

Assessing Innovation Hubs and Regional Innovation Engines: New Methods

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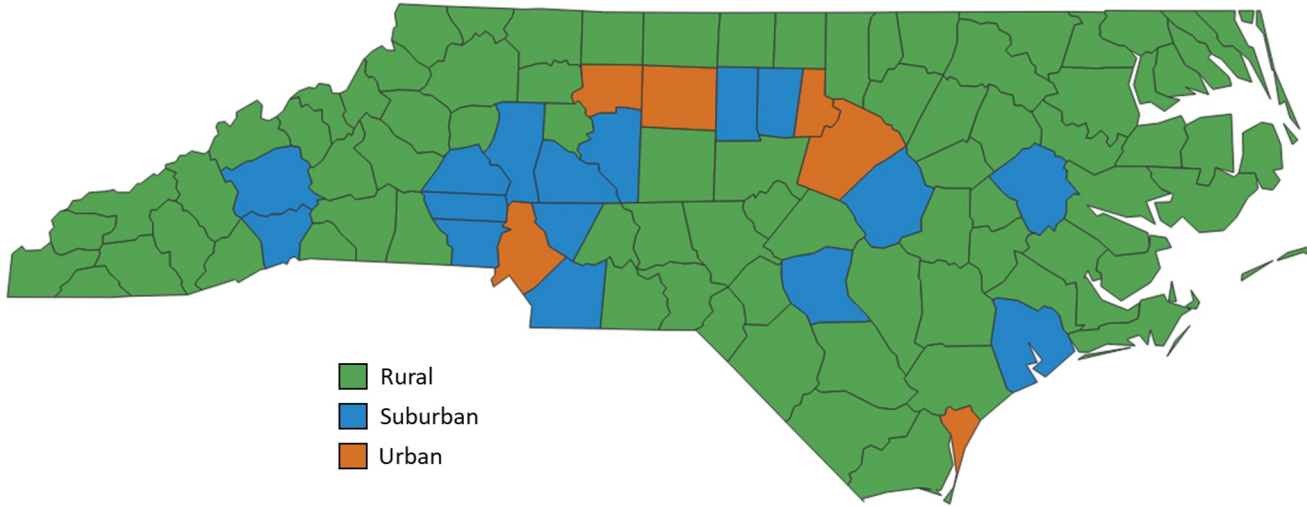




North Carolina Remains a “Persistently Rural” State

- 2nd-largest rural population in the nation with 3.6 million people.
- 2nd-largest number of small towns <10,000 in the nation.
- Urban centers less dense and more dispersed - 24 of 78 rural counties are within Metropolitan Statistical Areas (MSAs).
- Rural communities more dense.
- 78 (of 100) counties & 403 (of 556) towns.

North Carolina County Classification



Total Population

10,439,388

78 Rural Counties

3,646,750

16 Suburban Counties

3,073,322

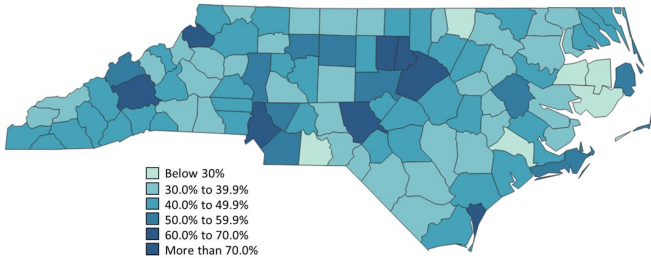
6 Urban Counties

3,719,316

Source: 2020 Decennial Census

Review of NC Economic Development Measures

Postsecondary Attainment (Ages 25-44): 2020

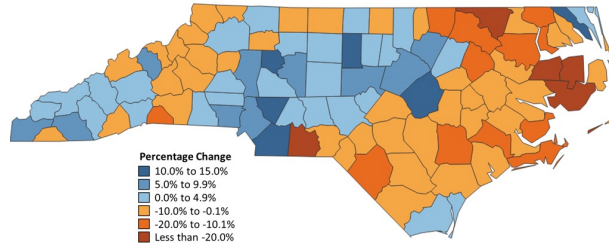


Postsecondary Attainment

Rural 41% | Suburban 51% | Urban 66%

Source: mvFutureNC. 2022 County Attainment Profiles

Young Adult (18-29) Population Change: 2017-2021

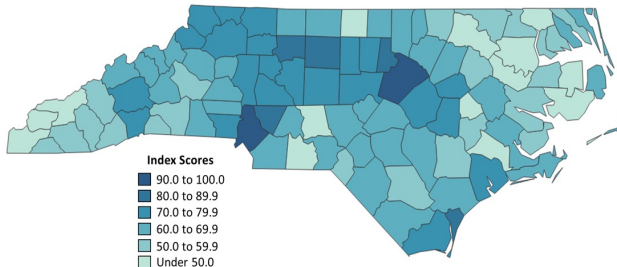


Young Adult Change

Rural -3.3% | Suburban 2.9% | Urban 4.9%

Source: American Community Survey 5-Year Estimates

Broadband Availability Index: 2021



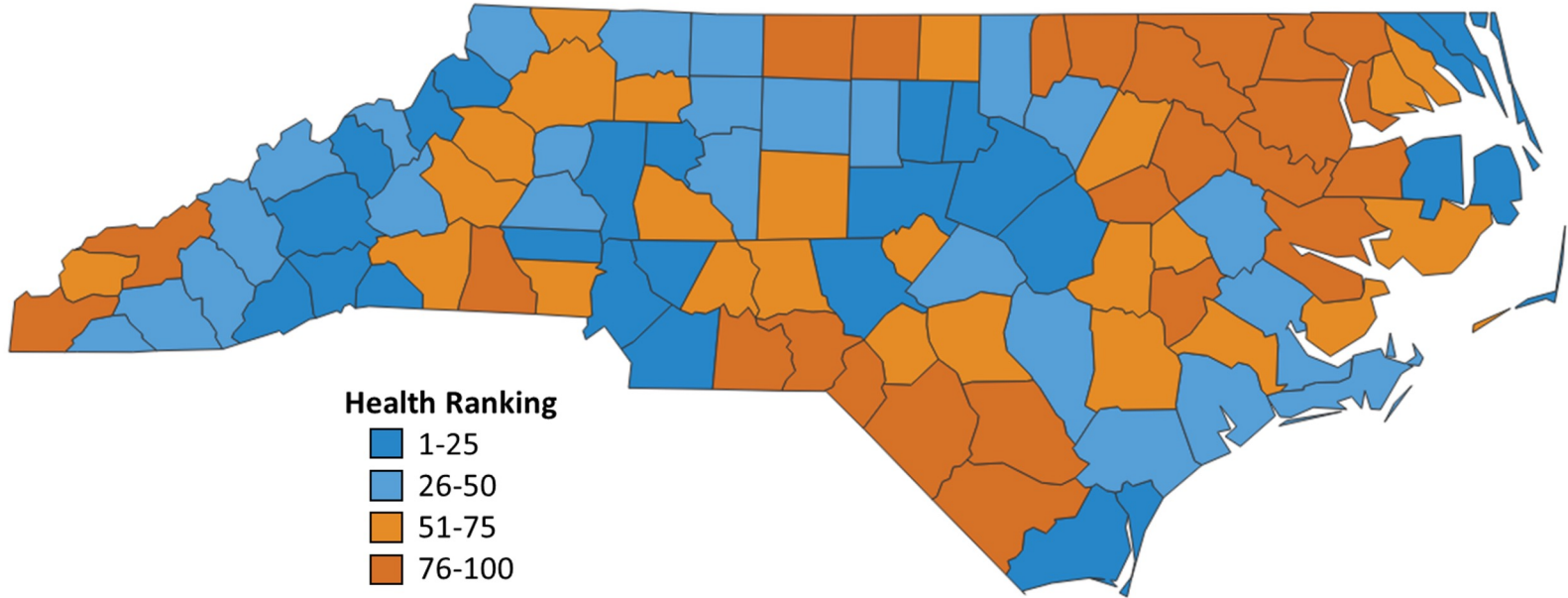
Average Index Scores

Rural 58 | Suburban 73 | Urban 88

Source: North Carolina Department of Information Technology, 2021 Broadband Availability Index

Rural Healthcare Inequities and Social Determinants of Health

County Health Rankings: 2023



Source: Robert Wood Johnson Foundation and University of Wisconsin Population Health Institute, 2023 County Health Rankings

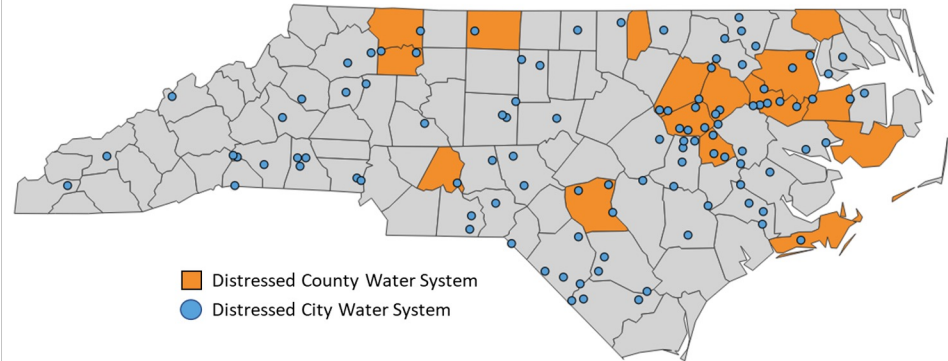
Safe, Modern, Affordable Infrastructure

47% OF RENTERS

20% OF HOMEOWNERS

in rural North Carolina are **cost-burdened** by housing costs.

Financially Distressed Water Systems

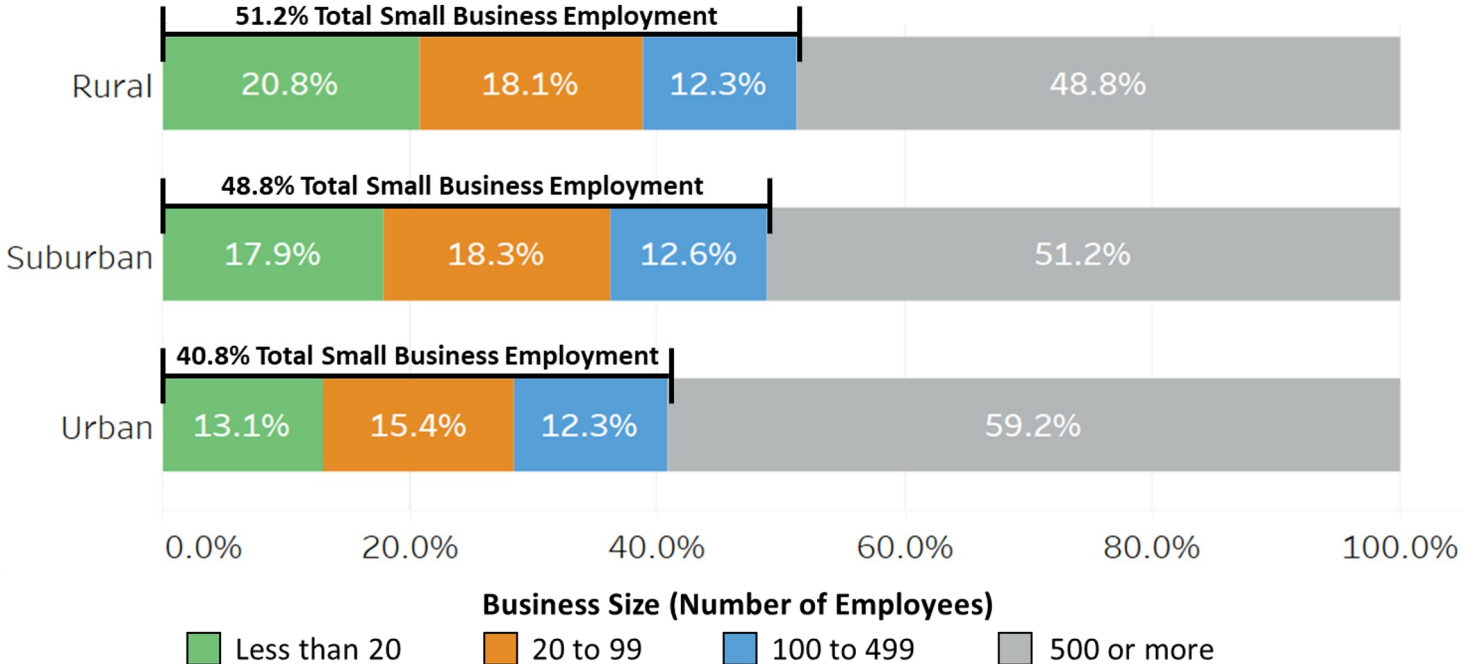


Source 1: North Carolina Housing Coalition, 2023 County Profiles

Source 2: State Water Infrastructure Authority, 2022 Distressed Local Government Units List

Small Business Support

Percentage of Total Employment by Business Size, 2019



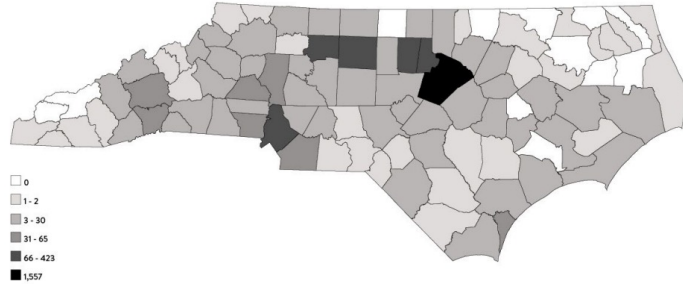
Source: US Census Bureau, 2019 Statistics of US Businesses



Review of NC Innovation Measures

3.3F

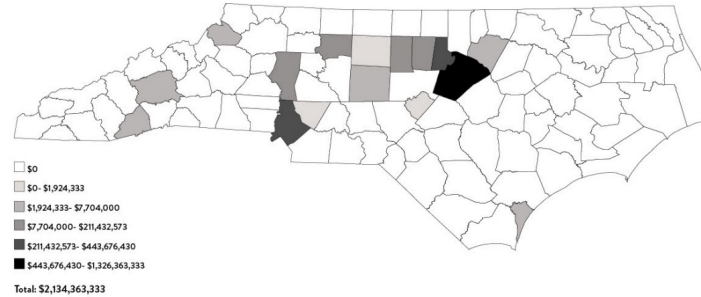
Average Annual Number of Patents, N.C. Counties, 2018-2020



Source: U.S. Patent and Trademark Office, via Neo IP Intellectual Property Law Firm and Magic Number, Inc. d/b/a Patent Forecast.

3.4E

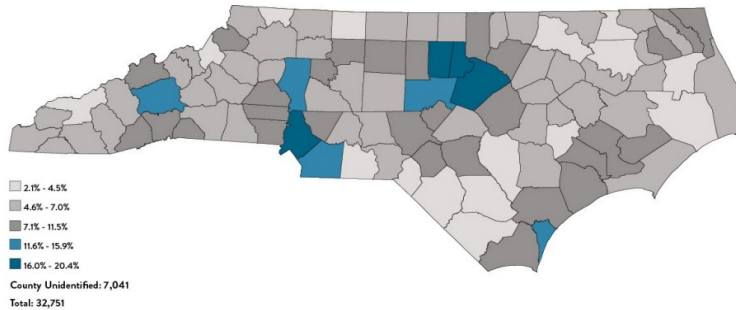
Location of Venture Capital Investments in N.C., Average Annual Investments, 2018-2020



Source: PitchBook Data Inc.

4.1C

High SET Establishments as a Percentage of Total Establishments, N.C. Counties, 2020

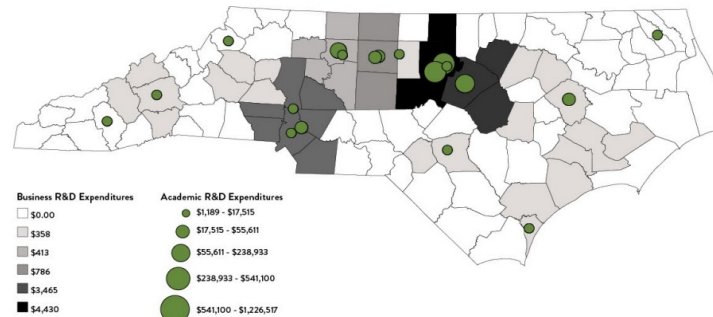


Source: Quarterly Census of Employment and Wages, Labor and Economic Analysis Division, NC Department of Commerce.

Note: Blue counties rank above the U.S. average.

2.1E

Location of R&D Expenditures in North Carolina, 2018-2019*



Sources: National Science Foundation and U.S. Census Bureau.

Note: Business R&D Expenditures are given in millions of dollars. Academic R&D Expenditures dollars. Business establishments perform 76% of R&D in NC; universities perform 24% of R&D

*Business R&D from 2018 survey and Academic R&D from 2019.

Additional Considerations

| Measurement: | Measures: |
|---|---|
| <p>Rural geographies \neq poor economies</p> <ul style="list-style-type: none">• Spillover effects from other local economies, transportation, commuting, etc. | <p>Funding varies in all shapes and sizes</p> <ul style="list-style-type: none">• Federal \$, CDFI, etc.• Purposes/uses of \$ lent |
| <p>Focus on long-term</p> <ul style="list-style-type: none">• Reliable macroeconomic measures are most important, but slowest to change• Micro-measures relevant, but harder to measure | <p>Infrastructure</p> <ul style="list-style-type: none">• Basics: water/wastewater, roads, lighting, etc. and tax \$ (or other \$) to support them• Broadband (current levels, promised levels, delivery of on promises, etc.) |
| <p>Investment opportunities vary considerably</p> <ul style="list-style-type: none">• Federal \$ are very impactful to a geography• State and local requirements can enhance or prohibit opportunity | <p>Alternative and Additional Measures:</p> <ul style="list-style-type: none">• Health systems, education systems, civics• STEM indicators remain important |

More Information and Questions

County Data Profiles

<https://www.ncruralcenter.org/advocacy-and-research/county-data/>

Data Stories (Interactive Drivers)

<https://www.ncruralcenter.org/advocacy-and-research/data-visualizations/>



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