



Southern Small City Resilience

How small cities are driving dynamic economic growth

RTI International

Michael Hogan

Sara Lawrence

Sara VanLear

Scruggs and Associates

Pat Scruggs

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I. Introduction: Why Small Cities Matter

Economic growth in the United States in the 21st century has concentrated in fewer metropolitan areas that account for a disproportionate share of jobs, research and development (R&D), innovation, investment, and business growth in high-tech industries. This urban-led growth, driven by innovation centers and the creative class, has been well documented and is exacerbating a rural–urban divide unlike any in our nation’s economic history. Advances in automation and artificial intelligence have intensified this shift, and many cities across the country are experiencing widespread decline. Similarly, many rural areas are marked by divestment and deteriorating infrastructure.

Recent data highlight this geographic polarization across the country:

- According to the 2020 Census, 86 percent of the population lived in metropolitan areas, the highest since the Census Bureau captured that statistic. Whereas four out of five metro areas grew, 53 percent of U.S. counties lost population, most of which were micropolitan¹ and rural areas.²
- High-wage jobs and wealth generation are increasingly concentrated in a limited number of places. Asset income (a measure of wealth concentration) increased at a rate six times faster in the top 10 percent of counties than in the remaining 90 percent of counties in the United States. This wealth concentration is driven by major cities like New York City, San Francisco, and Washington, DC, and wealthy retirement and recreation destinations such as Jackson, WY.³
- Five metro areas on the East and West Coasts accounted for 90 percent of the nation’s innovation sector growth between 2005 and 2017, and only 41 counties accounted for more than half the nation’s jobs in innovation industries.⁴ This is important because jobs created in the innovation sector have high multipliers,

¹ The U.S. Census Bureau defines micropolitan areas as the county or counties surrounding an urban area with between 10,000 and 50,000 residents. A metropolitan area is the county or counties surrounding an urban area with more than 50,000 residents.

² U.S. Census Bureau. (2021). *Around Four-Fifths of All U.S. Metro Areas Grew Between 2010 and 2020*. <https://www.census.gov/library/stories/2021/08/more-than-half-of-united-states-counties-were-smaller-in-2020-than-in-2010.html>

³ Benzow, A. and Fikri, K. (2021) *From wealthy enclaves to asset deserts: What the geography of asset income signals about wealth distribution in the United States*. Economic Innovation Group. <https://inclusivewealth.eig.org/wp-content/uploads/2021/08/Geography-of-Asset-Income-Report.pdf>

⁴ Atkinson, R. D., Muro, M., & Whiton, J. (2019). *The Case for Growth Centers: How to Spread Tech Innovation Across America*. Brookings. <https://www.brookings.edu/research/growth-centers-how-to-spread-tech-innovation-across-america/>

meaning that for each job in an innovation industry, up to six additional jobs are supported.⁵

- People are moving less frequently to different areas of the United States to find new jobs. The rate of domestic migration is at an all-time low: the annual migration rate in 2019 was 9.3 percent. For comparison, in the 1990s the rate was between 15 and 16 percent. Challenges of high housing costs, lack of quality jobs, and family ties make moving to high-growth areas increasingly difficult.⁶
- The COVID-19 pandemic did not shift economic activity out of major metro areas, despite an early narrative that small towns and exurbs were poised to thrive. Research from 2020 showed that the outflow of residents was limited, and most moves occurred within the same metro area.⁷ By the summer of 2021, economists at UBS reported that demand for residential and commercial real estate in cities such as New York was increasing quickly and in-migration to major cities had rebounded to pre-pandemic levels.⁸

These data are not simply painting a story of urban versus rural, but rather of how smaller cities and their surrounding regions have fared in the context of unbalanced economic growth and what that means for economic resiliency in a range of cities and regions. The geographic concentration of economic activity and the divergence between fast-growth metros and the rest of the country have consequences:

- Economic decline, job loss, and shrinking populations in areas of decline generate a cycle of lost tax revenue and basic resources, as well as divestment in services such as healthcare and education.
- Economic polarization generates political polarization, and distrust of institutions and leaders further fractures the social capital and community connections that foster vibrant, thriving, and resilient places to live and work.
- Concentration of high-wage jobs in larger metro areas contributes to challenges of affordability, gentrification, and barriers to access for people from low-income

⁵ Moretti, E. (2013). *The New Geography of Jobs*. Mariner.

⁶ Frey, W. (2020). *Just Before COVID-19, American Migration Hit a 73-Year Low*. Brookings. <https://www.brookings.edu/blog/the-avenue/2020/12/15/just-before-covid-19-american-migration-hit-a-73-year-low/>

⁷ Camello, M., Hogan, M., Lawrence, S., McManus, S., Ozawa, J., Pandiyan, M., Rieth, K., Rose, A., & VanLear, S. (2020, September). *Impacts of COVID-19 on Issues and Industries Central to an Innovation Corridor's Success*. RTI International. <https://www.rti.org/publication/impacts-covid-19-issues-and-industries-central-innovation-corridor%E2%80%99s-success/fulltext.pdf>

⁸ Winck, B. (2021, August 16). *Insider: 4 Charts Show How Fast Everyone is Flocking Back to Big Cities*. <https://www.businessinsider.com/urban-exodus-people-leaving-cities-charts-exurbs-real-estate-moving-2021-8#3-new-york-is-on-the-rise-3>

backgrounds, especially people of color who have historically faced systemic barriers to accruing wealth and income and thus have fewer assets to cushion relocation to high-wealth cities.⁹

Although some of these trends capture attention of the press, policymakers, and planners, they fail to tell the whole story of how the economic geography of the United States is evolving. Despite challenging structural conditions for many nonmetropolitan areas, a subset of small cities has maintained and grown their economies, generating broad-based growth and opportunities for residents. They go against the trend of decline outside of major cities, showing that there is a diversity of paths to economic growth. By recognizing the factors and strategies that combine to create economic development in these small cities, other areas that are similar can re-examine ways to position themselves for economic development in the future. RTI International's study sought to better understand how small cities are investing in themselves and using their unique assets to chart a new trajectory forward for economic dynamism and resiliency.

This article highlights seven small cities that have demonstrated economic dynamism and resilience in the southern United States during the last 20 years. These cities have experienced job and wage growth, have developed a culture and ecosystem that support new businesses, and have formulated strategies allowing them to continue to grow and thrive in light of economic restructuring challenges nationally. This article explores why cities like these are important to cultivating a greater balance in the U.S. economic recovery and seeks to understand how smaller cities and regions are changing their economic development trajectory to create broader-based growth and opportunity. We also explore how these cities are tackling questions of economic inclusion and historic inequities. The insights from this article are intended to inform policymakers, planners, economic developers, and the wider community of practice on ways to create broader and more equitable growth across states and regions.

II. Small City Dynamism and Resilience

Small cities provide “living laboratories” for ideas on how to generate dynamic economies that can provide greater economic opportunity in a time when growth is increasingly concentrated in large metro regions. There is a wealth of research on the economies of large cities and of small towns, ranging from leading thinkers such as Ed Glaeser and Enrico Moretti on the dynamism of large cities and knowledge economies to research by the Walton Foundation on micropolitan areas and the value of small-town revitalization.¹⁰ Research from Brookings calls for increased federal funding for

⁹ Federal Reserve. (2019). *Federal Reserve Survey of Consumer Finances*. <https://www.federalreserve.gov/econres/scfindex.htm>

¹⁰ DeVol, C. (2019). *Most Dynamic Metropolitans*. Walton Family Foundation. <https://www.waltonfamilyfoundation.org/learning/most-dynamic-micropolitans>

innovation to support growth centers outside of high-performing metro areas, with a focus on large metros that underperform on metrics related to innovation. PolicyLink's All-In Cities initiative supports equitable growth in a range of larger cities.¹¹ All these initiatives identify needs in large cities and rural places, but there is a gap in knowledge about small cities that have used their unique assets to build dynamic, resilient economies. **A focus on small cities allows us to explore the interconnected approaches places are taking to drive growth in jobs and wages and resilient business growth.** Such approaches include how places:

- Use and leverage assets such as education and innovation institutions in their economy and in the community;
- Build out supply chains for industries such as specialized manufacturing;
- Create accessible entrepreneurial ecosystems that lower barriers to entry and allow small businesses to thrive in a lower-cost environment while accessing resources and markets;
- Develop infrastructure for industrial development alongside improvements to downtown districts and community amenities to enhance attractiveness and quality of life;
- Attract and retain working-age people and families and connect workers to ongoing skills training; and
- Transform volatile industries such as tourism and specialized trade to year-round, resilient employment.

To understand approaches in the context of small city development, we define a small city and economic dynamism and resilience. Next, we describe how we assessed economic dynamism and resilience in small cities in the South to identify a set of locations to explore in more detail.

¹¹ All-In Cities. (n.d.). *Where We Work*. PolicyLink. <https://allincities.org/where-we-work>

Defining Small Cities

To identify types of small cities in the South that can provide insights and inspiration for charting a course of economic resiliency, we looked at core-based statistical areas (CBSAs) with a total population under 500,000. In 2020, the Census Bureau defined 939 CBSAs in the United States, of which 821 were micropolitan or metropolitan areas with a population under 500,000. They represent 821 places with unique histories, economies, and cultures that present a diversity of economic pathways. With this set of locations identified, we then examined key indicators to better understand economic resilience.

Metropolitan Area Definitions

The U.S. Census Bureau defines 939 **Core Based Statistical Areas**, which have a “core area containing a substantial population nucleus, together with adjacent communities having a high degree of economic and social integration with that core.” They include:

Metropolitan Statistical Areas (MSAs) have a core urban area with more than 50,000 people. Eighty-six percent of residents live in one of 392 MSAs.

Micropolitan Statistical Areas (μSAs) have a core urban area between 10,000 and 50,000 people. Eight percent of residents live in one of 547 μSAs.

Defining Economic Dynamism and Resilience

Economic resilience refers to how an economy can respond to economic shocks due to disruption of industries, economic downturns, and disasters. It includes if economies generate high-wage jobs and wealth; resilient economies adapt to shifts and downturns and reorient their industries as change occurs.

Economic dynamism is the degree to which new businesses, ideas, and people are entering an economy, driving reinvention. Dynamic places grow entrepreneurial and high-tech industries and attract a growing population to the region.

Examining Data on Small City Dynamism and Resilience

To understand how small cities in the South are dynamic and resilient, we compiled data at the county level for six states: Alabama, Mississippi, Tennessee, Georgia, South Carolina, and North Carolina. This data set included 46 metropolitan and 102 micropolitan areas. With this data set, we then explored traits of economic dynamism and resilience by creating a framework that builds on research by the Walton Family Foundation on micropolitan areas.¹² The framework accounts for growth in jobs, wages, and population; ways in which places are generating new firms and high-wage jobs; ways in which places are developing human capital with graduates with postsecondary degrees; and the retention of working-age residents. The framework for analysis is

¹² DeVol, C. (2019). *Most Dynamic Metropolitans*. Walton Family Foundation. <https://www.waltonfamilyfoundation.org/learning/most-dynamic-micropolitans>

shown in Table 1 and was used to screen for a subset of small cities to explore further and understand paths to economic dynamism and resilience.

Table 1. Data Framework for Exploring Small City Economic Dynamism and Resilience

Factor	Description
Job growth	Percentage change in private sector jobs from 1999 through 2019. This factor is the simplest indicator of a region's economic trajectory and its impact on residents.
Wage growth	Percentage change in average wage for jobs from 1999 to 2019, adjusted for inflation. This factor indicates whether the job growth is being driven by low-wage or higher-wage industries.
Share of high-tech jobs	Percentage of jobs in industries classified as “high-tech” using a set of North American Industry Classification System (NAICS) codes with an above-average share of occupations in science, technology, engineering, and math (STEM). These tend to be high-wage, growth industries that attract capital and are found primarily in technical services, advanced manufacturing, and energy.
Growth (or decline) of manufacturing jobs	Growth trend for traded sector manufacturing industries, which tend to generate high-wage jobs with a large local multiplier effect.
Rate of new firm establishments	Rate of new establishments founded in the last 12 months and rate of growth or decline in new businesses established over time. This factor offers a look into the health of entrepreneurship in the community.
Graduates of postsecondary programs	Number of annual graduates with associate's, bachelor's, or advanced degrees in a county. Presence of educational institutions, including community colleges, 4-year colleges, and universities anchors a place and provides human capital and knowledge.
Household income	Median household income in a county, an indicator of the economic well-being of households. This factor is broken out by race and ethnicity to identify barriers to economic mobility.
Share of working-age population	Percentage of the population under 65, an indicator of the place's ability to attract and retain working-age people.

Tracking Small City Resilience

After setting the framework in Table 1, RTI compiled data at the county level for all of the counties in the six focus states. Analysts collected publicly available data from the U.S. Bureau of Labor Statistics (BLS), Bureau of Economic Analysis, Department of Education, and Census Bureau. The full list of data sources and methods is found in the appendix.¹³ Using 10 indicators, we calculated scores for each indicator based on percentiles relative to the counties we examined across the six states. Each indicator was given a score between 1 and 100 with 100 being the maximum. The scores were then averaged to provide an overall score for each county. When scores were examined by size of region, fast-growth metropolitan areas averaged a resiliency score of 71 out of 100, while smaller metro areas averaged 57 and micropolitan areas averaged 43. However, in each category of metro size, we found selected communities that performed well above these averages (see Table 2). Examples of top performers from each of the three major categories depict a diversity of places with rapid population growth, job and wage growth, knowledge assets such as universities and research centers, and manufacturing hubs.

Table 2. Economic Resiliency and Dynamism: Top Performing Counties by Metropolitan/Micropolitan Category

COUNTY	METROPOLITAN/ MICROPOLITAN AREA	COMPOSITE SCORE
Top 10 Fastest Growth Metro Areas		
Wake County, NC	Raleigh-Cary, NC	90
Charleston County, SC	Charleston, SC	89
Mecklenburg County, NC	Charlotte, NC	88
Metros with Populations under 500,000, Outside of Top 10		
New Hanover County, NC	Wilmington, NC	79
Chatham County, GA	Savannah, GA	78
Hall County, GA	Gainesville, GA	75
Micropolitan Areas		
Lafayette County, MS	Oxford, MS	82
Watauga County, NC	Boone, NC	79
Pasquotank County, NC	Elizabeth City, NC	70

It is helpful to examine different kinds of city sizes across these dimensions to provide a broader perspective on economic dynamism and resilience and then understand how its

¹³ When applicable, data were normalized for population.

positive attributes contributing to this resilience can be accelerated and lagging aspects better addressed.

III. A Focus on Dynamic and Resilient Small Cities in the South

After compiling data on small city dynamism and resilience in the South, we examined how these places fit into the larger narrative of economic transition and what can be learned from the experience of small cities. We used the data to inform further research on small cities that performed well on measures related to economic growth, high-wage jobs, technology-based industries, and entrepreneurship. Small cities emerged that had seen above-average job and wage growth and rapid growth of entrepreneurial companies, and we oriented our focus on what made those places unique. We then identified common themes and takeaways. Before we explore those details, this article first provides a summary background on recent economic transitions in the South.

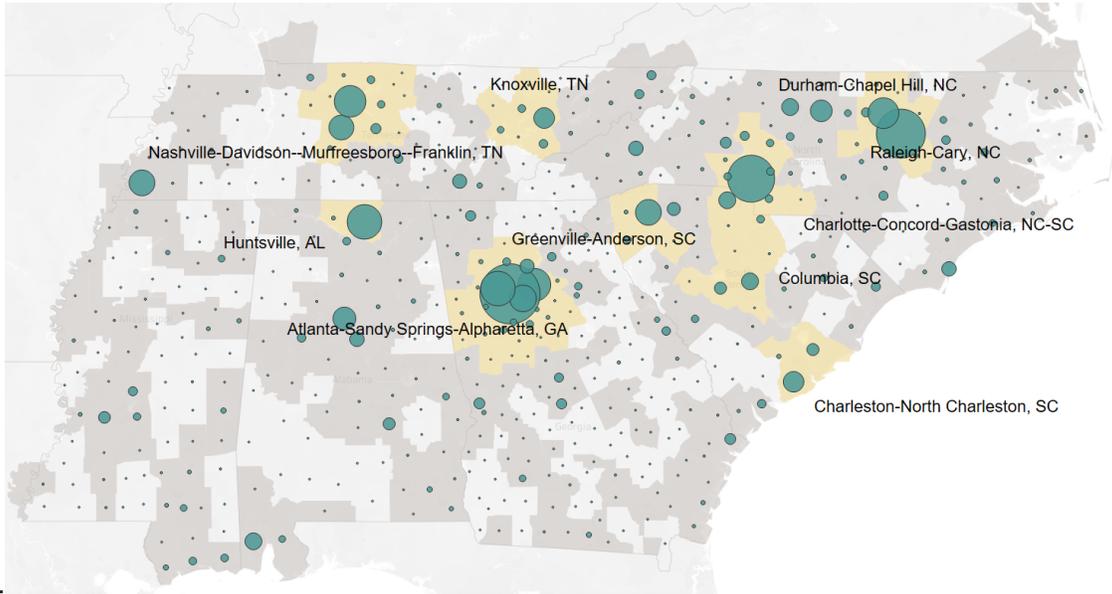
Economic Transition in the South

The South's economic transformation during the last 20 years mirrors similar national trends. In 1999, there were more than 2.7 million manufacturing jobs in Alabama, Mississippi, Tennessee, Georgia, South Carolina, and North Carolina. By 2010, over 1 million of those jobs had been lost in the region, driven by trade, automation, and the Great Recession. Although some manufacturing jobs were added in the following decade, the economy was fundamentally altered. While high-tech services replaced manufacturing in places with research universities and innovation assets like the Research Triangle and Charlotte, NC; Atlanta, GA; Huntsville, AL; and Nashville, TN, other historic manufacturing communities such as Hickory, NC; Memphis, TN; Birmingham, AL; and Winston-Salem, NC, saw a sustained decline in high-wage jobs. The question these data raise is why some regions with similar backgrounds found pathways to either retain manufacturing or replace lost manufacturing jobs with other high-wage options.

Attraction and growth of high-tech and innovation-based industries is one component of that growth. In the period from 1999 to 2019, 10 metro areas in the region accounted for 85 percent of net private sector job growth.¹⁴ Those 10 metros had a disproportionate share of high-tech jobs, university graduates, wage growth, and population growth, as seen by the presence of high-tech jobs in Figure 1.

¹⁴ By net private sector job gains from 1999 through 2019, the top 10 metropolitan areas were Atlanta, GA; Charlotte, NC; Nashville, TN; Raleigh, NC; Charleston, SC; Knoxville, TN; Columbia, SC; Huntsville, AL; Durham-Chapel Hill, NC; and Greenville, SC.

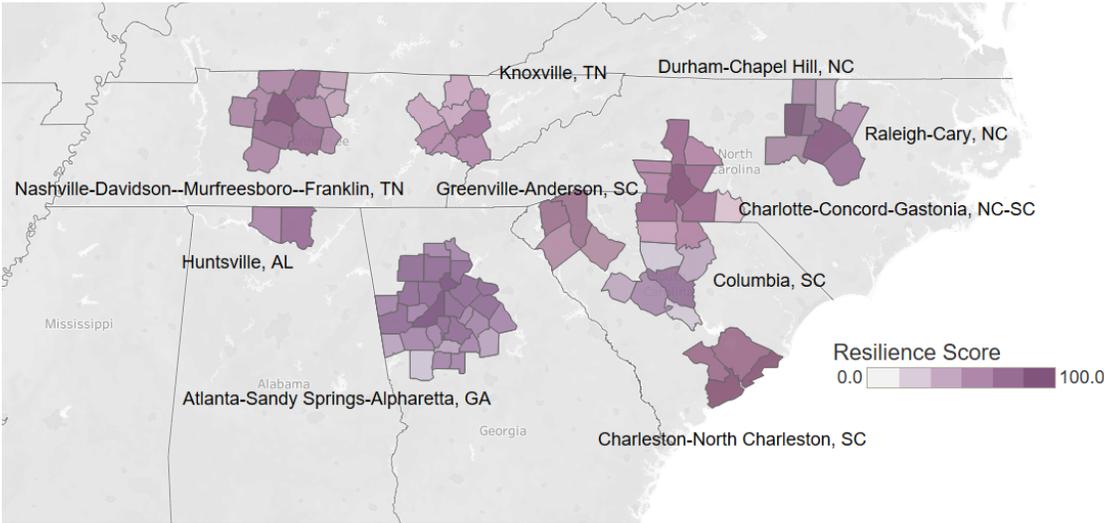
Figure 1. Concentration of High-Tech Jobs in the South



Size of bubbles indicates number of high-tech jobs in 2019. Top 10 fastest growth metro areas are highlighted in yellow. Source: BLS Quarterly Census of Employment and Wages

Accompanying this job growth, most counties in these fast-growth cities and surrounding metropolitan areas had high resilience scores. (See Figure 2.)

Figure 2. Economic Dynamism and Resilience Scores: Counties in Top 10 Growth Metros

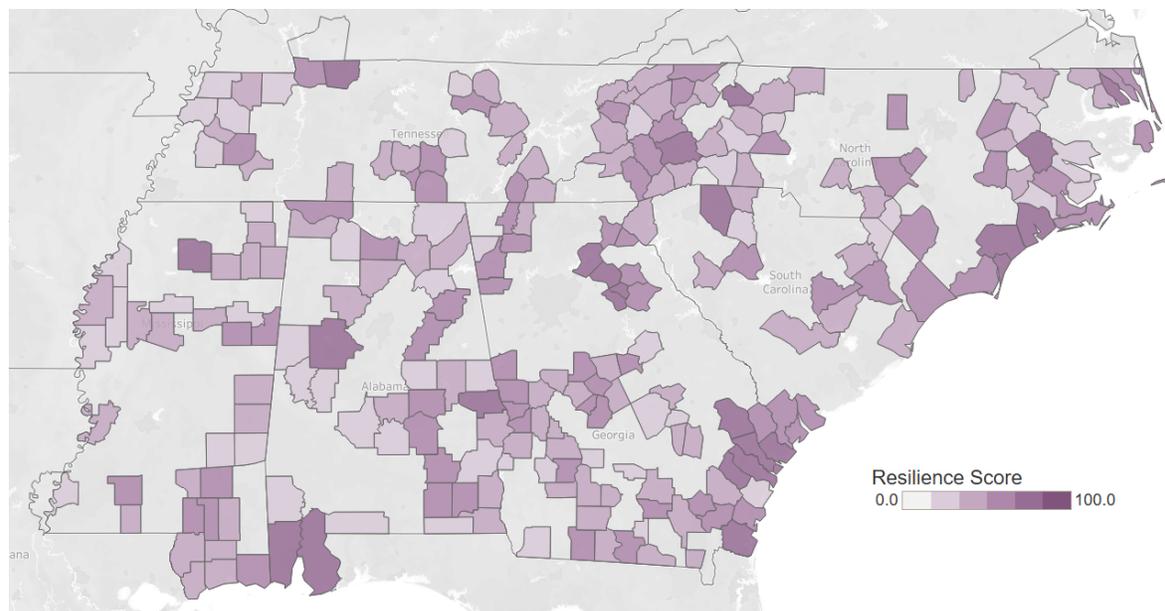


Successful metro areas tend to have a high concentration of job and wage growth, technology jobs, and university and community college graduates and high rates of new business formation, placing them in the top quartiles in nearly every indicator and scoring highly on measures of resilience.

Small Cities' Economic Transition

Excluding large-growth metros, the economic dynamism and resilience of small cities shows a mix of results: although small cities had a lower average score than top growth metros, the data indicated places with unique trends, as seen by the places highlighted in the map in Figure 3. Several small cities outperformed their peers and many large metros on measures of dynamism, and there was not a single driving force. Some small cities benefited from a major university or anchor institution supporting a tech economy; others supported a resilient manufacturing industry, going against the trend of manufacturing decline. Several small cities had generated wage growth in industries such as logistics and distribution, whereas others had rates of entrepreneurship above national averages.

Figure 3. Economic Resilience: Counties with Small Cities



Includes counties in metropolitan areas with under 500,000 residents and micropolitan areas

Most small cities with resilient economies maintained their manufacturing base or grew technology jobs, but few did both. Those with universities at the center of their economy tended to have higher than average rates of new establishment formation. High-performing regions also had varied geographic characteristics; some were adjacent to large metro regions, while others were more remote. A portion of the high-performing regions were adjacent to or bisected by major interstates; others were not. As we examined cities further, we investigated the details of what determined the difference in their economic trajectory.

IV. City-Level Tactics for Dynamism and Resilience

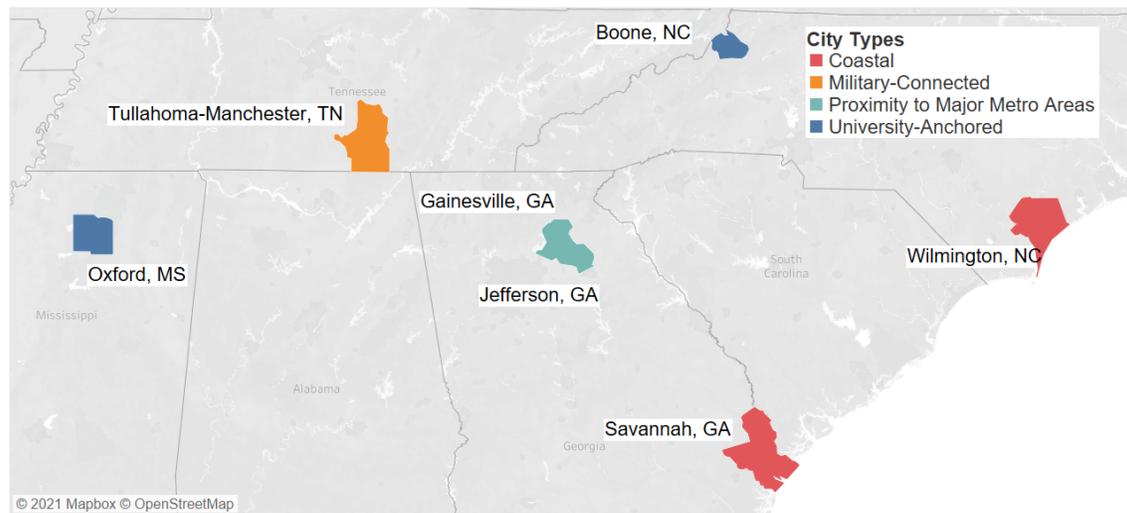
Amid concentrated economic growth in the top metros in the South, some small cities in diverse places are experiencing resilient economic growth. We describe how we selected cities to highlight, how each type of city pursued its path to economic resilience, and the common themes that emerged as we looked deeper into the tactics and decisions that determined their trajectory. In doing so, we identified elements of dynamism and resilience in these cities, including how they diversified their economy, leveraged their existing assets, and charted a course to connect to broader economic growth. Additionally, we explored how these cities are wrestling with challenges of economic inequality and unbalanced growth, particularly for women and people of color.

Methods for Selecting Cities

To further understand how small cities are becoming more economically resilient, we selected a subset to examine in more detail. We selected places that performed above average in at least eight of the indicators of dynamism and resilience (shown in detail in Table 3 in the appendix) and in the top quintile in selected indicators such as wage growth or high-tech jobs. They included a mix of sizes with three mid-sized metropolitan and four micropolitan areas. Each of the places has followed a different path, showing there is no single way for small cities to build resilient economies.

We grouped these seven cities into four categories, mapped in Figure 4:

- University-Anchored: Boone, NC, and Oxford, MS
- Proximity to Major Metro Areas: Gainesville and Jefferson, GA
- Coastal: Savannah, GA, and Wilmington, NC
- Military Connected: Tullahoma-Manchester, TN

Figure 4. Areas of Focus

Full data on the areas of Focus are found in Table 3 and Table 4 in the appendix.

Each of the cities is a high performer on measures of dynamic and resilient economic growth, but as seen in Table 4 in the appendix, they struggle with many endemic challenges of economic equity and inclusion. We explored how cities are currently addressing challenges related to equity and inclusion. Each city had unique challenges related to income and wealth gaps, asset poverty, gender gaps in wages, and affordability, which were particularly magnified for people of color.

Economic Equity

Economic equity is the degree to which economic growth benefits the array of population groups in a community, especially communities of color, women, and low-income households

To build on this quantitative analysis, we spoke with stakeholders in each of the seven cities to better understand how the small city forged its path to resilience. Stakeholders included economic developers, elected officials, business leaders, civic leaders, startup support organizations, and university representatives.

In the following section, we show how each of these cities embraced locally informed approaches to chart their course to dynamic and resilient economies over the last 20 years, and what local stakeholders are currently doing to address challenges and continue to grow. Additionally, we describe the driving forces behind this course: while some have benefited from high levels of collaboration by public officials, others have been driven by the private sector and individuals acting to drive growth. We first examine common tactics and approaches across the small cities we explored and then we profile the small cities by type.

Shared Tactics and Approaches

In examining these seven cities, we found that seven economic resiliency and dynamism themes stood out. Some of these themes underscore tactics used to grow regional economies, and other themes highlight the social capital and interactions among different people and organizations that resulted in economic change. These seven themes are highlighted below.

1. Diversifying Business and Industry. Each small city examined diversified their economies since 2000 by using a combination of tactics. Although their priorities were not all equal, they all made efforts to diversify their industries, a key component of resilience.

- All cities deployed initiatives to build out supply chains associated with existing industries. In Tullahoma-Manchester, they parlayed the research efforts at the Aerospace Development Complex to expand three key manufacturing sectors with significant engineering talent (aerospace, engines and machinery, and testing and design).
- Cities worked with state economic development organizations to capitalize on location and talent to attract new businesses. A key example of this is efforts between Georgia's state economic development agency and leaders in Gainesville and Jefferson to attract a key Korean electric automotive battery firm that in turn, attracted other auto-related manufacturing.
- Cities like Wilmington, Boone, and Oxford launched considerable efforts to accelerating entrepreneurship by developing accelerators, technical assistance, and startup funding.

2. Building Out Long-Lasting Infrastructure. Resilient small cities were proactive in developing infrastructure and community amenities. Local economic developers and other community stakeholders understood that economic infrastructure and community amenities served to attract and retain both businesses and talent.

- For cities like Gainesville, Jefferson, and Tullahoma-Manchester, the focus was on developing industrial sites, commercial spec buildings, and providing high-speed fiber Internet access. In Savannah, the deep seaport is a major economic asset.
- For cities more reliant on tourism and more remotely located from major metro areas, the focus was on developing community assets and amenities such as regional healthcare systems, parks and recreation, and retail centers.

3. Supporting Human Capital Development. Attracting and retaining talent in small cities is a constant challenge. Whether through the presence of major universities or a

focus on technical training, there was an intention to directly connect education and workforce development to economic development.

- In cities with a robust manufacturing base, there were strong connections between employers and community or technical colleges to provide skills training and certifications.
- Universities served as economic hubs connecting to various industry and entrepreneurship efforts in cities like Oxford, Savannah, Wilmington, and Boone.

4. Connecting to Broader Economic Opportunities. Small cities often rely on connections to larger economies to grow jobs and seize new opportunities. The cities profiled found several ways to identify these synergies for mutually beneficial growth.

- In northeast Georgia and Tullahoma-Manchester, there is a history of close coordination between local and state economic organizations to develop joint, multiyear strategies to grow targeted sectors that go beyond transactional or project-based opportunities.
- Oxford has participated in in two major multistate efforts to promote innovation and diversification of its economy, whereas in Wilmington efforts to grow pharmaceutical and technology sectors are closely tied to individuals, companies, and resources in larger North Carolina innovation hubs such as Raleigh-Durham and Charlotte.

5. Leveraging Local Champions Compared with larger cities, small cities have fewer staffed economic and community development organizations and rely on the leadership of key individuals to provide vision, maintain momentum, and bring stakeholders together. In some of the cities examined, this leadership was recognized and nurtured.

- In cities like Wilmington and Oxford, successful entrepreneurs and startup founders led and supported key initiatives to build entrepreneurial capacity.
- In regions like Tullahoma-Manchester, a retired colonel from the adjoining Air Force Base took on a role of community leader to connect the local economy to the unique research at the base and create a hub for innovation.

6. Fostering Social Capital. An undercurrent that ran across these cities was strong sense of social capital and a sense of place. Cities could use their smaller size to connect personally and create shared and informal connections to either strengthen the sense of community or focus on ways to “get things done.”

- Boone and Oxford have promoted a culture of connection that supports longtime residents and newcomers alike. Both cities also tap university alumni networks as a key part of economic and university initiatives.

- Wilmington has strong connections across North Carolina and has generated social capital with incoming new residents and returning residents. These connections have been a key factor in advancing entrepreneurial efforts.
- North Atlanta's well-established Korean community proved to be an attractive asset that helped attract significant new industry, such as the relocation of SK Innovation to Gainesville and Jackson, GA, because the Korea-based company could more readily connect with Korean communities and cultural amenities.

7. Increasing Focus on a Need for Greater Equity. While each of the cities profiled outperformed peers in measures of economic resilience, including tech jobs, business growth, and wage growth, they struggled with challenges of equity and inclusion. As Table 4 (see Appendix) shows, data for all of the small southern cities indicate that benefits from economic resilience have not necessarily reached women and people of color, and many of the persistent issues of income inequality, asset poverty, and affordability are still prevalent in small cities in the South.

In some cities, community economic development stakeholders are embracing new economic inclusiveness and equity strategies to address these issues more directly.

- Organizations like Step Up Savannah are actively addressing both workforce skills training and financial security to promote economic opportunity for low-income individuals. Cape Fear Collective in Wilmington is working to create better upward mobility in Wilmington and the Cape Fear region, and releasing its Inclusive economy report in 2021¹⁵. Both coastal cities have high levels of income inequality and gaps in asset poverty by race and ethnicity.
- Despite having a small minority population, Boone has a high income and wealth gap between White and non-White residents. The city is conducting a diversity, equity, and inclusion survey of residents and visitors to identify related strengths and challenges. The survey includes questions about how connected, respected, and valued people feel and how welcoming the community is for individuals with an array of demographic, social, and religious characteristics.¹⁶

¹⁵ Cape Fear Collective (2021) *Inclusive Economy Report*. <https://capefearcollective.org/inclusive-economy/>

¹⁶ Town of Boone, NC. (2021). *Town of Boone, NC Community Diversity, Equity and Inclusion Survey*. Polco. <https://polco.us/n/res/vote/boone-nc/town-of-boone-nc-community>

City Case Studies

With these seven themes summarized, we provide profiles of the cities below by type: university towns, small cities outside of major metropolitan areas, coastal small cities, and military-connected cities.

Boone, NC, and Oxford, MS: University Anchored

Boone and Oxford have focused on entrepreneurship and small business development for economic development. Recent university leadership fully embracing this growth strategy and public investment in both infrastructure and public amenities have enabled an environment that is good for business and supports residents' quality of life.

Oxford is attracting investment and jobs in technology and manufacturing



Source: Visit Oxford

Background

Boone, NC, and Oxford, MS, are small cities that have experienced a steady population increase and high job growth during the last 20 years. Both cities have sizable state universities and an economy that reflects the presence of such a large educational institution. More than 50 percent of the population above 25 years in both cities has a college degree. This percentage is more than double the rate for small cities in the Southeast. Both cities also have a higher than average population between the ages of 18 and 24 years, which skews the wage and poverty rates. For example, poverty rates in both cities are higher than average and are concentrated in ages 18 through 24 for both men and women.

Economic Overview: Both economies are a mix of education services, tourism, healthcare, manufacturing, and a growing technology base.

Boone, with a metro area population of 54,086, has experienced a steady growth in its economy since 2000:

- The micropolitan region grew its job base by 19 percent from 1999 through 2019, while other small cities in the U.S. Southeast lost 4 percent of their jobs. In 2019,

education accounted for more than 4,600 of the 18,673 jobs in the county making it the largest employment sector.

- In addition to educational services, the region's natural resources and arts and music have made Boone a tourism and retirement destination, as illustrated by high concentrations of employment in retail, recreation, craft trades, and hospitality that are 2 to 3 times above the average in small southeastern U.S. cities.
- Beyond tourism, the concentration of regional natural resources and an encouragement of entrepreneurship have led to a growing number of outdoor product manufacturers ranging from climbing safety equipment to custom, high-tech textile design and engineering.¹⁷
- In addition to the university system, Watauga County is home to a growing healthcare system that has increased its capacity in specialized care and is in the midst of a \$90 million expansion.¹⁸

Tsuga is a component of Boone's growing outdoor manufacturing industry



Source: Mountain BizWorks

¹⁷ TSUGA. (n.d.). *The Pisgah Pad*. <https://www.tsugagear.us>

¹⁸ Watauga County interview and Lasure, K. (2019, August 28). ARHS Discusses \$90 Million Plans for Hospital Campus. *Watauga Democrat*. https://www.wataugademocrat.com/news/arhs-discusses-90-million-plans-for-hospital-campus/article_5365bf9f-e4ea-5217-8413-c939056a5144.html

Oxford, population 55,813, has experienced a steady growth in its economy over the past 20 years, well above its peers.

- Oxford grew its job base by 66 percent from 1999 through 2019, putting the region in the top quintile for job growth.
- In addition to educational services, the region has a diverse mix of technology, manufacturing, and tourism sectors for a region of its size, helping to buffer the economy from downturns in any single industry. Its concentration of technology jobs is 2.5 times larger than other small southeastern cities, and it has an above-average concentration of employment in metals manufacturing.
- Oxford is a regional healthcare center for surrounding counties, providing more than 3,400 jobs in health and social services.

Economic Resiliency: Both Boone and Oxford have demonstrated economic resiliency and mobility due, in large part, to an educated population, a stream of new graduates, and growing wages.

- Both Boone and Oxford have a highly educated population (51.5% and 56.0% of adults have four-year degrees or higher, respectively), and the local universities provide a steady stream of skilled talent each year.
- Wages in Boone grew by 22 percent in real dollars from 1999 through 2019, compared with 13 percent for other micropolitan regions in the South. This wage growth is consistent with the entrepreneurial activity highlighted in interviews.
- Compared with other micropolitan areas in the South, Oxford created new companies at a rate 50 percent higher and supported twice the number of technology jobs per capita.

Economic Equality: As a large share of the city population is made up of college students, income inequality measures reflect the dynamics of small cities centered around universities. Other indicators, such as gender wage gaps, racial education disparities, and net worth indicate that people of color and women have not benefitted equitably from the region's growth.

- In both cities, the rates income inequality, asset poverty rate, and percentage of households with zero net worth are above the national average. For example, in Boone the top 20% of earners have an income that is 7.4x that of the bottom 20% (compared to 4.4x nationally) and in Oxford 31.6% of households are asset poor (compared to 24% nationally). These metrics are influenced by a large proportion of full-time students living in the region.
- The gender wage gap in Boone is near zero, with men and women earning nearly the same wages. However, gender wage gap in Oxford is above average:

men make 40 percent more than women, and men-owned businesses have revenues 280 percent higher than women-owned businesses.

- Both cities have disproportionately high poverty rates among households of color. In Boone, the poverty rate for households of color is over 4 times the average for all households while in Oxford, the poverty rate is 2 times the average for all households. For comparison, the poverty rate for households of color is 1.6 times the overall poverty rate.
- Although more than 28 percent of people of color have college degrees in Oxford, there is a greater share of households of color in poverty, indicating that the region's economic growth is not reaching everyone in the same manner. For full data on economic equity, see Table 4 in the Appendix.

Creating a Resilient Economy

Five key factors contributed to Boone's and Oxford's economic trajectories.

University and Healthcare Anchors: Strong universities and healthcare systems have protected the two cities from the major economic downturns faced by many other micropolitan areas in the last two decades.

- In Boone, Appalachian State University (ASU) and Appalachian Regional Healthcare system are two key anchors: they are the largest employers in the region, providing high-paying jobs and access to essential services, including education and healthcare. The Appalachian Regional Healthcare system began as one hospital and has grown to three regional facilities that include services like cancer and cardiovascular centers, acute care, pharmacies, and clinics that residents would have previously had to “go down the mountain” to access. In addition, the College of Health and Science recently built a building right next to the Watauga Medical Center and has begun a close partnership between the university and hospital to facilitate internships and residency opportunities for ASU students. Furthermore, ASU's College of Arts and Science is forming a new Rural Resiliency and Innovation Center to create more formal ties between the university and the surrounding community. The goal is to increase the “university's role as an institution in direct service of the community.”¹⁹
- Ole Miss is the leading research university in Mississippi and the economic anchor for Oxford. Recent investments, including Insight Park, the D3B biomedical engineering research center,²⁰ and the participation of the Provost's office in public-private entrepreneurship efforts, demonstrate how the university is embracing its role as an economic development and innovation driver. Ole

¹⁹ ASU interview with Patricia Mitchell.

²⁰ Ole Miss Engineering. (2021). *Research*. <https://engineering.olemiss.edu/research/>

Miss is now focused on the technology emerging from campus as a source of revenue and an opportunity to lower the institution's dependency on state resources. Like Boone, Oxford's strong healthcare system is not only a source of stable, good-paying jobs, but also an important anchor within the local set of critical assets that support quality-of-life.

Coordinated Entrepreneurial Support: Public and private leadership support and investment have contributed to a robust entrepreneurship ecosystem for businesses to start and thrive in both cities.

- In Boone, several entrepreneurial support services and commercial spaces have been created to support new and long-standing small business leaders. StartUp High Country and Boone Underground are both incubator spaces started by local entrepreneurs to strengthen a network of local entrepreneurs and provide technical assistance. The High Country Impact Fund and Mountain BizWorks are working to increase businesses' access to necessary capital. In fact, 50 percent of The High Country Impact Fund has been invested in Boone-based companies.²¹ Watauga County has financially supported Boone Underground and provided additional incubator space at the Appalachian Enterprise Center. The Center is “uncool and a bit austere”²² but provides affordable space with access to broadband. A range of technology, arts, media, and real estate businesses have taken advantage of this option in the city. Lastly, Boone's town officials have encouraged downtown development—growing the number of businesses to 150—and created an open-door approach to support businesses' preplanning and ongoing growth needs.
- Oxford experienced an exit of manufacturers, including the long-standing Whirlpool facility that operated for 53 years in Oxford.²³ As a result, leaders across the city and county government, the business community, and the university aligned around entrepreneurship and providing startup support to small business owners. The Oxford-Lafayette County Economic Development Foundation has included entrepreneurial development as a core objective in its strategy and established a “one-stop shop” to collaborate with entrepreneurs and lower permitting, financial, and other barriers to starting a business.²⁴ In addition to the cross-sector alignment, Oxford entrepreneurs have models of tremendous

²¹ Interviewee Chris Grasinger.

²² Interviewee Watauga County, Joe Furman.

²³ Elkins, C. (2019, May 29). Whirlpool Winds Down after 53 Years in Oxford. *Pontotoc Progress*. https://www.djournal.com/pontotoc/news/whirlpool-winds-down-after-53-years-in-oxford/article_c1847158-ba98-59cf-a2d6-123cb70d1dad.html

²⁴ Oxford Mississippi, Lafayette County. (n.d.). *Economic Development*. <https://oxfordms.com/economic-development/incentives-support/entrepreneurial-development/> and interview with Jon M. and Allen K.

local success. FNC was a locally grown real estate analytics and data-enabled services provider that was sold to CoreLogic for \$475m in 2015.²⁵ Oxford suddenly had several multidollar millionaires who have since reinvested in the city's entrepreneurial ecosystem as financial supporters, mentors, and serial entrepreneurs.²⁶

Culture of Connection: Interviewees in both cities described a strong culture of connection that lowers the barrier to locals' participation in the startup ecosystem. As a result of the geographic size, a willingness to connect personally, and the cross-sectoral focus on entrepreneurship, a natural support system has evolved to encourage individuals' pursuit of new ideas and continued pursuit when the first idea fails.

Infrastructure and Amenity Investment: Both Boone and Oxford interviewees pointed out the role of infrastructure investments and amenities as both good for business and a key contributor to the quality of life residents realize in both cities.

- In Boone, interviewees discussed road quality, broadband capabilities, and significant water and sewer investments, as well as the growing access to amenities such as craft food, arts venues, sports events, and outdoor adventures, as important drivers of economic growth.
- In Oxford, interviewees discussed the investments in city streetscaping, recreational assets such as parks and a man-made lake, and a public school system and healthcare system that reinforce the city as a stable location for growing businesses and establishing or growing personal roots in the region.

Connection to External Economic Initiatives: Rather than operate in isolation, Boone and Oxford are both actively leveraging external economic initiatives to further local efforts.

- Boone is in the midst of developing an economic resiliency plan through NC Growth²⁷ and working with the Durham-based Development Finance Initiative to re-envision property uses to support the city's resiliency priorities. Boone also is participating in the "made by mountains" initiative that is furthering a western North Carolina branding for the whole region to support makers and businesses in the western North Carolina outdoor industry.²⁸ Lastly, StartUp High Country has received grant funding from the NC IDEA Foundation to help further grow

²⁵ Lane, B. (2015, December 17). *CoreLogic Snaps Up FNC for \$475 Million*. Housing Wire. <https://www.housingwire.com/articles/35854-corelogic-snaps-up-fnc-for-475-million/>

²⁶ All Oxford interviewees.

²⁷ Kenan Institute of Private Enterprise. (n.d.). *NC Growth*. <https://ncgrowth.unc.edu>

²⁸ Made X Mtns. (n.d.). *WNC Is Made by Mountains*. <https://madexmtns.com>

entrepreneurial support services and connect to other entrepreneurship ecosystems across the state.²⁹

- Oxford has pursued opportunities to connect and further local economic strategies to external initiatives like the Heartland Forward initiative. The initiative allowed Oxford to be one of the first cities in the United States to host an Idea Accelerator that facilitated grants to local “problem solvers” and connected participants to a nationwide network of Heartland Forward entrepreneurs and technical assistance providers.³⁰ Oxford also participated in the inaugural Tennessee Valley Authority Innovation Academy, a 6-month program focused on strengthening the local innovation environment.³¹

Future Trajectory

Boone is taking a holistic approach to economic resiliency by incorporating environmental sustainability into its economic development plan. For example, Boone officials are working with energy providers to have 25 percent of the city’s energy use sourced from renewable energy by 2022 and 100 percent by 2023. In addition to this effort, the city is helping businesses make similar “green” energy transitions. Electric vehicle charging stations are a part of the city’s streetscape plans, and the city, county, and ASU have partnered to create a fleet of electric buses that will be free to use. As Boone grows, however, limited access to affordable housing and affordable commercial space is a significant challenge that could limit the city’s future economic resiliency and exacerbate, rather than solve, current economic disparities.

Oxford’s external connections are currently being strengthened through a collaboration across universities in the state and the Mississippi Economic Development Authority to focus on emerging technologies and opportunities to spin out new local companies. In addition, the D3B biomedical engineering research center at Ole Miss is pursuing opportunities to connect university-based research directly to industry partners across the state. These efforts, along with the ongoing entrepreneurship-focused investment by public and private partners, have the potential to continue the trajectory Oxford has

²⁹ Mountain Times. (2018, November 1). *Startup High Country Receives NC IDEA Grant*. https://www.wataugademocrat.com/mountaintimes/news/startup-high-country-receives-nc-idea-grant/article_33f8df31-bdcf-57c4-a1b5-dea24664d0a9.html

³⁰ Heartland Forward. (2021, April 20). *Press Release: Oxford among the First Cities in the Nation to Host IDEA Accelerator that Funds Local Problem Solvers*. <https://heartlandforward.org/news/press-release-oxford-among-the-first-cities-in-the-nation-to-host-idea-accelerator-that-funds-local-problem-solvers/> and Heartland Forward. (2018, May 1). *Micropolitan Success Stories from the Heartland*. <https://heartlandforward.org/case-study/micropolitan-success-stories-from-the-heartland/>

³¹ Seid, D. (2019, December 23). *Oxford-Lafayette County One of 10 TVA Innovation Academy Communities*. *Daily Journal*. https://www.djournal.com/news/business/oxford-lafayette-county-one-of-10-tva-innovation-academy-communities/article_0e546c23-8fcc-5d6d-92ad-4160587abbe8.html

experienced since 2000. Without dedicated gender and racial equity investments, however, Oxford's gender wage and business-ownership gaps could widen, and people of color could continue to be left out of the economic benefits realized in the region.

Gainesville and Jefferson, GA: Northeast Georgia

Northeast Georgia has successfully taken advantage of its geographic location outside of Atlanta—leveraging the airport and interstate infrastructure—and paired this with savvy state and local economic development decisions to build out a supply chain of businesses in the automotive manufacturing sector, which has created spillovers for other industry sectors to grow, including healthcare and retail. These activities are ensuring northeast Georgia is not just a bedroom community for Atlanta but also its own economic engine for jobs and income regionwide.

SK Innovations and Lanier Technical College are two of the assets driving growth in Northeast Georgia



Source: Jackson County Chamber of Commerce and Lanier Technical College

Background

Gainesville and Jefferson, GA, are small cities located in northeast Georgia, approximately 60 miles north of Atlanta, one of the largest metropolitan areas in the U.S. Southeast; they are approximately a 30- to 50-minute drive to Athens, GA, home to the University of Georgia. These small cities encompass two counties in Gainesville (Hall County) and Jefferson (Jackson County) with a combined population of approximately 210,000 for the two cities. Gainesville is significantly larger with a population of 198,667.

Economic Overview: The geographic location and diversified industry mix have helped accelerate the economic performance of this area compared with other similar locations.

- Both small cities experienced a 20-year job growth significantly higher than their peers. Gainesville's private sector jobs grew by 45 percent over 20 years, more than 3 times the average for other cities of similar size. Jefferson's job base grew 106 percent from 1999 through 2019, making it a top performer among all micropolitan regions in the South.
- Population in the two cities is growing faster than in peer cities. Since 2010, Gainesville grew 13 percent compared with 9 percent for all larger metro regions,

and Jefferson grew by 25 percent (compared with 1% for other micropolitan regions).

- It is striking that as most of the Southeast has seen a decline in manufacturing jobs, Gainesville experienced an 8.7 percent growth from 1999 to 2019. For comparison, small metropolitan areas of a similar size experienced a 20 percent decline over the same period. Jefferson had manufacturing job growth of 25.7 percent from 1999 through 2019 compared with a 36 percent decline for other Southeast micropolitan areas over this same time frame.

Economic Resiliency and Dynamism: Both Gainesville and Jefferson had similar patterns to their economic growth and resiliency.

- Wages and incomes are higher in these cities than in other small cities in the Southeast. Gainesville saw a 21.7 percent increase in wages from 1999 through 2019 compared with a 15.6 percent increase in all similar size cities in the Southeast. Jefferson's household income was much higher than its peers in 2019 at \$65,385 compared with \$42,304, perhaps capturing some of the growth spilling over from the northern suburbs of Atlanta.
- Jefferson also has an above-average rate of new firm creation at 11.08 percent compared with 7.59 percent for cities of a similar size in the Southeast.
- Despite the job and income growth, these two cities have lower than average educational attainment and degrees awarded when compared to national averages. Only 50.4 out of every 10,000 people in Gainesville hold a 2-year degree or greater compared with the average of 84.0 out of every 10,000 people for similar sized cities in the Southeast. Educational attainment—the population with a bachelor's degree or higher—is 31.8 percent in Gainesville and 27.6 percent in Jefferson. Although these percentages are slightly higher than other small communities in the South, they are well below the national average.

Economic Equality: The above-average economic performance of these regions has not benefited all groups equally.

- These small cities have shown a lower than average rate of income inequality and fewer households with a net worth of zero. This could be due to the growth in manufacturing jobs that do not require a college education yet pay above-average wages.
- However, poverty rates for people of color were more than twice the overall poverty rate, and the percentage of the population without health insurance was higher than average, especially in Gainesville where 20 percent of the population was uninsured compared with 10.9 percent nationally.

- Gender inequities also were high in terms of business income. Gainesville had the highest ratio of men-owned to women-owned business income of all regions examined: men-owned businesses receive, on average, 3 times the revenues of women-owned businesses.

Creating a Resilient Economy

Despite the uneven ways people are experiencing the resiliency of growth in these small cities, the area offers promising approaches for generating a path for greater economic opportunity and resiliency compared with other small southern cities. Five key points stand out that helped change the economic trajectories for Gainesville and Jefferson, GA.

Geographic Location: The location of Gainesville and Jefferson with respect to the major metropolitan area of Atlanta, in addition to the relatively close proximity of two major automotive manufacturers—Volkswagen in Chattanooga, TN, and BMW in Greenville, SC, has allowed these two small cities to take advantage of many nearby assets for their economic development. Atlanta’s infrastructure, including Hartsfield-Jackson International Airport, one of the largest and busiest airports in the world, and its interstate highways provide excellent access for manufacturers to get products to domestic and global markets. Moreover, the proximity of a major metropolitan area provides a growing population with a steady supply of workers for small and large businesses in these two small cities. When attracting foreign companies, Gainesville and Jefferson are also able to showcase their proximity to one of the United States’ largest Korean communities located nearby in north Atlanta which provides critical cultural and social capital types of assets.

Finally, Gainesville and Jefferson are located in a major car manufacturing corridor that is shaped like a “V” with Greenville, SC, to the northeast and Chattanooga to the northwest. These two small cities located at the bottom of the “V” shape offer ample land and water, lower cost of living and doing business, and well-built out highway spurs for easy access from businesses to the interstate. The location of Gainesville and Jefferson positions them to capture business growth in the automotive manufacturing supply chain from spillover effects of co-location of similar suppliers and buyers.

Physical Infrastructure: Taking advantage of their proximity to Atlanta and major automotive manufacturers, the cities’ local economic developers made strategic decisions about building out the local infrastructure to meet the potential demands of companies seeking to locate or expand in the area. Interviewees mentioned three specific points that were most important about infrastructure development:

- Building out spurs from the four interstate exits to the company locations to ensure seamless transit from the site to the interstate.

- Creating industrial parks at highway interchanges to ease the location and expansion of some large employers also expanded the quality of the infrastructure.
- Establishing a multicounty reservoir—the Bear Creek Reservoir—to supply abundant water to support industry growth was beneficial. Planning for the Bear Creek Reservoir began in the late 1970s, resulting in a comprehensive study in the late 1980s that laid the groundwork for this important element of infrastructure for growth in the 2000s.³² Long-term planning and commitment made a difference in northeast Georgia.

Clarity of Vision, Long-Term Cooperation, and Patience: Several interviews revealed that northeast Georgia has built a resilient economy because it has maintained a clear focus on ensuring the region is attractive for growth, building from its economic history, locational assets (proximity to Atlanta and the interstate), and worker training. This focus has resulted in a more diverse industry base overall with a more acute focus on engines of growth for the area in manufacturing and healthcare. Gainesville has been exceptionally organized and aligned with local and state-related efforts to attract businesses that diversify the industry mix, and Jefferson has more recently built out its logistics and distribution industry. In addition, it is home to the game-changing location of SK Innovation, a Korean company that manufactures lithium-ion batteries for electric vehicles.

Foreign Direct Investment and State and Local Economic Development

Coordination: The location of foreign-owned companies in northeast Georgia has played a significant role in the region’s ability to maintain economic resilience. Korean company SK Innovations broke ground on its first manufacturing site in 2019 and its second facility announced in May 2020, part of a \$1.67 billion investment.³³ According to the Jackson Alliance for Economic Development, this is the largest foreign direct investment project in Georgia’s history.³⁴ This kind of investment is the result of decades-long relationship development by the Georgia Department of Economic Development in close coordination with local economic development officials. Other significant companies that located to Gainesville and Jefferson were Kubota Manufacturing of America Corporation and Kubota Tractor Corporation, which further enhances the region’s presence in automotive manufacturing with its functions of

³² Upper Oconee Basin Water Authority. (2021). *Project Overview*.

<http://www.bearcreekwtp.com/project-overview.php>

³³ Georgia USA. (2020, May 4). *SK Innovation to Begin Construction on Second Georgia Battery Facility in July*. <https://www.georgia.org/newsroom/press-releases/sk-innovation-begin-construction-second-georgia-battery-facility-july>

³⁴ Jackson Alliance for Economic Development. (2021). *Georgia Department of Economic Development*. <https://jacksonalliance.com/partner-organizations/georgia-department-of-economic-development/>

headquarters, manufacturing, assembly, distribution, and R&D located across the two counties.³⁵ This is important because as the automotive manufacturing sector evolves into electric vehicles, the area is home to prominent innovators and manufacturers that can position the region for competitive growth in the future.

Workforce and Business Alignment: Interviewees reported that the long-standing strong support from the business community to support education has been made a difference for Gainesville and Jefferson. One interviewee commented that many small cities have land, water, and access to interstates, but organized and strategic long-term workforce development is what can distinguish some small cities from others. Gainesville is home to Lanier Technical College, which created tailored-skills training programs to support the needs of industry specifically in northeast Georgia. Interviewees said Lanier Technical College is good at workforce development because they have close relationships with business, they listen to business, and they frequently design and adapt skills-based training to meet the needs of local employers. This support from Lanier has been notable in the past 10 years since the area has experienced a “paradigm shift for increased skills-based education,” said an interviewee. Lanier Technical College also is interesting because it offers a guarantee to graduates—if a graduate cannot get a job upon graduation they can return to the College and get retrained for free.

Future Trajectory

Gainesville and Jefferson are well positioned to keep driving growth sectors of health and manufacturing, while also creating spillover effects that grow the local economy with opportunities in retail and service sector jobs. The continued population growth of Atlanta and its suburbs will offer a steady supply of workers. As the region prepares itself for the next generation of industries, it will be important to continue to focus on infrastructure but with a focus on broadband internet connectivity to support the needs of electric vehicle innovators and manufacturers and to provide virtual learning opportunities for skills-based training. Furthermore, salaries in logistics and distribution are typically lower than in other sectors. For Jefferson more specifically, it will be important to make sure there is a diverse supply of jobs with economic mobility so that workers in the logistics sector have options to build wealth. Furthermore, as these small cities continue to grow in overall resilience, it will be important to ensure all residents have the opportunity to engage in the economy, specifically ensuring that households of color in extreme poverty and women-owned businesses have the opportunity to flourish.

³⁵ Georgia USA. (2020). *Georgia Sows Great Relationships for Kubota's Success*. <https://www.georgia.org/georgia-made/success-stories/georgia-sows-great-relationships-kubotas-success>

Savannah, GA, and Wilmington, NC: Coastal Cities

Wilmington, NC, and Savannah, GA, are two southern coastal cities that are pushing economic diversification in distinct ways. While Savannah has benefited from historic industry strengths and a deep-water port, Wilmington is undergoing a rapid transformation by diversifying its industry base in manufacturing, fintech, and pharmaceuticals. Both are among the fastest growing places in the United States, benefiting from attractive locations and rapid industry growth, and they are tackling questions of income inequality and affordability as they grow.

The Port of Savannah Supports the Region's Manufacturing and Logistics Supply Chain



Source: Getty Images

Background

Savannah, GA, and Wilmington, NC, are examples of mid-sized metropolitan areas having between 250,000 and 500,000 residents and experiencing fast growth and economic performance outpacing similar sized areas in the United States. Coastal communities have bountiful natural assets and are attractive places to visit and relocate, and port infrastructure can support trade. However, they are vulnerable because many

jobs are seasonal, low wage, and susceptible to disruptions. Both cities have different economic trajectories that they have built and plan to pursue for greater resiliency.

Economic Overview:

The Savannah, GA, metro area has a population of 386,000, with above-average private sector job growth and population growth, a high median income, and a large working-age population. Its deep-water port and surrounding logistics and aerospace manufacturing industries support a growing regional manufacturing economy, and it is diversifying into creative industries, tourism, and tech by leveraging its local assets. It is one of the few places in the United States that has added manufacturing jobs since 2000, driven by aerospace and industries leveraging the port infrastructure and attracting small to mid-sized companies to support the supply chain.

The Wilmington, NC, metro area is home to more than 297,000 residents on the southeastern coast of North Carolina³⁶ and is among the fastest growing places in the United States. Despite not having the tourism draw of Myrtle Beach or the shipping port of Norfolk, it is quickly emerging as a new model for coastal city development. Its economy is driven by a mix of coastal tourism, manufacturing, and a growing tech sector, with major players including Corning, GE, and PPD alongside new growth in startups in software and finance, driving a growing high-tech workforce and wage growth.

- In the past 20 years, job growth in both cities was 3 times the rate of job growth in peer regions of similar size (36% to 38% compared with 13% for other small metros in the South).
- Savannah is a top performer in manufacturing job growth (growth of 9% over 20 years compared with a decline of -20% for similar regions), whereas Wilmington is a top performer in terms of the percentage of technology jobs (7.4% of all jobs compared with 2.1% for similar regions).
- Both regions have an above-average rate of new businesses formed: In Savannah this is a result of small to medium-sized manufacturing and logistics companies supporting the port infrastructure, while in Wilmington this is a product of a growing startup ecosystem.

Economic Resiliency

- Both Savannah and Wilmington have rapid population growth outpacing national averages and increasing racial and ethnic diversity.
- They benefit from high educational attainment in adults and multiple institutions of higher education (University of North Carolina–Wilmington and Cape Fear

³⁶ Until 2009, Brunswick County was included in the Wilmington, NC, metro area. Today, it is calculated as part of the Myrtle Beach, SC, metro area.

Community College in Wilmington; Savannah College of Art and Design, Georgia State, Savannah Tech in Savannah).

- They have a diverse industry mix, including manufacturing, logistics, tech, healthcare, and services that are generating above-average wages and household incomes.

Economic Equality

- Savannah has below-average income inequality, a lower percentage of working poor, and a higher percentage of people of color with health insurance. However, a high rate of households with asset poverty among Black residents stands out as a challenge for economic mobility and inclusion.
- Wilmington struggles with a bifurcated economy, between high-wage tech jobs and high-wealth retirees and lower-wage seasonal tourism employment. Affordable housing is consistently a top issue among community leaders and policymakers.
- Before the pandemic, both Savannah and Wilmington struggled with high rates of economic inequality. In Savannah, a Black household had an average income 39 percent below that of an average White household, and in Wilmington, a Black household had an average income 50 percent that of an average White household. Black households were more likely to be asset poor, without savings or assets to sustain their livelihood for more than 3 months. The pandemic was particularly hard for low-wage workers, and both places struggled with high unemployment in seasonal industries.

Creating a Resilient Economy

Both Savannah and Wilmington benefit from attractive locations and connectivity to high-growth areas and industries. For Savannah, benefits arise from connections through its port, logistics, and manufacturers in the southeast. For Wilmington, benefits arise from connections to high-growth metro areas in North Carolina, investor networks, and strong social capital throughout the state. These coastal cities offer several key takeaways that provide insight on their resiliency.

Wilmington's Entrepreneurial Economy is Diverse and Growing



Source: Jim Roberts, WALE

Infrastructure and Natural Assets: Savannah is home to the largest deep-water port in the Southeast and the third largest export port in the United States. The port supports additional industries in wood and metal products manufacturing, storage, maritime, railroads, and services. Wilmington initially attracted people with its beaches and lifestyle drawing wealthy and influential individuals from Raleigh and Charlotte. Wilmington's connection to influential individuals and successful startup founders transformed it into a fast-growing city with recent developments in pharmaceuticals, finance, and tech and a rapidly growing startup ecosystem.

Industry Diversification: Savannah has a healthy manufacturing and local logistics industry that helps diversify the economy from tourism. Neighboring Gulfstream Aerospace is the largest employer in the region and the hub for a large aerospace supply chain in the Southeast. Savannah is one of the few places in the Southeast to add manufacturing jobs in the 21st century, but it has not yet attracted the tech ecosystem that generates high-paying jobs in growth industries. Wilmington and the Cape Fear region are undergoing an economic transformation as the region is building a

more diversified and resilient economy with technology, finance, major manufacturers, healthcare, and emerging blue economy sectors such as offshore wind.

Manufacturing and Logistics Supply Chain: Savannah Benefits from Continued Growth in Manufacturing and Logistics and Is an Attractive Place for Small to Medium-Sized Companies in the Supply Chain to Invest and Relocate: Economic drivers in Savannah, including port logistics, defense, aircraft manufacturing, hospitality and tourism, and film production, have promoted small business growth over the last two decades. Leading manufacturers like Gulfstream and the port anchor the region and support a large supply chain, including many small and medium-sized companies in manufacturing, logistics, and warehousing.

These industries have created sustained job growth but are influenced by external factors such as pandemics, global trade, and federal government activities. Savannah suffered a significant downturn during the COVID-19 pandemic in 2020, taking a harder hit than Georgia because of large losses in restaurants, leisure, and hospitality, as well as in corporate jet purchases and film production. Demand has rebounded in 2021 but has motivated economic developers to attract more tech to the region.

According to research by Georgia Southern University, Savannah's share of jobs in high-tech industries is below that of Georgia and national averages. Other coastal cities, such as Charleston, SC, and Wilmington, NC, have had high-profile exits and initial public offerings in the last decade, including BenefitFocus and Blackbaud (Charleston) and nCino and Untappd (Wilmington), changing the discussion around startup activity in traditionally conservative coastal cities. Organizations like The Creative Coast and the Savannah Economic Development Authority are starting to connect the resources in Savannah and leverage the regional port and logistics industry to incorporate more technology, but the startup ecosystem remains small and is behind many of its peers and neighbors.

Entrepreneurship and Emerging Investment Networks. Wilmington has a fast growing entrepreneurial ecosystem with high profile exits, angel funds, and resources moving into the region. The local growth of startups, including Live Oak Bank in 2008 and subsequent spin-offs of nCino in 2011 and Apiture in 2017, placed Wilmington on the national map for fintech startups. In 2020, Startup Genome ranked Wilmington among its top 100 global emerging startup hubs, one of the smallest cities to make the list. Wilmington has demonstrated startup success stories such as Untappd, access to capital in hubs like Raleigh and Charlotte, and a wealth of retired entrepreneurs to mentor entrepreneurs. Currently, angel networks such as WALE and new initiatives such as Genesis Block are better connecting the startup ecosystem and attracting resources and companies to Wilmington.

Future Trajectory

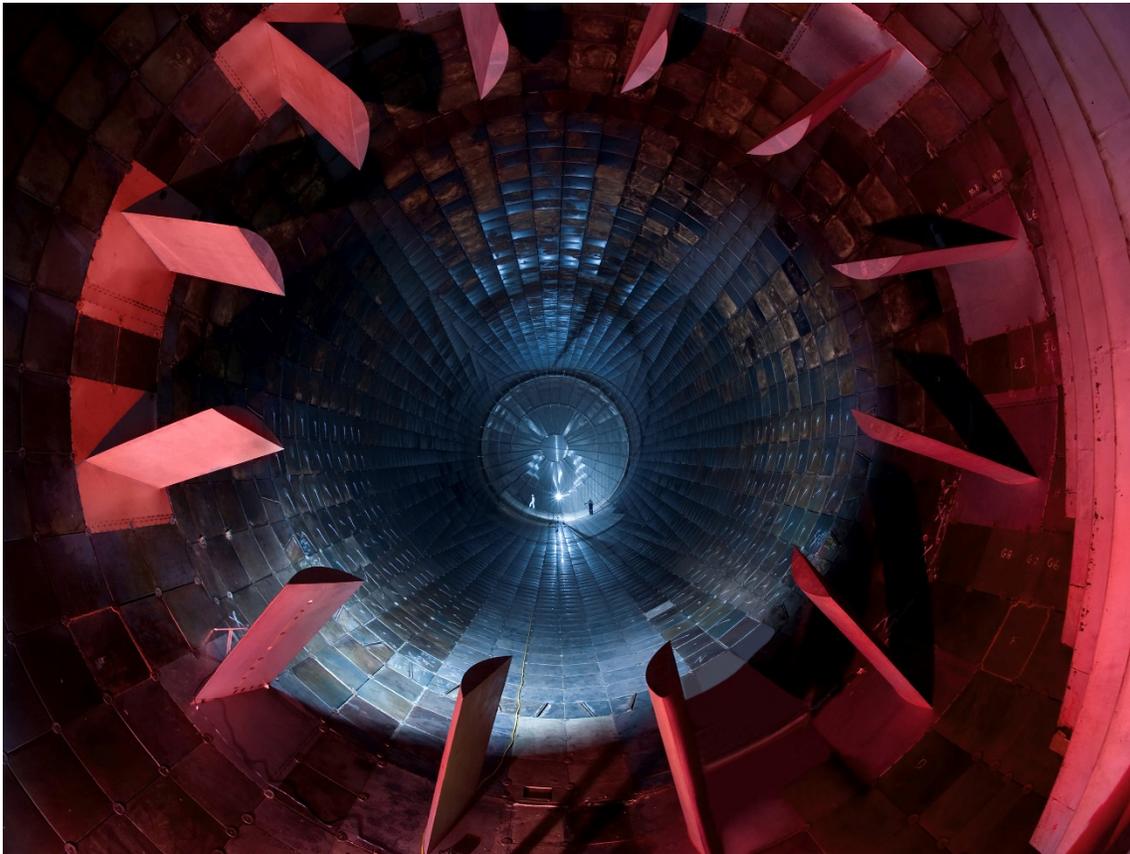
Despite the ongoing growth and diversification, seasonal tourism and service jobs make up a large share of the workforce, paying below-average wages in cities with above-average housing costs. Both coastal cities will need to focus on affordable housing, better access to good-paying jobs, and workforce development. Savannah is paying closer attention to building a stronger tech economy and providing support for local entrepreneurs that builds on the region's strengths such as in logistics and creative industries. Wilmington has a successful entrepreneurial ecosystem and is aiming to better focus, coordinate, and align its broader economic development activities. In Wilmington, a new generation of business leaders, elected officials, civic leaders, and others are starting to recognize this need and better align resources in the future. Organizations such as Cape Fear Collective, the Wilmington Chamber, WALE, and Genesis Block are starting to coalesce around new strategies for economic development.

Coastal cities are addressing the need for high-wage jobs and economic mobility. Both places struggle with high rates of asset poverty, economic inequality, affordable housing, and a large income gap between Black and White households. Organizations like Step Up Savannah are actively working to move employees into higher-wage jobs while navigating public benefits and workforce development resources. Cape Fear Collective in Wilmington is working to create better upward mobility in Wilmington and the Cape Fear region through its inclusive economy work.

Tullahoma-Manchester, TN: Military-Connected

Tullahoma-Manchester is a region that has created economic resiliency by parlaying its unique military, educational, and industry assets into new and expanded knowledge-based and advanced manufacturing companies that have steadily grown jobs, wages, and new firms. At the same time, this growth has supported the expansion of regional retail, recreation, and healthcare sectors.

The Arnold Engineering Development Complex at Arnold Air Force Base is Home to one of the Most Advanced Aerospace Testing Centers in the World



Source: Getty Images

Background

The Tullahoma-Manchester Micropolitan Statistical Area is located in southern Middle Tennessee and consists of three counties (Coffee, Franklin, and Moore) with a population of just over 100,000. It is approximately an hour from three metropolitan regions: Nashville, TN; Chattanooga, TN; and Huntsville, AL.

Economic Overview: The region's steady growth in the past 20 years is highlighted by a combination of traditional and knowledge-based industries.

- The region added 20 percent to its job base from 2009 through 2019, while the average southern micropolitan region lost 4 percent of its job base.
- The region's manufacturing base has grown in jobs and diversification over the past 20 years, while other regions this size have lost a significant level of goods-producing jobs.
- The Arnold Air Force Base (AFB) and development complex provide a steady foundation of jobs, mostly buffered from economic downturns.

Economic Resiliency: The ability for the region to maintain its economic resiliency appears to be driven by a combination of factors.

- It has 4 times the concentration of knowledge-based jobs compared with other micropolitan regions in the southern United States.
- It has diversified its manufacturing base from traditional sectors of distilled beverages and aerospace to include an above-average concentration of jobs in automotive, plastics, and machinery manufacturing.
- Diversification has resulted in higher than average median wages and a 20-year wage growth more than 80 percent greater than other micropolitan regions in the South.
- A mix of postsecondary educational institutions produces a higher than average number of skilled graduates for the workforce.

Economic Equality: While the region has made progress in terms of income inequality, gender and racial economic equality measures continue to lag.

- Job growth in a mix of industries and skill levels has resulted in relatively good performance in measures of equity: income inequality and the rate of zero net worth households are below national averages. Yet, the asset poverty rate (those unable to live above poverty without income) is higher than average.
- The gender measures are mixed: Men make, on average, 43 percent more than women (a gap almost double the U.S. average), yet the ratio of sales between men-owned and women-owned businesses is below the U.S. average and the lowest among the seven regions.
- Racial inequities are higher than average for poverty rates for households of color and for the percentage of people of color without healthcare insurance.

Creating a Resilient Economy

Data and interviews point to four assets working hand in hand to create economic resiliency.

Building on Unique Economic Assets: At the center of the region's economy is the Arnold AFB and the Arnold Engineering Development Complex (AEDC), a facility considered to be one of the most advanced aerospace testing centers in the world. With a 70-year history in the region, the complex has steadily grown and now operates 55 specialized units for testing aerodynamic and propulsion wind tunnels, rocket and turbine engine test cells, and other advanced systems. AEDC also was a driving force for the location of the University of Tennessee's Space Institute (UTSI) in the region.

The growth of AEDC's military and private sector workforce has been primarily driven by federal research funding and, for the most part, has had limited spin-off activity. However, this may be changing as new hypersonic research has attracted key university researchers such as Dr. John Schmisser at UTSI and companies like Integration Innovation Inc. (i3), a software and systems engineering company based in Huntsville, AL. It is anticipated that ongoing federal support for research at AEDC will continue to bolster new jobs. For example, i3 was recently acquired by Lockheed Martin, further raising the profile of domain expertise resident in Tullahoma-Manchester.

The region's recent uptick in firm growth and professional/technical jobs has been part entrepreneurial and part a result of contracting changes at Arnold AFB. Not long ago, Arnold changed how it contracted and out-sourced services, moving from one large contractor to multiple contractors. This structural change in contracting influenced data showing new firm formation in the region. Yet, professionals leaving AEDC and professionals associated with UTSI often stayed in the region to start new businesses. As an example, UTSI alumni Paul Gloyer started Gloyer-Taylor Laboratories, a company specializing in space systems, propulsion and composites for rockets, and other aerospace applications, that now employs more than 20 scientists and engineers.

Collaborative Support and Long-Term Focus to Build a Diverse Manufacturing Base: Although AEDC and UTSI are key assets, the region has a diverse manufacturing economy. The area has long been home to international distilleries such as Jack Daniels and George Dickel, and new artisanal distilleries are opening in the region. Likewise, the advanced manufacturing base has grown around an array of sectors in the past 20 years. Interviews noted the growth in manufacturing can be contributed, in part, to a long-standing history of maintaining certified industrial sites and spec buildings and the partnership between local and state economic development organizations. In addition, the region has an airport with an industrial complex, and Coffee County is also home to one of two industrial megasites in Tennessee, increasing the size and number of prospects. The industrial base combined with a skilled workforce has enabled the region to work with the state to attract an array of advanced manufacturers such as Nissan's

engine facility, precision machinery firms like Micro Craft and Schmiede, and specialized plastics manufacturers.

Strong Industry Alignment between Employers and Workforce and Educational Institutions: In the region, the Tennessee College of Applied Technology (TCAT) with 13 technical training programs, Motlow State Community College, and UTSI with master's and PhD programs, and branch campuses of other state institutions form a strong mix of workforce training assets. In addition, the K–12 education system is strongly supported by local government funding, with a long history of career and technical education programs. Active employer engagement and state support for capital projects associated with training facilities keep curricula fresh and has resulted in degree completion and job placement rates well above average. Connections between industry and education are further solidified with programs such as TCAT's 1-year "warranty of competency," where graduates are retrained at no cost if employers feel they have not met the skill competencies associated with their training.

Paying Attention to Technology Infrastructure: An early proponent of fiber, Tullahoma is one of seven "gig" cities in Tennessee. As Thom Robinson, the economic development director of Tullahoma, highlighted, "the availability of fiber has added to the competitive advantage of the region, allowing companies like Cubic Transportation (a company with offices throughout the world) to double its workforce in the Tullahoma office from 150 to 300 employees."

Supporting the region's economic resiliency is robust retail and healthcare services. Tullahoma is the largest city in a five-county region, making the micropolitan area a hub for retail and health services. As Winston Brooks, the Community Development Director of Tullahoma, noted, "As a regional center for commerce, the city punches above its weight class with regards to retail offerings." The Vanderbilt Tullahoma-Harton Hospital in Tullahoma is a 135-bed acute care regional hospital with more than 25 specialties serving the five-county area. Tullahoma is also a home to Vanderbilt's LifeFlight service, which is located at Tullahoma Municipal Airport.

Although the regional economy may be one of the more resilient in the South, it is not without its challenges. Overall, economic development is transaction based, with little strategic planning to integrate various projects or examine the region comprehensively. There is no regional economic entity, yet each organization has complementary roles and contributions, as well as close and constant communication. Major players include the state's economic and community development department, the Tennessee Valley Authority, Middle Tennessee Industrial Development Association, the counties' industrial development boards, the South-Central Tennessee Development District, Tullahoma Area Economic Development Corporation, and various chambers of commerce.

It was noted that the culture among leadership is heavily focused on recruitment, with less understanding of the role innovation and entrepreneurship play in job and wealth

creation. In addition, community development projects, such as downtown redevelopment and beautification, parks and greenspaces, and entrepreneurial infrastructure like accelerators and maker spaces, have not kept pace with growth.

Future Trajectory

Interviews noted that the region's future economic resiliency will likely come from continuing to focus on its key assets and sectors (aerospace research/testing and advanced manufacturing), as well as enhancing the ability and agility to readily seize new opportunities as they occur. Four trajectories stood out: two continue to build on existing assets, one focused on creating dynamic entrepreneurial opportunities, and one focused on enhancing the sense of place to support continued growth.

Continued Connection to and Growth of Specialized Services Related to AEDC:

AEDC will continue to be a major force in job creation and retention as research areas expand and emerge.

Building Out of Manufacturing Supply Chains: Being centrally located between three larger metro regions, the area's state and local economic developers plan to continue to position the Tullahoma-Manchester region as a hub for supply chain manufacturing, especially connecting to industries like automotive and advanced materials with engineering and technical research needs.

Innovation and Entrepreneurship: Moving forward, leaders in the region want to place more emphasis on innovation and entrepreneurship, which has been hard to jumpstart despite previous attempts. There is now pressure, however, for military bases to become more engaged in their communities and regional economies. This emphasis has resulted in a project called "Dream Tullahoma," led by retired Colonel Beverly Lee to create a regional collaborative between the community and the Base that includes entrepreneurial programs and innovation space to spur new products and businesses.

Improving Community Infrastructure: It appears that the region is poised to invest in capital projects to create community and downtown amenities that enhance the quality of life and attraction of the region. These projects include community infrastructure plans in the Dream Tullahoma project and the City of Tullahoma's completion of its first ever comprehensive plan.

V. Appendix and Data Sources

Summary Data

Table 3. Summary Data for Economic Resiliency

INDICATOR	UNIVERSITY TOWNS		METRO-CONNECTED		COASTAL CITIES		MILITARY
	BOONE, NC	OXFORD, MS	GAINESVILLE, GA	JEFFERSON, GA	SAVANNAH, GA	WILMINGTON, NC	TULLAHOMA-MANCHESTER, TN
Metro area population (2020)	56,441	54,408	203,136	76,199	404,798	285,905	106,555
Population change (2010–2020)	5.9%	17.9%	13.1%	25.5%	16.5%	18%	6.9%
Private sector jobs (2019)	18,673	17,282	79,173	25,625	155,139	107,841	33,829
Job growth (1999–2019)	19%	66%	45%	106%	38%	36%	20%
Percentage of jobs in tech/energy (2019)	3.4%	4.0%	3.6%	1.1%	2.8%	7.4%	7.5%
Change in manufacturing jobs (1999–2019)	-52%	-4%	9%	25.7%	9%	-37%	4.4%
Average wage (2019)	\$33,902	\$33,705	\$49,806	\$38,842	\$47,040	\$43,100	\$46,601
Wage growth (1999–2019)	21.8%	11.1%	21.7%	14.3%	13.4%	18%	24%
Rate of new firm creation	9.9%	11.3%	9.6%	11.1%	10.4%	10.3%	7.8%
Median household income (2019)	\$47,526	\$50,722	\$62,974	\$65,385	\$59,921	\$55,384	\$51,585
Degrees granted per 100,000 population	880	1,148	50	0	168	215	154

Percentage of population with postsecondary degree	51.4%	56.1%	31.8%	27.6%	43.4%	50.5%	25.7%
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Sources: U.S. Census Bureau. ACS 2015-2019 5-Year Averages, U.S. Census 2020, Bureau of Labor Statistics (1999-2019) Quarterly Census of Employment and Wages. Bureau of Economic Analysis Business (2019). Formation Statistics; U.S. Department of Education. (2019). Integrated Postsecondary Data System (IPEDS).

Values above peer average are highlighted in bold. Top quintile performers are in green.

Table 4. Summary Data for Economic Equity

RATIO	UNIVERSITY TOWNS		METRO-CONNECTED		COASTAL CITIES		MILITARY	U.S. AVERAGE
	BOONE, NC	OXFORD, MS	GAINESVILLE, GA	JEFFERSON, GA	SAVANNAH, GA	WILMINGTON, NC	TULLAHOOMA-MANCHESTER, TN	
Income Inequality (ratio of top 20% to bottom 20%)	7.4x	5.5x	4.2x	4.4x	4.7x	5.2x	4.4x	4.9x
Poverty rate for households of color	4.7x	2x	2.1x	2.5x	1.7x	2.5x	2.3x	1.6x
Asset poverty rate	27.2%	31.6%	22.3%	23.9%	29.8%	21.3%	25.9%	24.1%
Households with net worth of zero	18.4%	19.6%	12.3%	12.3%	19.1%	14.6%	14%	15.7%
Percentage of people employed who live in poverty	-	-	8.2%	4.1%	4.9%	6.8%	7.2%	5.7%
Ratio of value of male-owned to female-owned companies	-	2.8x	3.0x	2.1x	2.0x	1.9x	1.5x	1.9x
Men-to-women wage ratio	1.0x	1.4x	1.2x	1.4x	1.3x	1.2x	1.4x	1.2x
Ratio of median home value to median	5.8x	3.9x	3.1x	2.8x	3.1x	4.2x	2.6x	3.7x

household income								
Percentage without health insurance	10.7%	9.8%	20.1%	13.7%	15.1%	11.9%	11%	10.4%
Percentage without health insurance: ratio of non-White to total population	1.2x	1.4x	1.5x	1.5x	1.3x	1.5x	2.1x	1.6x

Source: U.S. Census Bureau (2019) 2015-2019 ACS 5-Year Averages. Prosperity Now Scorecard.

Public Data for Scores

Bureau of Labor Statistics, Quarterly Census of Employment and Wages

Department of Education Integrated Postsecondary Education Data System (IPEDS)

U.S. Census Bureau, ACS 2015–2019 5-year averages

U.S. Census Bureau, 2020 Census

Bureau of Economic Analysis, Business Formations Statistics

Prosperity Now Scorecard

Definitions of High-Tech Industries

NAICS	Industry Title
2111	Oil and Gas Extraction
2211	Electric Power Generation, Transmission and Distribution
3251	Basic Chemical Manufacturing
3254	Pharmaceutical and Medicine Manufacturing
3332	Industrial Machinery Manufacturing
3333	Commercial and Service Industry Machinery Manufacturing
3341	Computer and Peripheral Equipment Manufacturing
3342	Communications Equipment Manufacturing
3343	Audio and Video Equipment Manufacturing
3344	Semiconductor and Other Electronic Component Manufacturing
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing

3346	Manufacturing and Reproducing Magnetic and Optical Media
3353	Electrical Equipment Manufacturing
3364	Aerospace Product and Parts Manufacturing
4861	Pipeline Transportation of Crude Oil
4862	Pipeline Transportation of Natural Gas
4869	Other Pipeline Transportation
5112	Software Publishers
5173	Wired and Wireless Telecommunications Carriers
5174	Satellite Telecommunications
5179	Other Telecommunications
5182	Data Processing, Hosting, and Related Services
5191	Other Information Services
5413	Architectural, Engineering, and Related Services
5415	Computer Systems Design and Related Services
5416	Management, Scientific, and Technical Consulting Services
5417	Scientific Research and Development Services
5511	Management of Companies and Enterprises

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