CONNECTING
WARREN COUNTY

DIGITAL INCLUSION PLAN
2025–2030

ADOPTED JANUARY 2025

Kerr-Tar
Regional Council
Of Governments

Warren County

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Introduction

Warren County, North Carolina began county-led broadband advocacy and planning efforts in 2013. In November of that year, County government held a community meeting in partnership with NC Broadband, a Division of the N.C. Department of Commerce. The community meeting was held to discuss the County's plan to conduct a survey designed to gauge demand for Internet services. Then, in 2017, county commissioners approved a broadband feasibility study, and in 2019 the County released an RFP for broadband providers to provide service in the area.

Since 2019, federal and state funding designed to support rural communities has paved the way for these previous years of work to finally begin to take shape. In 2024, projects have been awarded, dirt is being turned, fiber is going in the ground, and customers are beginning to be served across the county.

The Warren County Digital Inclusion Plan is the county's roadmap to assist local government and community stakeholders in making sure that broadband adoption is happening alongside efforts to improve overall access. The four key elements of digital inclusion are access to digital literacy training, access to high-speed reliable broadband, affordable internet and user devices, and access to internet-enabled devices that meet the need of the user. In this plan, you will find the resources available in Warren County that can support your digital journey.

The four key elements of digital inclusion include:

Access to digital literacy training

Access to high-speed, reliable broadband

Affordable internet and user devices

Access to internet-enabled devices that meet the needs of the user.

Acknowledgements

A special thank you to those community partners who participated in our digital inclusion stakeholders meeting on April 2, 2024. The discussion held that day has informed much of this digital inclusion plan.

Those partners are:
Bob Allan, Lake Gaston Association
Helen Bradby, NCWorks
Brett Brenton, myFutureNC
Denny Burrows, Town of Norlina
Sterling Cheston, Warren County Memorial Library
Robert Davie, Town of Warrenton
Justin DeLancey, Charter Communications
Charla Duncan, Warren County Community and Economic Development
Jerry Edmonds, III, Vance Granville Community College
Jess Epsten, NC State University
Ben Farmer, Upper Coastal Plain COG
Katherine Hilliard, Town of Macon
Victoria Lehman, Warren County Board of Education
Amanda Lewis, Kerr Tar COG
Leanne Patrick, Lake Gaston Regional Chamber of Commerce
McKinley Perkinson, Brightspeed
Mike Peterson, BlueCross BlueShield of North Carolina
Matthew Place, Cooperative Extension
Rose Ponton, Warren County Community and Economic Development
Charlie Robinette, Kerr-Tar COG
Jenni Rogan, Working Landscapes
Carolyn Ross-Holmes, Ella Baker Educational Project
Susan Wells, Warren County Public Health Department
Heather Yencarelli, Gateway Community Development Corporation
Jeff Zimmer, Lake Gaston Association
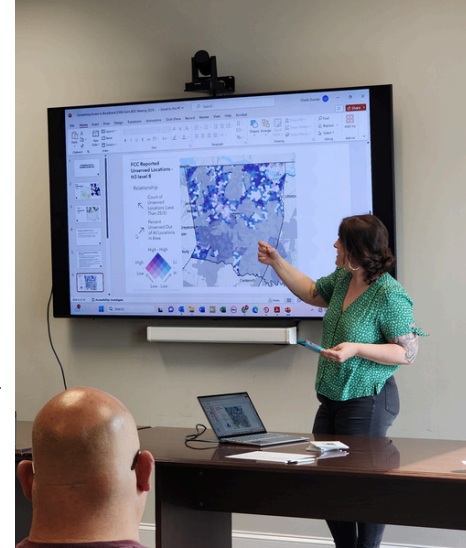
We also wish to acknowledge the advocacy and engagement work that our Warren County residents have participated in over the years. Citizen activism on broadband access has been an integral part of this process.

Warren County
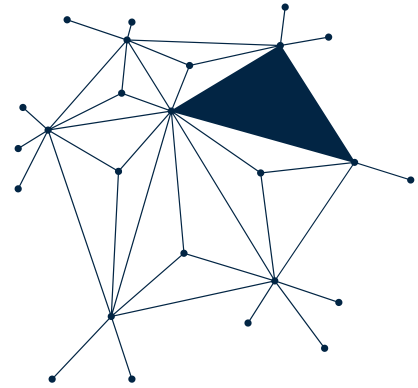
County Commissioners

Angelena Kearney Dunlap – *Chair*
Victor Hunt – *Vice Chair*
Bertadean Baker
Al Cooper
Tare "T" Davis

Facilitation & Planning

Charla Duncan – Director, *Warren County Community & Economic Development (CED)*
Rose Ponton – Community Development Manager, *Warren County CED*
Amanda Lewis – Regional Project Manager, *Kerr-Tar Regional Council of Governments*
Mayor Katherine Hilliard – Mayor, *Town of Macon*
Blaine Reese – Director of Operations, *Town of Norlina*
Robert Davie – Town Administrator, *Town of Warrenton*

Warren County Services

Local Government Services: Warren County Emergency Services, Warren County Veteran Services, Warren County Department of Social Services, Warren County Human Resources, Warren County Sheriff's Office, Warren Soil and Water Conservation District, Warren County Health Department, Warren County Public Utilities, Warren County Senior Center, Warren County Cooperative Extension, Warren County Library

K-12 Education: Northside K8, Vaughan Elementary School, Mariam Boyd Elementary School, Warren County Middle School, Warren County High School, Warren Early College, and the Haliwa-Saponi Tribal School

Higher Education: Vance Granville Community College–Warren Satellite Campus

Health Systems: H.O.P.E. Regional Medical Center, Warren County Health Department, Rural Health Group, Beckford Medical Clinic, Crenshaw & Haight Family Dentistry, Henderson & Henderson Family Dentistry, Freedom House Recovery Center, Eastpointe*

Eastpointe is a managed care organization (MCO) dedicated to working with individuals and families in eastern North Carolina who struggle with substance abuse, mental health, and intellectual and developmental disabilities.

Vision, Mission, & Values

OUR VISION FOR THE FUTURE:
Warren County is a diverse, thriving rural community known for its creative, sustainable economic revitalization.

OUR MISSION:
To collaborate on initiatives that improve broadband access, usage, and affordability, and that cultivate enhanced digital literacy, cybersecurity, physical and mental safety, and self-sufficiency for Warren County residents and organizations.

WE BELIEVE:
It is imperative to ensure that digital literacy initiatives are accessible to all and designed to address our community's diverse needs, regardless of age, income, or background.

These digital literacy initiatives should empower individuals and businesses with the knowledge and skills to navigate the digital world safely, confidently, and effectively.

Efforts that reduce disparities in access to technology and digital resources across the community should be prioritized.

Fostering collaboration among all community stakeholders – including schools, libraries, businesses, healthcare providers, and government institutions – is necessary to maximize impact and reach.
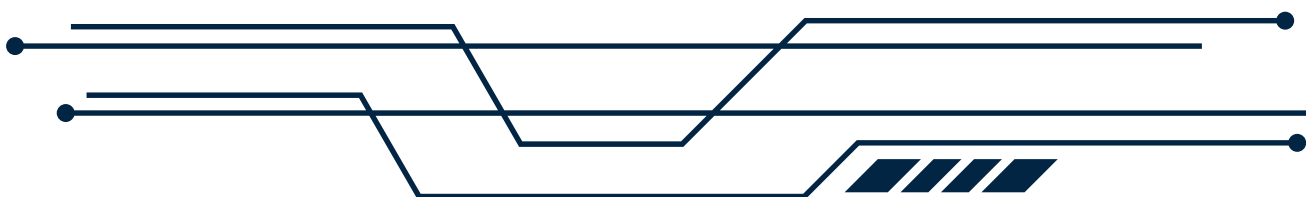
Strategic Alignment

2023 – 2027 KERR-TAR
COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY

Promote Small Business/Entrepreneurial Development
- Research and identify additional grant and other funding sources to support small business and entrepreneurial development
- Identify organizations and agencies that support and promote small business and entrepreneurial development

Engage in Labor Force Enhancements
- Identify underserved, underrepresented and non traditional population sectors for inclusion in enhancement programs ie Latino veterans disabled prisoners etc.
- Promote enhancement initiatives to existing industry and development marketing materials for new industry recruitment.

Promote Niches Economic Development Strategies
- Provide access to small business/entrepreneurial development resources to facilitate replication of niche businesses in other areas of the region

WARREN COUNTY 2022 COMPREHENSIVE DEVELOPMENT PLAN

Infrastructure Goal 1: Expand access to broadband service

Economic Development Goal 3: Prioritize infrastructure and service enhancements to areas with economic development opportunities

Economic Development Goal 6: Support efforts to encourage redevelopment and revitalization

Economic Development Goal 7: Develop workforce skills in tandem with industry needs

Definitions

American Communities Survey: The American Community Survey (ACS) is an ongoing survey that provides vital information on a yearly basis about our nation and its people including internet and use data.

ACP: The Affordable Connectivity program (ACP) is a federal program run through the FCC that reduces the cost on internet for eligible households by $30 per month and $75 per month on tribal lands

Broadband Access: Having the wires, Wi-Fi, and connectability available to you.

Broadband Adoption: Actually subscribing, creating an account, or logging on to the broadband that is available.

Community Anchor Institution: The division defines Community Anchor Institutions (CAIs) to mean a school, library, health clinic, health center, hospital or other medical provider, public safety entity, institution of higher education, public housing organization (including any public housing agency, HUD-assisted housing organization, or tribal housing organization), or community support organization that facilitates greater use of broadband service by covered populations.

Digital Equity*: Digital equity is a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy. Digital equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services.

Digital Inclusion*: Digital Inclusion refers to the activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies (ICTs). This includes five elements:
- Affordable, robust broadband internet service;
- Internet-enabled devices that meet the needs of the user;
- Access to digital literacy training;
- Quality technical support; and
- Applications and online content designed to enable and encourage self-sufficiency, participation and collaboration.

Digital Literacy*: The ability to use digital technology, communication tools, and networks to locate, evaluate, use, create, and share information.
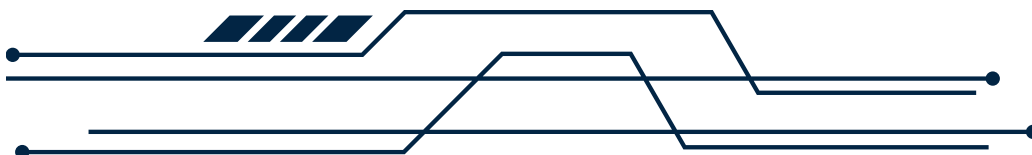
Definitions

Digital Navigator: Digital navigators are trusted guides who assist community members in internet adoption and the use of computing devices. Digital navigation services include ongoing assistance with affordable internet access, device acquisition, technical skills, and application support.

NTIA: National Telecommunications and Information Administration, an agency of the United States Department of Commerce that are awarding the Digital Equity Act and Broadband Equity Access and Deployment (BEAD) funding.

FCC: Federal Communications Commission

*Source: National Digital Includsion Alliance (https://www.digitalinclusion.org/definitions/)

About Warren County
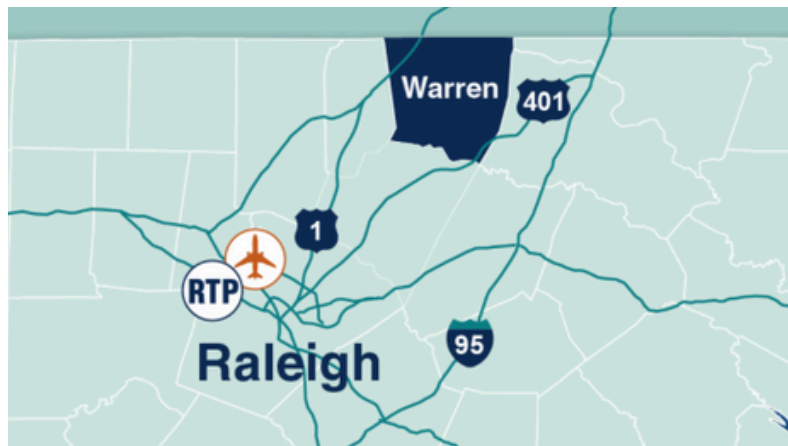
Warren County is located in North Carolina's north-central Piedmont region. Comprising 444 sq/mi, the county is bordered on the north by the Virginia State line, on the west by Vance County, on the south by Franklin County, and on the east by Halifax and Northampton counties. There are significant shoreline miles along Kerr Lake and Lake Gaston in the county's northeast and northwest corners. The tribal lands of the state-recognized Haliwa-Saponi occupy a portion of the southeastern part of the county. The city of Richmond is a little more than an hour to the north, and the "Triangle" of Raleigh, Durham, and Chapel Hill is located approximately an hour's drive to the south along the I-85 corridor.

About Warren County

Warren County is categorized by the North Carolina Department of Commerce as a Tier 1 County, meaning it is one of the 40 most distressed counties in the state. Based on local data from the 2023 NCACC Map Book, Warren County has a population of 18,892, a Poverty Tax rate of 0.8100, and ranked 84 out of 100 North Carolina counties. In 2022, it was estimated that county residents have a median age of 48.6 and a median household income of $42,282, with 90% of residents living outside the three small municipalities of Warrenton, Norlina, and Macon; all located near the county's geographic center. Warren County is the 8th most rural county in North Carolina; and the seventh most diverse, with the last Census reporting 49% African American residents, 41% White residents, 6% American Indian, and 5% Hispanic. This rural and diverse county is also 99th out of the state's 100 counties in private sector wages, with 21.2% of the county's overall population, and 36.5% of children, living in poverty. Only one in three residents hold any credential beyond a high school diploma.

The majority-minority population is a legacy of the County's complex history: the County was founded in 1779, and agriculture has played a major role in the County's economy since its founding. In Warren County, as is true elsewhere in the South, agriculture cannot be separated from a history of enslavement, the legacy of which continues to create economic disparities in the present day.

Additionally, the more recent history of agricultural consolidation and the shifts away from small and Main Street businesses have continued to have negative impacts on the local economy. Since 1950, the number of farm operations in Warren County has declined 92%. Currently, Warren County has only 237 farms.

The average commute among workers in the county is nearly half an hour, with nearly 10% of the county's working population commuting an hour or more. Approximately 4,500 residents commute out of the county for work. There are multiple census tracts in Warren County with a transportation disadvantage index of 16 relative to the state (max of 21), and there are multiple tracts with zero-car households (ranging from 7-16% in some tracts). The ability to find employment within walking distance is a challenge for many residents, especially given that many of these residents may not have a high school or advanced degree, or may have been previously incarcerated. According to myFutureNC 2024 Attainment Profile the top three employers for Warren County are Warren County Schools, County of Warren, and Glen Raven Inc.

Haliwa-Saponi Tribe

Getting a clear picture of the County's tribal population can be challenging, but extrapolating from the 2017-2021 American Community Survey 5-year estimates and the number of County residents who identified as American Indian or Alaska Native in the 2020 census, of the 3,719 members actively enrolled in the tribe in 2022, the number of tribal members living in Warren County is approximately 932 people. Statistical data for the Haliwa-Saponi SDTSA is difficult to extract from county to county, and there are sometimes wide margins of error for these statistics, so the following is a generalized picture of tribal demographics. At the 2021 ACS Census, the median age among residents in the Haliwa-Saponi SDTSA was estimated at 42.8 years old, with approximately 20.9% of the population between the ages of 25-54. The median household income was estimated at $34,727 or about half the national average. Per capita income was estimated at $20,937, which is only about ⅗ the national average. The overall poverty rate was estimated at 23.8%, with a harrowing 37% of children under 18 estimated to be in poverty. The Haliwa-Saponi were recognized as a Native American tribe by the state of North Carolina in 1965.

https://www.haliwa-saponi.org/

Broadband Availability

Broadband availability is measured based on the NC Broadband Availability Index application to view indices created by combining US Census demographic data with FCC Broadband availability data. Based on data from 2021, 93.09% of county population was estimated to have an available 100 megabits per second (Mbps) up and 20 Mbps down. The percentage of the population with available fiber was 4.33%. The ration of upload to download median advertised speeds is 0.08. It was estimated that there are 18.48 households per square mile, with 5.53% of housing units built in 2010 or later. The percentage of the population with access to DSL *only* was 0%.

Broadband Availability

Broadband Providers: Within Warren County, there are three fixed internet service providers (ISPs); five providers offer residential fiber, five extend fiber to businesses and institutions, one offers cable, three provided fixed wireless, three provide DSL, and three offer satellite (HugesNet, Viasat, and Starlink).

Brightspeed provides two options for internet service; DSL and fiber.
Charter Communications Inc. provides two options for internet service; fiber and cable.
Empower Broadband provides two options for internet service; DSL and fiber.
Empower Telecom provides two options for internet service; DSL and fiber.
NCREN provides one option for internet service; fiber.
Starlink is a satellite internet constellation providing coverage to over 100 countries and territories. It also aims to provide global mobile broadband.

Another source of internet in Warren County is offered through cellular providers. In addition to providing cell service, these providers are now providing wireless broadband services to individual residences.

OpenBroadband LLC provides two options for internet service; fixed-wireless and wireless
**T-Mobile** provides one option for internet service; wireless.
United States Cellular provides one option for internet service; fixed-wireless.
Verizon Wireless provides one option for internet service; fixed-wireless.

Broadband Availability

Warren County Internet Service Providers					
Provider	Fiber	Cable	Copper	Fixed Wireless	Wireless
Brightspeed	✓		✓	✓	
Charter Communications	✓	✓			
Empower Broadband	✓		✓		
Empower Telecom	✓		✓		
NCREN	✓				
OpenBroadband LLC				✓	✓
T-Mobile					✓
United States Cellular Corporation				✓	
Verizon Wireless				✓	

*Source: NC One Map FCC Broadband Data Collection map 3 version 8 as of April 2024
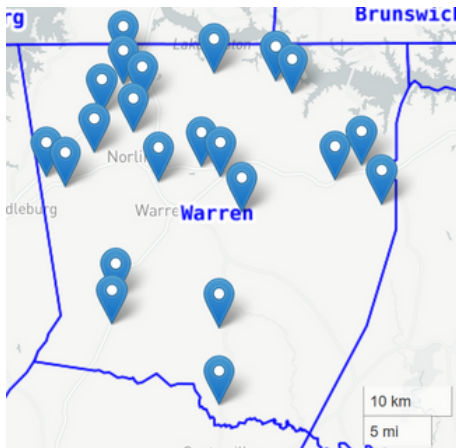
*Source: FCC Antenna Structure Registration Search as of June 2024

Note: The FCC Antenna Structure Registration Search is able to geographically display the physical locations for the structures that support the communities throughout the county. Broadband providers include Brightspeed, Charter Communications, Empower Broadband, Empower Telecom, NCREN, Openbroadband LLC, T-Mobile, United States Cellular Corporation, and Verizon Wireless.

Broadband Service in Warren County

Broadband service is defined based on the ability for continuous speeds above 100 Mbps download and 20 Mbps upload. The FCC collects self-reported speeds from Internet Service Provides (ISPs) which have been observed to be *advertised* speeds and not always the actual speed a customer receives. For this reason, the North Carolina Department of Information Technology (NCDIT) compared FCC data to the results from a state-wide survey that allowed community members to test the download and upload speeds at their home or business.

Broadband Service in Warren County

Unserved is defined as a location without service of 25 Mbps download and 3 Mbps upload speed or greater, and *Underserved* defined as a location without service of 100 Mbps download and 20 Mbps upload or greater. Warren County's Broadband Profile as of September 2024 reported 8.55% of county locations as unserved (approximately 1,115 locations) and 0% as underserved (approximately 0 locations). Warren County had 1.86% of locations with fiber (approximately 1243 locations) and 62.33% with DSL only (approximately 8,132 locations). The deployed survey highlighted the difference between FCC data and the actual speeds locations were reporting.
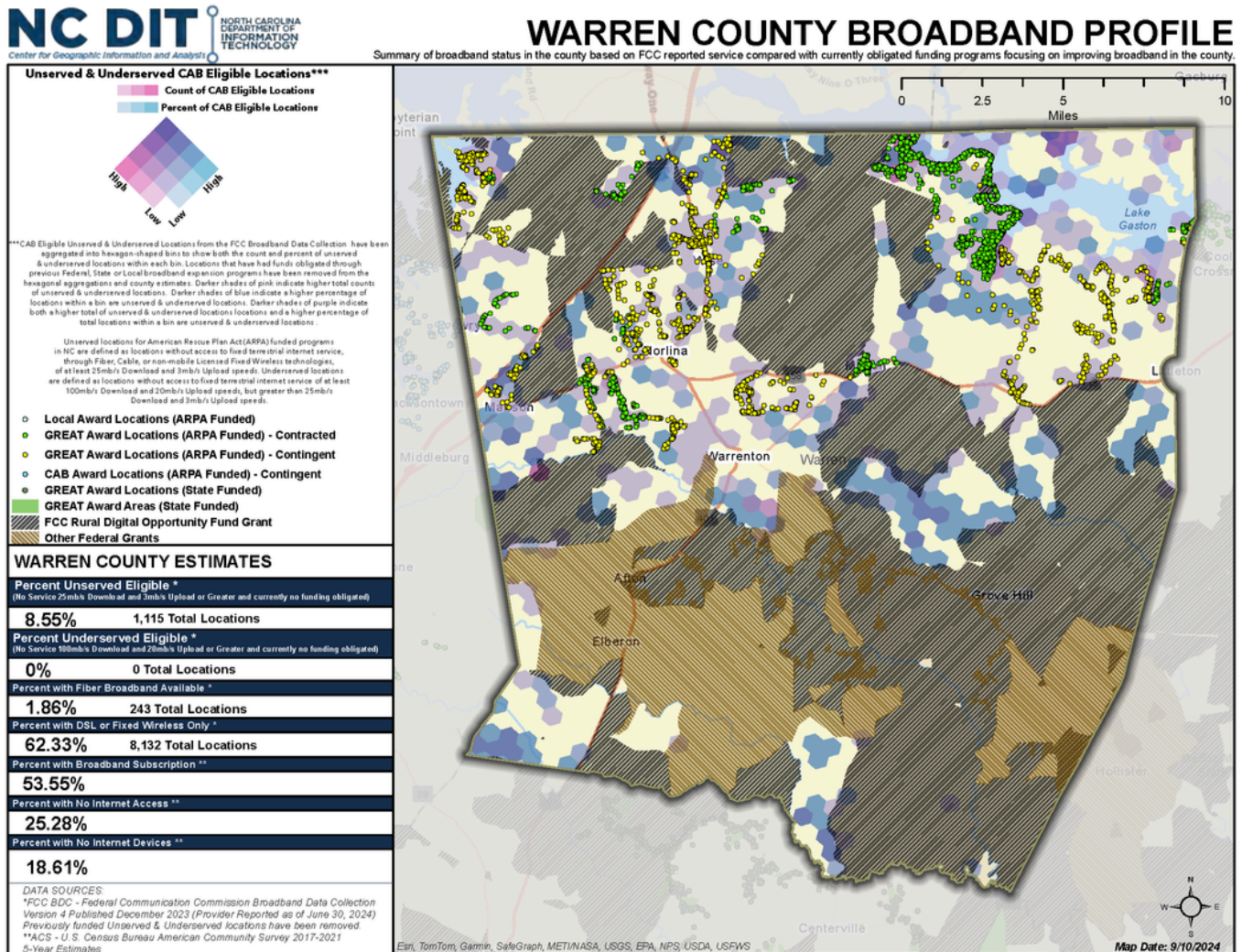
*Source: NCDIT County Broadband Profile September 2024

Broadband Service in Warren County
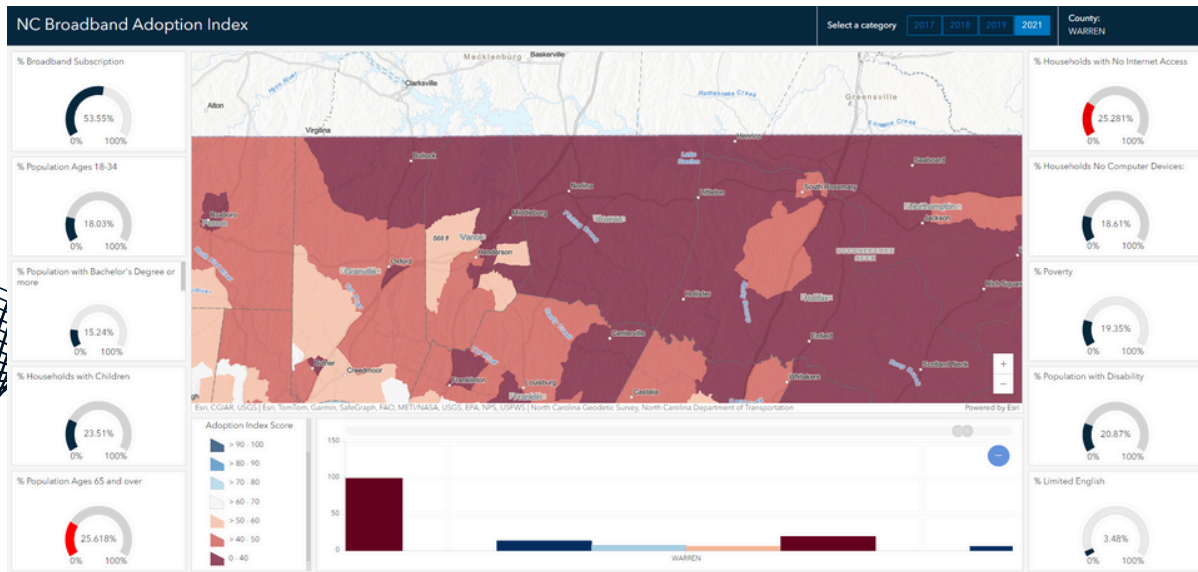
Source NC Broadband Adoption Index as of 2021

NCDIT created a Broadband Adoption Index using several variables. These variables are weighted according to research that result in the Broadband Adoption Index. As of 2021, 53.55% of locations have a broadband subscription, 18.03% of the population are ages 18–34, 15.24% of the population has at least a bachelor's degree, 23.51% of households have children, 25.618% of the population are aged 65 or older, 25.281% of households do not have access to internet, 18.61% of households do not have a computer, 19.35% of the population is in poverty, 20.87% of the population have a reported disability, and 3.48% of the population have limited English language communication skills. Warren County scored 20.1 out of 100 on the Broadband Adoption Index as of 2021.

2021	Warren:	2019-2021 Δ:	2017-2021 Δ:
% Broadband Subsciprtion	53.55	8.25	11.67
% Pop. Ages 18-34	18.03	-0.44	-0.98
% Pop. with a bachelor's degree	15.24	-0.57	-0.52
% Households with children	23.51	0.11	-0.09
% Pop. Ages 65 and older	25.618	1.053	2.745
% Housholds without internet	25.281	-11.002	-14.942
% Households without computer	18.61	-4.47	-9.06
% Povery	19.35	-0.44	-2.94
% Pop. with disability	20.87	2.8	1.18
% Limited English	3.48	2.82	2.9
Adoption Index Score	*20.1*	*13.4*	*6.1*

Analysis of the Warren County Adoption Index variables provides insight to the overall adoption within the community. From 2017 to 2021 there was an overall increase in the adoption index by 6.1%, and a 11.67% increase in broadband subscriptions in Warren County.
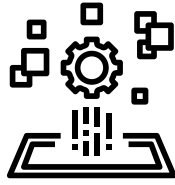
Broadband Survey Data

NCDIT partnered with the William & Ida Friday Institute for Educational Innovation at NC State University to administer surveys that collect information about North Carolinians' access to affordable, reliable high-speed internet and residents' digital equity needs. This information will be used to create and maintain state plans to connect all homes and businesses to adequate internet service, devices, and digital skills training options that meet the needs of all North Carolinians. The North Carolina Broadband Survey was designed to gather information on locations in the state without adequate internet access and speeds. The information gathered from the survey will provide clear data to guide investments of funds through the state's Growing Rural Economies with Access to Technology grant program, inform research and policy recommendations, and support strategic targeting of additional funding streams.
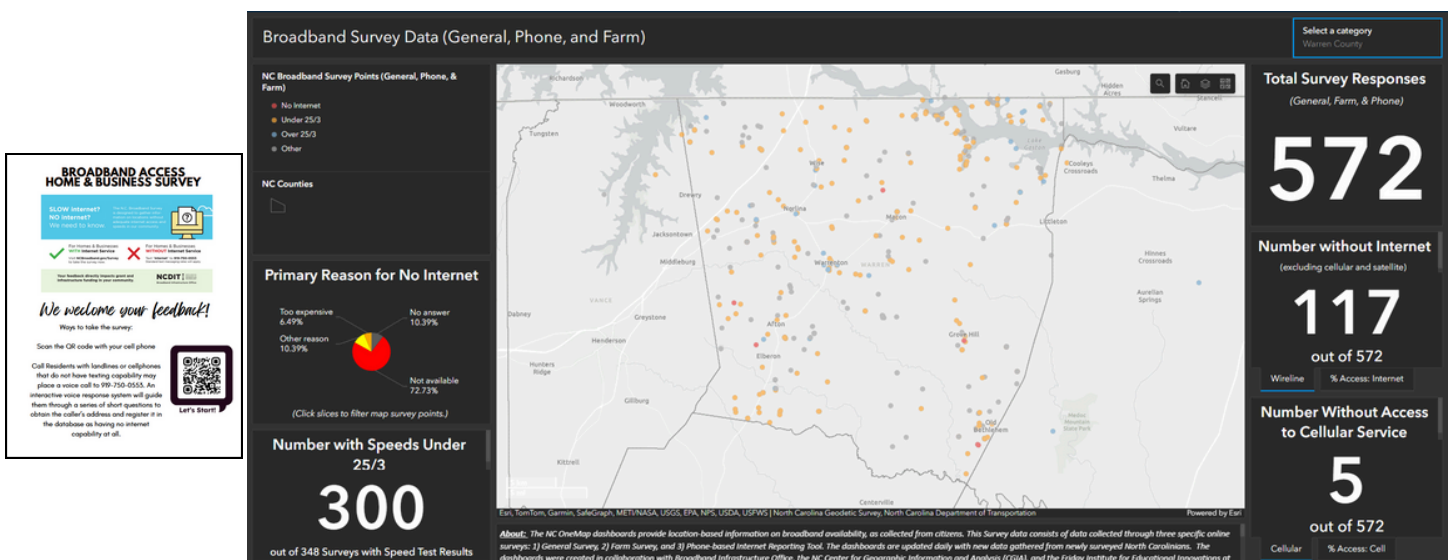
*Source: NCDIT Broadband Survey as of June 2024

NC Department of Information Technology (NCDIT) Broadband Survey Responses:
- Total Broadband Survey Responses: 572 as of June 2024
- 117 out of 572 locations reported not having internet
- 5 out of 572 reported no cellular service
- 300 locations reported speeds under 25 Mbps download and 3 Mbps upload
- 72.73% of the locations without internet shared that no internet was available
- 10.39% of the locations without internet shared another reason affected their access to internet
- 6.49% of the locations without internet shared the cost was too expensive
- 10.39% of the locations without internet did not provide an answer

Broadband Survey Data Review

The community reported their unique experiences with internet service in Warren County, with 310 individuals responding to the survey by August 13th, 2024. Review of survey data allowed for a more in-depth understanding of communities' needs.

Internet Access:
80% reported to have a home internet subscription service,
38% reported using a mobile data plan,
13% go somewhere else for internet access,
10% use a prepaid mobile data plan,
0% pick up free Wi-Fi outside,
0% do not use the internet, and
5% borrow a hotspot.

Barriers to access:
50% shared that internet is available, but does not work well enough for their needs,
25% said the cost was too expensive,
63% shared that internet is not available,
0% do not know how to use the internet,
0% do not have a digital device,
0% do not want internet at their home.
13% selected 'other' as their response.

The theme for several of the "other" responses included: "The digital divide is real with so many services going on the internet with many not having sufficient access." Another story from the community expressed: "The lack of internet access prevents me from working from home and working at home. Additionally, it discourages my adult children from visiting me because they cannot work remotely or use the computer to play video games that require a faster internet speed." Additionally, many of the "other" responses touch on satellite internet options; but, express a high cost associated with the service, most likely making this option cost-prohibitive for some residents. One response summed up their experience with satellite internet: "We use Starlink. It was expensive to purchase/get installed and is expensive each month. Connectivity is good."

Cost of service: There is generally a willingness to pay for internet service, regardless of how the service is delivered. The survey asked 36 individuals in Warren County what would be the highest amount they would pay per month for home internet subscription, with $0 being the minimum and $200 being the maximum. The average was $71 with a standard deviation of $34--meaning the main range in which people are willing to pay for internet service is between $37-$105. 36 Warren County residents reported how much they would be willing to pay for mobile internet subscription per month. The average was $64 with a standard deviation of $31--meaning the main range people are willing to pay is between $33-95.

Language barrier: When English is not a community member's primary language, it can create additional barriers for them. Of the 31 people that responded to their primary language spoken 0% reported sometimes, not sure, or not being able to access public resources in their language choice. However, it is important that we recognize the voices not reflected in this survey and that we also anticipate changes in our communities demographics. The primary languages spoken in Warren County are English and Spanish. There is a small percentage of other languages present.

Digital Literacy & Skills Opportunities

88.57%
out of 35
felt very confident turning on a digital device

82.86%
out of 35
felt very confident sending an email

27.78%
out of 36
did not feel confident using word processing software

28.57%
out of 35
did not feel confident installing apps on a device

31.7%
out of 35
did not feel confident accessing online banking

33.33%
out of 33
did not feel confident finding educational content

37.15%
out of 35
did not feel confident searching for or applying for a job

37.14%
out of 35
did not feel confident using video applications

41.18%
out of 34
did not feel confident accessing or applying for government services

45.71%
out of 35
did not feel confident keep themselves safe online

60.01%
out of 35
did not feel confident protecting the privacy of their personal data.

Services are available to support digital literacy & skills opportunities:
- Warren County Library System
- Warren County Cooperative Extension: Farmer support
- Warren County Senior Services
- Vance-Granville Community College
- NC Works Career Services Center

Digital Literacy & Skills Opportunities

DIGITAL LITERACY VISION: Warren County is a thriving, rural community with comprehensive broadband service, providing holistic digital literacy resources to residents that have universal access to devices suitable to their needs in order to spur and sustain creative, sustainable economic revitalization.

Warren County Schools Careers and Technical Education Department is committed to helping students prepare for bright futures after high school. Today, students need a broad education and 21st-century skills to ensure successful long-term careers. Fortunately, students no longer need to choose between the academic courses needed for college and a vocational or technical training program. The Career and Technical Education (CTE) courses offered by Warren County Schools allow students to combine both college preparation and real-world workforce skills development into one customized education program. CTE courses encourage students to explore and prepare for careers in engineering, construction, health and medical science, security, business, finance, marketing, entrepreneurship, and more. https://warrencareertech.org/

 www.instagram.com/warrencountycte/

 https://www.facebook.com/ctewcs

Kyte Learning emphasizes a "cafeteria learning" approach, allowing teachers to choose their learning path based on their individual needs, skill levels, and learning styles. This differentiated instruction model aims to cater to a wide range of educators, from tech novices to advanced users, providing them with the skills and ideas they need to enhance their teaching practices. https://kytelearning.com/

Warren County Library System

Community Access: With one location and one Smart Book Locker, you can access a vast collection of books, DVDs, audiobooks, magazines, newspapers, and online resources. The NC Cardinal system is a how resource sharing is made possible.

- Early Literacy: Story Time programs and resources designed to prepare children for school through reading and learning activities. Check out our upcoming events page.

Digital Literacy: One-to-one Tech Time is offered at the library where visitors can bring their own device (laptop, phone, or tablet) or use the desktop computers inside the library. STEM (Lego Day, NC Science Fest, Summer Reading, and our partnership with 4H) and STEAM (NC Kids Vote) programs are available on the upcoming events page as well. NC Kids Vote was a multi-series program that supported youth's understanding of the election process. Social Emotional Learning (SEL) programming is offered as well.

Learning Resources: Resources for homework help, life skills, career training, and STEAM education for kids and teens. Adult learners can access empowering programs and expert support. One-on-one career assistance with job searches, applications, and interview preparation to help you find employment in partnership with Vance-Granville Community College and NC Works. Access audiobooks, eBooks, and language learning tools for free, anytime.

Genealogy & Local History: Explore our Special Collection Room's genealogy and local history collection, both digital and physical, with tools like the Cultural Heritage Library and North Carolina State Archives available on public computers.

Food Literacy: The Charlie Cart Project, funded by Triangle North Healthcare Foundation, with a number of cooking demonstrations with a focus on developing better eating habits and a healthier lifestyle.

Strategic Planning: The Warren County Memorial Library received a Library Services and Technology Act grant, used to conduct a needs assessment survey, host focus groups, and development the new strategic plan.

WCML
wcmlibrary.org
252-257-4990

Warren County Community Resources

Vance-Granville Community College: Vance-Granville Community College (VGCC) offers a digital literacy course. VGCC's Small Business Center provides specialized individual classes catering to specific needs within the community. https://www.vgcc.edu/catalog/curriculum-programs/

- Information Technology Program - Prepares students for entry-level positions in the IT industry with an Associate Degree, Diploma or specialized IT industry certifications.
  - Microsoft Office Specialist Certification
  - Microsoft Technology Associate Certification
  - IC3 Digital Literacy Certification
- Ed2Go Online Learning - Online learning courses for career readiness in multiple fields that prepare students for certification exams, such as Microsoft Office Specialist Expert certifications in Word, Excel, PowerPoint, Outlook, Access and many more. https://www.vgcc.edu/coned/ed2go-online-learning/

NC Work Career Center: NCWorks Career Centers offer a wide variety of career services to support job seekers and employers in the community. Visit your local NCWorks Career Center or schedule an appointment by contacting the local office. NCWorks Career Center staff are available to meet in person, over the phone and virtually. https://www.ncworks.gov/

North Carolina Digital Equity Plan: The state plan identified five barriers and needs:
  - Access to and affordability of high-speed internet (100 Megabits per second download/20 Mbps upload.)
  - Accessibility and inclusivity of online public resources.
  - Digital Literacy
  - Cybersecurity and privacy.
  - Availability and affordability of devices and technical support.
  https://www.ncbroadband.gov/Digital-Equity-Plan

Warren County Public Schools

https://www.warrenk12nc.org/

Follow -US-

NC Career and Technical Education Course Management System (CMS) is a resource for North Carolina CTE that provides course, credential and pathway information. https://center.ncsu.edu/nccte-cms/

Learning.com provides educators with solutions to prepare their students with critical digital skills. Web-based curriculum for grades K-12 engages students as they learn keyboarding, online safety, applied productivity tools, computational thinking, coding and more!

Gmetrix is an online platform that specializes in providing test preparation resources for a wide range of professional certifications.The company initially focused on Microsoft Office certifications but has since expanded to offer practice tests and training materials for numerous other certification programs. https://www.gmetrix.com/

Kyte Learning emphasizes a "cafeteria learning" approach, allowing teachers to choose their learning path based on their individual needs, skill levels, and learning styles. This differentiated instruction model aims to cater to a wide range of educators, from tech novices to advanced users, providing them with the skills and ideas they need to enhance their teaching practices. https://kytelearning.com/

Google Workplace Suite Google's office suite of intelligent office and productivity apps. Google Workspace includes all of Google's familiar apps, such as Gmail, Calendar, Drive, Docs, Sheets, Slides, Meet, and more. workspace.google.com

Paxton Patterson Lab The ultimate career exploration to engage students in authentic problem-based learning experiences as they discover their interests and aptitudes. The learning systems engage students with problem-based, real-world technology. We empower students to discover their interests and aptitudes, along the pathway to post-secondary success. https://www.paxtonpatterson.com/

Qualtrics is a survey platform.

Warren County Schools provide 70" smart-panels in classrooms; laptops, Chromebooks, and iPads for students and teachers; as well as zSpace AR/VR to allow learners to manipulate objects in a 360 degree "screen breaking" experience using interactions that are simple and familiar; and Anatomage, an advanced 3D medical visualization technology that specializes in digitizing real human bodies into interactive, fully functional digital models.

Incorporated Areas in Warren County

Town of Warrenton

Tracing its origin to 1779, Warrenton was an early and progressive center of education for both men and women. Warrenton was the home of well-known builder Jacob Holt, who built Greek revival and Italianate style houses throughout the town and region. Today, over 300 structures survive and are listed in the National Register Historic District. Warrenton is also known as the Eastern Bluebird capital of North Carolina with the highest concentration of Eastern Bluebirds in the United States. Check out our local Rescue Group and order your own Bluebird house.
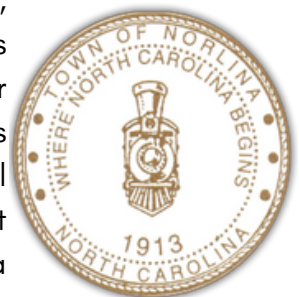
Town of Macon

Macon was known as the Macon Depot in the early 1800's. The post office was established in 1839 and in the 1880s, the town became known as Macon. The name was changed in honor of Nathaniel Macon, a prominent county native who had three terms as Speaker of the U. S. House of Representatives and a U. S. Senator from 1815-1828. Macon is the smallest of the county's three incorporated towns with a population of 115. Macon is the birthplace of writer and professor at Duke University, Reynolds Price, and the setting of his 1986 novel, Kate Vaiden. Fannie Pennington, an activist, was also born and raised here.

Town of Norlina

In 1837, Norlina was called the Ridgeway Junction and the expanding railroad found it necessary to stop in this area for refueling and goods. In the 1860s, Norlina became known as the "Woodyard" and in the 1870s, the railroads merged to form the Seaboard & Raleigh Railroad. In 1900, the Seaboard Air Line Railway was established through a series of mergers and acquisitions and quickly grew from 1,110 miles to over 4,680 miles. In 1913, a group of local citizens made the town one square mile with the Depot used as the direct center of these boundaries. A petition was sent to the North Carolina General Assembly for charter and the town of Norlina was incorporated. Norlina is the largest town in Warren County with a population of 1,108.

Incorporated Areas in Warren County

BROADBAND ACCESS HOME & BUSINESS SURVEY

SLOW internet?
NO internet?
We need to know.

✓ For Homes & Businesses WITH Internet Service
✗ For Homes & Businesses WITHOUT Internet Service

Your feedback directly impacts grant and infrastructure funding in your community.

NCDIT

We welcome your feedback!

Ways to take the survey:

Scan the QR code with your cell phone

Call Residents with landlines or cellphones that do not have texting capability may place a voice call to 919-750-0555. An interactive voice response system will guide them through a series of short questions to obtain the caller's address and register it in the database as having no internet capability at all.

Let's Start!

Survey outreach was conducted through in-person events to support the statewide effort to better understand the needs of our community. Kerr-Tar Regional Council of Governments staff and AmeriCorp member attended the Eastern Bluebird Festival to speak with members of the community to encourage them to take the state survey. Some residents expressed that they did not have internet access. This prompted the local government support staff to tell folks about the phone number they could call to take the survey to share that information with the state. The survey was made available for multiple languages through the web application and supported English and Spanish versions through the phone prompted survey.

Warren County Public Wi-Fi

Public Wi-Fi access helps bridge the digital divide when schools, libraries, and government buildings share their internet with the public. Sites that offer public Wi-Fi are listed below.
At their discretion, businesses, churches, and other organizations in the county may also offer wi-fi to residents and visitors.

Warren County Government:
- Warren County Recreational Center
  - 840 US-158 BYP, Warrenton, NC 27589
- Warren County Memorial Library
  - 119 S Front St. Warrenton 27589

> = Public Wi-Fi available as of June 2024

Warren County K-12 Schools:
- Northside K8
  - 164 Elementary Ave, Norlina, NC 27563
- Warren New Technical High
  - 219 US-158 BYP, Warrenton, NC 27589
- Warren County Middle
  - 118 Campus Dr. Warrenton, NC 27589
- Warren County High
  - 149 Campus Dr. Warrenton, NC 27589
- Vaughan Elementary
  - 2936 US Hwy 158 E, Macon, NC 27551
- Haliwa-Saponi Tribal School
  - 130 Haliwa Saponi Trl. Hollister, NC 27844

Goal 1: Universal Access

Ensure universal access to affordable and reliable internet connectivity and digital resources for all residents and businesses in Warren County.

OBJECTIVES

1 Cultivate local partnerships to facilitate improved access to technology.

> *Metric:* Demonstrate at least 10% increase in reliable internet access per year as estimated by NC One Broadband Map and resident survey data (see **Goal 7**, Objective 1)

2 Explore the possibility of local initiatives or partnerships to provide awards or grants to low-income households and small businesses.

> *Metric:* Identify and pursue at least two funding sources per year; empower local digital literacy task-force to manage funding.

Goal Partners:
Warren County Community & Economic Development
Warren County Grants and Contracts Administrator
Warren County Schools
Warren County Memorial Library
Local Faith Community
Local Community Development Non-profit Groups

Alignment:
Warren County Comprehensive Plan: IS 1.1 & ED 3:6
Kerr-Tar CEDS: Promote Small Business/Entrepreneurial Development & Engage in Labor Force Enhancements
NC Digital Equity Plan: Strategy 1, 2, & 3

Goal 2: Digital Literacy Education

Increase digital literacy rates among residents of all ages, with a focus on fundamental skills such as device operation, internet safety, and effective use of digital tools and resources.

OBJECTIVES

1 Partner with local schools, libraries, community colleges, and businesses to create and host regular workshops and classes, both in person and in and on-demand format, on devices care, cybersecuirty, and effective use of digital resources.

> *Metric:* At least four workshops and/or classes and at least two online tutorials are offered to Warren County residents in the first year.

2 Encourage businesses to offer digital literacy training to their employees and support community initiative aimed at enhancing digital self-sufficiency.

> *Metric:* Provide resources to encourage and facilitate trainings to at least 10 businesses in the first year.

Goal Partners:
Warren County Community & Economic Development
Warren County Memorial Library
Local Business Community
Warren County Schools & Vance Granville Community College

Alignment:
Warren County Comprehensive Plan: ED 3:6, 7
Kerr-Tar CEDS: Promote Small Business/Entrepreneurial Development & Engage in Labor Force Enhancements
NC Digital Equity Plan: Strategy 3

Goal 3: Enhance Cybersecurity

Build community resilience against cybersecurity threats and online risks through educational programming and support to residents and businesses on cybersecurity best practices and safe digital behaviors.

OBJECTIVES

1 Host free, online or in–person Cybersecurity Awareness Workshops for residents and businesses on topics such as recognizing phishing emails, creating strong passwords, and securing home and/or business networks.

Metric: Four workshops in the first year; target attendance of 15 participants per session.

2 Collaborate with local schools and the library to provide cybersecurity resource handouts and/or short training sessions integrated with their existing technology programs.

Metric: Track participation with a goal of engaging 100 residents in the first year.

Goal Partners:
Warren County Community & Economic Development
Warren County Memorial Library
Warren County Schools & Vance Granville Community College

Alignment:
Warren County Comprehensive Plan: ED 3:6, 7
Kerr–Tar CEDS: Promote Small Business/Entrepreneurial Development & Engage in Labor Force Enhancements
NC Digital Equity Plan: Strategy 4

Goal 4: Equity and Inclusion

Promote equity and inclusion in access to digital resources and opportunities, with a focus on addressing the unique needs of historically marginalized and underserved populations.

OBJECTIVES

1 Partner with local faith community and fire departments to host community listening sessions to gather input on specific digital access barriers faced by historically marginalized populations.

> *Metric:* Host at least three sessions in the first six months and record participant attendance and actionable insights collected.

2 Organize pop-up digital resource clinics to provide information on affordable internet programs and offer hands-on guidance for accessing digital tools.

> *Metric:* Host at least two events in the first six months; record participant attendance and resources provided.

Goal Partners:
Warren County Community & Economic Development
Warren County Memorial Library
Warren County Schools & Vance Granville Community College
Local Faith Community
Warren County Volunteer Fire Departments

Alignment:
Warren County Comprehensive Plan: ED 3:6, 7
Kerr–Tar CEDS: Promote Small Business/Entrepreneurial Development & Engage in Labor Force Enhancements
NC Digital Equity Plan: Strategy 1, 2, 3, & 5

Goal 5: Digital Marketplace

Equip local businesses with the digital tools and skills needed to thrive in the digital economy, thus promoting business resiliency, growth, and competitiveness in the modern marketplace.

OBJECTIVES

1 Create and distribute a downloadable toolkit that outlines options for free or discounted software tools (e.g. website creation, e-commerce, and customer relationship management), marketing tools (e.g. Canva), and online tutorials (e.g. Small Business Administration) for local entrepreneurs.

>   *Metric:* At least 150 downloads in first 6 months.

2 Facilitate a Peer-to-Peer Mentorship Program for business technology adoption that leverages the knowledge of local business owners who have successfully adopted digital tools to assist newer or less tech-savvy businesses.

>   *Metric:* Host at least four events in the first year, with 30 total participants in that time.

Goal Partners:
Warren County Community & Economic Development
Warren County Memorial Library
Local Small Business Community

Alignment:
Warren County Comprehensive Plan: IS 1:1 & ED 3:6, 7
Kerr-Tar CEDS: Promote Small Business/Entrepreneurial Development, Engage in Labor Force Enhancements, & Promote Niches Economic Development Strategies
NC Digital Equity Plan: Strategy 1, 3, 4, & 5

Goal 6: Modernization

Facilitate the modernization and digitization of services in local government, healthcare, education, and business sectors to improve efficiency, accessibility, and user experience.

OBJECTIVES

1 Conduct a Digital Needs Assessment survey across government, healthcare, education, and business sectors to identify key areas for digitization and modernization to target efficient future modernization efforts.

Metric: Survey at least 50% of stakeholders in local government, healthcare, education, and business sectors within the first quarter, with a goal to collect responses from at least 30 stakeholders. Deliver a summary report of findings and prioritized recommendations to stakeholders within six weeks of survey completion.

2 Form a Local Digital Support task force or advisory group with representatives from government, healthcare, education, and business sectors to provide guidance, share best practices, and oversee progress on digitization projects.

Metric: Conduct quarterly meetings with at least one participant from the above sectors at each event; empower this group to produce actionable recommendations for future digitization efforts.

Goal 6: Modernization

Facilitate the modernization and digitization of services in local government, healthcare, education, and business sectors to improve efficiency, accessibility, and user experience.

Goal Partners:
Warren County Government
Warren County Community & Economic Development
Warren County Memorial Library
Warren County Schools and Vance Granville Community College
Local Small Business Community

Alignment:
Warren County Comprehensive Plan: IS 1:1 & ED 3:6, 7
Kerr-Tar CEDS: Promote Small Business/Entrepreneurial Development, Engage in Labor Force Enhancements, & Promote Niches Economic Development Strategies
NC Digital Equity Plan: Strategy 1, 3, 4, & 5

Goal 7: Evaluation and Monitoring

Establish mechanisms for ongoing evaluation and monitoring of digital literacy initiatives, collecting feedback from stakeholders and measuring the impact of efforts to inform future strategies

OBJECTIVES

1 Develop and distribute a digital feedback form to participants of all digital literacy initiatives to collect valuable insights from participants on program effectiveness and potential areas for improvement.

> *Metric:* Create and publish feedback form within the first quarter and achieve a response rate of at least 50% from program participants.

2 Establish a small advisory committee of 5-7 key stakeholders (e.g., educators, community leaders, program participants) by end of the first quarter to provide ongoing guidance and feedback on digital literacy initiatives (see also **Goal 6,** Objective 3)

> *Metric:* Host biannual meetings with at least 75% attendance, with at least two actionable insights shared per meeting.

Goal Partners:
Warren County Community & Economic Development
Warren County Memorial Library
Warren County Schools and Vance Granville Community College
Alignment:
Warren County Comprehensive Plan: ED 3:6, 7
Kerr-Tar CEDS: Promote Small Business/Entrepreneurial Development & Engage in Labor Force Enhancements
NC Digital Equity Plan: Strategy 2 3, 4, & 5

Building Infrastructure for Success

Continuing the work of the Warren County Digital Inclusion Plan will require a cross-community collaboration among the public, non-profit, and private sectors. Perhaps one of the most critical elements to continuing digital inclusion work is the infrastructure buildout that is already taking place across Warren County. Warren County has already been building a strong partnership with the NC Department of Information Technology, as well as the internet service providers that have received federal and state funding to build out infrastructure in Warren County.
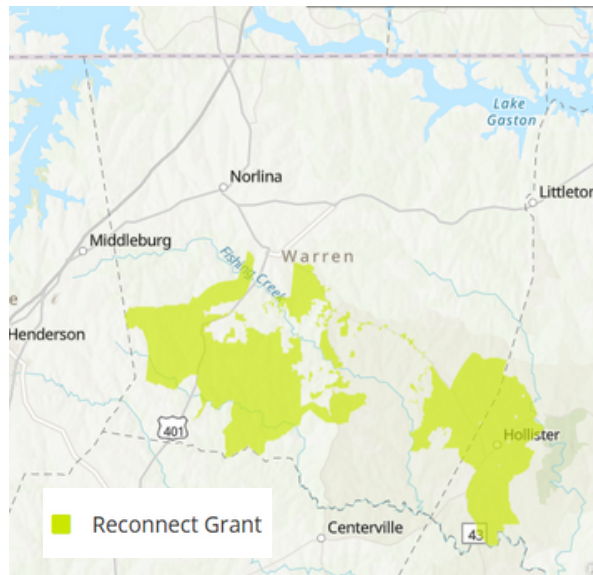
ReConnect Program –
USDA
Awarded to: AccessOn Networks Inc.
Amount: $17.5 million
Award Date: October 27, 2022
These funds will connect thousands of people, 100 businesses, 76 farms and 22 educational facilities to high-speed internet in Halifax and Warren counties in North Carolina. The company will make high-speed internet service affordable by participating in the Federal Communications Commission's (FCC) Lifeline and Affordable Connectivity Programs. This project will serve socially vulnerable communities in Halifax and Warren counties and people in the Haliwa-Saponi Tribal Statistical Area.

Source: https://www.usda.gov/article/biden-harris-administration-provides-759-million-bring-high-speed-internet-access-communities-across

# Building Infrastructure for Success

**Rural Digital Opportunity Fund –
FCC**

Awarded to: Spectrum

Award date: 2021

The company's RDOF expansion will provide broadband access to 1.3 million customer locations across 24 states in the coming years.

Spectrum's newly constructed fiber-optic network buildout in Warren County is part of the company's approximately $5 billion Rural Digital Opportunity Fund-related investment in unserved rural communities. Spectrum has also won more than $700 million in state broadband expansion subsidies, which, combined with Spectrum investment, will connect another 300,000 homes and small businesses.
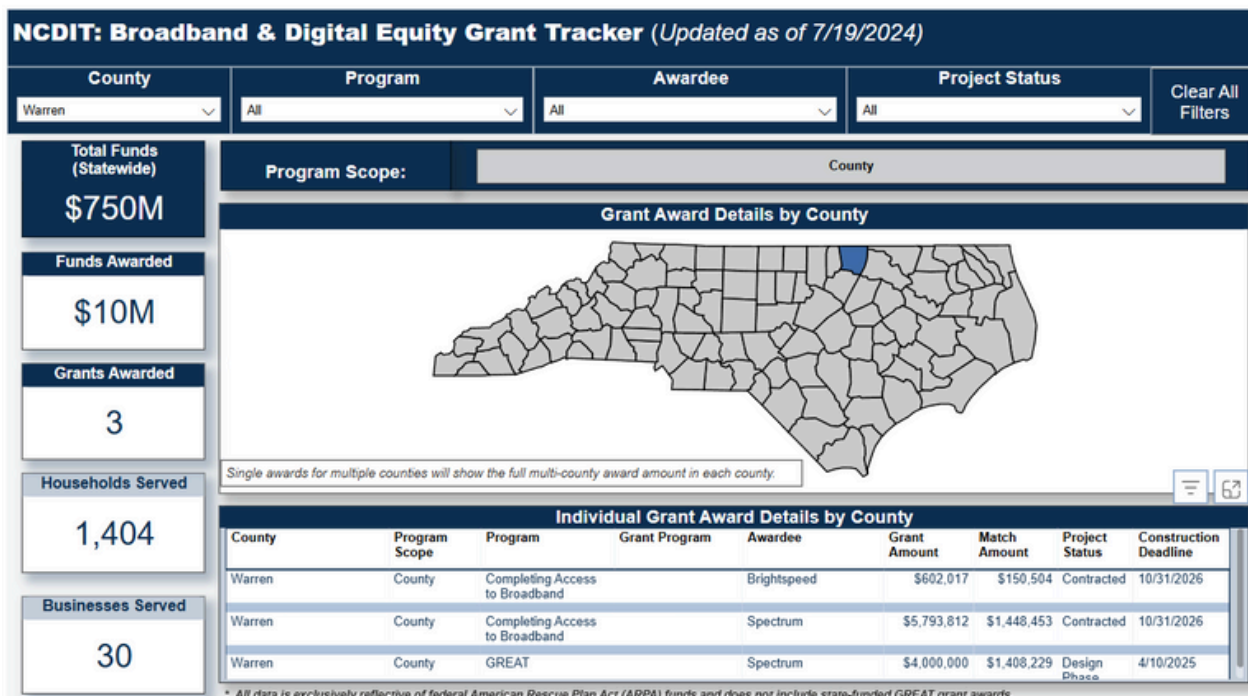
*Source: County Dashboard Awards as of July 2024

The dashboard above shows the total funds awarded across the state as well as the funds awarded by county, details and status of each award, and households and businesses served. Not all counties will display state-awarded funding; they either were not eligible for the GREAT grant or Completing Access to Broadband program or pursued projects independent of NCDIT grants.

Building Infrastructure for Success

GREAT Grant –
NCDIT
Awarded to: Spectrum Southeast, LLC
Award amount: $4,000,000 (Spectrum match: $1,408,229)
Award date: August 31, 2022
The GREAT grant program helps to bring high-speed internet to thousands of North Carolinians, businesses and farms in the most rural and remote areas of the state. These state-funded grants are available to private broadband service providers and are designed to connect these areas with broadband as quickly as possible. This award provides broadband services to approximately 1,434 households and businesses in the county.

Awarded to: Brightspeed
Award amount: $1,196,488.00 (Brightspeed match: $512,780.40)
Award Date: July 6, 2023
In a second round of GREAT funding, Brightspeed was awarded for Warren County. Construction deadline for this project is 8/8/2026.

Digital Champions Program –
NCDIT
Awarded to: HubZone Technology Initiative (HTI)
Award amount: $600,000
Award date: July 12, 2024
Counties supported: Durham, Edgecombe, Franklin, Granville, Greene, Halifax, Hertford, Martin, Nash, Northampton, Person, Vance, Wake, **Warren**, and Wilson
The Digital Champion grant program awarded more than $30 million to community service, nonprofit, higher education and regional organizations to expand digital equity to North Carolinians. HTI will use funding to develop and/or expand digital equity programming and address at least one of the following elements of digital inclusion: affordability of reliable high-speed internet; provision of internet-enabled devices (computer, laptops, etc.) that meet users' needs; access to digital literacy and skills training; quality technical support; or applications and online content designed to increase accessibility and inclusivity.

Building Infrastructure for Success

Completing Access to Broadband (CAB)
NCDIT
Awarded to: Spectrum Southeast, LLC & Brightspeed
Total Project Cost: $7,242,265.00 (County match: $362,113.25)
Award date: July 1, 2024
Awarded to: Connect Holding II, LLC. (Brightspeed)
Total Project Cost: $752,521.00 (County match: $362,113.25)
Funding originating from American Rescue Plan Act (ARPA) funding, requiring matching investments from counties and selected broadband providers to deploy crucial last-mile broadband infrastructure to serve the remaining unserved/underserved areas in North Carolina.

NOTE: Late in 2024, this round of funding, affected by actions in the NC Legislature, removed the county's requirement to match funding, thus reducing the anticipated funding from an expected $8 million to $3,350,000.

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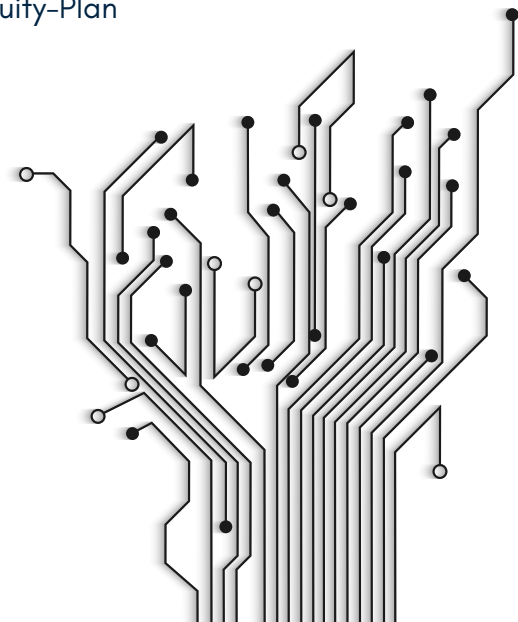
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