

Where We Stand (WWS): Case Studies

Purpose: This is a part of a series of working papers that serve as a basis for strategic conversations about what a successful St. Louis looks like and how we will get there. The regions of focus in the case studies were chosen because they are often thought of as successful regions or there is something specific that made the region worth a closer look.

Preamble, from [WWS9](#):

When someone sees something admirable in another region that may be lacking in St. Louis, it is common for them to ask: What are they doing that we're not? It is not a straightforward task to demonstrate causality in accounting for differences in socioeconomic outcomes. Moreover, it is not always clear what led to a given outcome. Local outcomes are influenced by national trends and policies, presence of natural amenities, and in some cases, the luck of having a pioneer firm in a growth industry. Nonetheless, it is important to take a close look at how specific regions came to experience specific outcomes, to weigh the influence of local decisions, and to ask whether effective decisions in other regions can be emulated here.

Have something to add to the discussion on this region? Please email us at wws@ewgateway.org

Case Study: Raleigh

Version: Revised November 2024

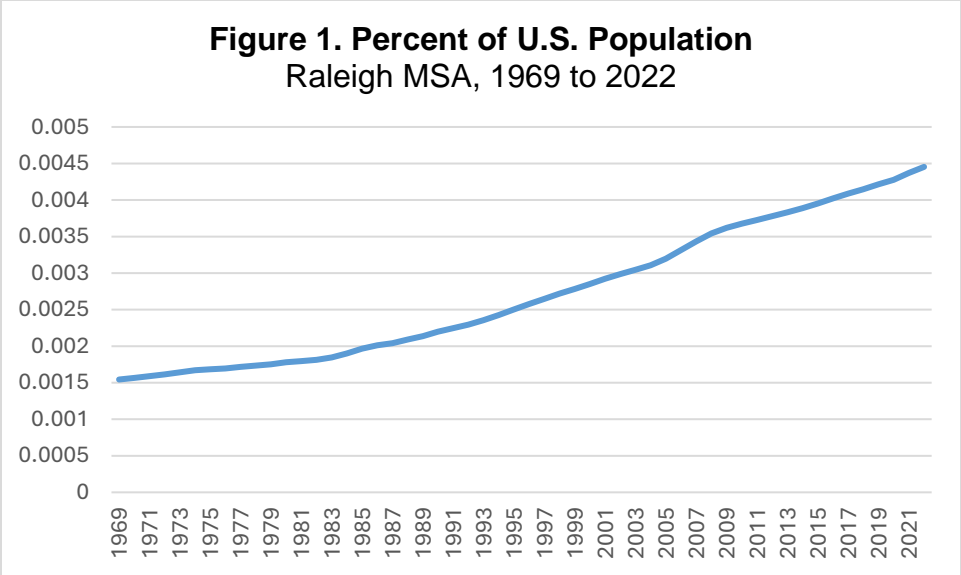
** This is a living document that will be updated periodically. Check for updates at www.ewgateway.org/wws*

The population and employment of the Raleigh Metropolitan Statistical Area (MSA) have consistently grown more quickly than the national average over the last half century. Raleigh has also generally seen increasing per capita income relative to the United States. Jobs in science and technology have driven Raleigh's growing prosperity. Over 120,000 jobs, or nearly one private sector job in five, is in life sciences, advanced manufacturing, or information technology.¹

Raleigh compared to the United States

Figure 1 shows that Raleigh's share of the U.S. population grew from 1969 through 2022. The region's share doubled from 1991 to 2022 and nearly tripled from 1969 to 2022. From 2019 to 2022, Raleigh's population grew by 6.6%, compared to the national average of 0.9%.

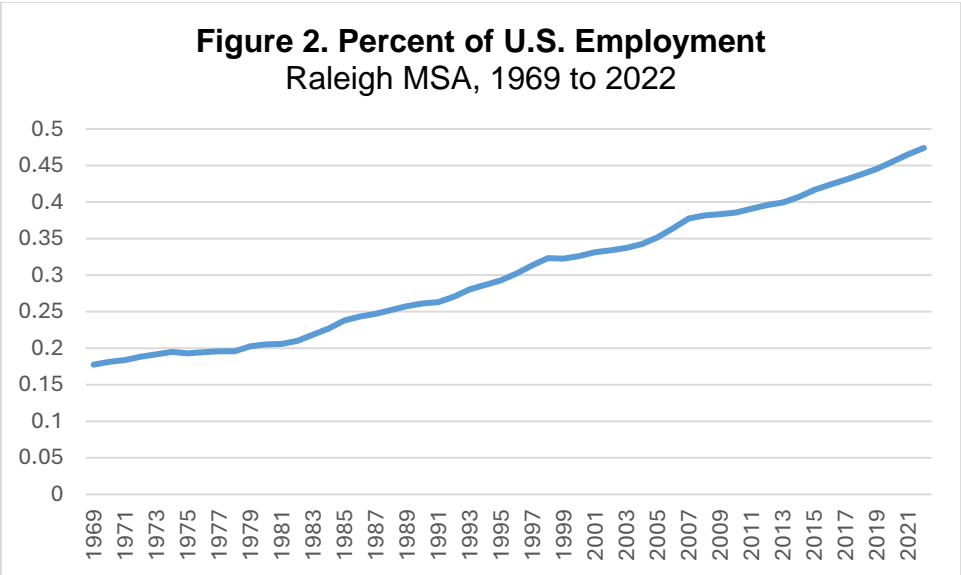
¹ In 2022, private sector non-farm wage and salary employment in Raleigh was 656,033 per BEA Table CAEMP25N. Advanced manufacturing was estimated at 22,000 in 2019 per Wake County Economic Development: https://nmcndn.io/e186d21f8c7946a19faed23c3da2f0da/ca771636b8514cc3b5eb2e42fc43d69e/files/target-industries/advanced-manufacturing/WCED_Advanced_Manufacturing_Brochure_Spread_update_medres.pdf; Technology employment was estimated at 60,000, and life sciences at 40,000 in 2020 per Work in the Triangle: www.workinthetriangle.com/working-here/



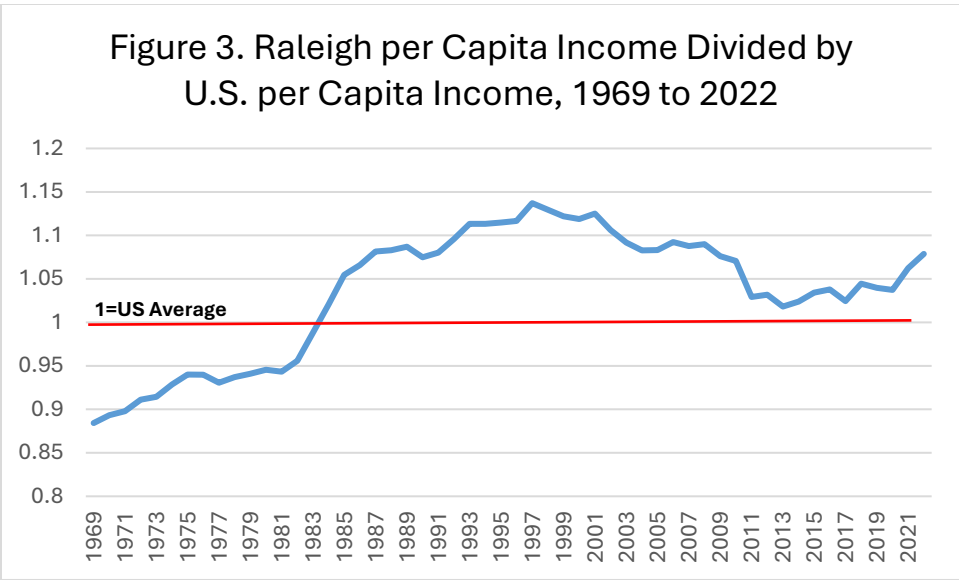
Source: Bureau of Economic Analysis (CAINC30)

Figure 2 shows that Raleigh’s share of national employment has also risen. From 1969 to 2022, Raleigh’s share of employment nearly tripled, growing by a factor of 2.67. From 2019 to 2022, employment in Raleigh grew more than twice as quickly as the national average.

As shown in Figure 3, the growth trend for per capita income is more complex. In 1969, per capita income in Raleigh was 88.4% of the U.S. average. This share grew rapidly over the next three decades, surpassing the U.S. average in 1984. By 1998, Raleigh’s per capita income was 12.9% higher than that of the United States. From 1998 to 2013, Raleigh’s per capita income fell to just 1.8% higher than the United States. Since 2013, income levels have generally grown more quickly in Raleigh than in the United States, and in 2022 stood 7.9% higher than the United States.



Source: Bureau of Economic Analysis (CAINC30)



Source: Bureau of Economic Analysis, (CAINC30)

Employment by Industry

North Carolina had a larger manufacturing sector than most of the South through the 1970s. Major industries included textiles, apparel, and tobacco. These industries were victims of globalization. From 1978 to 1997, North Carolina lost more than 80,000 jobs in textile manufacturing, 35,000 in apparel, and nearly 10,000 in tobacco manufacturing. These changes accompanied a long-term trend toward declining agricultural employment. Between 1950 and 2004, the share of North Carolina’s workforce engaged in farming declined from 25% to 2%.²

Despite its manufacturing prominence, wages in North Carolina remained low. In 1958, North Carolina ranked 47th among the 50 states on per capita income.³ Civic leaders were concerned with brain drain and recognized a need to create more jobs for college graduates. In particular, business leaders hoped to leverage the educational assets in the region: Duke University, the University of North Carolina at Chapel Hill, and North Carolina State University.

In Raleigh, the transition from a low-wage region to a technology leader was decades in the making. In 1953, a group of businessmen began meeting to discuss plans to attract jobs requiring higher education levels, and in the mid-1950s urged Governor Luther Hodges to commission a report on creating a research park.⁴ In 1956, the Research Triangle Committee was formally incorporated, changing its name to the Research Triangle Foundation in 1958. With initial fundraising of \$1.5 million, land was purchased, and in 1959 the Research Triangle Park (RTP) was founded. Early tenants included the U.S. Forest Service, the National Institute of Environmental Health Services, Underwriters Laboratory, and professional organizations in chemistry and electronic instruments.

² Jesse White, 2004. Economic Development in North Carolina: Moving toward Innovation. *Popular Government*, Spring/Summer, pp. 2-13.

³ Bureau of Economic Analysis, 2024. Table SAINC30.

⁴ Scott Huler, 2014. The man and plan behind Research Triangle Park. *Our State Magazine*, August 25. <https://www.ourstate.com/research-triangle-park/>

Recruiting IBM as a major tenant in 1965 helped solidify RTP’s status as a technology hub.⁵ In 1969, pharmaceutical giant Burroughs-Wellcome purchased 66 acres for a new corporate headquarters and remained a major employer in RTP for decades.⁶

In the 1980s, state government began funding the Microelectronics Center of North Carolina (MCNC) and the North Carolina Biotechnology Center (NCBC). MCNC developed a microwave communications system linking the universities with the first two-way broadcast-quality audio-visual system in the United States. The mcnc.org domain was registered in 1987, one of the first 10 “dot-org” registered domains.⁷

In 1984, the North Carolina General Assembly founded the North Carolina Biotechnology Center, which does business as NCBiotech. A 2008 report by NCBiotech estimated that the State of North Carolina spent \$1.2 billion over the previous decade on biotechnology, developing a \$45 billion industry in the state.⁸ The state investment included \$857 million in research and facilities including the NC Research Campus and UNC cancer research; \$135 million in workforce training at North Carolina State University; \$114 million to build partnerships via NCBiotech; and \$102 million in direct company incentives.

In addition to investing directly in developing technology-related industries, the state has also invested strategically in its education and transportation systems. In 2022, North Carolina ranked 5th in the nation on highway spending, behind only the states of Texas, California, Florida, and Pennsylvania.⁹ According to a report by the James G. Martin Center for Academic Renewal, in 2018 North Carolina ranked 4th among the 50 states on support for higher education per pupil.¹⁰ An article by Nichola Lowe concludes that “by coordinating training, recruitment, and research activities, agencies are influencing the location and employment strategies of life sciences firms in ways that are helping to foster a more socially inclusive transition to the knowledge economy.”¹¹

Conclusion

A review of nearly 75 years of history shows that Raleigh’s success did not happen overnight, nor was it the result of a single silver bullet. A critical success factor was the ability of state government to sustain investments over a multi-decadal period in alignment with strategic goals established by the regional business community.

⁵ Wiley Williams, 2006. Research Triangle Park. ncpedia.org/research-triangle-park

⁶ Paul Rudolph Institute for Modern Architecture. paulrudolph.institute/196903-burroughs-wellcome

⁷ MCNC’s History. mcnc.org/who-we-are/history/

⁸ State Science and Technology Institute. Annual Economic Impact of Biotechnology Exceeds \$45 Billion in North Carolina. <https://ssti.org/blog/annual-economic-impact-biotechnology-exceeds-45-billion-north-carolina>

⁹ U.S. Census Bureau, 2022. State and Local Government Finance Historical Datasets and Tables. <https://www.census.gov/data/datasets/2022/econ/local/public-use-datasets.html>

¹⁰ James G. Johnson Center for Academic Renewal, 2020. Did you know? NC Subsidies for Colleges Top 5 Nationally. <https://www.jamesgmartin.center/2020/12/did-you-know-nc-subsidies-for-colleges-top-5-nationally/>

¹¹ Nichola J. Lowe, 2008. Job Creation and the Knowledge Economy: Lessons from North Carolina’s Life Science Manufacturing Initiative. *Economic Development Quarterly*, 21, pp. 339-353.