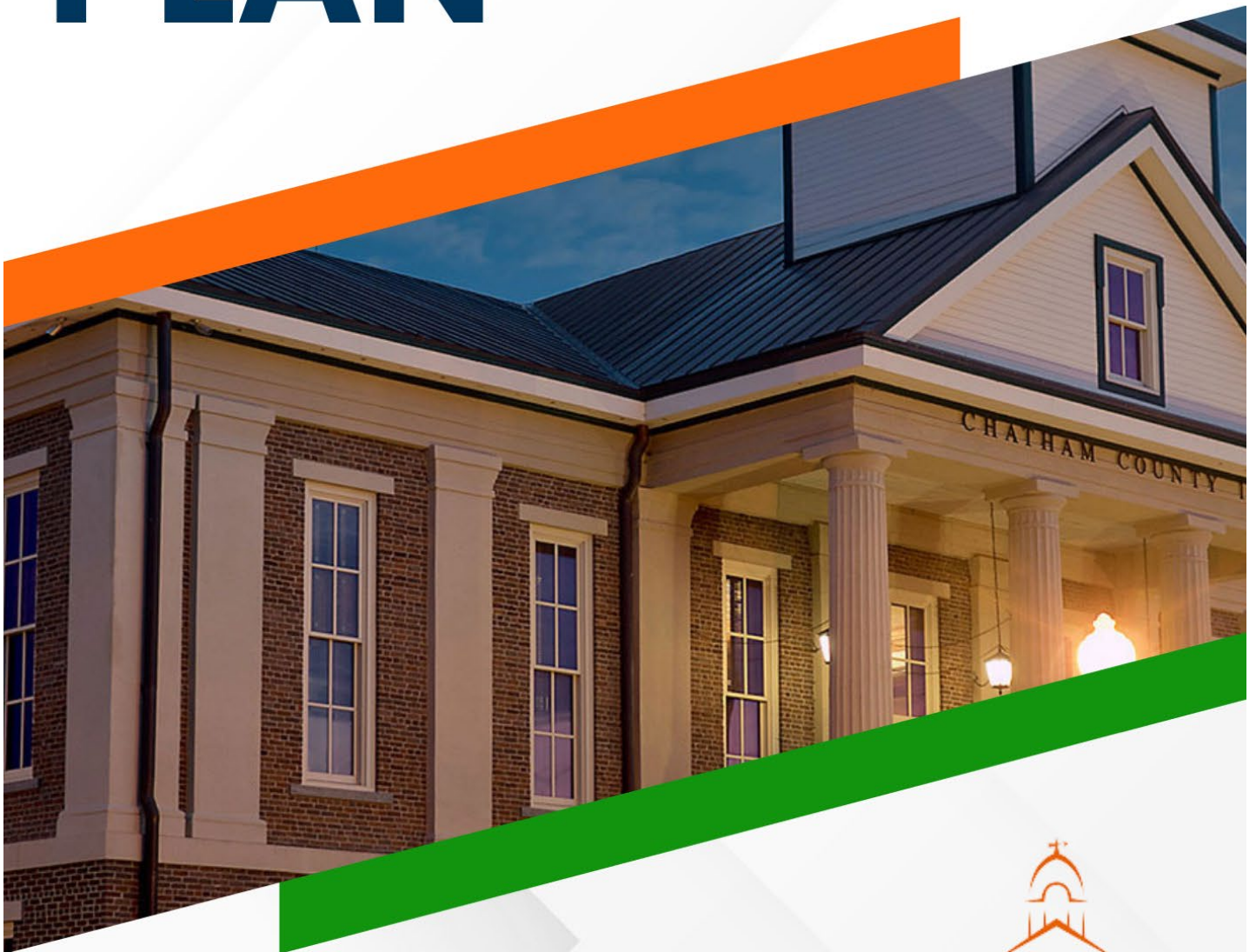


# CHATHAM COUNTY

## DIGITAL INCLUSION PLAN





# Table of Contents

---

<b>Table of Contents</b>	<b>1</b>
<b>Preface</b>	<b>3</b>
<b>Definitions</b>	<b>4</b>
Broadband 101	4
Broadband Technology/Infrastructure	4
Organizations/Entities to Know	6
<b>Introduction</b>	<b>6</b>
Executive Summary	8
What is Digital Inclusion	8
What is Digital Equity	8
<b>Mission, Vision, Values</b>	<b>9</b>
Mission	9
Vision	9
Values	9
<b>About Chatham County</b>	<b>9</b>
Historical and Geographic Overview	10
Governance	10
Demography	11
Economy	12
Education	13
<b>Availability</b>	<b>13</b>
Broadband Availability	14
Challenges	21
On-Going Efforts	25
Goals and Strategies	28
<b>Access</b>	<b>30</b>
Challenges	30
On-going Efforts	31



Goals and Strategies	33
<b>Adoption</b>	<b>35</b>
Challenges	35
On-going Efforts	37
Goals and Strategies	39
<b>Partners</b>	<b>42</b>
<b>Goal Breakdown</b>	<b>44</b>
<b>Continuing the Work</b>	<b>45</b>
<b>Community Voices</b>	<b>46</b>
Availability	46
Access	47
Adoption	51



# Preface

---

The Chatham County Digital Inclusion and Equity Coalition is thrilled to present the Digital Inclusion and Equity Plan for Chatham County, a comprehensive strategy designed to address the digital divide and ensure that all residents can access the resources needed to succeed in our increasingly digital world.

This plan is the result of a genuinely collaborative effort. It is the combined wisdom and expertise of a diverse group of stakeholders, including residents, non-profit organizations, local businesses, education institutions, and government agencies. Through numerous meetings, conversations, and brainstorming sessions, we have identified our community’s key challenges and developed practical and effective solutions. These goals, strategies, and objectives are not just to be facilitated by the Chatham County government but represent a collective effort and responsibility of all stakeholders in the community to achieve a better digital future for Chatham County.

We recognize that digital inclusion is not just a matter of individual availability to broadband but also equity of digital technology access and approaching the challenge of facilitating the adoption of this digital infrastructure. It is about ensuring that every community member has the tools and resources they need to participate fully in our economy, society, and democracy. This plan reflects our shared commitment to this vision and the values of collaboration, inclusivity, and empowerment underpinning it.

This plan is not the end of our efforts but the beginning. We see it as a living document, a roadmap for action that will guide the groups’ collective work for years to come. We are committed to regular reviews and updates to ensure that we progress toward our goals and adapt our strategies and objectives as new challenges and opportunities arise.

In short, this plan represents a significant milestone in our community’s ongoing efforts to promote digital inclusion and equity. We are proud of what we have accomplished together and excited about the possibilities that lie ahead. We invite you to join us in this vital work and to help us build a more inclusive, equitable, and prosperous digital future for all residents of Chatham County.



# Definitions

---

The following definitions set a framework for group discussion and plan development.

## Broadband 101

**Bandwidth:** A measurement indicating the maximum capacity of a wired or wireless connection in an amount of time. Often measured with megabits per second (Mbps).

**Broadband:** Internet access that is always on and faster than dial-up defined by a download speed of 25 Mbps and upload speed of 3 Mbps.

**Broadband Adoption:** Access to the internet at speeds, quality, and capacity necessary to accomplish everyday tasks, with digital skills required to participate online and on a personal device with a secure, convenient network.

**Broadband Connectivity:** High-speed Internet access that is always on and faster than traditional dial-up access and typically at speeds higher than 25 Mbps download and 3 Mbps upload.

**Cybersecurity:** The practice of protecting systems, networks, and programs from digital attacks.


**Digital Divide:** The gap between those with access to technology, the internet, and digital literacy training and those without.

**Digital Equity:** The condition in which all individuals and communities have the information technology capacity needed for full participation in 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, access and use information and communication technologies. This includes five elements:

1. Affordable, robust broadband internet service.
2. Internet-enabled devices that meet the needs of the user.
3. Access to digital literacy training.
4. Quality technical support.
5. Applications and online content are designed to enable and encourage self-sufficiency, participation, and collaboration.

“Broadband access must be the next generation utility for all families and households in Chatham County. As we continue preparing students for global competitiveness, we must equip them with both the capacity and the infrastructure to interact, collaborate and create with their global peers. Broadband for all must be our commitment and priority.” – **Dr. Anthony Jackson, Chatham County Schools Superintendent**



**Digital Literacy:** Ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills.

**Digital Navigators:** Trusted guides who assist community members in internet adoption and using computing devices, digital tools, and the internet.

**Digital Technology:** Information and communication technologies necessary for civic and cultural participation, employment, lifelong learning, and access to essential services. This includes broadband internet service, software, apps, websites, and devices such as laptops, desktops, tablets, and smartphones.

**Internet Service Provider (ISP):** Internet service provider refers to a company that provides access to the internet to both personal and business customers.

**Unserved:** A project area without access to wireline or fixed wireless broadband internet services of at least 25 Mbps download and 3 Mbps upload.

## **Broadband Technology/Infrastructure**

**Backbone:** Large-capacity fiber networks.

**Cable Modem Service (Coax or DOCSIS):** Cable modem service enables cable operators to provide broadband using the same coaxial cables that deliver pictures and sound to your TV. The maximum speed is about 1000 Mbps.

**Data Limits:** The amount of data you can download, and upload based on an ISP's standard.

**Dead-Zones:** Areas where mobile phones struggle to receive a strong signal, leading to dropped calls, slow internet speeds, and an overall frustrating communication experience.

**Digital Subscriber Line (DSL)/Copper:** Runs over traditional copper phone lines, speed-dependent technology, and distance. The maximum speed is about 80 Mbps.


**Download Speed:** How quickly you receive data online such as texts, images, music, videos and other data. Typically measured in Mbps.

**Fiber-Optic Cable (Fiber):** Converts electrical signals carrying data to light and sends the light through transparent glass fibers about the diameter of a human hair. Fiber transmits data faster than DSL or cable. The typical maximum speed is about 1,000 Mbps.

**Fixed Wireless:** Fixed wireless broadband connects a home or business to the internet using a radio link between equipment at the customer's location and the service provider's facility. Speed depends on the service provider's capacity and distance, among other variables.

**Internet Speed:** The rate of data transmission for connection to the internet.

**Last Mile:** Fiber network connections to end user.



**Latency (Lag):** The delay in time it takes data to transfer data from the web to your device.

**Megabits per second (Mbps):** Units of measurement for network bandwidth, used to show how fast a network or internet connection is. Each Mbps represents the capacity to transfer 1 million bits each second, or roughly one small photo per second. This can also be indicated as download speed/upload speed. For instance, if there is a 33 Mbps download speed and 5 Mbps upload speed it may be indicated as 33/5.

**Middle Mile:** Segment of fiber linking the core network to the local fiber.

**Mobile and Cellular:** Service based on mobile phone technology, these include LTE, 4G, and 5G. The maximum speed of 4G/LTE is about 25-50 Mbps. The maximum speed of 5G is about 300-1000 Mbps.

**Satellite:** A form of wireless broadband connecting the customer's home or business with satellites orbiting the Earth. The maximum speed is about 100 Mbps.

**Upload Speed:** The speed at which you can send information from your device to the web.


**Useful internet speeds:** The Federal Communications Commission (FCC) defines essential/useful broadband as transmission speeds of at least 25 Mbps (megabits per second) – or 25 million bits per second – downstream (from the internet to the user's computer) and 3 Mbps upstream (from the user's computer to the internet). At lower speeds, there may be significant barriers for users. New internet installations should avoid having less than 100 Mbps; the minimum useful speed will undoubtedly increase with new applications.

## Organizations/Entities to Know

**Central Carolina Community College (CCCC):** Central Carolina Community College is a public two-year college serving, primarily, residents of Chatham, Harnett, and Lee counties. It is a member of the North Carolina Community College System and accredited by the Southern Association of Colleges and Schools.

**Central Pines Regional Council:** The Central Pines Regional Council (formerly Triangle J Council of Governments) is one of the 17 regional North Carolina Councils of Governments (Region J) established by the North Carolina General Assembly for the purpose of regional planning and administration. Chatham County is a member of Central Pines Regional Council.

**Chatham County Public Libraries:** Chatham County Public Libraries include three branches: Chatham Community Library (Pittsboro), Goldston Public Library, and Wren Memorial Library (Siler City). Chatham County Public Libraries plays an integral role in the community by encouraging reading, lifelong learning, and community engagement, and by providing opportunities for people to connect, learn, and grow.



**Chatham County Public Schools:** Chatham County Public Schools is the public school district located in Chatham County. The school district operates 20 schools throughout Chatham County.

**Chatham Literacy:** Chatham County Literacy Council is a non-profit agency that helps adults who live or work in Chatham County develop the educational and literacy skills they need to reach their goals.

**Chatham County Center of the North Carolina Cooperative Extension Service:** The Chatham County Center of the North Carolina Cooperative Extension Service gives Chatham County residents easy access to the extension resources and expertise at both North Carolina State University and North Carolina A & T University. Extension educational programs are accessible to all individuals, families and communities to help them work towards economic prosperity, environmental stewardship and improved knowledge and skills for a safe, healthy and productive life.

**Federal Communications Commission (FCC):** The Federal Communications Commission regulates interstate and international communications by radio, television, wire, satellite, and cable in all 50 states, the District of Columbia, and U.S. territories. They are responsible for collecting and publishing internet access data.

**Innovate Chatham:** Innovate Chatham is a non-profit dedicated to advancing technology use for all Chatham County residents.

**National Telecommunications and Information Administration (NTIA):** NTIA is the Federal Executive Branch agency principally responsible for advising the President on telecommunications and information policy issues.

**North Carolina Association of County Commissioners (NCACC):** The NCACC is a non-partisan organization that serves as the official voice of all 100 counties on issues considered by the General Assembly, Congress, and federal and state agencies. Broadband and digital equity are essential issues for the NCACC.

**North Carolina Department of Information Technology (NCDIT):** The state agency responsible for issuing grant programs and guidance for broadband expansion across the state, as well as digital equity, inclusion, and literacy efforts.

**Right Here Right Now Project:** Right Here Right Now Project is a non-profit helping to address digital literacy skills in Alamance County, Rockingham County, and Chatham County, North Carolina.



# Introduction

---

## Executive Summary

Internet and broadband are essential to modern life. Through the beginning of the 2020s and the COVID-19 pandemic, broadband needs for Chatham County residents have become clear to governments, organizations, educational institutions, businesses, and non-profits serving the County. In response, these entities have come together to deliver a plan for the next phase of digital inclusivity work in Chatham County. This plan aims to create a framework to guide decision-making that will lead to expanding broadband availability, access, and adoption to all of Chatham County and build the necessary infrastructure to allow more residents to participate digitally.

The Chatham County Digital Inclusion Plan Coalition was built to address the rising needs of Chatham County residents as it relates to broadband and recognized the need for this plan not only as a framework for the future but also as an aid for residents' access to the digital landscape. The creation of this plan opens the opportunity for additional funding sources in the form of Federal and State grants. These grants will help digital integration in multiple areas, creating a more digitally inclusive Chatham County.

## What is Digital Inclusion

The Chatham County Digital Inclusion Plan Coalition views digital inclusion as the idea that all residents should have the necessary information, infrastructure, accessibility, knowledge, and skills to navigate digital tools and technology satisfactorily. This plan breaks up digital inclusion into availability, access, and adoption. Availability refers to the availability of digital infrastructure, access refers to the ability of someone to access the infrastructure (devices, Wi-Fi-access points), and adoption is the ability of someone to adopt technologies, often limited by their knowledge. By instituting programs that assist in all three areas, digital inclusion for all people in Chatham County will be a more attainable goal.

## What is Digital Equity

Digital equity is the idea that residents of Chatham County, regardless of residence, demographics, economic status, or education level, have the information technology capacity needed for full participation in our society, democracy, and economy. It is clear to the coalition that digital equity is necessary for all to participate, enjoy cultural engagement, receive employment opportunities, seek learning, and access foundational services. This type of digital equity can be called closing the digital divide. Through this plan, the coalition aims to close the digital divide in Chatham County by achieving digital equity.



# Mission, Vision, Values

---

## Mission

Our mission is to ensure that all residents have access to digital technology and the necessary skills to participate fully in the digital world. We aim to close the digital divide and promote equitable access to broadband by working to increase its availability, accessibility, and adoption. We are committed to creating an inclusive and equitable digital future for all residents of Chatham County.

## Vision

We envision a dynamic and inclusive community in Chatham County where every resident can access reliable high-speed broadband, digital technology, and the skills needed to participate and fully achieve their goals in the digital age.

## Values

The Chatham County Digital Inclusion Plan Coalition synthesized five values to use as guidance to develop the Chatham County Digital Inclusion Plan:

Collaboration - We believe collaboration, partnerships, and public engagement are essential. We will work closely with local organizations, businesses, government agencies, and schools to promote digital inclusion and close the digital divide in Chatham County.

Connectivity - We value the importance of connectivity in today's digital age. Everyone should have access to high-speed internet and the digital tools necessary to participate fully in society.

Empowerment - We believe access to digital technology and skills is vital to empowering individuals and communities to achieve their goals. Providing access to technology and digital literacy resources enables our residents to take charge of their lives and pursue their aspirations.

Inclusion - We are committed to creating an inclusive community where barriers have been diminished or removed to allow every resident to have equal opportunity to succeed and fulfill their potential.

Innovation - We recognize the rapidly changing nature of technology and are committed to staying at the forefront of digital innovation. We will strive to adopt new technologies and practices to ensure that Chatham County remains a desirable place to live, work, and do business in the digital age.

# About Chatham County

---

## Historical and Geographic Overview

Chatham County was founded in 1771, taking its name from the Earl of Chatham. The county seat is Pittsboro, and the two other incorporated towns strictly within the limits of Chatham County are Siler City, established in 1887, and Goldston, established in 1907. Cary, established in 1871, and Apex, established in 1873, also hold land within Chatham County on the east side of Jordan Lake. However, they are part of Wake County as well as Chatham.

Located at the state’s geographic center, Chatham County encompasses more than 707 square miles and is known as the “Heart of North Carolina.” The County shares borders with Durham, Orange, Alamance, Wake, Harnett, Lee, Moore, and Randolph Counties. Chatham is between two of the state’s three most prominent centers of population and commerce: the Triangle and the Piedmont Triad. Raleigh, Durham, Cary, Chapel Hill, Apex, Greensboro, and Burlington are some of the cities that make up these areas. The proximity to these major economic centers makes Chatham attractive for residential and economic growth.

Pittsboro is in the center of the county and serves as the county seat. It is also home to Chatham Park, a development projected to bring 60,000 residents to the town in the next two decades. Siler City is in the western part of the county and is the largest municipality. Goldston is the smallest locality but will increase in population over the next several decades. Chatham County also hosts many small unincorporated communities, such as Bonlee, Bennett, Silk Hope, Gulf, and Moncure.


## Governance

The Chatham County government is overseen by a five-member Board of Commissioners, whom county residents elect. Each of the five members represents a separate district in the County but is elected by all residents (at-large). The Commissioners appoint a County Manager to oversee the day-to-day operations of the County government, including personnel and budget oversight. The Board of Commissioners is also responsible for appointing the County Attorney, Clerk to the Board of Commissioners, and Tax Administrator.



*Figure 1: Pittsboro Courthouse*

The County Manager serves as the head of most county operations. While the manager only hires about two-thirds of department heads, the manager works closely with all department heads as the county is often responsible for funding some or all of their budgets. Some departments receive oversight from appointed boards or committees; for example, the Public Health Department is overseen by the Chatham County Board of Health, and the Department of Social Services is governed by the Chatham County Board of Social Services.



The Board of Commissioners has general authority over county policies. In contrast, several other boards have authority over specific policy areas, such as the Board of Health, Board of Social Services, Board of Elections, and Soil and Water Conservation District Board. The Board of Commissioners appoints all members of the Board of Health. It makes some of the appointments to the Board of Social Services. Still, neither the Board of Elections nor the Soil and Water District Conservation Board have any commissioner appointments.

### **Chatham County Government Mission**

Chatham County is committed to building a thriving community through services and solutions that are innovative, sustainable, and financially responsible.

### **Chatham County Government Vision**

Chatham County's vision is to excel in equity and enhance the quality of life for all through collaborative leadership, exceptional service, and transparency.

### **Chatham County Government Values**

Collaboration: To work jointly with others or collectively to achieve a common goal.

Integrity: Being honest and having strong moral principles that are unwavering.

Respect: Is the positive regard of one person for another, which is demonstrated through actions and words. Respect involves understanding and valuing differences.

Accountability: The acceptance of responsibility for honest and ethical conduct towards others.

Community: A group of people with diverse characteristics who are linked by common ties for the well-being of Chatham County.

Service: Resources offered by Chatham County government, intended to support members of a community and are systems and solutions that can benefit various groups of individuals within the county community.

Equity: Recognizing that we do not all start from the same place and must acknowledge and make the necessary adjustments to imbalances.

## **Demography**

The most recent U.S. Census data shows the population growth Chatham County has experienced recently. As of April 1, 2020, 76,285 people (about the seating capacity of the Los Angeles Memorial Coliseum) lived in Chatham County, an increase of more than 20% from the 2010 Census. Chatham County is the 36th largest county in North Carolina by population but had the seventh-highest population growth rate of all counties between 2010 and 2020.



the site of the new VinFast electric vehicle car factory and FedEx shipping hub, bringing about 8,000 jobs.

The county’s northwestern corner is the home of the Chatham-Siler City Advanced Manufacturing site, which will hold Wolfspeed, bringing 1,800 jobs to the area. These mega-sites will be home to additional businesses in the coming years, increasing employee counts and investments.

Despite the level of growth exhibited within the county, significant sections suffer from poverty. In 2020, Chatham County’s poverty rate was 10.7%, meaning that around 7,700 people in Chatham are living at or below the national poverty line. (For comparison, the national poverty rate was 12.8%, and the state rate was 14.0%.) Almost 1

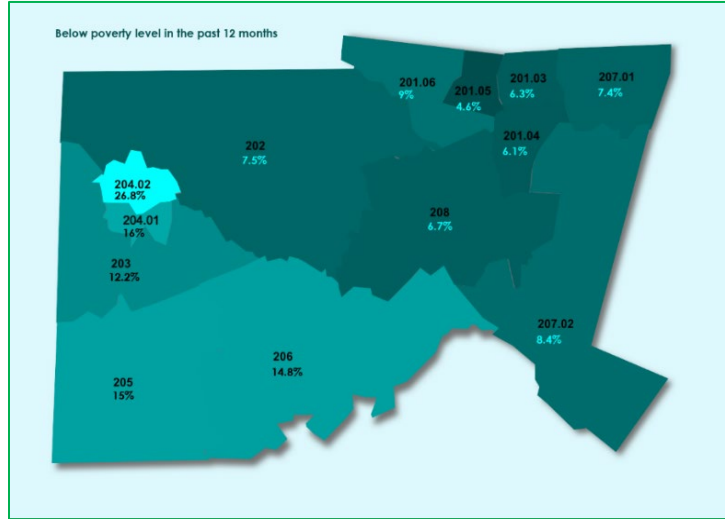


Figure 4: Residents Below Poverty Line Map Microsoft Power BI product for Digital Equity

in 3 Chatham adults report money as a primary cause of stress. Black and Hispanic residents were nearly four times as likely to experience poverty in 2020 compared to the overall county average.

## Education

Chatham County has a public school system with twenty schools, three public charter schools, and a community college with two campuses. Chatham County Schools, the public school district, has a four-year graduation rate of 89%.

More than 40% of Chatham County adults agree or strongly agree that there are high-quality K-12 schools where they live, compared to around 14% who disagree or strongly disagree. Additionally, 89% of Chatham County residents aged twenty-five and older have at least a high school diploma. In comparison, about 44% have at least a bachelor’s degree. Comparatively, around the same percentage of North Carolina and United States residents have at least a high school diploma. In contrast, fewer North Carolinians (32%) and Americans (32%) have at least a bachelor’s degree.

**Note:** Information from this Chapter extrapolated from the Chatham County Community Assessment 2021 as well as Information from Microsoft Power BI product for Digital Equity.

# Availability

Availability in the context of digital inclusion refers to digital broadband infrastructure. Having ubiquitous broadband infrastructure is imperative for digital inclusion and equity across Chatham County. As such, the following section will use information from various sources to express an inventory of broadband across Chatham County, challenges that are being faced surrounding availability and where in the county they are most prevalent, ongoing efforts in availability, and finally, a discussion of the goals and strategies to be engaged to address digital inequity surrounding availability in Chatham County.

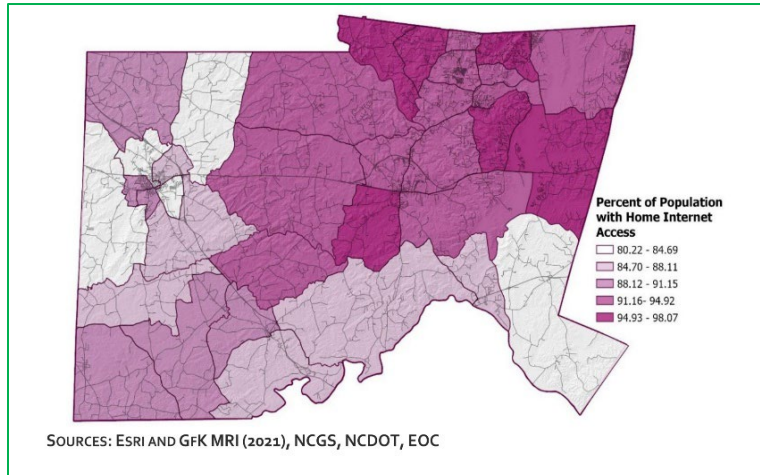


Figure 5: Home Internet Access Chatham County Community Assessment

## Broadband Availability

### Overall Availability

Chatham County, with an NC Broadband Office availability score of 70.8, has better than average availability for internet access in the state. Based on current data, 91.97% of the population has access to at least 25/3 Mbps services, and 84.27% have access to at least 100/20 Mbps. Chatham's population is growing, and 13% of the housing has been built since 2010. However, the availability score varies substantially across Chatham.

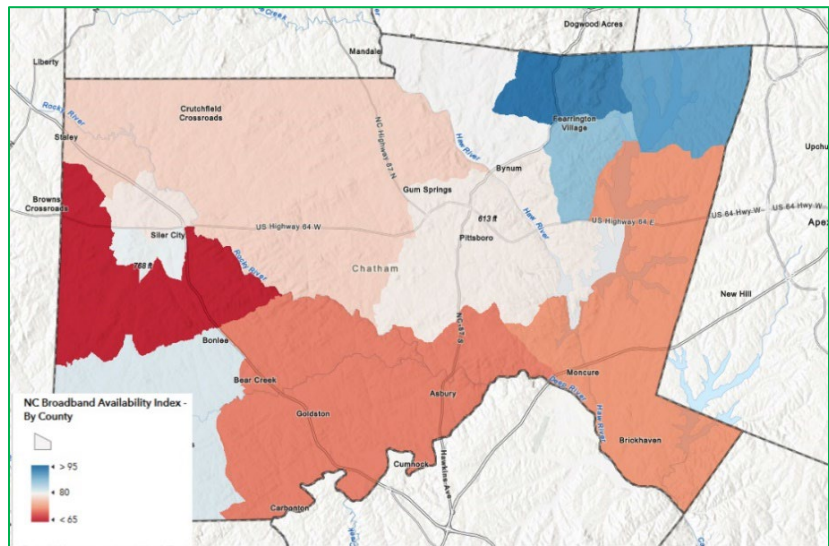


Figure 6: Chatham Broadband Map (arcgis.com)

Note that the Triangle Innovation Point site (southeast) and CAM sites (northwest) are in some areas with the poorest internet service availability.

## Asset Inventory

To begin the discussion surrounding broadband availability, we must take an introspective look at the assets present within Chatham County. The best way to see this is with information from the providers. Some internet service providers publish ‘coverage maps,’ although most do not share these maps publicly. Although this is the case, we can use several sources to indicate where these primary providers have coverage within Chatham County. The most reliable way to know if these providers cover an address is to ask their neighbors about their experience and inquire with internet providers if they are willing to service specific residences. Also, most providers have an address lookup on their page. These pages help determine immediately if an Internet Service Provider services a resident’s home.

**Note:** The following availability inventory was compiled using information from [FCC mappings](#), [NC Completing Access to Broadband \(CAB\) Planning Tool](#), and [broadbandnow.com](#). The major categories that are enumerated are Mobile/Cellular, Copper (wired), Fiber (wired), and Satellite.

## Mobile and Cellular Service

Mobile and cellular service within the bounds of this asset inventory means these providers offer mobile data at their indicated speeds. This information is derived from the FCC’s provider details on their FCC broadband mappings. It should be noted that this provider-reported information may not be completely accurate since the FCC had little time for the challenge period on this data. Despite this, the information included is the most accurate and complete data. For individuals to discover the best provider, shopping around is essential so that options can be raised, and asking neighbors about their experience is the most reliable method.

### T-Mobile Wireless 4G

T-Mobile Wireless 4G is present throughout the county, except for worse coverage in the Silk Hope area, South of Pittsboro, and much of the Southwest corner of the county near Bennett.

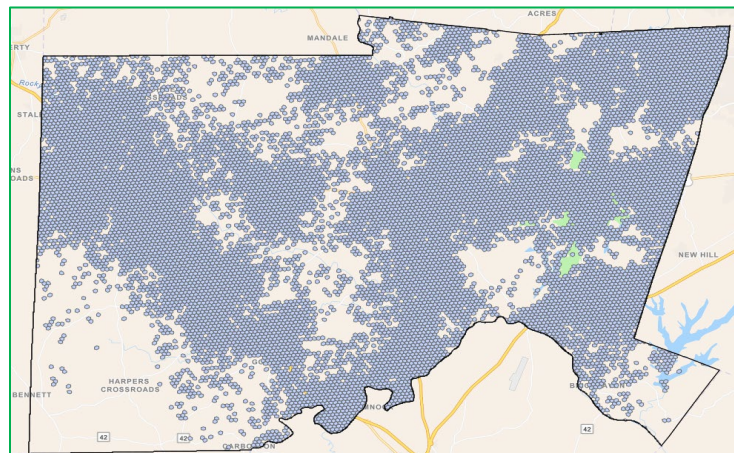


Figure 7: T-Mobile 4G Map – Map layer based on FCC BDC

### T-Mobile Wireless 5G

T-Mobile Wireless 5G generally follows the same model as T-Mobile 4G, except for a few pockets in the northern part of the county. However, this shows large amounts of 5G coverage from T-Mobile in Chatham County, especially within the municipalities.

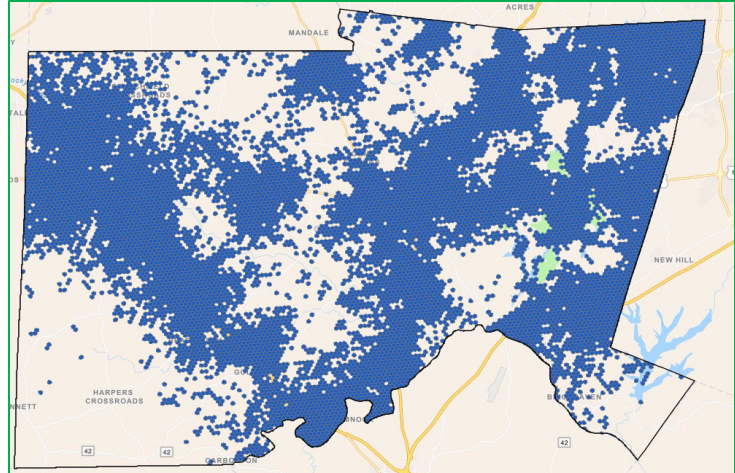


Figure 8: T-Mobile 5G Map – FCC Nat. Broadband Map

### AT&T Wireless 4G

AT&T 4G wireless is widely available across Chatham County municipalities but unavailable in some of the county's more rural areas, namely, Silk Hope, North of Goldston, and South-West Chatham, where Bonlee, Bennett, and Harpers Crossroads are located.

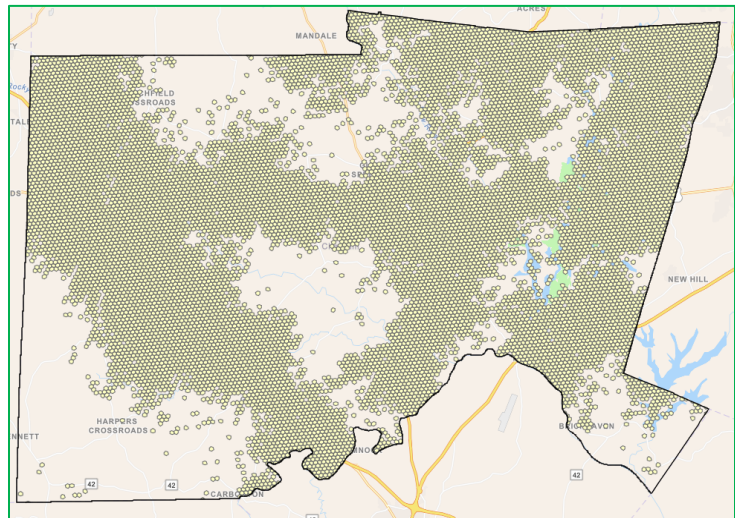


Figure 9: AT&T Wireless 4G – FCC Nat. Broadband Map

### AT&T Wireless 5G

Despite having 4G in much of the county, there is only 5G AT&T Wireless coverage in the North-West portion.

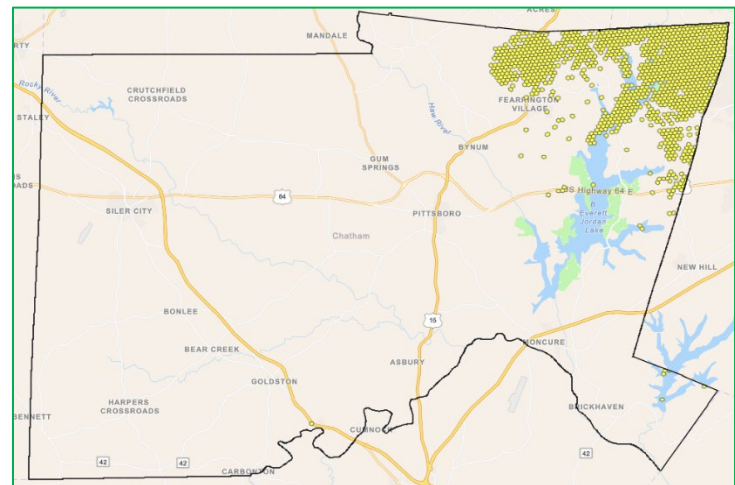


Figure 10: AT&T 5G Map – FCC Nat. Broadband Map

### Verizon Wireless 4G

Verizon Wireless 4G covers a majority of the county, with small portions of spotty coverage at the edge of the west side of the county and center, north of Goldston.

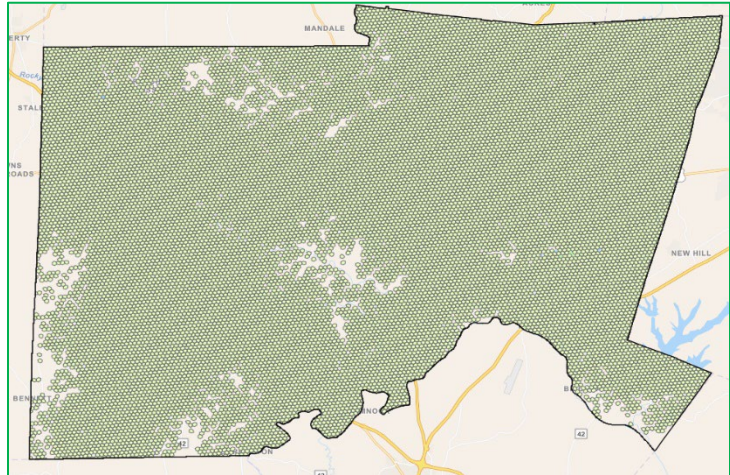


Figure 11: Verizon 4G Map – FCC Nat. Broadband Map

### Verizon Wireless 5G

Verizon Wireless 5G is much less abundant than their 4G within Chatham. However, there is clear coverage over much of the county, particularly the Northwest and Eastern sections.

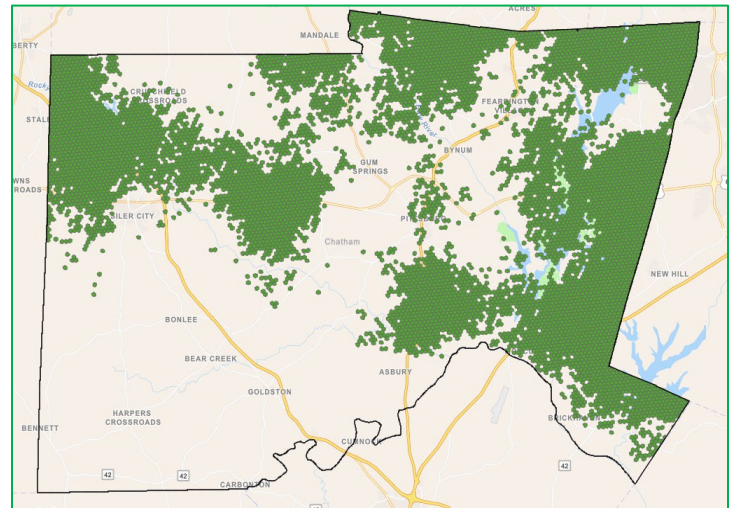


Figure 12: Verizon 5G Map – FCC Nat. Broadband Map

### Wired Service

Wired service, as it pertains to the bounds of this asset inventory, means broadband technologies running directly to the home. The three technologies that are a part of this part of the asset inventory

**Broadband needs to be both physically present for individuals and financially within reach. Whether fiber or cell towers, availability for the students and community supported by CCCC means it reaches their homes and they can afford to connect to it.” – Margaret Robertson, CCCC, Vice President of Workforce Development**

are Copper, Coaxial (Cable), and Fiber. Copper, or DSL, is a wireline transmission technology that transmits data faster over traditional copper telephone lines already installed in homes and businesses. Coaxial or Cable enables cable operators to provide broadband using the same coaxial cables that deliver pictures and sound to TV sets. Fiber optic technology converts electrical signals carrying data to light. It sends the light through transparent glass fibers about the diameter of a human hair. Fiber transmits data far exceeding current DSL or cable modem speeds,

typically tens or hundreds of Mbps. For wired service, plans will vary depending on the provider and location. Going to each provider’s website would be the best option to see more information about each of these plans.

### Brightspeed Copper

Brightspeed is the most prolific internet service provider within Chatham County. Although covering most of the county, significant areas still need to be covered, particularly in the Northeast. Residents have noted Brightspeed copper as less reliable than other internet sources in Chatham County.

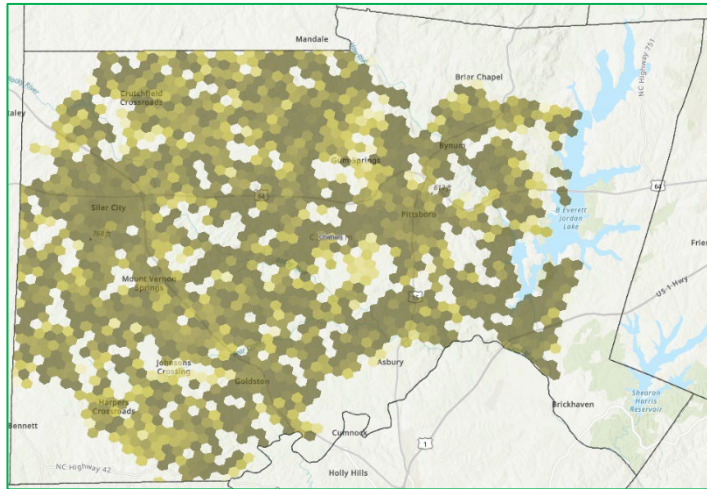


Figure 13: Brightspeed Copper – NCOneMap

### Brightspeed Fiber

Brightspeed Fiber placement in Chatham County is currently severely limited, with only small swaths of the county having coverage. These areas are primarily west of Jordan Lake and the residential regions of Pittsboro and Siler City.

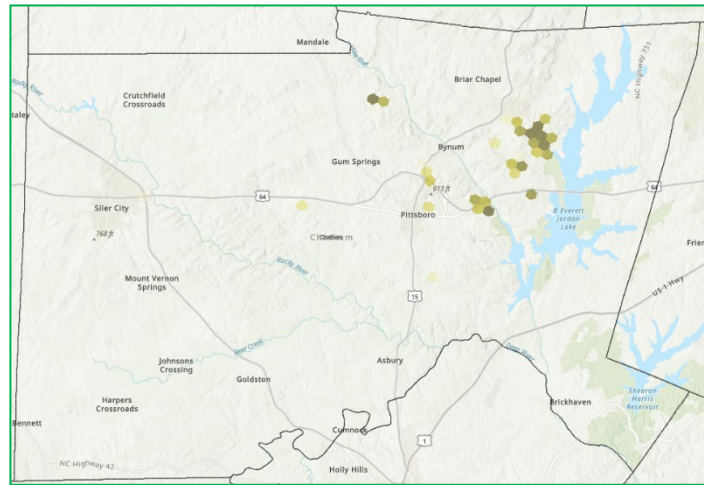


Figure 14: Brightspeed Fiber Map – NCOneMap

### Spectrum Coaxial

Spectrum Coaxial broadband coverage is widely spread in the more populated areas of the county, such as Siler City, Pittsboro, north and east of Pittsboro, and surrounding the Briar Chapel community. This coverage leaves out large swaths of the county, primarily the more rural areas.

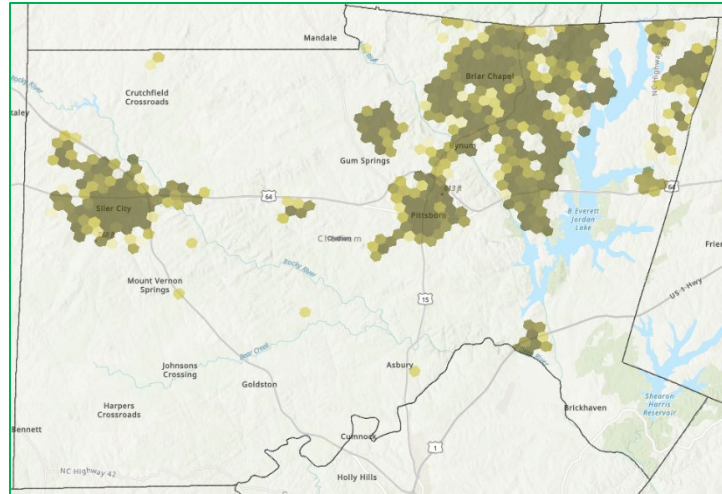


Figure 15: Spectrum Coaxial Map – NC One Map

### Spectrum Fiber

Spectrum Fiber is minimal, appearing in the most populated areas of the county in small amounts. These areas include Siler City, Pittsboro, North Chatham’s Briar Chapel community, and the west side of Jordan Lake.

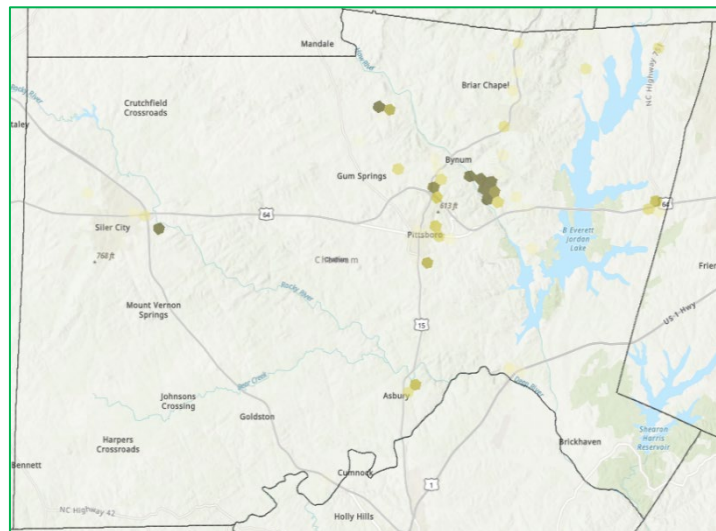


Figure 16: Spectrum Fiber Map – NC One Map

### AT&T Copper

AT&T Copper is primarily available on the east side of Jordan Lake in Apex and Cary. Furthermore, AT&T Copper is available in northern Chatham, north of Bynum. This copper covers areas east of Jordan Lake that are not covered by any other wired service.

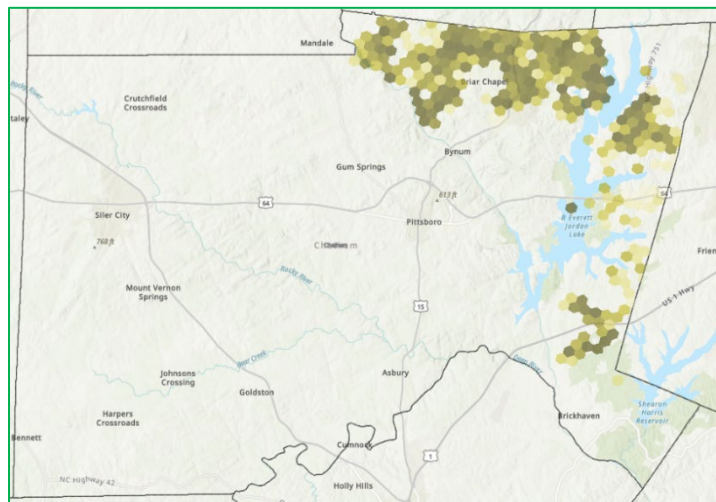


Figure 17: AT&T Copper Map –NC OneMap

### AT&T Fiber

AT&T fiber covers most of the area covered by AT&T copper, outside of the area south of US Highway 64. Much of the area is north of Fearington Village and in the Briar Chapel Community.

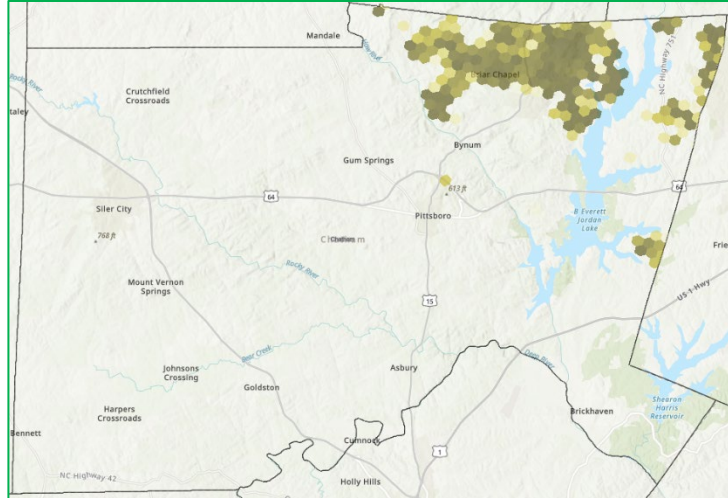


Figure 18: AT&T Fiber Map – NC OneMap

### Randolph Communications Copper

Randolph Communications Copper is primarily available on the western edge of Chatham County in the North and South.

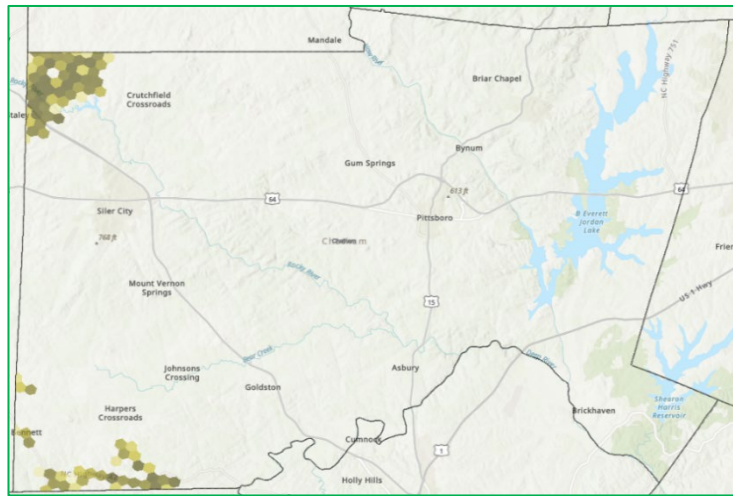


Figure 19: Randolph Communications Copper – NC OneMap

### Randolph Communications Fiber

Randolph Communications Fiber is a relatively new addition to the broadband resources for Chatham County. Over the past decade, Randolph has been expanding its fiber services to addresses in the Western and middle of Chatham County without high-speed internet access.

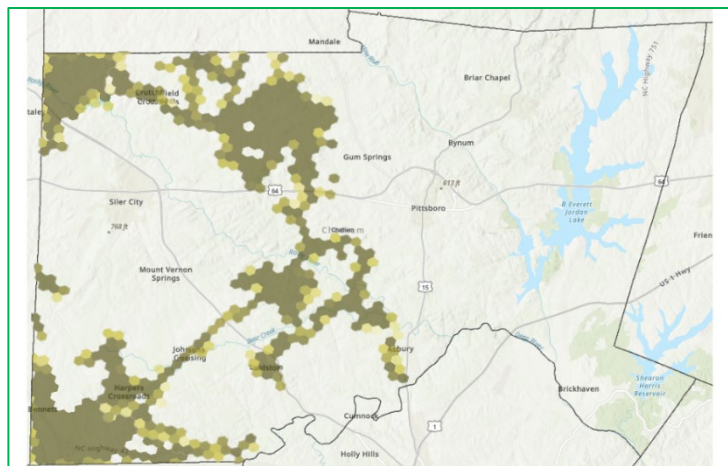


Figure 20: Randolph Communications Fiber – NC One Map

## Satellite Service

Just as satellites orbiting the earth provide necessary links for telephone and television services, they can also provide links for broadband. Although these internet service providers' speeds and plans are predicated on the location, weather, typography, and other factors that can vary the service type received, they are available in rural areas not traditionally covered by wired connections.

### HughesNet

HughesNet services the majority of Chatham County through its satellite internet services. Although not as reliable as a wired connection, it allows individuals without that opportunity to gain access to internet services.

### Viasat

Viasat is very similar to all other satellite providers. They cover most of the United States and all of Chatham County.

### Starlink

Starlink is a new satellite service, touting better speed than any other satellite provider. Starlink's availability map shows access to their services in all of Chatham County.

## Challenges

This asset and broadband inventory show that digital infrastructure exists in much of the county. Still, there are areas where these assets are sparse. According to the FCC National Broadband Map, 25.68% of locations in Chatham County are still considered unserved. The western and southern parts of the county are the areas indicating the least residents served.

Additionally, Chatham County initiates a Community Health Assessment every three years to gain information and give context to the health environment in the county. More than one-third (35.4%) of 2021 Chatham County Community Survey respondents cited internet access as something they would like to see Chatham County focus on to improve health and quality of life in the community, second only to water quality. During the Story Circles held for this Community Assessment process, community members expressed frustration with the county's internet coverage, saying good internet was hard to come by if they could not afford it or there was no high-speed internet in their area.

By understanding the need directly from the community, the next process is identifying specific areas and locations of need. By using NCDIT and FCC broadband availability map, we can see specific areas where there are significant challenges to broadband availability.

## Mobile and Cellular Service

The FCC provides cellular and mobile availability maps. The below map from the FCC dashboard on broadband availability shows significant challenges surrounding the southwestern part of the county and further issues with 5G across the county.

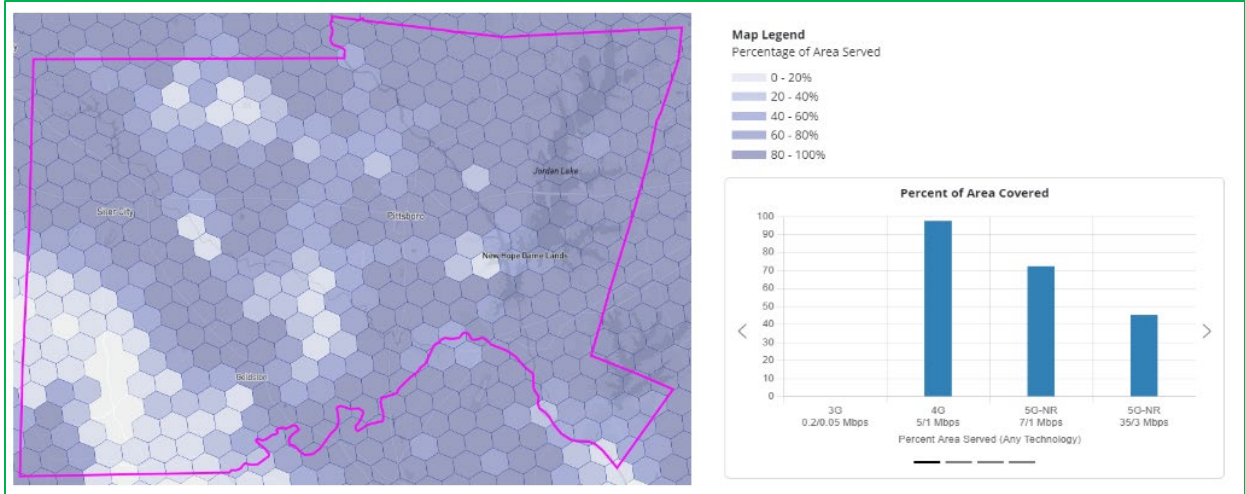


Figure 21: FCC Availability Map – Based on FCC BDC

The FCC requires providers to break down their service areas into two technology designations, 7/1 and 35/3 (minimum download/upload speeds in Mbps).

Rain, snow, tree cover, and local topography affect mobile data speed, and Chatham is a hilly and tree-covered county. Therefore, mobile broadband speeds can vary significantly from house to house and day to day.

### Wired Service

Wired service that reaches served status according to the FCC is limited in Chatham County. The below maps indicate where wired service that meets the served designation exists in Chatham County. The technology that reaches served status are cable and fiber technologies.

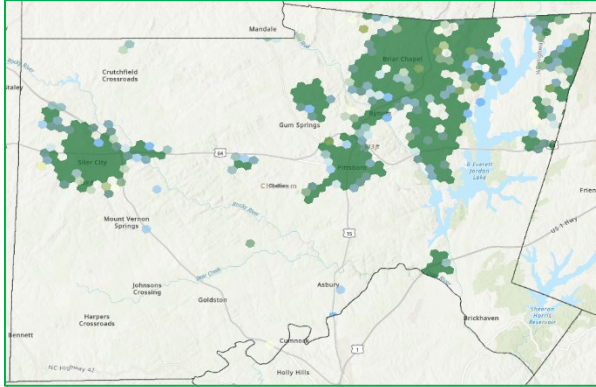


Figure 22: Served Cable Locations NC One Map

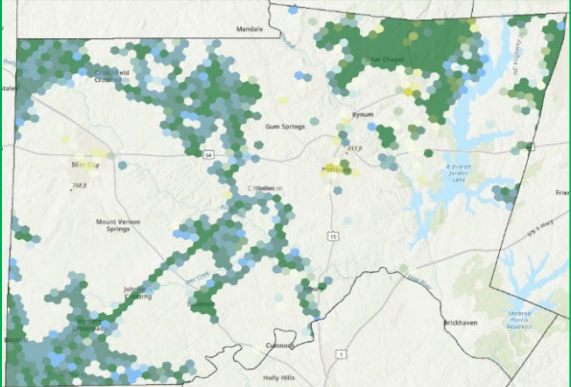


Figure 23: Served Fiber Locations NC One Map

Conversely, according to the mapping below, the darker areas have less wired service. This map and data indicate broad Chatham County swatches with service difficulties.

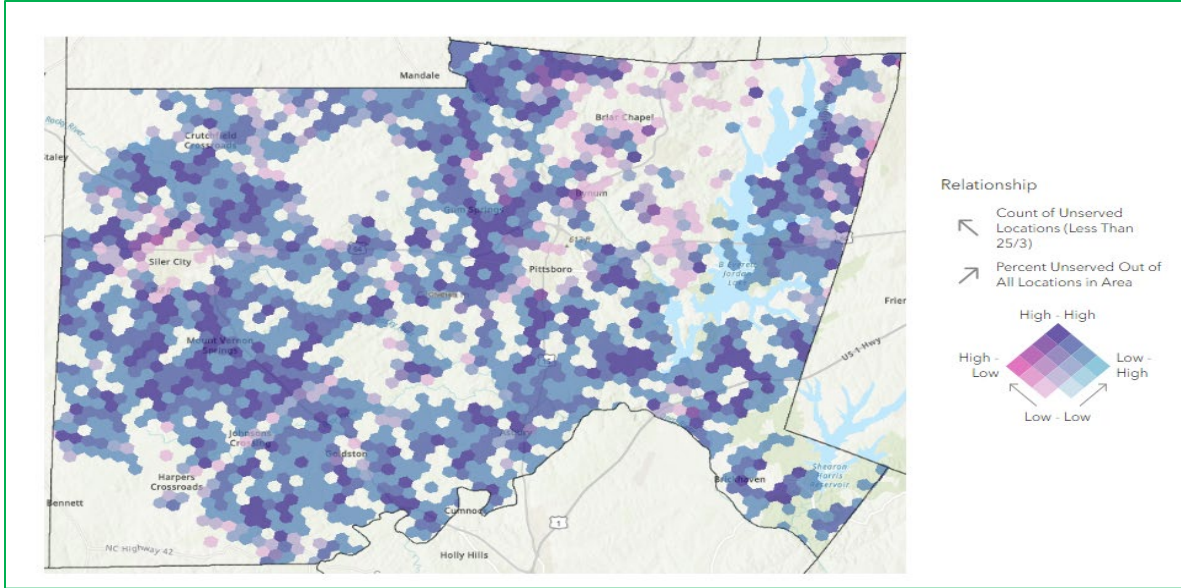


Figure 24: Unserved Locations NC One Map

Chatham wired service is made up of three types of technology: copper, coaxial cable, and fiber. Wired service can be uniquely challenging for the reasons laid out below:

1. **Infrastructure Installation:** The process of digging trenches or installing cables on utility poles is labor-intensive and requires skilled workers. Equipment and machinery for digging, laying, and securing cables also contribute to the overall costs.
2. **Materials:** The cables and related components used in wired broadband infrastructure are often made of high-quality materials to ensure durability and longevity. This can contribute to higher costs compared to some wireless alternatives.
3. **Maintenance and Repairs:** Over time, wired infrastructure may require maintenance and repairs. This involves detecting and fixing cable faults, replacing damaged components, and ensuring the overall integrity of the network. These ongoing operational costs can contribute to the overall expense.
4. **Initial Capital Investment:** The upfront investment in planning, designing, and implementing a wired broadband network is substantial. This includes not only the physical infrastructure but also the backend systems and technology required for a functional and efficient network.

While wired broadband may be more expensive to install and maintain, it often provides reliable and high-speed internet access, making it a preferred choice in many areas. However, advancements in wireless technologies and the deployment of fiber-optic networks are gradually addressing some of the cost challenges associated with wired services.

## Satellite Service

The challenges that Chatham County experiences in the satellite service space are slightly different than in other areas; as seen in the FCC map below, there is 100% coverage across the county at minimum speeds of 25/3.

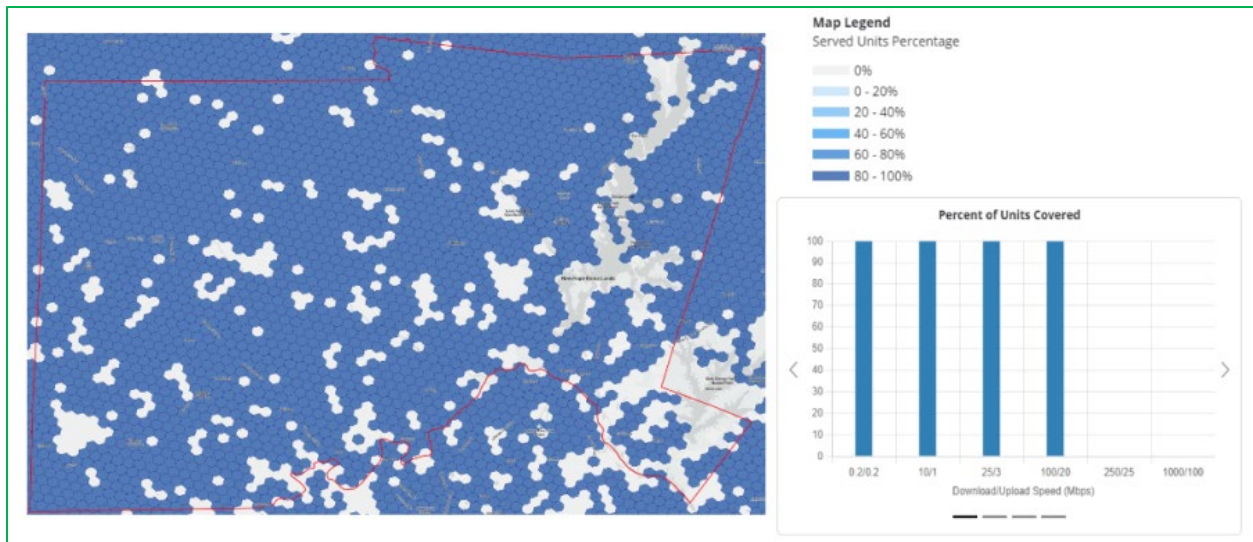


Figure 25: FCC Satellite Availability Map – FCC BDC

Rain, snow, trees, and topography affect satellite service. In Chatham County, especially in older neighborhoods with single-story homes, tree canopies commonly obscure the satellite dish's view of the sky to an extent that prevents service.

## Fixed Wireless Service

In fixed wireless, the signal comes from radio waves originating at cellular towers. The map below shows coverage in some parts of the county, but there is little high-speed access across Chatham.

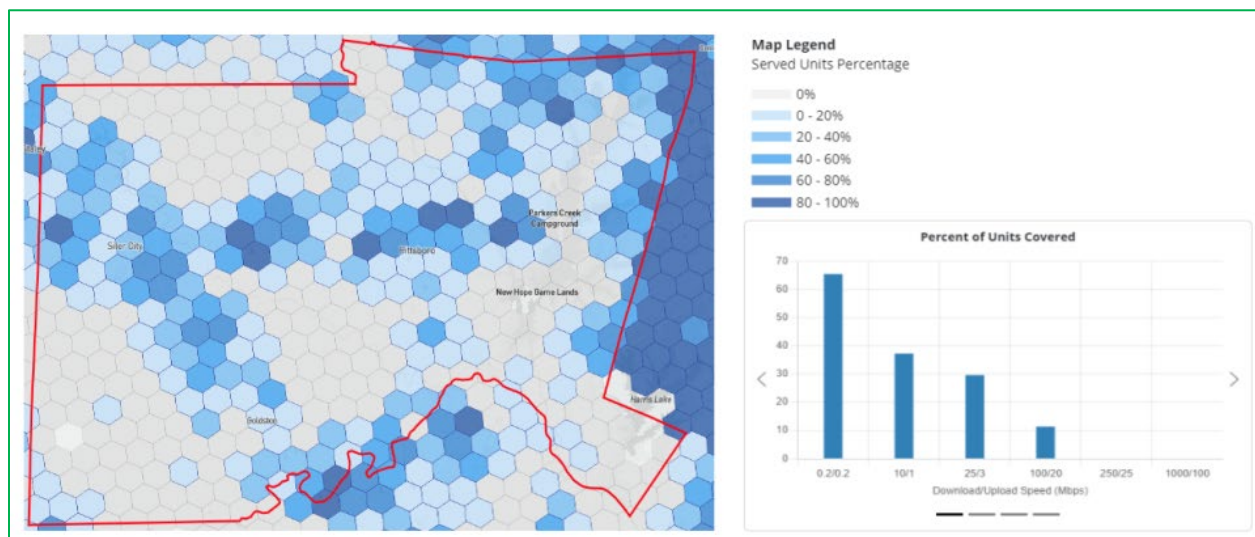


Figure 26: Fixed Wireless Availability Map – FCC BDC

Fixed wireless has the same challenges with trees, snow, rain, and topography in Chatham as satellite broadband.

## On-Going Efforts

### GREAT Grants

The N.C. Department of Information Technology's Broadband Infrastructure Office provides federally funded and state administered grants to internet service providers to facilitate the deployment of broadband service to unserved areas of North Carolina.

The Growing Rural Economies with Access to Technology (GREAT) Program funds deployment of broadband within unserved areas of economically distressed counties. This includes a matching requirement for participating counties.

The grants help bring high-speed internet to thousands of North Carolinians, businesses, and farms in the most rural areas of the state. Chatham County has received grants through this program. Provided is a map of where these grants have been awarded in the county (Green: Brightspeed and Yellow: AT&T).

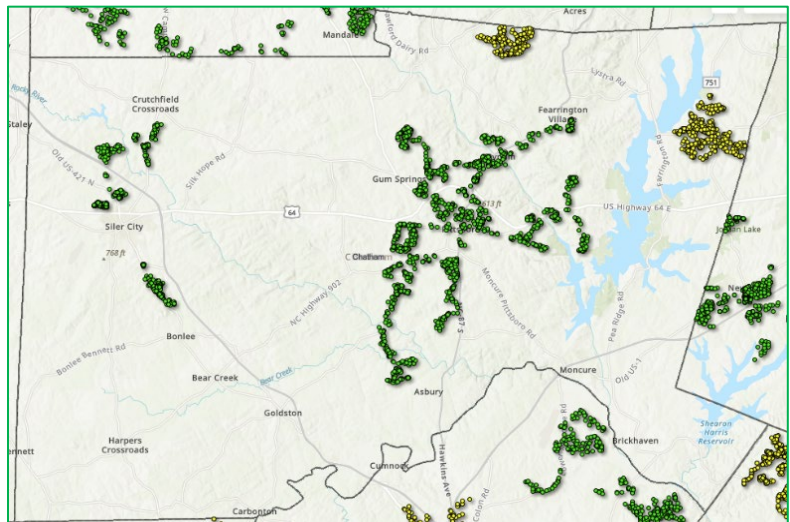


Figure 27: nconemap.gov Awarded GREAT Grant Map (Green: Brightspeed and Yellow: AT&T)

#### **Brightspeed GREAT Grant:**

Chatham County Contribution:	\$350,000.00
Locations to be Served:	1,914
Completion Date:	04/10/2025

#### **AT&T GREAT Grant:**

Chatham County Contribution:	\$169,228.20
Locations to be Served:	558
Completion Date:	10/20/2025

## Rural Digital Opportunity Fund (RDOF)

The Rural Digital Opportunity Fund is an initiative and distribution of Universal Service Fund dollars to internet service providers facilitated by the FCC. Internet Service Providers in Chatham County have received around 2.5 million dollars to facilitate serving residential locations throughout the county. RDOF grants have a deployment period of up to six years and will be fiber to the home deployments. The primary winner of RDOF awards in Chatham County is Spectrum under CCO Holdings. Spectrum is under a six-year requirement to deploy this RDOF-funded infrastructure.

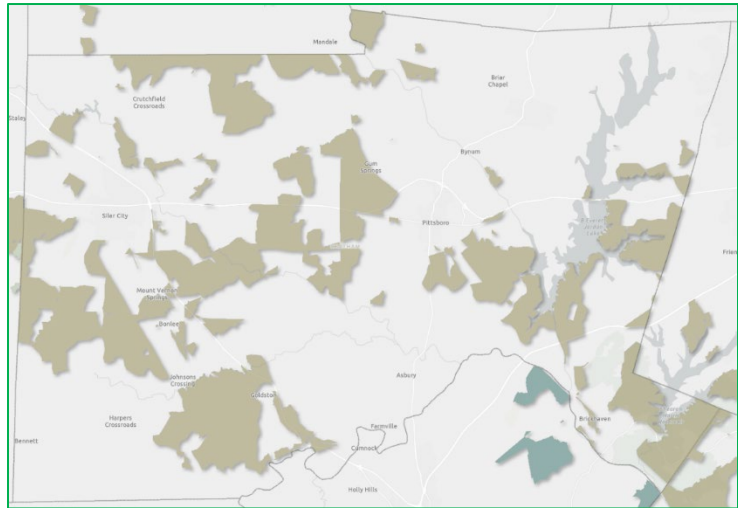


Figure 28: Rural Digital Opportunity Fund - NCOneMap

### Chatham County RDOF Grant:

Locations to be Served:	3,448
Completion Date:	By end of 2029

## Completing Access to Broadband (CAB)

The Completing Access to Broadband (CAB) program provides grant funds for individual counties to fund broadband deployment projects. The NC legislature has provided \$400 million from the American Rescue Plan Act (ARPA) for this program. Chatham County Government worked directly with the NC Department of Information Technology to gain this funding. The CAB Program complements the GREAT Grant program to provide solutions to areas not served by the GREAT Grant.

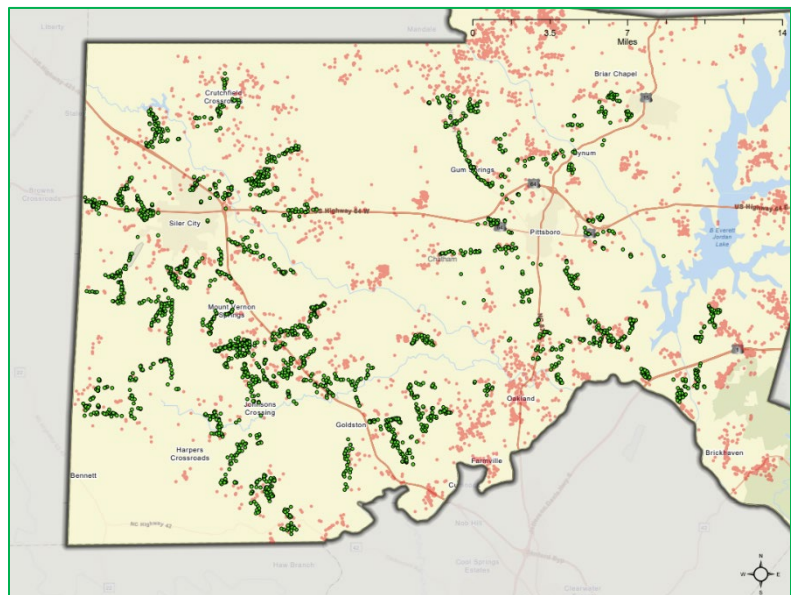


Figure 29: Brightspeed CAB Project Map

### Brightspeed CAB Grant:

Chatham County Contribution:	\$2,265,946.90
*Due to state law changes, this allocation by the Board of Commissioners is now being covered by NCDIT.	
Locations to be Served:	2,555
Completion Date:	Oct. 31, 2026

### Broadband Equity, Access, and Deployment (BEAD)

The Broadband Equity, Access, and Deployment (BEAD) program is currently in the planning process. It is expected that a BEAD program will be developed by the State of North Carolina to distribute more than \$1.5 billion awarded to NC. The state of North Carolina recently had its BEAD Five-Year Plan approved federally.

### Stop-Gap

The Broadband Stop Gap Solutions Program (Stop-Gap) provides broadband funding for unserved areas following investment from the GREAT Grant Program and the CAB Program. This program may grant funds to internet service providers, local government entities, and nonprofits for providing and installing broadband infrastructure to unserved households. Requirements for the Broadband Stop Gap Program are currently under development. \$90 million of federal American Rescue Plan Act funds are allocated for the Stop-Gap Program. The program will be launched following the GREAT Grant and CAB Grant programs.

## Goals and Strategies

### Goal 1: Create better broadband mapping for Chatham County residents.

Strategy 1.1: Encourage residents to request legislative representatives change laws, and solicit for more accurate, timely, and useful maps on internet availability.

Objectives:

- A) Promote changes to the Federal Communication Commission’s National Broadband Map project, allowing continuous corrections to incorrect data.
- B) Encourage residents to review and correct their FCC National Broadband Map information.

Strategy 1.2: Promote partnerships with internet service providers and state initiatives to improve broadband mapping.

Objectives:

- A) Work with internet service providers and state agencies to create better broadband mapping for Chatham County.
- B) Dedicate federal and state funding sources to continuously update availability mapping to see changes and developments.
- C) Work with technical mapping partners such as Chatham County Geographical Information Systems and the North Carolina Broadband Infrastructure Office to build out and update informative mapping systems.

### Goal 2: Coordinate increased connectivity for unserved areas.

Strategy 2.1: Utilize state and federal funding to expand availability of broadband to unserved areas based on new comprehensive mapping.

Objectives:

- A) Include communities that have previously lacked available infrastructure with broadband and cellular service.
- B) Capitalize on grant funding available to assist sections of the county in need of broadband.

Strategy 2.2: Prioritize rural and impoverished areas in advocating for increased broadband.

Objectives:

- A) Obtain wired service for the rural parts of the county that currently rely on satellite or fixed-wireless coverage so that those areas obtain reasonable broadband connectivity speeds.
- B) Partner with reliable providers for the rural areas of the county to continue this work.

Strategy 2.3: Advocate for increased availability in known cellular dead-zones.

Objectives:

- A) Use existing cell-towers to increase fixed-wireless and mobile coverage for the most in-need communities.

Goal 3: Promote improved connectivity and stability of broadband connections.

Strategy 3.1: Encourage residents to advocate for more fiber services across the county through their internet service providers and legislative representatives.

Objectives:

- A) Create or change laws to provide for more competition in the Chatham County broadband market.
- B) Increase availability of fast, reliable, future-proof fiber across Chatham County from dependable internet service providers.

Strategy 3.2: Advocate for more stable and upgraded broadband networks to prevent outages.

Objectives:

- A) Incentivize internet service providers to upgrade older infrastructure to prevent intermittent or long-term outages.
- B) State level law changes specifying network reliability requirements. Promote reliability upgrades such as underground infrastructure.

Strategy 3.3: Advocate for additional internet service provider plan types and availability.

Objectives:

- A) Ensure plan types at less expensive price points, increasing broadband access.
- B) Providing higher speeds for work-from-home residents and businesses that require them.

Strategy 3.4: Encourage internet service providers to provide their services as advertised (sometimes providers advertise and sell coverage at higher levels than they provide or that they can provide.)

Objectives:

- A) Partner with internet service providers to get a better understanding of the plans and services that they offer to residents, to provide public information.

# Access

---

Access refers to the ability for someone to gain access to the available broadband. The barriers to access include affordability concerns and lack of access to computing devices. As such, the following section will provide an overview of these challenges, information regarding challenges to access, ongoing efforts to address the lack of access in Chatham County, and finally, a discussion of the goals and strategies that will be used to address the needs of those with barriers to access.

## Challenges

### **Availability of Broadband Infrastructure**

As evident through the discussion of availability of Chatham County broadband, there are significant challenges to the development of broadband in Chatham County. Some of these barriers include terrain, rural tracts, and cost of infrastructure. These barriers cause difficulties primarily in unincorporated areas of Chatham County. As noted previously, Chatham County has on-going efforts related to broadband infrastructure expansion. These efforts are primarily related to broadband grants.

### **Internet Access and Affordability**

Affordability is a core component to the accessibility of the internet to many groups of residents in Chatham County. Broadband can be a considerable cost for households, which becomes a barrier to entry for digital access. The average broadband subscription in Chatham County is \$75 according to data from the FCC. To combat this affordability crisis, internet service providers have lower-cost programs. Despite this, these programs are challenging to promote to people in need and often have cumbersome application processes. As such, affordability continues to be an issue for broadband, even if widely available.

During the COVID-19 pandemic, hotspots were given out to residents by the school system, some businesses, and nonprofits. This was a helpful way to provide service to individuals who needed internet access or had affordability issues. However, this program was not designed to be run perpetually. It was funded through outside sources, presenting a barrier to people who require this type of assistance. Additionally, due to the poor availability of mobile broadband in some locations, many residents were unable to utilize their provided hotspots effectively.

### **Computer and Device Access**

Along with broadband connectivity, computing device access is necessary. Although many tasks can be completed on mobile phones, tasks such as education, job applications, remote work, and home businesses are very difficult on phones and require computing devices with larger screens and keyboards.

In Chatham County, there is a significant divide in the accessibility to these computing devices, mainly along the line of Household Income. According to 2022 American Community Survey and US Census data, it is estimated that 2,205 or 6.48% of households do not have access to a computer outside of their smartphones in Chatham County.

## On-going Efforts

### Public Broadband Access Points

One of the most important activities when attempting to deal with the challenge of internet affordability and access is to provide public access points. **According to the NC Broadband, Free Public Wi-Fi Location Map, there are five known public access points in Chatham:**



Figure 30: Wren Memorial Library in Siler City

- NC Works Career Center–126 Village Lake Rd., Siler City
- Silk Hope Ruritan Club–4221 Silk Hope Rd, Siler City, NC 27344
- Chatham Community Library – 197 N.C. Highway 87 North, Pittsboro, NC 27312
- Wren Memorial Library – 500 N 2nd Ave, Siler City, NC 27344
- Goldston Public Library – 9235 Pittsboro-Goldston Rd, Goldston, NC 27252

While these locations are known, there are other access points across the county that should be identified. Many organizations across the county offer guest wi-fi on their premises.

### Digital Devices

Regarding digital devices, there are several efforts. First, all K-12 Chatham School System students receive a Chromebook laptop computer. Most students can take these computers home to assist them with homework and other school-related activities. These computers are restricted in what they can access and are intended only for the students' use. These computers are a particularly crucial resource for all students within the county but are especially crucial to low-income, or in-need populations of students.

Chatham residents have access to low-cost computers through the Kramden Institute, a non-profit who provides technology tools and training to bridge the digital divide. Since 2003, Kramden has awarded more than 48,000 computers to deserving families across North Carolina. All K-12 Students have access to free computers from Kramden if their family does not have one that they own. Central Carolina Community College also offers a computer/laptop loan program to students that are in need. This loan program is only available to students.

## Public Computer Access Points

The three public libraries in the county are the primary locations that house public computer access points. These libraries are in Siler City, Goldston, and Pittsboro. Chatham County Public Libraries (CCPL) provide fair and equitable access to library computer resources. Computer access and Wi-Fi are offered to all visitors and Chatham County Public Library cardholders at no cost.

### **Guest passes for computers are also available for the following:**

- Patrons who forget to bring their library card with them.
- Patrons who are ineligible to obtain a free Chatham County Public Library Card.
- Visitors and tourists

Guest passes are time-limited for up to 3 hours of usage at the Chatham Community Library (Pittsboro), Wren Memorial Library (Siler City), and Goldston Public Library (Goldston) branches. Guest passes can be obtained at each library's main circulation desk.

## Discount Programs

### [Lifeline Program for Low-Income Consumers](#)

The Lifeline Program for Low-Income Consumers supports broadband and phone service. It provides up to \$9.25 monthly in service availability for qualifying individuals. This program is available for either a wireline or a wireless service, but not both. There are several criteria for this eligibility such as utilizing the following programs: Supplemental Nutrition Assistance Program (SNAP), Supplemental Security Income (SSI), Medicaid, Federal Public Housing Assistance, Tribal-specific programs: Bureau of Indian Affairs General Assistance, Tribally Administered Temporary Assistance for Needy Families (TTANF), Food Distribution Program on Indian Reservations (FDPIR), Head Start, or income at or below 135% of the Federal Poverty Guidelines.

### [Affordable Connectivity Program \(ACP\)](#)

The Affordable Connectivity Program (ACP), which provided vital support for low-income households to access essential internet services, has been discontinued following a decision by Congress to end its funding. Before its termination, the ACP was instrumental in bridging the digital divide, particularly for marginalized communities who struggled to afford broadband services. At the time of its discontinuation, the ACP had an estimated 3,323 participants who relied on the program for affordable internet access in Chatham County. To mitigate the adverse effects of the ACP's discontinuation, it will be imperative to explore new initiatives that prioritize affordable internet access.

## Goals and Strategies

### Goal 4: Increase equitable communications for in-need communities around affordability services.

Strategy 4.1: Advertise state and federal discount programs to assist in-need residents to afford internet subscriptions.

Objectives:

- A) Utilize state and federal funding to assist residents in gaining broadband and internet access.
- B) Provide education about programs to help in-need residents gain access to subsidies for broadband assistance.

Strategy 4.2: Provide translated communications and information surrounding broadband affordability programs.

Objectives:

- A) Reach parts of the community that may have been missed due to language barriers with affordability information.
- B) Routinely provide digital inclusion communication in Spanish.

Strategy 4.3: Find ways to support residents who are non-citizens.

Objectives:

- A) Find or develop ways for in-need residents who may not qualify for grant money due to citizenship status to receive broadband assistance.

### Goal 5: Expand access to digital devices.

Strategy 5.1: Expand device ownership within the county.


Objectives:

- A) Partner with organizations to expand device ownership to those in-need.
- B) Gain funding for programs that distribute computer devices to community members.
- C) Promote volunteering and donations to organizations that provide devices to community members.

Strategy 5.2: Expand public computer access points.

Objectives:

- A) Expand services providing device access and public desktop availability.
- B) Establish and expand device lending programs throughout the county.
- C) Engage with non-profit organizations and other entities to develop programs to allow community members access to computers.
- D) Create additional “day-access” locations near low-income, higher population areas that provide computer and internet access, for example, in affordable-housing complexes, near food banks, and public venues.



Strategy 5.3: Work with the Chatham County School system to identify, via survey, homes with little or no computer access.

Objectives:

- A) Work with households without computer access to secure devices through non-profit programs and grant opportunities.

Goal 6: Increase access to internet connectivity in public spaces.

Strategy 6.1: Provide free exterior Wi-Fi at designated facilities.

Objectives:

- A) Help populations that do not have broadband access by providing Wi-Fi at more designated facilities.
- B) Provide these services at no cost or obligation (e.g., to purchase items) to reduce the barrier of affordability.

Strategy 6.2: Complete the mapping of organizations that provide free Wi-Fi access across the county.

Objectives:

- A) Create effective mapping to allow residents in-need of internet access information on where to go.
- B) Present these maps in effective places throughout the county, for example business, government, and non-profit websites.

Goal 7: Increase hotspot availability.

Strategy 7.1: Address gaps in hotspot funding.

Objectives:

- A) Explore funding options to sustain hotspots for all school students in-need of connectivity during the school year.
- B) Provide alternatives for students in areas unable to connect through hotspots.

Strategy 7.2: Create a program to allow hotspots to be loaned out by the Chatham County Public Libraries.

Objectives:

- A) Assist residents that would have difficulties otherwise accessing a broadband or network connection.

# Adoption

Broadband adoption means adopting broadband internet in everyday life, or at least in essential ways. Many residents lack the technical skills and knowledge to navigate computers and the Internet. This is a significant issue for many portions of Chatham County residents, and the non-adopters are at a potential disadvantage. Within this section, there will be a discussion surrounding challenges to adoption, ongoing efforts in the realm of adoption, such as existing digital literacy training, and finally, a discussion of goals to encourage and assist residents with adoption to close the digital divide.

## Challenges

### Digital Literacy

Digital literacy is difficult to quantify, as there are levels of what it means to be digitally literate. As such, gaps should be addressed within Chatham County for populations that would benefit with more vital digital device skills and knowledge of the benefits of being digitally literate. To identify and qualify these gaps, a sufficient level of digital literacy could be defined as when a person can navigate the services that would be of value to them and be capable of continuing to learn independently.

The first challenge to digital literacy is the educational attainment of Chatham County residents. According to American Community Survey and Census Data (Figure 31) the communities with the lowest adoption rates are those with the highest percentages without a high school degree. Schools are one of the most common places for individuals to attain digital literacy. As such, providing options to those residents with lower educational attainment to become digitally literate is essential.

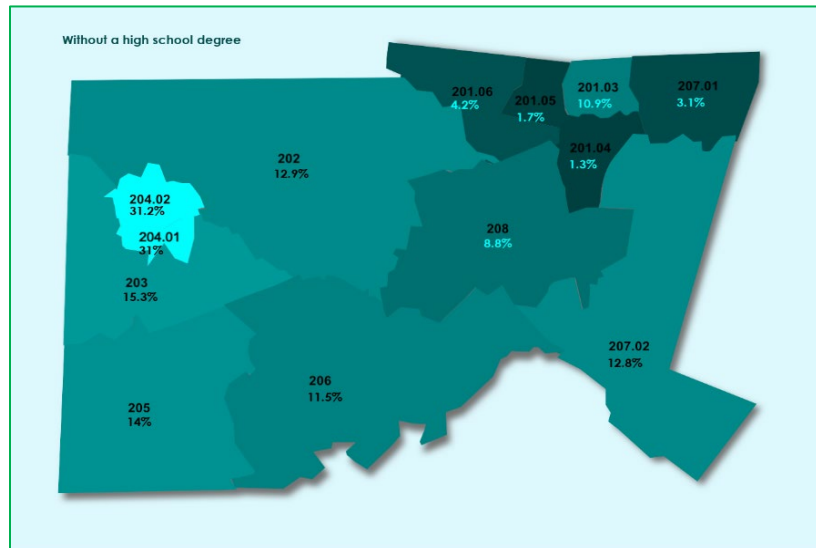



Figure 31: Microsoft BI Driven Percentage of Residents Without a High School Degree

Another indicator of the adoption and digital literacy struggle is an aging population. About one-fourth of Chatham residents are sixty-five and over. With an aging population, some seniors struggle with technology. Despite this, those with limited mobility and health issues could benefit the most from digital technology, including telehealth. As such, significant effort should be made to reach members of the aging community to provide resources to become digitally literate.



Lastly, digital literacy can be a challenge for residents who do not speak English as many resources in the county to provide digital literacy are not accessible in other languages. There are challenges regarding adoption and digital literacy in these non-English speaking or English as a Second language communities due to a need for language-accessible training and resources.

## Cyber-Security

For broadband adoption, one of the significant challenges residents face is cyber security. Many residents, particularly those who are new to using the internet and computers, may not be well-versed in recognizing and mitigating cyber threats. This lack of awareness may make them vulnerable to various online risks, which can, in turn, hinder their willingness and ability to adopt broadband internet in their daily lives.

### Common Cyber Security Threats

1. **Phishing Scams:** Phishing scams are one of the most prevalent cyber threats. These scams often come in the form of deceptive emails, texts, or websites that trick individuals into providing personal information, such as passwords or credit card numbers. Without proper knowledge, residents may fall victim to these scams, leading to financial loss and identity theft.
2. **Malware and Viruses:** Malware and viruses can infect computers through seemingly harmless downloads or email attachments. These malicious programs can steal personal information, damage files, and even take control of the user's computer. Many residents may not know how to protect their devices from such threats or how to recover if their devices are compromised.
3. **Data Privacy Concerns:** With increasing online activities, protecting personal data has become crucial. Many residents are not aware of the importance of strong, unique passwords, or they may not understand how to use privacy settings on social media and other online platforms to safeguard their information.
4. **Online Fraud:** Cybercriminals often exploit the lack of technical knowledge among new internet users through various forms of online fraud, such as fake job offers, investment schemes, and online shopping scams. These fraudulent activities can lead to significant financial losses for unsuspecting residents.

To foster broadband adoption while ensuring residents are protected from cyber threats, security education must be part of digital literacy training programs.

## On-going Efforts

### Digital Literacy Programs

Chatham County has programs that support digital literacy and STEM training, including computer training classes. Some businesses and universities provide more advanced training. **Here are some examples:**

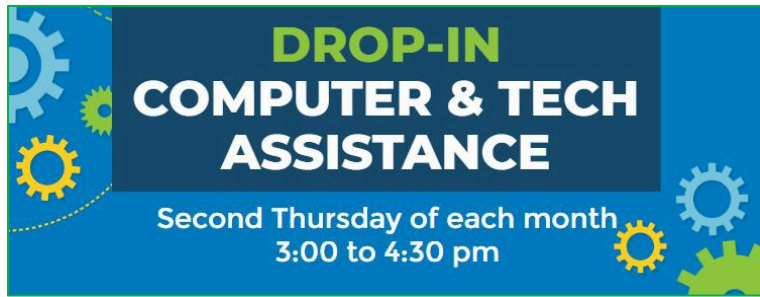


Figure 32: Chatham Community Library Computer Assistance Graphic

- The Chatham Libraries and CCCC provide computer classes.
- The Chatham School System has various computing classes, and Chatham Early College offers a pathway focused on STEM Courses.
- 79°West’s innovation space in the Mosaic area of Chatham Park has technical classes.
- There are various other programs in the area, for example, Coding Boot Camps at UNC in Chapel Hill and degree programs at NC State in Raleigh.
- Right Here Right Now provides free, small group, basic level classes for new computer users, leading to Northstar Digital Literacy certification. At the end of these trainings RHRN provides a computer to participants.


**Not everyone is ready, able, or desires to learn in a formal class. Some other programs and partnerships include:**

- N.C. Cooperative Extension has expanded its digital skills and literacy training programs for community members across the state.
- Chatham Literacy includes computer literacy training.
- Innovate Chatham provides STEM Club activities through partners such as Communities in Schools Chatham County, and the Boys and Girls Club.

### Cyber Security

To address the challenges posed by cybersecurity threats, the Chatham County Sheriff's Office plays a vital role in educating and protecting the community from scams:

1. **Public Awareness Campaigns:** The Sheriff's Office maintains an updated [Scam FAQ page](#) and a dedicated [Scams page](#) that provide detailed information about common scams targeting residents. These resources include descriptions of various fraud schemes and actionable steps residents can take to avoid falling victim to them.
2. **Community Outreach:** Deputies regularly engage with the community through workshops and presentations, raising awareness about emerging scams and sharing best practices for identifying and avoiding cyber threats.

- 
3. **Reporting and Support:** Residents are encouraged to report any suspicious activity directly to the Sheriff's Office. This initiative not only helps protect individuals but also enables law enforcement to track and address larger patterns of fraudulent activities in the area.
  4. **Partnerships with Other Agencies:** The Sheriff's Office collaborates with state and federal agencies to enhance scam prevention strategies and ensure a coordinated response to cyber threats.

To foster broadband adoption while ensuring residents are protected from cyber threats, cybersecurity education must be incorporated into digital literacy training programs. These efforts should include practical guidance on recognizing scams, protecting personal devices, and securing online accounts. The Sheriff's Office initiatives can serve as a valuable resource in these training programs, empowering residents to adopt broadband with confidence and security.

## Goals and Strategies

### Goal 8: Increase digital literacy learning across the county.

Strategy 8.1: Communicate and expand the availability of existing digital literacy training and courses.

Objectives:

- A) Increase advertising of digital literacy training in areas where residents historically have lower digital literacy levels.
- B) Expand current offerings (Microsoft software training, basic computer skills coaching, and hardware education) by making classes larger, more frequent, and providing a broad range of instruction.

Strategy 8.2: Increase digital literacy training in all areas of the county.

Objectives:

- A) Provide training in areas where there are lower digital literacy levels.

Strategy 8.3: Improve accessibility services surrounding digital literacy.

Objectives:

- A) Provide transportation services for residents in need of assistance to attend digital literacy classes.
- B) Provide individualized services for residents unable to travel to classes.
- C) Provide accessible digital learning opportunities to residents with mental and physical disabilities.
- D) Increase language-accessible digital literacy training.
- E) Increase access of classes to disabled residents.

Strategy 8.4: Increase partnerships to expand digital literacy education.

Objectives:

- A) Build partnerships with churches, non-profit organizations, foundations, businesses, and governments to increase digital literacy programs. For instance, using their spaces to host training and other such programs, and using them to identify those in need.
- B) Increase digital literacy communication through partnerships.

### Goal 9: Create a digital inclusion steering team.

Strategy 9.1: Work with partners to establish a digital inclusion program manager to oversee the digital inclusion process and plan throughout the county.

Objectives:

- A) Oversee digital inclusion initiatives within the county through partnerships with governmental and non-governmental organizations.

Strategy 9.2: Work with partners to create a Digital Navigator Corps program that addresses the larger digital inclusion process — home connectivity, devices, and digital skills — with community members through repeated interactions.

Objectives:

- A) Establish a lead digital navigator who heads the digital navigator program.
- B) Build a digital navigator corps comprised of, for example: volunteers, cross-trained local government staff, high school students, paid staff of the program, NC Cooperative Extension Agents, and library staff.
- C) Create office hours for digital navigators at accessible locations across the county.

Strategy 9.3: Work with partners to establish a Digital Literacy Training Coordinator.

Objectives:

- A) Provide leadership over digital literacy training across the county.
- B) Work with partner organizations to present digital inclusion training across the county.

Goal 10: Establish workforce development programs in broadband-related fields.

Strategy 10.1: Work with schools, colleges, and other partners, to advertise and create more programs around broadband and digital career opportunities.

Objectives:

- A) Establish programs in educational institutions, increasing broadband and digital educational opportunities (e.g., certified Fiber-Optic Technician).

Goal 11: Create events celebrating digital inclusion.

Strategy 11.1: Work with partners to develop and advertise a coding event to solve technology-based problems in the county.


Objectives:

- A) Build a digital inclusion event targeted toward adults that would bring community participation to digital inclusion and equity.
- B) Bring visibility to the struggles of broadband access to residents and promote digital inclusion and equity throughout the event.
- C) Utilize the event to explore digital inclusion challenges and opportunities facing Chatham County.

Strategy 11.2: Work with partners to create Chatham County App contest to encourage digital engagement in youth.

Objectives:

- A) Support digital education beyond literacy with annual app building contests.

- 
- B) Utilize the structure of the Congressional App Challenge to bring visibility to digital careers for the benefit of Chatham County youth.

# Partners

---

## **Partners in our efforts include (but are not limited to):**

- 79°West
- Central Carolina Community College (CCCC)
- Central Pines Regional Council
- Charlie Mike, Inc.
- Chatham County Aging Services
- Chatham County Government
- Chatham County Partnership for Children
- Chatham County Public Libraries
- Chatham County Public Schools
- Chatham Drug Free
- Chatham Economic Development Council
- Chatham Literacy
- Chatham Trades
- Communities in Schools Chatham County
- Hispanic Liaison/El Vínculo Hispano
- Innovate Carolina
- Innovate Chatham
- Kramden Institute
- Love Chatham
- NC Broadband Infrastructure Office - NCDIT
- NC Cooperative Extension – Chatham Campus
- NC State Institute for Emerging Issues
- National Digital Inclusion Alliance
- Right Here Right Now Project
- The Alliance
- The Learning Trail
- The Salvation Army of Chatham County
- WEBB Squared
- Word of Life Christian Outreach Center

## **Other organizations who may be instrumental in implementation efforts:**

- Boys and Girls Club
- CORA Food Bank
- Chatham Chamber of Commerce
- Chatham Education Foundation

- 
- Chatham Health Alliance
  - Chatham Health Alliance
  - Faith Based Organizations
  - Fearington Cares
  - NAACP
  - NC Works
  - Piedmont Health
  - Pittsboro Rotary Club Members
  - Rural Advancement Foundation International (RAFI-USA)
  - Siler City Rotary Club Members
  - UNC Health
  - United Way of Chatham County

# Goal Breakdown

	Goals	Strategies
Availability	Goal 1: Create better broadband mapping for Chatham County residents.	1.1: Encourage residents to request changes from elected representatives to change laws, and solicit for more accurate, timely, and useful maps of internet availability.
		1.2: Promote partnerships with internet service providers and state initiatives to improve broadband mapping.
	Goal 2: Coordinate increased connectivity for underserved areas.	2.1: Utilize state and federal funding to expand availability of broadband to underserved areas based on new comprehensive mapping.
		2.2: Prioritize rural and impoverished areas in advocating for increased broadband.
		2.3: Advocate for increased availability in known cellular dead-zones.
	Goal 3: Promote improved connectivity and stability of broadband connections.	3.1: Encourage residents to advocate for more fiber services across the county through their internet service providers and legislative representatives.
		3.2: Advocate for more stability and upgraded infrastructure for broadband networks to prevent outages.
		3.3: Advocate for an increase in internet service provider plan types and availability.
		3.4: Encourage internet service providers to provide their services as advertised (sometimes providers advertise and sell coverage at higher levels than they provide or that they can provide.)
Access	Goal 4: Increase equitable communications for high need communities around affordability services.	4.1: Advertise state and federal discount programs to assist in-need residents to afford internet subscriptions.
		4.2: Provide translated communications and information surrounding broadband affordability programs.
		4.3: Find ways to support residents who are non-citizens.
	Goal 5: Expand access to digital devices	5.1: Expand device ownership within the county.
		5.2: Expand public computer access points.
		5.3: Work with the Chatham County School system to identify, via survey, homes with little or no computer access.
	Goal 6: Increase access to internet connectivity in public spaces.	6.1: Provide free exterior Wi-Fi at designated facilities.
Goal 7: Increase hotspot availability.	6.2: Complete the mapping of organizations that provide Wi-Fi access across the county.	
	7.1: Address gaps in hotspot funding.	
	7.2: Create a Program to allow hotspots to be loaned out by the Chatham County Public Libraries.	
	8.1: Communicate and expand the availability of existing digital literacy training and courses.	
Adoption	Goal 8: Increase digital literacy learning across the county.	8.2: Increase digital literacy training in all areas of the county.
		8.3: Improve accessibility services surrounding digital literacy.
		8.4: Increase partnerships to expand digital literacy education.
		9.1: Work with partners to establish a digital inclusion program manager to oversee the digital inclusion process and plan throughout the county.
	Goal 9: Create digital inclusion steering team.	9.2: Work with partners to create a Digital Navigator Corps program that addresses the larger digital inclusion process — home connectivity, devices, and digital skills — with community members through repeated interactions.
		9.3: Work with partners to establish a Digital Literacy Training Coordinator.
		10.1: Work with schools, colleges, and other partners, to advertise and create more programs around broadband and digital career opportunities.
	Goal 10: Establish workforce development programs in broadband-related fields.	11.1: Develop and advertise a hackathon event to solve technology-based problems in the county.
Goal 11: Create events celebrating digital inclusion.	11.2: Work with partners to create Chatham County App contest to encourage digital engagement in youth.	

# Continuing the Work

---

Chatham County and the Chatham County Digital Equity and Inclusion Coalition are committed to the continued upkeep and facilitation of work to meet the goals, strategies, and objectives outlined in this Digital Inclusion and Equity Plan. To ensure this plan remains actionable and impactful, Chatham County will revise it annually and assess progress through the following key metrics:

## Availability Metrics

1. **Internet Expansion:** The number of preexisting homes connected to the internet within the year.
2. **Grant Project Development:** Progress on grant-funded projects advancing broadband infrastructure.
3. **Network Growth:** Gross expansion of broadband networks across Chatham County.
4. **Survey Insights:** Annual surveys tracking student and resident access to reliable internet.

## Access Metrics

1. **Device Distribution:** The change in the number of computing devices provided across the county.
2. **Program Participation:** Usage data for digital access programs, including identification of communities benefiting most from these services.
3. **Device Access Surveys:** Survey results reflecting changes in student access to essential devices.

## Adoption Metrics

1. **Digital Literacy Engagement:** Participation rates and outcomes of basic computing classes.
2. **Adoption Programs:** Establishment and performance evaluation of programs supporting broadband adoption, particularly in underserved areas.

## Community Input and Plan Development

While community input was gathered during the development of this initial plan, Chatham County recognizes the importance of expanding and strengthening engagement for future efforts. Input from residents, organizations, and stakeholders is essential for ensuring the plan reflects the community's needs and priorities. To enhance this process, Chatham County will actively prioritize broader outreach and engagement to collect diverse perspectives and actionable feedback. This input will guide the plan's annual updates, ensuring it remains adaptable and responsive to the evolving needs of the community.

Chatham County and the Digital Equity and Inclusion Coalition are committed to maintaining transparency and collaboration throughout this process. By using data and community feedback to refine strategies, they aim to make meaningful progress toward achieving digital inclusion for all residents.

# Community Voices

---

The voices of Chatham County residents and community leaders are integral to understanding the real-world impact and ongoing needs in digital inclusion. This section captures firsthand accounts, highlighting the experiences, challenges, and insights of community members as they navigate issues around broadband availability, access, and adoption. Their contributions illustrate the lived realities behind the data and offer valuable perspectives to shape future strategies.

## Availability

Access to reliable, high-speed internet is foundational for educational, economic, and social engagement. In Chatham County, community members emphasize the need for broadband infrastructure that reaches every home, noting gaps in service that hinder learning, business operations, and daily connectivity. This section highlights local experiences with broadband availability and underscores the demand for robust infrastructure.

1. Broadband access must be the next generation utility for all families and households in Chatham County. As we continue preparing students for global competitiveness, we must equip them with both the capacity and the infrastructure to interact, collaborate and create with their global peers. Broadband for all must be our commitment and priority. – **Dr. Anthony Jackson, Chatham County Schools Superintendent**
2. While CCCC works to address digital inclusion, the reality is that even where we can assist students with technology, we cannot assist when they do not have high quality internet access where they need it. Students who attempt to access learning and submit assignments via their cell phones because it is the only access point available are hampered in their educational experience. Availability of broadband needs to be both physically present for individuals and financially within reach. Whether fiber or cell towers, availability for the students and community supported by CCCC means it reaches their homes and they can afford to connect to it. – **Margaret Robertson, CCCC, Vice President of Workforce Development**
3. In 2021-22, Technology Services partnered with NCSU’s Friday Institute to implement a pilot broadband radio service to a select neighborhood in the Siler City area. This collaboration was fruitful in developing partnerships with the school district, NCSU, and the county; however, data usage had little impact on the families selected for this program. We continue to support this program for these families. – **Dr. Anthony Jackson, Chatham County Schools, Superintendent**

4. During Covid- businesses and schools learned that people could work from home and learn from home- if they have the right connections to the internet – **Liz Mauney Former NC Cooperative Extension, 4-H Program Assistant, 4-H Youth Development**
5. We need affordable, reliable access to a fiber network for digital services including phones and internet for the daily operations of our non-profit that serves adults with intellectual and developmental disabilities. When Chatham Trades purchased the building, they are in now in 2018, there was only one supplier for internet and phones. The service would not support a business network. It took months of meetings with other digital access providers before an affordable and reliable solution could be found. It is not a great scenario, but it is functional for now. With growth, a faster, more reliable digital service will be needed. – **Shawn Poe, Chatham Trades, Director**


## Access

For many in Chatham County, even when broadband is available, barriers such as affordability, lack of devices, and limited access to public internet points continue to prevent full digital inclusion. In these accounts, residents and service providers discuss the challenges and needs that must be addressed to ensure that every individual can access online resources, work, and essential services.

1. [Chatham County Schools] Technology Services collaborates with state partners to provide a robust and stable network at each school site. This network is filtered in alignment with federal requirements. [Family Educational Rights and Privacy Act (FERPA)] As a result of Elementary and Secondary School Emergency Relief (ESSER) funding from federal and state allocations, the district was able to acquire Verizon hotspots for student use. Over 800 student hotspots (1 per family/household) were acquired, and monthly subscription costs are covered by the district. We periodically assess usage to redistribute and assign to families as necessary. Over 40 bus hotspots were acquired and continue to provide internet services for students en route to schools or homes. Monthly subscription costs for these bus hotspots are paid for by the district. After ESSER funds are expended, the ongoing subscription costs for students and bus hotspots to continue the at-home support for students will be an organizational need. Additional LTE and 5G cell towers to provide district-wide coverage is critical as families/households are dependent on this service to connect via hotspots and/or have cellular access. We need stronger partnerships and communication efforts across the county to build awareness related to programs and services, access points in the community, advocacy efforts, etc. – **Dr. Anthony Jackson, Chatham County Schools, Superintendent**
2. Central Carolina Community College recognizes the need for digital inclusion across Chatham County to support students, faculty, staff, community members, and employers. The college began making our campus internet accessible to individuals both in the buildings and parking lots to support teaching and learning throughout the pandemic. CCCC

continues to offer connectivity in these ways, but this effort requires individuals to come to a campus and connect, which impacts time and transportation demands. – **Margaret Robertson, CCCC, Vice President of Workforce Development**

3. In response to student needs for devices, the college allows students to access digital devices from the library on loan throughout a semester. This provides students with a resource if they do not have access to their own device or have a device being repaired. The intent is to support students such that device resources are not the limitation to accessing learning. – **Margaret Robertson, CCCC, Vice President of Workforce Development**
4. Chatham County is at a tipping point where access to technology, shared resources, mentoring and knowledge will determine which parts of the community thrive and which parts are left behind. We must work together to ensure that everyone has an equal opportunity to realize their potential. – **Lisa Fedele, Founder, The Alliance**
5. In-person information meetings and surveys to accurately assess the needs of the community. Almost all information now including surveys, medical records access, banking, school correspondence, etc. is done digitally. Digital inclusion needs surveys in the past have been inaccessible because they required internet service, which people do not have, to participate. – **Shawn Poe, Chatham Trades, Executive Director**
6. There should be support for purchasing technological devices and free or low-cost access to internet services for all areas of the County. – **Genevieve Megginson, Chatham County Partnership for Children, Former Executive Director**
7. Access to affordable internet and mobile phone service is an essential tool for our clients to communicate with employers, landlords and human service providers. – **Rebecca Sommer-Petersen - The Salvation Army of Chatham County, Director**
8. Accessibility is important for low income/no income community members. – **Liz Mauney Former NC Cooperative Extension, 4-H Program Assistant, 4-H Youth Development**
9. I'm concerned that many immigrant residents that are least able to afford internet, may not qualify for these Federal aid programs due to their immigration status, or may not feel comfortable applying – **Burney Waring, Innovate Chatham, President**
10. The Alliance is providing access to technology, and workspace that is shared by multiple educational and human services organizations. In general, we would like to partner with more nonprofit organizations across Chatham County, to enable us to connect to a more diverse group of individuals and to expand our reach within the community. We support additional contributions, greater exposure for programs and activities already in place, additional public, and private funding. – **Dare Montague, The Alliance**




11. There are no day center options (other than the library) that would support individuals experiencing homelessness. Or that have a lack of basic needs (food, clothing, transportation challenges) A Day center would increase availability of access. Other resources could also be made available to those folks. Siler City is sorely lacking in public resources. Grants could be made available to direct service providers and could be used to facilitate funds and placed directly in the hands of clients that need this sort of assistance. Make it available. Low barrier to accessing the funds for the clients. We can build a referral process right through the Unite Us software/NCCARE360 database and make it a visible program for service providers (Salvation Army, Love Chatham, DSS, United Way, CPCA, etc.). Local non-profits and other county services can support the dissemination of information.  
— **Dakota Philbrick, Love Chatham, Executive Director**

12. Affordable housing will be built in Chatham Park and Siler City. We propose having a dedicated location on site, with internet access device, instructions, and periodic helpdesk assistance to residents to access an array of virtual services. Residents in these developments will likely have more transportation challenges than other residents of Chatham and so they could benefit immensely from virtual services such as telehealth. – **Liz Mauney, Former NC Cooperative Extension, 4-H Program Assistant, 4-H Youth Development**

13. Based on surveys and population estimates, perhaps 17,000 people in Chatham do not have access to a computer. Approximately the same number do not have internet available. – **Burney Waring, Innovate Chatham, President**

14. Kramden Institute has been providing free and low-cost computers to qualified residents in NC since 2003. Our records show that we have provided computers to about 230 clients in Chatham since 2008. Most of our clients are in the Research Triangle and immediate region but we technically serve all of NC, therefore, many residents of Chatham County can benefit from our services. Any child in grades K-12 without regular access to a working computer qualifies for a free desktop system with long term tech support provided by us while the child is in school. Any adult at or below 200% of the federal poverty line and/or on government assistance is qualified to purchase a \$30 desktop or \$70 laptop with 90 days of support. With the help of local partnerships, there is an opportunity to greatly increase our help in Chatham. We cannot ship computers to or receive them from Chatham County without partnering with local individuals and organizations. If partner organizations can identify children and adults that need free or low-cost devices, either the client or the organization (ideally in batches) can submit applications with us. Once the devices are ready, a representative can pick up and distribute the computers locally. If a significantly large portion of clients are identified (for instance, 30-60 children at a specific school), arrangements could potentially be made to ship computers ahead of time and award them



all at once. Prior to the pandemic, that is exactly how we placed computers with families in locations outside of the Triangle. – **Lile Stephens, Kramden Institute, Program Manager**

15. Use a county-wide outreach program to identify families in-need of computers. Acquire refurbished computers via organizations such as the Kramden Institute, and Dell. Provide for delivery and possibly setup of computing systems to recipients, either using nonprofits or commercial providers. It may also be possible to expand the numbers of refurbished computers and advance digital literacy through a local program to refurbish computers, for example using Kramden instructors, local computer enthusiasts, perhaps with the CCS system CTE program. Alternatively, we could use local, commercial computer refurbishment companies, or even purchase new, small, inexpensive computers. Depending on the combination, donation, storage, and distribution of computer systems would need to be provided for. – **Burney Waring, Innovate Chatham, President**
16. There are many underserved and underrepresented members of the community. In a digitized world, those that don't have adequate access are left behind. Many times, frustratingly so, I see Siler City overlooked or ignored and our community suffers because of it. As a concerned citizen and director of an organization that fights for its clients every day, it would be a blessing to bring more resources to our clients. It's not just having access to the internet that's a challenge but it's also about having access to the devices - laptops, tablets, cell phones, printers and so forth. — **Dakota Philbrick, Love Chatham, Executive Director**
17. Fiber, cable, wireless, devices are the means. But without affordable access, they are meaningless, and the technologies will change over time in any case. Affordability comes with demand for markets that deliver services improving lives in the community. That requires education and demonstration that high throughput delivers far more than better cat videos on TikTok to provide much need laughter in our days ... it delivers improved industry and agriculture, improved communities and communities, improved education, and lives. – **Don Kallgren, DGKallgren Consulting, President**
18. Siler City and parts of Pittsboro appear to have sufficient internet availability today. Residents in these areas in particular need assistance with the cost of internet, for example using the Affordable Connectivity Program (ACP). Charter/Spectrum has a program that would provide up to 100 Mbps service for free after the ACP discount. However, the application for ACP is complicated, particularly for those without much online experience. The Federal Government has not created an outreach program for the ACP. Nonprofits and the government in Chatham can start an outreach program and individuals to help, perhaps via a train-the-trainer mechanism to staff multiple helpdesks for ACP sign-up. – **Burney Waring, Innovate Chatham, President**
19. Collaboration with agencies such as Innovate Chatham and internet service providers will help us improve access. At the beginning of COVID students were sent home with laptops

for remote learning. Many do not have an ISP so were using the libraries' Wi-Fi in parking lots and outside of the building since we were closed. – **Rita Van Duinen, Chatham Community Library, Branch Manager**

20. Chatham County Public Libraries provides access to free Wi-Fi, and computers for patrons to use. – **Rita Van Duinen, Chatham Community Library, Branch Manager**

21. During the pandemic I had to drop out of college because I could not find internet access that had an electrical outlet available. Cafés, my college campus, and the Chatham library were closed. Most outdoor outlets are hidden or intentionally turned off. [Wi-Fi hotspots need] Solar powered outlets in public spaces. With USB C charge ports. – **Kassandra, Chatham County Resident**

## Adoption

Digital literacy and the confidence to use digital tools are essential for participating fully in a connected world. Community voices in this section reflect on the importance of support for skill-building, cybersecurity awareness, and device use, especially for populations such as seniors and non-English speakers. Their insights point to a need for comprehensive digital literacy programs that empower residents across Chatham County.

1. CCCC also provides access to technology adoption learning experiences. These courses can happen in short-term training and College & Career readiness programs focused on digital literacy which are available to the public and may be delivered at no cost to students based on their eligibility. Students also have opportunities to develop digital literacy skills through their degree programs and are encouraged to take advantage of college support resources. – **Margaret Roberton, CCCC Vice President of Workforce Development**
2. We provide support to small business owners of childcare programs. During the pandemic we had to secure mobile hotspots and tablets for some for them to survive the quick transition to digital processing! Many needed advice and ongoing help with using technology and now must fund the cost of the hot spot on their own. We only had limited funds to provide the support needed and now have not resources to replace or support more of our providers who may be new or need tech upgrades. This is a huge expense for childcare providers and not one they would prioritize over kid needs except that it is now required in order to function in the current digital world of business functions. – **Genevieve Megginson, Former Chatham County Partnership for Children, Executive Director**
3. Mobile-only users benefit less from using the internet, engage in fewer activities online, and do not develop digital skill at the same level as desktop/laptop users. Moreover, mobile internet access offers lower levels of functionality and content availability, and contributes to diminished levels of user engagement, content creation, and information seeking.

Leaving aside the connectivity factor:

- a. Full size devices are still necessary to support development of digital skills and to take advantage of the internet in ways that improve the person's health, education, and economic well-being.
- b. People who have been historically digitally marginalized are less able to afford the latest and greatest of smartphones, and more likely to have older phones of any type.
- c. For access and security reasons, everyone in a smartphone dependent household would need their own device, which is cost prohibitive for underrepresented households.
- d. People who have been historically digitally marginalized are less likely to keep their phones updated and secure (due to lower skills), increasing their vulnerability to information breaches or degrading performances.

Mobile-only users, while benefiting from internet access, have more limited computing experiences compared to their computer-owning counterparts. Relying solely on a smartphone to access the internet limits (1) the range of one's online activity and (2) one's digital skills. – **Jesse Bradley, RHRN Project, President**

4. Kramden Institute provides digital literacy training at our office [in Durham] as well as our growing Train the Trainer program where we prepare partner organizations (such as Housing Authorities) to deliver our curriculum and devices. As of now, we have not trained anyone to deliver our program in Chatham County. – **Lile Stephens, Kramden Institute, Program Manager**
5. Need to provide Digital Literacy training to residents including underserved communities, for example farmers and residents of rural areas. NC Cooperative Extension is piloting a program to provide skills training to community members. To improve adoption of digital skills in Chatham, we need a variety of leadership and coordination resources. Randolph County will have a dedicated Digital Literacy and Skills Extension Agent as part of the NC Cooperative Extension. Digital Literacy and Skills Extension Agent The agent will provide opportunities and experiences for Randolph County residents to increase their knowledge and skills for using digital resources to help them earn, learn or be well. Agent is a subject matter resource for current and emerging digital technologies. This Agent will interact with the public through the delivery of skill-building programs and provide broadband access information and resources to increase the adoption and utilization of digital resources in Randolph County. This position will be responsible for providing leadership to the Digital Skills Training Corps (DSTC) in Randolph County. The DSTC will help increase the digital skills capacity in Randolph County by providing training and coaching opportunities. Chatham County should also have such a resource. – **Liz Mauney, Former NC Cooperative Extension, 4-H Program Assistant, 4-H Youth Development**

6. Right Here Right Now Project runs small classes for basic computer skills classes open to the public. These classes are useful for many things from getting a job to helping kids with their homework. In a 9-week (18 hours) program that is free to the user, skills learned include basic mouse and keyboard use, interaction with the computer interface, online browsing, using files and drives, how to fill out online forms, and internet privacy. With a score of 85 or more, students receive Northstar Digital Literacy Certificate of Completion and a discounted or free laptop computer. We are unable to meet the demand for free basic digital literacy training that can run at the pace for novice learners. More instructors need to be recruited and trained to do basic training. Funding is needed to hire instructors, furnish equipment, provide translation, publicize the opportunity, and provide classes to all Chatham residents that need basic digital literacy skills. Volunteers could be found to be assistant teachers to double the number of students per class. – **Jesse Bradley, Right Here Right Now Project, President**
7. Many young people in Chatham County are unaware of and unprepared for career opportunities in the digital space, despite being located adjacent to one of the key technical centers in the Nation. Participation in events such as the Congressional App Challenge has been very modest. Alamance County’s Digital Inclusion Plan calls for the creation of a coding event to raise awareness of these careers. Chatham County could be the home of a Chatham County App Challenge for school-age children that could go on to compete in the Congressional App Challenge. A parallel event for adults or a separate “hackathon” event with prizes for Chatham residents would create awareness within the County of tech career paths and perhaps elevate the regional awareness of talent in Chatham. – **Burney Waring, Innovate Chatham, President**
8. Digital Navigators can be volunteers or cross-trained staff in public service. They provide direct support for residents needing to access government benefits and serve as a bridge to learning materials and classes. – **Jesse Bradley, Right Here Right Now Project, President**
9. The City of Raleigh has a Digital Connectors program for high schoolers to learn leadership and the facets of digital inclusion. The City of Charlotte has a Digital Navigators program that serves as a tech support hotline to answer questions from novices using a computer and point to existing community resources. These ideas are supported by what we see at Kramden (in-person touch is quite important) and the many calls we get from parents who say, "my son can program, my daughter has already built a computer at age 13, can they come volunteer?" I think there is something in the Digital Navigator program to combine skills with empathy and teaching. – **Cyndy Yu-Robinson, Kramden Institute, Executive Director**
10. Chatham County Public Libraries provides access to free Wi-Fi, computers, and electronic content from various databases and subscriptions. The Pittsboro branch, Chatham Community Library, provides classes (in-person and virtual) on basic digital literacy skills

(Internet Basics, Computer Basics) and classes on specific applications such as Word or Excel. – **Rita Van Duinen, Chatham Community Library, Branch Manager**

11. My name is Kathleen Browning. I am president of The Learning Trail which is an after-school tutoring program and preschool located within a mobile home community in Chapel Hill, called the Nature Trail. It is a Hispanic, low-income community of about 200 homes. Our facilities are within the community itself, with 2 small classrooms next to the property office. They allow us the use of the facilities for free. Our families generally have poor internet service and limited knowledge of computer skills. They do make use of texting quite extensively, so we use that when communicating with parents, mostly via WhatsApp. During Covid, when school was all or partly virtual, this community struggled tremendously. With poor access, small living spaces with multiple people sharing that space, a general discomfort with computers, it was a very tough time. The schools loaned out some devices, but they don't help much if the internet is poor. I read your draft report where you described internet access as equivalent to good roads and clean drinking water in terms of it being essential in these times. But people do not have to fill out forms and provide a lot of personal information or put up some initial funds and hope for a rebate, etc. etc. to access roads and water. They are just there for them, no questions asked. If we have low-income communities with limited resources and education and immigration fears, these programs will not break down the barriers to internet access and full participation in our society. There needs to be a better way. Glad that you are trying to address this—it is a great “un-equalizer” in our society. – **Kathleen Browning, The Learning Trail, President**

12. Previous programs by internet service providers and previous government programs to provide access to households have failed to provide service to many residents. Data from ISPs are often very optimistic. Thus, mapping efforts are error prone. The latest FCC mapping attempt is recognition of past problems and a serious attempt to correct them. Chatham County should have a program to reach out to every household to determine their actual availability for high-speed internet and use this data to encourage ISPs or seek grants to provide access where commercial solutions do not exist. Perhaps residents without availability or questionable availability could be in multiple ways, for example with outreach through existing channels such as school rolls, power bills and tax bills. – **Burney Waring, Innovate Chatham, President**

13. A client came to my office using their phone to complete the process for assistance with a bill. However, the client was forced due to financial hardship to choose between paying the mobile phone bill and paying other vital bills, including medical needs. The client had to come to my office with their phone and ask me to take a photo using my phone, so they could text the application to the correct staff member by the deadline for payment of the bill. The client noted that had their friend been unable to transport them at that time, they would not have had access to my office or to the assistance with the bill. – **Rebecca Sommer-Petersen – The Salvation Army of Chatham County, Director**