1969) believe place may play an important role in the transmission of knowledge. However, it is important to relate all of these ideas to the study at-hand. The essential suggestion of the literature is that physical proximity can help the spread of novel ideas. The discussion thus far does not connect this notion to the growth of a surplus of talent needed for additional technological innovation to occur.

This connection comes in the form of agglomeration. In addition to facilitating communication, geographic proximity can make it easier and less expensive for firms to access resources needed for production. Thus, agglomeration creates a comparative advantage. The specific industrial phenomenon, known as a Marshal-Arrow-Romer externality, leads firms to cluster geographically. The cluster may also create an export base. That is, a geographic area that specializes in production of particular goods and services that it exports to other locations. For example, in an industrial economy, raw materials could serve as the focal point. Furniture manufacturers may concentrate in close proximity to forests and lumber mills. This dynamic creates a furniture industry in a particular place at a particular time. This area then exports furniture to other areas without these advantages. Furniture sales bring new money into the economy, from outside markets, that offsets leakage of funds used to buy goods and services not produced locally. This dynamic sustains the economy. Without it, continual fiscal leakage would weaken a locality. Its money supply would decrease and local industry would eventually begin to close.

The key point of connection to human capital is this: in a post-industrial context within a global supply chain, the resource of focus in sustaining these productivity-enhancing clusters and export bases could be human instead of material. In a knowledge-focused economy, a concentration of skilled labor in a particular field may promote new firm formation or relocation. For instance, Air

Force bases in California could attract defense contractors to manufacture and maintain airplanes. These firms would hire a pool of engineers. These engineers may then join other firms or create their own firms. Also, other aircraft manufacturers or related firms may develop a presence in that location to benefit from the positive externalities of a highly-skilled and experienced engineering workforce in close proximity to major customers and specialized suppliers. Firms can then sell resultant products and services to other geographic markets, including other nations (Aoyama, 2011). However, this process may also bring together so large a pool of skilled labor that some of the workers are not needed to fully employ existing capital. Thus, within these places, it may be more possible (and even necessary) for capitalists to employ workers in research and development. Local competition from firms in the same industry may generate a need to innovate in order to keep up with competitors. Glaeser et al. (1992) found evidence of this phenomenon. Thus, geographic clustering may promote the talent conditions needed for innovation to occur. Zucker and Darby (1996) found evidence of this dynamic in their study of the bioscience industry. Biotech firms with greater access to "star scientists" (individuals that made major research breakthroughs in the field) performed better than those lacking such access. Given the nature of these breakthroughs, access may have been greatest for those firms physically able to visit the scientists' labs. These star scientists bridged the gap from research to the marketplace. That it was often scientists employed by universities, rather than those employed directly by firms, recalls Romer's notion of innovation requiring a public subsidy. While firms may need to develop new products to maintain a competitive position, the risks involved in basic research may exceed their appetite. However, if the state (through universities) socializes this risk to some extent, entrepreneurs may instead focus on turning basic discoveries into new technologies.

These relationships between discoverers and marketers are known as “actor-networks”. Theorists of this idea do not recognize the discrete economic existence of individual agents or separate institutional networks. Agents and networks exist only through the actions of individuals in relation to one another. Thus, the two notions combine to form a new unit, the actor-network. These actor-networks exist in space and time. Physical proximity and interaction allow trust to emerge and thus facilitates actor-network development (Aoyoma, 2011). However, Glaeser et al. also found that local industrial diversity promotes job growth. Thus, the aggregation of competing firms in the same field, plus access to insights from other industries, may help to promote innovation. This finding suggests large, economically diverse cities may be more likely to produce innovation than cities with economies focused within a specific market (e.g. oil towns, tourism centers, manufacturing hubs for specific products). Thus, such places may have a greater degree of economic resiliency. Those one-product localities may be hubs of innovation in their specific fields. However, they may also suffer greatly if the market on which they base their economies suffers or shifts structurally. For instance, the fate of oil-dependent fracking boom towns in the U.S. Plains Region when the price of oil drops or coal-dependent company towns in West Virginia when power companies switch to more environmentally-friendly products such as natural gas. Thus, the literature offers some insight into the geographic conditions that can promote innovation and long-run productivity gains.

Romer (1986) adds theoretical credibility to this focus on large, diverse economies by suggesting knowledge production may increase with scale. While he was referring to nations, it is also possible that large cities with several industrial clusters and high levels of education and training may be focal points of innovation. Romer (1992) also introduces the potential value of research universities in knowledge production. Thus, large, economically-diverse cities with a strong public

research base are predicted to produce more innovation. Romer also suggests movement of ideas between places can have a positive effect on economic growth. Again, he was referring to nations. Thus, cities with large immigrant communities may benefit from the knowledge and ideas (especially if some knowledge is tacit) of other nations and cultures. Bieri (2010) also found creativity and diversity to be a key driver of high-tech firm formation across the major U.S. high-tech industries. This paper seeks to build on its findings by relating all variables to gains in productivity.

So far, the discussion on the literature has focused mostly on the economic and geographic dynamics that promote innovation. However, again, Florida's work (the main focus of this paper) emphasizes the role of culture in promoting innovation. He may agree, generally, with all points made in this review so far. However, his contribution comes from contextualizing these dynamics in local culture, values, and social conditions. The following section will explore these ideas in more detail.

***Place and Culture***

In *The Rise of the Creative Class,* Florida argues place plays a strong role in innovation. He argues that innovators prefer places with certain cultural characteristics. In essence, he makes an embeddedness argument. That is, Karl Polanyi's (1958) notion that an economy must be understood within the context of the society in which it operates. Polanyi asserts noneconomic factors frame and condition economic forces. In the neoclassical tradition, growth comes from technological innovation arising out of research and development conducted by a surplus of skilled labor for the benefit of capitalist enterprise. In Florida's thinking, creatives with a profit motive seek out places where they are free to explore new ideas without restraint. This cultural flexibility then facilitates the creation and popularization of new value-generating enterprises. That is,

innovation occurs best within a specific cultural context that is nonhierarchical and open to new ideas. This cultural focus on creativity represents the most novel component of Florida's argument. However, it also has an intellectual heritage. Saxenian (1994) found that the cultural acceptability of business failure in Silicon Valley promoted innovation. Massachusetts' Route 128 corridor lacked this feature and thus had less entrepreneurial dynamism.

Florida also acknowledges the role of educated workers, a feature key to the Romerian argument and Ed Glaeser's work (discussed further below). However, he presents education as a perhaps necessary but insufficient condition for innovation in the absence of a broader cultural ethos. Florida thus agrees on the importance of human capital and innovation but with a bohemian twist. He argues innovation and productivity come from freedom and creativity. Creativity grows best in a society that is tolerant. Creative persons are attracted to places that exhibit this tolerance. This talent base (known as the creative class) creates new ideas and technologies that propel economic growth and also put these technologies to better use than their more traditional peers. He views certain cultural indicators as signs a city or region is open to creativity and thus to innovation. These indicators include the presence of bohemians (artists, musicians, dancers, and other purely creative occupations), immigrants, and coupled gays. To Florida, these groups serve as "canaries in the coal mine" that a city is open to difference and thus to different ideas. That is, he contends this cultural openness to difference facilitates innovation in economic domains. However, Florida does not contend the artists, immigrants, and gays themselves necessarily do the innovating. He simply suggests they serve as cultural indicators of a society open to different ways of doing things. By contrast, he feels rigidly hierarchical societies that close themselves off to those that do not fit a specific cultural paradigm greatly hinder the emergence of new ideas. Their fear of the new and

unknown traps them in old technologies and old ways of doing things (virtually ensuring they lose to more creative competition in the global economy). In this way, his work deepens Saxenian's.

He distills this model into the "Three Ts" of talent, technology, and tolerance. The idea is that creative people, working in a high-technology environment that is open to new ideas, create a feedback loop of innovation and economic development. Creative people come up with ideas, which attracts companies with a profit motive to monetize them, which attracts more creative people to work in those firms and employ the new technology. Those people may then, by their own entrepreneurialism or the value of the economic cluster they have formed, create or attract more companies. The feedback loop then continues in this manner. This quasi-Historical School approach encounters resistance from other human capital-focused thinkers.

Glaeser (2004) agrees with Florida that cities' economic success hinge on the presence of skilled and knowledgeable people. However, he does not maintain the same focus on so-called creative professions. Nor does he believe as strongly in the importance of embeddedness within a specific socio-cultural context. Instead, he argues creative people could just as reasonably be presumed to like "what most well-off people like – big suburban lots with easy commutes by automobile and safe streets and good schools and low taxes". He conducted regression analysis of several indicators to support his point. After testing the importance of bohemians, gays, the creative class, and even patent citations per capita, he finds only the percentage of adults with bachelor's degrees or higher to be significant. However, of essential importance, he uses population growth as his dependent variable. Solow long ago disproved the idea that simple growth in population represents economic growth. While new persons may produce more goods and services, they also consume more. Thus, for the average person, the real standard of living does not change. Glaeser may have

defeated a straw man. Thus, to fully assess CCT's relevance to economic growth, the literature requires an assessment of Florida's theory on a real productivity (chained GDP) per capita basis.

## Research Design

The present analysis will test Florida's creative class theory, within the US context, over a 20-year period using real GDP per capita as the dependent variable. That is, if creative people and bohemian places represent this more open cultural-economic environment, that value should show itself as an increase in real GDP per capita at the MSA level. This idea builds on the author's observation that Florida's methodology does not tie his arguments to indicators of productivity. He demonstrates a level of interrelationship between variables in his Three T's model (e.g. coupled gays and high-tech industry). However, to say that one contributes to the other may exceed the explanatory power of the data. Correlation does not imply causation. There could be another reason for this relationship than the "canary in the coal mine" dynamic he describes. Also, even if some relationship does exist between social and economic variables, economic developers may wish to question the relationship's value if the essential increase in productivity does not occur.

Thus, CCT tends to combine metrics that are not as much in-question, such as human-capital-related variables and technology-related variables, with cultural variables. For instance, Florida's Creativity Index combines measures of creative class share of employment, patents, tech industry, coupled gays, and immigrants. It is quite possible some of these variables contribute to growth and others do not. Regardless, he never shows a connection between any of his variables and increased output in the aggregate or per person. The present paper thus seeks to disaggregate his argument and test key variables against longitudinal per capita output data. This analysis will indicate if evidence exists creative people and tolerant places contribute significantly to creating more economic value on a per person basis.

Most significantly, it is important to test the importance of the Creative Class versus levels of formal education. The only role of cultural variables in Florida's argument is as attractors of Creative Class talent. In particular, Glaeser critiqued Florida's notion of the creative class as a variable that only picks up the effects of education. However, advances have occurred since Florida's original argument in the availability of consistent data to measure the creativity required by certain occupations. In particular, the Bureau of Labor Statistics created the O*NET data set. It describes the skills required by a job, including "thinking creatively". The USDA's Economic Research Service used this data set to create an operational definition of the creative class from Standard Occupation Codes. These occupations include roles such as top executives, architects, engineers, lawyers, computer specialists, and media workers. The analysis will use this definition as an independent variable. It will also control for the overall effect of education by including a variable for persons over the age of 25 with a bachelor's degree or higher. However, since the US Census Bureau stopped collecting detailed occupational data at the county level, this analysis will assess the year 2000 concentration of the Creative Class as a predictor of real GDP per capita growth from 2001 to 2020. All population data comes from the U.S. Census Bureau accessed via IPUMS NHGIS. All GDP data comes from the Bureau of Economic Analysis. Higher education institution data comes from a number of sources but primarily the Interdisciplinary Postsecondary Education Data System (IPEDS) published by the U.S. Department of Educations' National Center for Education Statistics.

This analysis examines Bohemian (following Florida's definition) shares of MSA workforces, foreign-born shares of MSA populations, and shares of households populated by same-sex partners. It also examines the role of technology in the economy. This includes both manufacturing and non-manufacturing high technology as defined by Bieri (2006). That is the fields of

"Information" and "Professional, Scientific, and Technical Services". The analysis controls for several factors that may influence the assessment. It seeks to control for MSA population size, gender, age, race, and the region of the county in which the MSA is located. The slight variations in year derive from the US Bureau of Economic Analysis (BEA) not publishing county-level GDP per capita data prior to 2001. In addition, given difficulty in consistently defining MSAs over time (the definition changed in 2003), the present analysis collected basic data at the county level then aggregate it to create MSAs based on the US Bureau of Labor Statistics 2013 county-MSA crosswalk. This county-level approach, using newly-released BEA data, adds to the significance of the present analysis in the literature. The author has not encountered any tests of Florida's theories that use a consistent metropolitan unit across an extended period of time. The author found even the MSAs used in *Rise of the Creative Class* do not clearly map to an accepted set of contemporary place names. Thus, it is somewhat difficult to tell with a high-level of precision exactly the places Florida means to discuss. The borders of MSAs vary over time and do not necessarily align well with popular notions of where a particular city "is". Finally, all statistical analysis takes the form of ordinary least-squares regressions. The author selected this method as a basic test of correlation between multiple independent variables and one dependent variable.

It is also important to note the limitations of this data set and analysis. The original Census dataset containing the detailed occupational data used to construct this paper's statistics only covered the largest 500 U.S. counties. Of the U.S.'s approximately 3,000 counties, 1,807 are in continental MSAs. They had a total population of 266 million at the outset of the study period (the U.S. as a whole only had a population of 285 million). The top 500 MSAs had a population of 215 million (or 80% of the total continental U.S. MSA population). As such, the present study only used this

group. The exclusion of smaller counties does not significantly affect findings related to Creative Class theory.

It is also important to note the likely impact of the Covid-19 pandemic on these data. Economic output contracted quickly with business shutdowns. However, it had somewhat rebounded by Q4 (U.S. Federal Reserve, 2022). This means some MSAs may have experienced greater growth but for the pandemic. However, the purpose of this paper is to assess growth over a 20-year period. Covid-19 did not have a significant effect on this assessment. Real (aggregate) GDP was approximately $13.3 trillion in Q4 2001. By Q4 2020, it was $18.8 trillion. So, while Covid-19 had some effect (2019 real GDP was $19.2 trillion) the overall effect on this analysis is negligible in the aggregate. However, certain MSAs may have been affected more than others (particularly depending on the status of economic shutdowns in the state in which they exist). Comparison of top 10 and bottom 10 lists based on 2001-2019 and 2001-2020 real GDP per capita showed largely the same MSAs (but in a different order). In some cases, MSAs just outside the top or bottom 10 entered or exited the list.

## High-Growth MSAs (2001-2020)

Prior to engaging in statistical analysis, it is useful to understand the MSAs that experienced, or did not experience, economic growth over the 2001-2020 period. In particular, a geographic understanding of this phenomenon versus a geographic representation of creativity can help provide a basic foundation of understanding from which to build a statistical analysis. Figure 2 (below) provides a map of US MSAs color-coded by real GDP per capita growth between 2001 and 2020. It is shaded by standard deviation.

Red and orange MSAs had below-average real GDP per capita growth (up to 0.5-2.5 standard deviations under the average). Gray MSAs had approximately average real GDP per capita growth. Light-green MSAs had above-average real GDP per capita growth (0.5-1.5 standard deviations), and dark-green MSAs had significantly above-average real GDP per capita growth (over 1.5 standard deviations).

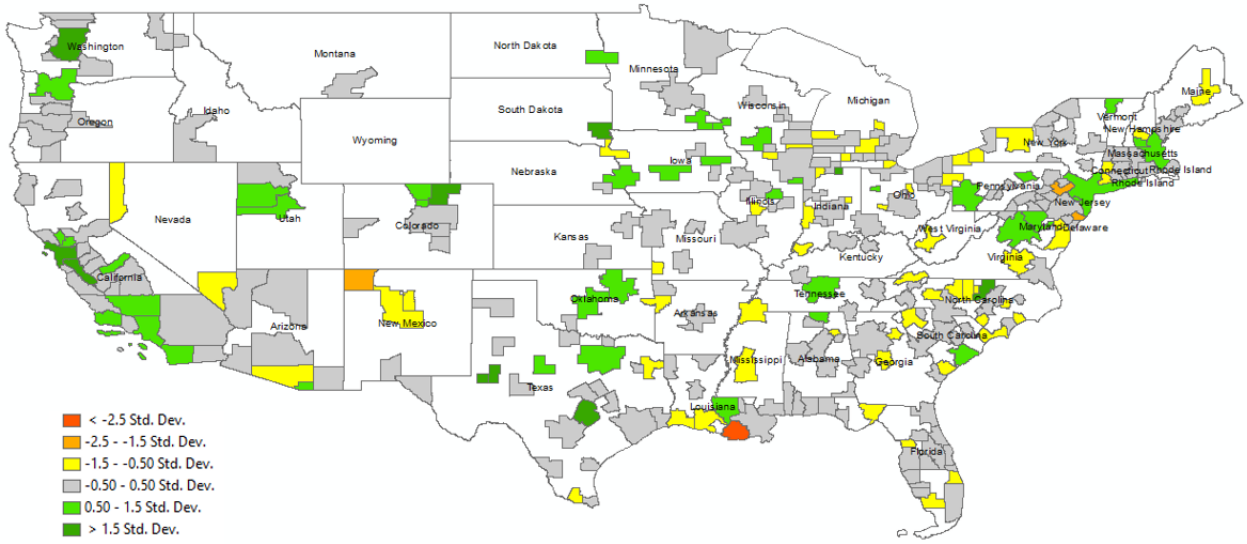


**Figure 2: MSA GDP / Capita Growth from 2001-2020 (Standard Deviations)**

By definition, most MSAs showed average real GDP per capita growth. The majority of MSAs with a loss of real GDP per capita appear to concentrate in the eastern half of the United States. However, more MSAs meeting the inclusion criteria exist in this region as a baseline. So, no regional geography-productivity relationship may exist. Those MSAs with moderate growth scatter throughout the country (with the exception of the Mountain West). High-growth MSAs also span the country (both the coasts and interior). So, no clear geographic relationship emerges. Table 1 (on the following page) shows the top 10 MSAs for per capita GDP growth over this period.

| MSA | GDP / Capita_2001 | GDP / Capita_2020 | Delta_GDP / Capita |
|---|---|---|---|
| San Jose-Sunnyvale-Santa Clara, CA | $ 67,594 | $176,686 | $109,091 |
| Midland, TX | $ 55,931 | $159,132 | $103,201 |
| San Francisco-Oakland-Hayward, CA | $ 74,034 | $111,425 | $37,391 |
| Seattle-Tacoma-Bellevue, WA | $ 63,851 | $96,356 | $32,505 |
| Elkhart-Goshen, IN | $ 42,022 | $69,504 | $27,482 |
| Greeley, CO | $ 39,181 | $66,462 | $27,282 |
| Austin-Round Rock, TX | $ 50,726 | $76,008 | $25,282 |
| Durham-Chapel Hill, NC | $ 64,034 | $89,229 | $25,195 |
| Sioux Falls, SD | $ 51,901 | $76,759 | $24,858 |
| Odessa, TX | $ 46,813 | $69,050 | $22,237 |

**Table 1: Top 10 MSAs for Real GDP Per Capita Growth (2001-2020)**

While some MSAs that intuitively align with a tech and creativity-focused economy emerge, others with very different economic character emerge as well. While San Jose-Sunnyvale-Santa Clara (i.e. Silicon Valley) California captured the top place, energy-focused Midland, Texas captured second. The remainder of the list includes a mixture of tech and energy-focused cities, with the addition of manufacturing-focused Elkhart-Goshen, Indiana. It also includes MSAs with and without a major research university. So, while some consonance with the literature presents itself, no overall geographic or economic pattern emerges clearly from the data. As such, a small number of case studies may prove useful to understand what economic growth looks like in-practice. Case study locations include San Jose-Sunnyvale-Santa Clara, Midland, and Elkart-Goshen. MSAs were selected because they represent different types of economies (e.g. tech-focused, energy-focused, manufacturing-focused). Each case study begins with an overview of the MSA, connects findings to the literature, and concludes with analysis of local variables derived from CCT.

**San Jose-Sunnyvale-Santa Clara, California**

This MSA proxies for the area generally known as Silicon Valley. Located at the southern tip of the San Francisco Bay, San Jose-Sunnyvale-Santa Clara (population approximately 1.9 million)

focuses economically on professional and business services, education and health services, and manufacturing (Bureau of Labor Statistics, 2022). Major employers include major business-to-consumer technology firms such as Google parent company Alphabet Inc, Apple, and Adobe. In 2001, non-manufacturing high technology represented 22% of MSA GDP. This level is over three-times that of the all-MSA average of 7%. Manufacturing output more closely aligned with the average. It represented 15% of MSA GDP compared to an all-MSA average of 14%. However, in keeping with Marshall-Arrow-Romer externality theory, its manufacturing sectors works in concert with its high-tech sector. Many specialized business-to-business suppliers also reside in this MSA. They include semiconductor manufacturing firms. Semiconductors, otherwise known as "chips", convey the electrical currents needed for modern technological devices to operate. Examples include memory chips (for storing and retrieving data) and microprocessors (for conveying logical relationships) (Congressional Research Service, 2020). Without them, no one could save data on a computer or even press a key on a keyboard and generate a letter. Other local suppliers include Flextronics International (also a semi-conductor producer), and Maxim Integrated Products (producer of printed & etched circuits) (Employment Development Department of California, 2022).

However, it is also important to note much manufacturing of these products occurs outside the United States (Ohio State University, 2015). Silicon Valley has land access to the two largest ports in the United States - the ports of Los Angeles and Long Beach (U.S. Department of Transportation, 2005). Finally, it also contains research universities (such as Stanford) and some public research and development entities, such as NASA's installation in Mountain View (the same city as Alphabet, Inc's headquarters). Its patents per capita rate in 2001 was 0.004. While this number does not appear high at first glance, it is over 10-times higher than the all-MSA

average (0.0003). The likely interplay between new ideas, high tech companies, specialized producers and suppliers, and actor-networks possible between the public sector and industry physically strongly reflect the literature on place-based economic development and innovation.

In many respects, Silicon Valley functions as the paragon of CCT. It is a highly-educated place. In 2000, 40% of residents had bachelor's degrees as compared to an MSA average of 23%. Silicon Valley also had high levels of immigration (foreign born population at an impressive 34% versus an MSA average of 7%). As discussed above, it contains the headquarters of some of the most famous consumer electronics firms in the world. More pertinent to the present analysis, from 2001 to 2020, its real GDP per capita increased from $67,594 to $176,686 (an increase of $109,092). The average MSA's real GDP per capita increased $6,006 during the same time period. Many of its workers are also highly-creative (40% of workers versus MSA average of 26%). Interestingly, few Bohemians lived in this MSA at the start of the study period. In 2000, bohemians comprised approximately the same share of the workforce (1.4% vs. 1.2%). It also had approximately the same rate of coupled same-sex households as the MSA average (0.7% vs. 0.5%).

So, from a cursory analysis, Silicon Valley appears to line up well with Romerian theory and parts of CCT. It is highly-educated and has many immigrants. These are some of Florida's proverbial canaries. It also has the predicted highly-creative workforce. However, some canaries are missing from the coal mine. It does not have a higher level of Bohemians or coupled same-sex households. These findings suggest the three T's model may mix contributors to growth with less relevant factors. However, later statistical analysis will be required to separate impactful from statistically-insignificant variables. Thus, cities seeking to turn themselves into Silicon Valley by applying Florida's Three T's model (talent, technology, and tolerance) may miscalculate in some respects.

Silicon Valley represents the cultural and economic outcome at which CCT aims. However, the ability of CCT to turn a place into Silicon Valley remains unclear.

This finding underscores the importance of an empirical evaluation of CCT. Emulating Silicon Valley may represent a tempting objective for many localities. It is important to note the margin by which its economic productivity grew compared to even the remainder of the top 10 growth list. Except for Midland, Texas (discussed below), San Jose-Sunnyvale-Santa Clara experienced more than double the growth of other high-growth cities. This growth represents a highly-impressive economic achievement in a 20-year period. However, Glaeser's critiques of CCT may have some salience in this analysis. Data do not clearly suggest a creative cultural context, or even a "creative class" per se, helped this transformation.

**Midland, Texas**

San Jose-Sunnyvale-Santa Clara contrasts sharply with Midland, Texas. If the former is known as Silicon Valley, the latter is best identified with the Permian Basin. The Permian Basin is a 75,000 square mile oil-producing region of West Texas. (Railroad Commission of Texas, n.d.). Midland represents the commercial hub for this region. It was founded in 1885 as a depot on the Texas and Pacific Railway. It is located midway between the cities of El Paso and Fort Worth. It has a population just over 170,000. While it has a university in the University of Texas Permian Basin, it does not produce high volumes of research (Carnegie Classification of Master's College and University). According to the Midland Development Corporation (2022). Major employers include Chevron, ConocoPhillips, and Halliburton.

As such, its economy does not focus strongly on technology per se (but rather on mineral / natural resource extraction). Its MSA GDP shares of these fields in 2001 were 4% traditional

manufacturing and 6% non-manufacturing high-technology. However, Midland shows perhaps a need to think of technology more broadly. That is, as something that cuts across industry segments (rather than only being an industry segment). Its major employers show evidence of Romerian innovation dynamics within a Marshall-Arrow-Romer cluster. While it does not have a diversified economy, it shows evidence of innovation within its field of expertise. Hydraulic fracturing (also known as "fracking") may have played a significant role in Midland's growth (CNN, 2019). Halliburton is also a leader in the hydraulic fracturing space. Its website reports having recently pioneered the first grid-powered electric fracturing and pumping unit. So, in some respects, the Permian Basin does not differ economically in major ways from Silicon Valley. While Silicon Valley has emerged as a hub for consumer electronics and related services, Midland has emerged as a leader in the (fossil fuel-based) energy field. However, as the literature might predict of a strong industrial cluster, it has not shown many signs of deviating from the existing technological paradigm. It is pioneering new and better ways to produce the same type of product (fossil fuel-based energy). Its per-capita patent generation rate is low (less than half that of the all-MSA average). This is the type of result one might expect without a more diversified economic base. Thus, Midland's ability to sustain its economic growth over the long term is in-question. When all the oil is gone, Midland may go with it. In fact, the better its companies become at extracting oil, the sooner challenges will arrive.

In addition, from a CCT-perspective, the Permian Basin is a very different place from Silicon Valley. The Midland MSA has a comparatively lower-level of education to San Jose-Sunnyvale-Santa Clara. At the outset of the study period, it had a nearly-average level of residents with a bachelor's degree or higher (25% versus 23% for all MSAs). Its rate of creative workers is also about average (27% versus 26%). Its level of foreign-born residents is also much lower than Silicon

Valley's. It again approximates the average MSA with 8% of its residents foreign born (again versus an MSA average of 7%). Bohemian rates of employment also approximately mirror the MSA average at the time (1% vs. 1,2%). Finally, coupled same-sex households mirror the all-MSA average. So, strictly from an economic growth perspective, the existence of a place like Midland, Texas does not fit will within CCT. CCT variables are not present but the economy grew significantly. Midland nearly tripled its real GDP per capita from 2001 to 2020 ($55,931 to $159,132). Technology, in the form of fracking, may have contributed to this growth. So, while its innovations may not be sustainable, its experiences could still possibly fit within a Romerian growth paradigm without the benefit of the Creative Class or any other associated variables from CCT.

**Elkhart-Goshen, Indiana**

Located just off the shores of Lake Michigan, Elkhart-Goshen, Indiana has a population of approximately 200,000. Its presence on the list of highest-productivity gain MSAs is somewhat surprising. It does not have a big name. Instead, it has an economy that concentrates mostly in manufacturing and agricultural marketing. In 2001, manufacturing comprised 41% of its real GDP (vs. 14% for the average MSA). Major exports include poultry, grain, dairy products, musical instruments, mobile homes, and pharmaceuticals. Major employers include Norfolk Southern railroad company, Keystone RV Company, and construction company Supreme Industries. However, its real per capita GDP increased from $42,022 in 2001 to $69,504 in 2020. What's more, it does not have a particularly-educated or creative workforce. Of residents over 25, 16% of had a bachelor's degree or higher; 17% of the workforce worked in a creative profession. It also does not have a particularly-high rate of foreign-born residents (7% of population, the same as the all-MSA average). So, what may have driven its productivity increase? While its share of non-

manufacturing high tech productivity is low (3% of MSA GDP at the 2001 outset of the study period), growth *could* have come in part from increased automation of its agricultural and manufacturing industries (New America, n.d.). Much more research is needed to confirm, but this hypothesis is plausible within the guidance of the literature. Location competition between firms trying to find an advantage to maintain market share may drive research and development, or at least the application of new technologies (even if created elsewhere). Its patents per capita rate mirrors the all-MSA average (.0003). So, if innovation is occurring, it may not be highly-localized. Finally, it is not unexpected that a place may exist for which the literature does not have a clear and compelling explanation. Individual variability still exists within regions. Elkhart-Goshen's success may come from any number of factors not included within contemporary theories.

**Section Summary**

So, what do the leading MSAs for real GDP growth in the study period tell the reader? Within the context of the literature, these real-world examples provide interesting insight into the dynamics of economic growth. However, a narrative that clearly explains the creation of these technologies remains elusive. Silicon Valley appears to personify the literature fairly well. However, other high-performing MSAs do not. CCT does not cleanly apply to any example. It is possible technology plays a role. Such challenges indicate the importance of broad statistical analysis in identifying trends.

*(Remainder of page intentionally left blank)*

## Low-Growth MSAs (2001-2020)

It is also instructive to examine the MSAs with the least growth (or decrease) in real GDP per capita over this time period. Table 2 (below) shows this information. All MSAs have fewer than 1 million residents. However, generalizations beyond this point prove elusive.

| MSA | GDP / Capita_2001 | GDP / Capita_2020 | Delta_GDP / Capita |
|---|---|---|---|
| Houma-Thibodaux, LA | $ 64,002 | $41,138 | ($22,864) |
| Farmington, NM | $ 56,418 | $43,373 | ($13,044) |
| Atlantic City-Hammonton, NJ | $ 53,157 | $41,846 | ($11,311) |
| Allentown-Bethlehem-Easton, PA-NJ | $ 60,364 | $49,568 | ($10,796) |
| Lafayette, LA | $ 59,534 | $49,853 | ($9,681) |
| Greensboro-High Point, NC | $ 56,075 | $48,962 | ($7,113) |
| Winston-Salem, NC | $ 52,745 | $46,237 | ($6,508) |
| Hilton Head Island-Bluffton-Beaufort, | $ 43,652 | $37,768 | ($5,884) |
| Racine, WI | $ 41,950 | $36,144 | ($5,806) |
| Macon, GA | $ 52,589 | $47,738 | ($4,852) |

**Table 2: Bottom 10 MSAs for GDP Per Capita Growth (2001-2020)**

These MSAs are located across the United States. Review of employment data did not yield any clearly-evident trends in industry other than a small potential cant towards transportation-focused industries (e.g. moving the value created elsewhere rather than generating something new). However, the effect (even without statistical analysis) appears inconsistent and varies in magnitude. Tourism-focused cities (Atlantic City, Hilton Head) also make an appearance.

Further case studies may help to illustrate these examples. Houma-Thibodaux, Atlantic City, and Allentown-Bethlehem-Easton were chosen. The author made this selection again because each MSA represents a different type of economy (energy-focused, tourism-focused, and former manufacturing / Rust Belt).

*(Remainder of page intentionally left blank)*

**Houma-Thibodaux, Louisiana**

Located in south Louisiana, Houma-Thibodaux had a population of approximately 105,000 at the outset of the study period. It is a hub for seafood, lumber, sulfur, sugar, natural gas, and the shipping of these commodities. While its population grew through 2020, its per capita GDP shrank by approximately one-third. Local news reports place the blame primarily on trouble in the oil and gas industry (HoumaToday, 2016 and 2017). Its GDP certainly does not focus in traditional technology sectors (5% traditional and 2% non-manufacturing at the outset of the study period). It also generated few patents per year. The largest employer in the main county comprising the MSA, Terrebone Parish, is oil company Danos (Terrebonne Economic Development Authority, n.d.). The question is, why did Houma not experience growth such as that found in Midland? Difficulties deploying new extraction technologies may provide a partial explanation. Local news reports identify south Louisiana fracking wells as limited in depth and orientation. The Houma Times describes local drilling as vertical only down to depths of 150 feet (Houma Times, 2015). This constraint limits the ability to extract oil. It describes other operations as drilling deeper vertically and also drilling horizontally, thus increasing access to shale gas deposits. A map of well locations provided by the FracTracker Alliance shows many fewer fracking wells in Houma-Thibodeaux versus Midland (FracTracker Alliance, 2022). The Louisiana Mid-Continent Oil & Gas Association (2014) describes the majority of Houma-Thibodaux's energy economy as focused on offshore exploration and drilling. The number of oil pockets accessible by this conventional method may be more limited and difficult to access, thus contributing to struggles within the local economy (Beattie, 2022). These findings are all consistent with the literature. While an industrial cluster exists in Houma-Thibodeaux, the creation and application of new technologies to the core field appear highly-limited. This may be due to geographic characteristics. However, the absence

of the ability to introduce a highly-valuable extraction technique (in fracking) may help to explain decreasing productivity.

In terms of CCT, Houma-Thibodaux ranks very low on all cultural metrics. At the outset of the study period, its population had relatively low levels of higher education compared to other MSAs (12% of those over 25). It also had relatively low levels of creative class employment (18%). It also had low-to-average levels of bohemians, foreign born persons, and same-sex households (0.6%, 1%, and 0.5%, respectively). So, in some ways, Houma's economic fortunes seem to accurately reflect CCT. Low levels of creativity and cultural openness exist in a place with poor economic outcomes. However, the above assessment suggests this productivity decline has more to do with technology and natural conditions than people. This surface-level consonance with CCT, with underlying contradiction, underlies the need for rigorous statistical analysis in assessing the impact of cultural variables on economic outcomes. It also lends support to Glaeser's assessment that CCT may introduce statistically-insignificant variables into human capital-focused theories of economic growth.

**Atlantic City-Hammonton, New Jersey**

Major urban development of Atlantic City began in 1820. Envisioned as a health resort, it was made the terminus of the Camden and Atlantic Railroad. While experiencing commercial success for over 100 years, Atlantic City went into economic decline following World War II. Following decades of economic struggle, the State of New Jersey authorized gambling to occur within the city. The first legal casino, at the time the only legal casino outside of Nevada, opened in May 1978 (Britannica, 2022). Tourism remains the mainstay of the economy to this day. Major employers include Harrah's Resort, Caesar's Entertainment, and Trump Entertainment, among others (Choose New Jersey, 2022). However, the development of casinos across the country has

likely contributed to the approximately 21% drop in real GDP from 2001 to 2020. Since 1978, casinos have opened across the country (including in the northeast). Superstorm Sandy also caused substantial damage to the major casino district in 2012. Finally, public health shutdowns in 2020 driven by Covid-19 responses likely contributed significantly to this decline.

The literature predicts this decline unless Atlantic City can adapt to current market conditions with new technology. Its susceptibility to economic interruption due to Covid-19 highlights the MSA's lack of resiliency. Local news articles show efforts to integrate new gaming technology (i.e. e-sports) into its economic ecosystem. However, recent economic development publications indicate even this sector may focus on in-person events. The advent of distributed sports gambling may also play a role in its future. The city does not show a concerted effort to diversify its economy significantly away from tourism. Publications report an interest in legalizing recreational marijuana. However, this idea still seeks to drive tourism to the city. Proposals for other sectors are not present.

In many ways, Atlantic City does not reflect CCT's cultural prescriptions for economic growth. The MSA's real GDP per capita declined $11,311 between 2001 and 2020. It had a slightly less-educated population than the all-MSA average (19% over 25 with a bachelor's degree or higher versus 23%). It also had a slightly lower percentage of creative class workers (19% vs. 26%). Its proportion of bohemian workers and coupled same-sex households was similar to the all-MSA average (approximately 0.5%). It has a public university (Stockton University) with approximately 9,000 students and low funded research output. It had approximately the same patents per capita as the average MSA in 2001 (outset of the study period). Interestingly, it has a slightly higher-than-average share of foreign-born residents (12% versus 7%). In terms of its economy, very little comes from direct technology fields. At the outset of the study period 3% of GDP derived from

traditional manufacturing and 6% from non-manufacturing high technology. These findings reflect Florida's concerns that, despite focus on tourism as an economic driver, tourism-focused economies will actually suffer over the long-run due to a lack of creative talent. While the cause could be another reason, reality appears to reflect that conclusion.

**Allentown-Bethlehem-Easton, Pennsylvania-New Jersey**

Formerly steel country, Allentown-Bethlehem-Easton (otherwise known as the Lehigh Valley) has sought to reinvent its economy since major steel production left the United States in the 1970s and 1980s. To fight the resultant Rust Belt economy, the region has sought to become a hub for a variety of industries. Its economic development authority lists resident businesses including major corporate headquarters (e.g. Martin Guitar, Olympus), manufacturing operations (e.g. Mack Trucks, Braun Medical), professional services firms (e.g. ADP, Dun & Bradstreet), transportation & logistics operations (e.g. Amazon, FedEX), and food and beverage processing (e.g. Coco-Cola, Nestle Purina) (Lehigh Valley Economic Development, 2022). However, 42% of its GDP at the outset of the study period came from traditional manufacturing and only 4% came from non-manufacturing high technology. It is also home to 10 four-year or greater colleges (including Lehigh University and Lafayette College), two community colleges, and three health networks.

However, its economy shrank in terms of real GDP (from approximately $41.7 billion to $38.5 billion; or 7.7%). While its economic development authority claims Covid-19 drove this decrease, it is unlikely the virus caused such a significant contraction. In addition, other MSAs did not experience this same decrease. As such, even if Covid-19 caused a decline in economic activity, such a change would demonstrate a lack of resiliency in the Lehigh Valley economy. However, another explanation for its contraction remains elusive. It appears to have attempted to technologically modernize when steel production left the United States. It actually had slightly

more patents per capita than the average MSA (0.006 vs. 0.004) over the study period. On the surface, Allentown-Bethlehem-Easton's economic profile does not vary significantly from Elkhart-Goshen, Indiana's. By CCT literature metrics, it actually fares neutrally. It has approximately the same number of creative class workers as the average MSA (25% vs. 26%). It has the same rate of individuals over 25 with a bachelor's degree as the average MSA (25%). It has slightly fewer foreign-born residents (5% vs. 7%). It has approximately the same number of Bohemian workers (1.1% vs. 1%) and fewer coupled same-sex households (0.4% vs. 1%). So, a clear explanation remains elusive (at least from a human capital and endogenous growth perspective).

**Section Summary**

Cities that suffered economically during the study period appear to align somewhat well with the literature. Evidence exists of a difficulty adapting technologically to a shifting economy. However, the human capital, endogenous growth, and economic geography literature reviewed have some trouble explaining these results. CCT certainly does not appear strongly-related to real outcomes.

## Most-Creative MSAs (2001-2020)

To provide additional context prior to statistical analysis, it is also important to review the distribution of the Creative Class in the year 2000. Figure 3 color-codes MSAs according to the Creative Class share of the workforce. It uses the same color-scheme (although standard deviation ranges vary slightly) as the per capita GDP-focused map. Again, no clear geographic pattern emerges. However, it shows a greater number of highly-creative places than the prior map showed highly-productive places. There are also more places with significantly below-average creativity. This finding suggests a potential for mismatch between creativity and productivity.

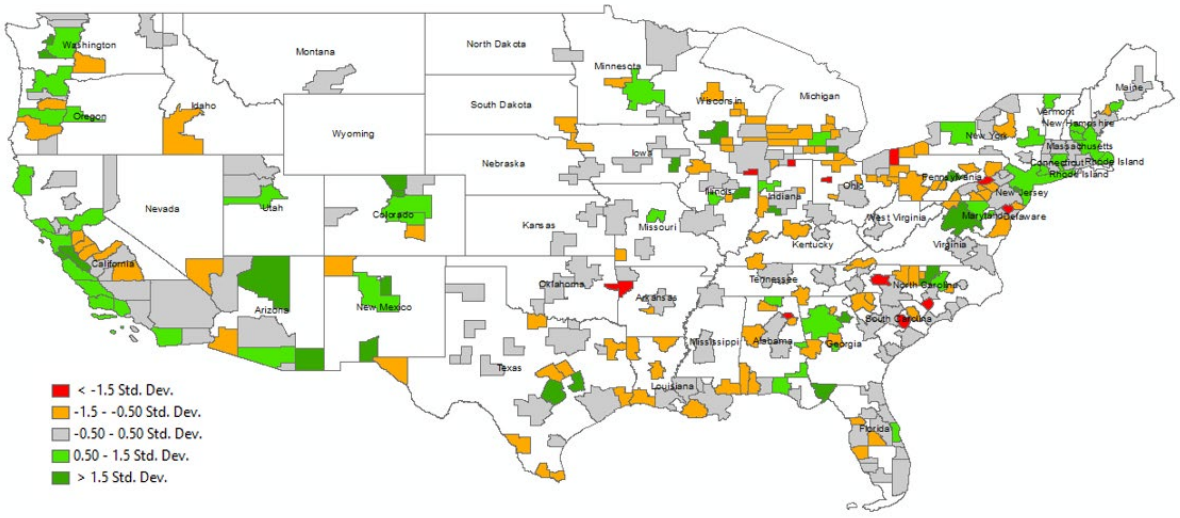


**Figure 3: Creative Class Share of Workforce in 2000**

Another top 10 and bottom 10 analysis may further illustrate this point. Table 3 shows the top 10 MSAs for creative class share of the workforce. It also shows change in GDP per capita from 2001-2020. University towns dominate the list. These include Tallahassee, Florida (Florida State), Boulder, Colorado (University of Colorado, Boulder), State College, Pennsylvania (Penn State), College Station, Texas (Texas A&M), and the list continues. It appears the presence of these institutions likely correlate strongly with the presence of the Creative Class.

| MSA | GDP / Capita_2001 | GDP / Capita_2020 | Delta_GDP / Capita | Share CC |
|---|---|---|---|---|
| Tallahassee, FL | $ 50,059 | $45,664 | ($4,395) | 47% |
| Boulder, CO | $ 60,477 | $81,987 | $21,510 | 47% |
| State College, PA | $ 39,778 | $47,437 | $7,660 | 46% |
| Olympia-Tumwater, WA | $ 40,078 | $42,999 | $2,921 | 45% |
| College Station-Bryan, TX | $ 35,163 | $42,498 | $7,335 | 45% |
| Washington-Arlington-Alexandria, DC- | $ 72,152 | $84,112 | $11,960 | 45% |
| Champaign-Urbana, IL | $ 44,964 | $46,490 | $1,526 | 43% |
| Santa Fe, NM | $ 40,906 | $37,844 | ($3,062) | 42% |
| Durham-Chapel Hill, NC | $ 64,034 | $89,229 | $25,195 | 42% |
| Fort Collins, CO | $ 40,262 | $53,135 | $12,873 | 41% |

**Table 3: Top 10 MSAs for Creative Class Share of the Workforce (2000)**

There is also a mixture of MSAs above and below 1 million residents. That is, some places are likely focused on one industry (higher education) whereas others have more diverse economies. However, it is evident the change in real GDP per capita does not show uniformly high growth, or even growth at all. Thus, at first glance, Floridian creativity did not appear to correlate highly with productivity gains. While more economies on the list grew than shrank, the theory would predict the most creative economies to have the highest rates of growth (rather than a mixture of contraction, minimal growth, and substantial growth). The MSAs highest on the list are those most known for their tech economies (Boulder, Colorado and North Carolina's Research Triangle). In that case, it appears tech and creativity (at least in the sense of creative class workers) is not synonymous. While there may be somewhat of a correlation, it does not appear strong. The relationship may not be statistically significant. Later statistical testing will confirm. Case studies may help to provide additional evidence. Tallahassee, Boulder, and State College were selected. The author chose these MSAs because they have varied economies (college as significant component of city economy, college as part of economically-diverse MSA, and college as MSA economic base).

**Tallahassee, Florida**

In 2020, the Tallahassee MSA had approximately 300,000 residents and was, measured by share of workers regularly using creativity in their employment, the most creative city in America. If asked to name America's most creative city, most people would not name Tallahassee, Florida. However, the state's capital (and home of Florida State University) has a greater share of workers that regularly use creativity in their work than any other MSA in the country. From a technological perspective, its economy focuses more on non-manufacturing high technology. Its share of GDP at the outset of the study period (13%). Outside of university-affiliated industries, the university is

also a hub for basic industry (lumber, agriculture and livestock) and includes manufacturing concerns in electronic equipment, printing and publishing, and metal products (Britannica, 2022). However, manufacturing represented only 1% of GDP at the outset of the study period. If GDP per capita data is any indication, the proximity of a major research university (and many creative workers) does not appear to translate into any highly-economically productive industry (on a GDP basis). Between 2001 and 2020, it declined economically. The MSA's per capita real GDP decreased approximately $4,400 from the start of the study period in 2001 to its end in 2020. Covid-19 may again have played a role. Florida temporarily shut down its public universities in 2020. However, other university towns across the country (where universities also closed) did not have the same negative economic experience (at a gross level).

**Boulder, Colorado**

Similarly-sized Boulder, Colorado (approximately 325,000 residents in 2020) had similar creativity but significantly better economic outcomes than Tallahassee. Its per capita real GDP grew over 30 percent from 2001 to 2020. Its economy focuses on aerospace, bioscience, environmentally-friendly technology, information technology, natural resources, and outdoor recreation. From a technology-related GDP perspective, it focused significantly in non-manufacturing high technology (27% of GDP). It has an R1 research university in CU-Boulder. Large technology concerns such as Google and IBM have a presence. Significant firms in other industries also have a presence. These include defense industry contractors such as Ball Aerospace, Lockheed Martin, and Northrop Grumman. Medical technology and pharmaceutical firms also have a presence. These include Medtronic and Corden Pharma. Finally, communications and technology firms such as Qualcomm, Research Electro-Optics, and Rally Software. Finally, the federal government maintains an agency and research presence through the National Oceanic and

Atmospheric Administration and the National Institute of Standards and Technology. Finally, U.S. Air Force and Space Force bases are within a two-hour drive. This economic context recalls the literature's focus on technology, agglomeration, local competition, and employer sector diversity. It also has research and development subsidized by the public sector. In 2000, it had a higher than average patent per capita rate (0.002 versus 0.0003). Thus, all signs point to a highly-technological and productive environment from an endogenous growth and economic geography perspective.

Thus, Boulder illustrates the difficulty of resolving the Florida-Glaeser debate without an extensive statistical dataset. In support of Glaeser, Boulder had a highly-educated population at the outset of the study period (52% of residents over the age of 25 with a bachelor's degree or higher in 2000). That is over double the all-MSA average. For Florida, Boulder appears to align somewhat with CCT. While it had an unremarkable share of foreign-born residents (9%), it had a higher-than-average share of bohemian workers (2.2% vs. 1.2%). It also had a slightly higher-than-average share of households consisting of coupled same-sex individuals (0.7 vs. 0.5). However, these facts could bear only an incidental relationship with the economic outcomes. Per Glaeser, more significant driving forces may exist (such as overall levels of education).

**State College, Pennsylvania**

Another college town, home to Pennsylvania State University, ranks third on the creativity list but had approximately average economic gains over the study period. While it had 46% of its workers in the creative class in 2000, the MSA gained $7,660 in real per capita GDP from 2001 to 2020. It is a smaller MSA, with only approximately 136,000 residents at the start of the study period. While the university and local support services make up a large share of employment, there are also some technology companies (e.g. Raytheon, KCF Technologies) with a presence. However, from a tech GDP perspective, the MSA does not fare remarkably. At the outset of the study period, its

manufacturing and non-manufacturing high technology GDP shares ranked below the average MSA.

Its demographics again demonstrate the difficulty of separating educational and cultural elements in analyzing economic development. At the outset of the study period, the MSA had a highly-educated population (36% over 25 with bachelor's degrees or higher). Rates of foreign-born residents and coupled same sex households were approximately the same as the all-MSA average. The bohemian share of employment was slightly higher. Again, there appears to be a correlation between Florida's selected cultural variables and college towns.

**Section Summary**

From examining the top 10 most-creative MSAs at the outset of the study period, and their resultant economic growth through 2020, creativity did not appear to drive productivity. Case studies suggest technology, and the formation of Marshall-Arrow-Romer clusters (such as in Boulder, Colorado) may be necessary for economic growth to occur. While certain factors, such as universities, can drive up the creative population of a place, this factor is less significant without the rest of the innovation ecosystem.

## Least-Creative MSAs (2001-2020)

It is also important to contrast the most-creative with the least-creative MSAs. All MSAs again have fewer than one million residents (just like the bottom-10 MSAs for real per capita GDP growth). However, in contrast, some of these least-creative MSAs show very-high real GDP per capita growth. The list, shown in Table 4 on the following page, even includes Elkhart-Goshen, Indiana (a member of the top-10 growth list). Many of the least-creative MSAs outrank their more-creative peers in terms of productivity growth. This evidence again makes the author question the

relationship between creativity (as defined herein) and economic growth. These less-creative MSAs' economies show links to manufacturing. It is possible, but requires further investigation, that manufacturing has gotten "smart'. The presence of economically-productive technological innovation appears to show itself strongly in manufacturing-based economies, sometimes even more than in service-based economies. These places also do not present evidence of strong agglomeration dynamics. There do not appear to be interconnected networks of producers, suppliers, and not-for-profit and government entities. Case studies help to provide a clearer picture. Kanakee, Lumberton, and Sumter were chosen. The author made this selection because they are the bottom-three ranking MSAs (and no other clearly-applicable economic criteria seemed to apply).

| MSA | GDP / Capita_2001 | GDP / Capita_2020 | Delta_GDP / Capita | Share CC |
|---|---|---|---|---|
| Kankakee, IL | $ 34,211 | $51,473 | $17,262 | 11% |
| Lumberton, NC | $ 30,164 | $26,833 | ($3,330) | 16% |
| Sumter, SC | $ 29,162 | $35,041 | $5,879 | 16% |
| Hickory-Lenoir-Morganton, NC | $ 52,907 | $49,300 | ($3,607) | 16% |
| Fort Smith, AR-OK | $ 47,574 | $46,943 | ($631) | 17% |
| Gadsden, AL | $ 25,624 | $24,954 | ($670) | 17% |
| Vineland-Bridgeton, NJ | $ 36,595 | $37,923 | $1,328 | 17% |
| Lima, OH | $ 52,830 | $72,761 | $19,931 | 17% |
| Pottsville, PA | $ 28,588 | $31,576 | $2,987 | 17% |
| Elkhart-Goshen, IN | $ 42,022 | $69,504 | $27,482 | 17% |

**Table 4: Bottom 10 MSAs for Creative Class Share of the Workforce (2000)**

**Kankakee, Illinois**

Kankakee, Illinois is the least creative place in America according to share of workers occupied in creative professions at the start of the study period in 2000. Despite having a population just over 100,000, it generated few patents per capita at the outset of the study period (0.0001). It has a low rate of foreign-born residents (3%), bohemians (0.4% of workers), and couple same-sex households (0.4%). However, its per capita GDP grew over the study period (from $34,211 to

$51,473 in constant dollars). According to the Economic Alliance of Kankakee County (2021), the biggest industries (by employment) are healthcare, biotechnology, food processing, and general manufacturing. Bureau of Economic Analysis GDP data showed, of directly technology-related fields, the MSA concentrated in traditional manufacturing (21% vs. 1% non-manufacturing high technology). Again, similar to Elkhart-Goshen, Indiana (which ranks on both the highest-growth and least-creative list), indicators of automation emerge. While anecdotal, the Economic Alliance of Kankakee County hosted a 2018 discussion on manufacturing automation in the life sciences, food and beverage, and manufacturing industries. While far from conclusive, this evidence suggests the plausibility of a technology-focused explanation for this growth.

**Lumberton, North Carolina**

Lumberton, an MSA of approximately 125,000 at the outset of the study period, is located in south-central North Carolina. By share of creative workforce (16%), it was the second least-creative place in the United States. Its economy focuses on manufacturing. It accounted for 42% of MSA GDP at the outset of the study period (with non-manufacturing high technology accounting for 2%). However, no easily-recognizable firms are present. Names include the Quickie Manufacturing Corporation, Gunmar Machine Corporation, International Paper, and Bast Fibre Technologies. It also has a university, University of North Carolina at Pembroke. Except for the presence of this university, it meets criteria for both the Glaeser and Florida perspectives on places unlikely to experience economic growth. During the study period, its real per capita GDP declined by approximately 10 percent. It had a relatively uneducated population (11% of individuals over 25 with a bachelor's degree or higher). It also had a below-average share of foreign-born residents (4%) and bohemians (0.4). It had approximately the all-MSA average share of same-sex households.

**Sumter, South Carolina**

Sumter, South Carolina is located in the center of the state. At the outset of the study period, it had approximately 100,000 residents. While having a low share of creative class workers (16%) it actually experienced average economic growth from 2001 to 2020. Its manufacturing and agriculture-focused economy focuses on a variety of goods. They include clothing, chemicals, electrical equipment, and food processing. Key crops include tobacco and cotton. In many ways, it shows similarity to its much less-successful North Carolina neighbor (Lumberton). In additional to industrial parallels, it has demographic similarities. It also has a relatively uneducated population (16% bachelor's degree attainment), lower than average shares of foreign-born residents, and approximately average shares of bohemians and same-sex households. It has a college offering four-year degrees in University of South Carolina-Sumter. However, its patents per capita were significantly below-average. In 2001, three patents were issued in the MSA (versus an all-MSA average of 189). In many ways, the MSA is not remarkable from a technological or cultural perspective. However, it had markedly-different outcomes from the similar MSA previously-studied.

**Overall Summary**

Thus, basic data analysis on per capita GDP and the creative class suggest a weak case for the theory. Highly-creative cities do not necessarily show high per capita GDP growth. What's more, some low-creativity cities do show high per capita GDP growth. In addition, highly-productive cities are scattered across the country. Clear trends in sector focus do not emerge from a cursory investigation. These cities represent tech and natural resource-focused economies. Technology as represented by traditional manufacturing may have some correlation with real per capita GDP

gains, but the direct influence is unclear. Technology may be represented in other forms. To further investigate, rigorous statistical analysis becomes necessary.

## Statistical Analysis

In order to more objectively assess the relationship between economic growth and the Creative Class, the present analysis uses ordinary least squares regression for 314 MSAs. It first assesses the data using a scatterplot chart. It then presents regression results. After describing regression results, it discusses the significance of these findings.

### Data Assessment

The data shows a distribution, relative to share of creative class employees, as found below. The reader can see a moderate amount of variation in change in real per capita gross domestic product from 2001 to 2020. Most MSAs experienced no more than $50,000 in growth and no more than $25,000 in contraction. Two outliers (San Jose-Sunnyvale-Santa Clara and Midland) are also present. These results appear to vary little with the share of creative class employment in the year 2000.

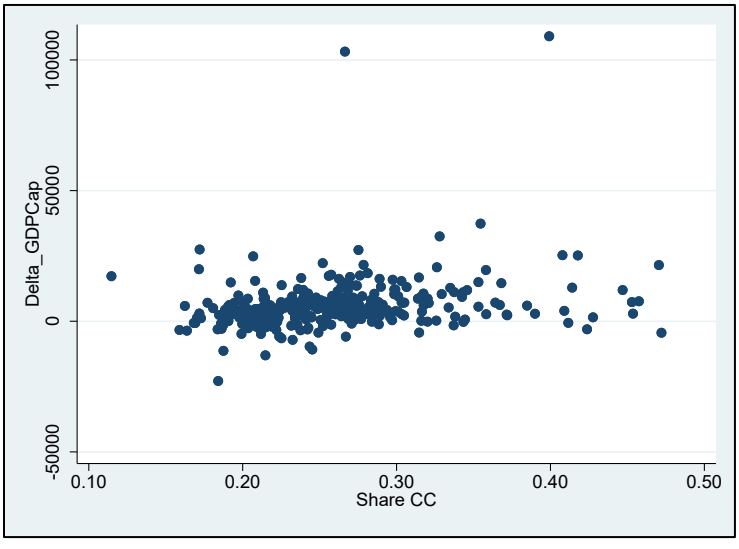


**Figure 4: Delta Real GDP Per Capita - '01-'20 vs. '00 Share of Creative Class Employment**

**Regression Results**

Figure 5 displays regression results. All factors analyzed yield an adjusted R-Square of 0.21. Thus, the factors studied explain only a small part of economic growth. However, with an F value of 0.00, they do so in a highly-statistically-reliable fashion. While the factors examined may only explain a small part of the growth equation, findings can help to inform the literature and public policy. The regression used 10 independent variables related to Florida's theory. The author categorizes them according to Florida's model. That is, talent variables (5), technology variables (3), and tolerance variables (2). In addition, the model includes 13 control variables related to median age, gender, city size, and region.

- **Talent:** Only the percentage of population over 25 with a bachelor's degree or higher showed a positive and statistically-significant effect. It had a coefficient of $52,155 and a p-value of 0.00. Share of Bohemian employees was also statistically-significant. Its p-value was 0.01. However, it's coefficient as -$538,560 (a significant effect). Number of universities did not have a statistically-significant effect. Most significantly, neither did the share of employees in creative class occupations.
- **Technology:** Share of real GDP (in 2000) from non-manufacturing high technology was the only variable with a statistically-significant effect. It had a coefficient of $78,394. Patents per capita and share of real GDP from manufacturing did not have statistically-significant effects.
- **Tolerance:** Both tolerance variables, foreign-born share of population and share of same-sex households, had statistically-significant effects. The foreign-born coefficient was $40,830 (p-value 0.00). The same-sex household coefficient was -$1,048,291 (p-value 0.05).

- **Control:** Only one control variable had a statistically-significant effect. MSA location in the southeastern United States had a coefficient of -$4,769 (p-value 0.02). Other regional locations did not have a statistically-significant effect on real per capita GDP growth over the study period. Of note, neither did MSA size. Smaller population did not have a statistically-significant effect.

*(Remainder of page intentionally left blank)*

| Factor | Δ Per Capita GDP ('01-20) | | Coefficient | Std. Error | t | P>\|t\| | 95% conf. interval | |
|---|---|---|---|---|---|---|---|---|
| Talent | % of Pop. 25 or Older with Bach. Degree or Greater (2000) | $ | 52,155 | 17,619 | 2.96 | 0.00 | 17,478 | 86,832 |
| | Number of Universities with High or Very-High Research Activity | $ | (830) | 853 | (0.97) | 0.33 | (2,509) | 848 |
| | Number of Non-Research Bachelors-Degree Granting Universities | $ | 261 | 316 | 0.82 | 0.41 | (361) | 883 |
| | Share of MSA Employees in Creative Class Occupation (2000) | $ | (9,128) | 19,884 | (0.46) | 0.65 | (48,263) | 30,007 |
| Technology | Share of Real GDP (2000) from Non-Manufacturing High Technology | $ | 78,394 | 25,656 | 3.06 | 0.00 | 27,899 | 128,889 |
| | Patents Per Capita (2000) | $ | 1,369,361 | 801,950 | 1.71 | 0.09 | (209,019) | 2,947,741 |
| | Share of Real GDP (2000) from Manufacturing | $ | 3,193 | 7,213 | 0.44 | 0.66 | (11,003) | 17,389 |
| Tolerance | Foreign Born Share of Pop. (2000) | $ | 40,830 | 12,839 | 3.18 | 0.00 | 15,560 | 66,099 |
| | Share of MSA Employees in Bohemian Occupation (2000) | $ | (538,560) | 206,664 | (2.61) | 0.01 | (945,311) | (131,810) |
| | Share of MSA Households Consisting of Coupled Same-Sex Individuals (2000) | $ | (1,048,291) | 542,191 | (1.93) | 0.05 | (2,115,419) | 18,837 |
| Control | BEA Region - Southeast | $ | (4,769) | 2,066 | (2.31) | 0.02 | (8,836) | (703) |
| | BEA Region - Great Lakes | $ | (3,816) | 2,308 | (1.65) | 0.10 | (8,359) | 727 |
| | BEA Region - New England | $ | (4,914) | 3,020 | (1.63) | 0.11 | (10,858) | 1,031 |
| | BEA Region - Plains | $ | (4,584) | 3,001 | (1.53) | 0.13 | (10,491) | 1,323 |
| | MSA Population from 500-999,999 (2001) | $ | (3,114) | 2,297 | (1.36) | 0.18 | (7,635) | 1,407 |
| | BEA Region - Mideast | $ | (2,884) | 2,375 | (1.21) | 0.23 | (7,559) | 1,791 |
| | BEA Region - Far West | $ | 2,709 | 2,302 | 1.18 | 0.24 | (1,822) | 7,240 |
| | BEA Region - Rocky Mountain | $ | (3,799) | 3,351 | (1.13) | 0.26 | (10,394) | 2,796 |
| | Female Share of Population (2000) | $ | (55,470) | 58,094 | (0.95) | 0.34 | (169,810) | 58,870 |
| | Percentage of Nonwhite Population (2000) | $ | (5,618) | 5,927 | (0.95) | 0.34 | (17,283) | 6,048 |
| | Constant | $ | 26,193 | 29,107 | 0.90 | 0.37 | (31,096) | 83,481 |
| | Median Age (2000) | $ | 138 | 204 | 0.68 | 0.50 | (263) | 538 |
| | MSA Population from 0-249,999 (2001) | $ | 1,164 | 2,322 | 0.50 | 0.62 | (3,405) | 5,734 |
| | MSA Population from 250-499,999 (2001) | $ | (688) | 2,175 | (0.32) | 0.75 | (4,968) | 3,592 |

**Figure 5: Regression Results**

## Discussion

CCT did not accurately predict future economic growth. Talent-based analysis sides with Glaeser and Romer; higher levels of educated persons predicted economic growth (measured by real per capita GDP). Variables Florida emphasizes did not contribute to growth. Most significantly, the Creative Class does not appear to have explanatory power (in regards to productivity growth) apart from level of education. Interestingly, university presence did not have an effect. This finding may have something to do with the mobility of talent. University students do not necessarily attend school near their homes. They can travel to a university and then leave it upon graduation. Thus, there does not appear to be a strong link between an MSA having universities and an MSA having highly-educated residents.

In terms of technology, from 2001 to 2020, gains appeared to derive primarily from non-manufacturing high technology (what one may popularly refer to as "tech"). This finding is somewhat consistent with endogenous growth theory. Further research is needed. However, these firms may be driving research and development (rather than universities). Alternatively, university research may be more portable than originally predicted. For whatever reason, growth follows tech. Given the results of the present inquiry, reasons why tech productivity occurs in certain places (and not others) requires further investigation. It is interesting to note that patents per capita was not statistically significant (when measured in 2001, the beginning of the study period) as a predictive variable. This may suggest patents generated in an MSA may not necessarily immediately precede the marketing of new technologies in that area (contrary to the literature).

Finally, findings suggest that CCT conflates economically-productive variables with statistically-insignificant ideas. Regression analysis showed cultural variables had mixed effects. Same-sex households and bohemians actually correlated very negatively with gains in real per capita GDP

(in a statistically-significant fashion). Thus, the data does not support the notion that creativity and innovation are culturally embedded in a place (and can be seen by those indicators). However, immigration had a sizeable and statistically-significant effect. Of note, this effect exists even when controlling for levels of education. Thus, policies focused on admitting only highly-skilled immigrants may not represent the best position. Immigration appears to correlate with economic growth regardless of levels of education. Also of interest, these findings appear to hold regardless of location in the country or size of the MSA. Thus, one can say with some confidence that these findings are generalizable throughout the country. However, it is important to note these findings reflect a globalized economy. If the world shifts to a more protectionist policy paradigm following Covid-19 (and the war in Ukraine) further research would be needed to verify some of these findings. In particular, the relative importance of domestic agriculture, energy production, and manufacture may increase. The US tech industry may act as part of a global brain trust made possible only by the execution of basic economic activities in other countries. Highly-educated workers in highly-developed countries may represent the excess labor Romer suggests is needed for innovation. If true, this system may depend on continued globalization.

While these variables combined explain only one-fifth of economic growth, readers should not discount their importance. Clearly, many factors beyond human capital go into economic productivity. However, regardless of MSA size, these findings suggest policymakers should view human capital as a comparative advantage. They should seek to boost levels of education, immigrants, and non-manufacturing high-technology firms. However, culture-focused economic development policies (e.g. based on tolerance and the arts) do not appear to represent evidence-based economic development strategies.

## Conclusion & Outlook

These findings suggest a different core view of the mechanisms by which regional growth occurs.

### Path Model

It is important to distill findings into a progression of institutions, inputs, and outputs. The author came to the following model. It does not differ significantly from prior path models (Bieri, 2010). Human capital and technology are still of primary importance. However, its metrics vary significantly. The present model also replaces universities with the market as the driver of human capital development.

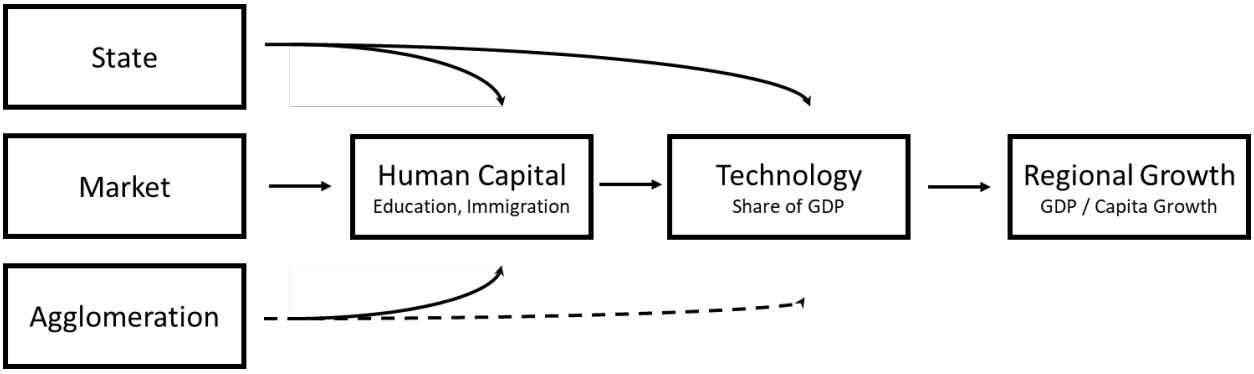


**Figure 6: Path Model**

Regional growth, per statistical analysis (and consistent with the literature) comes from technology applied in the economy. That is, through technology firms (defined broadly). Technology firms develop and employ new technologies created by a surplus of human capital. That is, by educated-individuals not needed to directly sustain core production activities. In a way, one may view the entire non-manufacturing high-technology sector in this regard. This sector does not directly produce food, shelter, or clothing. However, per Romer's definition of innovation, it explores different ways to guide the production process for greater output. Immigration adds to this stock of surplus educated labor. In addition, it brings new ideas. One cannot effectively separate

immigrants' tacit knowledge from their presence, so the author categorizes immigrants' ideas as human capital. At the core of this growth model lies the market. Profit-seeking and competition drive demand for a competitive advantage. The state, through policies promoting education and immigration, helps increase the supply of human capital needed for technological innovation to occur. The market creates agglomeration in order to reduce transaction costs in industry. This concentration of persons helps increase the supply of human capital and thus indirectly supports technological growth.

If the author were to summarize the practical application of these findings for a local leader, major findings include:

- **Talent, technology, and tolerance have an effect; however, definitions vary.** Florida's three-T's paradigm still has value. The most impactful variables in the regression analysis related to educated people, technology firms, and immigration. However, a specific class of people termed "creative" has less value. Technology firms and productivity remains valuable. Tolerance does not appear to apply to as many categories (in terms of relationship to economic growth) as Florida suggests. As such, the "canary in a coal mine" cultural theory regarding openness to new ideas appears suspect. However, immigration still has an effect (perhaps for a different reason). In addition to the new ideas and skills they bring, immigrants may increase the labor pool and allow other workers to focus on technology-focused activities. Universities appear to have an effect only insofar as they support human capital development and development of new technology. Local leaders should seek to reinforce talent pipelines from K-12 schools, through community colleges and affordable four-year degree programs. They should also look for opportunities to integrate immigrants

into their communities. Incentives to promote growth of new technology firms (or promote their relocation) should also be considered.

- **Regard magic bullets with suspicion; economic development is complex.** The overall model accounted for only 21 percent of variation in real GDP per capita over the 2001-20 period. As such, local leaders may want to focus on basic agendas (schools, housing, public safety, infrastructure) and view the pursuit of educated workers, technology companies, and immigrants as an additional ingredient that might put an otherwise well-run city over the top in terms of development and competitiveness. These ingredients are likely insufficient on their own to create a growing and resilient economy. Leaders should view the idea that pursuing creative workers, or any single solution, as suspect.

**Future Research**

Future research should seek to identify the most efficient and effective strategies to increase education levels, immigration, and new tech firm formation (or relocation). Studies could focus on finance, governance, overall quality of life (including amenities).

- **Finance**

  Study of higher education finance mechanisms could help to understand ways to increase overall human capital. Access to startup capital, and overall monetary policy, could be considered in regards to new firm formation and existing firm research and development.

- **Governance**

  From a governance perspective, it is important to understand how public (and private) education systems correlate with regional growth. This includes study of institutional arrangements at both the K-12 and post-secondary levels. Impacts of taxation and economic development incentives (both for new firm formation and relocation) should also

be considered. Study of the impact of overall infrastructure condition (e.g. power, roads, internet) may also represent an important avenue for future study. Finally, visa policy should be assessed to better understand the relationship of both high and low-skilled immigrants to growth.

- **Quality of Life**

  In seeking to increase levels of education, innovation, and new tech firm formation, scholars should also seek to understand general quality of life factors. Important among these may includes housing cost, traffic congestion, and public safety. Recent scholarship has also identified the role of amenities (e.g. bars, restaurants, music, hotels) as factors that make places attractive to educated professionals and businesses. The present study alludes to this factor in its discussion of bohemians. However, more specific study of amenities themselves should be undertaken.

## References


Almeida, P.; Kogut, B. (1997). *The Exploration of Technological Diversity and the Geographic Localization of Innovation*. Small Business Economics, 9, 21–31.

*Atlantic City, New Jersey* (2022). In Encyclopedia Britannica. Retrieved August 20, 2022 from https://www.britannica.com/place/Atlantic-City-New-Jersey

*Atlantic County* (2022). Choose New Jersey. Retrieved August 20, 2022 from https://www.choosenj.com/new-jerseys-assets/stats-and-facts/counties/atlantic-county/

*Automation Potential for Jobs in Elkhart-Goshen* (n.d.). New America. Retrieved August 31, 2022 from https://www.newamerica.org/work-workers-technology/reports/automation-potential-jobs-elkhart-goshen/key-conclusions-projecting-automation-risk-and-job-growth-in-elkhart-goshen

Aoyama, Y., Murphy, J. T., & Hanson, S. (2011). *Key Concepts in Economic Geography*. SAGE.

Beattie, A. (2022, January 31). *Shale Oil vs. Conventional Oil: What's the Difference?* Retrieved from https://www.investopedia.com/articles/active-trading/051215/cost-shale-oil-versus-conventional-oil.asp

Bieri, David S*., Picking a Winner? Evidence from the Non-Manufacturing High-Tech Industry in the Blacksburg MSA* (December 5, 2006). Available at SSRN: https://ssrn.com/abstract=949670 or http://dx.doi.org/10.2139/ssrn.949670

Bieri, David S., *Booming Bohemia? Evidence from the US High-Technology Industry* (February 2010). Industry and Innovation, 17-1, 23-48

*Centre County: 1st Quarter 2022*. Pennsylvania Department of Labor & Industry. Retrieved August 20, 2022 from https://www.workstats.dli.pa.gov/Documents/Top%2050/Centre_County_Top_50.pdf

*Integrated Postsecondary Education Data System – Compare Institutions* (2022). National Center for Education Statistics. https://nces.ed.gov/ipeds/datacenter/InstitutionByName.aspx?goToReportId=1

Congressional Research Service, Platzer, M., Sargent, J., & Sutter, K., *Semiconductors: U.S. Industry, Global Competition, and Federal Policy*. 1–58 (2020). Washington, D.C.; Congressional Research Service.

*Creative Class County Codes*. USDA Economic Research Service. Retrieved July 2, 2022, from https://www.ers.usda.gov/data-products/creative-class-county-codes/documentation.aspx

*Electric Fracturing* (n.d.). Halliburton. Retrieved July 24, 2022 from https://www.halliburton.com/en/completions/stimulation/hydraulic-fracturing/electric-fracturing#:~:text=From%20the%20pump%20to%20the,the%20most%20fuel%20on%20location.

*Elkhart, Indiana* (2022). In Encyclopedia Britannica. Retrieved August 31, 2022 from https://www.britannica.com/place/Elkhart-Indiana

*Freight Management and Operations* (2005). Federal Highway Administration. Retrieved August 14th, 2022 from https://ops.fhwa.dot.gov/freight/freight_analysis/nat_freight_stats/docs/06factsfigures/fig2_9.htm

Florida, R. (2002). *The Rise of the Creative Class and How It's transforming Work, Leisure, Community, and Everyday Life*. Basic Books.

Glaeser, E. Book Review of Richard Florida's "The Rise of the Creative Class". 2004. Retrieved July 2, 2022, from https://scholar.harvard.edu/glaeser/publications/book-review-richard-floridas-rise-creative-class

Glaeser, E. et al. (1992). Growth in Cities. *Journal of Political Economy*, *100*(6), 1126-1152. https://scholar.harvard.edu/files/shleifer/files/growthincities.pdf

Harrod, R. F. (1939). An Essay in Dynamic Theory. *The Economic Journal*, *49*(193), 14–33. https://www.jstor.org/stable/2225181

Isidore, C. (2019). Midland Texas: America's Ultimate Boomtown. *CNN*. Retrieved July 24, 2022 from https://www.cnn.com/2019/11/06/business/midland-texas-boomtown

Jacobs, J. (1969). *The Economy of Cities*. New York: Vintage, 1969.

*Key Industries and Companies* (n.d.). Boulder Economic Council. Retrieved. August 20, 2022 from https://boulderеconomiccouncil.org/boulder-economy/key-industries-companies/

*Louisiana Shale Viewer* (2022). FracTracker Alliance. Retrieved July 14, 2022 from https://ft.maps.arcgis.com/apps/webappviewer/index.html?appid=960743030af049f9accc8015c1b765b1

*Making of the iPhone.* The Ohio State University. N.d. Retrieved August 7, 2022 from https://u.osu.edu/iphone/3-the-manufacture-of-the-iphone/#:~:text=China%2C%20Taiwan%2C%20Thailand%2C%20Vietnam,is%20mostly%20assembled%20in%20China.

Magill, K. (2016, September 20). *Houma-Thibodaux Had Nation's Second-Worst Economy Last Year, New Report Says. HoumaToday*. Retrieved July 14, 2022 from

https://www.houmatoday.com/story/business/2016/09/20/houma-thibodaux-had-nations-second-worst-economy-last-year-new-report-says/25408202007/

*Major Employers* (n.d.). Midland Development Corporation. Retrieved July 24, 2022 from https://www.midlandtxedc.com/workforce/major-employers/

*Major Employers.* State of California – Employment Development Department. Retrieved August 7, 2022 from https://www.labormarketinfo.edd.ca.gov/majorer/countymajorer.asp?CountyCode=000085

*Manufacturing Automation Power Hour 2018.* Economic Alliance of Kankakee County. Retrieved August 20, 2022 from https://www.kankakeecountyed.org/business-resources/meetings-events/manufacturing-automation-power-hour-2018/

*Midland, Texas* (2022). Encyclopedia Britannica. Retrieved August 31, 2022 from https://www.britannica.com/place/Midland-Texas

*Multimedia Library*. Creative Class Group. (2020, December 13). Retrieved July 2, 2022, from https://creativeclass.com/richard_florida/multimedia-library/

*National Historical GIS*. IPUMS NHGIS. Retrieved July 2, 2022, from https://data2.nhgis.org/main

*Permian Basin (n.d.)*. Railroad Commission of Texas. Retrieved August 7, 2022, from https://www.rrc.texas.gov/oil-and-gas/major-oil-and-gas-formations/permian-basin/

Polanyi, M., & Nye, M. J. (1958). *Personal Knowledge: Towards a Post-critical Philosophy*. University of Chicago Press.

*QCEW County-MSA-CSA Crosswalk*. US Bureau of Labor Statistics. Retrieved July 2, 2022, from https://www.bls.gov/cew/classifications/areas/county-msa-csa-crosswalk.htm

*Regional Data – GDP and Personal Income*. Bureau of Economic Analysis. Retrieved July 2, 2022, https://apps.bea.gov/itable/iTable.cfm?ReqID=70&step=1&acrdn=5

*Real gross domestic product*. FRED. (2022, June 29). Retrieved July 2, 2022, from https://fred.stlouisfed.org/series/A939RX0Q048SBEA

*Report Forecasts Uptick in Gulf Oilfield*. Terrebonne Economic Development Authority. Retrieved July 14, 2022 from https://www.tpeda.org/news/category/Houma

Romer, P. (1986). Increasing Returns and Long-run Growth. *Journal of Political Economy*, *94*(5), 1002–1037. https://doi.org/10.1086/261420

Romer, P. (1990). Endogenous Technological Change. *Journal of Political Economy*, *98*(5), S71–S102. https://www.jstor.org/stable/2937632

Saxenian, A. (1994). *Regional Advantage*. Harvard University Press.

Smith, A. (1776). *Wealth of Nations*. Classic House Books.

Solow, R. (1956). A Contribution to the Theory of Economic Growth. *The Quarterly Journal of Economics*, *70*(1), 65–94. https://www.jstor.org/stable/pdf/1884513

*Tallahassee, Florida* (2022). In Encyclopedia Britannica. Retrieved August 20, 2022 from https://www.britannica.com/place/Tallahassee

*Texas Oil and Gas Viewer* (2022). FrackTracker Alliance. Retrieved August 31, 2022 from https://ft.maps.arcgis.com/apps/webappviewer/index.html?appid=f537aa46be49431fbb820c4e99e63474

*The University of Texas Permian Basin (n.d.)*. The Carnegie Classification of Institutions of Higher Education. Retrieved August 14th, 2022 from https://carnegieclassifications.acenet.edu/

*To Frack or Not to Frack*. Houma Times. Retrieved July 14, 2022 from https://www.houmatimes.com/uncategorized/frack-or-not-to-frack/

*Top Employers 2021*. Economic Alliance of Kankakee County. Retrieved August 20, 2022 from https://www.kankakeecountyed.org/top-employers/

Ucak, A. (2015). Adam Smith: The Inspirer of modern growth theories. *Procedia - Social and Behavioral Sciences*, *195*, 663–672. https://doi.org/10.1016/j.sbspro.2015.06.258

*U.S. State Patenting Breakout by Regional Component*. U.S. Patent and Trademark Office. Retrieved July 2, 2022, from https://www.uspto.gov/web/offices/ac/ido/oeip/taf/countyall/usa_county_gd.htm

Zucker, L. G.,; Darby, M. R. (1996). Star Scientists and Institutional Transformation: Patterns of Invention and Innovation in the Formation of the Biotechnology Industry. Proceedings of the National Academy of Science, 12, 709–716.

# Appendix

| MSA | Real GDP Per Capita_2001 | Real GDP Per Capita_2020 | Change in Real GDP Per Capita_2001-2020 |
|---|---|---|---|
| San Jose-Sunnyvale-Santa Clara, CA | $ 67,594 | $176,686 | $109,091 |
| Midland, TX | $ 55,931 | $159,132 | $103,201 |
| San Francisco-Oakland-Hayward, CA | $ 74,034 | $111,425 | $37,391 |
| Seattle-Tacoma-Bellevue, WA | $ 63,851 | $96,356 | $32,505 |
| Elkhart-Goshen, IN | $ 42,022 | $69,504 | $27,482 |
| Greeley, CO | $ 39,181 | $66,462 | $27,282 |
| Austin-Round Rock, TX | $ 50,726 | $76,008 | $25,282 |
| Durham-Chapel Hill, NC | $ 64,034 | $89,229 | $25,195 |
| Sioux Falls, SD | $ 51,901 | $76,759 | $24,858 |
| Odessa, TX | $ 46,813 | $69,050 | $22,237 |
| Salt Lake City, UT | $ 53,681 | $75,268 | $21,587 |
| Boulder, CO | $ 60,477 | $81,987 | $21,510 |
| Boston-Cambridge-Newton, MA-NH | $ 64,325 | $85,012 | $20,687 |
| Lima, OH | $ 52,830 | $72,761 | $19,931 |
| Trenton, NJ | $ 69,676 | $89,283 | $19,608 |
| Oklahoma City, OK | $ 46,463 | $64,868 | $18,405 |
| Rochester, MN | $ 49,970 | $67,783 | $17,814 |
| Bloomington, IL | $ 56,948 | $74,478 | $17,530 |
| Des Moines-West Des Moines, IA | $ 65,043 | $82,411 | $17,368 |
| Kankakee, IL | $ 34,211 | $51,473 | $17,262 |
| Cedar Rapids, IA | $ 48,968 | $65,940 | $16,971 |
| Portland-Vancouver-Hillsboro, OR-WA | $ 49,152 | $65,916 | $16,764 |
| Vallejo-Fairfield, CA | $ 37,477 | $54,035 | $16,558 |
| Los Angeles-Long Beach-Anaheim, CA | $ 50,380 | $66,624 | $16,244 |
| Nogales, AZ | $ 56,304 | $72,520 | $16,216 |
| Manchester-Nashua, NH | $ 44,713 | $60,610 | $15,897 |
| Pittsburgh, PA | $ 29,740 | $45,202 | $15,461 |
| Provo-Orem, UT | $ 28,700 | $44,096 | $15,396 |
| Santa Maria-Santa Barbara, CA | $ 44,849 | $59,843 | $14,995 |
| Williamsport, PA | $ 34,828 | $49,703 | $14,876 |
| Baton Rouge, LA | $ 57,820 | $72,569 | $14,749 |
| Madison, WI | $ 58,704 | $73,300 | $14,596 |
| Nashville-Davidson--Murfreesboro--Franklin, TN | $ 56,934 | $70,901 | $13,966 |
| Madera, CA | $ 26,186 | $40,025 | $13,839 |
| Fargo, ND-MN | $ 50,831 | $64,546 | $13,715 |
| Omaha-Council Bluffs, NE-IA | $ 55,434 | $69,124 | $13,690 |
| Bakersfield, CA | $ 40,914 | $54,540 | $13,626 |
| Dallas-Fort Worth-Arlington, TX | $ 53,018 | $66,203 | $13,184 |
| New York-Newark-Jersey City, NY-NJ-PA | $ 64,018 | $77,115 | $13,097 |
| Charleston-North Charleston, SC | $ 43,116 | $56,141 | $13,025 |
| Fort Collins, CO | $ 40,262 | $53,135 | $12,873 |

| MSA | Real GDP Per Capita_2001 | Real GDP Per Capita_2020 | Change in Real GDP Per Capita_2001-2020 |
|---|---|---|---|
| San Diego-Carlsbad, CA | $ 49,692 | $62,500 | $12,808 |
| Abilene, TX | $ 33,568 | $45,897 | $12,329 |
| Baltimore-Columbia-Towson, MD | $ 51,542 | $63,707 | $12,165 |
| Huntsville, AL | $ 44,989 | $57,146 | $12,158 |
| La Crosse-Onalaska, WI-MN | $ 43,618 | $55,636 | $12,018 |
| Washington-Arlington-Alexandria, DC-VA-MD-WV | $ 72,152 | $84,112 | $11,960 |
| Burlington-South Burlington, VT | $ 49,897 | $61,831 | $11,934 |
| Napa, CA | $ 56,623 | $68,432 | $11,809 |
| Tulsa, OK | $ 56,189 | $67,695 | $11,506 |
| San Luis Obispo-Paso Robles-Arroyo Grande, CA | $ 43,830 | $54,992 | $11,162 |
| Raleigh, NC | $ 52,135 | $63,253 | $11,118 |
| Wausau, WI | $ 46,414 | $57,381 | $10,966 |
| El Centro, CA | $ 35,179 | $45,814 | $10,635 |
| Crestview-Fort Walton Beach-Destin, FL | $ 43,192 | $53,795 | $10,603 |
| Bellingham, WA | $ 46,920 | $57,456 | $10,536 |
| Albany-Schenectady-Troy, NY | $ 53,665 | $64,067 | $10,402 |
| Minneapolis-St. Paul-Bloomington, MN-WI | $ 62,774 | $73,149 | $10,375 |
| Wooster, OH | $ 39,550 | $49,429 | $9,879 |
| Cincinnati, OH-KY-IN | $ 52,977 | $62,677 | $9,700 |
| Bend-Redmond, OR | $ 38,031 | $47,631 | $9,600 |
| Portland-South Portland, ME | $ 46,272 | $55,852 | $9,580 |
| Yakima, WA | $ 30,445 | $39,932 | $9,486 |
| Buffalo-Cheektowaga-Niagara Falls, NY | $ 42,452 | $51,928 | $9,476 |
| Syracuse, NY | $ 48,792 | $58,148 | $9,356 |
| Palm Bay-Melbourne-Titusville, FL | $ 31,540 | $40,870 | $9,330 |
| Dothan, AL | $ 45,856 | $55,145 | $9,289 |
| Waterloo-Cedar Falls, IA | $ 42,055 | $51,129 | $9,074 |
| Watertown-Fort Drum, NY | $ 41,040 | $50,090 | $9,050 |
| Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | $ 53,937 | $62,953 | $9,016 |
| Waco, TX | $ 35,888 | $44,851 | $8,963 |
| San Angelo, TX | $ 37,640 | $46,461 | $8,821 |
| Santa Rosa, CA | $ 44,904 | $53,565 | $8,662 |
| Auburn-Opelika, AL | $ 25,414 | $34,075 | $8,661 |
| Appleton, WI | $ 52,009 | $60,651 | $8,642 |
| Shreveport-Bossier City, LA | $ 39,658 | $48,247 | $8,589 |
| Hanford-Corcoran, CA | $ 32,971 | $41,473 | $8,502 |
| Kansas City, MO-KS | $ 55,823 | $64,153 | $8,330 |
| Ogden-Clearfield, UT | $ 33,471 | $41,591 | $8,120 |
| Fayetteville-Springdale-Rogers, AR-MO | $ 40,784 | $48,816 | $8,032 |
| Sherman-Denison, TX | $ 27,786 | $35,788 | $8,001 |
| Asheville, NC | $ 41,499 | $49,470 | $7,971 |

| MSA | Real GDP Per Capita_2001 | Real GDP Per Capita_2020 | Change in Real GDP Per Capita_2001-2020 |
|---|---|---|---|
| State College, PA | $ 39,778 | $47,437 | $7,660 |
| Visalia-Porterville, CA | $ 30,491 | $38,069 | $7,578 |
| Charlotte-Concord-Gastonia, NC-SC | $ 54,139 | $61,649 | $7,510 |
| Chattanooga, TN-GA | $ 54,553 | $61,915 | $7,362 |
| Salem, OR | $ 34,642 | $41,990 | $7,348 |
| College Station-Bryan, TX | $ 35,163 | $42,498 | $7,335 |
| Mobile, AL | $ 36,342 | $43,673 | $7,331 |
| Hartford-West Hartford-East Hartford, CT | $ 64,186 | $71,475 | $7,289 |
| Chicago-Naperville-Elgin, IL-IN-WI | $ 56,268 | $63,508 | $7,240 |
| Knoxville, TN | $ 41,722 | $48,891 | $7,169 |
| Salinas, CA | $ 51,478 | $58,634 | $7,156 |
| Malvern, AR | $ 54,362 | $61,503 | $7,141 |
| Gainesville, GA | $ 42,218 | $49,352 | $7,134 |
| Harrisburg-Carlisle, PA | $ 57,341 | $64,467 | $7,126 |
| Sierra Vista-Douglas, AZ | $ 28,476 | $35,602 | $7,126 |
| Fayetteville, NC | $ 39,514 | $46,626 | $7,112 |
| Lebanon, PA | $ 32,453 | $39,540 | $7,087 |
| Atlanta-Sandy Springs-Roswell, GA | $ 67,288 | $74,358 | $7,071 |
| Fresno, CA | $ 34,595 | $41,624 | $7,029 |
| Altoona, PA | $ 36,322 | $43,349 | $7,027 |
| Oxnard-Thousand Oaks-Ventura, CA | $ 48,114 | $55,106 | $6,992 |
| Lewiston-Auburn, ME | $ 33,130 | $39,882 | $6,752 |
| Lake Havasu City-Kingman, AZ | $ 32,177 | $38,846 | $6,669 |
| Little Rock-North Little Rock-Conway, AR | $ 59,211 | $65,760 | $6,549 |
| Billings, MT | $ 47,181 | $53,637 | $6,456 |
| East Stroudsburg, PA | $ 32,179 | $38,581 | $6,401 |
| Ocean City, NJ | $ 44,117 | $50,499 | $6,382 |
| Miami-Fort Lauderdale-West Palm Beach, FL | $ 44,423 | $50,795 | $6,372 |
| Anchorage, AK | $ 62,142 | $68,493 | $6,352 |
| Santa Cruz-Watsonville, CA | $ 43,500 | $49,754 | $6,254 |
| Florence, SC | $ 39,121 | $45,340 | $6,219 |
| El Paso, TX | $ 29,105 | $35,297 | $6,192 |
| Worcester, MA-CT | $ 39,972 | $46,148 | $6,176 |
| Cleveland-Elyria, OH | $ 50,236 | $56,406 | $6,170 |
| Lafayette-West Lafayette, IN | $ 40,615 | $46,751 | $6,136 |
| Merced, CA | $ 27,132 | $33,252 | $6,121 |
| Spokane-Spokane Valley, WA | $ 39,275 | $45,327 | $6,052 |
| Urban Honolulu, HI | $ 48,114 | $54,145 | $6,031 |
| Bremerton-Silverdale, WA | $ 36,157 | $42,157 | $6,000 |
| Jackson, MI | $ 31,218 | $37,120 | $5,902 |
| Janesville-Beloit, WI | $ 35,331 | $41,218 | $5,886 |

| MSA | Real GDP Per Capita_2001 | Real GDP Per Capita_2020 | Change in Real GDP Per Capita_2001-2020 |
|---|---|---|---|
| Sumter, SC | $ 29,162 | $35,041 | $5,879 |
| Hammond, LA | $ 24,175 | $30,033 | $5,858 |
| Niles-Benton Harbor, MI | $ 39,053 | $44,840 | $5,788 |
| Utica-Rome, NY | $ 37,106 | $42,853 | $5,747 |
| Spartanburg, SC | $ 38,986 | $44,680 | $5,694 |
| Kingston, NY | $ 30,159 | $35,801 | $5,641 |
| Columbus, OH | $ 52,892 | $58,530 | $5,637 |
| San Antonio-New Braunfels, TX | $ 42,022 | $47,621 | $5,599 |
| Sacramento--Roseville--Arden-Arcade, CA | $ 46,974 | $52,569 | $5,595 |
| Modesto, CA | $ 33,868 | $39,249 | $5,381 |
| Davenport-Moline-Rock Island, IA-IL | $ 50,041 | $55,404 | $5,362 |
| Denver-Aurora-Lakewood, CO | $ 61,621 | $66,877 | $5,257 |
| South Bend-Mishawaka, IN-MI | $ 40,207 | $45,421 | $5,214 |
| Louisville/Jefferson County, KY-IN | $ 58,005 | $63,193 | $5,188 |
| Chico, CA | $ 31,255 | $36,405 | $5,150 |
| Tampa-St. Petersburg-Clearwater, FL | $ 40,998 | $46,142 | $5,145 |
| Amarillo, TX | $ 39,586 | $44,702 | $5,116 |
| Phoenix-Mesa-Scottsdale, AZ | $ 44,414 | $49,526 | $5,112 |
| Decatur, AL | $ 37,584 | $42,665 | $5,081 |
| Yuma, AZ | $ 31,448 | $36,498 | $5,050 |
| Savannah, GA | $ 48,960 | $54,006 | $5,046 |
| Sheboygan, WI | $ 49,491 | $54,514 | $5,023 |
| Panama City, FL | $ 37,719 | $42,716 | $4,997 |
| St. Cloud, MN | $ 44,512 | $49,433 | $4,921 |
| Riverside-San Bernardino-Ontario, CA | $ 30,032 | $34,886 | $4,854 |
| Scranton--Wilkes-Barre--Hazleton, PA | $ 37,231 | $41,954 | $4,723 |
| Johnson City, TN | $ 37,057 | $41,766 | $4,709 |
| Columbus, GA-AL | $ 43,190 | $47,899 | $4,708 |
| Dayton, OH | $ 45,112 | $49,817 | $4,705 |
| St. Louis, MO-IL | $ 52,300 | $56,968 | $4,668 |
| Coeur d'Alene, ID | $ 30,916 | $35,579 | $4,663 |
| Ottawa-Peru, IL | $ 43,278 | $47,940 | $4,662 |
| Ogdensburg-Massena, NY | $ 34,980 | $39,629 | $4,649 |
| Topeka, KS | $ 48,373 | $53,015 | $4,642 |
| Tyler, TX | $ 41,894 | $46,498 | $4,604 |
| Tuscaloosa, AL | $ 43,756 | $48,354 | $4,598 |
| Akron, OH | $ 40,791 | $45,340 | $4,550 |
| Providence-Warwick, RI-MA | $ 40,948 | $45,348 | $4,400 |
| Decatur, IL | $ 49,007 | $53,390 | $4,383 |
| North Port-Sarasota-Bradenton, FL | $ 36,196 | $40,550 | $4,354 |
| Daphne-Fairhope-Foley, AL | $ 27,653 | $32,003 | $4,350 |

| MSA | Real GDP Per Capita_2001 | Real GDP Per Capita_2020 | Change in Real GDP Per Capita_2001-2020 |
|---|---|---|---|
| Grand Rapids-Wyoming, MI | $ 48,638 | $52,973 | $4,335 |
| Lexington-Fayette, KY | $ 50,823 | $55,120 | $4,297 |
| Jacksonville, FL | $ 48,123 | $52,405 | $4,282 |
| Toledo, OH | $ 48,741 | $52,928 | $4,188 |
| Monroe, LA | $ 35,678 | $39,861 | $4,183 |
| Laredo, TX | $ 40,127 | $44,215 | $4,088 |
| Lincoln, NE | $ 50,617 | $54,691 | $4,074 |
| Redding, CA | $ 36,881 | $40,955 | $4,074 |
| Medford, OR | $ 32,868 | $36,900 | $4,032 |
| Oshkosh-Neenah, WI | $ 50,411 | $54,422 | $4,012 |
| Bloomington, IN | $ 37,999 | $41,992 | $3,994 |
| Augusta-Waterville, ME | $ 38,635 | $42,537 | $3,902 |
| Houston-The Woodlands-Sugar Land, TX | $ 62,092 | $65,973 | $3,881 |
| Chambersburg-Waynesboro, PA | $ 31,240 | $35,101 | $3,861 |
| Lawton, OK | $ 32,511 | $36,308 | $3,797 |
| Indianapolis-Carmel-Anderson, IN | $ 61,925 | $65,715 | $3,790 |
| Birmingham-Hoover, AL | $ 50,791 | $54,549 | $3,758 |
| Pittsfield, MA | $ 43,144 | $46,877 | $3,733 |
| Columbia, MO | $ 45,122 | $48,812 | $3,691 |
| Barnstable Town, MA | $ 49,152 | $52,825 | $3,673 |
| Sebastian-Vero Beach, FL | $ 34,497 | $38,140 | $3,643 |
| New Haven-Milford, CT | $ 49,556 | $53,197 | $3,640 |
| Greenville, NC | $ 41,504 | $45,135 | $3,631 |
| Lubbock, TX | $ 36,521 | $40,033 | $3,512 |
| Anniston-Oxford-Jacksonville, AL | $ 31,353 | $34,836 | $3,483 |
| Deltona-Daytona Beach-Ormond Beach, FL | $ 26,922 | $30,308 | $3,386 |
| Milwaukee-Waukesha-West Allis, WI | $ 52,552 | $55,922 | $3,371 |
| Reading, PA | $ 39,643 | $42,935 | $3,292 |
| Virginia Beach-Norfolk-Newport News, VA-NC | $ 46,965 | $50,140 | $3,174 |
| Wichita, KS | $ 50,515 | $53,533 | $3,018 |
| Pottsville, PA | $ 28,588 | $31,576 | $2,987 |
| Johnstown, PA | $ 29,595 | $32,531 | $2,936 |
| Olympia-Tumwater, WA | $ 40,078 | $42,999 | $2,921 |
| Pensacola-Ferry Pass-Brent, FL | $ 34,493 | $37,409 | $2,916 |
| Ann Arbor, MI | $ 57,336 | $60,228 | $2,892 |
| Norwich-New London, CT | $ 55,402 | $58,294 | $2,892 |
| Binghamton, NY | $ 38,522 | $41,413 | $2,891 |
| Springfield, MO | $ 48,531 | $51,405 | $2,874 |
| New Orleans-Metairie, LA | $ 44,552 | $47,418 | $2,866 |
| Alexandria, LA | $ 35,302 | $38,129 | $2,827 |
| Eugene, OR | $ 34,135 | $36,907 | $2,772 |

| MSA | Real GDP Per Capita_2001 | Real GDP Per Capita_2020 | Change in Real GDP Per Capita_2001-2020 |
|---|---|---|---|
| Flagstaff, AZ | $ 41,738 | $44,437 | $2,699 |
| Salem, OH | $ 24,234 | $26,906 | $2,672 |
| Springfield, MA | $ 39,147 | $41,819 | $2,672 |
| Beaumont-Port Arthur, TX | $ 79,068 | $81,729 | $2,661 |
| Stockton-Lodi, CA | $ 35,148 | $37,809 | $2,660 |
| Mount Vernon-Anacortes, WA | $ 50,220 | $52,840 | $2,621 |
| Wilmington, NC | $ 49,437 | $52,036 | $2,599 |
| Flint, MI | $ 32,130 | $34,706 | $2,575 |
| Iowa City, IA | $ 51,909 | $54,455 | $2,546 |
| Lancaster, PA | $ 45,261 | $47,801 | $2,539 |
| Punta Gorda, FL | $ 25,101 | $27,554 | $2,454 |
| Brownsville-Harlingen, TX | $ 21,457 | $23,873 | $2,416 |
| Las Cruces, NM | $ 27,753 | $30,055 | $2,303 |
| Roseburg, OR | $ 27,428 | $29,686 | $2,258 |
| Montgomery, AL | $ 42,994 | $45,251 | $2,257 |
| Killeen-Temple, TX | $ 40,911 | $43,164 | $2,252 |
| Eureka-Arcata-Fortuna, CA | $ 34,335 | $36,553 | $2,218 |
| Duluth, MN-WI | $ 42,638 | $44,813 | $2,176 |
| York-Hanover, PA | $ 39,091 | $41,176 | $2,086 |
| Columbia, SC | $ 46,177 | $48,228 | $2,051 |
| Peoria, IL | $ 49,017 | $51,016 | $1,999 |
| Albany, OR | $ 32,767 | $34,708 | $1,941 |
| Detroit-Warren-Dearborn, MI | $ 49,788 | $51,728 | $1,940 |
| Ocala, FL | $ 24,724 | $26,643 | $1,919 |
| Canton-Massillon, OH | $ 37,812 | $39,676 | $1,863 |
| Battle Creek, MI | $ 40,714 | $42,556 | $1,842 |
| Pueblo, CO | $ 31,361 | $33,167 | $1,806 |
| Colorado Springs, CO | $ 44,848 | $46,602 | $1,754 |
| Holland, MI | $ 32,785 | $34,447 | $1,663 |
| Hagerstown-Martinsburg, MD-WV | $ 38,991 | $40,636 | $1,645 |
| Champaign-Urbana, IL | $ 44,964 | $46,490 | $1,526 |
| Prescott, AZ | $ 26,957 | $28,474 | $1,517 |
| Saginaw, MI | $ 36,673 | $38,159 | $1,486 |
| Grand Junction, CO | $ 36,769 | $38,244 | $1,475 |
| Wichita Falls, TX | $ 38,417 | $39,781 | $1,364 |
| Gulfport-Biloxi-Pascagoula, MS | $ 40,504 | $41,851 | $1,347 |
| Vineland-Bridgeton, NJ | $ 36,595 | $37,923 | $1,328 |
| Boise City, ID | $ 25,568 | $26,790 | $1,222 |
| Ashtabula, OH | $ 26,633 | $27,822 | $1,188 |
| Corpus Christi, TX | $ 51,164 | $52,295 | $1,131 |
| Clarksville, TN-KY | $ 23,250 | $24,290 | $1,040 |

| MSA | Real GDP Per Capita_2001 | Real GDP Per Capita_2020 | Change in Real GDP Per Capita_2001-2020 |
|---|---|---|---|
| Orlando-Kissimmee-Sanford, FL | $ 47,226 | $48,152 | $926 |
| Lakeland-Winter Haven, FL | $ 34,924 | $35,846 | $922 |
| Cape Coral-Fort Myers, FL | $ 37,482 | $38,344 | $862 |
| Augusta-Richmond County, GA-SC | $ 44,595 | $45,394 | $798 |
| Lansing-East Lansing, MI | $ 47,279 | $47,943 | $664 |
| Kalamazoo-Portage, MI | $ 44,929 | $45,540 | $611 |
| Evansville, IN-KY | $ 53,649 | $54,226 | $577 |
| Bangor, ME | $ 38,573 | $39,070 | $497 |
| Terre Haute, IN | $ 38,481 | $38,963 | $482 |
| Longview, TX | $ 53,513 | $53,974 | $461 |
| Rochester, NY | $ 54,924 | $55,330 | $406 |
| Erie, PA | $ 36,956 | $37,308 | $351 |
| Tucson, AZ | $ 36,810 | $37,053 | $243 |
| Albuquerque, NM | $ 48,877 | $49,054 | $177 |
| Youngstown-Warren-Boardman, OH-PA | $ 34,141 | $34,208 | $67 |
| Sioux City, IA-NE-SD | $ 44,009 | $43,875 | ($134) |
| Concord, NH | $ 58,164 | $58,022 | ($142) |
| Naples-Immokalee-Marco Island, FL | $ 46,447 | $46,280 | ($167) |
| Greenville-Anderson-Mauldin, SC | $ 46,112 | $45,913 | ($199) |
| Warner Robins, GA | $ 40,668 | $40,436 | ($232) |
| Muskegon, MI | $ 31,733 | $31,345 | ($388) |
| Athens-Clarke County, GA | $ 52,922 | $52,316 | ($607) |
| Fort Smith, AR-OK | $ 47,574 | $46,943 | ($631) |
| Gadsden, AL | $ 25,624 | $24,954 | ($670) |
| Kahului-Wailuku-Lahaina, HI | $ 44,665 | $43,955 | ($710) |
| Port St. Lucie, FL | $ 33,573 | $32,794 | ($779) |
| Jacksonville, NC | $ 35,701 | $34,813 | ($888) |
| Michigan City-La Porte, IN | $ 35,511 | $34,587 | ($924) |
| Springfield, OH | $ 30,405 | $29,461 | ($944) |
| Mansfield, OH | $ 35,099 | $34,068 | ($1,031) |
| Richmond, VA | $ 67,133 | $65,972 | ($1,161) |
| Rockford, IL | $ 42,322 | $41,091 | ($1,231) |
| Memphis, TN-MS-AR | $ 55,307 | $54,059 | ($1,248) |
| Charleston, WV | $ 52,437 | $51,128 | ($1,309) |
| Burlington, NC | $ 34,757 | $33,423 | ($1,334) |
| Kingsport-Bristol-Bristol, TN-VA | $ 42,933 | $41,591 | ($1,342) |
| McAllen-Edinburg-Mission, TX | $ 24,482 | $23,014 | ($1,468) |
| Springfield, IL | $ 51,229 | $49,678 | ($1,552) |
| Bay City, MI | $ 32,760 | $31,083 | ($1,677) |
| Dover, DE | $ 44,557 | $42,686 | ($1,870) |
| Monroe, MI | $ 36,572 | $34,699 | ($1,874) |

| MSA | Real GDP Per Capita_2001 | Real GDP Per Capita_2020 | Change in Real GDP Per Capita_2001-2020 |
|---|---|---|---|
| Salisbury, MD-DE | $ 52,596 | $50,593 | ($2,004) |
| Jamestown-Dunkirk-Fredonia, NY | $ 34,863 | $32,714 | ($2,149) |
| Lake Charles, LA | $ 71,855 | $69,520 | ($2,335) |
| Jackson, MS | $ 44,951 | $42,424 | ($2,527) |
| Homosassa Springs, FL | $ 28,533 | $25,883 | ($2,650) |
| Goldsboro, NC | $ 38,400 | $35,511 | ($2,889) |
| Santa Fe, NM | $ 40,906 | $37,844 | ($3,062) |
| Joplin, MO | $ 43,018 | $39,944 | ($3,074) |
| Torrington, CT | $ 42,774 | $39,670 | ($3,104) |
| Muncie, IN | $ 35,060 | $31,741 | ($3,319) |
| Lumberton, NC | $ 30,164 | $26,833 | ($3,330) |
| Reno, NV | $ 55,868 | $52,435 | ($3,433) |
| Hickory-Lenoir-Morganton, NC | $ 52,907 | $49,300 | ($3,607) |
| Bridgeport-Stamford-Norwalk, CT | $ 85,987 | $81,663 | ($4,324) |
| Myrtle Beach-Conway-North Myrtle Beach, SC-NC | $ 38,424 | $34,067 | ($4,357) |
| Tallahassee, FL | $ 50,059 | $45,664 | ($4,395) |
| Las Vegas-Henderson-Paradise, NV | $ 50,070 | $45,248 | ($4,822) |
| Macon, GA | $ 52,589 | $47,738 | ($4,852) |
| Racine, WI | $ 41,950 | $36,144 | ($5,806) |
| Hilton Head Island-Bluffton-Beaufort, SC | $ 43,652 | $37,768 | ($5,884) |
| Winston-Salem, NC | $ 52,745 | $46,237 | ($6,508) |
| Greensboro-High Point, NC | $ 56,075 | $48,962 | ($7,113) |
| Lafayette, LA | $ 59,534 | $49,853 | ($9,681) |
| Allentown-Bethlehem-Easton, PA-NJ | $ 60,364 | $49,568 | ($10,796) |
| Atlantic City-Hammonton, NJ | $ 53,157 | $41,846 | ($11,311) |
| Farmington, NM | $ 56,418 | $43,373 | ($13,044) |
| Houma-Thibodaux, LA | $ 64,002 | $41,138 | ($22,864) |

| MSA | Share of Real GDP from Manufacturing | Share of Real GDP from Non-Manufacturing High-Tech | Count _MSA Research Universities |
|---|---|---|---|
| San Jose-Sunnyvale-Santa Clara, CA | 15% | 22% | 1 |
| Midland, TX | 4% | 6% | 0 |
| San Francisco-Oakland-Hayward, CA | 13% | 16% | 3 |
| Seattle-Tacoma-Bellevue, WA | 14% | 17% | 1 |
| Elkhart-Goshen, IN | 41% | 3% | 0 |
| Greeley, CO | 15% | 3% | 1 |
| Austin-Round Rock, TX | 6% | 17% | 1 |
| Durham-Chapel Hill, NC | 23% | 11% | 2 |
| Sioux Falls, SD | 6% | 7% | 0 |
| Odessa, TX | 8% | 1% | 0 |
| Salt Lake City, UT | 7% | 10% | 1 |
| Boulder, CO | 8% | 27% | 1 |
| Boston-Cambridge-Newton, MA-NH | 7% | 16% | 1 |
| Lima, OH | 33% | 3% | 0 |
| Trenton, NJ | 5% | 17% | 1 |
| Oklahoma City, OK | 8% | 8% | 1 |
| Rochester, MN | 8% | 4% | 1 |
| Bloomington, IL | 7% | 4% | 1 |
| Des Moines-West Des Moines, IA | 7% | 8% | 0 |
| Kankakee, IL | 21% | 1% | 0 |
| Cedar Rapids, IA | 15% | 10% | 0 |
| Portland-Vancouver-Hillsboro, OR-WA | 11% | 11% | 0 |
| Vallejo-Fairfield, CA | 19% | 2% | 0 |
| Los Angeles-Long Beach-Anaheim, CA | 10% | 16% | 8 |
| Nogales, AZ | 9% | 12% | 0 |
| Manchester-Nashua, NH | 10% | 12% | 0 |
| Pittsburgh, PA | 16% | 6% | 3 |
| Provo-Orem, UT | 11% | 12% | 1 |
| Santa Maria-Santa Barbara, CA | 6% | 10% | 1 |
| Williamsport, PA | 23% | 4% | 0 |
| Baton Rouge, LA | 20% | 9% | 1 |
| Madison, WI | 9% | 9% | 1 |
| Nashville-Davidson--Murfreesboro--Franklin, TN | 10% | 10% | 3 |
| Madera, CA | 9% | 2% | 0 |
| Fargo, ND-MN | 7% | 7% | 0 |
| Omaha-Council Bluffs, NE-IA | 7% | 8% | 0 |
| Bakersfield, CA | 6% | 4% | 0 |
| Dallas-Fort Worth-Arlington, TX | 10% | 14% | 7 |
| New York-Newark-Jersey City, NY-NJ-PA | 7% | 15% | 0 |
| Charleston-North Charleston, SC | 9% | 8% | 0 |
| Fort Collins, CO | 9% | 9% | 1 |

| MSA | Share of Real GDP from Manufacturing | Share of Real GDP from Non-Manufacturing High-Tech | Count _MSA Research Universities |
|---|---|---|---|
| San Diego-Carlsbad, CA | 6% | 15% | 3 |
| Abilene, TX | 5% | 5% | 0 |
| Baltimore-Columbia-Towson, MD | 9% | 9% | 3 |
| Huntsville, AL | 14% | 11% | 2 |
| La Crosse-Onalaska, WI-MN | 13% | 5% | 0 |
| Washington-Arlington-Alexandria, DC-VA-MD-WV | 1% | 21% | 0 |
| Burlington-South Burlington, VT | 11% | 11% | 1 |
| Napa, CA | 22% | 6% | 0 |
| Tulsa, OK | 13% | 10% | 1 |
| San Luis Obispo-Paso Robles-Arroyo Grande, CA | 8% | 5% | 0 |
| Raleigh, NC | 10% | 14% | 1 |
| Wausau, WI | 24% | 5% | 0 |
| El Centro, CA | 3% | 2% | 0 |
| Crestview-Fort Walton Beach-Destin, FL | 3% | 9% | 0 |
| Bellingham, WA | 27% | 5% | 0 |
| Albany-Schenectady-Troy, NY | 8% | 10% | 2 |
| Minneapolis-St. Paul-Bloomington, MN-WI | 10% | 11% | 0 |
| Wooster, OH | 33% | 3% | 0 |
| Cincinnati, OH-KY-IN | 17% | 8% | 0 |
| Bend-Redmond, OR | 6% | 8% | 0 |
| Portland-South Portland, ME | 8% | 8% | 0 |
| Yakima, WA | 13% | 4% | 0 |
| Buffalo-Cheektowaga-Niagara Falls, NY | 15% | 7% | 1 |
| Syracuse, NY | 12% | 7% | 2 |
| Palm Bay-Melbourne-Titusville, FL | 6% | 9% | 1 |
| Dothan, AL | 8% | 8% | 0 |
| Waterloo-Cedar Falls, IA | 31% | 4% | 0 |
| Watertown-Fort Drum, NY | 5% | 3% | 0 |
| Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | 12% | 11% | 0 |
| Waco, TX | 14% | 6% | 1 |
| San Angelo, TX | 11% | 12% | 0 |
| Santa Rosa, CA | 12% | 8% | 0 |
| Auburn-Opelika, AL | 13% | 1% | 1 |
| Appleton, WI | 24% | 6% | 0 |
| Shreveport-Bossier City, LA | 12% | 6% | 0 |
| Hanford-Corcoran, CA | 9% | 1% | 0 |
| Kansas City, MO-KS | 11% | 14% | 0 |
| Ogden-Clearfield, UT | 15% | 5% | 0 |
| Fayetteville-Springdale-Rogers, AR-MO | 17% | 3% | 0 |
| Sherman-Denison, TX | 15% | 2% | 0 |
| Asheville, NC | 15% | 6% | 0 |

| MSA | Share of Real GDP from Manufacturing | Share of Real GDP from Non-Manufacturing High-Tech | Count _MSA Research Universities |
|---|---|---|---|
| State College, PA | 7% | 6% | 1 |
| Visalia-Porterville, CA | 8% | 3% | 0 |
| Charlotte-Concord-Gastonia, NC-SC | 17% | 8% | 0 |
| Chattanooga, TN-GA | 15% | 7% | 0 |
| Salem, OR | 8% | 5% | 0 |
| College Station-Bryan, TX | 6% | 6% | 1 |
| Mobile, AL | 13% | 7% | 1 |
| Hartford-West Hartford-East Hartford, CT | 12% | 8% | 2 |
| Chicago-Naperville-Elgin, IL-IN-WI | 13% | 11% | 0 |
| Knoxville, TN | 9% | 9% | 1 |
| Salinas, CA | 4% | 5% | 0 |
| Malvern, AR | 21% | 5% | 0 |
| Gainesville, GA | 29% | 3% | 0 |
| Harrisburg-Carlisle, PA | 9% | 6% | 0 |
| Sierra Vista-Douglas, AZ | 2% | 4% | 0 |
| Fayetteville, NC | 11% | 3% | 0 |
| Lebanon, PA | 21% | 2% | 0 |
| Atlanta-Sandy Springs-Roswell, GA | 8% | 17% | 4 |
| Fresno, CA | 8% | 5% | 0 |
| Altoona, PA | 15% | 5% | 0 |
| Oxnard-Thousand Oaks-Ventura, CA | 17% | 8% | 0 |
| Lewiston-Auburn, ME | 12% | 7% | 0 |
| Lake Havasu City-Kingman, AZ | 9% | 6% | 0 |
| Little Rock-North Little Rock-Conway, AR | 6% | 12% | 1 |
| Billings, MT | 20% | 6% | 0 |
| East Stroudsburg, PA | 15% | 4% | 0 |
| Ocean City, NJ | 2% | 3% | 0 |
| Miami-Fort Lauderdale-West Palm Beach, FL | 4% | 12% | 4 |
| Anchorage, AK | 1% | 9% | 0 |
| Santa Cruz-Watsonville, CA | 5% | 10% | 1 |
| Florence, SC | 18% | 6% | 0 |
| El Paso, TX | 16% | 5% | 1 |
| Worcester, MA-CT | 14% | 7% | 0 |
| Cleveland-Elyria, OH | 17% | 9% | 2 |
| Lafayette-West Lafayette, IN | 22% | 4% | 1 |
| Merced, CA | 12% | 3% | 0 |
| Spokane-Spokane Valley, WA | 7% | 7% | 0 |
| Urban Honolulu, HI | 3% | 7% | 1 |
| Bremerton-Silverdale, WA | 1% | 7% | 0 |
| Jackson, MI | 17% | 3% | 0 |
| Janesville-Beloit, WI | 26% | 4% | 0 |

| MSA | Share of Real GDP from Manufacturing | Share of Real GDP from Non-Manufacturing High-Tech | Count _MSA Research Universities |
|---|---|---|---|
| Sumter, SC | 21% | 2% | 0 |
| Hammond, LA | 10% | 4% | 0 |
| Niles-Benton Harbor, MI | 22% | 4% | 1 |
| Utica-Rome, NY | 10% | 5% | 0 |
| Spartanburg, SC | 29% | 4% | 0 |
| Kingston, NY | 8% | 5% | 0 |
| Columbus, OH | 9% | 9% | 1 |
| San Antonio-New Braunfels, TX | 5% | 11% | 0 |
| Sacramento--Roseville--Arden-Arcade, CA | 5% | 9% | 1 |
| Modesto, CA | 16% | 4% | 0 |
| Davenport-Moline-Rock Island, IA-IL | 19% | 3% | 0 |
| Denver-Aurora-Lakewood, CO | 6% | 17% | 2 |
| South Bend-Mishawaka, IN-MI | 17% | 7% | 0 |
| Louisville/Jefferson County, KY-IN | 16% | 8% | 0 |
| Chico, CA | 5% | 5% | 0 |
| Tampa-St. Petersburg-Clearwater, FL | 5% | 10% | 1 |
| Amarillo, TX | 11% | 6% | 0 |
| Phoenix-Mesa-Scottsdale, AZ | 8% | 8% | 1 |
| Decatur, AL | 35% | 3% | 0 |
| Yuma, AZ | 12% | 4% | 0 |
| Savannah, GA | 17% | 5% | 0 |
| Sheboygan, WI | 43% | 4% | 0 |
| Panama City, FL | 4% | 6% | 0 |
| St. Cloud, MN | 15% | 5% | 0 |
| Riverside-San Bernardino-Ontario, CA | 10% | 4% | 2 |
| Scranton--Wilkes-Barre--Hazleton, PA | 14% | 7% | 0 |
| Johnson City, TN | 12% | 8% | 1 |
| Columbus, GA-AL | 13% | 9% | 0 |
| Dayton, OH | 15% | 8% | 2 |
| St. Louis, MO-IL | 19% | 12% | 0 |
| Coeur d'Alene, ID | 5% | 6% | 0 |
| Ottawa-Peru, IL | 14% | 2% | 0 |
| Ogdensburg-Massena, NY | 14% | 2% | 1 |
| Topeka, KS | 7% | 9% | 0 |
| Tyler, TX | 18% | 2% | 0 |
| Tuscaloosa, AL | 19% | 4% | 1 |
| Akron, OH | 17% | 6% | 2 |
| Providence-Warwick, RI-MA | 13% | 5% | 0 |
| Decatur, IL | 33% | 1% | 0 |
| North Port-Sarasota-Bradenton, FL | 6% | 7% | 1 |
| Daphne-Fairhope-Foley, AL | 8% | 5% | 0 |

| MSA | Share of Real GDP from Manufacturing | Share of Real GDP from Non-Manufacturing High-Tech | Count _MSA Research Universities |
|---|---|---|---|
| Grand Rapids-Wyoming, MI | 24% | 7% | 0 |
| Lexington-Fayette, KY | 7% | 11% | 1 |
| Jacksonville, FL | 6% | 8% | 0 |
| Toledo, OH | 25% | 6% | 2 |
| Monroe, LA | 15% | 8% | 0 |
| Laredo, TX | 1% | 2% | 0 |
| Lincoln, NE | 12% | 8% | 1 |
| Redding, CA | 4% | 5% | 0 |
| Medford, OR | 8% | 6% | 0 |
| Oshkosh-Neenah, WI | 36% | 4% | 0 |
| Bloomington, IN | 14% | 6% | 1 |
| Augusta-Waterville, ME | 5% | 6% | 0 |
| Houston-The Woodlands-Sugar Land, TX | 19% | 10% | 3 |
| Chambersburg-Waynesboro, PA | 19% | 4% | 0 |
| Lawton, OK | 10% | 3% | 0 |
| Indianapolis-Carmel-Anderson, IN | 24% | 7% | 1 |
| Birmingham-Hoover, AL | 8% | 11% | 1 |
| Pittsfield, MA | 16% | 6% | 0 |
| Columbia, MO | 6% | 4% | 1 |
| Barnstable Town, MA | 2% | 7% | 0 |
| Sebastian-Vero Beach, FL | 5% | 8% | 0 |
| New Haven-Milford, CT | 12% | 10% | 1 |
| Greenville, NC | 21% | 4% | 1 |
| Lubbock, TX | 5% | 9% | 1 |
| Anniston-Oxford-Jacksonville, AL | 15% | 5% | 0 |
| Deltona-Daytona Beach-Ormond Beach, FL | 5% | 7% | 0 |
| Milwaukee-Waukesha-West Allis, WI | 16% | 8% | 2 |
| Reading, PA | 22% | 6% | 0 |
| Virginia Beach-Norfolk-Newport News, VA-NC | 8% | 8% | 0 |
| Wichita, KS | 32% | 6% | 1 |
| Pottsville, PA | 26% | 2% | 0 |
| Johnstown, PA | 8% | 6% | 0 |
| Olympia-Tumwater, WA | 3% | 6% | 0 |
| Pensacola-Ferry Pass-Brent, FL | 6% | 8% | 0 |
| Ann Arbor, MI | 13% | 14% | 1 |
| Norwich-New London, CT | 16% | 6% | 0 |
| Binghamton, NY | 11% | 7% | 1 |
| Springfield, MO | 10% | 7% | 0 |
| New Orleans-Metairie, LA | 6% | 9% | 2 |
| Alexandria, LA | 7% | 5% | 0 |
| Eugene, OR | 10% | 8% | 1 |

| MSA | Share of Real GDP from Manufacturing | Share of Real GDP from Non-Manufacturing High-Tech | Count _MSA Research Universities |
|---|---|---|---|
| Flagstaff, AZ | 5% | 3% | 1 |
| Salem, OH | 22% | 1% | 0 |
| Springfield, MA | 11% | 5% | 1 |
| Beaumont-Port Arthur, TX | 53% | 6% | 0 |
| Stockton-Lodi, CA | 11% | 4% | 1 |
| Mount Vernon-Anacortes, WA | 29% | 5% | 0 |
| Wilmington, NC | 18% | 7% | 0 |
| Flint, MI | 21% | 8% | 0 |
| Iowa City, IA | 12% | 5% | 1 |
| Lancaster, PA | 23% | 7% | 0 |
| Punta Gorda, FL | 2% | 4% | 0 |
| Brownsville-Harlingen, TX | 9% | 5% | 0 |
| Las Cruces, NM | 4% | 8% | 1 |
| Roseburg, OR | 12% | 4% | 0 |
| Montgomery, AL | 5% | 8% | 0 |
| Killeen-Temple, TX | 8% | 3% | 0 |
| Eureka-Arcata-Fortuna, CA | 6% | 4% | 0 |
| Duluth, MN-WI | 8% | 5% | 0 |
| York-Hanover, PA | 24% | 5% | 0 |
| Columbia, SC | 9% | 7% | 1 |
| Peoria, IL | 23% | 7% | 0 |
| Albany, OR | 21% | 3% | 0 |
| Detroit-Warren-Dearborn, MI | 16% | 12% | 2 |
| Ocala, FL | 8% | 6% | 0 |
| Canton-Massillon, OH | 27% | 5% | 0 |
| Battle Creek, MI | 27% | 5% | 0 |
| Pueblo, CO | 10% | 4% | 0 |
| Colorado Springs, CO | 4% | 14% | 0 |
| Holland, MI | 42% | 2% | 0 |
| Hagerstown-Martinsburg, MD-WV | 15% | 5% | 0 |
| Champaign-Urbana, IL | 10% | 6% | 1 |
| Prescott, AZ | 5% | 3% | 0 |
| Saginaw, MI | 23% | 5% | 0 |
| Grand Junction, CO | 6% | 6% | 0 |
| Wichita Falls, TX | 17% | 5% | 0 |
| Gulfport-Biloxi-Pascagoula, MS | 15% | 5% | 0 |
| Vineland-Bridgeton, NJ | 20% | 4% | 0 |
| Boise City, ID | 15% | 4% | 0 |
| Ashtabula, OH | 27% | 1% | 0 |
| Corpus Christi, TX | 28% | 6% | 0 |
| Clarksville, TN-KY | 15% | 2% | 0 |

| MSA | Share of Real GDP from Manufacturing | Share of Real GDP from Non-Manufacturing High-Tech | Count _MSA Research Universities |
|---|---|---|---|
| Orlando-Kissimmee-Sanford, FL | 4% | 10% | 1 |
| Lakeland-Winter Haven, FL | 11% | 6% | 0 |
| Cape Coral-Fort Myers, FL | 2% | 8% | 0 |
| Augusta-Richmond County, GA-SC | 16% | 4% | 0 |
| Lansing-East Lansing, MI | 11% | 7% | 1 |
| Kalamazoo-Portage, MI | 26% | 6% | 1 |
| Evansville, IN-KY | 22% | 6% | 0 |
| Bangor, ME | 11% | 6% | 1 |
| Terre Haute, IN | 15% | 4% | 1 |
| Longview, TX | 16% | 6% | 0 |
| Rochester, NY | 24% | 9% | 1 |
| Erie, PA | 26% | 6% | 0 |
| Tucson, AZ | 12% | 7% | 1 |
| Albuquerque, NM | 5% | 13% | 1 |
| Youngstown-Warren-Boardman, OH-PA | 23% | 4% | 0 |
| Sioux City, IA-NE-SD | 21% | 3% | 0 |
| Concord, NH | 6% | 6% | 0 |
| Naples-Immokalee-Marco Island, FL | 2% | 7% | 0 |
| Greenville-Anderson-Mauldin, SC | 27% | 7% | 1 |
| Warner Robins, GA | 9% | 5% | 0 |
| Muskegon, MI | 23% | 5% | 0 |
| Athens-Clarke County, GA | 20% | 4% | 1 |
| Fort Smith, AR-OK | 27% | 6% | 0 |
| Gadsden, AL | 16% | 4% | 0 |
| Kahului-Wailuku-Lahaina, HI | 2% | 4% | 0 |
| Port St. Lucie, FL | 3% | 6% | 0 |
| Jacksonville, NC | 3% | 2% | 0 |
| Michigan City-La Porte, IN | 26% | 3% | 0 |
| Springfield, OH | 21% | 3% | 0 |
| Mansfield, OH | 24% | 5% | 0 |
| Richmond, VA | 17% | 8% | 1 |
| Rockford, IL | 26% | 4% | 0 |
| Memphis, TN-MS-AR | 10% | 5% | 0 |
| Charleston, WV | 10% | 10% | 0 |
| Burlington, NC | 21% | 4% | 0 |
| Kingsport-Bristol-Bristol, TN-VA | 37% | 5% | 0 |
| McAllen-Edinburg-Mission, TX | 6% | 3% | 0 |
| Springfield, IL | 3% | 7% | 0 |
| Bay City, MI | 15% | 6% | 0 |
| Dover, DE | 10% | 1% | 0 |
| Monroe, MI | 18% | 4% | 0 |

| MSA | Share of Real GDP from Manufacturing | Share of Real GDP from Non-Manufacturing High-Tech | Count _MSA Research Universities |
|---|---|---|---|
| Salisbury, MD-DE | 12% | 0% | 0 |
| Jamestown-Dunkirk-Fredonia, NY | 24% | 4% | 0 |
| Lake Charles, LA | 48% | 3% | 0 |
| Jackson, MS | 7% | 10% | 1 |
| Homosassa Springs, FL | 2% | 1% | 0 |
| Goldsboro, NC | 29% | 2% | 0 |
| Santa Fe, NM | 2% | 9% | 0 |
| Joplin, MO | 29% | 3% | 0 |
| Torrington, CT | 15% | 6% | 0 |
| Muncie, IN | 21% | 4% | 1 |
| Lumberton, NC | 42% | 2% | 0 |
| Reno, NV | 5% | 7% | 1 |
| Hickory-Lenoir-Morganton, NC | 34% | 3% | 0 |
| Bridgeport-Stamford-Norwalk, CT | 12% | 13% | 1 |
| Myrtle Beach-Conway-North Myrtle Beach, SC-NC | 3% | 6% | 0 |
| Tallahassee, FL | 1% | 13% | 1 |
| Las Vegas-Henderson-Paradise, NV | 2% | 7% | 1 |
| Macon, GA | 22% | 6% | 0 |
| Racine, WI | 39% | 4% | 0 |
| Hilton Head Island-Bluffton-Beaufort, SC | 1% | 7% | 0 |
| Winston-Salem, NC | 31% | 6% | 1 |
| Greensboro-High Point, NC | 29% | 7% | 1 |
| Lafayette, LA | 5% | 7% | 1 |
| Allentown-Bethlehem-Easton, PA-NJ | 42% | 4% | 0 |
| Atlantic City-Hammonton, NJ | 3% | 6% | 0 |
| Farmington, NM | 3% | 2% | 0 |
| Houma-Thibodaux, LA | 5% | 2% | 0 |

| MSA | Count_Non-Research Bach. Granting Univ. | Percent of Population Over 25 with Bachlor's Degree or Higher_2001 | Patents Per Capita_2001 |
|---|---|---|---|
| San Jose-Sunnyvale-Santa Clara, CA | 4 | 40% | 0.003773 |
| Midland, TX | 0 | 25% | 0.000138 |
| San Francisco-Oakland-Hayward, CA | 10 | 39% | 0.000910 |
| Seattle-Tacoma-Bellevue, WA | 7 | 33% | 0.000396 |
| Elkhart-Goshen, IN | 1 | 16% | 0.000253 |
| Greeley, CO | 0 | 22% | 0.000749 |
| Austin-Round Rock, TX | 5 | 39% | 0.001548 |
| Durham-Chapel Hill, NC | 1 | 44% | 0.001050 |
| Sioux Falls, SD | 2 | 26% | 0.000132 |
| Odessa, TX | 1 | 12% | 0.000041 |
| Salt Lake City, UT | 1 | 27% | 0.000409 |
| Boulder, CO | 0 | 52% | 0.001572 |
| Boston-Cambridge-Newton, MA-NH | 0 | 37% | 0.000045 |
| Lima, OH | 2 | 13% | 0.000102 |
| Trenton, NJ | 3 | 34% | 0.001032 |
| Oklahoma City, OK | 7 | 26% | 0.000201 |
| Rochester, MN | 0 | 35% | 0.002123 |
| Bloomington, IL | 1 | 36% | 0.000105 |
| Des Moines-West Des Moines, IA | 3 | 30% | 0.000495 |
| Kankakee, IL | 1 | 15% | 0.000096 |
| Cedar Rapids, IA | 3 | 28% | 0.000536 |
| Portland-Vancouver-Hillsboro, OR-WA | 0 | 30% | 0.000142 |
| Vallejo-Fairfield, CA | 0 | 21% | 0.000119 |
| Los Angeles-Long Beach-Anaheim, CA | 25 | 26% | 0.000318 |
| Nogales, AZ | 0 | 28% | 0.000005 |
| Manchester-Nashua, NH | 4 | 30% | 0.000661 |
| Pittsburgh, PA | 12 | 19% | 0.000741 |
| Provo-Orem, UT | 1 | 31% | 0.000332 |
| Santa Maria-Santa Barbara, CA | 1 | 29% | 0.000464 |
| Williamsport, PA | 2 | 15% | 0.000176 |
| Baton Rouge, LA | 1 | 31% | 0.000358 |
| Madison, WI | 1 | 41% | 0.000598 |
| Nashville-Davidson--Murfreesboro--Franklin, TN | 5 | 29% | 0.000161 |
| Madera, CA | 0 | 12% | 0.000040 |
| Fargo, ND-MN | 2 | 31% | 0.000048 |
| Omaha-Council Bluffs, NE-IA | 0 | 31% | 0.000007 |
| Bakersfield, CA | 1 | 14% | 0.000101 |
| Dallas-Fort Worth-Arlington, TX | 5 | 29% | 0.000427 |
| New York-Newark-Jersey City, NY-NJ-PA | 0 | 30% | 0.000000 |
| Charleston-North Charleston, SC | 3 | 26% | 0.000142 |
| Fort Collins, CO | 0 | 40% | 0.001337 |

| MSA | Count_Non-Research Bach. Granting Univ. | Percent of Population Over 25 with Bachlor's Degree or Higher_2001 | Patents Per Capita_2001 |
|---|---|---|---|
| San Diego-Carlsbad, CA | 4 | 30% | 0.000667 |
| Abilene, TX | 3 | 22% | 0.000040 |
| Baltimore-Columbia-Towson, MD | 10 | 29% | 0.000270 |
| Huntsville, AL | 2 | 28% | 0.000204 |
| La Crosse-Onalaska, WI-MN | 0 | 25% | 0.000028 |
| Washington-Arlington-Alexandria, DC-VA-MD-WV | 1 | 44% | 0.000002 |
| Burlington-South Burlington, VT | 3 | 41% | 0.002470 |
| Napa, CA | 1 | 26% | 0.000227 |
| Tulsa, OK | 1 | 27% | 0.000272 |
| San Luis Obispo-Paso Robles-Arroyo Grande, CA | 1 | 27% | 0.000235 |
| Raleigh, NC | 4 | 39% | 0.000881 |
| Wausau, WI | 0 | 18% | 0.000103 |
| El Centro, CA | 0 | 10% | 0.000028 |
| Crestview-Fort Walton Beach-Destin, FL | 0 | 24% | 0.000250 |
| Bellingham, WA | 1 | 27% | 0.000182 |
| Albany-Schenectady-Troy, NY | 9 | 30% | 0.000769 |
| Minneapolis-St. Paul-Bloomington, MN-WI | 1 | 35% | 0.000026 |
| Wooster, OH | 1 | 17% | 0.000196 |
| Cincinnati, OH-KY-IN | 0 | 27% | 0.000007 |
| Bend-Redmond, OR | 0 | 25% | 0.000257 |
| Portland-South Portland, ME | 4 | 30% | 0.000204 |
| Yakima, WA | 1 | 15% | 0.000090 |
| Buffalo-Cheektowaga-Niagara Falls, NY | 6 | 23% | 0.000304 |
| Syracuse, NY | 4 | 26% | 0.000253 |
| Palm Bay-Melbourne-Titusville, FL | 1 | 24% | 0.000569 |
| Dothan, AL | 0 | 31% | 0.000029 |
| Waterloo-Cedar Falls, IA | 2 | 23% | 0.000259 |
| Watertown-Fort Drum, NY | 0 | 16% | 0.000204 |
| Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | 0 | 28% | 0.000005 |
| Waco, TX | 0 | 19% | 0.000051 |
| San Angelo, TX | 1 | 20% | 0.000029 |
| Santa Rosa, CA | 1 | 29% | 0.000331 |
| Auburn-Opelika, AL | 0 | 28% | 0.000137 |
| Appleton, WI | 1 | 23% | 0.001066 |
| Shreveport-Bossier City, LA | 2 | 21% | 0.000107 |
| Hanford-Corcoran, CA | 0 | 10% | 0.000008 |
| Kansas City, MO-KS | 2 | 30% | 0.000092 |
| Ogden-Clearfield, UT | 1 | 25% | 0.000292 |
| Fayetteville-Springdale-Rogers, AR-MO | 0 | 22% | 0.000003 |
| Sherman-Denison, TX | 1 | 17% | 0.000213 |
| Asheville, NC | 3 | 25% | 0.000302 |

| MSA | Count_Non-Research Bach. Granting Univ. | Percent of Population Over 25 with Bachlor's Degree or Higher_2001 | Patents Per Capita_2001 |
|---|---|---|---|
| State College, PA | 0 | 36% | 0.000529 |
| Visalia-Porterville, CA | 0 | 11% | 0.000037 |
| Charlotte-Concord-Gastonia, NC-SC | 1 | 26% | 0.000019 |
| Chattanooga, TN-GA | 1 | 24% | 0.000026 |
| Salem, OR | 3 | 20% | 0.000152 |
| College Station-Bryan, TX | 0 | 37% | 0.000303 |
| Mobile, AL | 2 | 19% | 0.000077 |
| Hartford-West Hartford-East Hartford, CT | 5 | 31% | 0.000445 |
| Chicago-Naperville-Elgin, IL-IN-WI | 2 | 29% | 0.000006 |
| Knoxville, TN | 1 | 27% | 0.000380 |
| Salinas, CA | 2 | 23% | 0.000140 |
| Malvern, AR | 0 | 22% | 0.000004 |
| Gainesville, GA | 1 | 19% | 0.000163 |
| Harrisburg-Carlisle, PA | 4 | 26% | 0.000244 |
| Sierra Vista-Douglas, AZ | 0 | 19% | 0.000076 |
| Fayetteville, NC | 2 | 19% | 0.000033 |
| Lebanon, PA | 1 | 15% | 0.000124 |
| Atlanta-Sandy Springs-Roswell, GA | 8 | 35% | 0.000335 |
| Fresno, CA | 2 | 18% | 0.000049 |
| Altoona, PA | 0 | 14% | 0.000047 |
| Oxnard-Thousand Oaks-Ventura, CA | 2 | 27% | 0.000555 |
| Lewiston-Auburn, ME | 1 | 14% | 0.000077 |
| Lake Havasu City-Kingman, AZ | 0 | 22% | 0.000032 |
| Little Rock-North Little Rock-Conway, AR | 4 | 28% | 0.000201 |
| Billings, MT | 2 | 26% | 0.000084 |
| East Stroudsburg, PA | 1 | 21% | 0.000146 |
| Ocean City, NJ | 0 | 22% | 0.000078 |
| Miami-Fort Lauderdale-West Palm Beach, FL | 6 | 24% | 0.000184 |
| Anchorage, AK | 2 | 29% | 0.000125 |
| Santa Cruz-Watsonville, CA | 1 | 34% | 0.001484 |
| Florence, SC | 2 | 19% | 0.000237 |
| El Paso, TX | 0 | 17% | 0.000047 |
| Worcester, MA-CT | 1 | 26% | 0.000032 |
| Cleveland-Elyria, OH | 7 | 24% | 0.000381 |
| Lafayette-West Lafayette, IN | 0 | 33% | 0.000501 |
| Merced, CA | 0 | 11% | 0.000041 |
| Spokane-Spokane Valley, WA | 3 | 25% | 0.000135 |
| Urban Honolulu, HI | 4 | 28% | 0.000081 |
| Bremerton-Silverdale, WA | 0 | 25% | 0.000947 |
| Jackson, MI | 1 | 16% | 0.000163 |
| Janesville-Beloit, WI | 1 | 17% | 0.000215 |

| MSA | Count_Non-Research Bach. Granting Univ. | Percent of Population Over 25 with Bachlor's Degree or Higher_2001 | Patents Per Capita_2001 |
|---|---|---|---|
| Sumter, SC | 1 | 16% | 0.000029 |
| Hammond, LA | 1 | 16% | 0.000020 |
| Niles-Benton Harbor, MI | 0 | 20% | 0.000222 |
| Utica-Rome, NY | 3 | 18% | 0.000098 |
| Spartanburg, SC | 3 | 18% | 0.000288 |
| Kingston, NY | 1 | 25% | 0.000392 |
| Columbus, OH | 7 | 30% | 0.000247 |
| San Antonio-New Braunfels, TX | 6 | 23% | 0.000168 |
| Sacramento--Roseville--Arden-Arcade, CA | 1 | 27% | 0.000230 |
| Modesto, CA | 1 | 14% | 0.000116 |
| Davenport-Moline-Rock Island, IA-IL | 1 | 21% | 0.000133 |
| Denver-Aurora-Lakewood, CO | 3 | 34% | 0.000258 |
| South Bend-Mishawaka, IN-MI | 0 | 24% | 0.000026 |
| Louisville/Jefferson County, KY-IN | 1 | 25% | 0.000037 |
| Chico, CA | 1 | 22% | 0.000063 |
| Tampa-St. Petersburg-Clearwater, FL | 7 | 22% | 0.000151 |
| Amarillo, TX | 1 | 21% | 0.000077 |
| Phoenix-Mesa-Scottsdale, AZ | 2 | 25% | 0.000333 |
| Decatur, AL | 0 | 18% | 0.000107 |
| Yuma, AZ | 0 | 14% | 0.000012 |
| Savannah, GA | 2 | 25% | 0.000103 |
| Sheboygan, WI | 1 | 18% | 0.000380 |
| Panama City, FL | 0 | 18% | 0.000207 |
| St. Cloud, MN | 3 | 22% | 0.000074 |
| Riverside-San Bernardino-Ontario, CA | 4 | 16% | 0.000106 |
| Scranton--Wilkes-Barre--Hazleton, PA | 5 | 18% | 0.000127 |
| Johnson City, TN | 1 | 23% | 0.000260 |
| Columbus, GA-AL | 0 | 20% | 0.000005 |
| Dayton, OH | 4 | 24% | 0.000354 |
| St. Louis, MO-IL | 5 | 27% | 0.000052 |
| Coeur d'Alene, ID | 0 | 19% | 0.000134 |
| Ottawa-Peru, IL | 0 | 13% | 0.000178 |
| Ogdensburg-Massena, NY | 2 | 16% | 0.000081 |
| Topeka, KS | 1 | 26% | 0.000059 |
| Tyler, TX | 2 | 23% | 0.000118 |
| Tuscaloosa, AL | 1 | 24% | 0.000060 |
| Akron, OH | 0 | 24% | 0.000514 |
| Providence-Warwick, RI-MA | 3 | 22% | 0.000085 |
| Decatur, IL | 1 | 17% | 0.000150 |
| North Port-Sarasota-Bradenton, FL | 0 | 25% | 0.000188 |
| Daphne-Fairhope-Foley, AL | 0 | 23% | 0.000062 |

| MSA | Count_Non-Research Bach. Granting Univ. | Percent of Population Over 25 with Bachlor's Degree or Higher_2001 | Patents Per Capita_2001 |
|---|---|---|---|
| Grand Rapids-Wyoming, MI | 5 | 26% | 0.000434 |
| Lexington-Fayette, KY | 4 | 36% | 0.000774 |
| Jacksonville, FL | 6 | 23% | 0.000099 |
| Toledo, OH | 1 | 22% | 0.000319 |
| Monroe, LA | 1 | 23% | 0.000102 |
| Laredo, TX | 1 | 14% | 0.000005 |
| Lincoln, NE | 3 | 33% | 0.000253 |
| Redding, CA | 1 | 17% | 0.000096 |
| Medford, OR | 1 | 22% | 0.000076 |
| Oshkosh-Neenah, WI | 1 | 23% | 0.000741 |
| Bloomington, IN | 0 | 40% | 0.000225 |
| Augusta-Waterville, ME | 2 | 21% | 0.000042 |
| Houston-The Woodlands-Sugar Land, TX | 6 | 27% | 0.000381 |
| Chambersburg-Waynesboro, PA | 1 | 15% | 0.000092 |
| Lawton, OK | 1 | 19% | 0.000018 |
| Indianapolis-Carmel-Anderson, IN | 7 | 27% | 0.000377 |
| Birmingham-Hoover, AL | 5 | 29% | 0.000091 |
| Pittsfield, MA | 3 | 26% | 0.000224 |
| Columbia, MO | 2 | 42% | 0.000226 |
| Barnstable Town, MA | 0 | 34% | 0.000204 |
| Sebastian-Vero Beach, FL | 0 | 23% | 0.000104 |
| New Haven-Milford, CT | 5 | 28% | 0.000452 |
| Greenville, NC | 0 | 26% | 0.000111 |
| Lubbock, TX | 1 | 24% | 0.000130 |
| Anniston-Oxford-Jacksonville, AL | 1 | 15% | 0.000027 |
| Deltona-Daytona Beach-Ormond Beach, FL | 3 | 18% | 0.000126 |
| Milwaukee-Waukesha-West Allis, WI | 6 | 26% | 0.000453 |
| Reading, PA | 3 | 18% | 0.000307 |
| Virginia Beach-Norfolk-Newport News, VA-NC | 0 | 23% | 0.000001 |
| Wichita, KS | 3 | 25% | 0.000162 |
| Pottsville, PA | 0 | 11% | 0.000067 |
| Johnstown, PA | 3 | 14% | 0.000059 |
| Olympia-Tumwater, WA | 2 | 30% | 0.000141 |
| Pensacola-Ferry Pass-Brent, FL | 1 | 22% | 0.000074 |
| Ann Arbor, MI | 2 | 48% | 0.001203 |
| Norwich-New London, CT | 1 | 26% | 0.000671 |
| Binghamton, NY | 0 | 23% | 0.001185 |
| Springfield, MO | 4 | 24% | 0.000174 |
| New Orleans-Metairie, LA | 5 | 24% | 0.000147 |
| Alexandria, LA | 1 | 17% | 0.000055 |
| Eugene, OR | 1 | 26% | 0.000231 |

| MSA | Count_Non-Research Bach. Granting Univ. | Percent of Population Over 25 with Bachlor's Degree or Higher_2001 | Patents Per Capita_2001 |
|---|---|---|---|
| Flagstaff, AZ | 0 | 30% | 0.000213 |
| Salem, OH | 0 | 11% | 0.000098 |
| Springfield, MA | 10 | 25% | 0.000210 |
| Beaumont-Port Arthur, TX | 1 | 16% | 0.000116 |
| Stockton-Lodi, CA | 1 | 15% | 0.000086 |
| Mount Vernon-Anacortes, WA | 0 | 21% | 0.000143 |
| Wilmington, NC | 1 | 31% | 0.000313 |
| Flint, MI | 2 | 16% | 0.000191 |
| Iowa City, IA | 0 | 48% | 0.000620 |
| Lancaster, PA | 3 | 21% | 0.000240 |
| Punta Gorda, FL | 0 | 18% | 0.000137 |
| Brownsville-Harlingen, TX | 1 | 13% | 0.000017 |
| Las Cruces, NM | 0 | 22% | 0.000091 |
| Roseburg, OR | 0 | 13% | 0.000110 |
| Montgomery, AL | 4 | 26% | 0.000045 |
| Killeen-Temple, TX | 1 | 20% | 0.000083 |
| Eureka-Arcata-Fortuna, CA | 1 | 23% | 0.000047 |
| Duluth, MN-WI | 1 | 22% | 0.000005 |
| York-Hanover, PA | 1 | 18% | 0.000210 |
| Columbia, SC | 3 | 29% | 0.000142 |
| Peoria, IL | 2 | 21% | 0.000605 |
| Albany, OR | 0 | 13% | 0.000202 |
| Detroit-Warren-Dearborn, MI | 8 | 23% | 0.000511 |
| Ocala, FL | 0 | 14% | 0.000072 |
| Canton-Massillon, OH | 3 | 18% | 0.000290 |
| Battle Creek, MI | 1 | 16% | 0.000188 |
| Pueblo, CO | 1 | 18% | 0.000042 |
| Colorado Springs, CO | 3 | 32% | 0.000521 |
| Holland, MI | 0 | 16% | 0.000213 |
| Hagerstown-Martinsburg, MD-WV | 0 | 15% | 0.000038 |
| Champaign-Urbana, IL | 0 | 38% | 0.000315 |
| Prescott, AZ | 1 | 21% | 0.000138 |
| Saginaw, MI | 1 | 16% | 0.000124 |
| Grand Junction, CO | 1 | 22% | 0.000143 |
| Wichita Falls, TX | 1 | 20% | 0.000085 |
| Gulfport-Biloxi-Pascagoula, MS | 0 | 18% | 0.000105 |
| Vineland-Bridgeton, NJ | 0 | 12% | 0.000061 |
| Boise City, ID | 3 | 15% | 0.011324 |
| Ashtabula, OH | 0 | 11% | 0.000087 |
| Corpus Christi, TX | 1 | 19% | 0.000099 |
| Clarksville, TN-KY | 0 | 19% | 0.000052 |

| MSA | Count_Non-Research Bach. Granting Univ. | Percent of Population Over 25 with Bachlor's Degree or Higher_2001 | Patents Per Capita_2001 |
|---|---|---|---|
| Orlando-Kissimmee-Sanford, FL | 4 | 25% | 0.000149 |
| Lakeland-Winter Haven, FL | 3 | 15% | 0.000079 |
| Cape Coral-Fort Myers, FL | 1 | 21% | 0.000107 |
| Augusta-Richmond County, GA-SC | 1 | 19% | 0.000070 |
| Lansing-East Lansing, MI | 1 | 30% | 0.000208 |
| Kalamazoo-Portage, MI | 1 | 31% | 0.000473 |
| Evansville, IN-KY | 0 | 19% | 0.000017 |
| Bangor, ME | 1 | 20% | 0.000055 |
| Terre Haute, IN | 1 | 21% | 0.000105 |
| Longview, TX | 1 | 20% | 0.000206 |
| Rochester, NY | 8 | 30% | 0.001664 |
| Erie, PA | 4 | 21% | 0.000344 |
| Tucson, AZ | 0 | 27% | 0.000377 |
| Albuquerque, NM | 0 | 31% | 0.000446 |
| Youngstown-Warren-Boardman, OH-PA | 2 | 16% | 0.000023 |
| Sioux City, IA-NE-SD | 0 | 19% | 0.000106 |
| Concord, NH | 3 | 29% | 0.000396 |
| Naples-Immokalee-Marco Island, FL | 1 | 28% | 0.000121 |
| Greenville-Anderson-Mauldin, SC | 5 | 22% | 0.000313 |
| Warner Robins, GA | 1 | 20% | 0.000088 |
| Muskegon, MI | 1 | 14% | 0.000216 |
| Athens-Clarke County, GA | 0 | 40% | 0.000450 |
| Fort Smith, AR-OK | 0 | 17% | - |
| Gadsden, AL | 0 | 13% | 0.000058 |
| Kahului-Wailuku-Lahaina, HI | 0 | 22% | 0.000038 |
| Port St. Lucie, FL | 0 | 20% | 0.000183 |
| Jacksonville, NC | 0 | 15% | 0.000007 |
| Michigan City-La Porte, IN | 1 | 14% | 0.000073 |
| Springfield, OH | 1 | 15% | 0.000062 |
| Mansfield, OH | 1 | 13% | 0.000047 |
| Richmond, VA | 4 | 33% | 0.000220 |
| Rockford, IL | 1 | 19% | 0.000371 |
| Memphis, TN-MS-AR | 0 | 24% | 0.000001 |
| Charleston, WV | 2 | 21% | 0.000182 |
| Burlington, NC | 1 | 19% | 0.000195 |
| Kingsport-Bristol-Bristol, TN-VA | 2 | 18% | 0.000197 |
| McAllen-Edinburg-Mission, TX | 1 | 13% | 0.000010 |
| Springfield, IL | 1 | 29% | 0.000116 |
| Bay City, MI | 0 | 14% | 0.000210 |
| Dover, DE | 2 | 19% | 0.000062 |
| Monroe, MI | 0 | 14% | 0.000284 |

| MSA | Count_Non-Research Bach. Granting Univ. | Percent of Population Over 25 with Bachlor's Degree or Higher_2001 | Patents Per Capita_2001 |
|---|---|---|---|
| Salisbury, MD-DE | 0 | 17% | 0.000081 |
| Jamestown-Dunkirk-Fredonia, NY | 1 | 17% | 0.000115 |
| Lake Charles, LA | 1 | 17% | 0.000104 |
| Jackson, MS | 4 | 26% | 0.000098 |
| Homosassa Springs, FL | 0 | 13% | 0.000033 |
| Goldsboro, NC | 1 | 15% | 0.000009 |
| Santa Fe, NM | 2 | 37% | 0.000282 |
| Joplin, MO | 1 | 16% | 0.000246 |
| Torrington, CT | 0 | 27% | 0.000716 |
| Muncie, IN | 0 | 20% | 0.000059 |
| Lumberton, NC | 1 | 11% | 0.000008 |
| Reno, NV | 2 | 24% | 0.000327 |
| Hickory-Lenoir-Morganton, NC | 1 | 17% | 0.000537 |
| Bridgeport-Stamford-Norwalk, CT | 3 | 40% | 0.000706 |
| Myrtle Beach-Conway-North Myrtle Beach, SC-NC | 0 | 19% | 0.000025 |
| Tallahassee, FL | 1 | 42% | 0.000109 |
| Las Vegas-Henderson-Paradise, NV | 0 | 17% | 0.000107 |
| Macon, GA | 2 | 21% | 0.000084 |
| Racine, WI | 0 | 20% | 0.000411 |
| Hilton Head Island-Bluffton-Beaufort, SC | 0 | 33% | 0.000104 |
| Winston-Salem, NC | 2 | 23% | 0.000204 |
| Greensboro-High Point, NC | 5 | 26% | 0.000216 |
| Lafayette, LA | 0 | 25% | 0.000393 |
| Allentown-Bethlehem-Easton, PA-NJ | 1 | 23% | 0.000057 |
| Atlantic City-Hammonton, NJ | 1 | 19% | 0.000035 |
| Farmington, NM | 0 | 14% | 0.000060 |
| Houma-Thibodaux, LA | 1 | 12% | 0.000219 |

| MSA | Share of Population Born in a Foreign Country_2001 | Share of Workforce in Creative Class Occupation_2001 | Share of Workforce in Bohemian Occupation_2001 |
|---|---|---|---|
| San Jose-Sunnyvale-Santa Clara, CA | 34% | 40% | 1.4% |
| Midland, TX | 8% | 27% | 1.0% |
| San Francisco-Oakland-Hayward, CA | 27% | 35% | 2.2% |
| Seattle-Tacoma-Bellevue, WA | 12% | 33% | 1.6% |
| Elkhart-Goshen, IN | 7% | 17% | 0.6% |
| Greeley, CO | 9% | 28% | 1.4% |
| Austin-Round Rock, TX | 13% | 41% | 1.9% |
| Durham-Chapel Hill, NC | 10% | 42% | 1.3% |
| Sioux Falls, SD | 4% | 21% | 0.9% |
| Odessa, TX | 11% | 25% | 0.6% |
| Salt Lake City, UT | 10% | 28% | 1.2% |
| Boulder, CO | 9% | 47% | 2.2% |
| Boston-Cambridge-Newton, MA-NH | 14% | 33% | 1.5% |
| Lima, OH | 1% | 17% | 0.5% |
| Trenton, NJ | 14% | 36% | 1.6% |
| Oklahoma City, OK | 7% | 28% | 1.1% |
| Rochester, MN | 8% | 26% | 1.1% |
| Bloomington, IL | 3% | 28% | 1.0% |
| Des Moines-West Des Moines, IA | 6% | 26% | 1.1% |
| Kankakee, IL | 3% | 11% | 0.4% |
| Cedar Rapids, IA | 3% | 27% | 1.2% |
| Portland-Vancouver-Hillsboro, OR-WA | 12% | 31% | 1.7% |
| Vallejo-Fairfield, CA | 16% | 24% | 1.0% |
| Los Angeles-Long Beach-Anaheim, CA | 34% | 29% | 2.5% |
| Nogales, AZ | 4% | 26% | 1.1% |
| Manchester-Nashua, NH | 7% | 30% | 1.2% |
| Pittsburgh, PA | 1% | 21% | 1.0% |
| Provo-Orem, UT | 6% | 30% | 1.6% |
| Santa Maria-Santa Barbara, CA | 21% | 35% | 2.4% |
| Williamsport, PA | 1% | 19% | 0.9% |
| Baton Rouge, LA | 4% | 27% | 0.9% |
| Madison, WI | 6% | 37% | 1.8% |
| Nashville-Davidson--Murfreesboro--Franklin, TN | 5% | 27% | 1.9% |
| Madera, CA | 20% | 23% | 0.7% |
| Fargo, ND-MN | 3% | 27% | 1.1% |
| Omaha-Council Bluffs, NE-IA | 5% | 27% | 1.0% |
| Bakersfield, CA | 17% | 27% | 0.9% |
| Dallas-Fort Worth-Arlington, TX | 15% | 29% | 1.2% |
| New York-Newark-Jersey City, NY-NJ-PA | 26% | 31% | 2.1% |
| Charleston-North Charleston, SC | 3% | 26% | 1.2% |
| Fort Collins, CO | 4% | 41% | 2.2% |

| MSA | Share of Population Born in a Foreign Country_2001 | Share of Workforce in Creative Class Occupation_2001 | Share of Workforce in Bohemian Occupation_2001 |
|---|---|---|---|
| San Diego-Carlsbad, CA | 21% | 33% | 1.8% |
| Abilene, TX | 4% | 24% | 1.0% |
| Baltimore-Columbia-Towson, MD | 6% | 30% | 1.3% |
| Huntsville, AL | 4% | 30% | 1.2% |
| La Crosse-Onalaska, WI-MN | 3% | 24% | 1.2% |
| Washington-Arlington-Alexandria, DC-VA-MD-WV | 18% | 45% | 1.8% |
| Burlington-South Burlington, VT | 6% | 35% | 1.6% |
| Napa, CA | 18% | 27% | 1.6% |
| Tulsa, OK | 5% | 26% | 1.2% |
| San Luis Obispo-Paso Robles-Arroyo Grande, CA | 9% | 34% | 2.3% |
| Raleigh, NC | 9% | 34% | 1.4% |
| Wausau, WI | 3% | 21% | 1.0% |
| El Centro, CA | 32% | 24% | 0.7% |
| Crestview-Fort Walton Beach-Destin, FL | 5% | 32% | 1.5% |
| Bellingham, WA | 10% | 29% | 1.5% |
| Albany-Schenectady-Troy, NY | 5% | 33% | 1.2% |
| Minneapolis-St. Paul-Bloomington, MN-WI | 8% | 30% | 1.5% |
| Wooster, OH | 2% | 20% | 0.9% |
| Cincinnati, OH-KY-IN | 3% | 26% | 1.1% |
| Bend-Redmond, OR | 3% | 30% | 2.0% |
| Portland-South Portland, ME | 3% | 28% | 1.5% |
| Yakima, WA | 17% | 23% | 0.9% |
| Buffalo-Cheektowaga-Niagara Falls, NY | 4% | 24% | 0.9% |
| Syracuse, NY | 5% | 26% | 1.2% |
| Palm Bay-Melbourne-Titusville, FL | 6% | 34% | 1.3% |
| Dothan, AL | 4% | 32% | 1.3% |
| Waterloo-Cedar Falls, IA | 4% | 25% | 1.3% |
| Watertown-Fort Drum, NY | 4% | 27% | 1.1% |
| Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | 7% | 27% | 1.2% |
| Waco, TX | 6% | 21% | 0.9% |
| San Angelo, TX | 6% | 24% | 0.8% |
| Santa Rosa, CA | 14% | 31% | 2.0% |
| Auburn-Opelika, AL | 3% | 32% | 1.1% |
| Appleton, WI | 3% | 20% | 1.0% |
| Shreveport-Bossier City, LA | 2% | 21% | 0.8% |
| Hanford-Corcoran, CA | 16% | 26% | 0.9% |
| Kansas City, MO-KS | 5% | 28% | 1.2% |
| Ogden-Clearfield, UT | 5% | 28% | 1.1% |
| Fayetteville-Springdale-Rogers, AR-MO | 7% | 25% | 1.0% |
| Sherman-Denison, TX | 4% | 24% | 0.8% |
| Asheville, NC | 4% | 24% | 1.6% |

| MSA | Share of Population Born in a Foreign Country_2001 | Share of Workforce in Creative Class Occupation_2001 | Share of Workforce in Bohemian Occupation_2001 |
|---|---|---|---|
| State College, PA | 6% | 46% | 2.0% |
| Visalia-Porterville, CA | 22% | 23% | 1.0% |
| Charlotte-Concord-Gastonia, NC-SC | 6% | 25% | 1.0% |
| Chattanooga, TN-GA | 3% | 23% | 1.1% |
| Salem, OR | 12% | 29% | 1.1% |
| College Station-Bryan, TX | 10% | 45% | 1.1% |
| Mobile, AL | 2% | 22% | 1.0% |
| Hartford-West Hartford-East Hartford, CT | 10% | 30% | 1.3% |
| Chicago-Naperville-Elgin, IL-IN-WI | 16% | 27% | 1.3% |
| Knoxville, TN | 2% | 27% | 1.2% |
| Salinas, CA | 29% | 31% | 2.3% |
| Malvern, AR | 4% | 22% | 1.1% |
| Gainesville, GA | 15% | 20% | 0.8% |
| Harrisburg-Carlisle, PA | 4% | 26% | 0.9% |
| Sierra Vista-Douglas, AZ | 12% | 36% | 1.6% |
| Fayetteville, NC | 5% | 24% | 0.7% |
| Lebanon, PA | 2% | 18% | 1.1% |
| Atlanta-Sandy Springs-Roswell, GA | 12% | 30% | 1.3% |
| Fresno, CA | 21% | 25% | 1.1% |
| Altoona, PA | 1% | 19% | 0.9% |
| Oxnard-Thousand Oaks-Ventura, CA | 20% | 32% | 1.7% |
| Lewiston-Auburn, ME | 3% | 20% | 0.8% |
| Lake Havasu City-Kingman, AZ | 7% | 27% | 1.3% |
| Little Rock-North Little Rock-Conway, AR | 3% | 25% | 1.0% |
| Billings, MT | 1% | 26% | 0.9% |
| East Stroudsburg, PA | 6% | 26% | 1.3% |
| Ocean City, NJ | 3% | 28% | 1.4% |
| Miami-Fort Lauderdale-West Palm Beach, FL | 34% | 29% | 1.5% |
| Anchorage, AK | 8% | 29% | 1.3% |
| Santa Cruz-Watsonville, CA | 18% | 37% | 2.7% |
| Florence, SC | 2% | 19% | 0.7% |
| El Paso, TX | 27% | 22% | 0.8% |
| Worcester, MA-CT | 7% | 25% | 1.1% |
| Cleveland-Elyria, OH | 5% | 24% | 1.0% |
| Lafayette-West Lafayette, IN | 8% | 32% | 0.9% |
| Merced, CA | 24% | 22% | 0.8% |
| Spokane-Spokane Valley, WA | 4% | 28% | 1.3% |
| Urban Honolulu, HI | 19% | 29% | 1.7% |
| Bremerton-Silverdale, WA | 6% | 38% | 2.4% |
| Jackson, MI | 2% | 23% | 1.1% |
| Janesville-Beloit, WI | 3% | 19% | 0.8% |

| MSA | Share of Population Born in a Foreign Country_2001 | Share of Workforce in Creative Class Occupation_2001 | Share of Workforce in Bohemian Occupation_2001 |
|---|---|---|---|
| Sumter, SC | 2% | 16% | 0.6% |
| Hammond, LA | 1% | 24% | 0.9% |
| Niles-Benton Harbor, MI | 5% | 25% | 1.2% |
| Utica-Rome, NY | 5% | 22% | 1.1% |
| Spartanburg, SC | 4% | 19% | 0.7% |
| Kingston, NY | 6% | 29% | 2.8% |
| Columbus, OH | 5% | 28% | 1.1% |
| San Antonio-New Braunfels, TX | 11% | 26% | 1.1% |
| Sacramento--Roseville--Arden-Arcade, CA | 14% | 35% | 1.4% |
| Modesto, CA | 18% | 21% | 0.9% |
| Davenport-Moline-Rock Island, IA-IL | 4% | 23% | 1.0% |
| Denver-Aurora-Lakewood, CO | 11% | 33% | 1.3% |
| South Bend-Mishawaka, IN-MI | 5% | 24% | 0.9% |
| Louisville/Jefferson County, KY-IN | 3% | 23% | 1.0% |
| Chico, CA | 8% | 29% | 1.8% |
| Tampa-St. Petersburg-Clearwater, FL | 10% | 26% | 1.1% |
| Amarillo, TX | 6% | 24% | 1.1% |
| Phoenix-Mesa-Scottsdale, AZ | 14% | 29% | 1.3% |
| Decatur, AL | 3% | 19% | 0.8% |
| Yuma, AZ | 12% | 23% | 1.0% |
| Savannah, GA | 4% | 26% | 1.2% |
| Sheboygan, WI | 4% | 18% | 0.9% |
| Panama City, FL | 4% | 25% | 1.0% |
| St. Cloud, MN | 2% | 21% | 1.1% |
| Riverside-San Bernardino-Ontario, CA | 18% | 24% | 1.1% |
| Scranton--Wilkes-Barre--Hazleton, PA | 2% | 21% | 1.0% |
| Johnson City, TN | 2% | 24% | 1.1% |
| Columbus, GA-AL | 5% | 21% | 0.9% |
| Dayton, OH | 3% | 27% | 1.0% |
| St. Louis, MO-IL | 3% | 26% | 1.1% |
| Coeur d'Alene, ID | 2% | 25% | 1.1% |
| Ottawa-Peru, IL | 3% | 20% | 0.6% |
| Ogdensburg-Massena, NY | 3% | 26% | 1.0% |
| Topeka, KS | 3% | 26% | 1.0% |
| Tyler, TX | 7% | 24% | 1.1% |
| Tuscaloosa, AL | 2% | 22% | 0.8% |
| Akron, OH | 3% | 26% | 1.2% |
| Providence-Warwick, RI-MA | 12% | 24% | 1.2% |
| Decatur, IL | 1% | 19% | 0.8% |
| North Port-Sarasota-Bradenton, FL | 9% | 23% | 1.6% |
| Daphne-Fairhope-Foley, AL | 2% | 23% | 1.1% |

| MSA | Share of Population Born in a Foreign Country_2001 | Share of Workforce in Creative Class Occupation_2001 | Share of Workforce in Bohemian Occupation_2001 |
|---|---|---|---|
| Grand Rapids-Wyoming, MI | 6% | 22% | 1.2% |
| Lexington-Fayette, KY | 6% | 29% | 1.2% |
| Jacksonville, FL | 5% | 26% | 1.1% |
| Toledo, OH | 3% | 22% | 1.0% |
| Monroe, LA | 1% | 21% | 0.8% |
| Laredo, TX | 28% | 20% | 0.5% |
| Lincoln, NE | 5% | 29% | 1.2% |
| Redding, CA | 4% | 28% | 1.0% |
| Medford, OR | 5% | 28% | 2.1% |
| Oshkosh-Neenah, WI | 3% | 23% | 1.3% |
| Bloomington, IN | 5% | 41% | 2.2% |
| Augusta-Waterville, ME | 2% | 30% | 1.1% |
| Houston-The Woodlands-Sugar Land, TX | 19% | 29% | 1.1% |
| Chambersburg-Waynesboro, PA | 2% | 21% | 0.9% |
| Lawton, OK | 6% | 27% | 0.8% |
| Indianapolis-Carmel-Anderson, IN | 4% | 26% | 1.0% |
| Birmingham-Hoover, AL | 3% | 27% | 1.1% |
| Pittsfield, MA | 4% | 26% | 1.7% |
| Columbia, MO | 4% | 32% | 1.5% |
| Barnstable Town, MA | 5% | 30% | 2.0% |
| Sebastian-Vero Beach, FL | 8% | 26% | 1.9% |
| New Haven-Milford, CT | 9% | 27% | 1.1% |
| Greenville, NC | 4% | 26% | 1.1% |
| Lubbock, TX | 3% | 29% | 1.2% |
| Anniston-Oxford-Jacksonville, AL | 2% | 21% | 0.6% |
| Deltona-Daytona Beach-Ormond Beach, FL | 6% | 27% | 1.2% |
| Milwaukee-Waukesha-West Allis, WI | 6% | 24% | 1.1% |
| Reading, PA | 4% | 22% | 1.1% |
| Virginia Beach-Norfolk-Newport News, VA-NC | 5% | 27% | 1.3% |
| Wichita, KS | 7% | 24% | 1.0% |
| Pottsville, PA | 1% | 17% | 0.7% |
| Johnstown, PA | 1% | 20% | 0.7% |
| Olympia-Tumwater, WA | 6% | 45% | 1.6% |
| Pensacola-Ferry Pass-Brent, FL | 3% | 28% | 1.3% |
| Ann Arbor, MI | 10% | 39% | 1.6% |
| Norwich-New London, CT | 5% | 28% | 2.0% |
| Binghamton, NY | 5% | 29% | 1.0% |
| Springfield, MO | 2% | 24% | 1.2% |
| New Orleans-Metairie, LA | 5% | 26% | 1.2% |
| Alexandria, LA | 2% | 20% | 0.8% |
| Eugene, OR | 5% | 30% | 1.8% |

| MSA | Share of Population Born in a Foreign Country_2001 | Share of Workforce in Creative Class Occupation_2001 | Share of Workforce in Bohemian Occupation_2001 |
|---|---|---|---|
| Flagstaff, AZ | 4% | 36% | 1.7% |
| Salem, OH | 1% | 19% | 1.0% |
| Springfield, MA | 7% | 26% | 1.3% |
| Beaumont-Port Arthur, TX | 6% | 22% | 0.8% |
| Stockton-Lodi, CA | 19% | 20% | 0.7% |
| Mount Vernon-Anacortes, WA | 9% | 25% | 1.7% |
| Wilmington, NC | 3% | 28% | 1.7% |
| Flint, MI | 2% | 22% | 1.2% |
| Iowa City, IA | 6% | 37% | 1.5% |
| Lancaster, PA | 3% | 19% | 1.1% |
| Punta Gorda, FL | 8% | 26% | 1.4% |
| Brownsville-Harlingen, TX | 25% | 18% | 0.7% |
| Las Cruces, NM | 18% | 37% | 1.2% |
| Roseburg, OR | 2% | 21% | 1.1% |
| Montgomery, AL | 5% | 26% | 1.2% |
| Killeen-Temple, TX | 7% | 22% | 0.8% |
| Eureka-Arcata-Fortuna, CA | 5% | 30% | 1.9% |
| Duluth, MN-WI | 2% | 26% | 1.2% |
| York-Hanover, PA | 2% | 21% | 1.0% |
| Columbia, SC | 3% | 29% | 1.0% |
| Peoria, IL | 2% | 24% | 1.1% |
| Albany, OR | 3% | 23% | 0.9% |
| Detroit-Warren-Dearborn, MI | 8% | 26% | 1.4% |
| Ocala, FL | 5% | 24% | 0.9% |
| Canton-Massillon, OH | 2% | 19% | 0.7% |
| Battle Creek, MI | 2% | 21% | 0.7% |
| Pueblo, CO | 3% | 22% | 0.8% |
| Colorado Springs, CO | 6% | 34% | 1.4% |
| Holland, MI | 3% | 22% | 1.3% |
| Hagerstown-Martinsburg, MD-WV | 2% | 19% | 1.0% |
| Champaign-Urbana, IL | 8% | 43% | 1.8% |
| Prescott, AZ | 6% | 30% | 2.3% |
| Saginaw, MI | 2% | 20% | 1.0% |
| Grand Junction, CO | 3% | 24% | 0.9% |
| Wichita Falls, TX | 5% | 22% | 0.9% |
| Gulfport-Biloxi-Pascagoula, MS | 3% | 22% | 0.9% |
| Vineland-Bridgeton, NJ | 6% | 17% | 0.7% |
| Boise City, ID | 8% | 22% | 0.7% |
| Ashtabula, OH | 2% | 17% | 0.8% |
| Corpus Christi, TX | 7% | 24% | 0.8% |
| Clarksville, TN-KY | 4% | 23% | 1.1% |

| MSA | Share of Population Born in a Foreign Country_2001 | Share of Workforce in Creative Class Occupation_2001 | Share of Workforce in Bohemian Occupation_2001 |
|---|---|---|---|
| Orlando-Kissimmee-Sanford, FL | 12% | 27% | 1.5% |
| Lakeland-Winter Haven, FL | 7% | 22% | 0.7% |
| Cape Coral-Fort Myers, FL | 9% | 28% | 1.6% |
| Augusta-Richmond County, GA-SC | 3% | 24% | 1.0% |
| Lansing-East Lansing, MI | 5% | 34% | 1.3% |
| Kalamazoo-Portage, MI | 4% | 27% | 1.3% |
| Evansville, IN-KY | 2% | 20% | 0.9% |
| Bangor, ME | 2% | 25% | 1.0% |
| Terre Haute, IN | 2% | 22% | 0.9% |
| Longview, TX | 5% | 22% | 0.8% |
| Rochester, NY | 7% | 30% | 1.3% |
| Erie, PA | 3% | 21% | 1.0% |
| Tucson, AZ | 12% | 33% | 1.7% |
| Albuquerque, NM | 9% | 32% | 1.7% |
| Youngstown-Warren-Boardman, OH-PA | 2% | 19% | 0.8% |
| Sioux City, IA-NE-SD | 7% | 21% | 1.0% |
| Concord, NH | 3% | 32% | 1.2% |
| Naples-Immokalee-Marco Island, FL | 17% | 28% | 1.8% |
| Greenville-Anderson-Mauldin, SC | 4% | 22% | 0.9% |
| Warner Robins, GA | 3% | 34% | 1.2% |
| Muskegon, MI | 2% | 21% | 0.9% |
| Athens-Clarke County, GA | 8% | 41% | 1.5% |
| Fort Smith, AR-OK | 7% | 17% | 0.7% |
| Gadsden, AL | 2% | 17% | 0.5% |
| Kahului-Wailuku-Lahaina, HI | 16% | 23% | 2.2% |
| Port St. Lucie, FL | 9% | 26% | 1.2% |
| Jacksonville, NC | 4% | 27% | 1.2% |
| Michigan City-La Porte, IN | 2% | 20% | 0.7% |
| Springfield, OH | 1% | 19% | 0.6% |
| Mansfield, OH | 2% | 20% | 1.0% |
| Richmond, VA | 5% | 29% | 1.1% |
| Rockford, IL | 6% | 22% | 1.0% |
| Memphis, TN-MS-AR | 4% | 24% | 1.0% |
| Charleston, WV | 1% | 26% | 0.7% |
| Burlington, NC | 6% | 19% | 0.8% |
| Kingsport-Bristol-Bristol, TN-VA | 1% | 21% | 0.8% |
| McAllen-Edinburg-Mission, TX | 28% | 23% | 0.9% |
| Springfield, IL | 2% | 34% | 1.1% |
| Bay City, MI | 1% | 23% | 1.2% |
| Dover, DE | 4% | 25% | 0.6% |
| Monroe, MI | 2% | 21% | 1.0% |

| MSA | Share of Population Born in a Foreign Country_2001 | Share of Workforce in Creative Class Occupation_ 2001 | Share of Workforce in Bohemian Occupation_2001 |
|---|---|---|---|
| Salisbury, MD-DE | 4% | 22% | 1.2% |
| Jamestown-Dunkirk-Fredonia, NY | 2% | 21% | 0.8% |
| Lake Charles, LA | 1% | 21% | 0.8% |
| Jackson, MS | 1% | 24% | 0.9% |
| Homosassa Springs, FL | 5% | 20% | 1.1% |
| Goldsboro, NC | 4% | 19% | 0.6% |
| Santa Fe, NM | 10% | 42% | 4.2% |
| Joplin, MO | 3% | 18% | 0.7% |
| Torrington, CT | 5% | 24% | 1.7% |
| Muncie, IN | 1% | 22% | 0.9% |
| Lumberton, NC | 4% | 16% | 0.4% |
| Reno, NV | 14% | 24% | 1.3% |
| Hickory-Lenoir-Morganton, NC | 6% | 16% | 0.6% |
| Bridgeport-Stamford-Norwalk, CT | 17% | 31% | 1.9% |
| Myrtle Beach-Conway-North Myrtle Beach, SC-NC | 4% | 25% | 1.3% |
| Tallahassee, FL | 5% | 47% | 1.7% |
| Las Vegas-Henderson-Paradise, NV | 17% | 20% | 1.3% |
| Macon, GA | 2% | 21% | 0.7% |
| Racine, WI | 4% | 22% | 1.1% |
| Hilton Head Island-Bluffton-Beaufort, SC | 6% | 27% | 1.4% |
| Winston-Salem, NC | 5% | 23% | 1.0% |
| Greensboro-High Point, NC | 6% | 23% | 1.1% |
| Lafayette, LA | 2% | 24% | 1.1% |
| Allentown-Bethlehem-Easton, PA-NJ | 5% | 25% | 1.1% |
| Atlantic City-Hammonton, NJ | 12% | 19% | 0.7% |
| Farmington, NM | 2% | 21% | 0.8% |
| Houma-Thibodaux, LA | 1% | 18% | 0.6% |

| MSA | Share of Households Comprised of Coupled Same-Sex Partners_2001 | Median Age_2001 | Percentage of Female Residents _2001 |
|---|---|---|---|
| San Jose-Sunnyvale-Santa Clara, CA | 0.7% | 34 | 49% |
| Midland, TX | 0.4% | 34 | 52% |
| San Francisco-Oakland-Hayward, CA | 1.3% | 37 | 51% |
| Seattle-Tacoma-Bellevue, WA | 0.9% | 35 | 50% |
| Elkhart-Goshen, IN | 0.3% | 33 | 50% |
| Greeley, CO | 0.5% | 31 | 50% |
| Austin-Round Rock, TX | 0.8% | 31 | 49% |
| Durham-Chapel Hill, NC | 0.8% | 31 | 52% |
| Sioux Falls, SD | 0.3% | 34 | 50% |
| Odessa, TX | 0.4% | 32 | 51% |
| Salt Lake City, UT | 0.7% | 29 | 50% |
| Boulder, CO | 0.7% | 33 | 49% |
| Boston-Cambridge-Newton, MA-NH | 0.7% | 36 | 52% |
| Lima, OH | 0.3% | 36 | 50% |
| Trenton, NJ | 0.6% | 36 | 51% |
| Oklahoma City, OK | 0.5% | 33 | 51% |
| Rochester, MN | 0.3% | 35 | 51% |
| Bloomington, IL | 0.4% | 31 | 52% |
| Des Moines-West Des Moines, IA | 0.5% | 34 | 51% |
| Kankakee, IL | 0.4% | 35 | 51% |
| Cedar Rapids, IA | 0.3% | 35 | 51% |
| Portland-Vancouver-Hillsboro, OR-WA | 0.9% | 34 | 50% |
| Vallejo-Fairfield, CA | 0.7% | 34 | 50% |
| Los Angeles-Long Beach-Anaheim, CA | 0.8% | 33 | 51% |
| Nogales, AZ | 0.4% | 40 | 53% |
| Manchester-Nashua, NH | 0.6% | 36 | 51% |
| Pittsburgh, PA | 0.3% | 40 | 52% |
| Provo-Orem, UT | 0.3% | 23 | 50% |
| Santa Maria-Santa Barbara, CA | 0.7% | 33 | 50% |
| Williamsport, PA | 0.4% | 38 | 51% |
| Baton Rouge, LA | 0.5% | 32 | 52% |
| Madison, WI | 0.8% | 33 | 51% |
| Nashville-Davidson--Murfreesboro--Franklin, TN | 0.6% | 34 | 51% |
| Madera, CA | 0.7% | 33 | 52% |
| Fargo, ND-MN | 0.3% | 31 | 50% |
| Omaha-Council Bluffs, NE-IA | 0.4% | 33 | 51% |
| Bakersfield, CA | 0.5% | 31 | 49% |
| Dallas-Fort Worth-Arlington, TX | 0.7% | 32 | 50% |
| New York-Newark-Jersey City, NY-NJ-PA | 0.7% | 36 | 52% |
| Charleston-North Charleston, SC | 0.6% | 33 | 51% |
| Fort Collins, CO | 0.5% | 33 | 50% |

| MSA | Share of Households Comprised of Coupled Same-Sex Partners_2001 | Median Age_2001 | Percentage of Female Residents _2001 |
|---|---|---|---|
| San Diego-Carlsbad, CA | 0.8% | 33 | 50% |
| Abilene, TX | 0.4% | 32 | 52% |
| Baltimore-Columbia-Towson, MD | 0.6% | 36 | 52% |
| Huntsville, AL | 0.4% | 35 | 51% |
| La Crosse-Onalaska, WI-MN | 0.4% | 34 | 52% |
| Washington-Arlington-Alexandria, DC-VA-MD-WV | 0.8% | 34 | 51% |
| Burlington-South Burlington, VT | 1.0% | 34 | 51% |
| Napa, CA | 0.7% | 38 | 50% |
| Tulsa, OK | 0.5% | 34 | 51% |
| San Luis Obispo-Paso Robles-Arroyo Grande, CA | 0.5% | 37 | 49% |
| Raleigh, NC | 0.6% | 34 | 50% |
| Wausau, WI | 0.3% | 36 | 50% |
| El Centro, CA | 0.5% | 31 | 48% |
| Crestview-Fort Walton Beach-Destin, FL | 0.4% | 36 | 49% |
| Bellingham, WA | 0.6% | 34 | 51% |
| Albany-Schenectady-Troy, NY | 0.5% | 37 | 52% |
| Minneapolis-St. Paul-Bloomington, MN-WI | 0.7% | 34 | 51% |
| Wooster, OH | 0.3% | 35 | 51% |
| Cincinnati, OH-KY-IN | 0.4% | 35 | 52% |
| Bend-Redmond, OR | 0.5% | 38 | 50% |
| Portland-South Portland, ME | 0.8% | 38 | 52% |
| Yakima, WA | 0.4% | 31 | 50% |
| Buffalo-Cheektowaga-Niagara Falls, NY | 0.3% | 38 | 52% |
| Syracuse, NY | 0.5% | 36 | 52% |
| Palm Bay-Melbourne-Titusville, FL | 0.4% | 41 | 51% |
| Dothan, AL | 0.5% | 33 | 50% |
| Waterloo-Cedar Falls, IA | 0.3% | 34 | 52% |
| Watertown-Fort Drum, NY | 0.4% | 33 | 48% |
| Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | 0.6% | 36 | 52% |
| Waco, TX | 0.4% | 32 | 52% |
| San Angelo, TX | 0.4% | 34 | 52% |
| Santa Rosa, CA | 1.2% | 38 | 51% |
| Auburn-Opelika, AL | 0.4% | 28 | 51% |
| Appleton, WI | 0.3% | 34 | 50% |
| Shreveport-Bossier City, LA | 0.4% | 35 | 53% |
| Hanford-Corcoran, CA | 0.6% | 30 | 43% |
| Kansas City, MO-KS | 0.5% | 34 | 51% |
| Ogden-Clearfield, UT | 0.4% | 28 | 50% |
| Fayetteville-Springdale-Rogers, AR-MO | 0.5% | 33 | 50% |
| Sherman-Denison, TX | 0.5% | 37 | 52% |
| Asheville, NC | 0.8% | 39 | 52% |

| MSA | Share of Households Comprised of Coupled Same-Sex Partners_2001 | Median Age_2001 | Percentage of Female Residents _2001 |
|---|---|---|---|
| State College, PA | 0.5% | 29 | 49% |
| Visalia-Porterville, CA | 0.6% | 29 | 50% |
| Charlotte-Concord-Gastonia, NC-SC | 0.6% | 35 | 51% |
| Chattanooga, TN-GA | 0.5% | 37 | 52% |
| Salem, OR | 0.5% | 34 | 50% |
| College Station-Bryan, TX | 0.4% | 24 | 49% |
| Mobile, AL | 0.5% | 34 | 52% |
| Hartford-West Hartford-East Hartford, CT | 0.6% | 37 | 52% |
| Chicago-Naperville-Elgin, IL-IN-WI | 0.6% | 34 | 51% |
| Knoxville, TN | 0.5% | 37 | 52% |
| Salinas, CA | 0.8% | 32 | 48% |
| Malvern, AR | 0.4% | 34 | 50% |
| Gainesville, GA | 0.6% | 32 | 49% |
| Harrisburg-Carlisle, PA | 0.4% | 38 | 52% |
| Sierra Vista-Douglas, AZ | 0.5% | 37 | 50% |
| Fayetteville, NC | 0.4% | 30 | 49% |
| Lebanon, PA | 0.3% | 39 | 51% |
| Atlanta-Sandy Springs-Roswell, GA | 0.9% | 33 | 51% |
| Fresno, CA | 0.6% | 30 | 50% |
| Altoona, PA | 0.3% | 40 | 52% |
| Oxnard-Thousand Oaks-Ventura, CA | 0.6% | 34 | 50% |
| Lewiston-Auburn, ME | 0.6% | 37 | 51% |
| Lake Havasu City-Kingman, AZ | 0.5% | 40 | 51% |
| Little Rock-North Little Rock-Conway, AR | 0.5% | 35 | 52% |
| Billings, MT | 0.3% | 37 | 51% |
| East Stroudsburg, PA | 0.7% | 37 | 51% |
| Ocean City, NJ | 0.4% | 42 | 52% |
| Miami-Fort Lauderdale-West Palm Beach, FL | 0.8% | 38 | 52% |
| Anchorage, AK | 0.6% | 32 | 49% |
| Santa Cruz-Watsonville, CA | 1.1% | 35 | 50% |
| Florence, SC | 0.4% | 36 | 53% |
| El Paso, TX | 0.5% | 30 | 52% |
| Worcester, MA-CT | 0.5% | 36 | 51% |
| Cleveland-Elyria, OH | 0.4% | 37 | 52% |
| Lafayette-West Lafayette, IN | 0.4% | 27 | 49% |
| Merced, CA | 0.6% | 29 | 50% |
| Spokane-Spokane Valley, WA | 0.5% | 35 | 51% |
| Urban Honolulu, HI | 0.5% | 36 | 50% |
| Bremerton-Silverdale, WA | 0.6% | 36 | 49% |
| Jackson, MI | 0.4% | 37 | 49% |
| Janesville-Beloit, WI | 0.3% | 36 | 51% |

| MSA | Share of Households Comprised of Coupled Same-Sex Partners_2001 | Median Age_2001 | Percentage of Female Residents_2001 |
|---|---|---|---|
| Sumter, SC | 0.4% | 33 | 52% |
| Hammond, LA | 0.5% | 32 | 52% |
| Niles-Benton Harbor, MI | 0.5% | 37 | 52% |
| Utica-Rome, NY | 0.4% | 38 | 50% |
| Spartanburg, SC | 0.4% | 36 | 51% |
| Kingston, NY | 0.8% | 38 | 50% |
| Columbus, OH | 0.7% | 35 | 51% |
| San Antonio-New Braunfels, TX | 0.6% | 32 | 51% |
| Sacramento--Roseville--Arden-Arcade, CA | 0.7% | 35 | 51% |
| Modesto, CA | 0.6% | 32 | 51% |
| Davenport-Moline-Rock Island, IA-IL | 0.4% | 37 | 51% |
| Denver-Aurora-Lakewood, CO | 0.7% | 34 | 50% |
| South Bend-Mishawaka, IN-MI | 0.4% | 34 | 52% |
| Louisville/Jefferson County, KY-IN | 0.5% | 37 | 52% |
| Chico, CA | 0.5% | 36 | 51% |
| Tampa-St. Petersburg-Clearwater, FL | 0.7% | 43 | 52% |
| Amarillo, TX | 0.4% | 34 | 51% |
| Phoenix-Mesa-Scottsdale, AZ | 0.7% | 35 | 50% |
| Decatur, AL | 0.5% | 37 | 51% |
| Yuma, AZ | 0.4% | 37 | 51% |
| Savannah, GA | 0.7% | 34 | 52% |
| Sheboygan, WI | 0.3% | 37 | 50% |
| Panama City, FL | 0.5% | 37 | 50% |
| St. Cloud, MN | 0.3% | 32 | 50% |
| Riverside-San Bernardino-Ontario, CA | 0.7% | 32 | 50% |
| Scranton--Wilkes-Barre--Hazleton, PA | 0.4% | 41 | 52% |
| Johnson City, TN | 0.5% | 37 | 51% |
| Columbus, GA-AL | 0.4% | 33 | 51% |
| Dayton, OH | 0.5% | 36 | 52% |
| St. Louis, MO-IL | 0.4% | 35 | 52% |
| Coeur d'Alene, ID | 0.3% | 36 | 50% |
| Ottawa-Peru, IL | 0.3% | 38 | 51% |
| Ogdensburg-Massena, NY | 0.5% | 35 | 49% |
| Topeka, KS | 0.4% | 37 | 52% |
| Tyler, TX | 0.4% | 36 | 52% |
| Tuscaloosa, AL | 0.5% | 32 | 52% |
| Akron, OH | 0.4% | 36 | 52% |
| Providence-Warwick, RI-MA | 0.6% | 37 | 52% |
| Decatur, IL | 0.4% | 38 | 52% |
| North Port-Sarasota-Bradenton, FL | 0.6% | 47 | 52% |
| Daphne-Fairhope-Foley, AL | 0.5% | 39 | 51% |

| MSA | Share of Households Comprised of Coupled Same-Sex Partners_2001 | Median Age_2001 | Percentage of Female Residents_2001 |
|---|---|---|---|
| Grand Rapids-Wyoming, MI | 0.4% | 32 | 51% |
| Lexington-Fayette, KY | 0.7% | 33 | 51% |
| Jacksonville, FL | 0.6% | 37 | 51% |
| Toledo, OH | 0.5% | 34 | 52% |
| Monroe, LA | 0.5% | 32 | 53% |
| Laredo, TX | 0.5% | 27 | 52% |
| Lincoln, NE | 0.4% | 32 | 50% |
| Redding, CA | 0.4% | 39 | 51% |
| Medford, OR | 0.7% | 39 | 51% |
| Oshkosh-Neenah, WI | 0.3% | 35 | 50% |
| Bloomington, IN | 0.7% | 28 | 51% |
| Augusta-Waterville, ME | 0.6% | 39 | 52% |
| Houston-The Woodlands-Sugar Land, TX | 0.7% | 34 | 50% |
| Chambersburg-Waynesboro, PA | 0.4% | 38 | 51% |
| Lawton, OK | 0.3% | 30 | 48% |
| Indianapolis-Carmel-Anderson, IN | 0.6% | 35 | 51% |
| Birmingham-Hoover, AL | 0.6% | 33 | 52% |
| Pittsfield, MA | 0.4% | 41 | 52% |
| Columbia, MO | 0.6% | 30 | 52% |
| Barnstable Town, MA | 0.9% | 45 | 53% |
| Sebastian-Vero Beach, FL | 0.4% | 47 | 52% |
| New Haven-Milford, CT | 0.5% | 37 | 52% |
| Greenville, NC | 0.5% | 30 | 53% |
| Lubbock, TX | 0.4% | 31 | 51% |
| Anniston-Oxford-Jacksonville, AL | 0.4% | 37 | 52% |
| Deltona-Daytona Beach-Ormond Beach, FL | 0.5% | 42 | 51% |
| Milwaukee-Waukesha-West Allis, WI | 0.4% | 36 | 52% |
| Reading, PA | 0.4% | 37 | 51% |
| Virginia Beach-Norfolk-Newport News, VA-NC | 0.5% | 33 | 51% |
| Wichita, KS | 0.5% | 34 | 51% |
| Pottsville, PA | 0.3% | 41 | 50% |
| Johnstown, PA | 0.3% | 41 | 51% |
| Olympia-Tumwater, WA | 0.7% | 37 | 51% |
| Pensacola-Ferry Pass-Brent, FL | 0.5% | 36 | 50% |
| Ann Arbor, MI | 0.7% | 31 | 50% |
| Norwich-New London, CT | 0.5% | 37 | 51% |
| Binghamton, NY | 0.4% | 38 | 52% |
| Springfield, MO | 0.5% | 35 | 51% |
| New Orleans-Metairie, LA | 0.7% | 35 | 52% |
| Alexandria, LA | 0.5% | 36 | 52% |
| Eugene, OR | 0.7% | 37 | 51% |

| MSA | Share of Households Comprised of Coupled Same-Sex Partners_2001 | Median Age_2001 | Percentage of Female Residents_2001 |
|---|---|---|---|
| Flagstaff, AZ | 0.6% | 30 | 50% |
| Salem, OH | 0.3% | 39 | 50% |
| Springfield, MA | 0.8% | 35 | 52% |
| Beaumont-Port Arthur, TX | 0.4% | 35 | 50% |
| Stockton-Lodi, CA | 0.6% | 32 | 50% |
| Mount Vernon-Anacortes, WA | 0.4% | 37 | 50% |
| Wilmington, NC | 0.5% | 36 | 52% |
| Flint, MI | 0.4% | 35 | 52% |
| Iowa City, IA | 0.7% | 28 | 50% |
| Lancaster, PA | 0.4% | 36 | 51% |
| Punta Gorda, FL | 0.4% | 54 | 52% |
| Brownsville-Harlingen, TX | 0.6% | 29 | 52% |
| Las Cruces, NM | 0.6% | 30 | 51% |
| Roseburg, OR | 0.4% | 41 | 51% |
| Montgomery, AL | 0.6% | 36 | 51% |
| Killeen-Temple, TX | 0.4% | 29 | 50% |
| Eureka-Arcata-Fortuna, CA | 0.7% | 36 | 51% |
| Duluth, MN-WI | 0.3% | 39 | 51% |
| York-Hanover, PA | 0.4% | 38 | 51% |
| Columbia, SC | 0.5% | 34 | 52% |
| Peoria, IL | 0.4% | 37 | 51% |
| Albany, OR | 0.3% | 37 | 51% |
| Detroit-Warren-Dearborn, MI | 0.4% | 36 | 51% |
| Ocala, FL | 0.5% | 44 | 52% |
| Canton-Massillon, OH | 0.3% | 38 | 52% |
| Battle Creek, MI | 0.4% | 36 | 51% |
| Pueblo, CO | 0.4% | 37 | 51% |
| Colorado Springs, CO | 0.4% | 33 | 50% |
| Holland, MI | 0.6% | 35 | 50% |
| Hagerstown-Martinsburg, MD-WV | 0.5% | 37 | 49% |
| Champaign-Urbana, IL | 0.5% | 29 | 50% |
| Prescott, AZ | 0.5% | 45 | 51% |
| Saginaw, MI | 0.4% | 36 | 52% |
| Grand Junction, CO | 0.4% | 38 | 51% |
| Wichita Falls, TX | 0.4% | 33 | 49% |
| Gulfport-Biloxi-Pascagoula, MS | 0.4% | 34 | 50% |
| Vineland-Bridgeton, NJ | 0.5% | 36 | 49% |
| Boise City, ID | 0.4% | 31 | 50% |
| Ashtabula, OH | 0.4% | 38 | 51% |
| Corpus Christi, TX | 0.5% | 33 | 51% |
| Clarksville, TN-KY | 0.4% | 30 | 50% |

| MSA | Share of Households Comprised of Coupled Same-Sex Partners_2001 | Median Age_2001 | Percentage of Female Residents_2001 |
|---|---|---|---|
| Orlando-Kissimmee-Sanford, FL | 0.7% | 37 | 51% |
| Lakeland-Winter Haven, FL | 0.5% | 39 | 51% |
| Cape Coral-Fort Myers, FL | 0.6% | 45 | 51% |
| Augusta-Richmond County, GA-SC | 0.5% | 34 | 52% |
| Lansing-East Lansing, MI | 0.6% | 33 | 52% |
| Kalamazoo-Portage, MI | 0.5% | 33 | 52% |
| Evansville, IN-KY | 0.4% | 37 | 53% |
| Bangor, ME | 0.6% | 37 | 51% |
| Terre Haute, IN | 0.4% | 35 | 51% |
| Longview, TX | 0.4% | 35 | 52% |
| Rochester, NY | 0.6% | 37 | 52% |
| Erie, PA | 0.3% | 36 | 51% |
| Tucson, AZ | 0.7% | 36 | 51% |
| Albuquerque, NM | 0.8% | 35 | 51% |
| Youngstown-Warren-Boardman, OH-PA | 0.3% | 39 | 52% |
| Sioux City, IA-NE-SD | 0.3% | 34 | 51% |
| Concord, NH | 0.6% | 38 | 51% |
| Naples-Immokalee-Marco Island, FL | 0.5% | 44 | 50% |
| Greenville-Anderson-Mauldin, SC | 0.4% | 35 | 51% |
| Warner Robins, GA | 0.3% | 34 | 51% |
| Muskegon, MI | 0.4% | 36 | 50% |
| Athens-Clarke County, GA | 0.6% | 25 | 51% |
| Fort Smith, AR-OK | 0.4% | 36 | 51% |
| Gadsden, AL | 0.4% | 38 | 52% |
| Kahului-Wailuku-Lahaina, HI | 0.9% | 37 | 50% |
| Port St. Lucie, FL | 0.5% | 45 | 51% |
| Jacksonville, NC | 0.4% | 25 | 45% |
| Michigan City-La Porte, IN | 0.4% | 37 | 49% |
| Springfield, OH | 0.4% | 38 | 52% |
| Mansfield, OH | 0.4% | 38 | 50% |
| Richmond, VA | 0.5% | 35 | 53% |
| Rockford, IL | 0.4% | 36 | 51% |
| Memphis, TN-MS-AR | 0.5% | 34 | 52% |
| Charleston, WV | 0.5% | 40 | 52% |
| Burlington, NC | 0.5% | 36 | 52% |
| Kingsport-Bristol-Bristol, TN-VA | 0.3% | 40 | 52% |
| McAllen-Edinburg-Mission, TX | 0.6% | 27 | 51% |
| Springfield, IL | 0.4% | 37 | 52% |
| Bay City, MI | 0.3% | 38 | 51% |
| Dover, DE | 0.4% | 34 | 52% |
| Monroe, MI | 0.3% | 36 | 50% |

| MSA | Share of Households Comprised of Coupled Same-Sex Partners_2001 | Median Age_2001 | Percentage of Female Residents_2001 |
|---|---|---|---|
| Salisbury, MD-DE | 0.9% | 41 | 51% |
| Jamestown-Dunkirk-Fredonia, NY | 0.4% | 38 | 51% |
| Lake Charles, LA | 0.5% | 35 | 51% |
| Jackson, MS | 0.5% | 33 | 52% |
| Homosassa Springs, FL | 0.4% | 53 | 52% |
| Goldsboro, NC | 0.5% | 35 | 51% |
| Santa Fe, NM | 1.2% | 38 | 51% |
| Joplin, MO | 0.3% | 35 | 52% |
| Torrington, CT | 0.6% | 40 | 51% |
| Muncie, IN | 0.4% | 34 | 52% |
| Lumberton, NC | 0.6% | 32 | 51% |
| Reno, NV | 0.7% | 36 | 49% |
| Hickory-Lenoir-Morganton, NC | 0.5% | 36 | 51% |
| Bridgeport-Stamford-Norwalk, CT | 0.6% | 37 | 52% |
| Myrtle Beach-Conway-North Myrtle Beach, SC-NC | 0.5% | 38 | 51% |
| Tallahassee, FL | 0.6% | 30 | 52% |
| Las Vegas-Henderson-Paradise, NV | 0.7% | 34 | 49% |
| Macon, GA | 0.5% | 35 | 54% |
| Racine, WI | 0.4% | 36 | 51% |
| Hilton Head Island-Bluffton-Beaufort, SC | 0.5% | 36 | 49% |
| Winston-Salem, NC | 0.5% | 37 | 52% |
| Greensboro-High Point, NC | 0.5% | 36 | 52% |
| Lafayette, LA | 0.5% | 32 | 51% |
| Allentown-Bethlehem-Easton, PA-NJ | 0.4% | 38 | 52% |
| Atlantic City-Hammonton, NJ | 0.6% | 37 | 52% |
| Farmington, NM | 0.4% | 31 | 50% |
| Houma-Thibodaux, LA | 0.5% | 33 | 51% |

| MSA | Percent of Non-White Residents_2001 | MSA Population from 0-249999 | MSA Population from 250-499999 | MSA Population from 500k-999999 |
|---|---|---|---|---|
| San Jose-Sunnyvale-Santa Clara, CA | 46% | 0 | 0 | 0 |
| Midland, TX | 23% | 1 | 0 | 0 |
| San Francisco-Oakland-Hayward, CA | 43% | 0 | 0 | 0 |
| Seattle-Tacoma-Bellevue, WA | 22% | 0 | 0 | 0 |
| Elkhart-Goshen, IN | 14% | 1 | 0 | 0 |
| Greeley, CO | 18% | 1 | 0 | 0 |
| Austin-Round Rock, TX | 28% | 0 | 0 | 0 |
| Durham-Chapel Hill, NC | 40% | 0 | 1 | 0 |
| Sioux Falls, SD | 7% | 1 | 0 | 0 |
| Odessa, TX | 26% | 1 | 0 | 0 |
| Salt Lake City, UT | 14% | 0 | 0 | 1 |
| Boulder, CO | 11% | 0 | 1 | 0 |
| Boston-Cambridge-Newton, MA-NH | 17% | 0 | 0 | 0 |
| Lima, OH | 15% | 1 | 0 | 0 |
| Trenton, NJ | 32% | 0 | 1 | 0 |
| Oklahoma City, OK | 26% | 0 | 0 | 1 |
| Rochester, MN | 10% | 1 | 0 | 0 |
| Bloomington, IL | 11% | 1 | 0 | 0 |
| Des Moines-West Des Moines, IA | 12% | 0 | 1 | 0 |
| Kankakee, IL | 20% | 1 | 0 | 0 |
| Cedar Rapids, IA | 6% | 1 | 0 | 0 |
| Portland-Vancouver-Hillsboro, OR-WA | 18% | 0 | 0 | 0 |
| Vallejo-Fairfield, CA | 44% | 0 | 1 | 0 |
| Los Angeles-Long Beach-Anaheim, CA | 48% | 0 | 0 | 0 |
| Nogales, AZ | 16% | 0 | 0 | 0 |
| Manchester-Nashua, NH | 6% | 0 | 1 | 0 |
| Pittsburgh, PA | 4% | 0 | 0 | 1 |
| Provo-Orem, UT | 8% | 0 | 1 | 0 |
| Santa Maria-Santa Barbara, CA | 27% | 0 | 1 | 0 |
| Williamsport, PA | 6% | 1 | 0 | 0 |
| Baton Rouge, LA | 44% | 0 | 1 | 0 |
| Madison, WI | 11% | 0 | 1 | 0 |
| Nashville-Davidson--Murfreesboro--Franklin, TN | 23% | 0 | 0 | 0 |
| Madera, CA | 38% | 1 | 0 | 0 |
| Fargo, ND-MN | 5% | 1 | 0 | 0 |
| Omaha-Council Bluffs, NE-IA | 17% | 0 | 0 | 1 |
| Bakersfield, CA | 38% | 0 | 0 | 1 |
| Dallas-Fort Worth-Arlington, TX | 32% | 0 | 0 | 0 |
| New York-Newark-Jersey City, NY-NJ-PA | 38% | 0 | 0 | 0 |
| Charleston-North Charleston, SC | 36% | 0 | 1 | 0 |
| Fort Collins, CO | 9% | 0 | 1 | 0 |

| MSA | Percent of Non-White Residents_2001 | MSA Population from 0-249999 | MSA Population from 250-499999 | MSA Population from 500k-999999 |
|---|---|---|---|---|
| San Diego-Carlsbad, CA | 33% | 0 | 0 | 0 |
| Abilene, TX | 19% | 1 | 0 | 0 |
| Baltimore-Columbia-Towson, MD | 33% | 0 | 0 | 0 |
| Huntsville, AL | 22% | 0 | 0 | 1 |
| La Crosse-Onalaska, WI-MN | 6% | 1 | 0 | 0 |
| Washington-Arlington-Alexandria, DC-VA-MD-WV | 43% | 0 | 0 | 0 |
| Burlington-South Burlington, VT | 5% | 1 | 0 | 0 |
| Napa, CA | 20% | 1 | 0 | 0 |
| Tulsa, OK | 25% | 0 | 0 | 1 |
| San Luis Obispo-Paso Robles-Arroyo Grande, CA | 15% | 0 | 1 | 0 |
| Raleigh, NC | 27% | 0 | 0 | 1 |
| Wausau, WI | 6% | 1 | 0 | 0 |
| El Centro, CA | 51% | 1 | 0 | 0 |
| Crestview-Fort Walton Beach-Destin, FL | 17% | 1 | 0 | 0 |
| Bellingham, WA | 12% | 1 | 0 | 0 |
| Albany-Schenectady-Troy, NY | 11% | 0 | 0 | 1 |
| Minneapolis-St. Paul-Bloomington, MN-WI | 16% | 0 | 0 | 0 |
| Wooster, OH | 3% | 1 | 0 | 0 |
| Cincinnati, OH-KY-IN | 17% | 0 | 0 | 0 |
| Bend-Redmond, OR | 5% | 1 | 0 | 0 |
| Portland-South Portland, ME | 4% | 0 | 1 | 0 |
| Yakima, WA | 34% | 1 | 0 | 0 |
| Buffalo-Cheektowaga-Niagara Falls, NY | 16% | 0 | 0 | 0 |
| Syracuse, NY | 13% | 0 | 0 | 1 |
| Palm Bay-Melbourne-Titusville, FL | 13% | 0 | 1 | 0 |
| Dothan, AL | 7% | 0 | 1 | 0 |
| Waterloo-Cedar Falls, IA | 12% | 1 | 0 | 0 |
| Watertown-Fort Drum, NY | 11% | 1 | 0 | 0 |
| Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | 28% | 0 | 0 | 0 |
| Waco, TX | 28% | 1 | 0 | 0 |
| San Angelo, TX | 21% | 1 | 0 | 0 |
| Santa Rosa, CA | 18% | 0 | 1 | 0 |
| Auburn-Opelika, AL | 26% | 1 | 0 | 0 |
| Appleton, WI | 6% | 1 | 0 | 0 |
| Shreveport-Bossier City, LA | 47% | 0 | 1 | 0 |
| Hanford-Corcoran, CA | 46% | 1 | 0 | 0 |
| Kansas City, MO-KS | 22% | 0 | 0 | 0 |
| Ogden-Clearfield, UT | 10% | 0 | 1 | 0 |
| Fayetteville-Springdale-Rogers, AR-MO | 11% | 0 | 1 | 0 |
| Sherman-Denison, TX | 13% | 1 | 0 | 0 |
| Asheville, NC | 11% | 1 | 0 | 0 |

| MSA | Percent of Non-White Residents_2001 | MSA Population from 0-249999 | MSA Population from 250-499999 | MSA Population from 500k-999999 |
|---|---|---|---|---|
| State College, PA | 9% | 1 | 0 | 0 |
| Visalia-Porterville, CA | 42% | 0 | 1 | 0 |
| Charlotte-Concord-Gastonia, NC-SC | 26% | 0 | 0 | 0 |
| Chattanooga, TN-GA | 24% | 0 | 1 | 0 |
| Salem, OR | 18% | 0 | 1 | 0 |
| College Station-Bryan, TX | 26% | 1 | 0 | 0 |
| Mobile, AL | 37% | 0 | 1 | 0 |
| Hartford-West Hartford-East Hartford, CT | 19% | 0 | 0 | 0 |
| Chicago-Naperville-Elgin, IL-IN-WI | 34% | 0 | 0 | 0 |
| Knoxville, TN | 10% | 0 | 1 | 0 |
| Salinas, CA | 44% | 0 | 1 | 0 |
| Malvern, AR | 9% | 1 | 0 | 0 |
| Gainesville, GA | 19% | 1 | 0 | 0 |
| Harrisburg-Carlisle, PA | 15% | 0 | 1 | 0 |
| Sierra Vista-Douglas, AZ | 23% | 1 | 0 | 0 |
| Fayetteville, NC | 45% | 0 | 1 | 0 |
| Lebanon, PA | 6% | 1 | 0 | 0 |
| Atlanta-Sandy Springs-Roswell, GA | 43% | 0 | 0 | 0 |
| Fresno, CA | 46% | 0 | 0 | 1 |
| Altoona, PA | 2% | 1 | 0 | 0 |
| Oxnard-Thousand Oaks-Ventura, CA | 30% | 0 | 0 | 1 |
| Lewiston-Auburn, ME | 3% | 1 | 0 | 0 |
| Lake Havasu City-Kingman, AZ | 9% | 0 | 0 | 1 |
| Little Rock-North Little Rock-Conway, AR | 36% | 0 | 1 | 0 |
| Billings, MT | 7% | 1 | 0 | 0 |
| East Stroudsburg, PA | 12% | 1 | 0 | 0 |
| Ocean City, NJ | 8% | 1 | 0 | 0 |
| Miami-Fort Lauderdale-West Palm Beach, FL | 28% | 0 | 0 | 0 |
| Anchorage, AK | 28% | 0 | 1 | 0 |
| Santa Cruz-Watsonville, CA | 25% | 0 | 1 | 0 |
| Florence, SC | 41% | 1 | 0 | 0 |
| El Paso, TX | 26% | 0 | 0 | 1 |
| Worcester, MA-CT | 10% | 0 | 0 | 1 |
| Cleveland-Elyria, OH | 25% | 0 | 0 | 0 |
| Lafayette-West Lafayette, IN | 11% | 1 | 0 | 0 |
| Merced, CA | 44% | 1 | 0 | 0 |
| Spokane-Spokane Valley, WA | 9% | 0 | 1 | 0 |
| Urban Honolulu, HI | 79% | 0 | 0 | 1 |
| Bremerton-Silverdale, WA | 16% | 1 | 0 | 0 |
| Jackson, MI | 11% | 1 | 0 | 0 |
| Janesville-Beloit, WI | 9% | 1 | 0 | 0 |

| MSA | Percent of Non-White Residents_2001 | MSA Population from 0-249999 | MSA Population from 250-499999 | MSA Population from 500k-999999 |
|---|---|---|---|---|
| Sumter, SC | 50% | 1 | 0 | 0 |
| Hammond, LA | 30% | 1 | 0 | 0 |
| Niles-Benton Harbor, MI | 20% | 1 | 0 | 0 |
| Utica-Rome, NY | 10% | 1 | 0 | 0 |
| Spartanburg, SC | 25% | 0 | 1 | 0 |
| Kingston, NY | 11% | 1 | 0 | 0 |
| Columbus, OH | 19% | 0 | 0 | 0 |
| San Antonio-New Braunfels, TX | 31% | 0 | 0 | 0 |
| Sacramento--Roseville--Arden-Arcade, CA | 30% | 0 | 0 | 0 |
| Modesto, CA | 31% | 0 | 1 | 0 |
| Davenport-Moline-Rock Island, IA-IL | 13% | 0 | 1 | 0 |
| Denver-Aurora-Lakewood, CO | 21% | 0 | 0 | 0 |
| South Bend-Mishawaka, IN-MI | 18% | 0 | 1 | 0 |
| Louisville/Jefferson County, KY-IN | 23% | 0 | 0 | 1 |
| Chico, CA | 15% | 1 | 0 | 0 |
| Tampa-St. Petersburg-Clearwater, FL | 17% | 0 | 0 | 0 |
| Amarillo, TX | 21% | 1 | 0 | 0 |
| Phoenix-Mesa-Scottsdale, AZ | 23% | 0 | 0 | 0 |
| Decatur, AL | 15% | 1 | 0 | 0 |
| Yuma, AZ | 19% | 0 | 1 | 0 |
| Savannah, GA | 45% | 1 | 0 | 0 |
| Sheboygan, WI | 7% | 1 | 0 | 0 |
| Panama City, FL | 16% | 1 | 0 | 0 |
| St. Cloud, MN | 4% | 1 | 0 | 0 |
| Riverside-San Bernardino-Ontario, CA | 38% | 0 | 0 | 0 |
| Scranton--Wilkes-Barre--Hazleton, PA | 3% | 0 | 0 | 1 |
| Johnson City, TN | 6% | 1 | 0 | 0 |
| Columbus, GA-AL | 50% | 1 | 0 | 0 |
| Dayton, OH | 21% | 0 | 0 | 1 |
| St. Louis, MO-IL | 24% | 0 | 0 | 0 |
| Coeur d'Alene, ID | 4% | 1 | 0 | 0 |
| Ottawa-Peru, IL | 5% | 1 | 0 | 0 |
| Ogdensburg-Massena, NY | 5% | 1 | 0 | 0 |
| Topeka, KS | 17% | 1 | 0 | 0 |
| Tyler, TX | 27% | 1 | 0 | 0 |
| Tuscaloosa, AL | 32% | 1 | 0 | 0 |
| Akron, OH | 14% | 0 | 0 | 1 |
| Providence-Warwick, RI-MA | 14% | 0 | 0 | 0 |
| Decatur, IL | 17% | 1 | 0 | 0 |
| North Port-Sarasota-Bradenton, FL | 10% | 0 | 0 | 1 |
| Daphne-Fairhope-Foley, AL | 13% | 1 | 0 | 0 |

| MSA | Percent of Non-White Residents_2001 | MSA Population from 0-249999 | MSA Population from 250-499999 | MSA Population from 500k-999999 |
|---|---|---|---|---|
| Grand Rapids-Wyoming, MI | 14% | 0 | 0 | 1 |
| Lexington-Fayette, KY | 19% | 0 | 1 | 0 |
| Jacksonville, FL | 28% | 0 | 0 | 0 |
| Toledo, OH | 19% | 0 | 0 | 1 |
| Monroe, LA | 36% | 1 | 0 | 0 |
| Laredo, TX | 18% | 1 | 0 | 0 |
| Lincoln, NE | 10% | 0 | 1 | 0 |
| Redding, CA | 11% | 1 | 0 | 0 |
| Medford, OR | 8% | 1 | 0 | 0 |
| Oshkosh-Neenah, WI | 5% | 1 | 0 | 0 |
| Bloomington, IN | 9% | 1 | 0 | 0 |
| Augusta-Waterville, ME | 3% | 1 | 0 | 0 |
| Houston-The Woodlands-Sugar Land, TX | 38% | 0 | 0 | 0 |
| Chambersburg-Waynesboro, PA | 5% | 1 | 0 | 0 |
| Lawton, OK | 35% | 1 | 0 | 0 |
| Indianapolis-Carmel-Anderson, IN | 20% | 0 | 0 | 0 |
| Birmingham-Hoover, AL | 34% | 0 | 0 | 0 |
| Pittsfield, MA | 5% | 1 | 0 | 0 |
| Columbia, MO | 15% | 1 | 0 | 0 |
| Barnstable Town, MA | 6% | 1 | 0 | 0 |
| Sebastian-Vero Beach, FL | 13% | 1 | 0 | 0 |
| New Haven-Milford, CT | 21% | 0 | 0 | 1 |
| Greenville, NC | 38% | 1 | 0 | 0 |
| Lubbock, TX | 26% | 1 | 0 | 0 |
| Anniston-Oxford-Jacksonville, AL | 21% | 1 | 0 | 0 |
| Deltona-Daytona Beach-Ormond Beach, FL | 14% | 0 | 1 | 0 |
| Milwaukee-Waukesha-West Allis, WI | 24% | 0 | 0 | 0 |
| Reading, PA | 12% | 0 | 1 | 0 |
| Virginia Beach-Norfolk-Newport News, VA-NC | 40% | 0 | 0 | 0 |
| Wichita, KS | 21% | 0 | 1 | 0 |
| Pottsville, PA | 3% | 1 | 0 | 0 |
| Johnstown, PA | 4% | 1 | 0 | 0 |
| Olympia-Tumwater, WA | 14% | 1 | 0 | 0 |
| Pensacola-Ferry Pass-Brent, FL | 22% | 0 | 1 | 0 |
| Ann Arbor, MI | 23% | 0 | 1 | 0 |
| Norwich-New London, CT | 13% | 0 | 1 | 0 |
| Binghamton, NY | 9% | 1 | 0 | 0 |
| Springfield, MO | 6% | 1 | 0 | 0 |
| New Orleans-Metairie, LA | 45% | 0 | 0 | 0 |
| Alexandria, LA | 33% | 1 | 0 | 0 |
| Eugene, OR | 9% | 0 | 1 | 0 |

| MSA | Percent of Non-White Residents_2001 | MSA Population from 0-249999 | MSA Population from 250-499999 | MSA Population from 500k-999999 |
|---|---|---|---|---|
| Flagstaff, AZ | 37% | 1 | 0 | 0 |
| Salem, OH | 4% | 1 | 0 | 0 |
| Springfield, MA | 18% | 0 | 0 | 1 |
| Beaumont-Port Arthur, TX | 43% | 1 | 0 | 0 |
| Stockton-Lodi, CA | 42% | 0 | 0 | 1 |
| Mount Vernon-Anacortes, WA | 14% | 1 | 0 | 0 |
| Wilmington, NC | 20% | 1 | 0 | 0 |
| Flint, MI | 25% | 0 | 1 | 0 |
| Iowa City, IA | 10% | 1 | 0 | 0 |
| Lancaster, PA | 9% | 0 | 1 | 0 |
| Punta Gorda, FL | 7% | 1 | 0 | 0 |
| Brownsville-Harlingen, TX | 20% | 0 | 1 | 0 |
| Las Cruces, NM | 32% | 1 | 0 | 0 |
| Roseburg, OR | 6% | 1 | 0 | 0 |
| Montgomery, AL | 58% | 0 | 1 | 0 |
| Killeen-Temple, TX | 37% | 1 | 0 | 0 |
| Eureka-Arcata-Fortuna, CA | 15% | 1 | 0 | 0 |
| Duluth, MN-WI | 5% | 1 | 0 | 0 |
| York-Hanover, PA | 7% | 0 | 1 | 0 |
| Columbia, SC | 36% | 0 | 0 | 1 |
| Peoria, IL | 13% | 0 | 1 | 0 |
| Albany, OR | 7% | 1 | 0 | 0 |
| Detroit-Warren-Dearborn, MI | 29% | 0 | 0 | 0 |
| Ocala, FL | 16% | 0 | 1 | 0 |
| Canton-Massillon, OH | 10% | 0 | 1 | 0 |
| Battle Creek, MI | 16% | 1 | 0 | 0 |
| Pueblo, CO | 21% | 1 | 0 | 0 |
| Colorado Springs, CO | 19% | 0 | 0 | 1 |
| Holland, MI | 7% | 1 | 0 | 0 |
| Hagerstown-Martinsburg, MD-WV | 10% | 1 | 0 | 0 |
| Champaign-Urbana, IL | 21% | 1 | 0 | 0 |
| Prescott, AZ | 8% | 1 | 0 | 0 |
| Saginaw, MI | 25% | 1 | 0 | 0 |
| Grand Junction, CO | 8% | 1 | 0 | 0 |
| Wichita Falls, TX | 21% | 1 | 0 | 0 |
| Gulfport-Biloxi-Pascagoula, MS | 26% | 0 | 1 | 0 |
| Vineland-Bridgeton, NJ | 34% | 1 | 0 | 0 |
| Boise City, ID | 17% | 1 | 0 | 0 |
| Ashtabula, OH | 6% | 1 | 0 | 0 |
| Corpus Christi, TX | 28% | 0 | 1 | 0 |
| Clarksville, TN-KY | 27% | 1 | 0 | 0 |

| MSA | Percent of Non-White Residents_2001 | MSA Population from 0-249999 | MSA Population from 250-499999 | MSA Population from 500k-999999 |
|---|---|---|---|---|
| Orlando-Kissimmee-Sanford, FL | 25% | 0 | 0 | 0 |
| Lakeland-Winter Haven, FL | 20% | 0 | 1 | 0 |
| Cape Coral-Fort Myers, FL | 12% | 0 | 1 | 0 |
| Augusta-Richmond County, GA-SC | 44% | 0 | 1 | 0 |
| Lansing-East Lansing, MI | 18% | 0 | 1 | 0 |
| Kalamazoo-Portage, MI | 15% | 1 | 0 | 0 |
| Evansville, IN-KY | 11% | 1 | 0 | 0 |
| Bangor, ME | 3% | 1 | 0 | 0 |
| Terre Haute, IN | 9% | 1 | 0 | 0 |
| Longview, TX | 27% | 1 | 0 | 0 |
| Rochester, NY | 19% | 0 | 0 | 1 |
| Erie, PA | 9% | 0 | 1 | 0 |
| Tucson, AZ | 25% | 0 | 0 | 1 |
| Albuquerque, NM | 29% | 0 | 0 | 1 |
| Youngstown-Warren-Boardman, OH-PA | 13% | 0 | 0 | 1 |
| Sioux City, IA-NE-SD | 13% | 1 | 0 | 0 |
| Concord, NH | 3% | 1 | 0 | 0 |
| Naples-Immokalee-Marco Island, FL | 14% | 0 | 1 | 0 |
| Greenville-Anderson-Mauldin, SC | 19% | 0 | 0 | 1 |
| Warner Robins, GA | 29% | 1 | 0 | 0 |
| Muskegon, MI | 19% | 1 | 0 | 0 |
| Athens-Clarke County, GA | 35% | 1 | 0 | 0 |
| Fort Smith, AR-OK | 18% | 1 | 0 | 0 |
| Gadsden, AL | 17% | 1 | 0 | 0 |
| Kahului-Wailuku-Lahaina, HI | 66% | 1 | 0 | 0 |
| Port St. Lucie, FL | 17% | 0 | 1 | 0 |
| Jacksonville, NC | 28% | 1 | 0 | 0 |
| Michigan City-La Porte, IN | 14% | 1 | 0 | 0 |
| Springfield, OH | 12% | 1 | 0 | 0 |
| Mansfield, OH | 12% | 1 | 0 | 0 |
| Richmond, VA | 37% | 0 | 0 | 1 |
| Rockford, IL | 18% | 0 | 1 | 0 |
| Memphis, TN-MS-AR | 44% | 0 | 0 | 0 |
| Charleston, WV | 10% | 1 | 0 | 0 |
| Burlington, NC | 24% | 1 | 0 | 0 |
| Kingsport-Bristol-Bristol, TN-VA | 3% | 1 | 0 | 0 |
| McAllen-Edinburg-Mission, TX | 22% | 0 | 0 | 1 |
| Springfield, IL | 13% | 1 | 0 | 0 |
| Bay City, MI | 5% | 1 | 0 | 0 |
| Dover, DE | 27% | 1 | 0 | 0 |
| Monroe, MI | 5% | 1 | 0 | 0 |

| MSA | Percent of Non-White Residents_2001 | MSA Population from 0-249999 | MSA Population from 250-499999 | MSA Population from 500k-999999 |
|---|---|---|---|---|
| Salisbury, MD-DE | 20% | 1 | 0 | 0 |
| Jamestown-Dunkirk-Fredonia, NY | 6% | 1 | 0 | 0 |
| Lake Charles, LA | 26% | 1 | 0 | 0 |
| Jackson, MS | 49% | 0 | 1 | 0 |
| Homosassa Springs, FL | 5% | 1 | 0 | 0 |
| Goldsboro, NC | 39% | 1 | 0 | 0 |
| Santa Fe, NM | 26% | 1 | 0 | 0 |
| Joplin, MO | 7% | 1 | 0 | 0 |
| Torrington, CT | 4% | 1 | 0 | 0 |
| Muncie, IN | 9% | 1 | 0 | 0 |
| Lumberton, NC | 67% | 1 | 0 | 0 |
| Reno, NV | 20% | 0 | 1 | 0 |
| Hickory-Lenoir-Morganton, NC | 15% | 1 | 0 | 0 |
| Bridgeport-Stamford-Norwalk, CT | 21% | 0 | 0 | 1 |
| Myrtle Beach-Conway-North Myrtle Beach, SC-NC | 19% | 1 | 0 | 0 |
| Tallahassee, FL | 34% | 1 | 0 | 0 |
| Las Vegas-Henderson-Paradise, NV | 28% | 0 | 0 | 0 |
| Macon, GA | 50% | 1 | 0 | 0 |
| Racine, WI | 17% | 1 | 0 | 0 |
| Hilton Head Island-Bluffton-Beaufort, SC | 29% | 1 | 0 | 0 |
| Winston-Salem, NC | 25% | 0 | 1 | 0 |
| Greensboro-High Point, NC | 30% | 0 | 0 | 1 |
| Lafayette, LA | 27% | 1 | 0 | 0 |
| Allentown-Bethlehem-Easton, PA-NJ | 10% | 0 | 0 | 1 |
| Atlantic City-Hammonton, NJ | 32% | 0 | 1 | 0 |
| Farmington, NM | 47% | 1 | 0 | 0 |
| Houma-Thibodaux, LA | 26% | 1 | 0 | 0 |

| MSA | MSA Population from 0-499999 | BEA Region - Far West | MSA - Region Great Lakes | BEA Region - Mideast |
|---|---|---|---|---|
| San Jose-Sunnyvale-Santa Clara, CA | 0 | 1 | 0 | 0 |
| Midland, TX | 1 | 0 | 0 | 0 |
| San Francisco-Oakland-Hayward, CA | 0 | 1 | 0 | 0 |
| Seattle-Tacoma-Bellevue, WA | 0 | 1 | 0 | 0 |
| Elkhart-Goshen, IN | 1 | 0 | 1 | 0 |
| Greeley, CO | 1 | 0 | 0 | 0 |
| Austin-Round Rock, TX | 0 | 0 | 0 | 0 |
| Durham-Chapel Hill, NC | 1 | 0 | 0 | 0 |
| Sioux Falls, SD | 1 | 0 | 0 | 0 |
| Odessa, TX | 1 | 0 | 0 | 0 |
| Salt Lake City, UT | 0 | 0 | 0 | 0 |
| Boulder, CO | 1 | 0 | 0 | 0 |
| Boston-Cambridge-Newton, MA-NH | 0 | 0 | 0 | 0 |
| Lima, OH | 1 | 0 | 1 | 0 |
| Trenton, NJ | 1 | 0 | 0 | 1 |
| Oklahoma City, OK | 0 | 0 | 0 | 0 |
| Rochester, MN | 1 | 0 | 0 | 0 |
| Bloomington, IL | 1 | 0 | 1 | 0 |
| Des Moines-West Des Moines, IA | 1 | 0 | 0 | 0 |
| Kankakee, IL | 1 | 0 | 1 | 0 |
| Cedar Rapids, IA | 1 | 0 | 0 | 0 |
| Portland-Vancouver-Hillsboro, OR-WA | 0 | 1 | 0 | 0 |
| Vallejo-Fairfield, CA | 1 | 1 | 0 | 0 |
| Los Angeles-Long Beach-Anaheim, CA | 0 | 1 | 0 | 0 |
| Nogales, AZ | 0 | 0 | 0 | 0 |
| Manchester-Nashua, NH | 1 | 0 | 0 | 0 |
| Pittsburgh, PA | 0 | 0 | 0 | 1 |
| Provo-Orem, UT | 1 | 0 | 0 | 0 |
| Santa Maria-Santa Barbara, CA | 1 | 1 | 0 | 0 |
| Williamsport, PA | 1 | 0 | 0 | 1 |
| Baton Rouge, LA | 1 | 0 | 0 | 0 |
| Madison, WI | 1 | 0 | 1 | 0 |
| Nashville-Davidson--Murfreesboro--Franklin, TN | 0 | 0 | 0 | 0 |
| Madera, CA | 1 | 1 | 0 | 0 |
| Fargo, ND-MN | 1 | 0 | 0 | 0 |
| Omaha-Council Bluffs, NE-IA | 0 | 0 | 0 | 0 |
| Bakersfield, CA | 0 | 1 | 0 | 0 |
| Dallas-Fort Worth-Arlington, TX | 0 | 0 | 0 | 0 |
| New York-Newark-Jersey City, NY-NJ-PA | 0 | 0 | 0 | 1 |
| Charleston-North Charleston, SC | 1 | 0 | 0 | 0 |
| Fort Collins, CO | 1 | 0 | 0 | 0 |

| MSA | MSA Population from 0-499999 | BEA Region - Far West | MSA - Region Great Lakes | BEA Region - Mideast |
|---|---|---|---|---|
| San Diego-Carlsbad, CA | 0 | 1 | 0 | 0 |
| Abilene, TX | 1 | 0 | 0 | 0 |
| Baltimore-Columbia-Towson, MD | 0 | 0 | 0 | 1 |
| Huntsville, AL | 0 | 0 | 0 | 0 |
| La Crosse-Onalaska, WI-MN | 1 | 0 | 1 | 0 |
| Washington-Arlington-Alexandria, DC-VA-MD-WV | 0 | 0 | 0 | 1 |
| Burlington-South Burlington, VT | 1 | 0 | 0 | 0 |
| Napa, CA | 1 | 1 | 0 | 0 |
| Tulsa, OK | 0 | 0 | 0 | 0 |
| San Luis Obispo-Paso Robles-Arroyo Grande, CA | 1 | 1 | 0 | 0 |
| Raleigh, NC | 0 | 0 | 0 | 0 |
| Wausau, WI | 1 | 0 | 1 | 0 |
| El Centro, CA | 1 | 1 | 0 | 0 |
| Crestview-Fort Walton Beach-Destin, FL | 1 | 0 | 0 | 0 |
| Bellingham, WA | 1 | 1 | 0 | 0 |
| Albany-Schenectady-Troy, NY | 0 | 0 | 0 | 1 |
| Minneapolis-St. Paul-Bloomington, MN-WI | 0 | 0 | 0 | 0 |
| Wooster, OH | 1 | 0 | 1 | 0 |
| Cincinnati, OH-KY-IN | 0 | 0 | 1 | 0 |
| Bend-Redmond, OR | 1 | 1 | 0 | 0 |
| Portland-South Portland, ME | 1 | 0 | 0 | 0 |
| Yakima, WA | 1 | 1 | 0 | 0 |
| Buffalo-Cheektowaga-Niagara Falls, NY | 0 | 0 | 0 | 1 |
| Syracuse, NY | 0 | 0 | 0 | 1 |
| Palm Bay-Melbourne-Titusville, FL | 1 | 0 | 0 | 0 |
| Dothan, AL | 1 | 0 | 0 | 0 |
| Waterloo-Cedar Falls, IA | 1 | 0 | 0 | 0 |
| Watertown-Fort Drum, NY | 1 | 0 | 0 | 1 |
| Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | 0 | 0 | 0 | 1 |
| Waco, TX | 1 | 0 | 0 | 0 |
| San Angelo, TX | 1 | 0 | 0 | 0 |
| Santa Rosa, CA | 1 | 1 | 0 | 0 |
| Auburn-Opelika, AL | 1 | 0 | 0 | 0 |
| Appleton, WI | 1 | 0 | 1 | 0 |
| Shreveport-Bossier City, LA | 1 | 0 | 0 | 0 |
| Hanford-Corcoran, CA | 1 | 1 | 0 | 0 |
| Kansas City, MO-KS | 0 | 0 | 0 | 0 |
| Ogden-Clearfield, UT | 1 | 0 | 0 | 0 |
| Fayetteville-Springdale-Rogers, AR-MO | 1 | 0 | 0 | 0 |
| Sherman-Denison, TX | 1 | 0 | 0 | 0 |
| Asheville, NC | 1 | 0 | 0 | 0 |

| MSA | MSA Population from 0-499999 | BEA Region - Far West | MSA - Region Great Lakes | BEA Region - Mideast |
|---|---|---|---|---|
| State College, PA | 1 | 0 | 0 | 1 |
| Visalia-Porterville, CA | 1 | 1 | 0 | 0 |
| Charlotte-Concord-Gastonia, NC-SC | 0 | 0 | 0 | 0 |
| Chattanooga, TN-GA | 1 | 0 | 0 | 0 |
| Salem, OR | 1 | 1 | 0 | 0 |
| College Station-Bryan, TX | 1 | 0 | 0 | 0 |
| Mobile, AL | 1 | 0 | 0 | 0 |
| Hartford-West Hartford-East Hartford, CT | 0 | 0 | 0 | 0 |
| Chicago-Naperville-Elgin, IL-IN-WI | 0 | 0 | 1 | 0 |
| Knoxville, TN | 1 | 0 | 0 | 0 |
| Salinas, CA | 1 | 1 | 0 | 0 |
| Malvern, AR | 1 | 0 | 0 | 0 |
| Gainesville, GA | 1 | 0 | 0 | 0 |
| Harrisburg-Carlisle, PA | 1 | 0 | 0 | 1 |
| Sierra Vista-Douglas, AZ | 1 | 0 | 0 | 0 |
| Fayetteville, NC | 1 | 0 | 0 | 0 |
| Lebanon, PA | 1 | 0 | 0 | 1 |
| Atlanta-Sandy Springs-Roswell, GA | 0 | 0 | 0 | 0 |
| Fresno, CA | 0 | 1 | 0 | 0 |
| Altoona, PA | 1 | 0 | 0 | 1 |
| Oxnard-Thousand Oaks-Ventura, CA | 0 | 1 | 0 | 0 |
| Lewiston-Auburn, ME | 1 | 0 | 0 | 0 |
| Lake Havasu City-Kingman, AZ | 0 | 0 | 0 | 0 |
| Little Rock-North Little Rock-Conway, AR | 1 | 0 | 0 | 0 |
| Billings, MT | 1 | 0 | 0 | 0 |
| East Stroudsburg, PA | 1 | 0 | 0 | 1 |
| Ocean City, NJ | 1 | 0 | 0 | 1 |
| Miami-Fort Lauderdale-West Palm Beach, FL | 0 | 0 | 0 | 0 |
| Anchorage, AK | 1 | 1 | 0 | 0 |
| Santa Cruz-Watsonville, CA | 1 | 1 | 0 | 0 |
| Florence, SC | 1 | 0 | 0 | 0 |
| El Paso, TX | 0 | 0 | 0 | 0 |
| Worcester, MA-CT | 0 | 0 | 0 | 0 |
| Cleveland-Elyria, OH | 0 | 0 | 1 | 0 |
| Lafayette-West Lafayette, IN | 1 | 0 | 1 | 0 |
| Merced, CA | 1 | 1 | 0 | 0 |
| Spokane-Spokane Valley, WA | 1 | 1 | 0 | 0 |
| Urban Honolulu, HI | 0 | 1 | 0 | 0 |
| Bremerton-Silverdale, WA | 1 | 1 | 0 | 0 |
| Jackson, MI | 1 | 0 | 1 | 0 |
| Janesville-Beloit, WI | 1 | 0 | 1 | 0 |

| MSA | MSA Population from 0-499999 | BEA Region - Far West | MSA - Region Great Lakes | BEA Region - Mideast |
|---|---|---|---|---|
| Sumter, SC | 1 | 0 | 0 | 0 |
| Hammond, LA | 1 | 0 | 0 | 0 |
| Niles-Benton Harbor, MI | 1 | 0 | 1 | 0 |
| Utica-Rome, NY | 1 | 0 | 0 | 1 |
| Spartanburg, SC | 1 | 0 | 0 | 0 |
| Kingston, NY | 1 | 0 | 0 | 1 |
| Columbus, OH | 0 | 0 | 1 | 0 |
| San Antonio-New Braunfels, TX | 0 | 0 | 0 | 0 |
| Sacramento--Roseville--Arden-Arcade, CA | 0 | 1 | 0 | 0 |
| Modesto, CA | 1 | 1 | 0 | 0 |
| Davenport-Moline-Rock Island, IA-IL | 1 | 0 | 0 | 0 |
| Denver-Aurora-Lakewood, CO | 0 | 0 | 0 | 0 |
| South Bend-Mishawaka, IN-MI | 1 | 0 | 1 | 0 |
| Louisville/Jefferson County, KY-IN | 0 | 0 | 0 | 0 |
| Chico, CA | 1 | 1 | 0 | 0 |
| Tampa-St. Petersburg-Clearwater, FL | 0 | 0 | 0 | 0 |
| Amarillo, TX | 1 | 0 | 0 | 0 |
| Phoenix-Mesa-Scottsdale, AZ | 0 | 0 | 0 | 0 |
| Decatur, AL | 1 | 0 | 0 | 0 |
| Yuma, AZ | 1 | 0 | 0 | 0 |
| Savannah, GA | 1 | 0 | 0 | 0 |
| Sheboygan, WI | 1 | 0 | 1 | 0 |
| Panama City, FL | 1 | 0 | 0 | 0 |
| St. Cloud, MN | 1 | 0 | 0 | 0 |
| Riverside-San Bernardino-Ontario, CA | 0 | 1 | 0 | 0 |
| Scranton--Wilkes-Barre--Hazleton, PA | 0 | 0 | 0 | 1 |
| Johnson City, TN | 1 | 0 | 0 | 0 |
| Columbus, GA-AL | 1 | 0 | 0 | 0 |
| Dayton, OH | 0 | 0 | 1 | 0 |
| St. Louis, MO-IL | 0 | 0 | 0 | 0 |
| Coeur d'Alene, ID | 1 | 0 | 0 | 0 |
| Ottawa-Peru, IL | 1 | 0 | 1 | 0 |
| Ogdensburg-Massena, NY | 1 | 0 | 0 | 1 |
| Topeka, KS | 1 | 0 | 0 | 0 |
| Tyler, TX | 1 | 0 | 0 | 0 |
| Tuscaloosa, AL | 1 | 0 | 0 | 0 |
| Akron, OH | 0 | 0 | 1 | 0 |
| Providence-Warwick, RI-MA | 0 | 0 | 0 | 0 |
| Decatur, IL | 1 | 0 | 1 | 0 |
| North Port-Sarasota-Bradenton, FL | 0 | 0 | 0 | 0 |
| Daphne-Fairhope-Foley, AL | 1 | 0 | 0 | 0 |

| MSA | MSA Population from 0-499999 | BEA Region - Far West | MSA - Region Great Lakes | BEA Region - Mideast |
|---|---|---|---|---|
| Grand Rapids-Wyoming, MI | 0 | 0 | 1 | 0 |
| Lexington-Fayette, KY | 1 | 0 | 0 | 0 |
| Jacksonville, FL | 0 | 0 | 0 | 0 |
| Toledo, OH | 0 | 0 | 1 | 0 |
| Monroe, LA | 1 | 0 | 0 | 0 |
| Laredo, TX | 1 | 0 | 0 | 0 |
| Lincoln, NE | 1 | 0 | 0 | 0 |
| Redding, CA | 1 | 1 | 0 | 0 |
| Medford, OR | 1 | 1 | 0 | 0 |
| Oshkosh-Neenah, WI | 1 | 0 | 1 | 0 |
| Bloomington, IN | 1 | 0 | 1 | 0 |
| Augusta-Waterville, ME | 1 | 0 | 0 | 0 |
| Houston-The Woodlands-Sugar Land, TX | 0 | 0 | 0 | 0 |
| Chambersburg-Waynesboro, PA | 1 | 0 | 0 | 1 |
| Lawton, OK | 1 | 0 | 0 | 0 |
| Indianapolis-Carmel-Anderson, IN | 0 | 0 | 1 | 0 |
| Birmingham-Hoover, AL | 0 | 0 | 0 | 0 |
| Pittsfield, MA | 1 | 0 | 0 | 0 |
| Columbia, MO | 1 | 0 | 0 | 0 |
| Barnstable Town, MA | 1 | 0 | 0 | 0 |
| Sebastian-Vero Beach, FL | 1 | 0 | 0 | 0 |
| New Haven-Milford, CT | 0 | 0 | 0 | 0 |
| Greenville, NC | 1 | 0 | 0 | 0 |
| Lubbock, TX | 1 | 0 | 0 | 0 |
| Anniston-Oxford-Jacksonville, AL | 1 | 0 | 0 | 0 |
| Deltona-Daytona Beach-Ormond Beach, FL | 1 | 0 | 0 | 0 |
| Milwaukee-Waukesha-West Allis, WI | 0 | 0 | 1 | 0 |
| Reading, PA | 1 | 0 | 0 | 1 |
| Virginia Beach-Norfolk-Newport News, VA-NC | 0 | 0 | 0 | 0 |
| Wichita, KS | 1 | 0 | 0 | 0 |
| Pottsville, PA | 1 | 0 | 0 | 1 |
| Johnstown, PA | 1 | 0 | 0 | 1 |
| Olympia-Tumwater, WA | 1 | 1 | 0 | 0 |
| Pensacola-Ferry Pass-Brent, FL | 1 | 0 | 0 | 0 |
| Ann Arbor, MI | 1 | 0 | 1 | 0 |
| Norwich-New London, CT | 1 | 0 | 0 | 0 |
| Binghamton, NY | 1 | 0 | 0 | 1 |
| Springfield, MO | 1 | 0 | 0 | 0 |
| New Orleans-Metairie, LA | 0 | 0 | 0 | 0 |
| Alexandria, LA | 1 | 0 | 0 | 0 |
| Eugene, OR | 1 | 1 | 0 | 0 |

| MSA | MSA Population from 0-499999 | BEA Region - Far West | MSA - Region Great Lakes | BEA Region - Mideast |
|---|---|---|---|---|
| Flagstaff, AZ | 1 | 0 | 0 | 0 |
| Salem, OH | 1 | 0 | 1 | 0 |
| Springfield, MA | 0 | 0 | 0 | 0 |
| Beaumont-Port Arthur, TX | 1 | 0 | 0 | 0 |
| Stockton-Lodi, CA | 0 | 1 | 0 | 0 |
| Mount Vernon-Anacortes, WA | 1 | 1 | 0 | 0 |
| Wilmington, NC | 1 | 0 | 0 | 0 |
| Flint, MI | 1 | 0 | 1 | 0 |
| Iowa City, IA | 1 | 0 | 0 | 0 |
| Lancaster, PA | 1 | 0 | 0 | 1 |
| Punta Gorda, FL | 1 | 0 | 0 | 0 |
| Brownsville-Harlingen, TX | 1 | 0 | 0 | 0 |
| Las Cruces, NM | 1 | 0 | 0 | 0 |
| Roseburg, OR | 1 | 1 | 0 | 0 |
| Montgomery, AL | 1 | 0 | 0 | 0 |
| Killeen-Temple, TX | 1 | 0 | 0 | 0 |
| Eureka-Arcata-Fortuna, CA | 1 | 1 | 0 | 0 |
| Duluth, MN-WI | 1 | 0 | 0 | 0 |
| York-Hanover, PA | 1 | 0 | 0 | 1 |
| Columbia, SC | 0 | 0 | 0 | 0 |
| Peoria, IL | 1 | 0 | 1 | 0 |
| Albany, OR | 1 | 1 | 0 | 0 |
| Detroit-Warren-Dearborn, MI | 0 | 0 | 1 | 0 |
| Ocala, FL | 1 | 0 | 0 | 0 |
| Canton-Massillon, OH | 1 | 0 | 1 | 0 |
| Battle Creek, MI | 1 | 0 | 1 | 0 |
| Pueblo, CO | 1 | 0 | 0 | 0 |
| Colorado Springs, CO | 0 | 0 | 0 | 0 |
| Holland, MI | 1 | 0 | 1 | 0 |
| Hagerstown-Martinsburg, MD-WV | 1 | 0 | 0 | 1 |
| Champaign-Urbana, IL | 1 | 0 | 1 | 0 |
| Prescott, AZ | 1 | 0 | 0 | 0 |
| Saginaw, MI | 1 | 0 | 1 | 0 |
| Grand Junction, CO | 1 | 0 | 0 | 0 |
| Wichita Falls, TX | 1 | 0 | 0 | 0 |
| Gulfport-Biloxi-Pascagoula, MS | 1 | 0 | 0 | 0 |
| Vineland-Bridgeton, NJ | 1 | 0 | 0 | 1 |
| Boise City, ID | 1 | 0 | 0 | 0 |
| Ashtabula, OH | 1 | 0 | 1 | 0 |
| Corpus Christi, TX | 1 | 0 | 0 | 0 |
| Clarksville, TN-KY | 1 | 0 | 0 | 0 |

| MSA | MSA Population from 0-499999 | BEA Region - Far West | MSA - Region Great Lakes | BEA Region - Mideast |
|---|---|---|---|---|
| Orlando-Kissimmee-Sanford, FL | 0 | 0 | 0 | 0 |
| Lakeland-Winter Haven, FL | 1 | 0 | 0 | 0 |
| Cape Coral-Fort Myers, FL | 1 | 0 | 0 | 0 |
| Augusta-Richmond County, GA-SC | 1 | 0 | 0 | 0 |
| Lansing-East Lansing, MI | 1 | 0 | 1 | 0 |
| Kalamazoo-Portage, MI | 1 | 0 | 1 | 0 |
| Evansville, IN-KY | 1 | 0 | 1 | 0 |
| Bangor, ME | 1 | 0 | 0 | 0 |
| Terre Haute, IN | 1 | 0 | 1 | 0 |
| Longview, TX | 1 | 0 | 0 | 0 |
| Rochester, NY | 0 | 0 | 0 | 1 |
| Erie, PA | 1 | 0 | 0 | 1 |
| Tucson, AZ | 0 | 0 | 0 | 0 |
| Albuquerque, NM | 0 | 0 | 0 | 0 |
| Youngstown-Warren-Boardman, OH-PA | 0 | 0 | 1 | 0 |
| Sioux City, IA-NE-SD | 1 | 0 | 0 | 0 |
| Concord, NH | 1 | 0 | 0 | 0 |
| Naples-Immokalee-Marco Island, FL | 1 | 0 | 0 | 0 |
| Greenville-Anderson-Mauldin, SC | 0 | 0 | 0 | 0 |
| Warner Robins, GA | 1 | 0 | 0 | 0 |
| Muskegon, MI | 1 | 0 | 1 | 0 |
| Athens-Clarke County, GA | 1 | 0 | 0 | 0 |
| Fort Smith, AR-OK | 1 | 0 | 0 | 0 |
| Gadsden, AL | 1 | 0 | 0 | 0 |
| Kahului-Wailuku-Lahaina, HI | 1 | 1 | 0 | 0 |
| Port St. Lucie, FL | 1 | 0 | 0 | 0 |
| Jacksonville, NC | 1 | 0 | 0 | 0 |
| Michigan City-La Porte, IN | 1 | 0 | 1 | 0 |
| Springfield, OH | 1 | 0 | 1 | 0 |
| Mansfield, OH | 1 | 0 | 1 | 0 |
| Richmond, VA | 0 | 0 | 0 | 0 |
| Rockford, IL | 1 | 0 | 1 | 0 |
| Memphis, TN-MS-AR | 0 | 0 | 0 | 0 |
| Charleston, WV | 1 | 0 | 0 | 0 |
| Burlington, NC | 1 | 0 | 0 | 0 |
| Kingsport-Bristol-Bristol, TN-VA | 1 | 0 | 0 | 0 |
| McAllen-Edinburg-Mission, TX | 0 | 0 | 0 | 0 |
| Springfield, IL | 1 | 0 | 1 | 0 |
| Bay City, MI | 1 | 0 | 1 | 0 |
| Dover, DE | 1 | 0 | 0 | 1 |
| Monroe, MI | 1 | 0 | 1 | 0 |

| MSA | MSA Population from 0-499999 | BEA Region - Far West | MSA - Region Great Lakes | BEA Region - Mideast |
|---|---|---|---|---|
| Salisbury, MD-DE | 1 | 0 | 0 | 1 |
| Jamestown-Dunkirk-Fredonia, NY | 1 | 0 | 0 | 1 |
| Lake Charles, LA | 1 | 0 | 0 | 0 |
| Jackson, MS | 1 | 0 | 0 | 0 |
| Homosassa Springs, FL | 1 | 0 | 0 | 0 |
| Goldsboro, NC | 1 | 0 | 0 | 0 |
| Santa Fe, NM | 1 | 0 | 0 | 0 |
| Joplin, MO | 1 | 0 | 0 | 0 |
| Torrington, CT | 1 | 0 | 0 | 0 |
| Muncie, IN | 1 | 0 | 1 | 0 |
| Lumberton, NC | 1 | 0 | 0 | 0 |
| Reno, NV | 1 | 1 | 0 | 0 |
| Hickory-Lenoir-Morganton, NC | 1 | 0 | 0 | 0 |
| Bridgeport-Stamford-Norwalk, CT | 0 | 0 | 0 | 0 |
| Myrtle Beach-Conway-North Myrtle Beach, SC-NC | 1 | 0 | 0 | 0 |
| Tallahassee, FL | 1 | 0 | 0 | 0 |
| Las Vegas-Henderson-Paradise, NV | 0 | 1 | 0 | 0 |
| Macon, GA | 1 | 0 | 0 | 0 |
| Racine, WI | 1 | 0 | 1 | 0 |
| Hilton Head Island-Bluffton-Beaufort, SC | 1 | 0 | 0 | 0 |
| Winston-Salem, NC | 1 | 0 | 0 | 0 |
| Greensboro-High Point, NC | 0 | 0 | 0 | 0 |
| Lafayette, LA | 1 | 0 | 0 | 0 |
| Allentown-Bethlehem-Easton, PA-NJ | 0 | 0 | 0 | 1 |
| Atlantic City-Hammonton, NJ | 1 | 0 | 0 | 1 |
| Farmington, NM | 1 | 0 | 0 | 0 |
| Houma-Thibodaux, LA | 1 | 0 | 0 | 0 |

| MSA | BEA Region - New England | BEA Region - Plains | BEA Region - Rocky Mountain |
|---|---|---|---|
| San Jose-Sunnyvale-Santa Clara, CA | 0 | 0 | 0 |
| Midland, TX | 0 | 0 | 0 |
| San Francisco-Oakland-Hayward, CA | 0 | 0 | 0 |
| Seattle-Tacoma-Bellevue, WA | 0 | 0 | 0 |
| Elkhart-Goshen, IN | 0 | 0 | 0 |
| Greeley, CO | 0 | 0 | 1 |
| Austin-Round Rock, TX | 0 | 0 | 0 |
| Durham-Chapel Hill, NC | 0 | 0 | 0 |
| Sioux Falls, SD | 0 | 1 | 0 |
| Odessa, TX | 0 | 0 | 0 |
| Salt Lake City, UT | 0 | 0 | 1 |
| Boulder, CO | 0 | 0 | 1 |
| Boston-Cambridge-Newton, MA-NH | 1 | 0 | 0 |
| Lima, OH | 0 | 0 | 0 |
| Trenton, NJ | 0 | 0 | 0 |
| Oklahoma City, OK | 0 | 0 | 0 |
| Rochester, MN | 0 | 1 | 0 |
| Bloomington, IL | 0 | 0 | 0 |
| Des Moines-West Des Moines, IA | 0 | 1 | 0 |
| Kankakee, IL | 0 | 0 | 0 |
| Cedar Rapids, IA | 0 | 1 | 0 |
| Portland-Vancouver-Hillsboro, OR-WA | 0 | 0 | 0 |
| Vallejo-Fairfield, CA | 0 | 0 | 0 |
| Los Angeles-Long Beach-Anaheim, CA | 0 | 0 | 0 |
| Nogales, AZ | 0 | 0 | 0 |
| Manchester-Nashua, NH | 1 | 0 | 0 |
| Pittsburgh, PA | 0 | 0 | 0 |
| Provo-Orem, UT | 0 | 0 | 1 |
| Santa Maria-Santa Barbara, CA | 0 | 0 | 0 |
| Williamsport, PA | 0 | 0 | 0 |
| Baton Rouge, LA | 0 | 0 | 0 |
| Madison, WI | 0 | 0 | 0 |
| Nashville-Davidson--Murfreesboro--Franklin, TN | 0 | 0 | 0 |
| Madera, CA | 0 | 0 | 0 |
| Fargo, ND-MN | 0 | 1 | 0 |
| Omaha-Council Bluffs, NE-IA | 0 | 1 | 0 |
| Bakersfield, CA | 0 | 0 | 0 |
| Dallas-Fort Worth-Arlington, TX | 0 | 0 | 0 |
| New York-Newark-Jersey City, NY-NJ-PA | 0 | 0 | 0 |
| Charleston-North Charleston, SC | 0 | 0 | 0 |
| Fort Collins, CO | 0 | 0 | 1 |

| MSA | BEA Region - New England | BEA Region - Plains | BEA Region - Rocky Mountain |
|---|---|---|---|
| San Diego-Carlsbad, CA | 0 | 0 | 0 |
| Abilene, TX | 0 | 0 | 0 |
| Baltimore-Columbia-Towson, MD | 0 | 0 | 0 |
| Huntsville, AL | 0 | 0 | 0 |
| La Crosse-Onalaska, WI-MN | 0 | 0 | 0 |
| Washington-Arlington-Alexandria, DC-VA-MD-WV | 0 | 0 | 0 |
| Burlington-South Burlington, VT | 1 | 0 | 0 |
| Napa, CA | 0 | 0 | 0 |
| Tulsa, OK | 0 | 0 | 0 |
| San Luis Obispo-Paso Robles-Arroyo Grande, CA | 0 | 0 | 0 |
| Raleigh, NC | 0 | 0 | 0 |
| Wausau, WI | 0 | 0 | 0 |
| El Centro, CA | 0 | 0 | 0 |
| Crestview-Fort Walton Beach-Destin, FL | 0 | 0 | 0 |
| Bellingham, WA | 0 | 0 | 0 |
| Albany-Schenectady-Troy, NY | 0 | 0 | 0 |
| Minneapolis-St. Paul-Bloomington, MN-WI | 0 | 1 | 0 |
| Wooster, OH | 0 | 0 | 0 |
| Cincinnati, OH-KY-IN | 0 | 0 | 0 |
| Bend-Redmond, OR | 0 | 0 | 0 |
| Portland-South Portland, ME | 1 | 0 | 0 |
| Yakima, WA | 0 | 0 | 0 |
| Buffalo-Cheektowaga-Niagara Falls, NY | 0 | 0 | 0 |
| Syracuse, NY | 0 | 0 | 0 |
| Palm Bay-Melbourne-Titusville, FL | 0 | 0 | 0 |
| Dothan, AL | 0 | 0 | 0 |
| Waterloo-Cedar Falls, IA | 0 | 1 | 0 |
| Watertown-Fort Drum, NY | 0 | 0 | 0 |
| Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | 0 | 0 | 0 |
| Waco, TX | 0 | 0 | 0 |
| San Angelo, TX | 0 | 0 | 0 |
| Santa Rosa, CA | 0 | 0 | 0 |
| Auburn-Opelika, AL | 0 | 0 | 0 |
| Appleton, WI | 0 | 0 | 0 |
| Shreveport-Bossier City, LA | 0 | 0 | 0 |
| Hanford-Corcoran, CA | 0 | 0 | 0 |
| Kansas City, MO-KS | 0 | 1 | 0 |
| Ogden-Clearfield, UT | 0 | 0 | 1 |
| Fayetteville-Springdale-Rogers, AR-MO | 0 | 0 | 0 |
| Sherman-Denison, TX | 0 | 0 | 0 |
| Asheville, NC | 0 | 0 | 0 |

| MSA | BEA Region - New England | BEA Region - Plains | BEA Region - Rocky Mountain |
|---|---|---|---|
| State College, PA | 0 | 0 | 0 |
| Visalia-Porterville, CA | 0 | 0 | 0 |
| Charlotte-Concord-Gastonia, NC-SC | 0 | 0 | 0 |
| Chattanooga, TN-GA | 0 | 0 | 0 |
| Salem, OR | 0 | 0 | 0 |
| College Station-Bryan, TX | 0 | 0 | 0 |
| Mobile, AL | 0 | 0 | 0 |
| Hartford-West Hartford-East Hartford, CT | 1 | 0 | 0 |
| Chicago-Naperville-Elgin, IL-IN-WI | 0 | 0 | 0 |
| Knoxville, TN | 0 | 0 | 0 |
| Salinas, CA | 0 | 0 | 0 |
| Malvern, AR | 0 | 0 | 0 |
| Gainesville, GA | 0 | 0 | 0 |
| Harrisburg-Carlisle, PA | 0 | 0 | 0 |
| Sierra Vista-Douglas, AZ | 0 | 0 | 0 |
| Fayetteville, NC | 0 | 0 | 0 |
| Lebanon, PA | 0 | 0 | 0 |
| Atlanta-Sandy Springs-Roswell, GA | 0 | 0 | 0 |
| Fresno, CA | 0 | 0 | 0 |
| Altoona, PA | 0 | 0 | 0 |
| Oxnard-Thousand Oaks-Ventura, CA | 0 | 0 | 0 |
| Lewiston-Auburn, ME | 1 | 0 | 0 |
| Lake Havasu City-Kingman, AZ | 0 | 0 | 0 |
| Little Rock-North Little Rock-Conway, AR | 0 | 0 | 0 |
| Billings, MT | 0 | 0 | 1 |
| East Stroudsburg, PA | 0 | 0 | 0 |
| Ocean City, NJ | 0 | 0 | 0 |
| Miami-Fort Lauderdale-West Palm Beach, FL | 0 | 0 | 0 |
| Anchorage, AK | 0 | 0 | 0 |
| Santa Cruz-Watsonville, CA | 0 | 0 | 0 |
| Florence, SC | 0 | 0 | 0 |
| El Paso, TX | 0 | 0 | 0 |
| Worcester, MA-CT | 1 | 0 | 0 |
| Cleveland-Elyria, OH | 0 | 0 | 0 |
| Lafayette-West Lafayette, IN | 0 | 0 | 0 |
| Merced, CA | 0 | 0 | 0 |
| Spokane-Spokane Valley, WA | 0 | 0 | 0 |
| Urban Honolulu, HI | 0 | 0 | 0 |
| Bremerton-Silverdale, WA | 0 | 0 | 0 |
| Jackson, MI | 0 | 0 | 0 |
| Janesville-Beloit, WI | 0 | 0 | 0 |

| MSA | BEA Region - New England | BEA Region - Plains | BEA Region - Rocky Mountain |
|---|---|---|---|
| Sumter, SC | 0 | 0 | 0 |
| Hammond, LA | 0 | 0 | 0 |
| Niles-Benton Harbor, MI | 0 | 0 | 0 |
| Utica-Rome, NY | 0 | 0 | 0 |
| Spartanburg, SC | 0 | 0 | 0 |
| Kingston, NY | 0 | 0 | 0 |
| Columbus, OH | 0 | 0 | 0 |
| San Antonio-New Braunfels, TX | 0 | 0 | 0 |
| Sacramento--Roseville--Arden-Arcade, CA | 0 | 0 | 0 |
| Modesto, CA | 0 | 0 | 0 |
| Davenport-Moline-Rock Island, IA-IL | 0 | 1 | 0 |
| Denver-Aurora-Lakewood, CO | 0 | 0 | 1 |
| South Bend-Mishawaka, IN-MI | 0 | 0 | 0 |
| Louisville/Jefferson County, KY-IN | 0 | 0 | 0 |
| Chico, CA | 0 | 0 | 0 |
| Tampa-St. Petersburg-Clearwater, FL | 0 | 0 | 0 |
| Amarillo, TX | 0 | 0 | 0 |
| Phoenix-Mesa-Scottsdale, AZ | 0 | 0 | 0 |
| Decatur, AL | 0 | 0 | 0 |
| Yuma, AZ | 0 | 0 | 0 |
| Savannah, GA | 0 | 0 | 0 |
| Sheboygan, WI | 0 | 0 | 0 |
| Panama City, FL | 0 | 0 | 0 |
| St. Cloud, MN | 0 | 1 | 0 |
| Riverside-San Bernardino-Ontario, CA | 0 | 0 | 0 |
| Scranton--Wilkes-Barre--Hazleton, PA | 0 | 0 | 0 |
| Johnson City, TN | 0 | 0 | 0 |
| Columbus, GA-AL | 0 | 0 | 0 |
| Dayton, OH | 0 | 0 | 0 |
| St. Louis, MO-IL | 0 | 1 | 0 |
| Coeur d'Alene, ID | 0 | 0 | 1 |
| Ottawa-Peru, IL | 0 | 0 | 0 |
| Ogdensburg-Massena, NY | 0 | 0 | 0 |
| Topeka, KS | 0 | 1 | 0 |
| Tyler, TX | 0 | 0 | 0 |
| Tuscaloosa, AL | 0 | 0 | 0 |
| Akron, OH | 0 | 0 | 0 |
| Providence-Warwick, RI-MA | 1 | 0 | 0 |
| Decatur, IL | 0 | 0 | 0 |
| North Port-Sarasota-Bradenton, FL | 0 | 0 | 0 |
| Daphne-Fairhope-Foley, AL | 0 | 0 | 0 |

| MSA | BEA Region - New England | BEA Region - Plains | BEA Region - Rocky Mountain |
|---|---|---|---|
| Grand Rapids-Wyoming, MI | 0 | 0 | 0 |
| Lexington-Fayette, KY | 0 | 0 | 0 |
| Jacksonville, FL | 0 | 0 | 0 |
| Toledo, OH | 0 | 0 | 0 |
| Monroe, LA | 0 | 0 | 0 |
| Laredo, TX | 0 | 0 | 0 |
| Lincoln, NE | 0 | 1 | 0 |
| Redding, CA | 0 | 0 | 0 |
| Medford, OR | 0 | 0 | 0 |
| Oshkosh-Neenah, WI | 0 | 0 | 0 |
| Bloomington, IN | 0 | 0 | 0 |
| Augusta-Waterville, ME | 1 | 0 | 0 |
| Houston-The Woodlands-Sugar Land, TX | 0 | 0 | 0 |
| Chambersburg-Waynesboro, PA | 0 | 0 | 0 |
| Lawton, OK | 0 | 0 | 0 |
| Indianapolis-Carmel-Anderson, IN | 0 | 0 | 0 |
| Birmingham-Hoover, AL | 0 | 0 | 0 |
| Pittsfield, MA | 1 | 0 | 0 |
| Columbia, MO | 0 | 1 | 0 |
| Barnstable Town, MA | 1 | 0 | 0 |
| Sebastian-Vero Beach, FL | 0 | 0 | 0 |
| New Haven-Milford, CT | 1 | 0 | 0 |
| Greenville, NC | 0 | 0 | 0 |
| Lubbock, TX | 0 | 0 | 0 |
| Anniston-Oxford-Jacksonville, AL | 0 | 0 | 0 |
| Deltona-Daytona Beach-Ormond Beach, FL | 0 | 0 | 0 |
| Milwaukee-Waukesha-West Allis, WI | 0 | 0 | 0 |
| Reading, PA | 0 | 0 | 0 |
| Virginia Beach-Norfolk-Newport News, VA-NC | 0 | 0 | 0 |
| Wichita, KS | 0 | 1 | 0 |
| Pottsville, PA | 0 | 0 | 0 |
| Johnstown, PA | 0 | 0 | 0 |
| Olympia-Tumwater, WA | 0 | 0 | 0 |
| Pensacola-Ferry Pass-Brent, FL | 0 | 0 | 0 |
| Ann Arbor, MI | 0 | 0 | 0 |
| Norwich-New London, CT | 1 | 0 | 0 |
| Binghamton, NY | 0 | 0 | 0 |
| Springfield, MO | 0 | 1 | 0 |
| New Orleans-Metairie, LA | 0 | 0 | 0 |
| Alexandria, LA | 0 | 0 | 0 |
| Eugene, OR | 0 | 0 | 0 |

| MSA | BEA Region - New England | BEA Region - Plains | BEA Region - Rocky Mountain |
|---|---|---|---|
| Flagstaff, AZ | 0 | 0 | 0 |
| Salem, OH | 0 | 0 | 0 |
| Springfield, MA | 1 | 0 | 0 |
| Beaumont-Port Arthur, TX | 0 | 0 | 0 |
| Stockton-Lodi, CA | 0 | 0 | 0 |
| Mount Vernon-Anacortes, WA | 0 | 0 | 0 |
| Wilmington, NC | 0 | 0 | 0 |
| Flint, MI | 0 | 0 | 0 |
| Iowa City, IA | 0 | 1 | 0 |
| Lancaster, PA | 0 | 0 | 0 |
| Punta Gorda, FL | 0 | 0 | 0 |
| Brownsville-Harlingen, TX | 0 | 0 | 0 |
| Las Cruces, NM | 0 | 0 | 0 |
| Roseburg, OR | 0 | 0 | 0 |
| Montgomery, AL | 0 | 0 | 0 |
| Killeen-Temple, TX | 0 | 0 | 0 |
| Eureka-Arcata-Fortuna, CA | 0 | 0 | 0 |
| Duluth, MN-WI | 0 | 1 | 0 |
| York-Hanover, PA | 0 | 0 | 0 |
| Columbia, SC | 0 | 0 | 0 |
| Peoria, IL | 0 | 0 | 0 |
| Albany, OR | 0 | 0 | 0 |
| Detroit-Warren-Dearborn, MI | 0 | 0 | 0 |
| Ocala, FL | 0 | 0 | 0 |
| Canton-Massillon, OH | 0 | 0 | 0 |
| Battle Creek, MI | 0 | 0 | 0 |
| Pueblo, CO | 0 | 0 | 1 |
| Colorado Springs, CO | 0 | 0 | 1 |
| Holland, MI | 0 | 0 | 0 |
| Hagerstown-Martinsburg, MD-WV | 0 | 0 | 0 |
| Champaign-Urbana, IL | 0 | 0 | 0 |
| Prescott, AZ | 0 | 0 | 0 |
| Saginaw, MI | 0 | 0 | 0 |
| Grand Junction, CO | 0 | 0 | 1 |
| Wichita Falls, TX | 0 | 0 | 0 |
| Gulfport-Biloxi-Pascagoula, MS | 0 | 0 | 0 |
| Vineland-Bridgeton, NJ | 0 | 0 | 0 |
| Boise City, ID | 0 | 0 | 1 |
| Ashtabula, OH | 0 | 0 | 0 |
| Corpus Christi, TX | 0 | 0 | 0 |
| Clarksville, TN-KY | 0 | 0 | 0 |

| MSA | BEA Region - New England | BEA Region - Plains | BEA Region - Rocky Mountain |
|---|---|---|---|
| Orlando-Kissimmee-Sanford, FL | 0 | 0 | 0 |
| Lakeland-Winter Haven, FL | 0 | 0 | 0 |
| Cape Coral-Fort Myers, FL | 0 | 0 | 0 |
| Augusta-Richmond County, GA-SC | 0 | 0 | 0 |
| Lansing-East Lansing, MI | 0 | 0 | 0 |
| Kalamazoo-Portage, MI | 0 | 0 | 0 |
| Evansville, IN-KY | 0 | 0 | 0 |
| Bangor, ME | 1 | 0 | 0 |
| Terre Haute, IN | 0 | 0 | 0 |
| Longview, TX | 0 | 0 | 0 |
| Rochester, NY | 0 | 0 | 0 |
| Erie, PA | 0 | 0 | 0 |
| Tucson, AZ | 0 | 0 | 0 |
| Albuquerque, NM | 0 | 0 | 0 |
| Youngstown-Warren-Boardman, OH-PA | 0 | 0 | 0 |
| Sioux City, IA-NE-SD | 0 | 1 | 0 |
| Concord, NH | 1 | 0 | 0 |
| Naples-Immokalee-Marco Island, FL | 0 | 0 | 0 |
| Greenville-Anderson-Mauldin, SC | 0 | 0 | 0 |
| Warner Robins, GA | 0 | 0 | 0 |
| Muskegon, MI | 0 | 0 | 0 |
| Athens-Clarke County, GA | 0 | 0 | 0 |
| Fort Smith, AR-OK | 0 | 0 | 0 |
| Gadsden, AL | 0 | 0 | 0 |
| Kahului-Wailuku-Lahaina, HI | 0 | 0 | 0 |
| Port St. Lucie, FL | 0 | 0 | 0 |
| Jacksonville, NC | 0 | 0 | 0 |
| Michigan City-La Porte, IN | 0 | 0 | 0 |
| Springfield, OH | 0 | 0 | 0 |
| Mansfield, OH | 0 | 0 | 0 |
| Richmond, VA | 0 | 0 | 0 |
| Rockford, IL | 0 | 0 | 0 |
| Memphis, TN-MS-AR | 0 | 0 | 0 |
| Charleston, WV | 0 | 0 | 0 |
| Burlington, NC | 0 | 0 | 0 |
| Kingsport-Bristol-Bristol, TN-VA | 0 | 0 | 0 |
| McAllen-Edinburg-Mission, TX | 0 | 0 | 0 |
| Springfield, IL | 0 | 0 | 0 |
| Bay City, MI | 0 | 0 | 0 |
| Dover, DE | 0 | 0 | 0 |
| Monroe, MI | 0 | 0 | 0 |

| MSA | BEA Region - New England | BEA Region - Plains | BEA Region - Rocky Mountain |
|---|---|---|---|
| Salisbury, MD-DE | 0 | 0 | 0 |
| Jamestown-Dunkirk-Fredonia, NY | 0 | 0 | 0 |
| Lake Charles, LA | 0 | 0 | 0 |
| Jackson, MS | 0 | 0 | 0 |
| Homosassa Springs, FL | 0 | 0 | 0 |
| Goldsboro, NC | 0 | 0 | 0 |
| Santa Fe, NM | 0 | 0 | 0 |
| Joplin, MO | 0 | 1 | 0 |
| Torrington, CT | 1 | 0 | 0 |
| Muncie, IN | 0 | 0 | 0 |
| Lumberton, NC | 0 | 0 | 0 |
| Reno, NV | 0 | 0 | 0 |
| Hickory-Lenoir-Morganton, NC | 0 | 0 | 0 |
| Bridgeport-Stamford-Norwalk, CT | 1 | 0 | 0 |
| Myrtle Beach-Conway-North Myrtle Beach, SC-NC | 0 | 0 | 0 |
| Tallahassee, FL | 0 | 0 | 0 |
| Las Vegas-Henderson-Paradise, NV | 0 | 0 | 0 |
| Macon, GA | 0 | 0 | 0 |
| Racine, WI | 0 | 0 | 0 |
| Hilton Head Island-Bluffton-Beaufort, SC | 0 | 0 | 0 |
| Winston-Salem, NC | 0 | 0 | 0 |
| Greensboro-High Point, NC | 0 | 0 | 0 |
| Lafayette, LA | 0 | 0 | 0 |
| Allentown-Bethlehem-Easton, PA-NJ | 0 | 0 | 0 |
| Atlantic City-Hammonton, NJ | 0 | 0 | 0 |
| Farmington, NM | 0 | 0 | 0 |
| Houma-Thibodaux, LA | 0 | 0 | 0 |

| MSA | BEA Region - Southeast |
|---|---|
| San Jose-Sunnyvale-Santa Clara, CA | 0 |
| Midland, TX | 0 |
| San Francisco-Oakland-Hayward, CA | 0 |
| Seattle-Tacoma-Bellevue, WA | 0 |
| Elkhart-Goshen, IN | 0 |
| Greeley, CO | 0 |
| Austin-Round Rock, TX | 0 |
| Durham-Chapel Hill, NC | 1 |
| Sioux Falls, SD | 0 |
| Odessa, TX | 0 |
| Salt Lake City, UT | 0 |
| Boulder, CO | 0 |
| Boston-Cambridge-Newton, MA-NH | 0 |
| Lima, OH | 0 |
| Trenton, NJ | 0 |
| Oklahoma City, OK | 0 |
| Rochester, MN | 0 |
| Bloomington, IL | 0 |
| Des Moines-West Des Moines, IA | 0 |
| Kankakee, IL | 0 |
| Cedar Rapids, IA | 0 |
| Portland-Vancouver-Hillsboro, OR-WA | 0 |
| Vallejo-Fairfield, CA | 0 |
| Los Angeles-Long Beach-Anaheim, CA | 0 |
| Nogales, AZ | 0 |
| Manchester-Nashua, NH | 0 |
| Pittsburgh, PA | 0 |
| Provo-Orem, UT | 0 |
| Santa Maria-Santa Barbara, CA | 0 |
| Williamsport, PA | 0 |
| Baton Rouge, LA | 1 |
| Madison, WI | 0 |
| Nashville-Davidson--Murfreesboro--Franklin, TN | 1 |
| Madera, CA | 0 |
| Fargo, ND-MN | 0 |
| Omaha-Council Bluffs, NE-IA | 0 |
| Bakersfield, CA | 0 |
| Dallas-Fort Worth-Arlington, TX | 0 |
| New York-Newark-Jersey City, NY-NJ-PA | 0 |
| Charleston-North Charleston, SC | 1 |
| Fort Collins, CO | 0 |

| MSA | BEA Region - Southeast |
|---|---|
| San Diego-Carlsbad, CA | 0 |
| Abilene, TX | 0 |
| Baltimore-Columbia-Towson, MD | 0 |
| Huntsville, AL | 1 |
| La Crosse-Onalaska, WI-MN | 0 |
| Washington-Arlington-Alexandria, DC-VA-MD-WV | 0 |
| Burlington-South Burlington, VT | 0 |
| Napa, CA | 0 |
| Tulsa, OK | 0 |
| San Luis Obispo-Paso Robles-Arroyo Grande, CA | 0 |
| Raleigh, NC | 1 |
| Wausau, WI | 0 |
| El Centro, CA | 0 |
| Crestview-Fort Walton Beach-Destin, FL | 1 |
| Bellingham, WA | 0 |
| Albany-Schenectady-Troy, NY | 0 |
| Minneapolis-St. Paul-Bloomington, MN-WI | 0 |
| Wooster, OH | 0 |
| Cincinnati, OH-KY-IN | 0 |
| Bend-Redmond, OR | 0 |
| Portland-South Portland, ME | 0 |
| Yakima, WA | 0 |
| Buffalo-Cheektowaga-Niagara Falls, NY | 0 |
| Syracuse, NY | 0 |
| Palm Bay-Melbourne-Titusville, FL | 1 |
| Dothan, AL | 1 |
| Waterloo-Cedar Falls, IA | 0 |
| Watertown-Fort Drum, NY | 0 |
| Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | 0 |
| Waco, TX | 0 |
| San Angelo, TX | 0 |
| Santa Rosa, CA | 0 |
| Auburn-Opelika, AL | 1 |
| Appleton, WI | 0 |
| Shreveport-Bossier City, LA | 1 |
| Hanford-Corcoran, CA | 0 |
| Kansas City, MO-KS | 0 |
| Ogden-Clearfield, UT | 0 |
| Fayetteville-Springdale-Rogers, AR-MO | 1 |
| Sherman-Denison, TX | 0 |
| Asheville, NC | 1 |

| MSA | BEA Region - Southeast |
|---|---|
| State College, PA | 0 |
| Visalia-Porterville, CA | 0 |
| Charlotte-Concord-Gastonia, NC-SC | 1 |
| Chattanooga, TN-GA | 1 |
| Salem, OR | 0 |
| College Station-Bryan, TX | 0 |
| Mobile, AL | 1 |
| Hartford-West Hartford-East Hartford, CT | 0 |
| Chicago-Naperville-Elgin, IL-IN-WI | 0 |
| Knoxville, TN | 1 |
| Salinas, CA | 0 |
| Malvern, AR | 1 |
| Gainesville, GA | 1 |
| Harrisburg-Carlisle, PA | 0 |
| Sierra Vista-Douglas, AZ | 0 |
| Fayetteville, NC | 1 |
| Lebanon, PA | 0 |
| Atlanta-Sandy Springs-Roswell, GA | 1 |
| Fresno, CA | 0 |
| Altoona, PA | 0 |
| Oxnard-Thousand Oaks-Ventura, CA | 0 |
| Lewiston-Auburn, ME | 0 |
| Lake Havasu City-Kingman, AZ | 0 |
| Little Rock-North Little Rock-Conway, AR | 1 |
| Billings, MT | 0 |
| East Stroudsburg, PA | 0 |
| Ocean City, NJ | 0 |
| Miami-Fort Lauderdale-West Palm Beach, FL | 1 |
| Anchorage, AK | 0 |
| Santa Cruz-Watsonville, CA | 0 |
| Florence, SC | 1 |
| El Paso, TX | 0 |
| Worcester, MA-CT | 0 |
| Cleveland-Elyria, OH | 0 |
| Lafayette-West Lafayette, IN | 0 |
| Merced, CA | 0 |
| Spokane-Spokane Valley, WA | 0 |
| Urban Honolulu, HI | 0 |
| Bremerton-Silverdale, WA | 0 |
| Jackson, MI | 0 |
| Janesville-Beloit, WI | 0 |

| MSA | BEA Region - Southeast |
|---|---|
| Sumter, SC | 1 |
| Hammond, LA | 1 |
| Niles-Benton Harbor, MI | 0 |
| Utica-Rome, NY | 0 |
| Spartanburg, SC | 1 |
| Kingston, NY | 0 |
| Columbus, OH | 0 |
| San Antonio-New Braunfels, TX | 0 |
| Sacramento--Roseville--Arden-Arcade, CA | 0 |
| Modesto, CA | 0 |
| Davenport-Moline-Rock Island, IA-IL | 0 |
| Denver-Aurora-Lakewood, CO | 0 |
| South Bend-Mishawaka, IN-MI | 0 |
| Louisville/Jefferson County, KY-IN | 1 |
| Chico, CA | 0 |
| Tampa-St. Petersburg-Clearwater, FL | 1 |
| Amarillo, TX | 0 |
| Phoenix-Mesa-Scottsdale, AZ | 0 |
| Decatur, AL | 1 |
| Yuma, AZ | 0 |
| Savannah, GA | 1 |
| Sheboygan, WI | 0 |
| Panama City, FL | 1 |
| St. Cloud, MN | 0 |
| Riverside-San Bernardino-Ontario, CA | 0 |
| Scranton--Wilkes-Barre--Hazleton, PA | 0 |
| Johnson City, TN | 1 |
| Columbus, GA-AL | 1 |
| Dayton, OH | 0 |
| St. Louis, MO-IL | 0 |
| Coeur d'Alene, ID | 0 |
| Ottawa-Peru, IL | 0 |
| Ogdensburg-Massena, NY | 0 |
| Topeka, KS | 0 |
| Tyler, TX | 0 |
| Tuscaloosa, AL | 1 |
| Akron, OH | 0 |
| Providence-Warwick, RI-MA | 0 |
| Decatur, IL | 0 |
| North Port-Sarasota-Bradenton, FL | 1 |
| Daphne-Fairhope-Foley, AL | 1 |

| MSA | BEA Region - Southeast |
|---|---|
| Grand Rapids-Wyoming, MI | 0 |
| Lexington-Fayette, KY | 1 |
| Jacksonville, FL | 1 |
| Toledo, OH | 0 |
| Monroe, LA | 1 |
| Laredo, TX | 0 |
| Lincoln, NE | 0 |
| Redding, CA | 0 |
| Medford, OR | 0 |
| Oshkosh-Neenah, WI | 0 |
| Bloomington, IN | 0 |
| Augusta-Waterville, ME | 0 |
| Houston-The Woodlands-Sugar Land, TX | 0 |
| Chambersburg-Waynesboro, PA | 0 |
| Lawton, OK | 0 |
| Indianapolis-Carmel-Anderson, IN | 0 |
| Birmingham-Hoover, AL | 1 |
| Pittsfield, MA | 0 |
| Columbia, MO | 0 |
| Barnstable Town, MA | 0 |
| Sebastian-Vero Beach, FL | 1 |
| New Haven-Milford, CT | 0 |
| Greenville, NC | 1 |
| Lubbock, TX | 0 |
| Anniston-Oxford-Jacksonville, AL | 1 |
| Deltona-Daytona Beach-Ormond Beach, FL | 1 |
| Milwaukee-Waukesha-West Allis, WI | 0 |
| Reading, PA | 0 |
| Virginia Beach-Norfolk-Newport News, VA-NC | 1 |
| Wichita, KS | 0 |
| Pottsville, PA | 0 |
| Johnstown, PA | 0 |
| Olympia-Tumwater, WA | 0 |
| Pensacola-Ferry Pass-Brent, FL | 1 |
| Ann Arbor, MI | 0 |
| Norwich-New London, CT | 0 |
| Binghamton, NY | 0 |
| Springfield, MO | 0 |
| New Orleans-Metairie, LA | 1 |
| Alexandria, LA | 1 |
| Eugene, OR | 0 |

| MSA | BEA Region - Southeast |
|---|---|
| Flagstaff, AZ | 0 |
| Salem, OH | 0 |
| Springfield, MA | 0 |
| Beaumont-Port Arthur, TX | 0 |
| Stockton-Lodi, CA | 0 |
| Mount Vernon-Anacortes, WA | 0 |
| Wilmington, NC | 1 |
| Flint, MI | 0 |
| Iowa City, IA | 0 |
| Lancaster, PA | 0 |
| Punta Gorda, FL | 1 |
| Brownsville-Harlingen, TX | 0 |
| Las Cruces, NM | 0 |
| Roseburg, OR | 0 |
| Montgomery, AL | 1 |
| Killeen-Temple, TX | 0 |
| Eureka-Arcata-Fortuna, CA | 0 |
| Duluth, MN-WI | 0 |
| York-Hanover, PA | 0 |
| Columbia, SC | 1 |
| Peoria, IL | 0 |
| Albany, OR | 0 |
| Detroit-Warren-Dearborn, MI | 0 |
| Ocala, FL | 1 |
| Canton-Massillon, OH | 0 |
| Battle Creek, MI | 0 |
| Pueblo, CO | 0 |
| Colorado Springs, CO | 0 |
| Holland, MI | 0 |
| Hagerstown-Martinsburg, MD-WV | 0 |
| Champaign-Urbana, IL | 0 |
| Prescott, AZ | 0 |
| Saginaw, MI | 0 |
| Grand Junction, CO | 0 |
| Wichita Falls, TX | 0 |
| Gulfport-Biloxi-Pascagoula, MS | 1 |
| Vineland-Bridgeton, NJ | 0 |
| Boise City, ID | 0 |
| Ashtabula, OH | 0 |
| Corpus Christi, TX | 0 |
| Clarksville, TN-KY | 1 |

| MSA | BEA Region - Southeast |
|---|---|
| Orlando-Kissimmee-Sanford, FL | 1 |
| Lakeland-Winter Haven, FL | 1 |
| Cape Coral-Fort Myers, FL | 1 |
| Augusta-Richmond County, GA-SC | 1 |
| Lansing-East Lansing, MI | 0 |
| Kalamazoo-Portage, MI | 0 |
| Evansville, IN-KY | 0 |
| Bangor, ME | 0 |
| Terre Haute, IN | 0 |
| Longview, TX | 0 |
| Rochester, NY | 0 |
| Erie, PA | 0 |
| Tucson, AZ | 0 |
| Albuquerque, NM | 0 |
| Youngstown-Warren-Boardman, OH-PA | 0 |
| Sioux City, IA-NE-SD | 0 |
| Concord, NH | 0 |
| Naples-Immokalee-Marco Island, FL | 1 |
| Greenville-Anderson-Mauldin, SC | 1 |
| Warner Robins, GA | 1 |
| Muskegon, MI | 0 |
| Athens-Clarke County, GA | 1 |
| Fort Smith, AR-OK | 1 |
| Gadsden, AL | 1 |
| Kahului-Wailuku-Lahaina, HI | 0 |
| Port St. Lucie, FL | 1 |
| Jacksonville, NC | 1 |
| Michigan City-La Porte, IN | 0 |
| Springfield, OH | 0 |
| Mansfield, OH | 0 |
| Richmond, VA | 1 |
| Rockford, IL | 0 |
| Memphis, TN-MS-AR | 1 |
| Charleston, WV | 1 |
| Burlington, NC | 1 |
| Kingsport-Bristol-Bristol, TN-VA | 1 |
| McAllen-Edinburg-Mission, TX | 0 |
| Springfield, IL | 0 |
| Bay City, MI | 0 |
| Dover, DE | 0 |
| Monroe, MI | 0 |

| MSA | BEA Region - Southeast |
|---|---|
| Salisbury, MD-DE | 0 |
| Jamestown-Dunkirk-Fredonia, NY | 0 |
| Lake Charles, LA | 1 |
| Jackson, MS | 1 |
| Homosassa Springs, FL | 1 |
| Goldsboro, NC | 1 |
| Santa Fe, NM | 0 |
| Joplin, MO | 0 |
| Torrington, CT | 0 |
| Muncie, IN | 0 |
| Lumberton, NC | 1 |
| Reno, NV | 0 |
| Hickory-Lenoir-Morganton, NC | 1 |
| Bridgeport-Stamford-Norwalk, CT | 0 |
| Myrtle Beach-Conway-North Myrtle Beach, SC-NC | 1 |
| Tallahassee, FL | 1 |
| Las Vegas-Henderson-Paradise, NV | 0 |
| Macon, GA | 1 |
| Racine, WI | 0 |
| Hilton Head Island-Bluffton-Beaufort, SC | 1 |
| Winston-Salem, NC | 1 |
| Greensboro-High Point, NC | 1 |
| Lafayette, LA | 1 |
| Allentown-Bethlehem-Easton, PA-NJ | 0 |
| Atlantic City-Hammonton, NJ | 0 |
| Farmington, NM | 0 |
| Houma-Thibodaux, LA | 1 |