

Economic Benefits of High Broadband Utilization in Rural Counties

Remote Work

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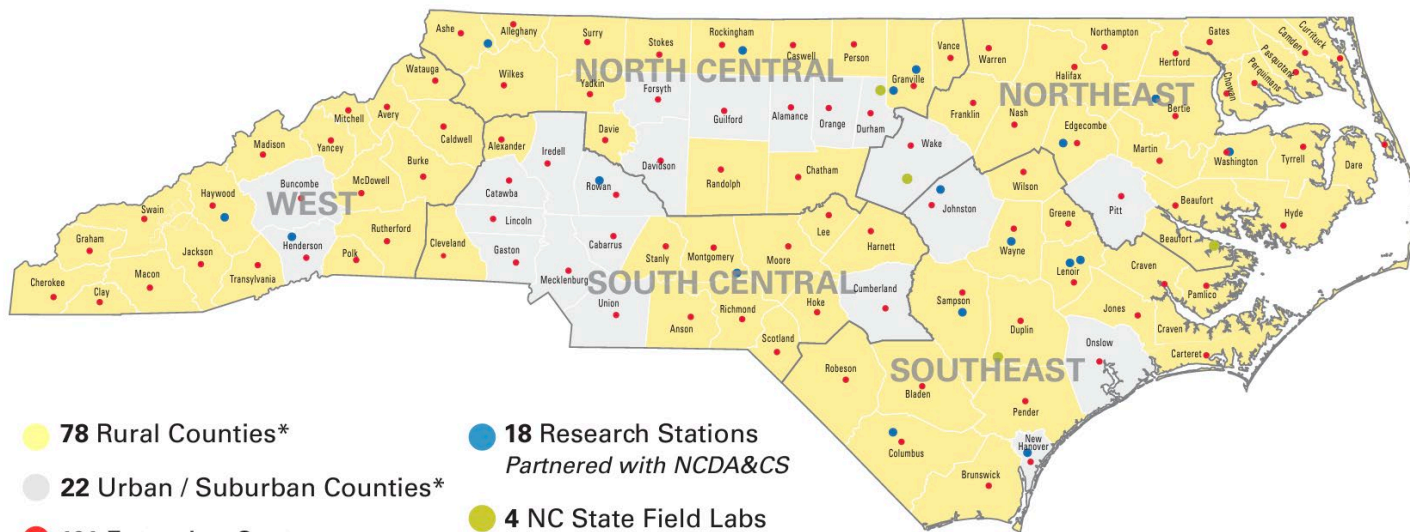


Remote Work by any other name...

- Work from Home
- Hybrid Work
- Telecommuting
- Telework
- Work from Anywhere
- Mobile work
- Virtual work
- Distributed work



NC State Extension



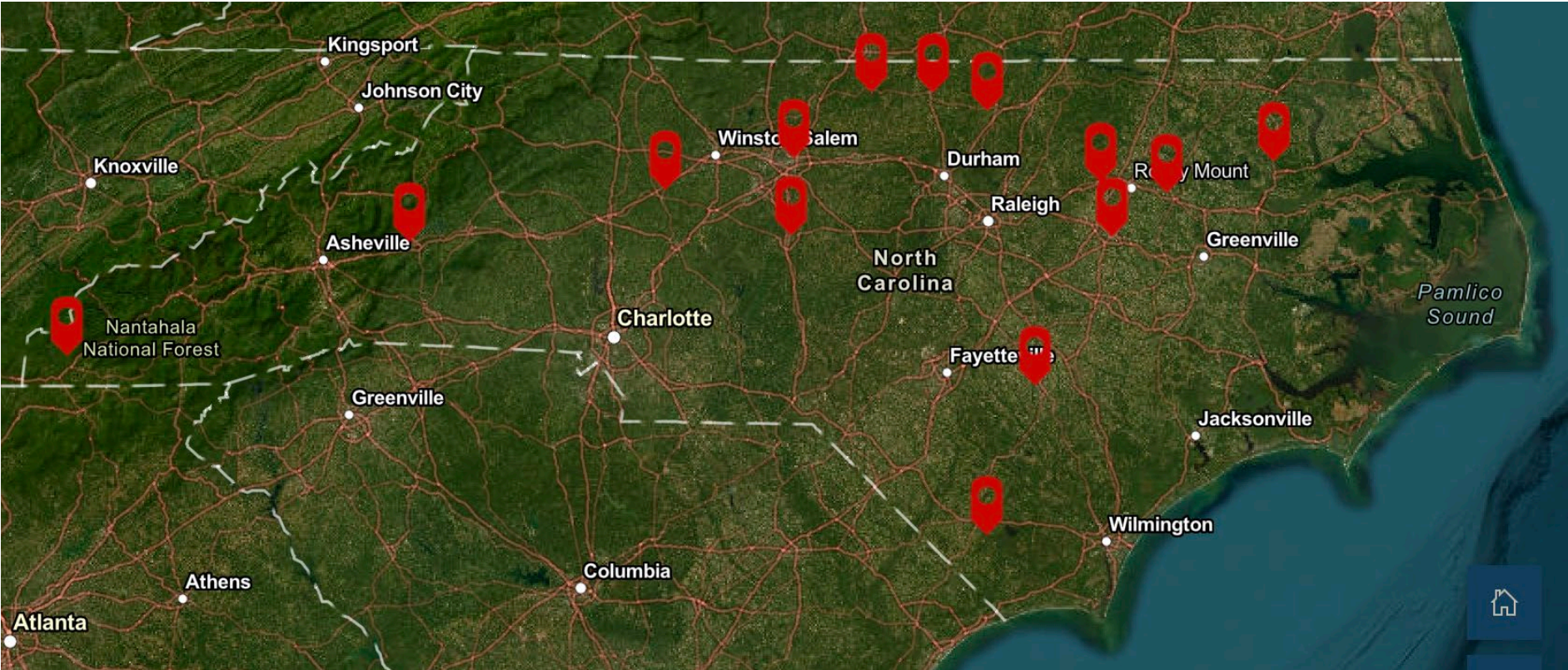
Digital Skills Education



Community and Rural Development

Digital Skills Educators Our Vision

In North Carolina, every individual on a farm, in a household,
and in business will have the digital skills necessary to
EARN, LEARN, BE WELL, and LIVE WELL.



Cherokee	McDowell	Davie	Guilford	Randolph	Caswell	Person
Granville	Wilson	Nash	Edgecombe	Bertie	Sampson	Columbus

Remote Work



Remote and Hybrid work impacts rural areas

High broadband utilization brings numerous economic advantages to rural counties.

Improved internet access benefits residents, businesses, and overall rural economies.

Broadband Infrastructure Role

Reliable broadband is essential for remote work and economic benefits.

A light red arrow pointing downwards, indicating a flow from the first point to the second.

Significant disparities still exist, requiring continued investment.

A light red arrow pointing downwards, indicating a flow from the second point to the third.

[NC Broadband Infrastructure Office Programs](#)

Attracting Remote Workers



Rural areas with broadband attract high-income remote workers.

Connectivity

Availability of Jobs

Franklin County, NC, has the state's highest percentage of remote workers. (TBJ July 2024)
27.2% of the workforce

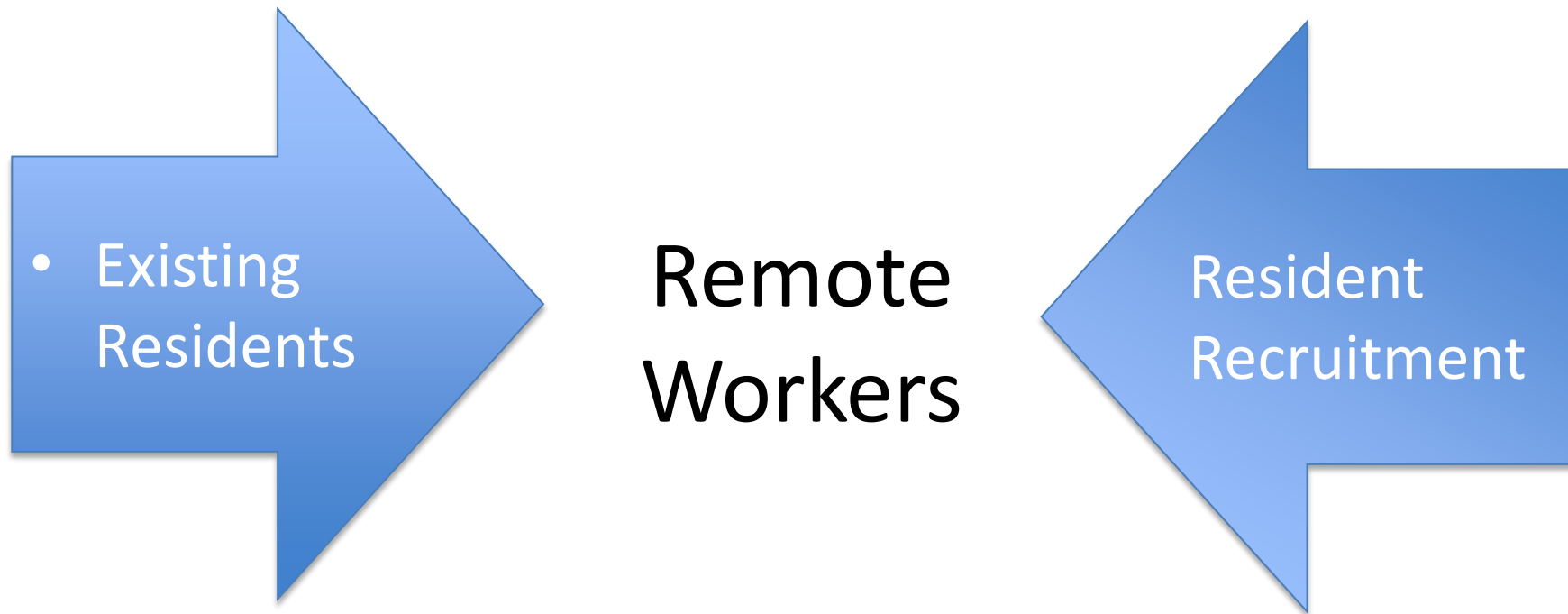
Remote Work as a Catalyst

- Remote and hybrid work facilitated by broadband boosts rural economies.
- Reduces geographic employment barriers and attracts skilled workers.
- **On Indeed.com in NC**
 - Remote Jobs 1,000+
 - Hybrid Jobs 2,000+

On LinkedIn

Remote Jobs 458
Hybrid Jobs 526

Who are the Remote Workers



Remote/Hybrid Work and Quality of Life



Remote/Hybrid work improves life quality for rural residents.



No commutes, greater flexibility, and career retention within communities.

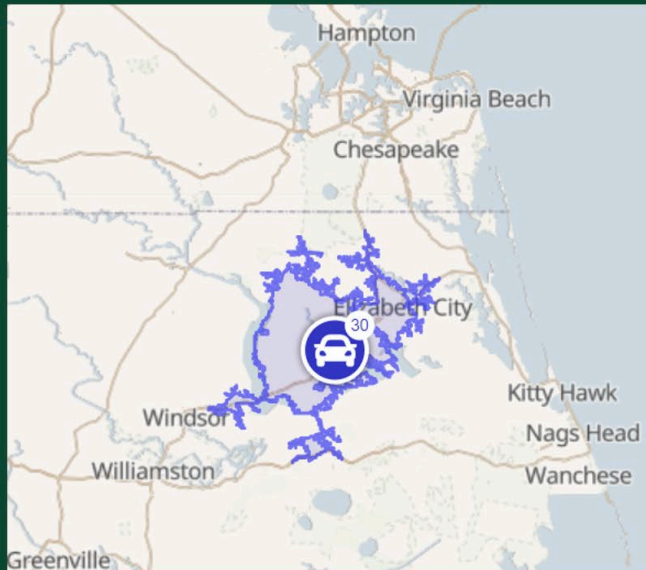


Commuting further, but less often, increases job options

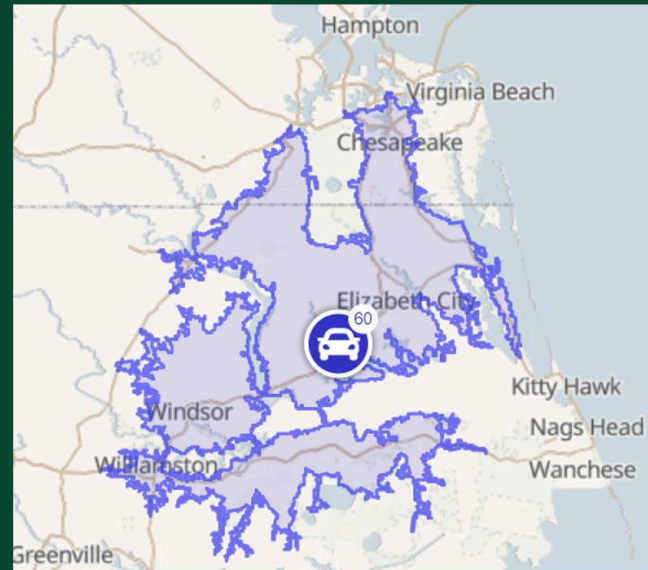
Study by Jason Jolley and Brent Lane

RW Commuting Shed Extension Effect Hertford, NC

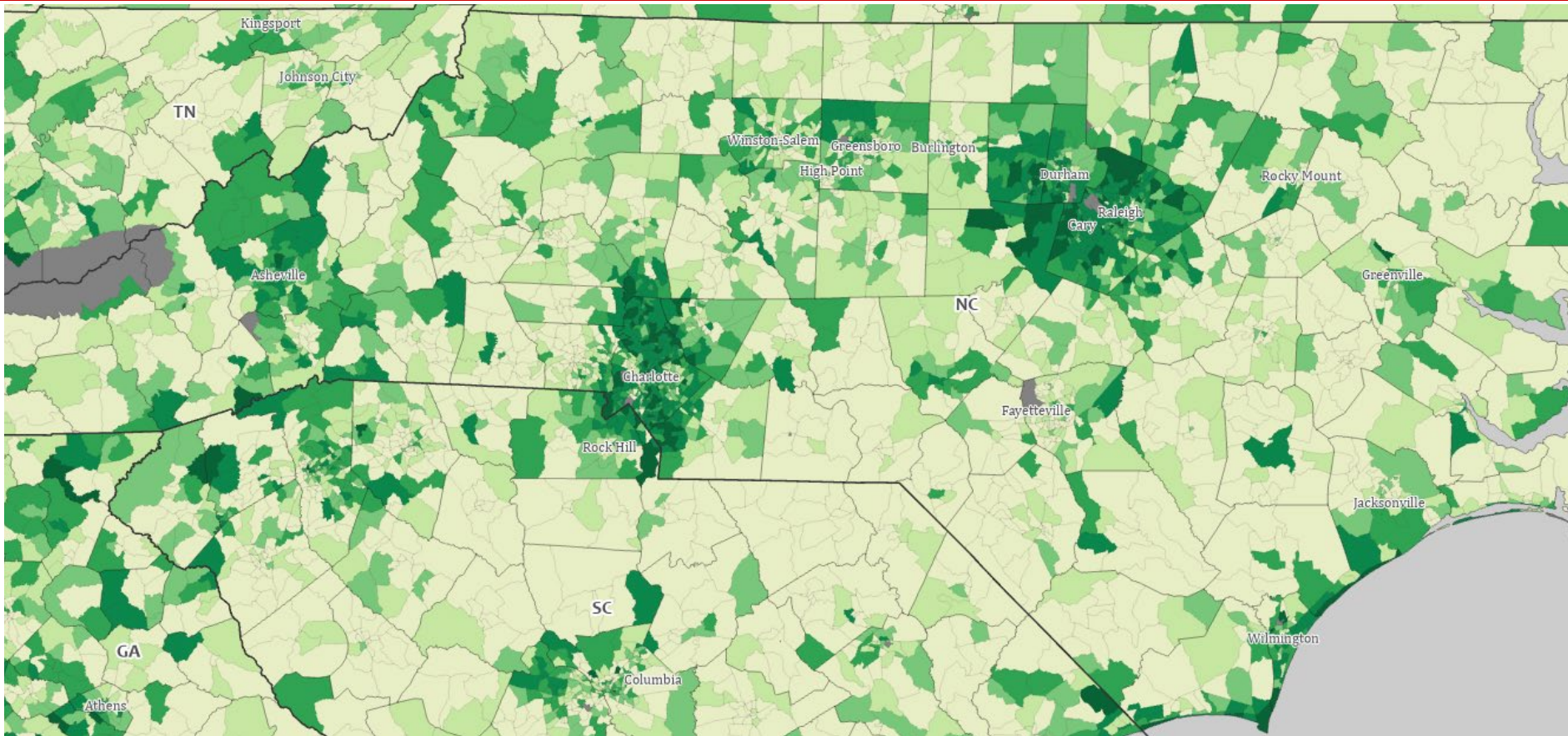
30 min. = 2,003 jobs



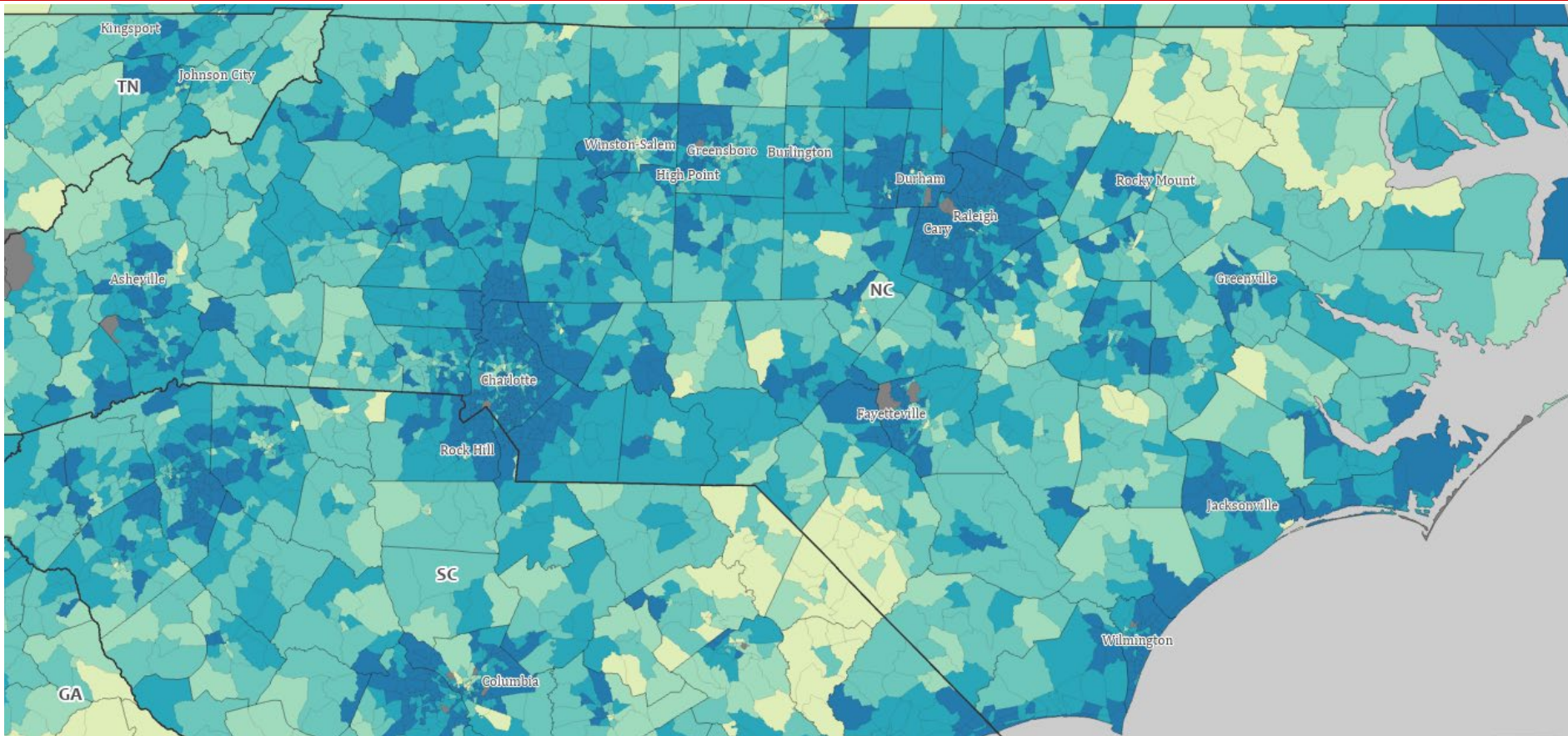
60 min. = 20,034 jobs



Indeed.com

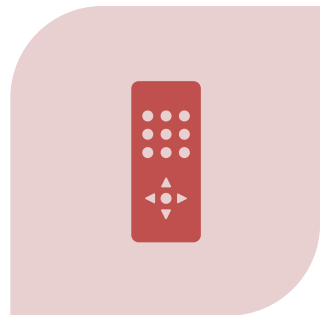


Percentage of workers that work from home ([US Census 2017-2021](#))



Percentage of households with broadband subscription ([US Census 2017-2021 ACS](#))

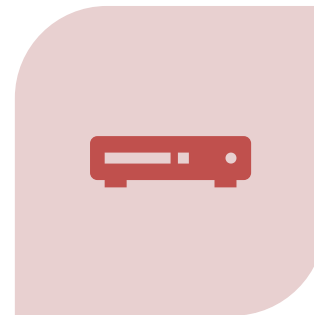
Challenges and Considerations



BROADBAND READINESS IS CRITICAL
FOR SUPPORTING REMOTE WORK.



RURAL AREAS NEED AMENITIES,
HOUSING OPTIONS, AND DIGITAL
SKILLS TRAINING.



ASSISTING CURRENT RESIDENTS TO
GAIN THE SKILLS OR RECRUITING NEW
RESIDENTS WHO ARE ALREADY
REMOTE-WORKING

Recommendations



Invest in broadband infrastructure and close the digital divide.



Promote digital skills and create ecosystems supporting remote workers.



Remote Work Certification with NC State Extension



Help connect companies with the program



The Course

The program includes four live, interactive workshops, hosted via video call using **Zoom**, a free conferencing software. You can attend the workshops from any location with Internet access. Workshops provide an opportunity for you to discuss career goals and review content from the modules in a virtual environment that mimics a real distributed team. Our workshops are held weekly with the option of an afternoon session or an evening session. Accelerated courses offer workshops twice per week with an afternoon and evening session.

What do we cover in the course?

The program consists of nine core modules, delivered in a

- Module 1: Workday
- Module 2: Communication
- Module 3: Critical Thinking
- Module 4: Workflow
- Module 5: Productivity & Time Management
- Module 6: Teamwork
- Module 7: Compliance & Online Security
- Module 8: Virtual Careers
- Module 9: Remote Job Development

Digital Skills Education



Community and Rural Development

Digital Skills Educators Our Vision

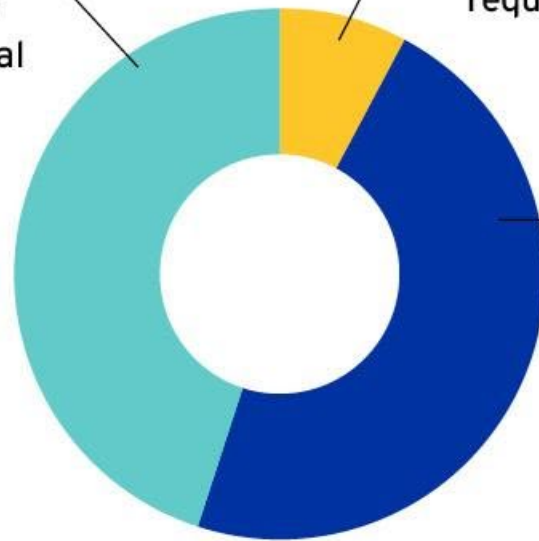
In North Carolina, every individual on a farm, in a household,
and in business will have the digital skills necessary to
EARN, LEARN, BE WELL, and LIVE WELL.



**ACROSS
INDUSTRIES,
92%
OF JOBS
REQUIRE
DIGITAL
SKILLS**

45%
of jobs likely
require digital
skills

8%
of jobs do not
require digital skills

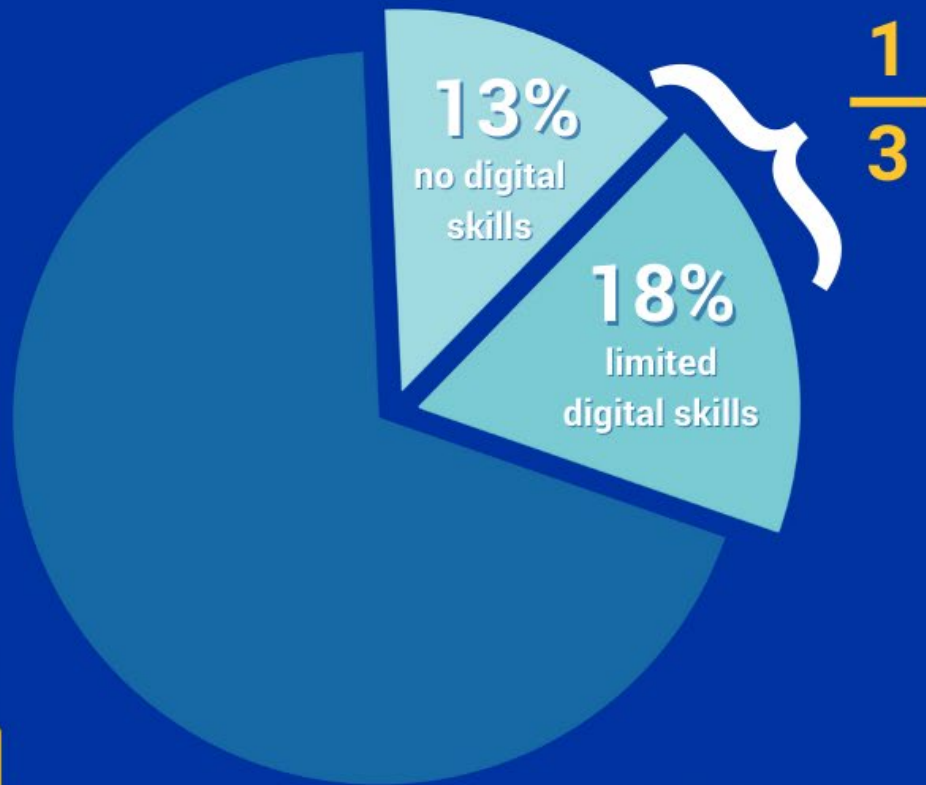


47%
of jobs definitely
require digital
skills

Source: NSC/Federal Reserve Bank of Atlanta analysis of 2021 job postings. Full report: *Closing the Digital Skill Divide*.

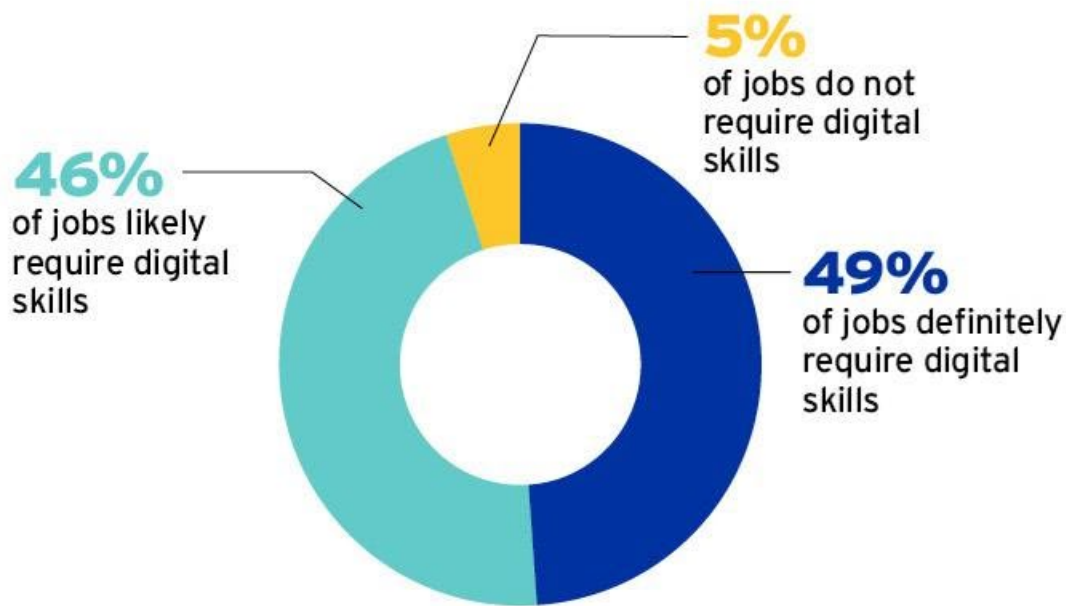
Nearly one-third of the U.S. workforce doesn't possess foundational digital skills.

Specifically, **13 percent** have no digital skills and **18 percent** have very limited skills.





Businesses need **ENTRY-LEVEL WORKERS** to have digital skills



Of jobs seeking applicants with 0-2 years experience, 95% required digital skills or skills that were likely to be digital.

Source: NSC/Federal Reserve Bank of Atlanta analysis of 2021 job postings. Full report: [Closing the Digital Skill Divide](#).



**NATIONAL
SKILLS
COALITION**

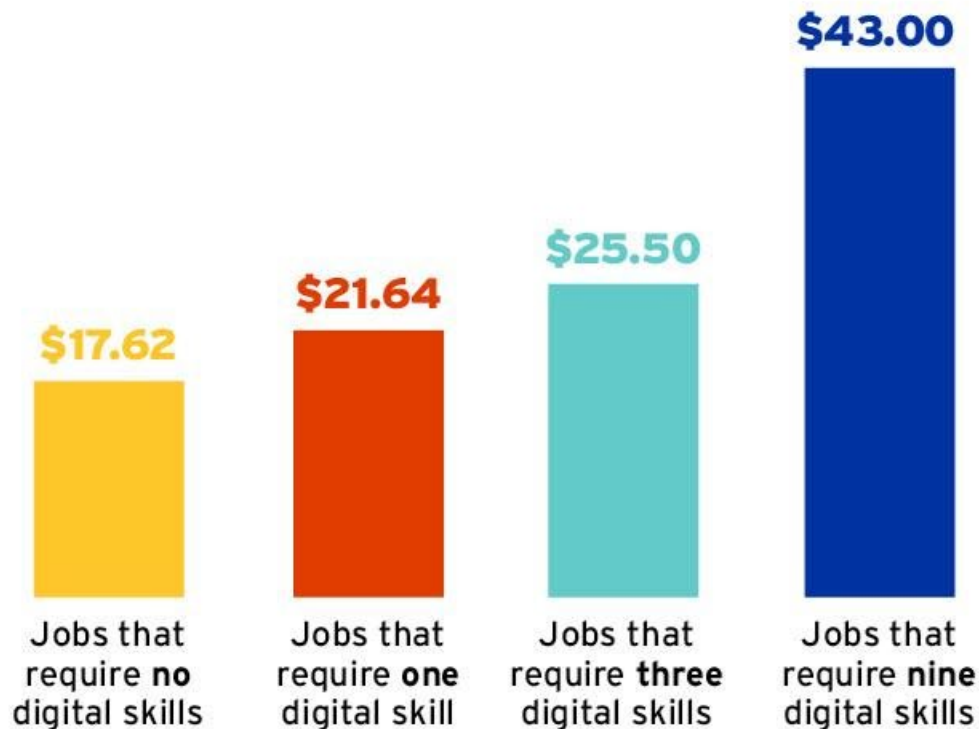
Every worker. Every industry.
A strong economy.

Digital skills & economic impact



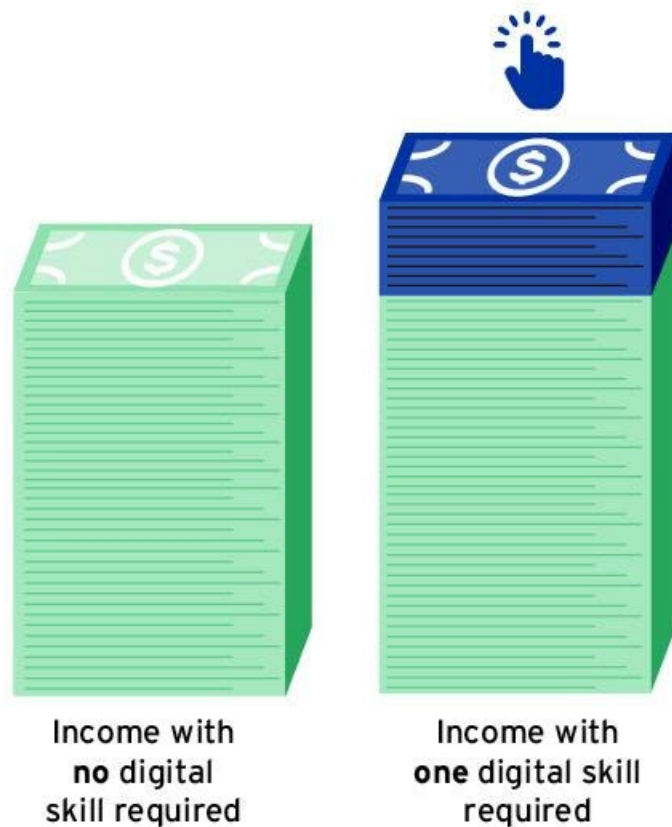
Jobs that
require
**DIGITAL
SKILLS
PAY MORE**

MEDIAN HOURLY WAGE



Source: NSC/Federal Reserve Bank of Atlanta analysis of 2021 job postings. Full report: Closing the Digital Skill Divide.

On average,
jobs requiring a
digital skill pay
**23%
MORE**
than those
that do not.



Source: NSC/Federal Reserve Bank of Atlanta analysis of 2021 job postings. Full report: Closing the Digital Skill Divide.

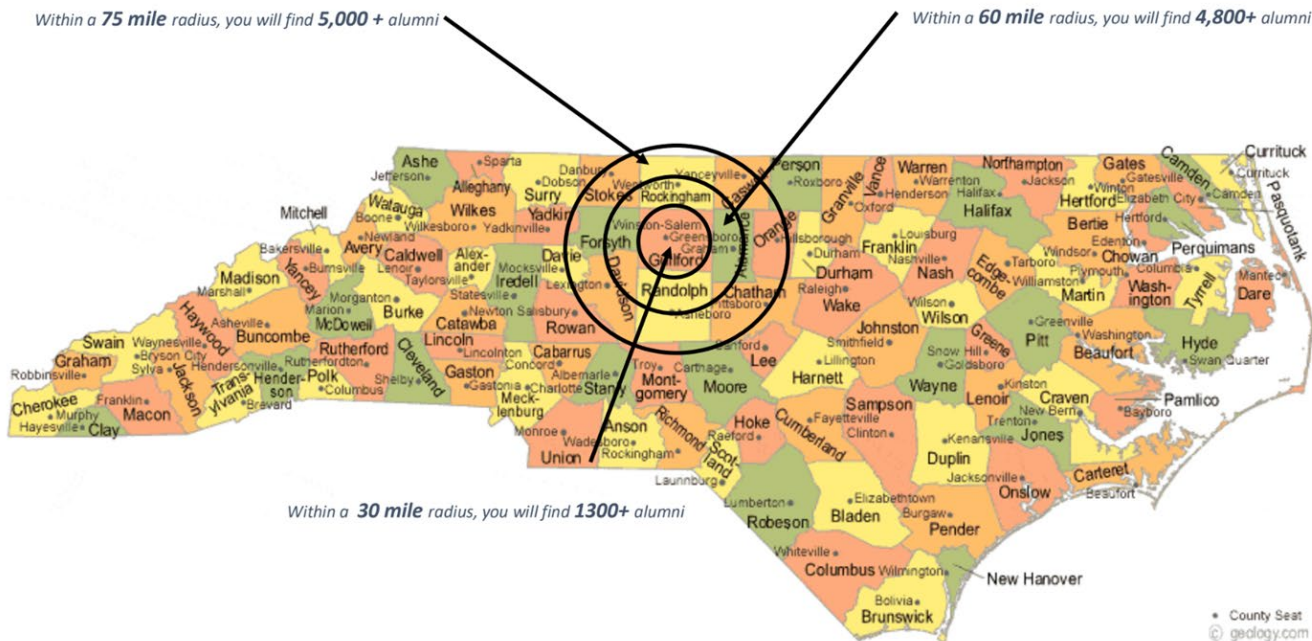
**DIGITAL SKILLS CAN
HELP WORKERS EARN
23% MORE...**



**...WHICH INCREASES
THEIR CONTRIBUTIONS
TO STATE AND LOCAL
ECONOMIES.**



Labor Draw: NC State Electrical, Industrial and Mechanical Engineering Alumni



North Carolina Workforce Development Leadership Initiative

- Professional development program providing training, education and resources for workforce development leaders across North Carolina.
- Builds stronger collaborations between local workforce and economic developers.
- Directly aligns with the N.C. Department of Commerce's First in Talent plan.



NC STATE UNIVERSITY
Institute for
Emerging Issues

NC STATE

External Affairs, Partnerships
and Economic Development

NC STATE

Municipal Research Lab

NC STATE

Continuing and Lifelong Education



UNC WGED January 25, 2024

COVID's Unexpected Rural Dividend

**Capitalizing on Remote Work as a
Rural Economic Development Strategy**

Dr. Jason Jolley and Brent Lane

Center for Economic Development and Community Resilience

Remote Work (RW) Key Points

1. RW is the “New Normal” for many workers
2. RW favors rural America by devaluing proximity
3. RW benefits address a range of rural challenges
4. “Rural remote readiness” is required & possible



COVID's Unexpected Rural Dividend

Remote workers' increased access to jobs enables them to remain, return, or relocate to where they'd rather live...

...and many prefer rural areas.



Remote Work Is Poised to Devastate America's Cities

Remote Work Is Bleeding Cities Dry

America's Downtowns Are Hurting

Superstar Cities Are in Trouble

Remote Work Favors Rural America

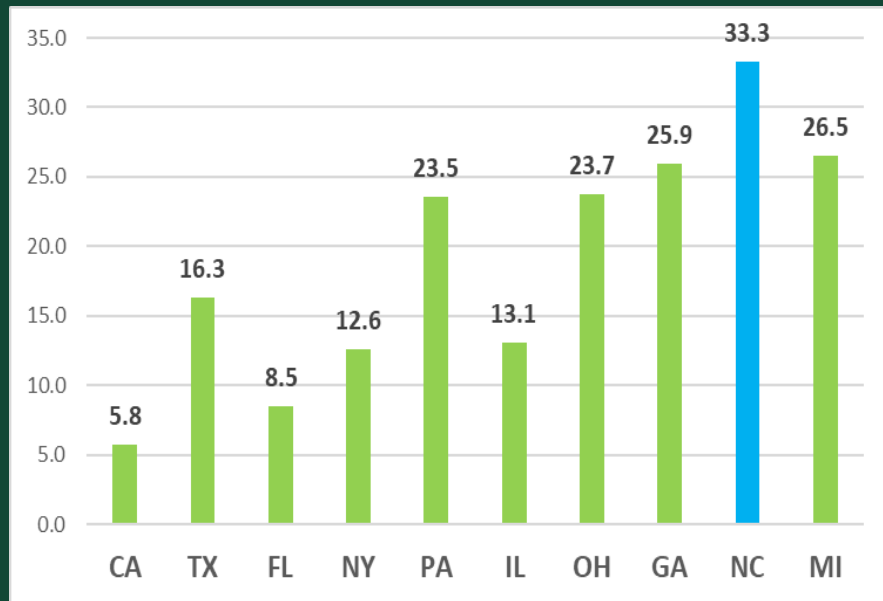
After decades of
economic forces
favoring cities,
Remote Work
reduces
geographic
barriers and
increases rural access
to employment



NC has the largest share (33.3%) of rural residents in the top 10 US states

**NC's 3.5 million rural pop. =
30th largest state**

Utah, Iowa, Nevada, Arkansas,
Mississippi, Kansas, New Mexico,
Nebraska, Idaho, West Virginia, Hawaii,
New Hampshire, Maine, Rhode Island,
Montana, Delaware, South Dakota, North
Dakota, Alaska



...Remote Work Favors Rural America

RW reduces job market inefficiencies by **expanding both commuting sheds and labor sheds**

- Commuting further, but less often, increases job options
- Near- and long-term effect on housing location

Merges people- and place-based economic development strategies

Remote Work and Housing Location

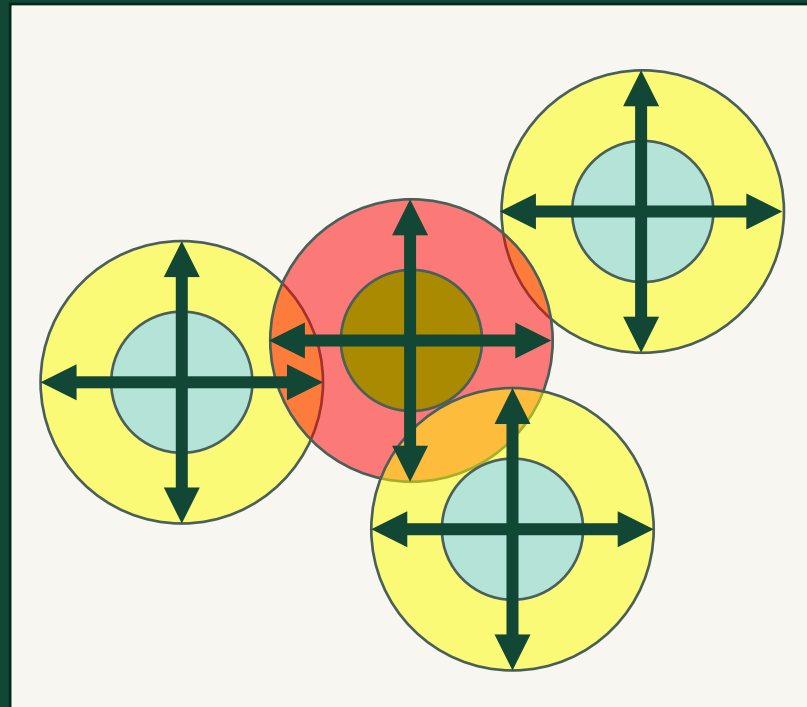
National Housing Survey Special Topics Report



Remote workers accept longer,
but less frequent, commutes

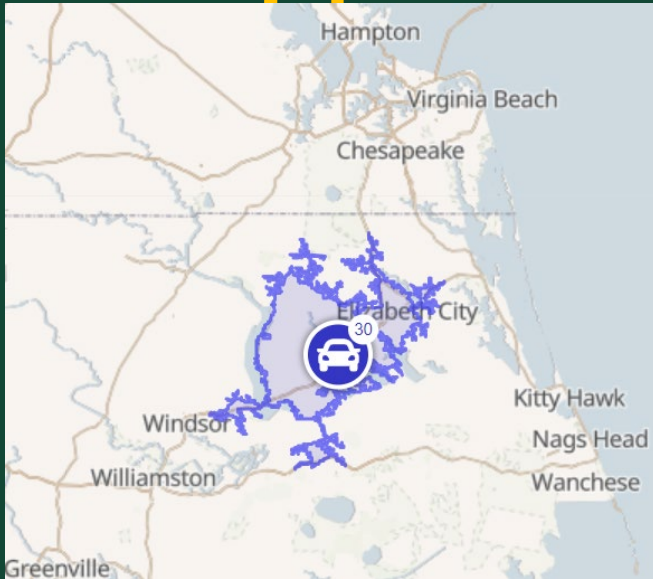
This improves job access and
optimization

"More and better jobs"

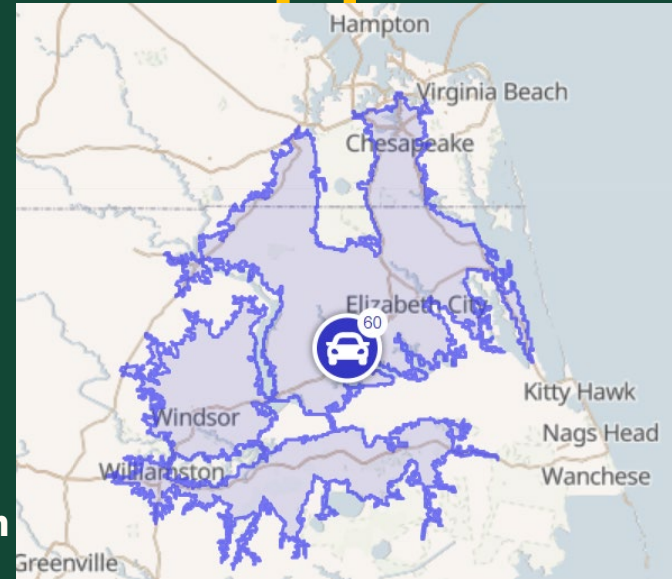


RW Commuting Shed Extension Effect Hertford, NC

30 min. = 2,003



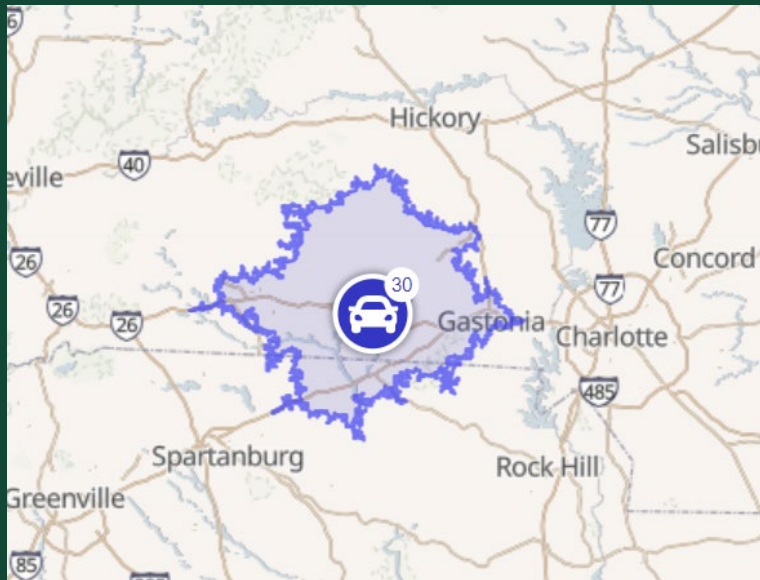
60 min. = 20,034



Indeed.com

RW Commuting Shed Extension Effect Shelby, NC

30 min. = 6,524



60 min. = 56,841



Indeed.com

Conclusion



High broadband utilization drives economic prosperity in rural areas.



Broadband bridges gaps and builds vibrant, sustainable communities.