**ORDINANCE O-01-25**

**AN ORDINANCE AMENDING CHAPTER 34 OF THE CODE OF WALKER COUNTY, GEORGIA REGARDING UTILITIES; TO PROVIDE FOR BROADBAND READY COMMUNITY CERTIFICATION AND OTHER PURPOSES**

**WHEREAS**, the Board of Commissioners is the governing authority for Walker County, Georgia; and

**WHEREAS**, Walker County desires for every resident to have reliable and affordable access to the internet, along with the necessary tools and skills that unlock opportunities for educational advancement, economic success, improved health and strengthened social ties; and

**WHEREAS**, in 2018, the Georgia General Assembly passed SB402, also known as Achieving Connectivity Everywhere (ACE) Act to encourage greater access to broadband services throughout the state by removing obstacles to the deployment of broadband infrastructure to homes and businesswise due to their location in rural and other underserved area; and

**WHEREAS**, the Walker County Joint Comprehensive Plan 2022-2032 set forth a community goal to reduce obstacles to broadband infrastructure investment, adopt a strategy to promote broadband growth in the community, and attain Broadband Ready Community status from the state; and

**WHEREAS**, the County, as part of the Appalachian Digital Accelerator program and in collaboration with Thrive Regional Partnership, developed a "Community Connectivity Plan" to serve as a guiding document for making decisions about identified broadband deployment projects and digital skills training; and

**WHEREAS**, the County desires to leverage the data compiled in the Community Connectivity Plan to resolve identified gaps in broadband access and digital equity through federal programs such as the Broadband Equity, Access, and Deployment (BEAD) and Digital Equity Act programs;

**THEREFORE, BE IT ORDAINED** by the Board of Commissioners of Walker County that Chapter 34 of the Code of Walker County, Georgia is amended as follows:

## ARTICLE I. IN GENERAL

### Section 34-1. Community Connectivity Plan adopted.

The Walker County Community Connectivity Plan, which will be periodically updated, and its priorities, is adopted and shall serve to guide public and private policy to encourage greater access to broadband services throughout the county.

### Section 34-2 – 34-11 Reserved.

## ARTICLE II. BROADBAND NETWORK PROJECTS

### Section 34-12. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings

ascribed to them in this section, except where the context clearly indicates a different meaning:

*Applicant* means a person applying for a permit for a broadband network project.

*Application* means a written request on the form(s) designated by the County for a permit for a broadband network project.

*Broadband network project* means any deployment of broadband services.

*Permit* means any local permit, license, certificate approval, registration, or similar form of approval required by policy, administrative rule, regulation, ordinance, or resolution with respect to a broadband network project.

**Section 34-13. Single Point of Contact.**

The County shall appoint a single point of contact for all matters related to a broadband network project:

**a)** The single point of contact shall be the Walker County Planning Director, who may be reached at 706-638-4048 or planning@walkerga.us.

**b)** The single point of contact shall be available for matters related to a broadband network project or a related liaison who may direct such inquiry in real time, with general scope and responsibilities to include permitting and right-of-way.

**c)** The single point of contact information shall remain current with contact information updated within 15 calendar days of a change at walkercountyga.gov.

**Section 34-14. Application Completeness Review.**

**a)** The County shall determine whether an application is incomplete and notify the applicant, by email, of the determination by the County within 10 calendar days of receiving an application.

**b)** If the County does not respond to the applicant on whether the application is incomplete, within 10 calendar days, the application shall be assumed to be complete on the 11th day.

**Section 34-15. Notification of Incomplete Application.**

**a)** If the County determines that an application is not complete, the notification by email to the applicant shall specify all required components of the submitted application that were considered 'incomplete'; and

**b)** The County's response shall include a checklist of sequenced items that resulted in the application being deemed 'incomplete' and the review timeline shall be as follows:

i. The applicant has up to 40 calendar days from the date of notification of incompleteness to respond back with corrections; and

ii. If the applicant does not respond back within 40 calendar days, the application is deemed canceled.

**c)** If within 10 calendar days the County does not respond to the applicant on whether the corrected application is incomplete, the application shall be assumed to be complete on the 11th day.

**d)** The County shall require a new submission and reset the process and application fees, should an application be deemed incomplete a second time.

**Section 34-16. Approval or Denial Notification.**

If, on or before the 11th day as described in 34-14(b), an application is deemed complete, the County shall approve or deny an application within 10 calendar days, unless a joint meeting between the applicant and the County is deemed necessary.

**a)** If a joint meeting is deemed necessary, the joint meeting must occur within 15 calendars days of notification of completion and the joint meeting shall include:

i. Where applicant is going to conduct work; and

ii. When the work will be conducted; and

iii. What type of work will be done; and

iv. Who the County can contact for specific details or related questions; and

v. Any permit seeking approval under application.

Following a joint meeting between the applicant and the County, the County shall deny or approve the application within 10 calendar days.

**b)** Upon final approval, any required permit shall be deemed issued.

**Section 34-17. Related Fees.**

**a)** Any fee imposed by the County to review an application, issue a permit, or perform any other activity related to a broadband network project shall be reasonable, cost based, and nondiscriminatory to all applicants.

**b)** Any application fee that exceeds $100.00 shall be considered unreasonable, unless the County provides documentation justifying such fee based on a specific cost.

**Section 34-18. Other Information.**

**a)** **Double Fee:** The County shall not require an application or permit(s) when already approved by an authorized state or federal jurisdiction. Provider shall notify and provide a copy of the approved permit to the single-point-of-contact at the County prior to access of right-of-way within the County's jurisdiction.

**b)** **Application Validity Timeline:** Any approved application shall be valid for six months from the date of approval. Should a provider not commence the service request qualified in the approved application within six months, the application shall expire, and it shall require a new permit approval and any associated fees, as applicable.

**c)** **Single Service Drop:** The County shall not require a permit for a broadband service provider to perform an installation of broadband service at an individual customer's service address as long as the facility being utilized only transverses a deminimis portion of the public right-of-way to reach the customer's property. The provider must still comply with the provisions of Chapter 9 of Title 25 of the O.C.G.A.

**Section 34-19. Broadband Ready Community.**

Walker County acknowledges:

**a)** A Georgia Certified Broadband Ready Community has an affirmative duty to notify the Georgia Department of Community Affairs of any changes to the information submitted as part of its application; and

**b)** Failure to notify Georgia Department of Community Affairs of changes may result in revocation of Walker County's Broadband Ready Certification, should the certification be granted.

**3.**

This ordinance is effective immediately upon its adoption.

**4.**

All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.

**5.**

If any section, clause, sentence, or phrase of this ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way affect the validity of the remaining portions of this ordinance.

**PASSED AND ADOPTED** this 9th day of January, 2025.

**ATTEST:**

Jessica Staton

JESSICA STATON, Deputy Clerk

**WALKER COUNTY, GEORGIA**

Angela Teems

ANGELA TEEMS, Chairwoman

The foregoing Ordinance received a motion for approval from Commissioner Hart, second by Commissioner Wilson, and upon the question the vote is 4 ayes, 0 nays to adopt the Resolution.

# COMMUNITY

## CONNECTIVITY PLAN

Prepared by Thrive Regional Partnership

# ACKNOWLEDGEMENTS

This plan was created as part of the Appalachia Digital Accelerator, a Connect Humanity program funded by the Appalachia Regional Commission with additional support from Truist Foundation and Ford Foundation.

## CONNECTIVITY PLAN AUTHORS

This plan was written by the following individuals:

- Shannon Millsaps, COO, Thrive Regional Partnership
- Virginia Petitte, Project Coordinator, Thrive Regional Partnership
- Joe Legge, Public Relations Director, Walker County
- Dakiya Porter, Communications Specialist, Walker County

## CONTRIBUTORS

The following people and organizations were critical to the planning process:

- Michelle Smith, Data and Research Analyst, Thrive Regional Partnership
- Rhett Bentley, CCO, Thrive Regional Partnership
- Debra Socia, President/CEO, The Enterprise Center
- Sammy Lowdermilk, Program Director, The Enterprise Center

We would like to thank the following people who participated in interviews, shared insight, and gave feedback during the Asset Inventory research.

- Aprill Ashley, Co-owner, Freedom From Laundry LLC
- Bob Swanson, Network Operations Supervisor, Walker County School System
- Chelsea Kovalevskiy, Assistant Director, Cherokee Regional Library System
- Damon Raines, Superintendent, Walker County School System
- Dwight Watt, EdD, CIST Instructor, Georgia Northwestern Technical College
- Glen Brown, Walker County School System
- John Donahoo, District Vice President, North Georgia Community YMCA
- Laura Beth Newsom, Coordinator, Walker Family Connections
- Lecia Eubanks, Director, Cherokee Regional Library
- Marlena Smith, LaFayette Housing Authority
- Marshana Sharp, Next Chapter
- Preston Lewis, Manager, Walker County Senior Life Services
- Sam Bowman, Cedar Grove Community Center
- Scott Harden, Coordinator of Technology, Walker County School System
- Wade Hutcheson, Extension Agent, UGA Extension Walker County

Connect Humanity · Appalachian Regional Commission · Truist Foundation · Ford Foundation

# CONTENTS

# CONTENTS


WALKER
ROCKS
.COM
WALKER COUNTY, GEORGIA
Come Play!

Walker County recognizes that digital connectivity is essential for all residents to participate in the workforce, have access to public healthcare, engage in community resources, support agriculture, connect with emergency response services, and provide educational opportunities. In response to the State of Georgia's Digital Connectivity Plan, Walker County conducted the following Connectivity Plan assessment to:

- *Understand the local community needs as they relate to the digital divide;*
- *Discover opportunities for digital connectivity;*
- *Identify gaps in broadband access and digital equity that could be resolved through federal funding programs such as the upcoming implementation of the Broadband Equity, Access, and Deployment (BEAD) and Digital Equity Act (DEA) programs.*

Walker County aims to ensure that all of its residents and businesses have access to fast, reliable internet service, providing equal opportunities for all throughout the county. The county also acknowledges the importance of a strategic plan to achieve this connectivity. This Digital Connectivity Plan marks the initial phase in developing a strategic plan and serves as a guiding document for Walker County in making decisions about identified broadband deployment projects and digital skills training. For maximum effectiveness, this document must be dynamic and continuously evolving.

Internet access is no longer a luxury. It is a necessity for schools, businesses and healthcare to function in the 21st century. Yet, there is a major disparity in broadband service across Walker County, ranging from variable speeds to unserved and underserved areas. Additionally, digital skills are required for most jobs (over 90% in the State of Georgia[1] and 92% of jobs nationally require at least one digital skill) and directly impact the median hourly wage received (wage increases in correspondence to the number of digital skills required in a role)[2]. Residents of Walker County expect broadband service that is accessible, affordable, and reliable. In a post COVID-19 environment, the importance of connectivity has become all the more evident as a necessity for the welfare of residents.

Detailed recommendations are outlined within this plan, however, **the biggest need identified is for all Walker County residents and businesses to have access to fast and reliable internet service**. This can only be advanced through the collaboration and partnership of stakeholders across organizations and sectors. Yet service is not accessible if it is not also affordable. Many Walker County residents who have access to the internet are paying too much for inadequate service. While affordability cannot be addressed directly through potential grant opportunities, it is possible through the expansion of access options.

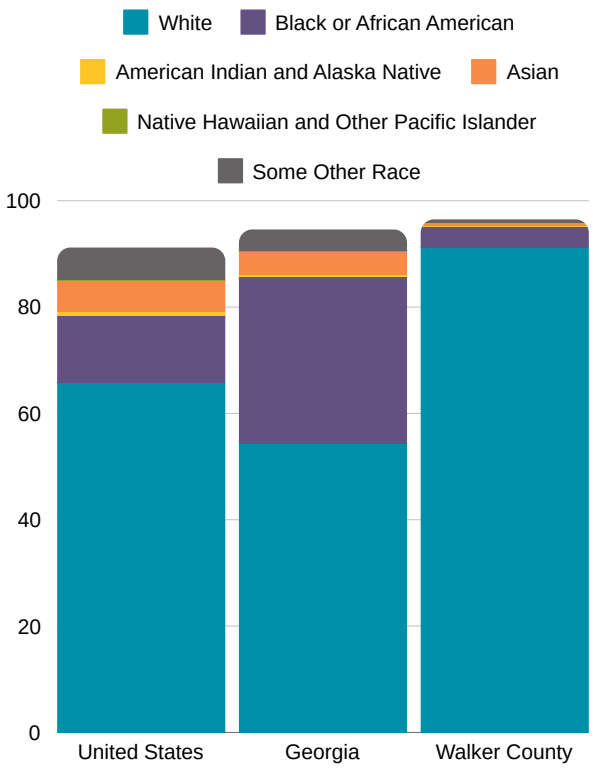
[1]National Skills Coalition
[2]Federal Reserve Bank of Atlanta


Fiber Internet
now available.
Rtctel.com/LaFayette
RTC | 706.965.1234
LAFAYETTE
GA
DOWN TOWN
JOE T. MOORE CPA

Walker County, Georgia is located in northwest Georgia with a population of 68,065 residents according to 2022 census data[3] and is considered to be located in the Valley and Ridge province of Georgia (flat ridges and fertile valleys with limestone aquifers)[4]. Walker County has a long history in agriculture which is still reflected in the composition of the land. Five cities are incorporated in the 446 square miles: Chickamauga, LaFayette, Lookout Mountain, Rossville, and a small portion of Fort Oglethorpe.

The most recent data from the 2022 American Community Survey 5 Year Estimates is used to best represent Walker County, with the understanding that the years following 2020 have been ones of change and migration of place.

### Demographic Profile



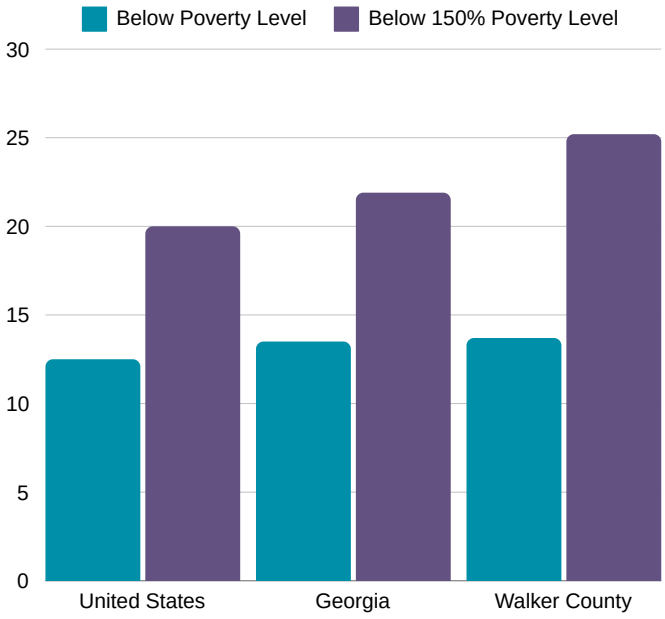

## GEOGRAPHIC AND DEMOGRAPHIC PROFILE

| Demographic Data | |
|---|---|
| Total Population Number | 68,065 |
| Square Miles Covered | 446 |
| Number of People per Square Mile | 152 |
| Residents Who Identify as White | 91.2%[5] |
| Residents Who Identify as Black | 4% |
| Residents Who Identify as Hispanic or Latino | 2.7% |
| Residents Who Identify as Asian | 0.6% |
| Residents Who Identify as Indigenous | 0.2% |
| Residents Who Identify as Native Hawaiian | 0% |
| Residents Who Identify as Other | 0.5% |
| Residents Who Identify as Two or More Races | 3.5% |

[3] U.S. Census Bureau. "ACS Demographic and Housing Estimates." American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP05, 2022.
[4] Walker County Joint Comprehensive Plan
[5] U.S. Census Bureau. "ACS Demographic and Housing Estimates." American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP05, 2022.

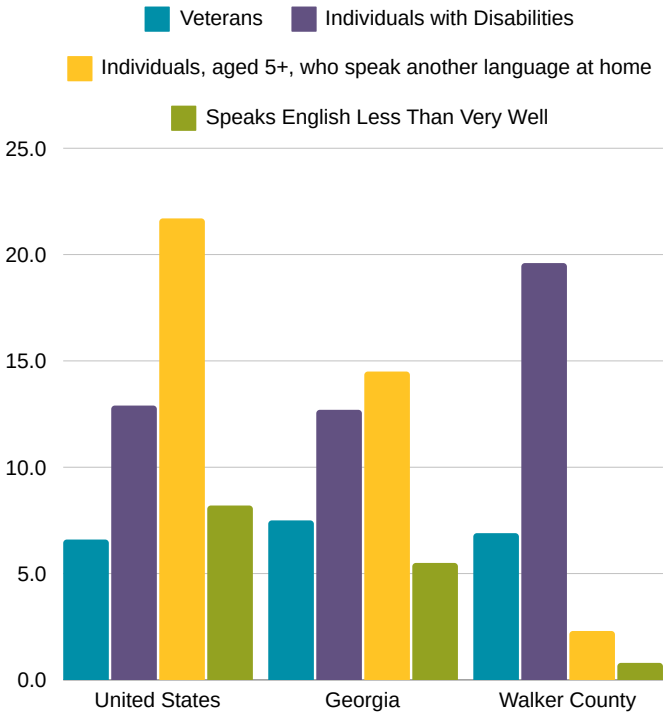
| | |
|---|---|
| Total Number of Households | 26,087 [6] |
| Households That Are Owner Occupied | 74.3% |
| Average Household Size | 2.55 [7] |
| Mean Household Income | $71,206 [8] |
| Median Household Income | $52,276 |
| Unemployment Rate (16 years old and above) | 5.5%[9] |
| Individuals Living Below the Poverty Line | 13.7%[10] |
| Individuals Below 150% of Poverty Line | 25.2% |

## Population Poverty Level




[6] U.S. Census Bureau. "Selected Housing Characteristics." American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP04, 2022.
[7] U.S. Census Bureau. "Selected Social Characteristics in the United States." American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP02, 2022.
[8] U.S. Census Bureau. "Income in the Past 12 Months (in 2022 Inflation-Adjusted Dollars)." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1901, 2022.
[9] U.S. Census Bureau. "Employment Status." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2301, 2022.
[10] U.S. Census Bureau. "Poverty Status in the Past 12 Months." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1701, 2022

## Covered Populations

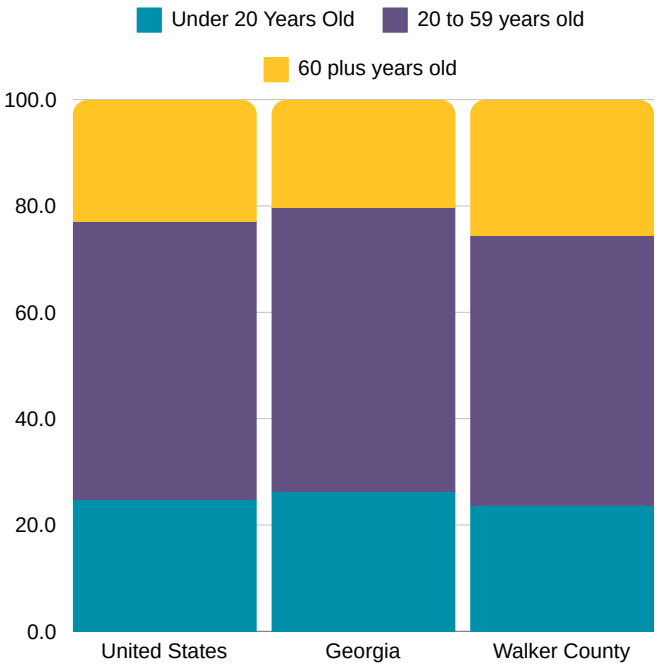



| | |
|---|---|
| Individuals with a Disability | 19.6%[11] |
| Aging Population (60 years old and older) | 25.6%[12] |
| Less than a 9th grade education (25 and older) | 5.4%[13] |
| Speak a language other than English at home (5 years and older) | 2.3%[14] |
| Speaks English less than very well | 0.8% |
| Veterans | 6.9%[15] |

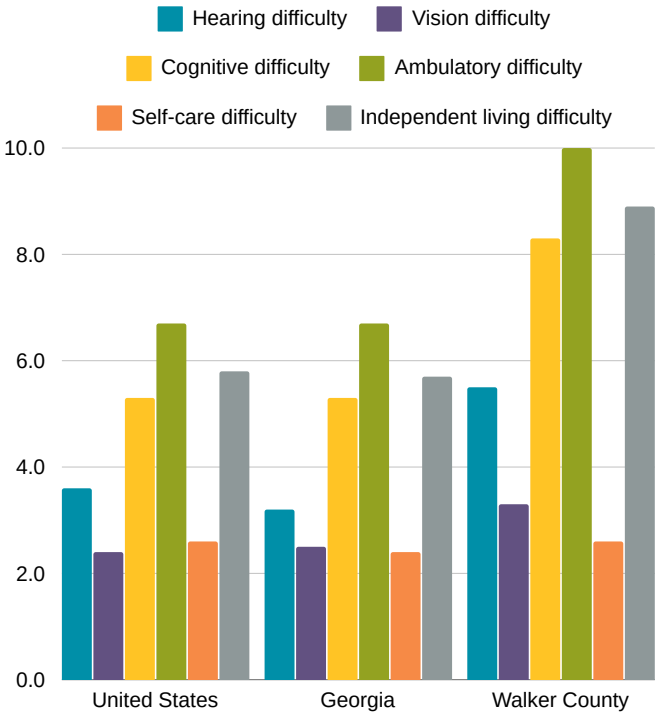
[11] U.S. Census Bureau. "Disability Characteristics." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1810, 2022
[12] U.S. Census Bureau. "Age and Sex." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S0101, 2022
[13] U.S. Census Bureau. "Educational Attainment." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1501, 2022
[14] U.S. Census Bureau. "Language Spoken at Home." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1601, 2022
[15] U.S. Census Bureau. "Veteran Status." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2101, 2022

**Social determinants vary significantly from one community to another and addressing these determinants is crucial for promoting a strong, healthy, connected community for Walker County. Although there can be general assumptions about the impact of certain social determinants, the true story of the individual can never be wholly captured as often more than one social determinant impacts the individual, making addressing needs complex.**

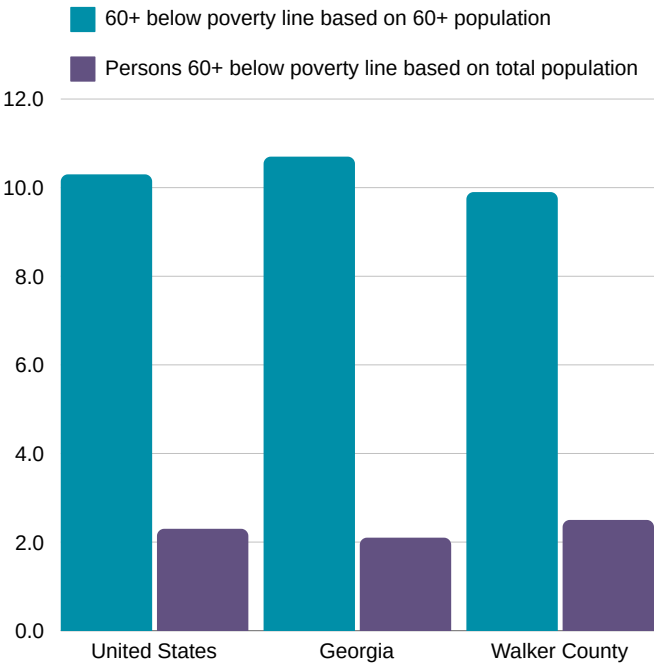
## Population Distribution by Age




## Disability by Type




## Poverty Level Aged 60 plus



## SOCIAL DETERMINANT

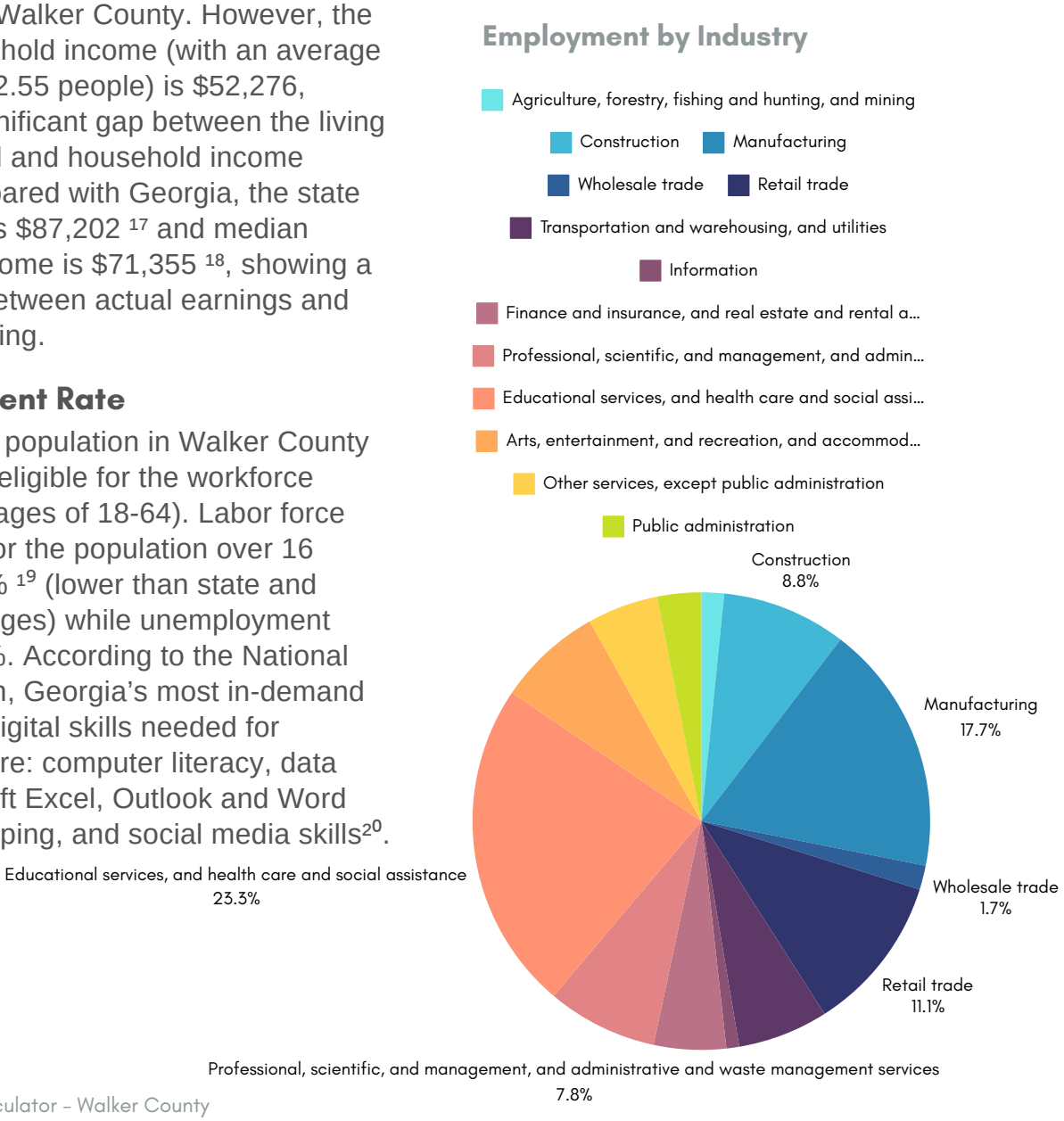
## ECONOMIC FACTORS

### Income Inequality

According to Living Wage Calculator, two working adults with one child need $75,639 [16] annually in Walker County. However, the median household income (with an average household of 2.55 people) is $52,276, showing a significant gap between the living wage required and household income earned. Compared with Georgia, the state Living Wage is $87,202 [17] and median household income is $71,355 [18], showing a smaller gap between actual earnings and true cost of living.

### Unemployment Rate

59.86% of the population in Walker County is considered eligible for the workforce (between the ages of 18-64). Labor force participation for the population over 16 years is 58.8% [19] (lower than state and national averages) while unemployment rates are 5.5%. According to the National Skills Coalition, Georgia's most in-demand foundational digital skills needed for employment are: computer literacy, data entry, Microsoft Excel, Outlook and Word Processing, typing, and social media skills[20].




[16] Living Wage Calculator - Walker County
[17] Living Wage Calculator - Georgia
[18] U.S. Census Bureau. "Income in the Past 12 Months (in 2022 Inflation-Adjusted Dollars)." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1901, 2022
[19] U.S. Census Bureau. "Selected Economic Characteristics." *American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP03*, 2022
[20] National Skills Coalition

## Poverty Levels

13.7% of the people in Walker County live below the poverty line which is similar to the state's poverty level of 13.5% [21]. Yet there is a larger delta between the state and Walker County for those who live below 150% of the poverty line. 61.2% of students are eligible for free or reduced price lunch (compared to Georgia with 59.6% and nationally of 53.5%[22]) Female householders with children under 18 and no spouse are more vulnerable and require food stamps/supplemental nutrition assistance programs (27.5%, compared to male householders with 3.5%[23]).

## Lack of Economic Opportunities

Walker County is considered a Tier 3 Community based on state designated economic tiers enabling specific industries to be eligible for Job Tax Credits[24]. LaFayette specifically is designated as a Rural Zone, which allows for Job Tax Credits, Investment Credits, and Rehabilitation Credits. Similarly, Rossville is also designated as a Rural Zone[25]. Walker County's roots started in agriculture and include a history in the mill and textile industries. The lack of a geographic center of commerce requires the ability to travel for work. Currently, Roper Corporation is the largest employer in Walker County, which is also representative of the largest industry for employment - manufacturing.

# EDUCATION

## Educational Attainment

85% of the population 25 years and over have a high school education or higher. Of that 35.5% have high school only, 22% some college, 7.9% associate's degree, 12.5% bachelor's degree, and 7.2% higher[26].

## Access to Quality Education

The Walker County School System is made up of 15 public schools, K-12, with 89.9% of students enrolled in public school. Georgia Northwestern Technical College, vocational-technical college, is located in Walker County. Walker County is home to the best welding school in the nation according to Skills USA which has consistently ranked Georgia Northwestern Technical College at the top in the Nation for this trade[27].

## Ready for College, Ready for Work, Ready for Life

Walker Launch is a college and career academy enabling students to earn both college and high school credit at the same time through a partnership between Walker County Schools and Georgia Northwestern Technical College. Career, Technical, and Agricultural Education (CTAE) bridges the gap between core academic areas and a career.

[21] U.S. Census Bureau. "Poverty Status in the Past 12 Months." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1701, 2022
[22] NCES
[23] U.S. Census Bureau. "Food Stamps/Supplemental Nutrition Assistance Program (SNAP)." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2201, 2022
[24] Georgia Job Tax Credit
[25] Walker County Joint Comprehensive Plan
[26] U.S. Census Bureau. "Educational Attainment." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1501, 2022
[27] Walker County Business & Economic Development

## HEALTHCARE

### Healthcare Access

There are no hospitals in Walker County or after hour care. Residents must travel to bordering counties or utilize telehealth. Chickamauga, LaFayette, and Rossville all have medical offices for healthcare accessibility.

### Health Insurance

86.6% of Walker County residents have health insurance and 13.4% are uninsured[28].

## HOUSING

### Affordable Housing

The cost of housing has increased steadily in Walker County. The median housing market value increased by 56% between 2015 and 2020 [29]. The median rent has increased from $702 [30] to $847 [31] in the last five years. As of 2024, according to the Walker County Assessors' Office, there are approximately 465 duplexes, and only 27 triplexes in Walker County. There are 157 four or more unit complexes.

### Housing Quality

Substandard housing effects 24.89% of Walker County[32]. Both LaFayette and Rossville are participating in the Georgia Initiative of Community Housing to address blight and new housing development[33]. 63% of Rossville's housing stock was built over 50 years ago, while nearly 48% of LaFayette's housing stock is more than half a century old[34]. County wide, over 50% of the homes were built before 1980[35].

### Homeownership

Walker County has high rates of home ownership (74.3%[36] of homes are owner occupied). 52.3% housing units have a mortgage with the median mortgage being $1,273. 24.28% of households live in cost burdened households with 45.1% of those being rental households[37]. Only 1.9% of those who moved into a house in 2021 or later are owner-occupied.

## CULTURAL CHARACTER

### Natural

A limestone aquifer system provides the availability of clean water, while over 30,000 acres[38] have been preserved in conservation to protect mountains and watersheds from urban development. Rock Creek is an unpolluted, undisturbed tributary.

[28] U.S. Census Bureau. "Selected Characteristics of Health Insurance Coverage in the United States." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2701, 2022
[29] Walker County Joint Comprehensive Plan
[30] U.S. Census Bureau. "SELECTED HOUSING CHARACTERISTICS." American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP04, 2017
[31] U.S. Census Bureau. "Selected Housing Characteristics." American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP04, 2022
[32] Sparkmap Community Needs Assessment - Walker County, GA
[33] Walker County Joint Comprehensive Plan
[34] Housing Program - LaFayette and Rossville
[35] U.S. Census Bureau. "Selected Housing Characteristics." American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP04, 2022
[36] U.S. Census Bureau. "Selected Housing Characteristics." American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP04, 2022
[37] Sparkmap - Community Needs Assessment Walker County, GA
[38] Georgia Department of Natural Resources - Crockford-Pigeon Mountain and Lulu Lake Land Trust

### Historic

Originally Cherokee land, Walker County was formed in 1833 and was the site of one of the bloodiest battles of the Civil War. In 1890, the site of the battlefield was dedicated as the Chickamauga-Chattanooga National Military Park. Coal deposits located in the Appalachian Plateau powered industrial production in the past. Walker County is made up of former mill towns and is home to 17 sites on the National Register of Historic Places, including the John Ross House, which was constructed in 1797.

### Scenic

Unique rock formations and natural vistas draw visitors to Walker County to enjoy the beauty that abounds.

Canon and monument positioned in one of the park's open meadows. Photo courtesy: Bob Butters

## INFRASTRUCTURE AND ENVIRONMENT

### Infrastructure Investment

There has been a significant investment in the roads of Walker County in recent years. Funding made possible through a special tax for transportation projects has enabled the repaving of roads, bridge work and other transportation improvements[39]. Additionally, there has been investment by the Walker County Water and Sewerage Authority to provide clean drinking water for the county, supplying water to underserved and unserved rural communities, and redirecting the sewer system from the north end of the county to a treatment plant in Chickamauga, rather than Chattanooga[40].

### Environmental Hazards

There are a number of brownfield sites due to old manufacturing facilities that are no longer in operation and require specialized redevelopment. The county launched a brownfield assessment program in 2022 to develop cleanup plans for up to 30 sites. Chickamauga is largely located in a floodplain making further development an issue.

[39] TSPLOST
[40] Walker County Water and Sewerage Authority

### Transportation Access

Walker County lacks a major interstate yet adjoins Hamilton County and the city of Chattanooga. As such, portions of Walker County are considered within the Chattanooga-Hamilton County/North Georgia Transportation Planning Organization[41]. Walker County has a rural public transit service for residents who need transportation for health and employment related needs[42]. Fares cost $4 per trip and require a one day notice reservation. Walker Transit trips have grown 9% from 2022 to 2023 (including the Roper route which provides a line for employees and which grew 41% in 2023)[43]. Walker County is in the process of constructing a 2.2 mile connector trail for pedestrians and cyclists between the Chickamauga and Chattanooga National Military Park and downtown Chickamauga, known as the Chickamauga Battlefield Connector Trail[44] which is one part of a larger vision for 118 miles of connection between communities[45].


Entrance to the Chickamauga and Chattanooga National Military Park. Photo courtesy: Walker County

### Detention Center

The county detention center averages 215-250 inmates a day. The capacity of Walker State Prison is 444 inmates.

## SOCIAL SUPPORT

### Community Resources

Limited access to social services and support networks. The northern portion of Walker County falls within the Chattanooga Metropolitan Planning Area with closer proximity to a metropolitan area whereas the southern and southern/west portions remain rural. Walker Family Connection exists to connect those in need of services to the appropriate resource.

### Social Connection

Anchor institutions connect generations of residents through shared experiences. Schools, churches and various recreational activities create traditions that bind community members young and old.

[41] Walker County Joint Comprehensive Plan
[42] Walker Transit
[43] Walker Transit
[44] Walker County Connector Trail
[45] Walker County Joint Comprehensive Plan

## Based on social determinants, geographic, and demographic information of Walker County, the following observations can be made:

- The disparity between living wage and actual wage is significant, forcing residents to compromise on what is considered basic needs. The affordability of broadband is a barrier to access.
- Digital skills have a direct impact on an increase in wages. Moving from a job that requires no digital skills to one that requires just one can result in an increase in wages of 23%. Examples of industry specific skills include the ability to use: medical record software, Computer Numeric Control (CNC) in manufacturing, retail software, and the Nationwide Mortgage Licensing System[46].
- In Georgia, a majority of jobs (54%) require skills training beyond high school, but not a four-year degree. 69% of Georgians would take advantage of skills training if offered and 95% agree that access to skills training is a key characteristic of a good job. The National Skills Coalition found that 82% of black voters would take advantage of skills training, 75% under the age of 50, and 77% of those without a college degree[47].
- The residents of Walker County participate in improving and caring for the county and are willing to invest their financial resources to help their county.
- Education impacts poverty. The poverty rate is highest for those who have less than high school education at 22% for those 25 and older[48]. As education levels increase, poverty rates decrease. Only 3.2% of the population with a bachelor's degree or higher is considered in poverty. Additionally, having "some college or an associates degree" has an impact on lower rates of poverty (with 9.1% compared to high school graduates in poverty of 16.7%).
- Healthcare options are limited for Walker County residents as there is no county hospital. Medical care requires traveling to neighboring counties for a hospital or specialized care, making telehealth access all the more important. Lack of transportation is an issue for residents to access resources for mental health.
- Walker County remains an excellent place for agriculture, with an identity strongly rooted in its history, as well as cultural heritage. The rural, agricultural areas of Walker County require connectivity for monitoring crops and livestock, advance warning of dangerous weather conditions, the implementation of advanced farming technology, and for staying up to date on the newest rules and regulations pertaining to growing/raising food.

[46] National Skills Coalition
[47] National Skills Coalition
[48] U.S. Census Bureau. "Poverty Status in the Past 12 Months." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1701, 2022

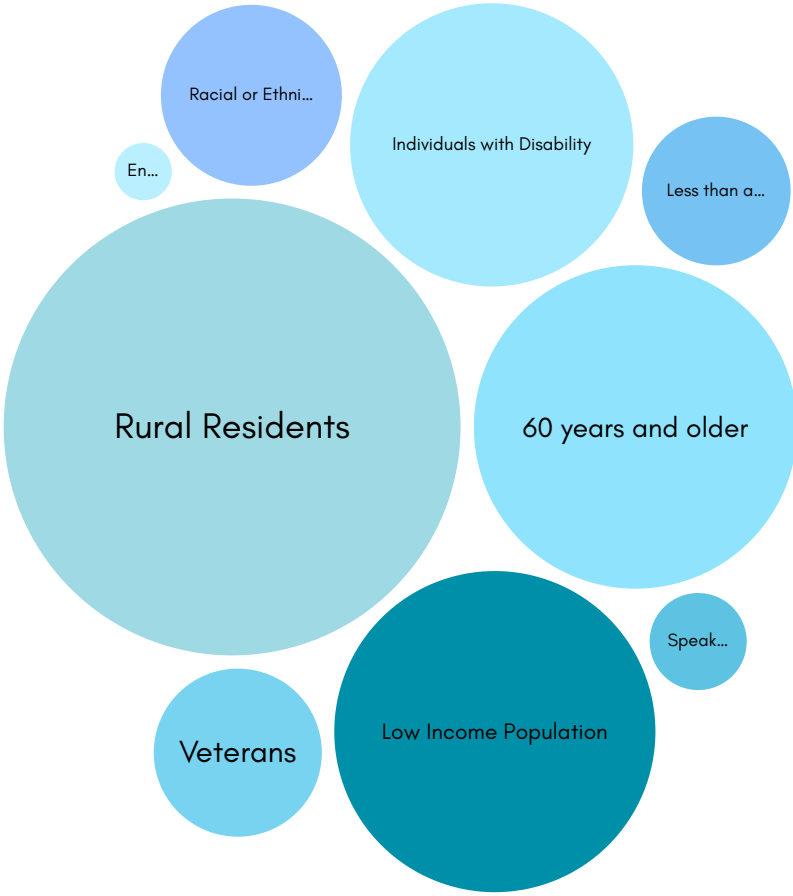
## GENERAL COMMUNITY STATUS

Walker County recognizes the need for strategic goals which align with the State of Georgia's priority to Strengthen Rural Georgia and the impact increasing rural broadband access will have on economic opportunities for growth, empowering the continuing of education, and healthcare access for rural communities. According to Benson et al. (2023), "Research suggests people living in high poverty areas experience significant barriers to well-being whether or not they're poor themselves. The longer poverty exists in an area, the more likely the community lacks adequate infrastructure and support services."[49]

**"This county was a farming county for a long time and access is not there. It hasn't gotten to us yet."**

Bob Swanson
Network Operations Supervisor

## DOCUMENTED PRESENCE OF COVERED POPULATIONS



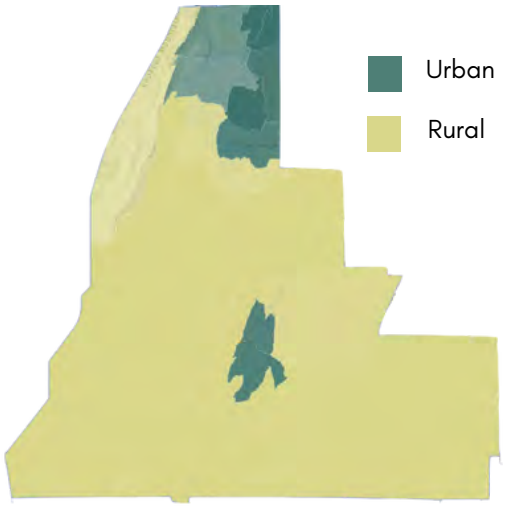

These covered populations, as defined in the Infrastructure Investment and Jobs Act (IIJA), would see an impact from projects and outcomes that result from the Digital Equity and Broadband Equity, Access, and Deployment (BEAD) programs. In Walker County, those covered populations identified as most prevalent are:

- Individuals living below 150% of the poverty level
- Residents of rural areas
- Individuals with disabilities
- The aging and elderly

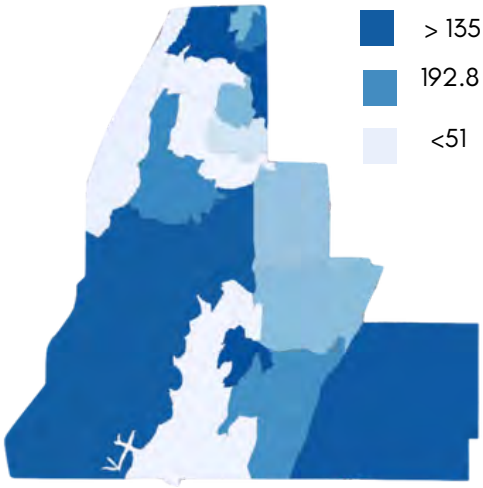
[49] US Census - Persistent Poverty

Covered populations often overlap, with individuals likely being classified as part of multiple covered populations. The following mapping shows areas most likely to be impacted by targeted implementation strategies. Those living in rural areas are often negatively affected by limited infrastructure and stand to benefit from funding opportunities like the BEAD program. Similarly, individuals with disabilities and older adults are more likely to benefit from funding through the Digital Equity Act or a combination of programs.

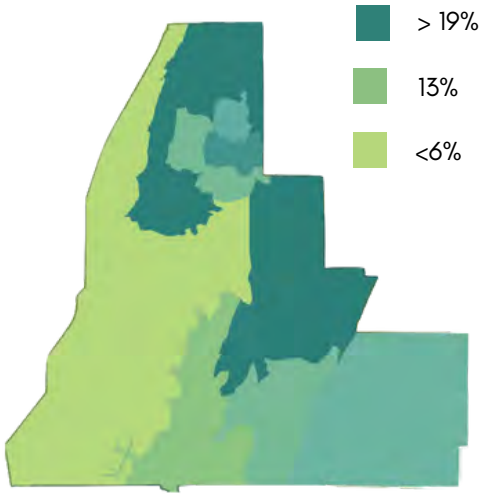
### Map 1: Urban vs Rural Population[50]



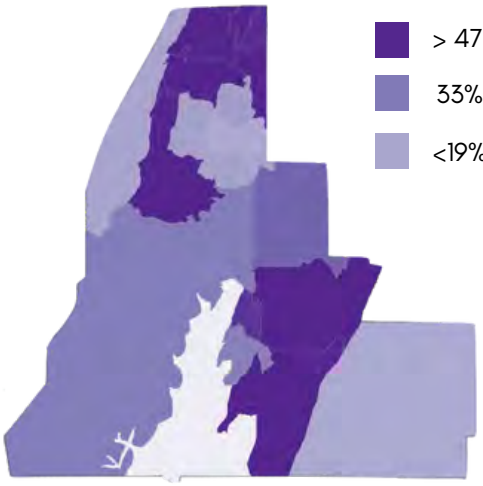

### Map 2: Population 60+ below poverty[52] (count)




### Map 3: Population with Disability[51]




### Map 4: Population 65+ with Disability[53]

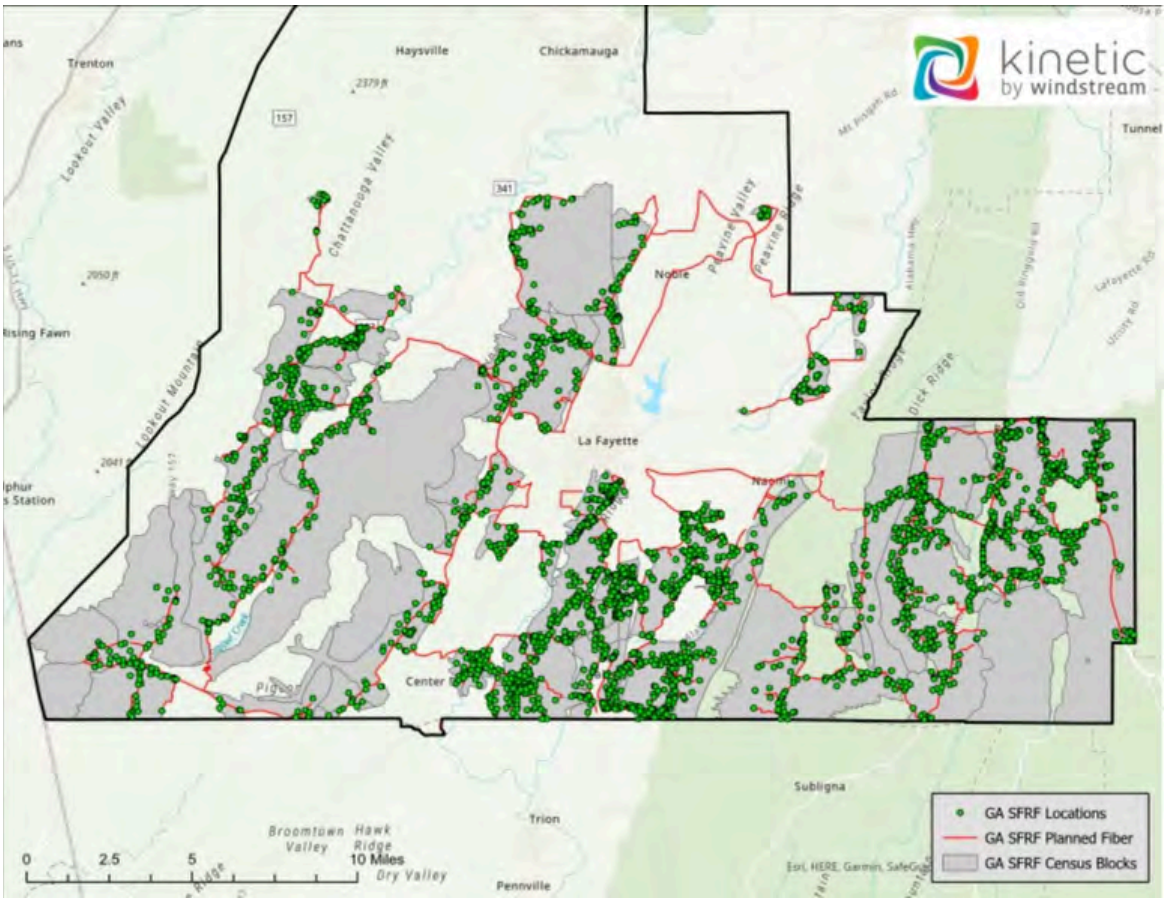



[50] Map generated through ESRI using U.S. Census Bureau's 2020 Census Demographic and Housing Characteristics information
[51] Map generated through ESRI using U.S. Census Bureau's American Community Survey (ACS) 2018-2022 5-year estimates, Table(s) B18101, B18102, B18103, B18104, B18105, B18106, B18107, C18108_
[52] Map generated through ESRI using U.S. Census Bureau's American Community Survey (ACS) 2018-2022 5-year estimates, Table(s) B18101
[53] Map generated through ESRI U.S. Census Bureau's American Community Survey (ACS) 2018-2022 5-year estimates, Table(s) B17020, C17002

## PREVIOUS FUNDING SOURCES FOR BROADBAND IMPLEMENTATION STRATEGIES

Walker County was awarded $6.3 million in grant money from the Coronavirus State and Local Fiscal Recovery Funds program to expand broadband access throughout the southern half of the county. The county is collaborating with Georgia Windstream, LLC to leverage their existing infrastructure, engineering experience and construction management to deploy a Fiber-to-the-Premises (FTTP) solution to 3,339 homes and businesses in rural areas. The project involves extending 323 miles of fiber throughout the Armuchee Valley, Center Post and Kensington communities, among other locations by the end of 2026.

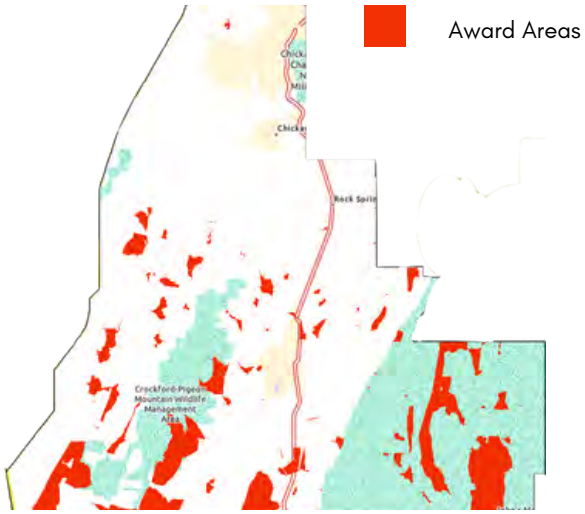
**Map 5: Coronavirus State and Local Fiscal Recovery Funds**[54]



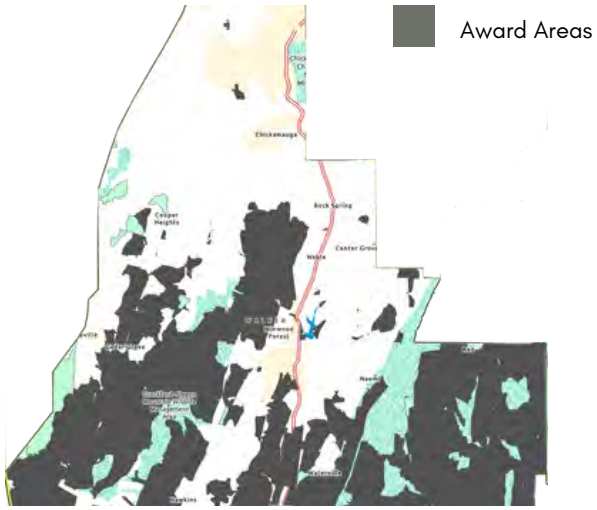

[54] Walker County Grant for Broadband Expansion

With the exception of a few eligible areas, most of the potential census blocks were awarded funding (shaded dark gray), through previous grants from the Georgia Broadband Program (GBDI+FCC E-CAM) and Rural Digital Opportunity Fund (RDOF - see red sections).

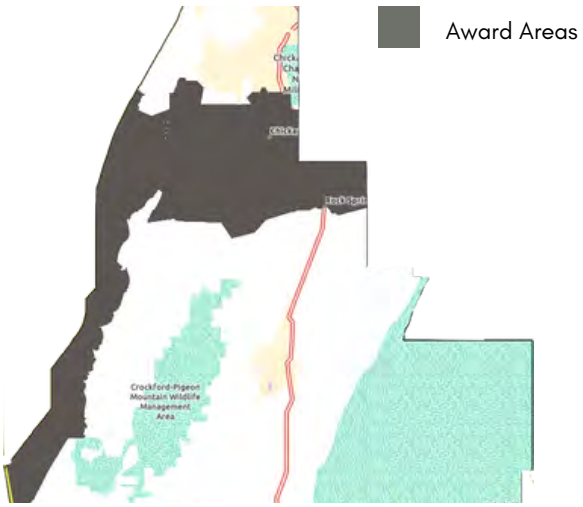
### Map 6: Rural Digital Opportunity Fund



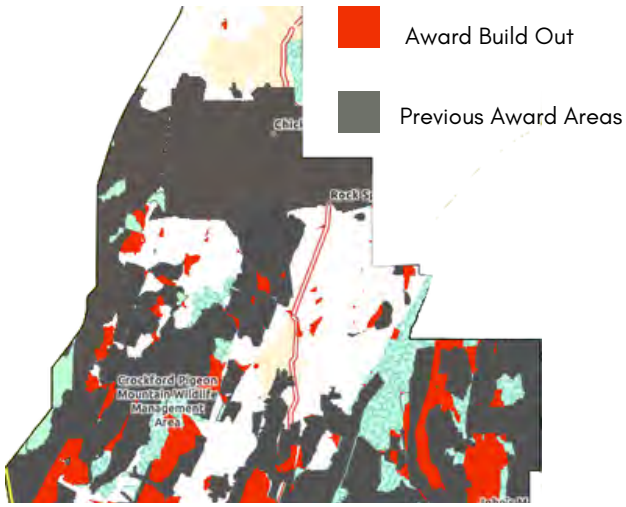

### Map 7: Georgia Broadband Deployment Initiative Program




### Map 8: FCC E-CAM Award




### Map 9: Potential Award Areas



# STATE DATA

## PREVIOUS BROADBAND STUDIES

As part of the State of Georgia's strategy for digital connectivity, a detailed assessment of the digital divide was created. Additionally, the state, in response to grant funds from the National Telecommunications and Information Administration (NTIA), has created a Five Year Action Plan and Initial Proposal(s) Volume I and II for how to distribute the funds and the resulting impacts for the State of Georgia.

| *Broadband Plan* | *Purpose of Broadband Plan* |
|---|---|
| *State of Georgia Digital Connectivity Plan*[55] | A detailed plan including all 15 requirements outlined in NTIA's State Digital Equity Planning Grant Program Notice of Funding Opportunity (NOFO), developed in strict compliance with the Digital Equity Act of 2021 and the Infrastructure Investment and Jobs Act of 2021, Public Law 117-58, 135 Stat. 429. |
| *Broadband Equity, Access, and Deployment Program Five-Year Action Plan* | A comprehensive plan including a needs assessment, the identified digital skills needed, and the state's goals. |
| *Initial Proposal Volume I* | Details how the State of Georgia will meet all requirements of NTIA's BEAD Notice of Funding Opportunity. Includes existing efforts funded by the federal government or the State of Georgia within the state to deploy broadband, identifies unserved and underserved locations, how the state is addressing community anchor institutions, and the challenge process.<br><br>The State of Georgia has created a detailed broadband availability map[56] that is reflective of this. |
| *Initial Proposal Volume II* | Describes how the State of Georgia will distribute the allocated BEAD funding in compliance with state and federal requirements. |

[55] Georgia's Digital Connectivity Plan
[56] Georgia Broadband Map

## IDENTIFICATION OF STATE PRIORITIES

**In its BEAD Five-Year Action Plan[57], the State of Georgia outlined several priorities for broadband deployment, including**

1. Serve 100% of unserved locations (i.e., below 25/3 Mbps) with a minimum of 100/20 service within five years

2. Serve 100% of underserved locations (i.e., between 25/3 and 100/20) with a minimum of 100/20 service within five years

3. Deliver gigabit connections to community anchor institutions that do not have that level of service within five years

**Should BEAD funds remain after the first three objectives are fulfilled, the State will continue to fund the next set of priorities**

4. Address challenges related to line extension costs to unserved and underserved residences determined to be in extremely high-cost locations

5. Identify and connect unserved units in multiple-dwelling-unit buildings with a minimum of 100/20 Mbps service, while assessing and upgrading the internal wiring to facilitate high-speed internet access for all units simultaneously

6. Support programs that alleviate barriers to digital connectivity, enabling economic empowerment, promoting academic success, and enhancing community health

[57] Georgia's BEAD Five Year Action Plan

## These priorities have been outlined by the State of Georgia in the Georgia BEAD 5 Year Action Plan to achieve the following broadband and digital connectivity goals and objectives:

| Goals | Description |
|---|---|
| Ensure comprehensive high-speed internet accessibility | Ensure availability of high-speed connection for all Georgians, with a particular focus on populations most affected by limited service options. To achieve this will require collaboration with internet service providers, community anchor institutions, local government entities, and other community organizations both for the build out as well as the monitoring of quality and costs. |
| Empower workforce advancement and economic growth in unserved and underserved communities and population groups through broadband expansion projects | Employment of funding to economically distressed areas, incentivizing participation of small Georgia-based providers as well as expanding broadband workforce training initiatives through a state-led program. |
| Bolster cybersecurity across state networks, foster a cyber-ready workforce, and establish lasting partnerships for collaborative action | Requires compliance of GTA's information security policies and standards. The State of Georgia will cultivate an environment of cybersecurity education, training, research, and practical application for both private and public sectors. |
| Reduce obstacles to digital connectivity (equity) and foster an environment conducive to economic growth, academic achievement, and improved healthcare outcomes | Promotion of digital literacy programs and assistance of community anchor institutions to deliver technology-based training and services to maximize their transformative impact. |

The Georgia Technology Authority (GTA) has identified priority recipients of BEAD funding, in the following order:

- Unserved locations
- Underserved locations
- Community anchor institutions
- Affordable housing

The fund allocations aim to cover all unserved locations in Georgia and expect that many underserved areas will also receive funding. However, community anchor institutions and lower-priority areas are unlikely to receive support through BEAD. BEAD funding will be restricted to infrastructure projects that improve broadband access in unserved or underserved areas. In the second round of funding, GTA may limit applications to unserved locations to achieve full coverage.

Walker County's main goal - for residents to have access to fast, reliable internet service - aligns with the broadband priorities of the State of Georgia. The county seeks funding opportunities to provide service to all unserved locations and underserved areas.

The State's Connectivity Plan describes how broadband connectivity impacts the following:

| | |
|---|---|
| **Economic and Workforce Development** | Enables access to a wider range of employment through online job platforms, upskilling through online courses, and increased earning potential through remote work. Creates the ability to manage personal finances through online banking and financial platforms. |
| **Educational Advancement** | Enables access to educational resources, remote learning, self-paced learning, tutoring, and digital libraries. Enables skill-building through specialized online courses, certifications, and degree programs. Enhances access to adaptive learning tools tailored for people with disabilities and multilingual educational resources for English learners. |
| **Health Outcomes** | Enhances the ability to schedule appointments online, request FSA reimbursements, participate in telehealth consultations, and access critical health information. Use of remote monitoring technologies can improve quality of life and independence for aging and individuals with disabilities. |
| **Strengthened Social Ties** | Access to communities and social media can reduce feelings of isolation and loneliness for aging and individuals with disabilities. Specialized forums and online services can offer emotional support and reintegration assistance for veterans. |

## METHOD FOR DETERMINING ELIGIBILITY

To access BEAD funding, the State of Georgia developed a detailed, two-volume plan that demonstrates how unserved locations would be connected through BEAD. The State of Georgia's BEAD Initial Proposal Volumes 1& 2 describe the process of identifying eligible locations for funding and how it will be distributed[58], as shown below:

1. The State identified the existing broadband funding allocated within the state (Requirement 3), including sources of funding, description of the funded activities, total funding, amount expended and remaining funding available. This step was necessary to prevent any locations with existing broadband funding from being eligible to receive BEAD funding.
2. The State identified unserved locations as those with service below 25 Megabits per second (Mbps) download and 3 Mbps upload speeds, and underserved locations as those with service below 100 Mbps download and 20 Mbps upload speeds (Requirement 5), utilizing FCC National Broadband Map data collected through the Broadband Data Collection process (data as of December 31, 2022).
3. The State identified the types of Community Anchor Institutions (Requirement 6) eligible to receive BEAD funding within the state, including schools, libraries, health clinics or medical providers with a Centers for Medicare and Medicaid Services identifier, public safety entities, higher education institutions, community support organizations that target covered populations, government entities.
4. The State confirmed that it will adopt the NTIA's BEAD Model Challenge process (Requirement 7), which will allow for all identified eligible locations to be reviewed and challenged ahead of the BEAD Subgrantee selection process.
5. Following the completion of the State's BEAD Challenge process, the State may modify the eligibility of certain locations with enforceable commitments, planned service deployment, etc. and allow for a rebuttal phase prior to making its final determination.

[58] Georgia Initial Proposal Volume I

Further details regarding the State's Deployment Subgrantee Selection process (Requirement 8), can be found in Volume 2 of the BEAD Initial Proposal. According to the State's plans, funding should be maximized to reach as far as possible, prioritizing fiber to the premises. Georgia Technology Authority (GTA) intends to limit its first round to fiber and award based on low cost and other public policy priorities. Although GTA will allow applicants to designate which locations they intend to serve, it is highly discouraged to "cherry pick" locations and applications may be disqualified. There will be a scoring phase and a negotiation phase. In some cases, there may be a post negotiation scoring phase. Applicants will be scored based on their following capabilities: financial, managerial, technical, and operational as well as their legal, cybersecurity, and supply chain compliance. Applicants will receive the majority of potential points based on being the most cost-efficient (total funding requested divided by number of locations proposed to serve) proposal submitted for a County Grant Area. Applicants will also receive points for secondary criteria that includes: speed of deployment (subgrantees must provide service no later than four years after the date of receiving the grant), community/local government support, connecting CAIs with one gigabit symmetrical, universality of application (to serve the greatest number of unserved and underserved locations), and speed of network. Unserved locations are first priority, underserved locations second, community anchor institutions third, and affordable housing following the first three.

GTA does not anticipate having non-deployment subgrantees. However, in the case that BEAD funds are remaining after the above priorities have been satisfied, non-deployment funds will be used for the following:

1. Identify and connect unserved units in multiple-dwelling-unit buildings with a minimum of 100/20 Mbps service, while assessing and upgrading the internal wiring to facilitate high-speed internet access for all units simultaneously.
2. Support programs that alleviate barriers to digital connectivity, enabling economic empowerment, promoting academic success, and enhancing community health.

## SUMMARY OF THE STATE DIGITAL EQUITY STRATEGIES

According to the State of Georgia's Digital Connectivity Plan, the following critical challenges of connectivity and strategies to address are:

| Challenge | Strategies | Objectives |
|---|---|---|
| Lack of broadband availability | • Increase access to residential broadband infrastructure<br>• Expand collaborative efforts as broadband progresses | • Achieve statewide broadband access: every Georgian can access 100/20 Mbps at home.<br>• Increase broadband subscription statewide through a holistic awareness campaign.<br>• Spur a significant increase in broadband subscription for Georgians living in counties with highest digital inequities. |
| Low-income households struggle to afford broadband services, devices, and technical support | • Partner with ISPs and community stakeholders for improved broadband affordability and device accessibility<br>• Establish a device ecosystem<br>• Expand device ownership initiatives<br>• Leverage CAIs to expand community-level device access<br>• Prioritize and prepare for broadband and digital connectivity in counties with highest digital inequities | • Boost ACP enrollment<br>• Increase the percentage of ISPs with low-cost broadband service offerings.<br>• Enhance device access for all covered populations through a sustainable device ecosystem.<br>• Georgians in need can access affordable device options through digital connectivity organizations.<br>• Increase device loaner programs and public computer labs through CAIs serving covered populations. |
| Ensuring digital inclusivity as Georgia advances in digital services | • Improve universal design and accessibility in public resources<br>• Train Digital Navigators specialized in assisting covered populations | • Members of covered populations can access government services online.<br>• Widen the accessibility and awareness of assistive technology.<br>• Train and deploy specialized Digital Navigators within community spaces serving covered populations. |

| Challenge | Strategies | Objectives |
|---|---|---|
| Covered populations need support to develop digital skills, including skills to protect themselves and their personal data online | • Develop a foundational digital skills framework for all Georgians<br>• Empower covered populations with digital healthcare skills<br>• Foster online safety and privacy awareness within digital literacy<br>• Empower community organizations for comprehensive digital literacy<br>• Enhance digital literacy through youth and adult education platforms<br>• Leverage digital connectivity to empower opportunities for workforce and economic advancement | • Design and develop a statewide digital skills framework.<br>• Expand digital literacy through community collaborations.<br>• Increase digital skills program enrollment and proficiency among covered populations.<br>• Covered populations in Georgia can effectively use the internet if they so choose.<br>• Covered populations in Georgia can access information or training to learn how to protect their security and privacy online.<br>• Enhance digital health literacy in covered populations.<br>• Enhance workforce development and opportunities in telecom, technology, and broadband-related industries. |
| Local communities lack resources and expertise for digital connectivity efforts | • Build collaboration among State, local, and nonprofit entities<br>• Support and develop local capacity through a statewide consortium<br>• Sustain and grow State and local efforts in digital connectivity<br>• Create a repository of digital connectivity insights | • Establish local digital connectivity plans.<br>• Establish a statewide digital connectivity consortium.<br>• Establish a Digital Connectivity Insights Hub.<br>• Monitor the financial sustainability of digital connectivity efforts. |

## APPLICANT GRANT READINESS

Walker County, GA has obtained the following federal registrations and information, as required to apply federal funding programs:

- Assigned and active Federal Tax ID
- Assigned and active Unique Entity Identification (UEI) number
- Completed entity registration in SAM.gov

## CURRENT INTERNET ACCESS, ADOPTION AND USE

Assessing the current state of broadband infrastructure and services in Walker County will help target and prioritize areas to close the digital divide. This approach will advance broadband access for all residents and businesses by identifying gaps, barriers, and opportunities for a connected, resilient community.

Data analyzed by Thrive Regional Partnership for Walker County include, but were not limited to:

- Availability
  - Mapping created by Reid Consulting Group, LLC in June, 2024 for Connect Humanity, as part of the Appalachian Broadband Accelerator Program and analyzed by Thrive Regional Partnership
  - Speed tests from FCC data and Ookla
- Adoption and Device Information
  - Census data from the American Communities Survey (ACS) 5-year estimates
  - Data compiled by Jimmy Boogs of Generation West Virginia for Connect Humanity, as part of the Appalachian Broadband Accelerator Program and analyzed by Thrive Regional Partnership
- Type of Broadband Service and Internet Service Providers
  - Mapping created by Reid Consulting Group, LLC in June 2024 for Connect Humanity, as part of the Appalachian Broadband Accelerator Program and analyzed by Thrive Regional Partnership
  - FCC data
  - Census data from the American Communities Survey (ACS) 5-year estimates

The majority of the data tables referenced and analyzed from the FCC are based on census blocks; mapping utilized a combination of census tracts, blocks, or H3 geospatial indexing (hexagons). Ookla speed testing used tiles. In addition, most of the data analyzed in relation to internet service providers is based on connected population and may not add up to the entire state population/units/square miles.

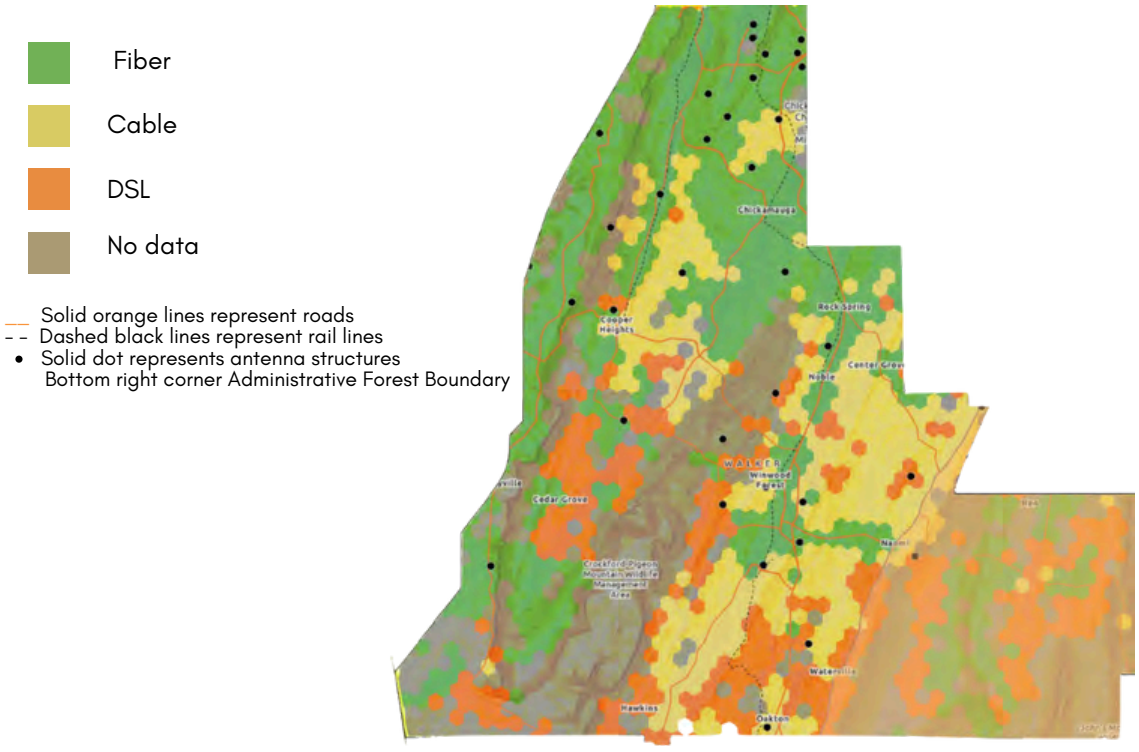
## CURRENTLY AVAILABLE INTERNET SERVICES

To analyze available internet services, Walker County's project team reviewed data from Connect Humanity, which used publicly available broadband data and local datasets. They compiled this information to show the competitive landscape, including:

- An inventory of existing fiber networks within the county, including vertical structures, roads, ridges/slopes, and administrative forest overlay;
- An overview of previous awards, award eligibility, and qualified opportunity zones;
- An overview of current broadband providers' services and speed testing;
- An overview of poverty levels and previous ACP subscribers;
- To the best extent possible, the locations of existing fiber and broadband-related electronics;
- To the best extent possible, device by household; and
- To the best extent possible, areas of no access.

The landscape of Walker County includes steep slopes with canopy tree coverage. While there are registered vertical structures, they cannot provide additional connectivity due to slope and canopy issues. This map demonstrates the ridges, canopy, vertical structures, and an administrative forest boundary (in the lower right shaded corner). This challenge may cause difficult connections and/or possible permitting problems.

### Map 10: Vertical Structures

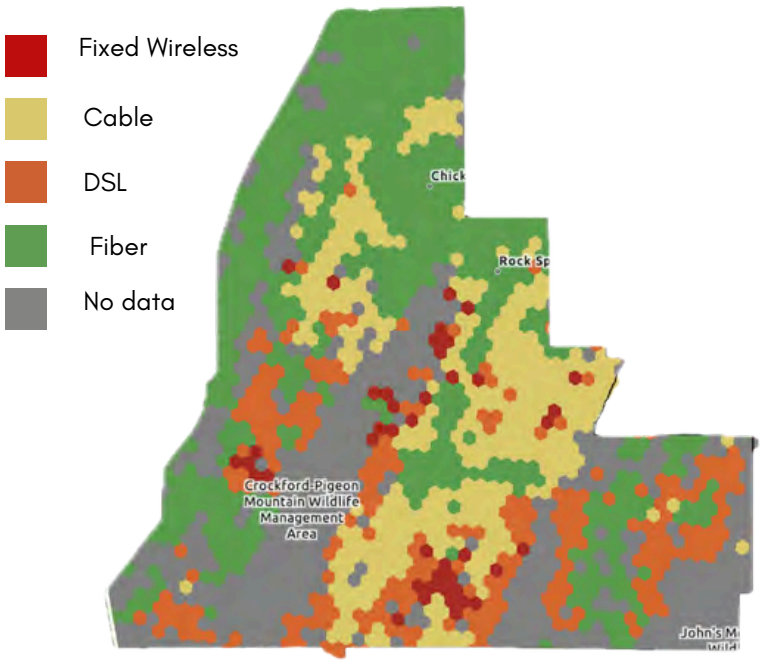


## TRUTH ON THE GROUND

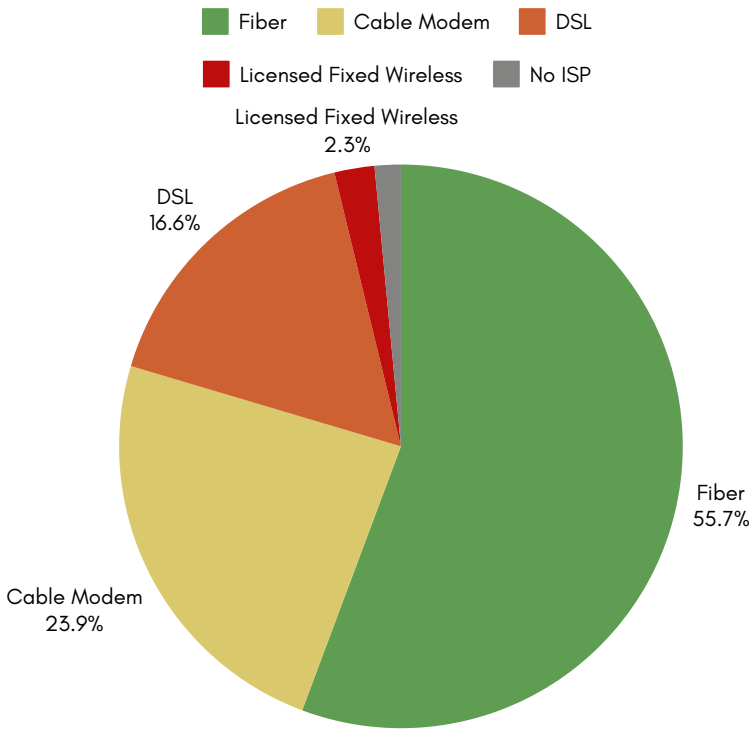
According to Broadband Deployment Data from the Federal Communications Commission, the following five technologies are currently deployed to connect Walker County residents and businesses to the internet:

- Wired Broadband: Fiber, Cable and Asymmetric DSL
- Wireless Broadband: Fixed Wireless and Satellite (not represented in pie chart or map)

### Map 11: Top Technology



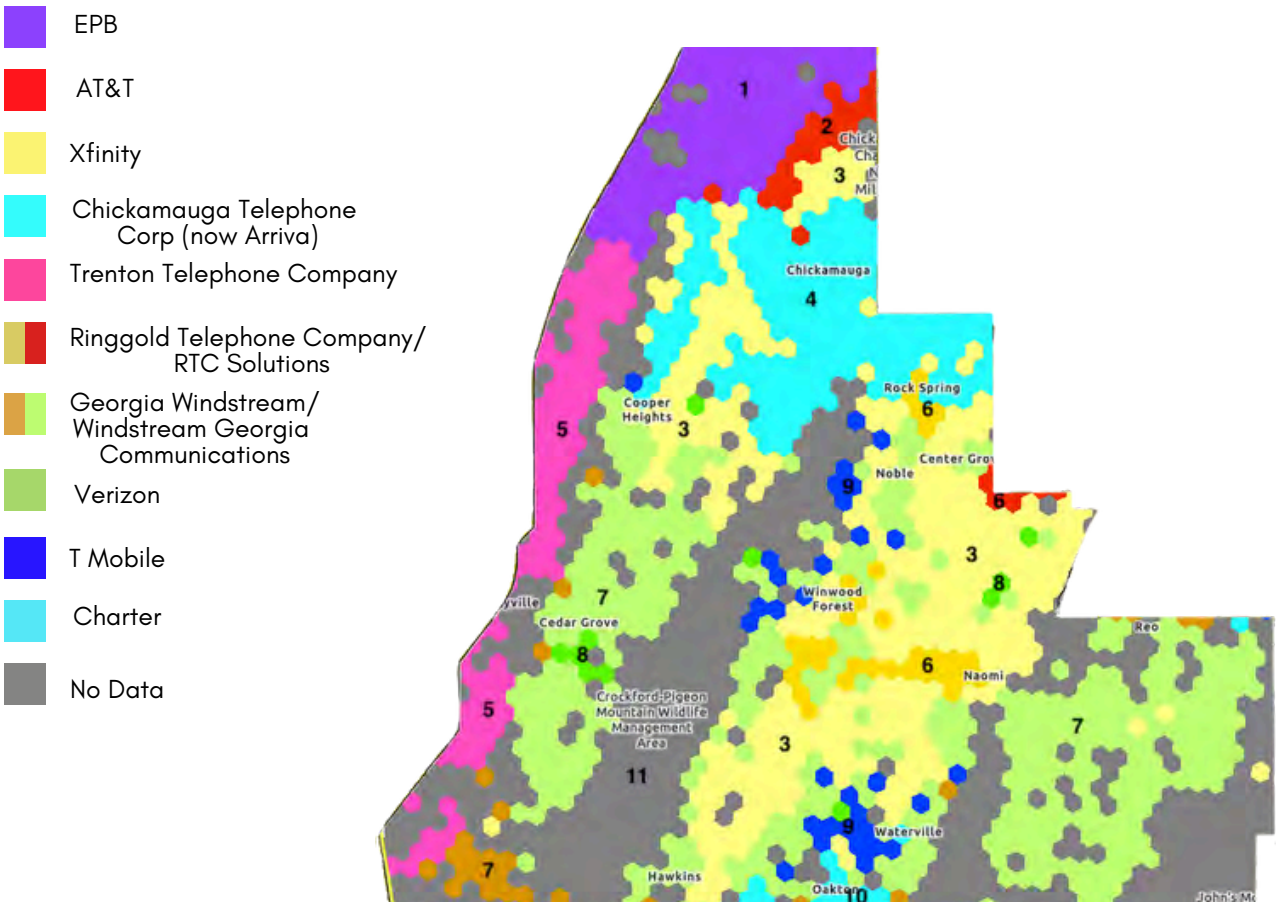

### Technology Provided by Square Miles




| Service Type | Total Census Units | Sq Mile Covered | % Sq Mile Coverage |
|---|---|---|---|
| Fiber | 21,089 | 231.32 | 55.7% |
| Cable Modem | 6,918 | 99.22 | 23.9% |
| DSL | 852 | 83.42 | 16.6% |
| Licensed Fixed Wireless | 153 | 9.48 | 2.3% |

The FCC Broadband Deployment Data identifies the following top ten internet service providers (ISPs) in Walker County with the corresponding broadband technology they are currently providing throughout the county.

### Map 12: Top ISP



These services are currently offered by ten ISPs listed below (see table in Appendix for details):

- Fiber: AT&T, Chickamauga Telephone Corp. (now operating as Arriva), EPB, Georgia Windstream, LLC, Ringgold Telephone Company, RTC Solutions, Inc, Trenton Telephone Company, and Windstream GA Communications, LLC
- DSL: Chickamauga Telephone Corp. (now operating as Arriva), Georgia Windstream, LLC, Windstream GA Communications, LLC
- Cable: Charter Communications Inc, Xfinity
- Licensed Fixed Wireless: T-Mobile US, Verizon

EPB has the largest number of census units of any one provider, accounting for over 27% of the total census units and census population. EPB is located in northern Walker County, close to its headquarters in Chattanooga, Tennessee, which enables it to extend into Walker County due to its existing service footprint. EPB performs fairly well with only a few pockets that have a lower speed test rating.

Xfinity services almost 23% of census units. Xfinity uses a cable modem and claims a speed of 1200/35 mbps. The speed test results tend to run slower. Additionally, it should be noted that they are servicing many rural areas.

AT&T uses fiber. Their advertised speed is 5000 Mbps symmetrical and speed tests show they perform fairly well.

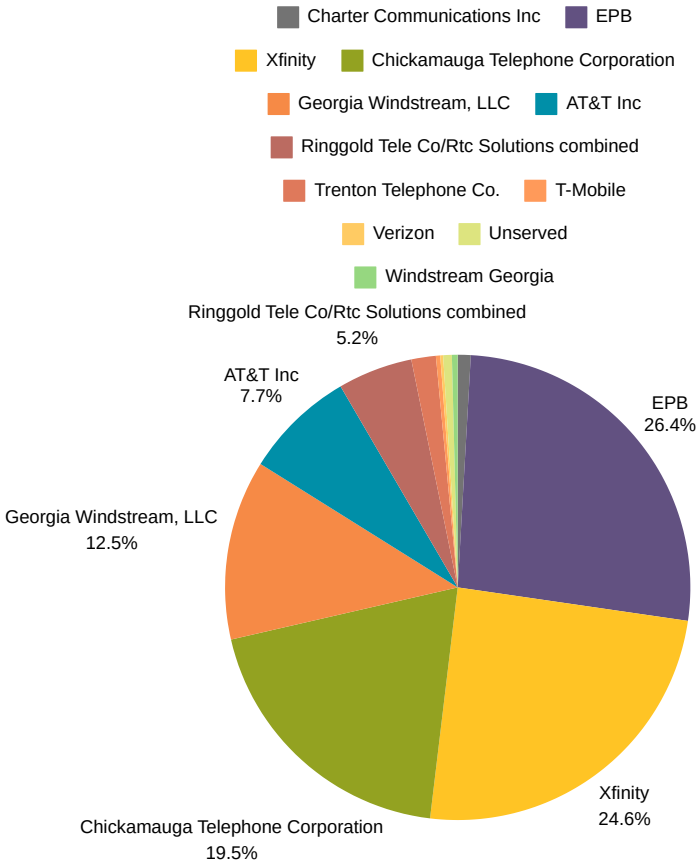
Chickamauga Telephone Corp. (now operating as Arriva) uses mostly fiber with claimed speeds of 1000 Mbps symmetrical. This company performs well in the mid to east side of their service area but tends to be slower in the west and midwest side of their area, which is closer to steeper slopes. There is one census unit with DSL.

Ringgold Telephone Co/RTC Solutions and Trenton Telephone Company both claim 1000 Mbps symmetrical with their fiber and both do reasonably well according to speed tests.

Georgia Windstream/Windstream Georgia Communications uses both DSL and Fiber, with roughly a quarter of their customers using DSL. The DSL performs poorly compared with fiber.

The top two providers account for approximately 50% of the census units and census population. While EPB and Xfinity cover more census units and populations, Georgia Windstream LLC covers more square miles than any of the other ISPs.

## Population Served by Providers



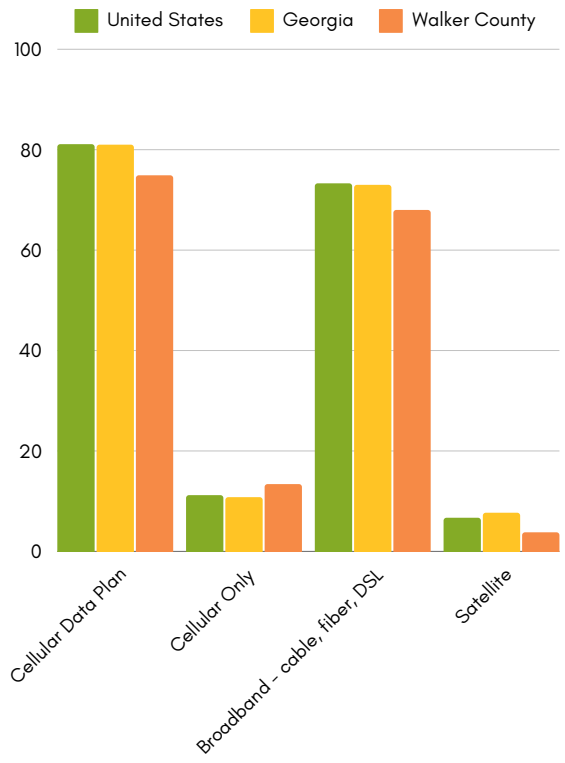

| ISP | Top Tech | Top Speed |
|---|---|---|
| AT&T Inc | Fiber | 5000 Mbps symmetrical |
| Chickamauga Telephone Corp. (now operating as Arriva) | Fiber | 1 Gig symmetrical |
| EPB | Fiber | 25000 Mbps symmetrical |
| Georgia Windstream, LLC. | Fiber | 2000 Mbps symmetrical |
| Ringgold Telephone Co/RTC SOLUTIONS, INC | Fiber | 1 Gig symmetrical |
| Trenton Telephone Co. | Fiber | 1 Gig symmetrical |
| Charter Communications Inc | Cable Modem | 1000 Mbps/35 Mbps |
| Xfinity | Cable Modem | 1200 Mbps/35 Mbps |
| Georgia Windstream, LLC. | DSL | 200 Mbps/ 52 Mbps |
| T-Mobile US | Licensed Fixed Wireless | 100 Mbps/ 20 Mbps |

## INTERNET ADOPTION

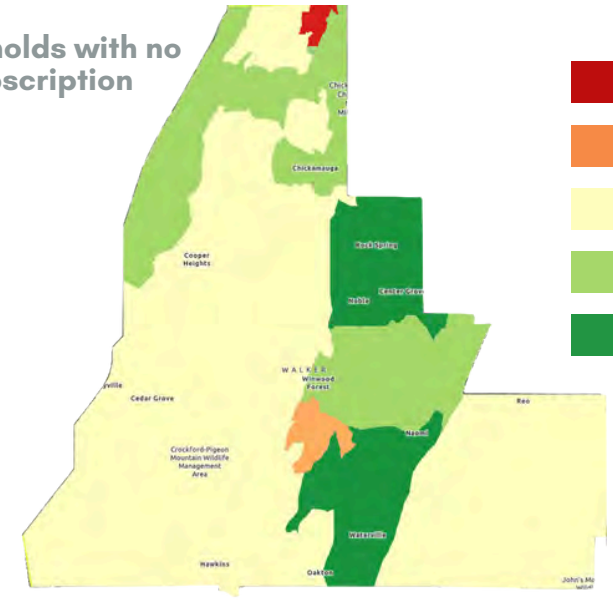
Walker County also analyzed broadband usage data from the ACS 5 year survey census data[59] specific to the community, which illustrates the overall percentage of internet adoption:

| Internet/Usage Statistic | % per Household |
|---|---|
| Number of Total Households | 26,087 |
| Households with Broadband of Any Kind (DSL, Cable, Fiber) | 83.5% |
| Households with Fixed Cellular | 74.9% |
| Households with Satellite | 3.8% |
| Households with Mobile (Cellular) Internet Only | 13.4% |
| No Internet Subscription | 16.2% |

### Internet Subscription



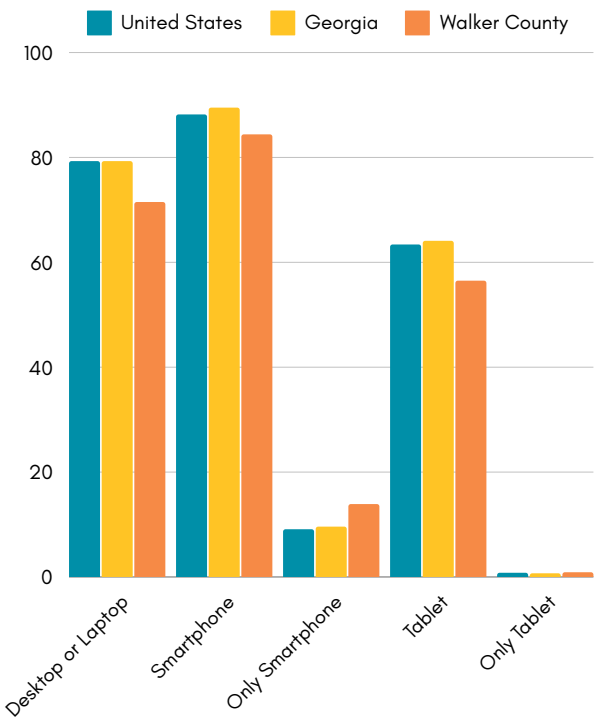

### Map 13: Households with no Internet Subscription



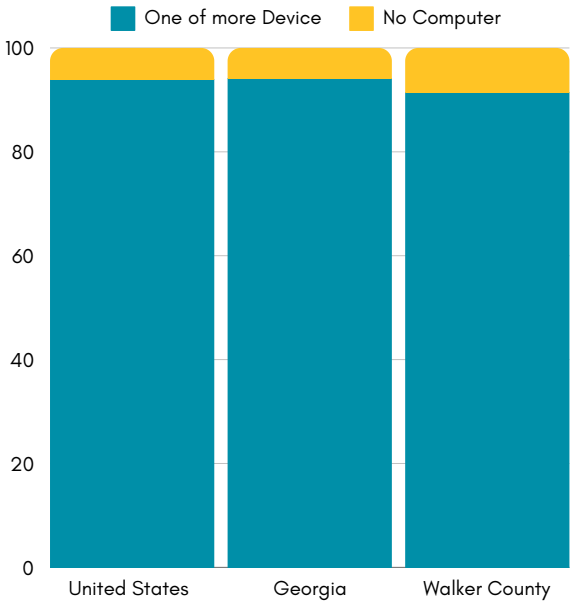

[59] U.S. Census Bureau. "Types of Computers and Internet Subscriptions." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2801, 2022

| Device Statistic | % per Household |
|---|---|
| Number of Total Households | 26,087 |
| Households with One or More Devices | 91.4% |
| Households with a Desktop or Laptop Computer | 71.5% |
| Households with a Smartphone | 84.4% |
| Households with Only a Smartphone | 13.9% |
| Households with a Tablet | 56.5% |
| Households with Only a Tablet | 0.9% |
| Households with No Computer | 8.6% |

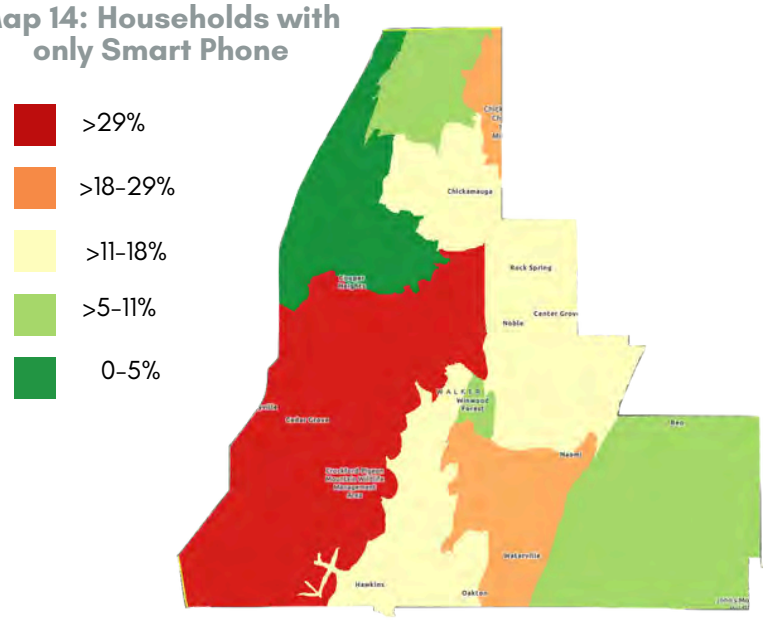
## Type of Device




## Device Ownership




## Map 14: Households with only Smart Phone

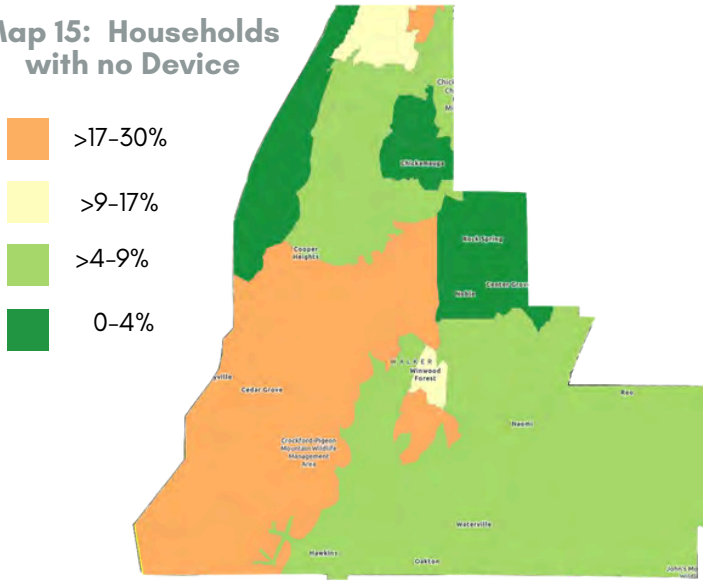


## OBSERVATIONS

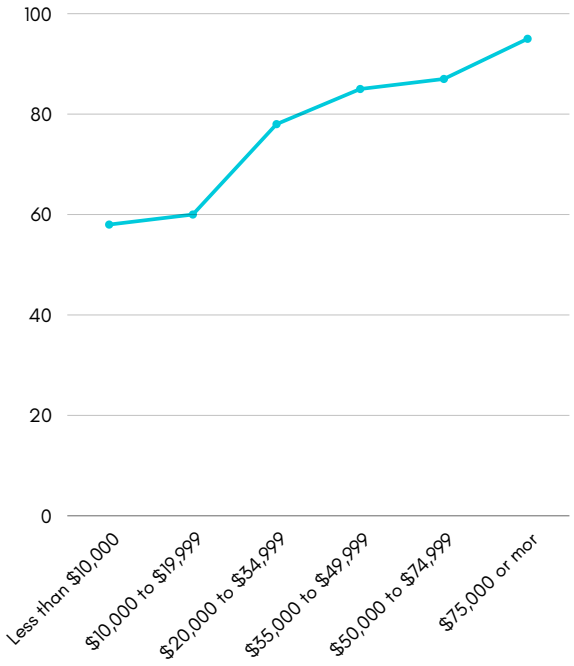
Based on the internet usage and median household income information of Walker County, the following observations can be made:

- For incomes less than $20,000 the ability to subscribe to an internet service is at risk. 40.8%[60] of those households in Walker County do not have an internet subscription, whether or not an ISP provides service in their community.
- As salary brackets increase, the percentage of households without internet subscriptions decrease, showing a direct relationship to the affordability of internet services.
- According to the Living Wage calculator, the average household monthly cost for both internet and mobile subscriptions are $172/month[61].

**Map 15: Households with no Device**




**Broadband Subscription by Household Income Level[62]**




[60] U.S. Census Bureau. "Types of Computers and Internet Subscriptions." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2801, 2022
[61] Living Wage Calculator - Walker County, GA
[62] U.S. Census Bureau. "Household Income in the Last 12 Months (in 2022 Inflation-Adjusted Dollars) by Presence and Type of Internet Subscription in Household." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B28004, 2022

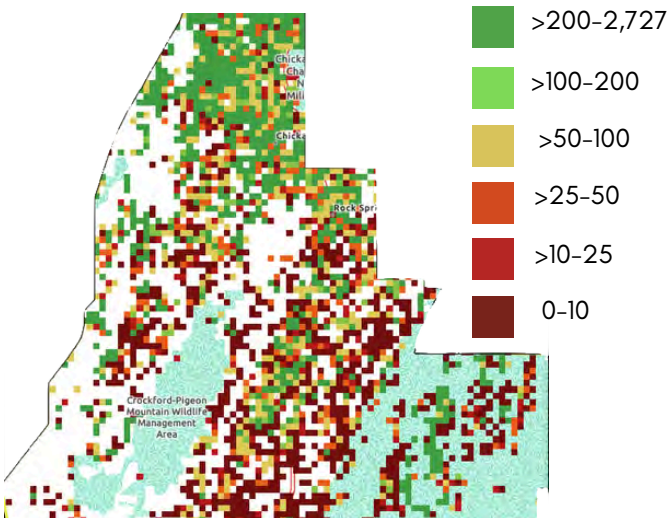
## STATEMENT OF CONNECTIVITY NEED

Walker County recognizes the importance of public access to the internet. Although the priority is to address the infrastructure needed for all of Walker County to be considered served, Walker County has undergone a public wifi initiative by implementing wifi access points in county owned buildings to include the Civic Center campus, the main courthouse, and various community centers throughout the county. Center Post Community Center is expected to have public wifi by the end of 2024. Also, a project to provide public wifi at the Rossville Community Center was recently completed and grant funding has been obtained to provide public wifi and a device charging station at Walker Rocks Park. The goal is to provide 24x7 access to free wifi at all county facilities to help address the digital divide.

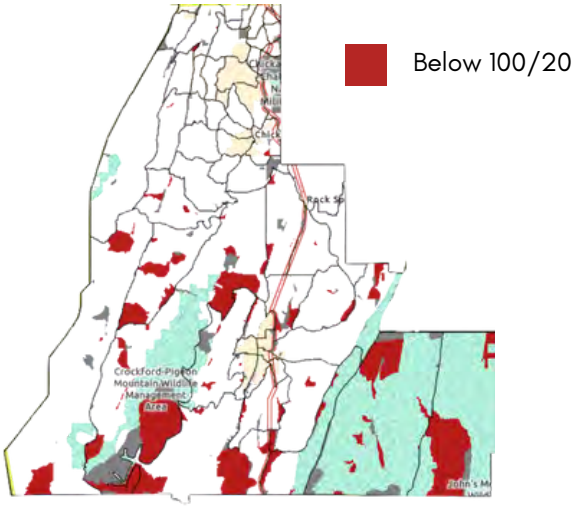
Fiber is considered the fastest, most durable, and reliable broadband technology, offering high symmetrical download and upload speeds. Symmetrical download and upload broadband speeds best provide robust, reliable, and fast service.  Speeds below 100/20 Mbps service are considered underserved; speeds below 25/3 Mbps service are considered unserved. It is of critical importance for broadband expansion projects to utilize fiber to achieve high-speed, symmetrical internet.

**The following broadband speed map is based on the FCC Broadband Deployment data representing the highest ISP-reported speed per census block. According to the FCC data the following areas are considered underserved, unserved and areas eligible for awards.**

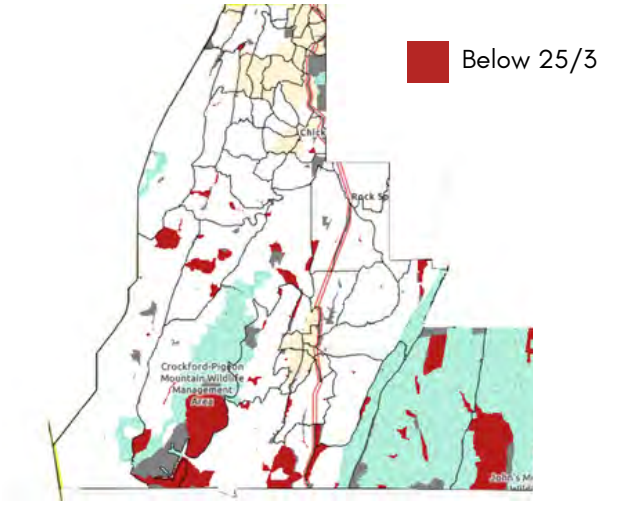
### Map 16: Ookla Speed Tests



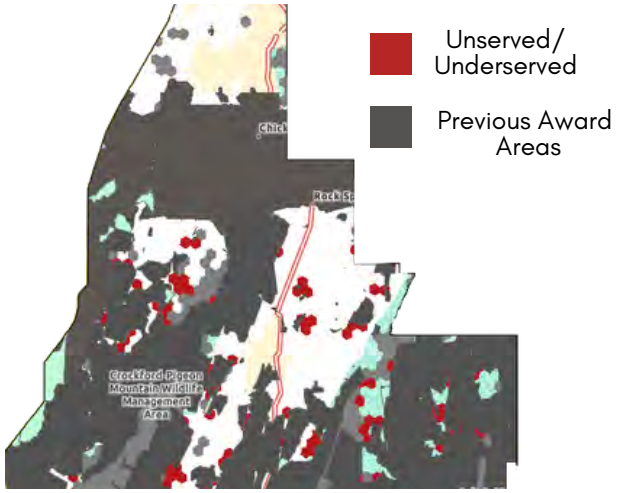

### Map 17: Underserved




### Map 18: Unserved




### Map 19: Potential Award Areas




If your cell phone
is required to conduct
necessary business,
please do so in a
quiet manner
so as not to
disturb other patrons.
Please take all other
personal phone calls
to the East or North
foyer areas

## INTRODUCTION AND VISION FOR DIGITAL EQUITY

Walker County recognizes the value of a shared vision to achieve future results of growth and development. Walker County is committed to building a strong, healthy community and acknowledges the importance of achieving Digital Equity for this to be true.

Access to high-speed internet is necessary for business, education, healthcare, emergency response, agriculture, and social connection. Walker County adopts the State's goals and strategies as defined in the State of Georgia's Digital Connectivity Plan as Walker County's vision and mission.

Digital equity is more than infrastructure for broadband access. Walker County government is a steward of this place: of the natural resources that are to be protected and enjoyed, and the infrastructure and services needed for a thriving community. As the county grows, collaboration is key to achieving digital equity while preserving natural, historic, and scenic character.


Photo Courtesy: Cherokee Regional Library System

| | |
|---|---|
| *Problem Statement* | There is a major disparity in broadband service across our community, with variable speeds ranging from unserved to underserved areas and unreliability. Internet access is no longer a luxury. It is a necessity for schools, businesses and healthcare to function in the 21st century. |
| *Vision Statement* | Our vision for a fully connected Walker County is to ensure that every resident has reliable and affordable access to the internet, along with the necessary tools and skills that unlock opportunities for educational advancement, economic success, improved health, and strengthened social ties. This will create a more connected, resilient, and prosperous community and cultivate an environment across the county where our workforce can thrive, our infrastructure can support growth, and our industries can continue to succeed. |
| *Mission Statement* | All of Walker County will have access to the following five critical elements of digital connectivity:<br>1. Access to affordable, reliable internet connectivity at home and in their community<br>2. A computing device and the opportunity to maintain it<br>3. The opportunity to learn and apply digital skills<br>4. Tools and practical knowledge for safe online engagement<br>5. Essential online government and community resources that are accessible for people of all abilities |
| *Values* | • Stewardship of the manmade and natural resources<br>• Sensitive and responsive to issues of local and community concerns<br>• Proactive in identifying and planning for emerging opportunities<br>• Supportive of public-private partnerships to enhance broadband access, affordability and equity for the betterment of the community |

## ALIGNMENT WITH EXISTING GOALS

Walker County's Digital Equity vision, mission, and values support, and are aligned with, the following existing goals from the Walker County Joint Comprehensive Plan (2022-2032)[63]:

- *Strong management of and operational infrastructure*
- *Downtown revitalization*
- *Greenspace and natural resources preservation and development*
- *Balance between residential, commercial, and industrial development*
- *Growth management*
- *Considerate stewardship of both the manmade and natural environment*
- *Quality education*
- *Community and economic development*
- *Clear county-wide vision and agreed upon goals*
- *Regional collaboration*

Additionally, Walker County's goals are aligned with the following State of Georgia Digital Connectivity Plan priorities and goals:

- *Ensure comprehensive high-speed internet accessibility*
- *Empower workforce advancement and economic growth in unserved and underserved communities and population groups through broadband expansion projects*
- *Reduce obstacles to digital connectivity and foster an environment conducive to economic growth, academic achievement, and improved healthcare outcomes*

Walker County is adopting the State of Georgia's framework to be used for achieving these goals:

- *Targeted impact on key populations*
- *Collaboration and strengthening of partnerships*
- *Build on existing achievements and collaborations*
- *Prioritize data and information gathering*
- *Smart growth and lasting impact*

For Walker County, that requires identifying barriers to digital equity for covered populations and developing broad but achievable goals. Walker County recognizes the need to design strategies that guide the implementation of these activities with measurable objectives to monitor progress. Walker County is committed to ensuring alignment with the State's priorities while still understanding the needs of the individual communities that make up this county. The digital equity barriers identified determine the goals that the county has formed and the aligned strategies and objectives to support those goals. The implementation plan is based on federal and state funding opportunities which align with these goals.

[63] Walker County Joint Comprehensive Plan

## BROADBAND INFRASTRUCTURE RELATIONSHIP

The community of Walker County relies on private ISPs to provide broadband service. Currently there is duplicity of services being provided which allows for fair market pricing. However, the duplicity of efforts often does not provide as far reaching access to the more rural segments of the county. There is a small presence of a municipally owned broadband network in the northern most point of the county. However, their ability to expand is restricted to their current electrical power footprint.

Walker County has been collaborating with Georgia Windstream, LLC to leverage their existing infrastructure, engineering experience and construction management to deploy a Fiber-to-the- Premises (FTTP) solution to 3,339 homes and businesses in rural areas. The grant funded project involves extending 323 miles of fiber throughout the Armuchee Valley, Center Post and Kensington communities, among other locations by the end of 2026. Once complete, gigabit access will extend to an estimated 87% of the unserved census blocks in Walker County.

## PLANNING PROCESS SUMMARY

Walker County's development of its Digital Equity vision, mission, goals, and values have been evolving over the years and was put into action during the 2022-2032 Walker County Joint Comprehensive Plan. During that process, it was identified that county residents believed an increase in internet speeds, as well as a lack of county-wide broadband, were areas to be addressed.

Thrive Regional Partnership coordinated with Walker County to identify and create this Digital Connectivity Plan. Walker County and any subsequent partners will be responsible for implementing the respective strategies to achieve its vision.

## COMMUNITY DIGITAL EQUITY ASSET INVENTORY

For many residents of Walker County, public wifi has been the only option for connectivity due to lack of broadband access at home. As many businesses and offices shut their doors during the COVID-19 pandemic, one community anchor institution worked to not only keep their doors open, but to extend their hours. The Cherokee Regional Library System is truly an anchor institution in a large and rural county that has relatively few community resources available. As part of Walker County's Digital Equity planning process, a Digital Equity Asset inventory was taken, consisting of the following:

- Organizations serving covered populations
  - Returning citizen programs
  - University agricultural extension programs
  - Family Resource Advocate
  - Senior Center
  - Housing Authority
- Anchor institutions
  - Government owned buildings, i.e., Civic Center
  - Libraries
  - Schools (K-12 and higher education)
- Other community assets
  - ISPs
  - Small Businesses

## ASSET INVENTORY, DATA COLLECTION, AND DISSEMINATION

To develop the Digital Equity Asset inventory, Walker County followed the steps below:

1. Consulted a variety of national and state templates for the asset inventory
2. Adapted a framework provided by Connect Humanity
3. Conducted a community survey which included a question on community resources
4. Reached out to organizations and community anchor institutions for in-depth conversations in regards to the work being done and barriers they face (see Appendix)

Throughout the Digital Equity planning process, Walker County leveraged partnerships with Thrive Regional Partnership to assist with gathering asset data and promoting awareness of the Digital Equity Community Survey and Asset inventory. The partners contributed significantly by identifying digital equity barriers for covered populations, assisting with community engagement sessions, and being actively involved with the implementation phase of the plan.

Walker County developed a comprehensive strategy for disseminating the data from the Asset inventory within the community. Methods utilized by Walker County, include, but are not limited to:

- Publishing content on Walker County Government's website
- Targeted email marketing
- Public engagement session for information sharing

A copy of Walker County's Digital Equity Asset Inventory is available in the Appendix of the Connectivity Plan with detailed descriptions of the resources, needs, and impacts of each of the community anchor institutions listed in this plan. This is not intended to be a static asset inventory. The resources listed are those which were uncovered during the research portion of writing this plan. The intent is for the asset inventory to continue to grow as a list of resources, to capture the work being done in the county, and to provide a list for potential future collaborations and partnerships. As the needs of Walker County continue to be identified, this asset inventory will help to close the gaps through resource sharing and collaboration.

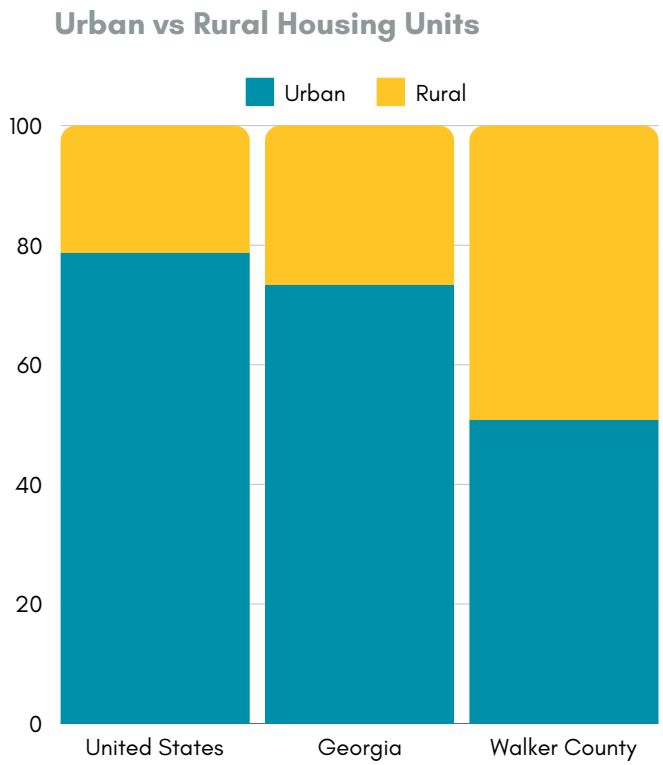
# MEANINGFUL COMMUNITY ENGAGEMENT

## IDENTIFY COVERED POPULATIONS

Based on the demographic and internet usage of Walker County, the following groups have been identified as covered populations most at risk for being impacted by the digital divide:

- Rural residents
- Low income

According to the 2020 U.S. Census Bureau "Urban and Rural" Decennial Census, DEC Demographic and Housing Characteristics, just over half of Walker County is considered a rural population, which is almost two times that of Georgia, and roughly half of the housing units as displayed in the following graph[64].




[64] U.S. Census Bureau. "URBAN AND RURAL." Decennial Census, DEC Demographic and Housing Characteristics, Table H2, 2020

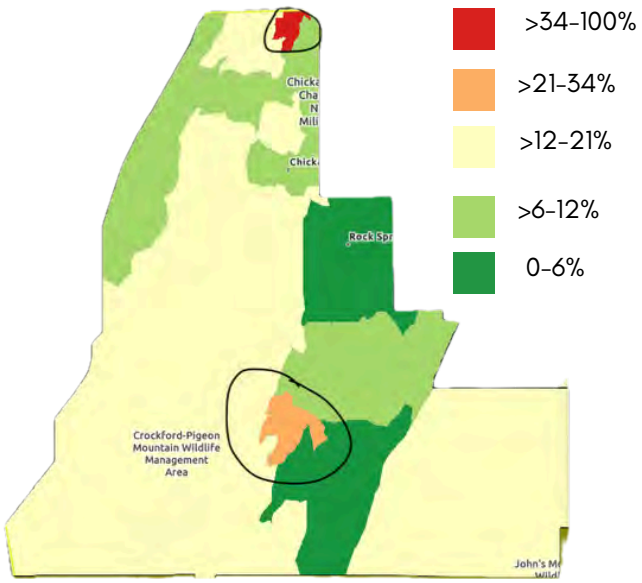
## AFFORDABILITY

A table with a sample of plans available in Walker County from the top ten internet service providers is included in the Appendix.

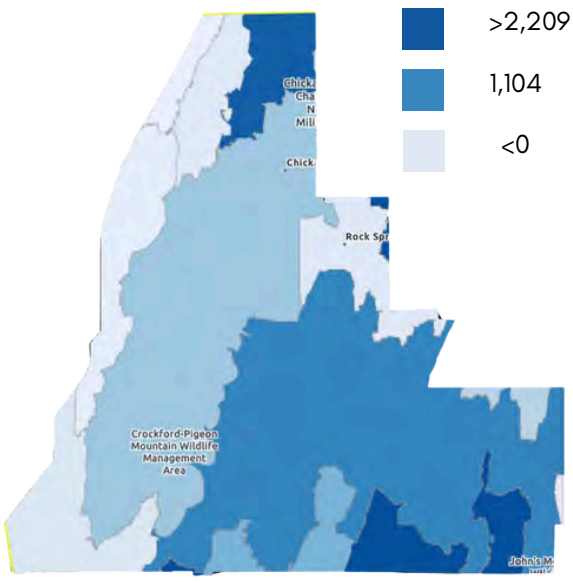
When looking at the households below the poverty line and that have no internet, two areas in the map below show more concern. The red area in the upper section is Rossville. EPB services this urban area and speed tests appear good. The assumption is this is a problem of affordability rather than lack of connectivity. This area is located in a Qualified Opportunity Zone.

The second area (orange) is in proximity to LaFayette. Since they are near a higher population area, there are providers servicing the area. Again lack of service is assumed to be due to affordability for this census tract rather than availability. Comparing the internet subscription map with the following ACP Enrollment, the Rossville area also had high household enrollment in the now defunct Affordable Connectivity Program (ACP) (darker blue) while LaFayette also utilized ACP but at a lower level, indicating a need for assistance in affording broadband service.

### Map 20: Households with no Internet




### Map 21: Affordable Connectivity Program Enrollment (Count)



## STAKEHOLDER ENGAGEMENT AND COLLABORATION

As part of an inclusive Digital Equity planning process, Walker County understands that it must work collaboratively and partner with community anchor institutions to ensure identified covered populations in the community are engaged, during both the planning and implementation phases, to achieve equitable internet for all.

Presently, Walker County is not monitoring the following meaningful data within the community:

- Internet adoption data
- Unserved/Underserved areas
- Internet speeds (download and upload)
- Type of broadband service
- Reliability or affordability of service

In order to continue to enhance digital services in the future, Walker County will have to build the capacity to utilize participation, feedback, and data from each of the covered populations to measure efficacy and progress toward meeting digital equity and complement overall State Digital Equity goals.


American Rescue Plan Act Grant Announcement
Photo Courtesy: Walker County Government

| Community Resource | Organization Description | Covered Populations Served |
|---|---|---|
| **Cherokee Regional Library System** | "All things to all people" - each community is a little different and the libraries vary a little in response to the interests and needs of those communities. People come to the library because there is a person there who can help. | Low Income, Aging, Incarcerated, Veterans, Disabled, Language Barriers, Racial/Ethnic Minorities Rural |
| **Walker County School System** | 8,500 students in 15 schools | Low Income, Disabled, Language Barriers, Racial/Ethnic Minorities Rural |
| **North Georgia Technical College** | Largest college in northwest Georgia with a campus in Walker County | Low Income, Veterans, Disabled Language Barriers, Racial/Ethnic Minorities, Rural |
| **North Georgia Community YMCA** | Strong partner with schools providing meals for kids on weekends and 2 star quality rated after school program | Low Income, Language Barriers, Racial/Ethnic Minorities, Rural |
| **Walker Family Connect** | Bringing community partners together to develop, implement, and evaluate plans that address the serious challenges facing children and families | Low Income, Disabilities, Language Barriers, Racial/Ethnic Minorities, Rural |
| **North Georgia Community Action - LaFayette Senior Center** | Facility that has guest speakers who address cybersecurity and scams. Awareness campaigns. | Low income, Aging, Disabilities, Rural |
| **LaFayette Housing Authority** | Housing assistance for low income residents who are primarily disabled and aging | Low Income, Aging, Veterans |

Community Engagement and Feedback Session at Walker County Civic Center
Photo Courtesy: Walker County Government

## CREATE OUTREACH AND ENGAGEMENT PLAN

Walker County understands that it must utilize a variety of outreach strategies and methods to facilitate participation and engagement from the community's Digital Equity planning and implementation. Walker County values the feedback, engagement, support and buy-in from the community, to include partners who represent the covered populations that are most impacted by the digital divide.

As part of Walker County's Digital Equity planning process, the following potential Outreach and Engagement Plan has been developed for future continued work.

| Component | Description | Key Activities | Status | Future Action |
|---|---|---|---|---|
| **Needs Assessment** | Assess the digital equity needs of the target communities | Conduct surveys | Completed | Annual updates |
| **Stakeholder Mapping** | Identify key stakeholders and partners for collaboration. | Identify local nonprofits, government agencies, and community organizations involved in digital equity and engage in discussions. | Completed | Annual updates |
| **Community Engagement** | Engage with the community to understand specific challenges and needs. | Host community meetings to gather input. | Completed | Continual engagement needed |
| **Private Sector Engagement** | Collaborate with businesses for support and partnership | Reach out to local companies for sponsorship and support; Organize corporate volunteer programs. | Future Action | |
| **Progress Monitoring** | Continuously track and evaluate progress. | Collect data on key performance indicators; Adjust strategies based on results. | Future Action | |
| **Community Outreach Events** | Host community events to promote digital equity. | Organize digital fairs, workshops, and awareness campaigns. | Future Action | |

## CONDUCT COMMUNITY SURVEY

Walker County developed a Digital Equity Community Survey to seek direct feedback from county residents to capture needs, unique challenges, and recommended engagement strategies to increase broadband access and adoption. The Community Survey was distributed in person at a community engagement session along with a page built on the county website for further feedback.

"***I moved from the northern part of the county and paid roughly $100/1GB for EPB and now spend $150/month and need two different providers to have bad internet and it is still not enough for three adults living in the same household to have reliable internet. I face issues getting work done at home. I feel like I moved to a third world county***". - Walker County resident

To conduct the Digital Equity Community Survey, Walker County utilized the Community Engagement Session to both disseminate information in regards to the work being done by the county, as well as to listen to the community's challenges in regards to broadband access. The survey was handed out during the meeting and was posted on the county website on June 17, 2024. The survey ended September 17th, 2024. Collectively, the Digital Equity Community Survey reached 31 respondents/participants. We acknowledge that a more targeted effort of covered populations and further engagement sessions with the community may have increased respondents/participants.

**The Digital Equity Community Survey consisted of the following questions:**

**Section 1: Demographics**

Name:
Email:
Area where you reside:

**Section 2: Digital Opportunity**

1. Why do you think it is important for your community to be digitally connected?
2. What barriers do you currently face in being digitally connected?
3. When you can access the Internet, do you feel confident that you have the skills necessary to use it?
4. What do you see already happening in the community that is helping to provide digital connection?
5. Where in the community do you prefer to use resources, go for help in regards to skills training, or for digital access such as free public wifi?
6. What have been the challenges accessing existing resources? Are there specific suggestions on making them more accessible?
7. What would you like to see prioritized in our Walker County Connectivity Plan?

**Section 3: Speed Test Data**

Download Speed:
Upload Speed:

**Section 4: Additional Comments**

(Open-ended response)

## COMMUNITY SURVEY RESPONSES

"***The community is being forced to be digital without the actual accommodations to do so. There is a huge knowledge gap and with constant changes it leaves the community farther behind. Services that can make things easier make things harder when the connections aren't available or working correctly.***" - resident of LaFayette

When asked "why residents think it is important for their community to be digitally connected", responses spoke to the world increasingly operating online and the requirements to be connected. Whether it is for a small business out of one's home or working remotely, for emergency responses, education, inability to access resources if not online. The overwhelming majority of responses spoke to everything being online and the requirements for every aspect of life.

When asked "what barriers residents currently face in being digitally connected", the majority spoke to the cost and affordability of the internet as compared to the service received (whether unreliable or too slow). Additional responses included lack of infrastructure in the area, lack of choice of ISP, and infrastructure vulnerabilities.

"***Although I can afford the costs for being digitally connected today, the costs have increased significantly the last 2 to 3 years. I am retired and live on a fixed income***." - resident of Chickamauga

28 out of 31 survey respondents answered yes (or in the affirmative) to the question: "when you can access the Internet, do you feel confident that you have the skills necessary to use it"; two answered they have digital skills that they need help learning and one did not comment. We acknowledge that these answers were submitted online so that the respondent had to have had the digital skills necessary to complete the survey and that this question is not representative of the current digital skill assessment of Walker County. The original survey was created for in person engagement and the questions were compiled with that in mind.

When asked "Where in the community do you prefer to use resources, go for help in regards to skills training, or for digital access such as free public wifi?", the library was mentioned the most and was the only place frequently mentioned, with 14 responses. Eight respondents said they do not access public wifi or they only use wifi at home. Three respondents said they use the internet at work. Of the following responses, each one was mentioned once: Walmart, McDonalds, government buildings, coffee shops, church, community centers, go to a neighboring county to access or through local businesses. Two respondents said they did not know and two did not answer. The survey responses were evidence of the importance of the Cherokee Regional Library Systems as a community anchor institution as the most frequented and trusted source for public wifi in Walker County.

Suggestions to the question “What have been the challenges accessing existing resources? Are there specific suggestions on making them more accessible?” included:

- Secure public access to the internet
- Having enough spots to connect everyone
- Public wifi in parks
- Resources in the southern part of the county
- More choice

Responses to the questions “What would you like to see prioritized in our Walker County Connectivity Plan?” included:

- Remote locations prioritized
- More options amongst ISP’s
- Fiber
- Stable internet connection
- Low cost options for internet (affordability in general was mentioned frequently)
- Resilient infrastructure
- Connecting all addresses to broadband

In general, the Digital Equity Community Survey responses indicated the following themes and trends:

- Need for ISP accountability and transparency
- More affordability and competition in options
- Lack of necessary infrastructure for access to broadband
- Service does not mean reliability and adequate speeds
- Safety issues related to no access

In regards to internet service provider transparency, residents of Walker County want to know where the award money has been spent and want updates on the broadband infrastructure expansion; where has service been extended to through the funding provided by the award. During the August 26, 2024 engagement session, Walker County invited Windstream Georgia to participate and share an update on the progress that has been made thus far in the fiber buildout. As of August 26, 2024, 70% of the locations had fiber access. The current estimation is the project will be completed by the end of 2024 or beginning of 2025. One of the largest barriers to completion has been the delay in permitting as Windstream is required to receive permitting from different sectors to include Georgia Department of Transportation, pole owners, US Forest Service, etc. Additionally, Windstream spoke to the need for increased labor force to meet the buildout demands. The volume of the work being done needs to be streamlined. Further communication of both the project status and how residents can enroll in service is needed.

Although the community engagement session held on June 17, 2024 did not result in any completed surveys, feedback was collected through an interactive exercise. Walker County adjusted the questions slightly during the session. The information gathered was in line with the submitted survey responses with the addition of noting that multiple people use their cell phone as a hotspot and also use the library as a resource to check out hotspots. Additionally, many people commented that they would like to know if their address is eligible for fiber and if so when. The residents that attended the engagement session shared their individual frustrations and issues with the current service that they have/do not have.

- One man who operates his business out of his home spoke of not having enough speed to send an email with an attachment.
- One resident spoke of living at the south end of the county and cannot even get cell service. Their internet is in and out and not dependable.
- A Center Post resident spoke of their community center not having cell or internet service and the safety concern that it is having to drive five minutes up the road just to get a cell signal.
- A man from the High Point community shared his struggles of subscribing to DSL for $79/month for only 2 Mbps and having to get up late at night to use the internet to do his banking.
- A man from Rossville shared he has service from EPB and uses a VPN and gets good service and has nothing to complain about, yet his concern is about accountability.
- Another High Point community member spoke of accountability and wanting to know where money is going from the grant awards previously given.

## CARRY-OUT COMMUNITY ENGAGEMENT ACTIVITIES

In addition to the Digital Equity Community Survey, Walker County engaged and will continue to engage the local community to obtain feedback and encourage participation in the digital equity plan development process.

| Community Engagement Activities for Digital Equity | Description | Objective/ Outcome | Date/ Time | Location/ Venue | Resources Needed |
|---|---|---|---|---|---|
| **Community Meeting** | Held a town hall-style meeting | Shared information on internet access | June 17, 2024 and August 26, 2024 | Rock Spring, GA | Handouts with information on broadband access and digital equity |
| **Stakeholder Roundtable** | Convene key stakeholders | Discuss strategies and partnerships | Future Potential | | |
| **Public Awareness Campaign** | Launch a digital equity program campaign | Raise awareness and promote | Future Potential | | |

## AGGREGATE COMMUNITY ENGAGEMENT FINDINGS

The following key findings and observations resulted from the community engagement process:

- Collaboration across sectors is key for building relevant and meaningful impact
- This work cannot be done by just one agency
- Walker County as a community wants to partner in this and believes in the potential

## UNDERSTANDING BARRIERS TO DIGITAL EQUITY

| ***Covered Population*** | ***Description*** |
|---|---|
| *Individuals who live in low income* | Even if infrastructure is accessible, affordability is a barrier to internet subscription. Often those who live in low income do not have the ability to access resources as easily and face more barriers than other income brackets. Individuals are faced with compromises between device or access and other necessities. |
| *Aging individuals* | Digital skills and cybersecurity training are needed in an increasingly online age to provide access to telehealth and additional benefit services in a predominantly rural area with no hospital. As individuals age and mobility decreases, the ability to connect is of increased importance. |
| *Veterans* | Services and benefits are increasingly only available online |
| *Individuals with disabilities* | Adaptive technology resources are needed to bridge gaps to meet individual needs |
| *Individuals with a language barrier* | Access to online resources and services in languages other than English to enable easier navigation and equity in resource accessibility |
| *Individuals who are English learners* | *Online educational tools and courses for assistance with learning English as well as providing access to resources in other languages* |
| *Those with low levels of literacy* | *Additional online educational resources which can improve educational outcomes and opportunities as well as provide access to increased job opportunities* |
| *Individuals who are members of a racial or ethnic minority group* | *Social ties and connection with family and friends in a county with very few minority groups* |
| *Individuals who primarily reside in a rural area* | *No service or unreliable service combined with high pricing limit options for those in rural areas to participate in small businesses, remote work, and e-commerce.* |

**Walker County's Digital Equity planning process has contributed to its understanding of unique barriers to achieving digital equity across a wide range of covered populations.**

As a rural agricultural community, connectivity is key to continue to maintain thriving businesses and the cultural heritage of Walker County. Wade Hutchinson, from the UGA Extension office in Walker County, when asked how connectivity was used within agricultural communities, shared examples unique to agriculture from his conversations with local farmers:

- Cattle management software utilizes cloud data and storage
- Poultry houses are highly technical and send data such as the environmental conditions, water and feed line service needs or failure alerts
- The ability to work from home and manage the farm without having to split time and attention

Alan Painter, a local beekeeper, also shared how he uses technology to maintain his hives. He has implemented AI software which, similar to poultry farming, enables him to receive alerts and to monitor the health of his hives. Additionally, it is helping him to train the next generation beekeeper to understand and assess the vitality of his hives without the years of knowledge he has gained. Currently, due to lack of available service, Painter relies on cell phone data for monitoring his bees which continues to max out and does not provide the coverage he needs.

# DEVELOPING IMPLEMENTATION STRATEGIES

## EXISTING PROGRAMS

Based on the unique barriers to achieving Digital Equity identified in the previous section, Walker County identified the following existing programs that address the respective needs/barriers of the applicable covered populations. Many programs target and address multiple covered populations. We acknowledge this is not a comprehensive list of the work and resources in Walker County. This is a starting place of capturing work being done and will need to continue to be developed and evolved. More information is included in the Appendix.

Walker County is a primarily rural county and resources are largely isolated to the cities of Chickamauga, LaFayette, Rossville and Fort Oglethorpe. For those without transportation or in rural areas, resources are limited. The library system is the primary community anchor institution currently addressing the digital divide across all segments of the population. Many of the organizations at work are connected through the school system to the families in need of help. Yet, for those without children in school, it is harder to identify needs and where resources could provide opportunities for closing gaps.

| Community Resource | Organization Description | Types of Services |
|---|---|---|
| **Cedar Grove Community Center** | Services are free and open to the public. The center provides a space and place for people to connect with each other | Wifi Connectivity |
| **Cherokee Regional Library System** | All things to all people; the library serves people where they are. | Device Access, Wifi Connectivity, Hot Spot Lending, Device Lending, Cybersecurity Training, Support Resources |
| **LaFayette Housing Authority** | Housing assistance for low income residents who are primarily disabled and aging. | Cybersecurity Training, Support Resources |
| **North Georgia Community YMCA** | Strong partner with schools and 2-star quality rated after school program | Device Access, Support Resources |
| **Northwest Georgia Technical College** | Largest college in Northwest Georgia with a campus in Walker County | Wifi, Digital Skills Training, Device Lending |
| **North Georgia Community Action - LaFayette Senior Center** | Facility with guest speakers who address cybersecurity and scams; Awareness campaigns. | Cybersecurity Training |
| **Walker County School System** | 8,500 students across 15 schools in the county. | Device Access, Wifi, Digital Skills Training, Device Lending, Cybersecurity Training, Adaptive Technology, Support Resources |
| **Walker Family Connect** | Bringing community partners together | Support Resources |

## NEW PROGRAMS/RESOURCES

In addition to the existing programs detailed above, Walker County identified areas where new digital inclusion resources and programs must be funded, developed, and implemented to meet the needs of the respective covered populations and to align with the State of Georgia goals and strategies as seen on pages 24-29 of this plan. These are potential programs that could be implemented, should funding be made available.

| Community Resource | Potential for New Program or Resource Description | Types of Services |
|---|---|---|
| **Center Post Community Center** | Community space for public internet access | Wifi Connectivity |
| **Cedar Grove Community Center** | Community space for teaching digital skills | Digital Skills Training, Cybersecurity Training |
| **Cherokee Regional Library System** | Expand programs currently offered through increased funding | Hot Spot Lending, Digital Skills Training, Digital Navigator Program, Cybersecurity Training, Adaptive Technology |
| **LaFayette Housing Authority** | Community space for hosting computer classes, as well as increasing support which could include multiple resources | Device Access, Wifi Connectivity, Digital Skills Training, Digital Navigator Program, Cybersecurity Training, Adaptive Technology |
| **North Georgia Technical College** | Largest college in northwest Georgia with a campus in Walker County | Digital Navigator Program, Cybersecurity Training, Adaptive Technology, Support Resources |
| **North Georgia Community YMCA** | Partner for community engagement | Digital Skills Training, Digital Navigator Program, Cybersecurity Training, Adaptive Technology |
| **North Georgia Community Action - LaFayette Senior Center** | Facility that has guest speakers who address cybersecurity and scams | Device Access, Wifi Connectivity, Digital Skills Training, Digital Navigator Program, Adaptive Technology |

| Community Resource | Potential for New Program or Resource Description | Types of Services |
|---|---|---|
| **Tech Goes Home** | "Learn to earn" train-the-trainer model for digital skills training curriculum | Device Access, Wifi Connectivity, Digital Skills Training, Digital Navigator Program, Support Resources |
| **Walker County School System** | 8,500 students in 15 schools | Hot Spot Lending, Cybersecurity Training, Digital Navigtaor Programs |
| **Walker Family Connect** | Bringing community partners together to develop, implement, and evaluate plans that address the serious challenges facing children and families | Device Access, Hot Spot Lending, Digital Navigator Program |

## COUNTY SERVICE AREA GIS

Walker County requires an up to date and accurate assessment of the current broadband resources to enable the exploration of broadband delivery methods and identify strategies for increasing broadband resources in the county. Through the development of Walker County's Connectivity Plan, the collection of internet service coverage data for the county, includes at the minimum: a list of the Internet Service Providers (also referred to as ISP) in Walker County, as well as those operating just outside of county lines; maps of ISP coverage; upload and download speeds for ISPs to include advertised and actual; type of infrastructure/technology used by each ISP in Walker County; an assessment of geographic areas and communities considered unserved and underserved as defined by the State of Georgia (including natural and demographic indicators). The data collected is for the purpose of determining areas of service gaps and inequality. The results of this plan will assist in making future recommendations as to where infrastructure investments should be made and for targeting funding opportunities to address the identified needs.

| ISP | Tech | Surrounding Counties |
|---|---|---|
| AT&T Inc | DSL | Whitfield, Dade, Murray |
| Chickamauga Telephone Corp. (now operating as Arriva) | Fiber | Catoosa |
| EPB | Fiber | Catoosa and Dade |
| Georgia Windstream/ Windstream Georgia Communications | Fiber | Chattooga, Murray, Whitfield |
| Ringgold Telephone Co/RTC SOLUTIONS, INC | Fiber | Catoosa |
| Trenton Telephone Co. | Fiber | Dade |
| Xfinitiy | Cable Modem | Catoosa, Chattooga, Dade |
| Charter Communications | Cable Modem | Catoosa, Chattooga, Dade, Floyd, Gordon, Murray, and Whitfield |
| T-Mobile | Fixed Wireless | Catoosa, Chattooga, Dade, Floyd, Gordon, Murray, and Whitfield |
| Verizon | Fixed Wireless | Catoosa, Chattooga, Dade, Floyd, Gordon, Whitfield |

Geographically, Walker County is located mostly in the Valley and Ridge province of Georgia, which is characterized by flat ridges and fertile valleys. These soils are what have defined Walker County's identity and have made it rich in agricultural history. These valleys' limestone aquifer system provides water for Walker County, and which also is what has attracted industries in addition to the coal deposits located in a small portion of the northwest corner of the county located within the Appalachian Plateau. Today, the Plateau's unique rock formation and natural vistas remain a pride and attraction for Walker County and draw tourism to the area.

Infrastructure networks must be developed to steer new development away from sensitive natural resource areas and protect what has defined Walker County. Walker County must make efficient use of existing infrastructure and public facilities to minimize the need for costly new/expanded facilities and services and to ensure the greatest impact to the unserved and underserved areas of the county. In those locations in which existing infrastructure is in good, structural condition we will encourage use of existing infrastructure, so as to minimize cost. Utilities and services expansion are being phased, so to encourage new development to be contiguous with already present development and broadband expansion should mirror and follow alongside to ensure adequate coverage for new development.

The following GIS mapping assets and data points were obtained, analyzed, and utilized to diagnose the current state of broadband infrastructure and service in Walker County:

- Base map of county to include boundaries, subdivisions, parcels and street centerlines
- To the extent available, maps of existing infrastructure including water, sewer and conduits
- To the extent known to the public or from providers willing to share, existing fiber infrastructure in the Community
- To the extent known, already-funded broadband expansion projects in the community
- To the extent available, address-level speedtest ratings
- Vertical infrastructure, such as towers, water towers, tall buildings/rooftops
  - In some rural areas, this could include grain silos, some larger barn rooftops or other privately owned structures
- Address list for all homes and businesses
- Planned/phased broadband expansion routes
- Rights-of-way and easements
- Broadband Serviceable Location Fabric data points from the FCC

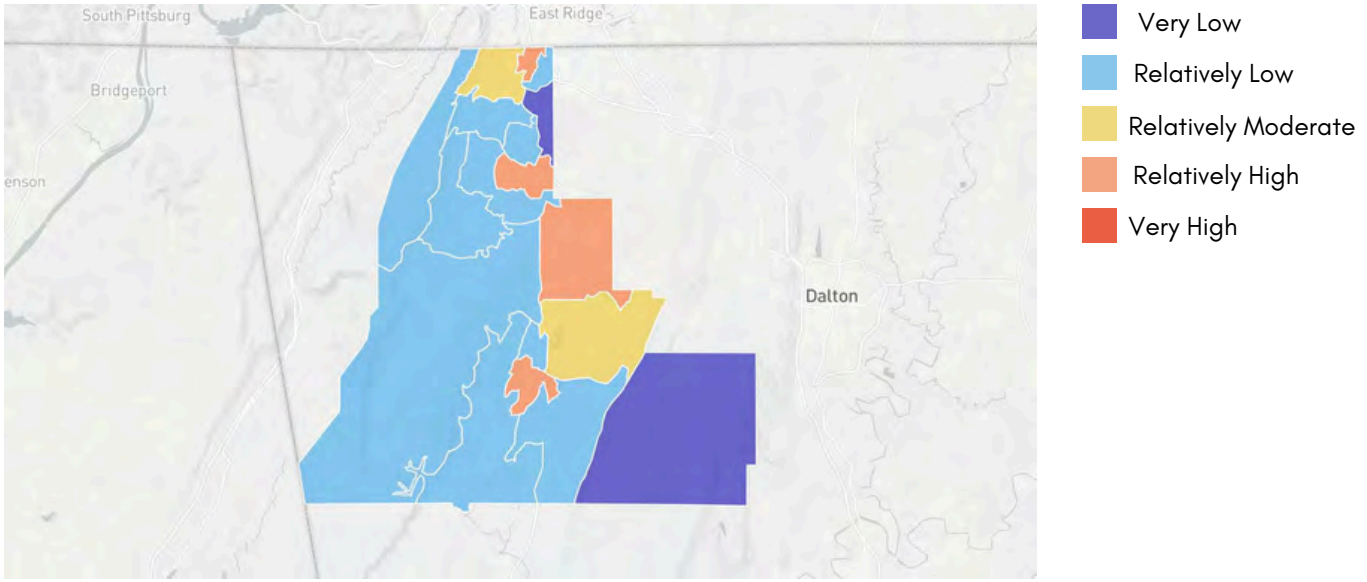
## ENVIRONMENTAL, HISTORICAL, AND CULTURAL PRESERVATION REQUIREMENTS

Walker County understands it is critical for potential broadband infrastructure partners to comply with environmental, historical, and cultural preservation requirements when federal funding is being utilized to deploy broadband network infrastructure. Before the commencement of any new construction activities, all applicable environmental screening must be completed, including those outlined in the National Environmental Policy Act (NEPA), the National Historic Preservation Act, the Endangered Species Act, and other applicable environmental regulations.

Essential for connecting residents and driving local economic growth, broadband networks are also vulnerable to damage from extreme weather events, such as wildfires, heatwaves, floods, and tornadoes, which can disrupt services and impede emergency response efforts. As communities plan for, and work alongside ISP partners, to build out long-term broadband infrastructure – expected to last 20 years or more – it is crucial to address not only current environmental risks but also the anticipated impacts of climate change, including the increased frequency and severity of extreme weather events. It is crucial to incorporate resilience strategies to safeguard connectivity in the face of these challenges.

According to the Center for Rural Innovation's Broadband Climate Risk Mitigation Tool[65], Walker County's overall hazard risk percentile is Relatively High (62/100). The top four primary natural hazards identified across the county include tornadoes, earthquakes, lightning, and riverine flooding – all falling at or above the 79th percentile. The full Broadband Climate Risk Mitigation Report can be found in the Appendix of this plan.

### MAP 22: TRACT HAZARD RISK SCORE MAP




[65] Broadband Climate Risk Mitigation Tool

As noted in the Tract Hazard Risk Score Map (from the preceding page), four census tracts rise above the rest when assessing the average economic loss for a community in dollars resulting from natural hazards each year. These four tracts encompass the areas of Rossville, Rock Spring, Chickamauga, and LaFayette.

Acknowledgment of the impact of natural hazards on infrastructure also appears in Walker County's latest Joint Comprehensive Plan (2022-2032). "Chickamauga's greatest need now is the replacement of its aging infrastructure; specifically, the repairs and replacements needed are for sidewalks and sewer. Special attention should be devoted to stormwater, as a large portion of the city is within a floodplain."[66]

There are a variety of mitigation strategies that should be considered as local internet service providers seek to complete their networks and connect all unserved and underserved areas of the county.

[66] Walker County's Joint Comprehensive Plan

## CLIMATE RISK MITIGATION STRATEGIES

### INITIAL HAZARD SCREENING AND POTENTIAL DAMAGE

**Aerial:** Structure stress, structural failure, fire damage, electrical short-circuit conditions, grid power failure, equipment damage

**Buried:** Structure stress, structural failure, electrical surge or short-circuit, grid power failure, equipment damage

**Wireless:** Structure stress, structural failure, service disruption, fire damage, electrical surge or short-circuit conditions, grid power failure, equipment damage

### AERIAL MITIGATION STRATEGIES

**Flood Protection:** Avoid constructing infrastructure in flood-prone areas where feasible, and ensure proper drainage systems around poles or other components. Use Uninterrupted Power Supply (UPS) systems for backup power and generators for larger installations to maintain service during weather disruptions.

**Wind and Structural Resilience:** Use equipment rated for significant wind stress, such as composite or steel poles, and heavy-duty cable brackets where appropriate. Clear tree limbs and vulnerable structures from critical infrastructure. Whenever possible, bury cables to avoid damage from high winds. Harden essential network facilities, like hubs or central offices, to withstand destructive winds.

**Lightning and Surge Protection:** Install lightning arrestors, grounding wires, and surge protectors to safely manage energy from strikes and voltage surges. Ensure cables include a properly rated grounding conductor to prevent damage from electrical storms.

**Ice and Snow Load**: Use materials designed to handle the added weight of ice accumulation, and adhere to National Electrical Safety Code (NESC) standards for clearance around transmission lines. Regularly clear tree limbs from nearby infrastructure to prevent ice-related damage. Backup power systems, including UPS and generators, are critical during severe winter events.

**Earthquake Preparedness**: In earthquake-prone areas, use materials and installation techniques that provide flexibility and durability to withstand seismic activity. Backup power should be ensured in all essential network facilities.

### BURIED MITIGATION STRATEGIES

**Flood Protection:** Utilize materials such as waterproof conduits and fiber with water-resistant components (e.g., gel-filled cables) to protect against flooding. Avoid burying infrastructure in areas prone to erosion or washouts, and consider replacing underground installations with aerial infrastructure in high-risk flood zones.

**Power Backup:** Equip underground facilities with Uninterrupted Power Supply (UPS) systems to mitigate power loss during flooding or other emergencies. For larger control buildings, consider using generators to ensure continued operation during extended outages.

**Electrical Surge Protection**: Install surge protectors and use cables with properly rated grounding conductors to safeguard against voltage surges. These measures help protect buried infrastructure from electrical damage caused by power fluctuations.

**Ground Shifting & Freeze Protection**: In areas where freezing temperatures can lead to ground shifting, use materials and construction techniques designed for extra durability and flexibility to minimize the risk of damage. Backup power systems, including UPS and generators, are essential in maintaining uninterrupted service during these conditions.

**Earthquake Resilience**: In earthquake-prone areas, select materials and techniques that provide additional flexibility and durability to withstand seismic activity. Keep in mind that underground damage can be more unpredictable and harder to repair than aerial damage, making resilient design and power backup systems critical.

## WIRELESS MITIGATION STRATEGIES

**Flood Protection:** Avoid constructing wireless base stations in flood-prone areas when possible. Ensure proper drainage around the base of towers and poles to prevent water damage. Equip installations with Uninterrupted Power Supply (UPS) systems to maintain service during power outages, and consider generators for larger facilities like data centers. For remote locations, alternative power sources, such as solar panels, can provide reliable backup power.

**Wind and Structural Resilience:** Utilize reinforced towers, antennas, high-strength equipment brackets, and enclosures to withstand significant wind stress. Keep tree limbs and other vulnerable structures clear from wireless infrastructure to prevent wind-related damage. Point-to-point connections should use high-strength brackets to avoid misalignment caused by strong winds. UPS systems and generators can provide critical backup power during windstorms.

**Lightning and Surge Protection:** Install lightning arrestors and grounding wires to safely transfer strike energy to the ground and protect against electrical surges. Backup power systems like UPS and generators should be in place to ensure wireless base stations and access points remain operational during outages.

**Ice and Snow Load:** Use materials designed to handle the extra weight of ice buildup on towers and antennas, and consider equipment enclosures with heating elements to prevent ice accumulation. Backup power, via UPS or generators, is essential to maintain service in harsh winter conditions.

**Earthquake and Hail Resilience:** In areas prone to earthquakes or hail, use materials and techniques with extra durability and flexibility to prevent damage. Ensure that all wireless base stations and access points have backup power options, including UPS and generators. Solar panels or other alternative power sources are beneficial for remote installations.

## IMPLEMENTATION STRATEGIES AND DIGITAL EQUITY ACT OBJECTIVES

Walker County's Digital Equity Plan includes the following potential implementation strategies to address the following needs for each of the covered populations in the community. These are suggestions and recommendations of the work that needs to be done to close the digital divide that exists in Walker County. However, these strategies are only possible through partnership and collaboration across sectors. The primary finding and recommendation is to create a Director of Community Development or Director of Broadband role for Walker County who will further assess and develop a roadmap for addressing the digital divide in Walker County.

### BROADBAND ACCESS EXPANSION

*Objective - Increase the availability of affordable high-speed internet access.*

- Create partnerships with ISPs to bring affordable, reliable broadband internet access to underserved communities
- Collaborate with neighboring counties to target the edge zones in respective counties
- Develop a county resilience strategy in regards to broadband connectivity
- Implement the Broadband Ready Designation as a county to be eligible for increased funding opportunities
- Measure annually the work in closing the digital divide to continue to refine strategies to include monitoring reliability issues, track quality of internet, and associated costs
- Expand public wifi in all county buildings
- Initiate public wifi projects throughout rural areas of the county to provide additional access points

### DIGITAL LITERACY PROGRAMS

*Objective - Improve digital literacy and technology skills among underserved populations.*

- Create awareness campaign of the resources available in the community
- Collaborate with libraries and community centers in funding opportunities to expand digital literacy programs throughout the county
- Collaborate with the Chamber of Commerce and local industries to increase digital skills related to workforce opportunities
- Survey residents to target digital literacy programs and identify proficiencies
- Expand Next Chapter to Walker County jail through the partnership with the Cherokee Regional Library System
- Expand support of Walker Family Connection to provide resources to a growing English as a Second Language (ESL) and English for Speakers of Other Languages (ESOL) population

## ONLINE ACCESSIBILITY AND INCLUSIVITY OF PUBLIC RESOURCES AND SERVICES

*Objective - Ensure everyone has the same opportunity to engage with public resources and services online to increase civic participation.*

- Support and partner with the library and other community anchor institutions to maximize their transformative impact
- Create wifi mapping to provide public wifi awareness
- Create a Director of Community Development or Director of Broadband position in the county to lead the future strategy and implementation of broadband expansion and digital equity
- Provide all government services online (examples: permitting, digital payment, courthouse services such as property records, case files, etc.)
- Consider establishing a data insight hub to collect, analyze and present data from various sources to provide insight to residents and stakeholders

## AVAILABILITY AND AFFORDABILITY OF CONSUMER DEVICES

*Objective - Ensure access to affordable devices and software.*

- Build a device eco-system through funding ownership programs, loaner, retrofit/refurbish/upgrading computer labs
- Implementing programs such as “Tech Goes Home”, where program graduates receive low cost computers
- Partner with Digital Navigators for device maintenance
- Support the Cherokee Regional Library System’s hotspot loaner program to expand scope

## AWARENESS AND USE OF CYBERSECURITY AND ONLINE PRIVACY TOOLS

*Objective - Empower individuals, organizations, and communities to protect their digital assets, personal information, and online activities from cyber threats and privacy breaches.*

- Digital Navigator as a community shared resource to implement and manage cybersecurity classes throughout the library system and county
- Utilize the Georgia Cyber Center for training and education
- Collaborate with libraries and community centers in funding opportunities to expand cybersecurity programs throughout the county
- Expand cybersecurity training courses to the community

## COMMUNITY TECHNOLOGY HUBS

*Objective - Establish community centers equipped with technology resources.*

- Fund and support the creation of technology hubs for the aging population such as through the Housing Authority or Senior Center
- Expand wifi access points to community centers, parks, housing authority and senior centers
- Establish partnerships in rural areas of the county to target accessibility issues to include assistive technology
- Partner with the Cherokee Regional Library System and community centers to expand adaptive technology resources

## PUBLIC-PRIVATE PARTNERSHIPS

*Objective - Foster collaboration between government, businesses, and nonprofits.*

- Create a Broadband Committee to collaborate across government, business, and nonprofits to open lines of communication and ensure efforts are coordinated to reduce redundancy and increase impact of collective energy
- Implement policies across county projects that would enable ISP's to lay conduit during sewer and water expansion projects or to work with future developments and urban sprawl to implement broadband projects
- Work on the county level to streamline permitting in regards to broadband expansion
- Partner with the library system and Walker Family Connection to implement a program similar to Next Chapter for non-native English speakers and immigrants
- Partner with North Georgia Community YMCA to establish a digital skills engagement with parents

Walker County recognizes that much of the work needing to be done will require partnership and collaboration across sectors. There are many strategies that will need to be developed to meet the needs of the population of Walker County. There needs to be accountability from ISPs in regards to services provided. It is not enough to provide internet if it is not quality internet - reliable and affordable. To support the work of ISPs, Walker County needs to address the barriers they face with permitting and partner with them on expansion projects.

Closing the digital divide will take work in stages. With the current funding opportunities, Walker County is prioritizing supporting broadband expansion to unserved and underserved communities. However, Walker County recognizes that accessibility is also based on affordability. As there are limited federal resources available for subsidizing subscriptions, other means will need to be pursued to help residents of Walker County afford subscribing to broadband services, such as expanding public wifi access points in rural areas.

Further work that is outside Walker County's capacity relates to resilience work. Evaluating the broadband infrastructure and planning for major outages and monitoring disruptions to make sure the impact to the county is minimized requires partnership with ISP's. Additionally, the expectation is Walker County's broadband network will only increase and scalability is a consideration, with future increases in bandwidth demands and load balancing requirements.

## DIGITAL EQUITY EVALUATION STRATEGY

Walker County understands the importance of alignment of the community's Digital Equity Plan with the State of Georgia's Digital Connectivity Plan to:

- Track progress towards achieving Digital Equity:
  - Walker County currently does not have the capability to monitor and measure advancements in achieving digital equity, nor a process in place to assess and document progress toward achieving Plan goals, yet recognizes the value and potential of monitoring and measuring progress.
- Demonstrate how progress furthers the State's priorities:
  - Walker County's Digital Equity Plan will align with and contribute to the broader priorities, objectives, and goals of the State to advance digital equity.

As Walker County works to implement digital equity strategies, it will be important to put a system in place to measure impact and progress toward addressing the unique challenges and barriers to affordability, access, and adoption faced by covered populations. To assist in these efforts, a Digital Equity Evaluation Plan Template has been provided in the Appendix of this document for county leadership to reflect on their progress toward addressing these respective barriers. It is our recommendation that Walker County continue to expand this practice throughout the implementation phase of this plan.

## WORKFORCE DEVELOPMENT CONSIDERATIONS

Workforce development needs are an issue the State and its partners are attempting to mitigate. Significant investment in the broadband deployment sector will place intense demands on the State's labor market, which is already strained according to public and private stakeholders in Georgia. Hiring a sufficient workforce for some of the key roles required to execute this work—like communications line workers—will require a concerted recruitment and training effort across the public and private sectors, according to GTA's 2022 Georgia Broadband Annual Report.

## CONSTRUCTION PROCESS IMPROVEMENTS

### COST OVERRUNS

To best advocate for taxpayers and residents, Walker County should request that internet service providers seeking their support make efforts to mitigate cost overruns with respect to the deployment of the proposed project(s). The county could, for example, require that:

- All contractors must have operating history and are extensively vetted by the Project Team.
- Contractors will have performance requirements and penalty payments will be assessed for projects behind schedule.
- Letter of credit required from contractor for non-performance.
- Insurance required for each project and liquidated damages tied to performance.

### MAKE-READY DELAYS

The examples below describe how Walker County can work with service providers to mitigate make-ready delays with respect to the deployment of the proposed project(s).

- Engage with utility companies early to secure approvals and align schedules, preventing conflicts and unexpected delays.
- Conduct site surveys and use professional engineering services to identify and address potential make-ready issues before construction starts.
- Advocate for One-Touch Make-Ready (OTMR) policies, allowing a single contractor to perform all necessary work, reducing the need for multiple crews.
- Develop contingency plans for critical project segments and maintain clear communication with stakeholders to manage expectations and promptly address concerns.

## PERMITTING, LICENSING, AUTHORIZATIONS, AND APPROVALS DELAYS

The examples below describe how Walker County can potentially help mitigate permitting delays (particularly railroads and federal lands) with respect to the deployment of its proposed project(s).

- Initiate discussions with local, state, and federal permitting agencies early in the planning process to understand requirements, timelines, and potential challenges.
- Assist service providers with preparing and submitting complete, accurate permit applications with all required documentation and ensure compliance with regulations to avoid back-and-forth revisions.
- Identify and utilize any available expedited or priority permitting programs for broadband infrastructure projects to shorten approval timelines.
- Assign a dedicated team member to maintain regular follow-ups with permitting agencies, track application statuses, and address any issues promptly to keep the process moving forward.

## PLANNED PUBLIC WORKS

The examples below describe how Walker County can coordinate Dig Once opportunities with ongoing and planned public works projects (i.e., opening of roads, right-of-way, or easements) to avoid delays:

- Establish partnerships with local governments, utility companies, and transportation agencies to align broadband deployment with planned infrastructure projects, such as roadwork or utility upgrades.
- Develop a shared project schedule that outlines upcoming construction activities in the area. This will help identify opportunities to coordinate trenching or conduit installation with other projects to minimize excavation needs.
- Attend local and regional planning meetings to stay informed about upcoming infrastructure projects and advocate for the inclusion of broadband conduit installations in those plans.
- Establish a system for receiving notifications about planned excavations and roadwork, allowing the project team to proactively coordinate Dig Once opportunities with relevant stakeholders.

## IMPLEMENTATION LOGISTICS AND REQUIREMENTS

Walker County's strategy for broadband expansion and adoption involves a dynamic, multi-phase approach to enhance digital connectivity and equity across the county. Rather than focusing on a single project, the county is exploring several initiatives that will be executed in partnership with service providers and external support teams.

To ensure seamless coordination and effective implementation, Walker County would benefit from establishing a dedicated internal position within the county government. This role will be crucial for overseeing the execution of the county's broadband connectivity plans. The primary responsibilities of this position should include:

- Project Coordination: Managing day-to-day activities across various broadband projects, including scheduling, budgeting, and ensuring compliance with all regulatory requirements. This role will act as the central point of contact for all stakeholders, ensuring that each initiative aligns with the county's overall digital strategy.
- Stakeholder Engagement: Building and maintaining strong relationships with ISPs, tech support teams, bulk installation contractors, and community organizations. This could involve negotiating contracts, coordinating on-the-ground activities, and addressing any challenges that arise during the deployment phase.
- Data Collection and Analysis: Monitoring the progress of each project by collecting new data on service coverage, adoption rates, and community feedback. This information can be used to refine ongoing efforts and to support applications for state and federal funding.
- Digital Equity Initiatives: Working closely with community partners to identify and address gaps in digital access and literacy. This includes developing programs to support low-income households, senior citizens, and other underserved populations in gaining reliable internet access and the skills needed to use it effectively.

In addition to the internal broadband coordinator, Walker County should engage external partners for additional technical support. By leveraging the strengths of both internal resources and external partners, the county can find success building a robust, future-ready digital infrastructure that serves all residents and supports economic growth and community well-being.

## FUNDING STRATEGY AND REMAINING GAPS

Walker County understands that funding gaps exist and additional grant funding will likely be required to support the financial sustainability of the broadband network infrastructure projects necessary to connect all homes, schools, and businesses. Walker County is encouraged to explore a combination of federal and/or state grant funding, ISP match, local match, and financing options.

The table below provides a structured framework for planning and executing a broadband partnership and financing structure. It is essential to tailor these components to the specific needs and circumstances of the broadband project and community in question.

| Component | Description | Key Stakeholders | Financing Sources |
|---|---|---|---|
| **1. Project Objectives** | Define the goals and objectives of the broadband project. | Government Agencies, Private Partners, Community | Grants, Public Funds, Private Investments |
| **2. Partnership Formation** | Identify key partners and their roles in the project. | Government Agencies, ISPs, Infrastructure Providers | Public-Private Partnerships, Joint Ventures |
| *Public Sector* | Government agencies responsible for regulation, funding, and oversight. | Local, State, and Federal Government | Grants, Bonds, Public Funds |
| *Private Sector* | Internet Service Providers (ISPs), infrastructure providers, and technology companies. | ISPs, Infrastructure Providers, Technology Companies | Private Investments, Loans, Equity |
| *Community Engagement* | Involvement of the local community and organizations. | Community Groups, Nonprofits, Local Businesses | Community Contributions, Grants |

| | | | |
|---|---|---|---|
| **3. Financial Planning** | Develop a financial plan for the project. | Financial Analysts, Project Managers | Grants, Loans, Bonds, Equity |
| *Budget Allocation* | Allocate funds for infrastructure, operations, and maintenance. | Project Managers, Financial Analysts | Public Funds, Grants, Loans |
| *Revenue Generation* | Identify revenue streams, such as subscription fees and service charges. | Finance Team, ISPs | Subscription Fees, Service Charges |
| **4. Funding Sources** | Identify sources of funding for the project. | Funding Agencies, Private Investors | Grants, Loans, Equity |
| *Government Grants* | Federal, state, or local grants for broadband infrastructure. | Government Agencies | Government Grants |
| *Public Bonds* | Issuing municipal or revenue bonds for project financing. | Finance Team | Public Bonds |
| *Private Investments* | Attract private investors for equity or debt financing. | Private Partners, Investors | Private Investments, Loans |
| **5. Revenue Sharing Agreements** | Establish agreements for revenue sharing among partners. | Government Agencies, Private Partners | Revenue Sharing Terms |
| *Risk Allocation* | Define how risks and liabilities are shared among partners. | Legal Team, Partners | Risk Allocation Terms |

| | | | |
|---|---|---|---|
| **6. Project Governance** | Define the governance structure for decision-making and oversight. | Governing Board, Project Manager | Governance Structure |
| *Steering Committee* | A committee overseeing the project's progress and compliance. | Steering Committee Members | Decision-Making Protocols |
| *Project Manager* | Appoint a project manager responsible for day-to-day operations. | Project Manager | Reporting, Execution |
| *Reporting and Monitoring* | Implement mechanisms for progress reporting and performance monitoring. | Project Manager, Oversight Team | Reporting Framework |
| **7. Risk Mitigation Strategies** | Develop strategies to mitigate project risks. | Risk Management Team | Risk Mitigation Plans |
| *Contingency Plans* | Create contingency plans for unexpected events. | Risk Management Team | Contingency Plans |
| *Insurance* | Purchase insurance to cover potential losses. | Risk Management Team | Insurance Policies |
| **8. Performance Metrics** | Define key performance indicators (KPIs) for the project. | Project Manager, Oversight Team | KPIs and Measurement Metrics |
| *Broadband Accessibility* | Measure the percentage of the population with access to broadband. | Oversight Team | Coverage Percentage |
| *Service Quality* | Monitor the quality of broadband services provided. | ISPs, Oversight Team | Service Level Agreements (SLAs) |
| ***9. Review and Adaptation*** | Establish a process for project review and adaptation. | Steering Committee, Project Manager | Review Schedule, Adaptation Strategies |

## MATCH AND LETTER OF CREDIT

Walker County understands that accessing federal broadband grant opportunities such as the NTIA's BEAD program will require a minimum 25% match and an additional Letter of Credit in the amount equal to 25% of the federal grant request. Any potential ISP grant application partner for the BEAD program will also require a Letter of Credit. The NTIA recently announced a waiver[67] granting flexibility to the Letter of Credit requirement, allowing certain subgrantees to utilize credit unions, performance bonds, and reduction of Letter of Credit/Performance Bonds upon completion of milestones.

[67] Waiver

# FUNDING ECOSYSTEM ASSESSMENT

## BROADBAND GRANT ASSESSMENT

The Broadband Grant Assessment can be used as a guide and reference when pursuing existing public, private, and philanthropic grant opportunities and accompanies Walker County's Connectivity Plan as a separate attachment.

**Acronyms:**
**DHS - FEMA** Department of Homeland Security - Federal Emergency Management Agency
**FCC - USAC** Federal Communications Commission - Universal Service Administrative Company
**USDA-RD** United States Department of Agriculture - Rural Development
**USDOC-EDA** United States Department of Commerce - Economic Development Administration
**USDOC-NTIA** National Telecommunications and Information Administration
**USDHUD** United States Department of Housing and Urban Development

## PREPARING FOR GRANT FUNDING OPPORTUNITIES

Based on previous experience working with other communities regarding the development of funding applications, it is recommended that several studies and narratives be completed prior to applying for federal grant funding opportunities. Each of these documents are required by the funding agencies in order to satisfy various programmatic and federal requirements and their completion ahead of time provides greater flexibility for Walker County when considering multiple avenues of funding proposed network solutions.

Below are several studies that are uniform requirements for seeking federal funding:

*Preliminary and Final Engineering Feasibility Report (EFR)*

- The Preliminary and Final EFR is the document that is utilized by the funding agencies to understand the needs and existing conditions of the community and the proposed solution to address those needs. The EFR includes an overview of the project's scope, size, cost and alignment with the communities' priorities (i.e. closing the Digital Divide, economic development, workforce development, etc.). Typically, funders will accept a Preliminary EFR during the grant application phase and once funding is awarded, the agency will provide comments based on their review to finalize the document. Prior to the release of funding for construction, most funding agencies will require the EFR to be approved to ensure project feasibility.

*General Application Information*

- Depending on the nature of the grant, applicants are required to provide some general application information including a project description, stakeholders involved, documenting public and business support, anticipated economic impact, alignment with the agency and grant programs goals and objectives, project schedule, and proposed equipment.

*Proforma*

- Federal agencies typically request a proforma that projects fiscal expenditures (planning/design, construction, and operations) and revenue over a long-term period, 10 - 20 years, etc., to understand the financial sustainability of the project.

*Environmental Narrative*

- To satisfy National Environmental Policy Act requirements, applicants seeking federal funding must provide information to the funding agency regarding the project's potential impact on the environment. Since a variety of federal regulations exist, such as the Clean Water Act, Clean Air Act, Endangered Species Act, etc. it is important for the applicant to document how the proposed project impacts the environment. For projects that are located in environmentally sensitive areas such as wetlands, brownfields, preservation areas, etc. it is critical that the applicant document how the project will not negatively impact the environment. Typically, the federal funding agency will review the Environmental Narrative/Questionnaire to determine if any additional studies are required prior to issuing a Finding of No Significant Impact (FONSI). If additional studies are required such as Archeological, Air Quality, or Geotechnical surveys, the federal funding agency will require that these be completed prior to issuing a FONSI and beginning construction activities. Additionally, the federal funding agency may require coordination with other federal agencies (i.e. United States Army Corps of Engineers, Fish and Wildlife, Department of Interior, etc.) for their respective reviews prior to issuing a FONSI.

Through past experience applying and obtaining financial assistance, communities who have the required engineering and technical information completed ahead of time are most prepared, confident, and competitive when seeking grant funding. Often, federal agencies only provide between 45 - 60 days for application submission which leaves very little time to begin these studies and assessment while the application period is open. If Walker County is strongly interested in seeking grant funding to address its broadband infrastructure and accessibility gaps, we recommend that they conduct these efforts as soon as possible so they are prepared and ready for future funding opportunities.

Additionally, prior to applying for grant funding, it is strongly recommended that Walker County coordinate closely with the Georgia Technology Authority and other key stakeholders to ensure that their proposal is aligned with state planning efforts and to include Walker County's needs with respect to project costs to reach unserved and underserved areas. It is also important to note that partnerships with related stakeholders can possibly strengthen potential applications for funding, however more weight is given to partnerships that have been formally established prior to applying for funding. Lastly, due to the varying amount of local matching funding required to pursue these opportunities, we suggest that Walker County identify sources and amounts of matching funding to determine the respective capacity to secure grant funding.

## PREVIOUSLY OBTAINED GRANTS

To date, Walker County has previously obtained federal and/or state grant funding to support broadband infrastructure development within the community, including, but not limited to the following:

State of Georgia - 2022 American Rescue Plan Act

- Project Name: Georgia Windstream Fiber-to-the-Premises
- Grant Award Amount: $6,253,152
- Total Project Amount: $11,264,066

This grant award has been utilized by Walker County to collaborate with Georgia Windstream, LLC to deploy a Fiber-to-the-Premises (FTTP) solution to 3,339 homes and businesses in rural areas. The project involves extending 323 miles of fiber throughout the Armuchee Valley, Center Post and Kensington communities, among other locations. Under the requirements of the ARPA grant, the fiber deployment must be completed by the end of 2026.

## HISTORICAL FINANCIALS

Walker County understands the importance of demonstrating strong financial capacity and ability to sustain broadband network infrastructure investments. Walker County is prepared to demonstrate its financial strength and stability by providing audited financial statements for the previous three fiscal years. Additionally, if Walker County partners with an ISP partner to pursue future joint network investment opportunities such as grants, the respective entity will also be expected to provide audited financial statements at the time of a grant application.


kinetic
SPEED
LIMIT
25

## APPENDIX A: GLOSSARY OF TERMS

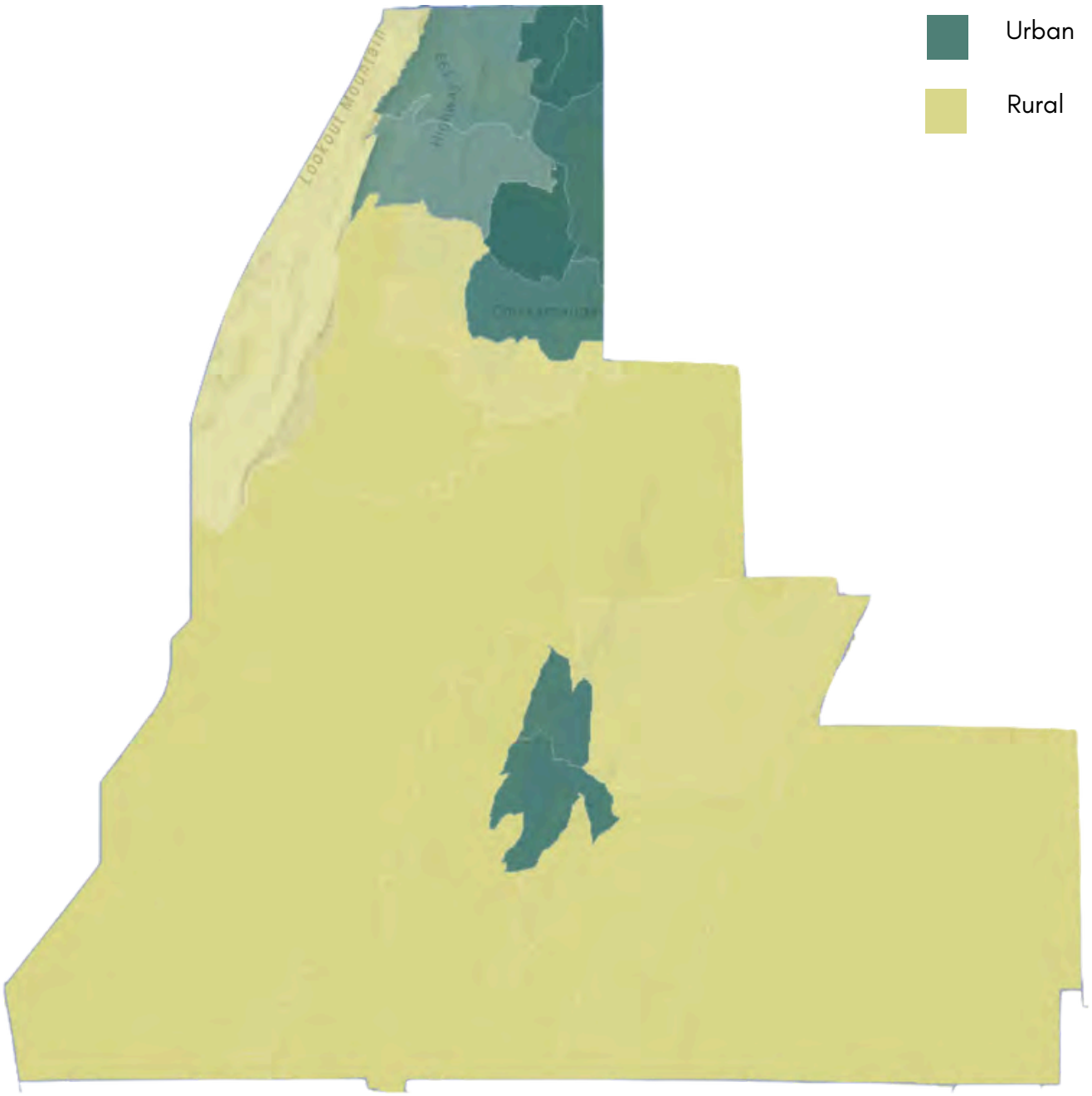
**Adaptive Technology** - is a form of assistive technology which is specifically designed for people with a disability
**Annualized Frequency** - the expected frequency or probability of a hazard occurrence per year
**Ariel Fiber (Aerial Installation)** - installed on poles
**Assistive Technology** - term used for assistive products and services; may be used to help or improve functioning or participation of an individual. Assistive technology may be used by aging population or people with disabilities.
**Asymmetrical** - upload and download speeds do not match
**Bandwidth** - the maximum amount of data that can pass through a network connection at any time. Bandwidth is measured by speed in Megabits per second (Mbps) and Gigabits per second (Gbps).
**Base Monthly Price** - cost of the plan before any additional charges and fees are included (such as rentals for modems or taxes)
**Broadband** - high-capacity transmission technology that sends data, voice, and video across long distances and at high speeds. Examples of broadband infrastructure are coaxial cables, fiber optic cables, wireless, and satellite.
**Broadband Accessibility** - access to the internet. Those who do not have access are classified as unserved or underserved.
**Broadband Adoption** - residential subscription to broadband, meaning the daily access to the internet
**Broadband Equity, Access And Deployment Program (BEAD)** - $42.45B federal grant program available to states and territories for closing the availability gap (infrastructure) of broadband
**Broadband Serviceable Locations (BSL)** - geographic coordinates of all structures where a broadband connection can be installed (residential and commercial locations)
**Building Exposure** - defined as the dollar value of the buildings determined to be exposed to a hazard. The maximum possible building exposure of a geographic area (census block, census tract, or county) is its building value as recorded in Hazus 6.0.
**Cable Internet** - broadband Internet access that uses the infrastructure of cable TV networks to provide Internet services
**Census Unit** - Census count of housing units in a census block (the smallest level of geography designated by the US Census Bureau)
**Census Population** - Census count of total population in a census block
**Coaxial Cable (Coax)** - A type of cable used to transmit data such as the internet, video and voice communications
**Community Anchor Institutions** - An entity such as a school, library, health clinic, health center, hospital or other medical provider, public safety entity, institution of higher education, public housing organization, or community support organization that provides access to broadband service to covered populations, including, but not limited to, low-income individuals, unemployed individuals, children, the incarcerated, and aged individuals.
**Computing Device** - either a computer or a phone that is enabled with access to the internet
**Covered Populations** - defined in the Infrastructure Investment and Jobs Act, Section 60301 et seq. (Digital Equity Act of 2021) as: individuals who live in covered households (those whose income from the most recent year is not more than 150% of the poverty level), aging individuals ( 60 years and older), incarcerated individuals (other than individuals who are incarcerated in a Federal correctional facility), veterans, individuals with disabilities, individuals with a language barrier, including individuals who are English learners and have low levels of literacy, individuals who are members of a racial or ethnic minority group, and individuals who primarily reside in a rural area.
**Cybersecurity -** the safe use of the internet to prevent against a cyberattack (any intentional effort to steal, disable, or harm data or a device through the unauthorized access to the physical device or the network it is using)
**Digital Connectivity -** when people and communities are able to access and use affordable, high-speed, reliable internet to meet their needs
**Digital Divide -** the gap between people who have access to affordable, reliable Internet service, and the skills and computers or phones needed to use it, and those who do not have access
**Digital Equity** - individuals and communities are able to fully participate in the society and economy of the United States digitally

**Digital Equity Act (DEA)** - $2.75 billion in federal funding to promote digital inclusion and equity as part of the Infrastructure Investment and Jobs Act
**Digital Literacy -** the ability to use technologies to find and communicate information, requiring both cognitive and technical skills
**Digital Navigators** - trained community members whose role is to assist other community members with support with connectivity, devices, and/or digital skills
**Digital Skills -** requires both knowledge and technical skills to use the internet to meet the needs of an individual. Essential digital skills include but are not limited to: turning on a device, knowing where to go on the device to access the internet, understanding the information that can be found through the use of the internet, connecting to a safe and secure internet connection, ability to browse the internet, and understanding how and why it is important to keep personal information safe and secure online.
**Download Speed** -how quickly data is pulled from a server to your computer. The download speed will be advertised first when listed by your service provider. Download is usually faster since the expectation is that most people are using their internet for web browsing, streaming videos, and downloading content.
**DSL -** technology that uses copper wire telephone lines to provide connection to the internet
**Expected Annual Building Loss** - the average economic loss to buildings in dollars resulting from natural hazards each year
**Fiber** - A fiber optic cable is made up of bundles of hair-thin strands of very pure glass or plastic. Data passes over them in the form of light pulses created by lasers. Data can travel farther and faster on fiber than on copper wires with much less loss of data.
**Fiber-to-the-premises -** connection of a fiber optic cable to a home or building
**Fixed Broadband** (fixed wireless as opposed to mobile wireless) - data is transmitted between two fixed antennas using radio waves. Unlike Wi-Fi, the radio beams need to be narrow for optimum strength with antennas being installed high such as on the roof of buildings since line of sight is necessary.
**H3 Geospatial Indexing** - is a hierarchical geospatial index. Geospatial indexing is a database storage and retrieval system based on geographic location that enables identification of objects or data located within a geographic region.
**Hazard ratings -** provided in one of five qualitative categories describing the geographic area's Expected Annual Building Loss values in comparison to all other communities at the same geographic level. Rating categories range from "Very Low" to "Very High."
Very High: 80th to 100th percentiles
Relatively High: 60th to 80th percentiles
Relatively Moderate: 40th to 60th percentiles
Relatively Low: 20th to 40th percentiles
Very Low: 0th to 20th percentiles
**Historic Building Loss Ratio -** a natural hazard consequence factor that represents the estimated percentage of the exposed building value expected to be lost due to a natural hazard occurrence. Arizona State University's SHELDUS loss data are used to calculate Historic Loss Ratio for most hazard types.
**Infrastructure Investment and Jobs Act (IIJA) -** federal bill to provide funding for infrastructure projects
**Internet Service Providers (ISP's)** - a company that provides subscribers with access to the internet
**Last mile -** connecting the individual customer's home or business from the middle mile network
**Low latency** - Latency describes the reaction time of the connection - the delay between a request for data and the response to that request. A low latency (fast ping) means a more responsive connection. Latency generally is measured in milliseconds (ms).
**Middle Mile -** the infrastructure that enables the connection between the last mile, or the home/business connection, and the Internet network that supplies the broadband service
**Mobile Network (Mobile wireless Internet)** - accessed via smartphones. Data is transferred between cell phone towers.
**Network** - shared connection between computers provided through utilizing the same source of broadband connection
**Qualified Opportunity Zone** - federal designation for an economically distressed community which is eligible for preferential tax treatment
**Risk scores** - national percentile ranks derived from Expected Annual Building Loss estimates
**Rural Digital Opportunity Fund (RDOF) -** $20.4 billion fund for rural homes and businesses that lacked broadband service
**Server** - a centralized computer that send and receives requests to other computers through a shared network providing information

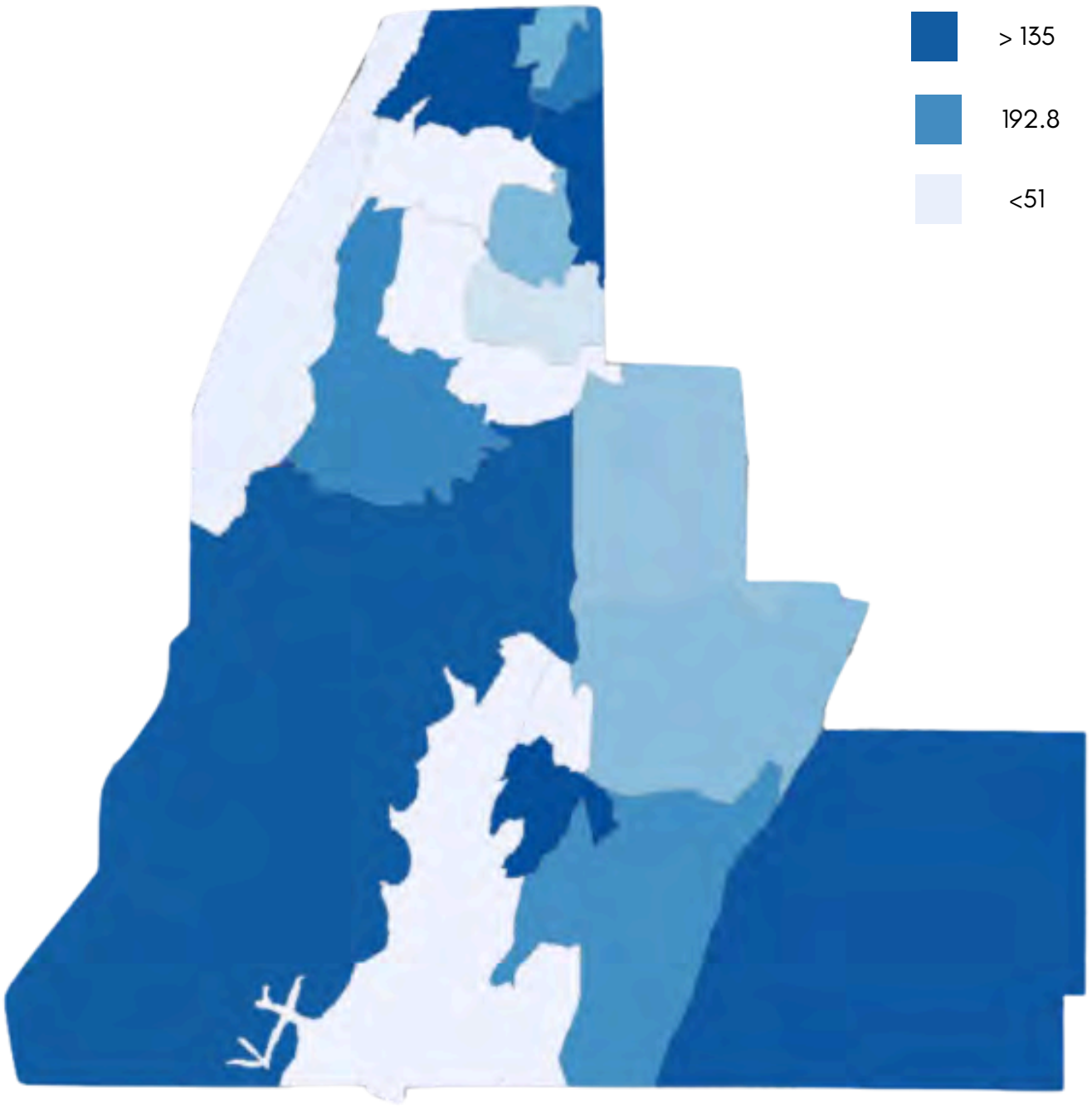
**Social Determinants** - factors that influence health outcomes. They are a set of conditions that shape the conditions of life for a resident.
**Speed** - measurement of how quickly data can pass through a network connection, measured by Megabits per second (Mbps) or Gigabits per second (Gbps)
**Speedtest** - measures your connection in Mbps, or megabits per second, which is what your broadband plan should use to describe the speed so you can easily compare
**Symmetrical** - upload and download speeds match
**Take Rate** - percentage of those subscribing to a service divided by the number of people who could take the service
**Top ISP** - FCC provider name for the provider with the top technology and speed in a census block
**Top Tech** - technology provided by the top provider in a census block
**Underserved** - Under BEAD, an underserved location is a broadband serviceable location reflected on the FCC's Broadband DATA Map that is lacking access to reliable broadband service with speed of at least 100 Mbps for downloads and 20 Mbps for uploads
**Unserved** - Under BEAD, an unserved location is a broadband serviceable location reflected on the FCC's Broadband DATA Map that has no access to broadband service or reliable broadband service with speed of at least 25 Mbps for downloads and 3 Mbps for uploads
**Upload speed** - how quickly data is sent from your computer to a server. This is necessary for video calls, sending large files by email, or for sending a video to someone by wifi enabled text.
**Wifi** - local area network that is wireless and allows a computer or device to connect to the Internet. The router which transmits the wireless wifi to devices must be connected to the network with cables or wires.

# APPENDIX B: MAPPING

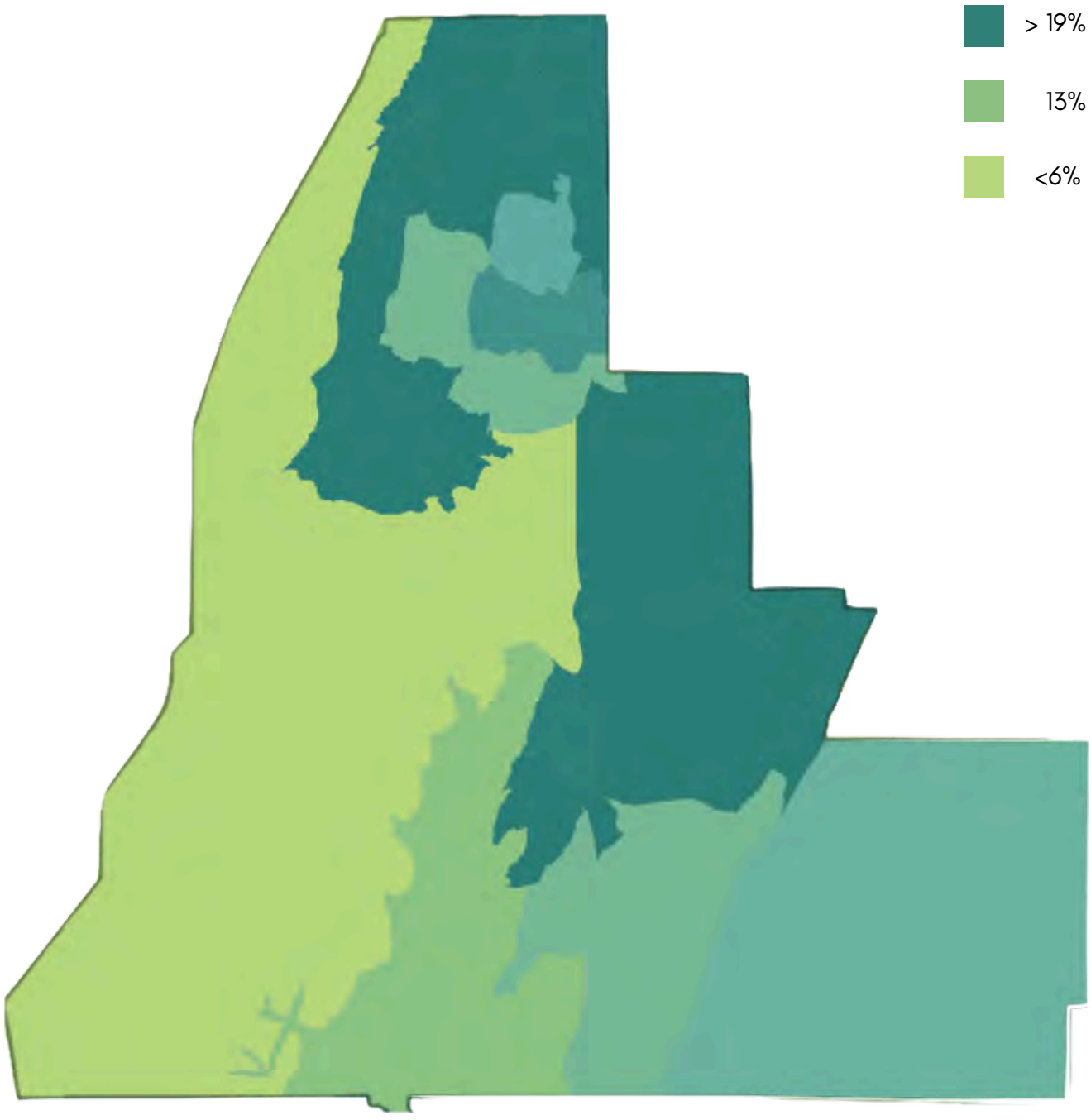
## MAP 1: URBAN VS RURAL POPULATION



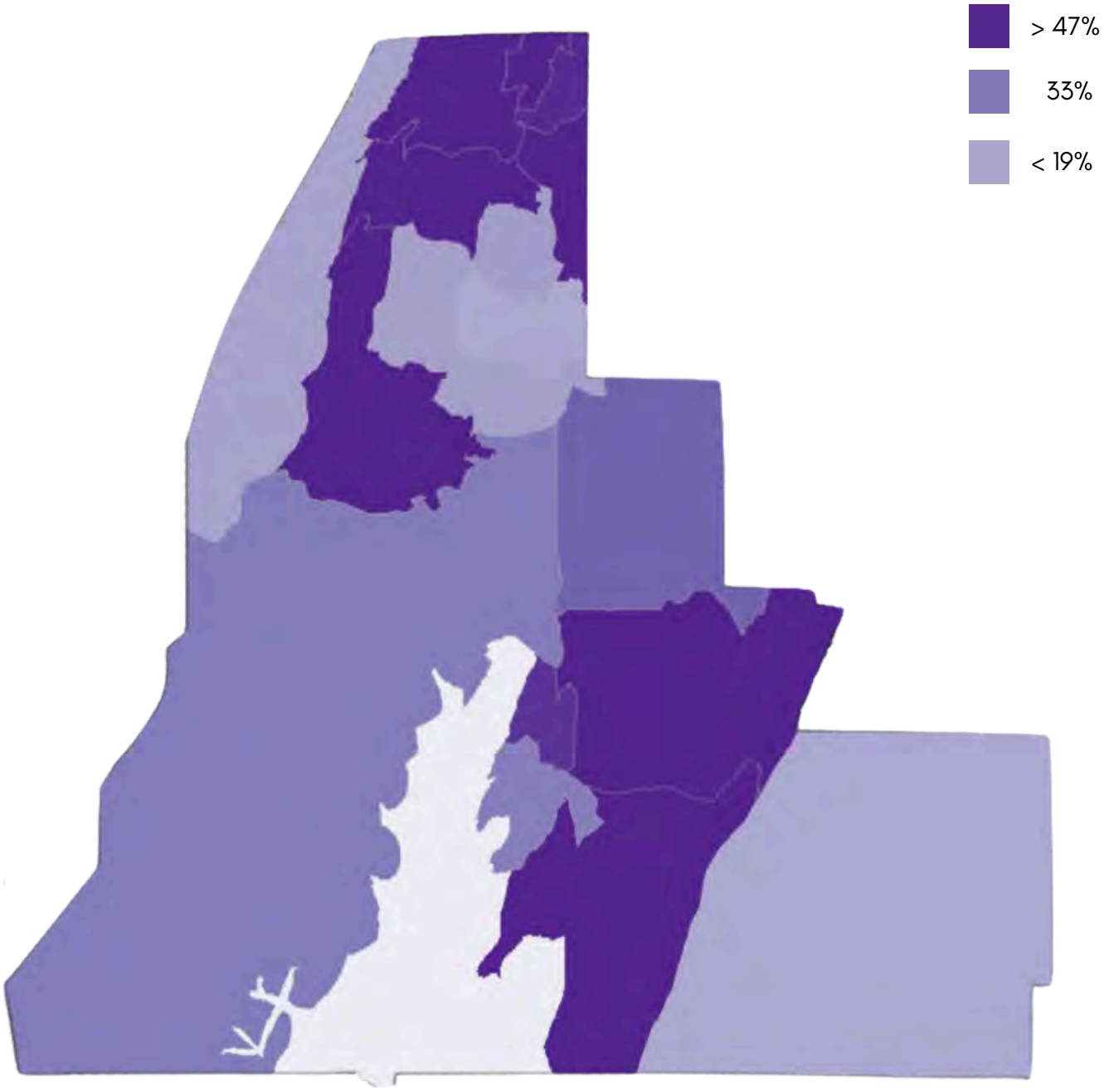
## MAP 2: POPULATION 60+ BELOW POVERTY (COUNT)



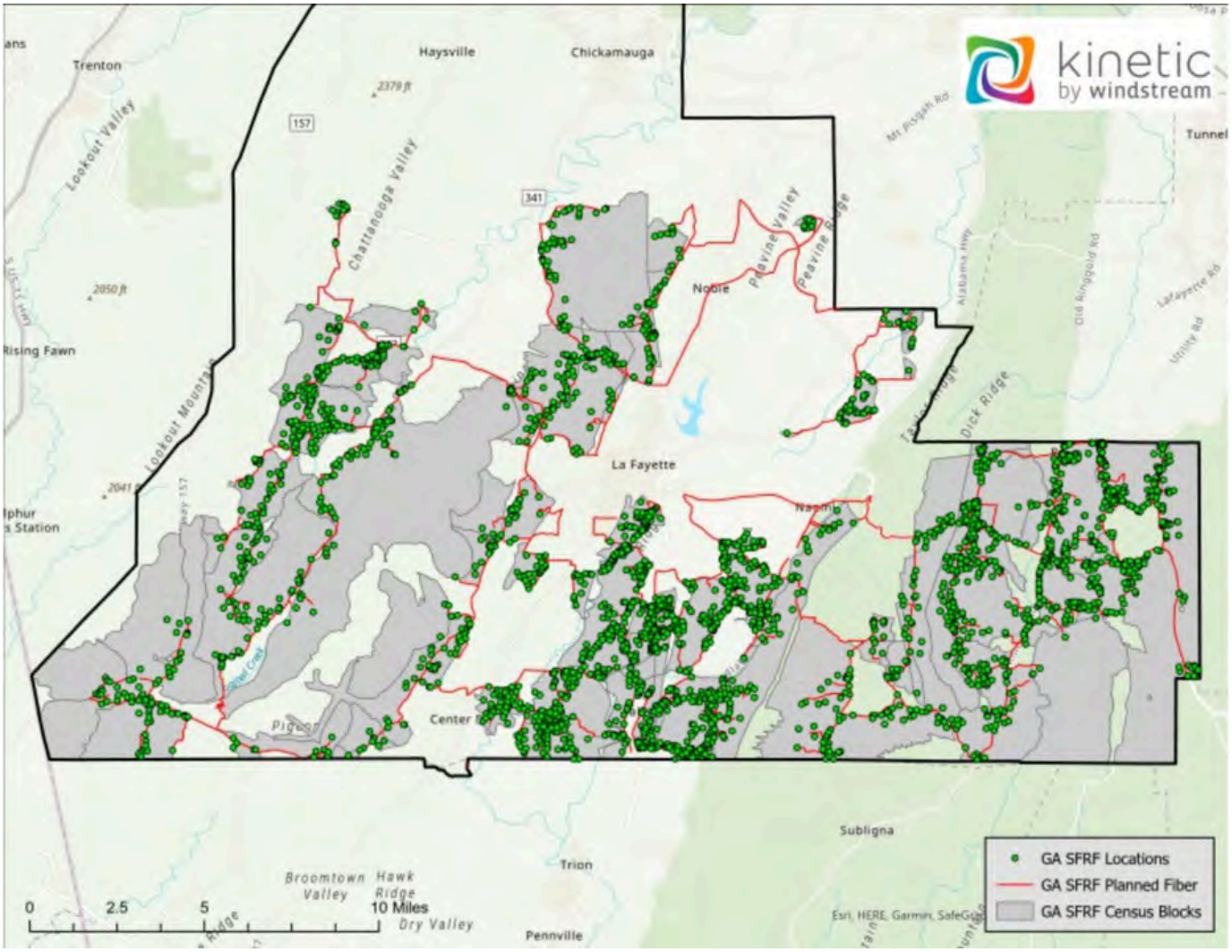
## MAP 3: POPULATION WITH DISABILITY



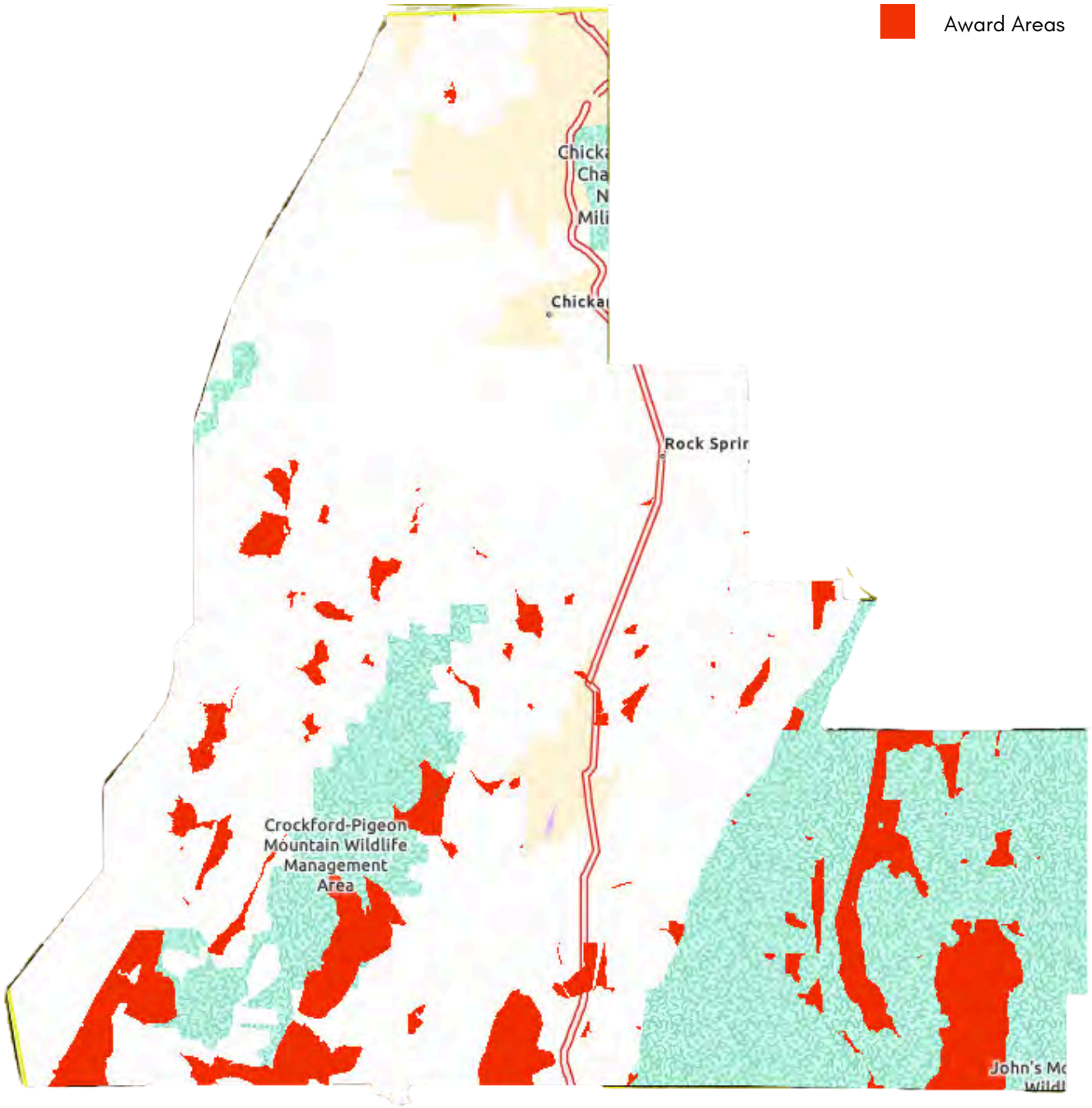
## MAP 4: POPULATION 65+ WITH DISABILITY



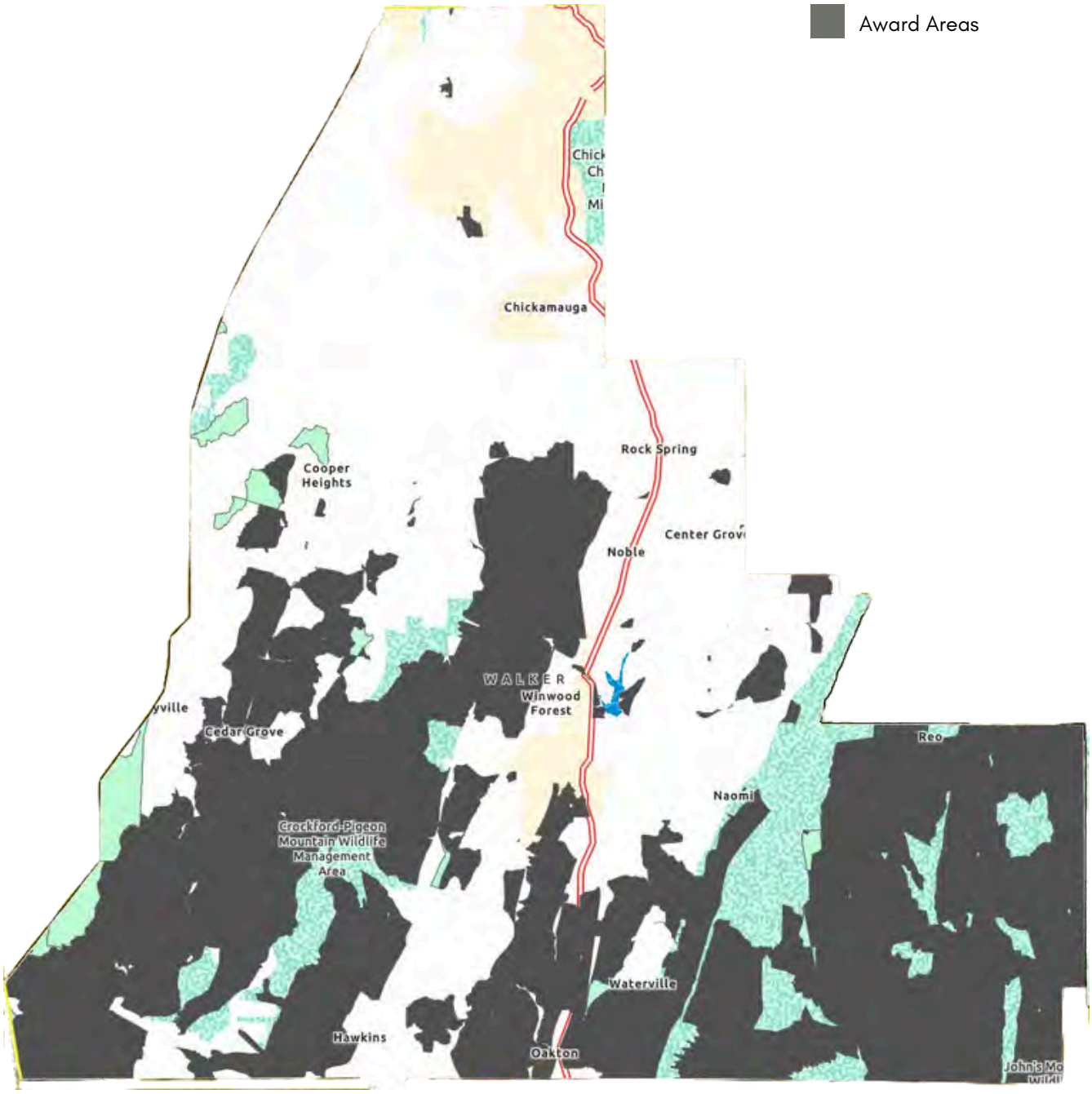
## MAP 5: CORONAVIRUS STATE AND LOCAL FISCAL RECOVERY FUNDS PROGRAM



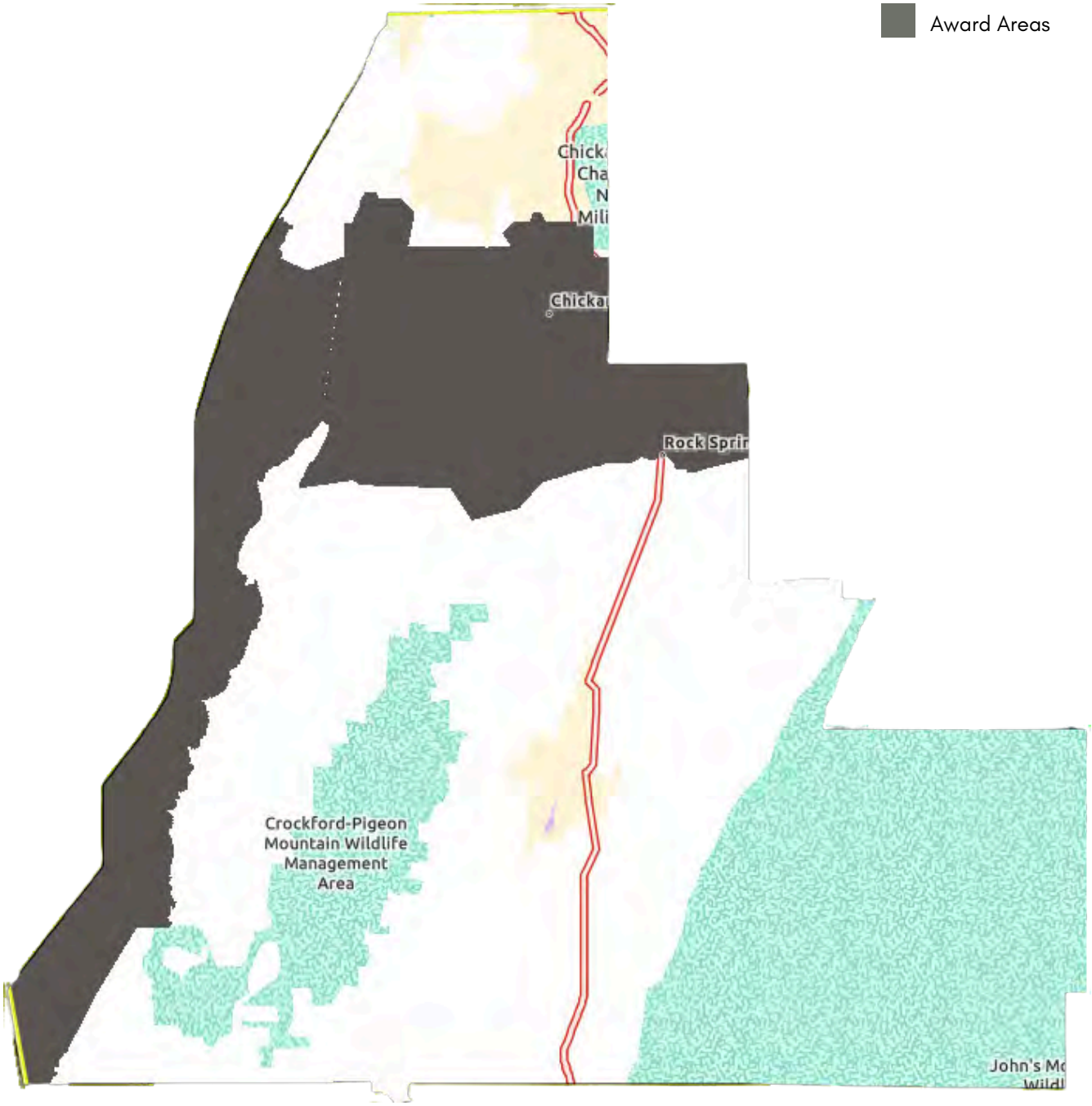
## MAP 6: RURAL DIGITAL OPPORTUNITY FUND



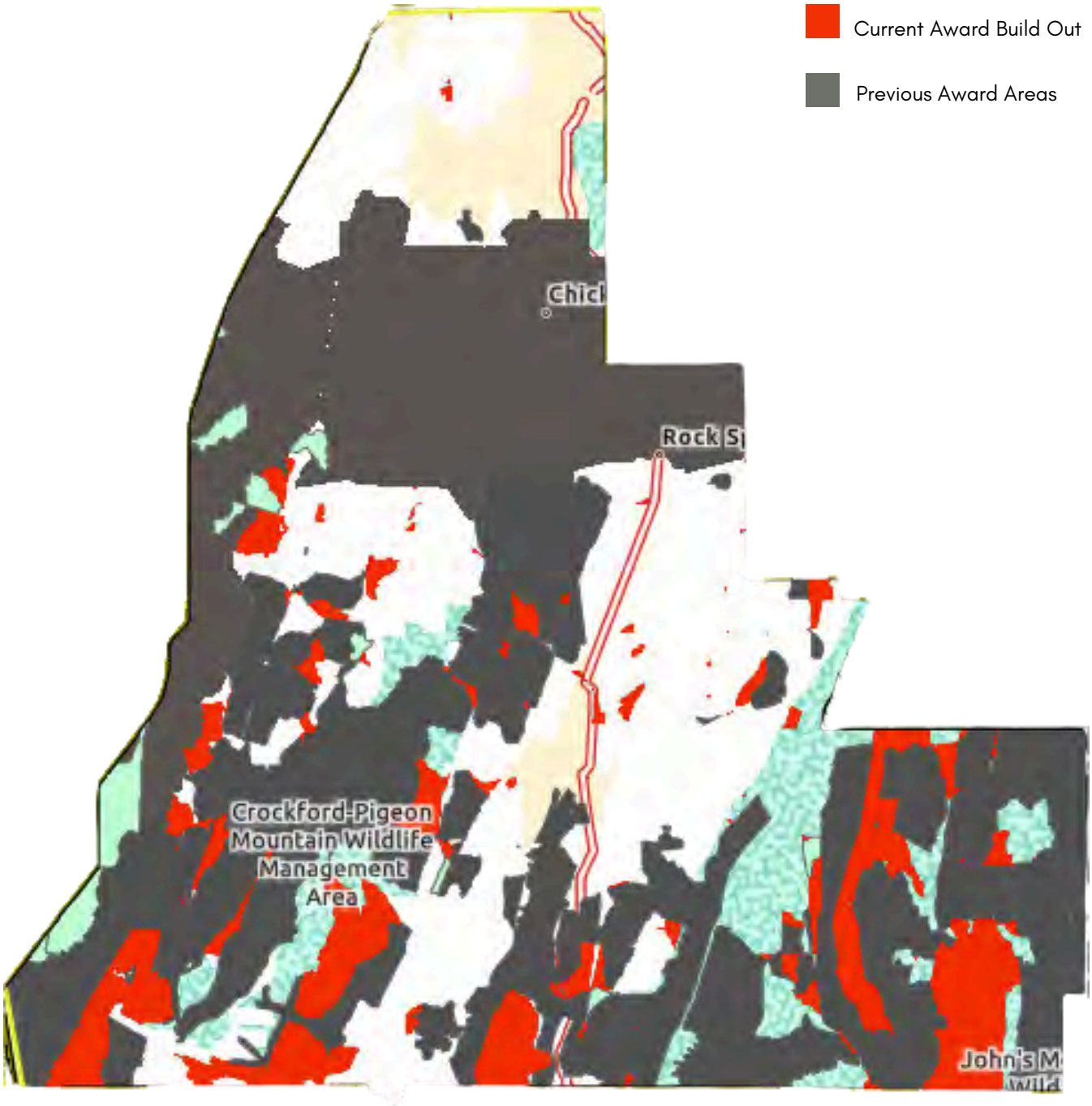
## MAP 7: GEORGIA BROADBAND DEPLOYMENT INITIATIVE PROGRAM



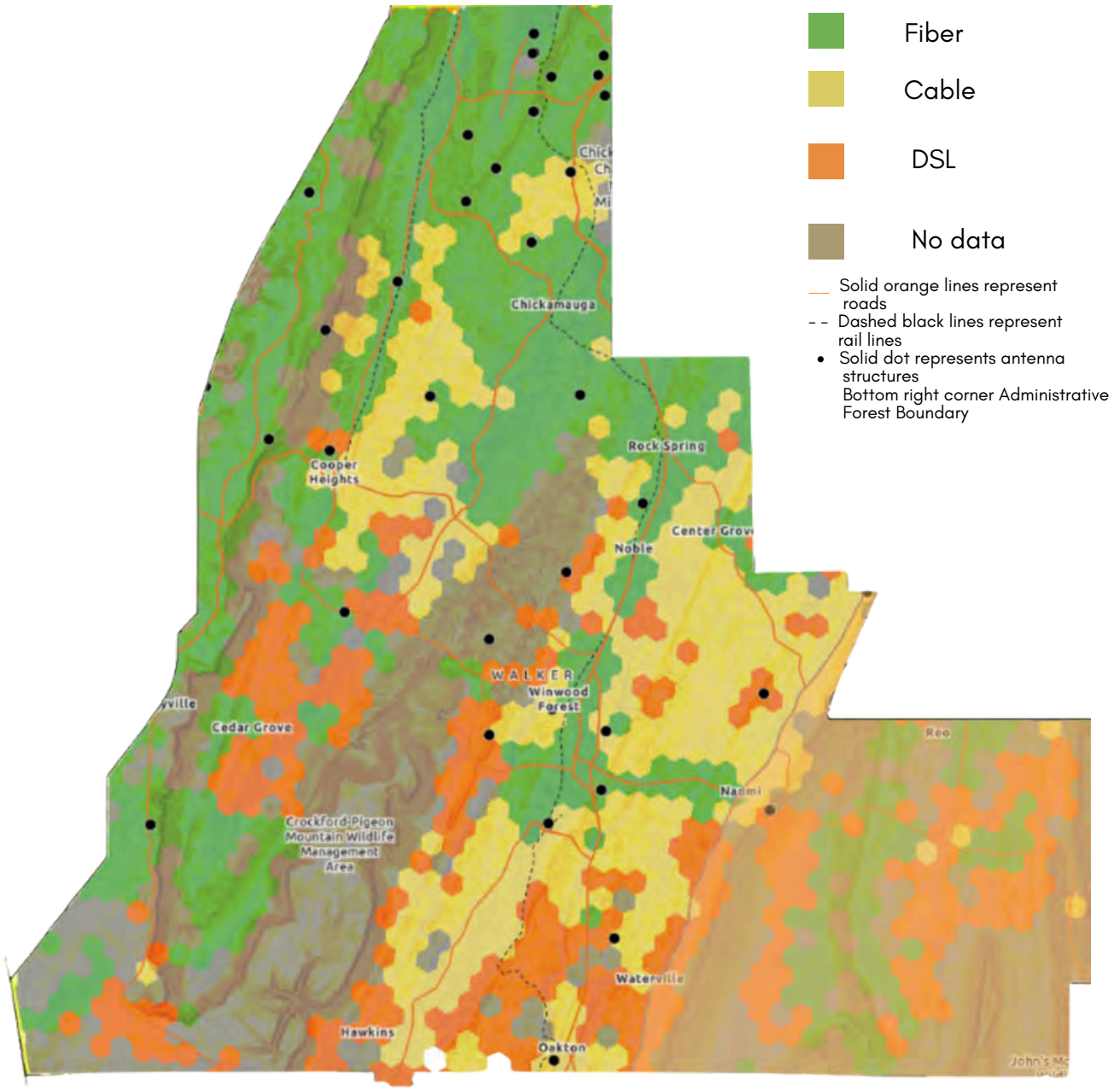
## MAP 8: FCC E-CAM AWARD



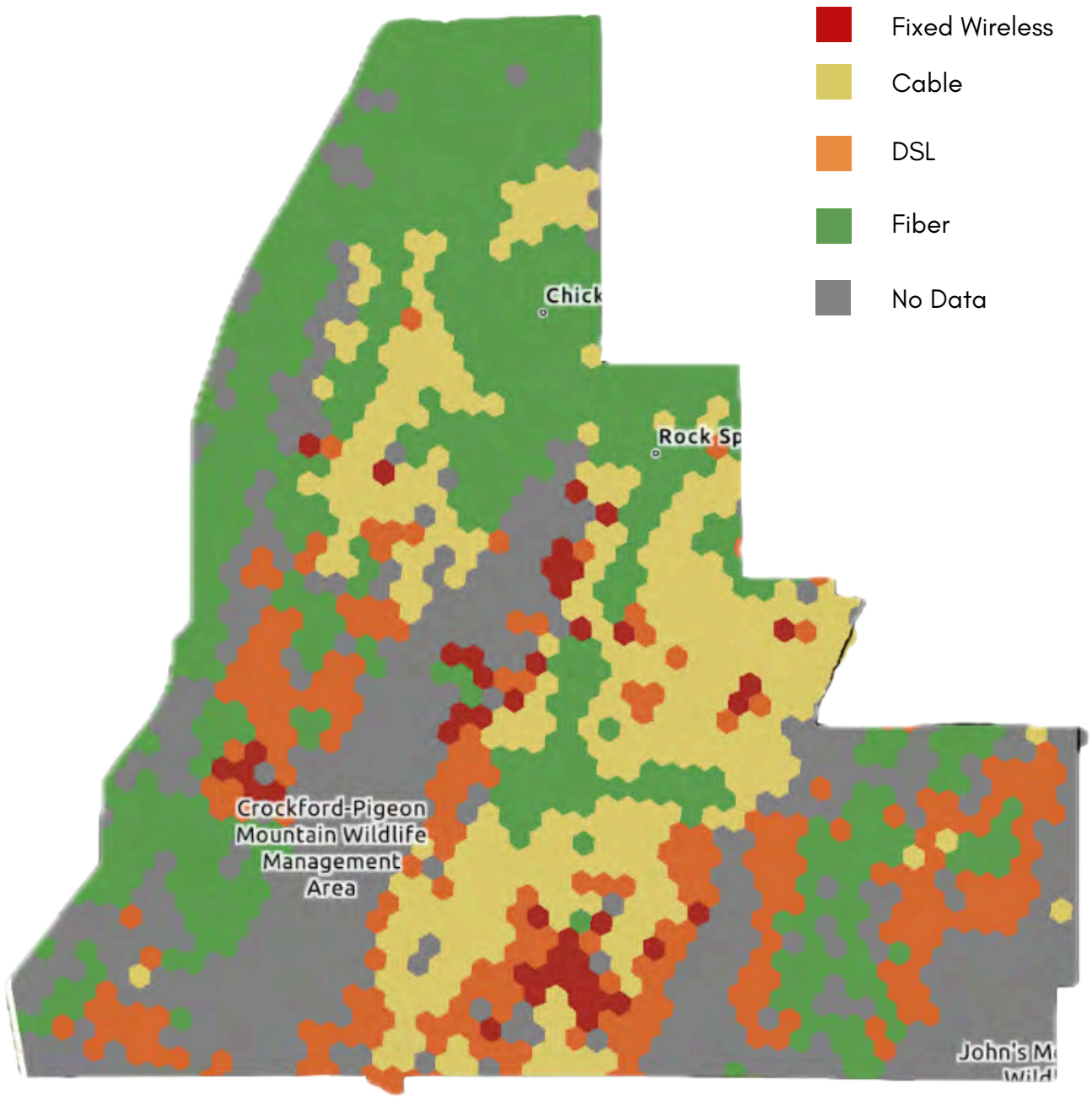
## MAP 9: POTENTIAL AWARD AREAS



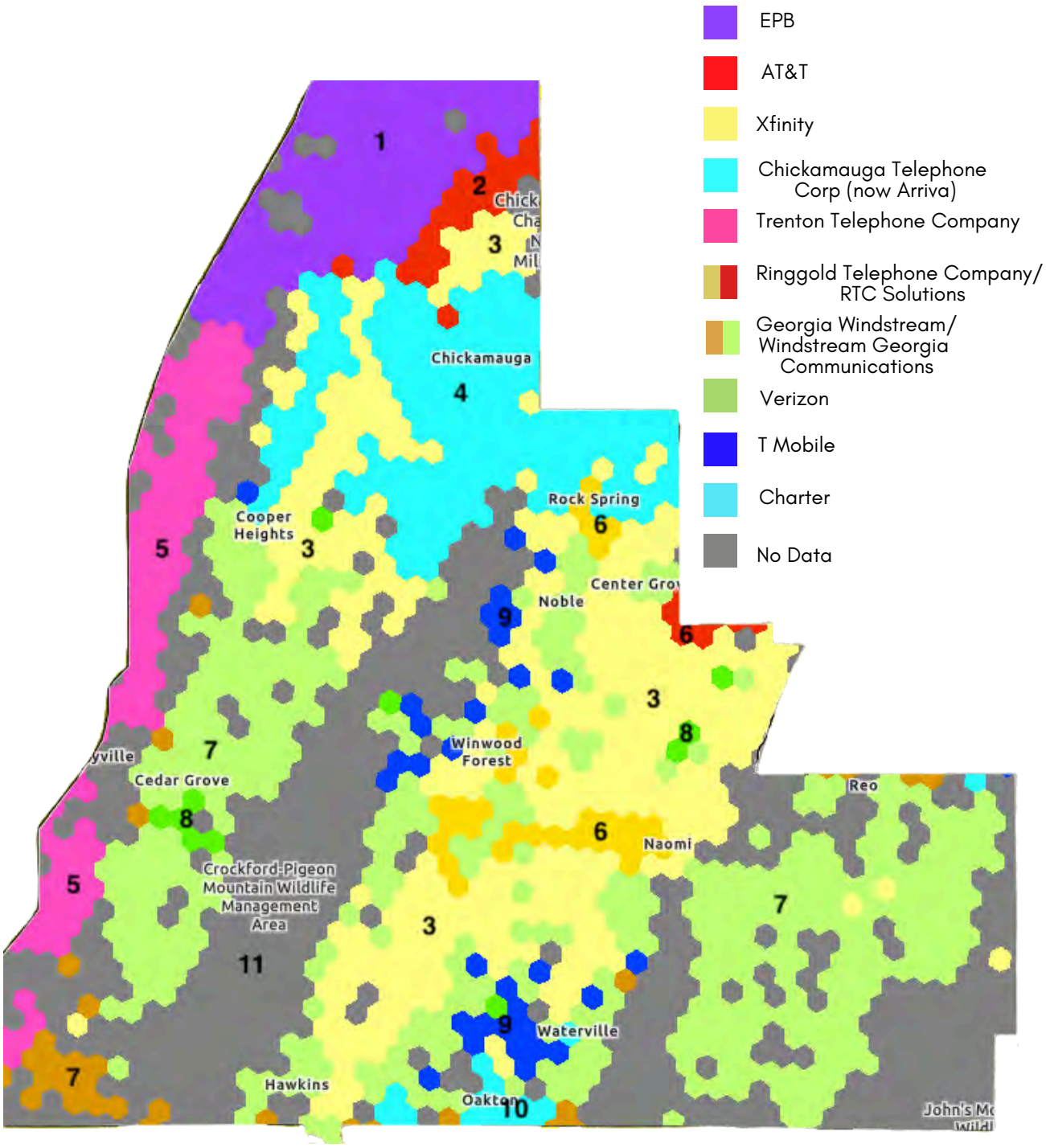
## MAP 10: VERTICAL STRUCTURES



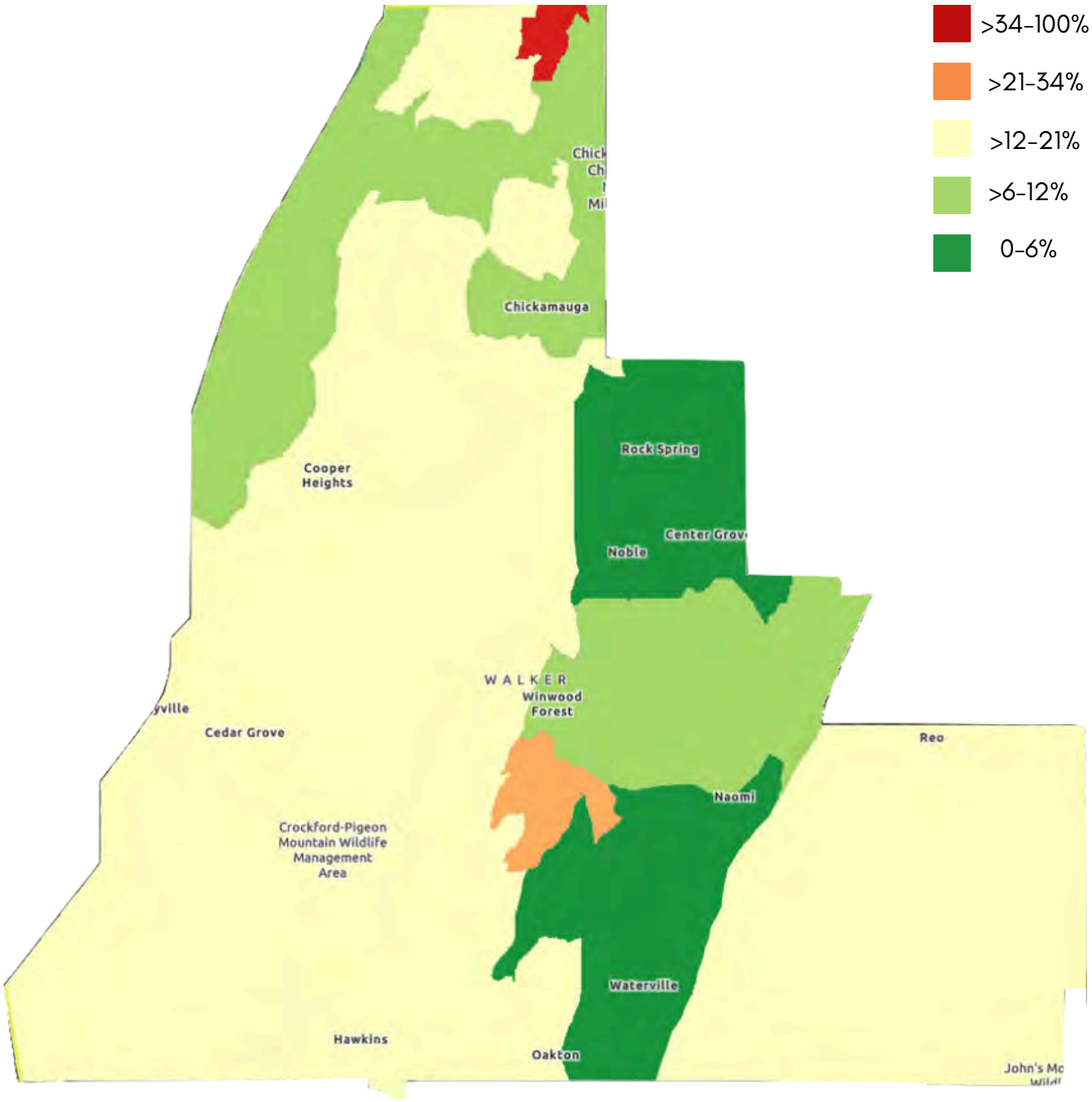
## MAP 11: TOP TECHNOLOGY



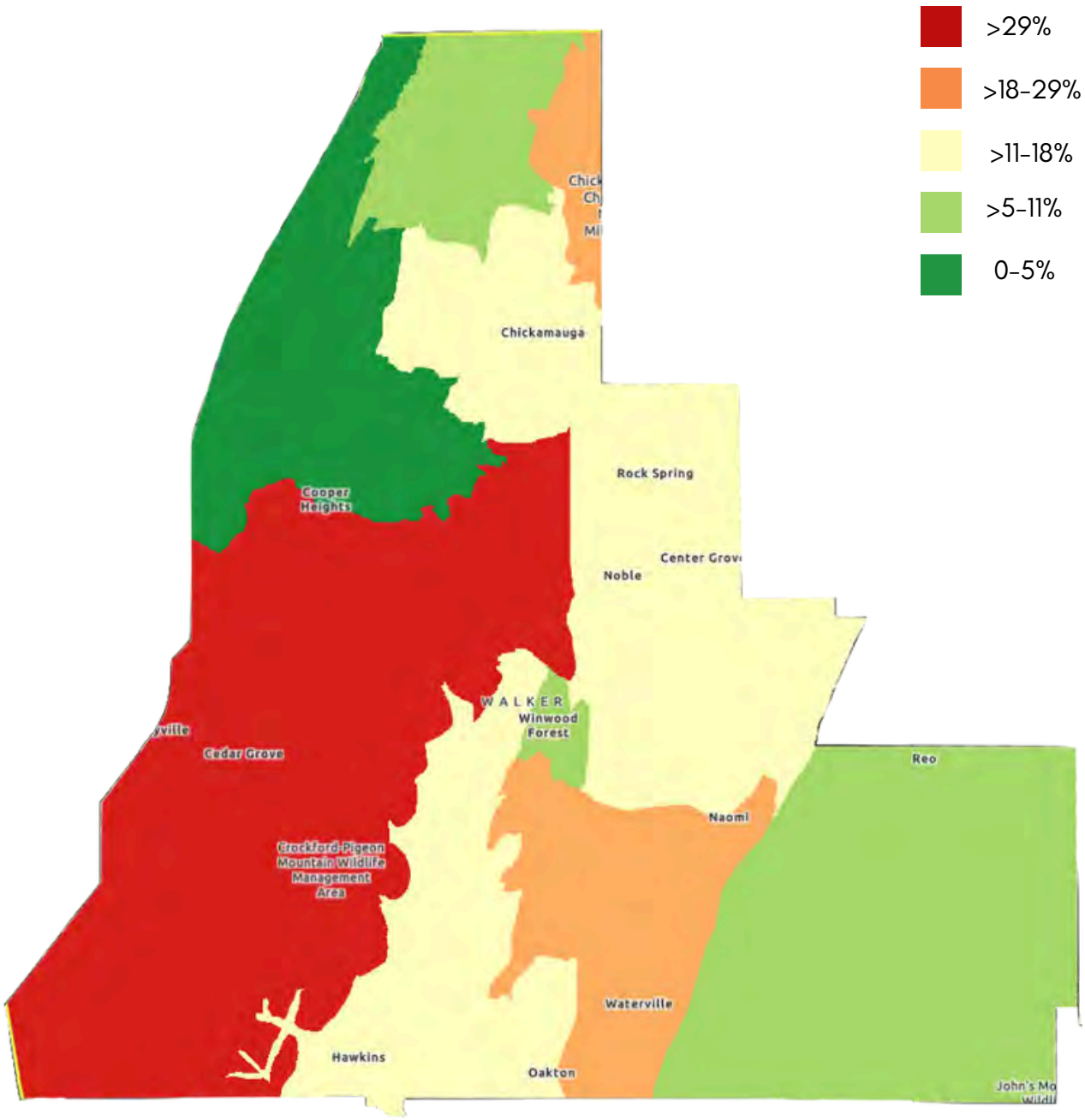
## MAP 12: TOP ISP



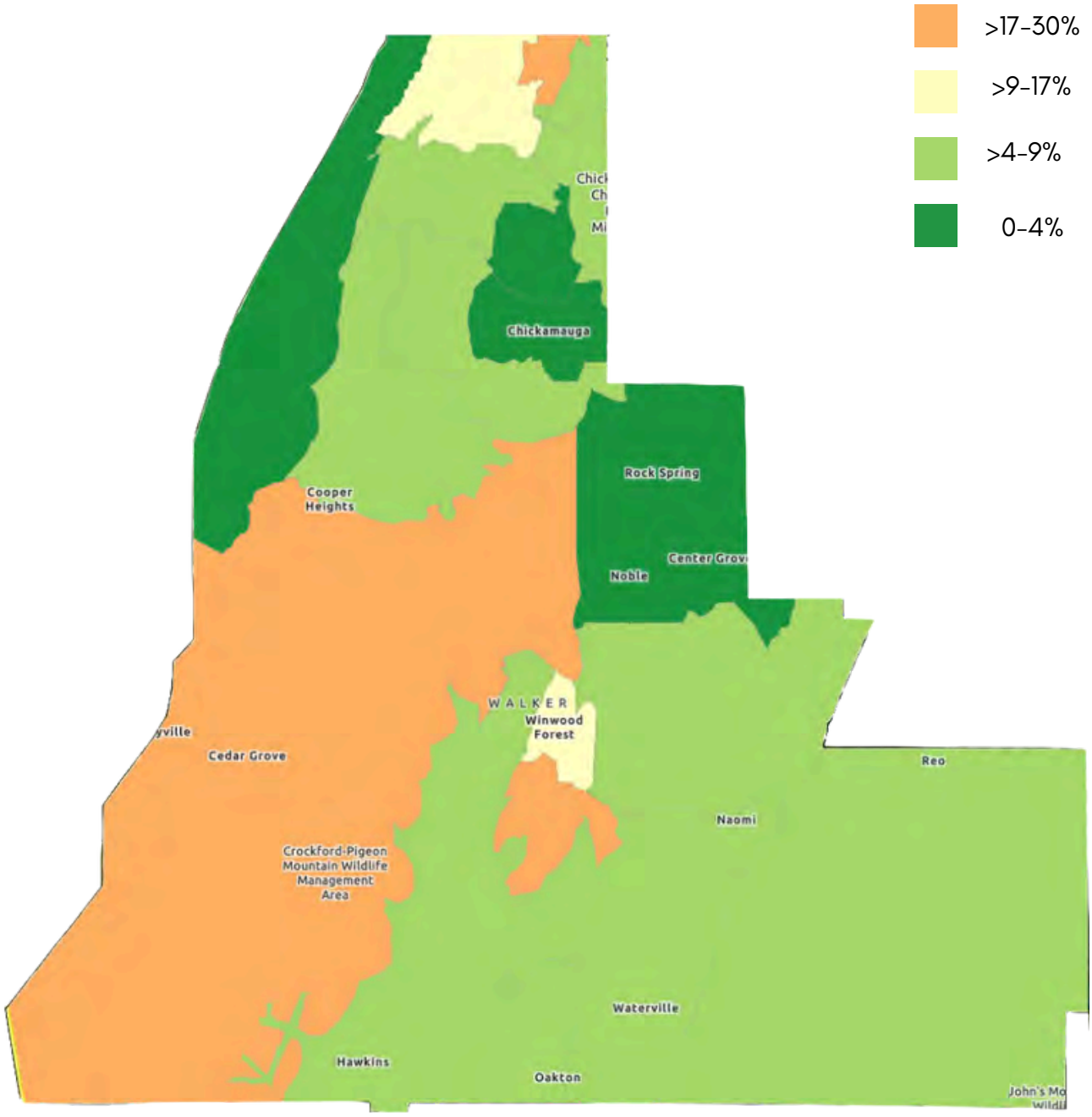
## MAP 13: HOUSEHOLDS WITH NO INTERNET SUBSCRIPTION



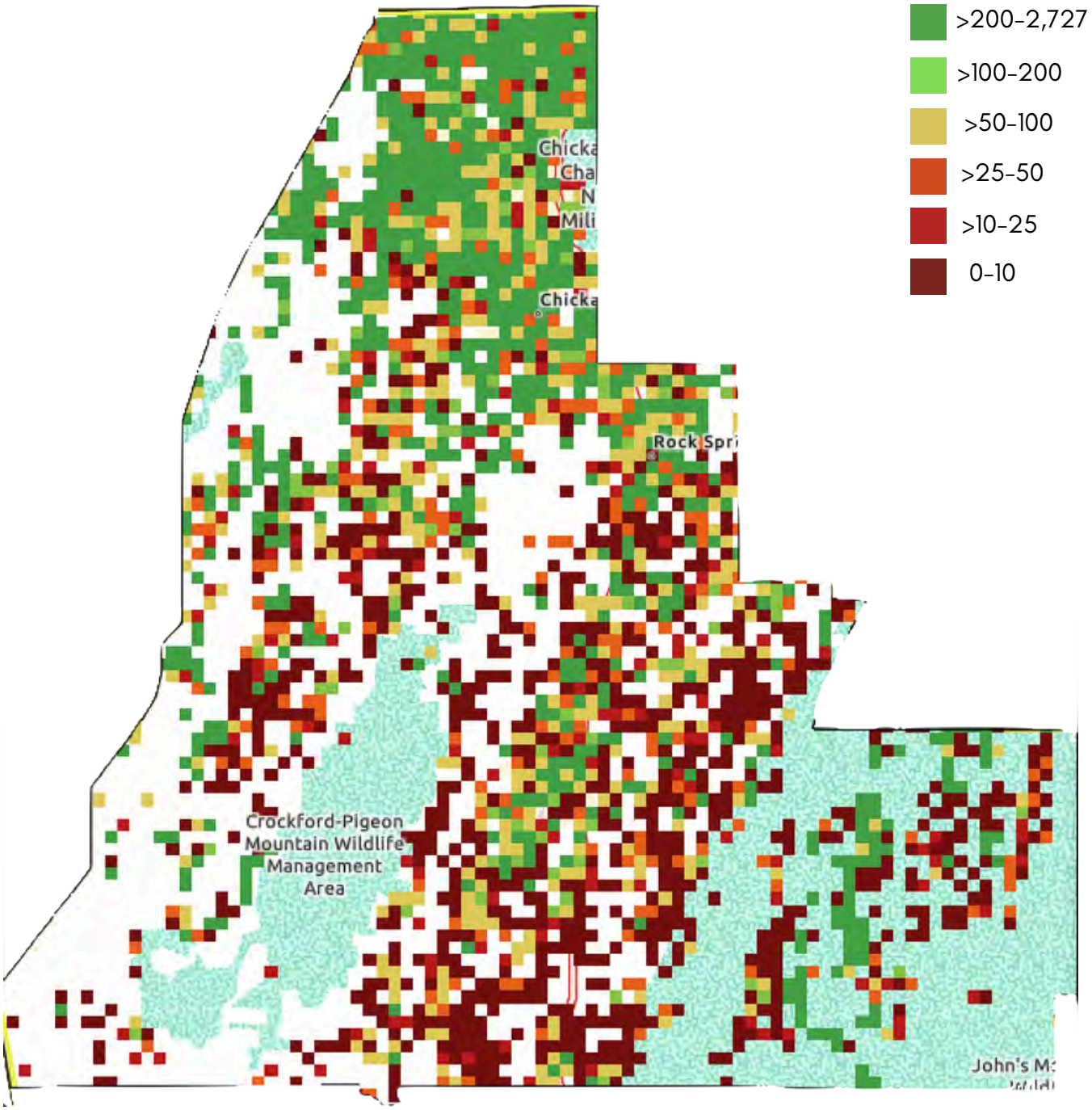
## MAP 14: HOUSEHOLDS WITH ONLY SMART PHONE



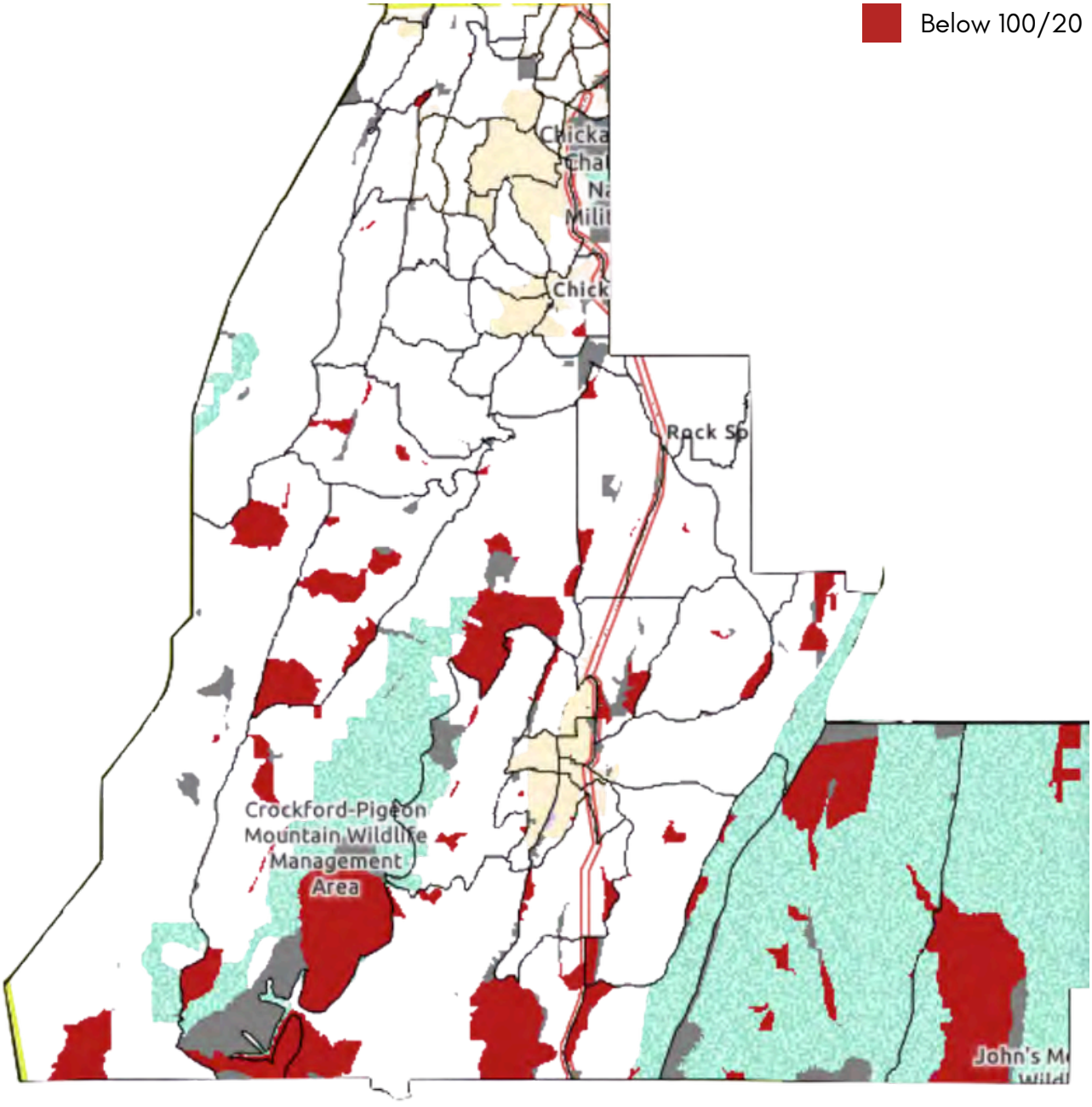
## MAP 15: HOUSEHOLDS WITH NO DEVICE



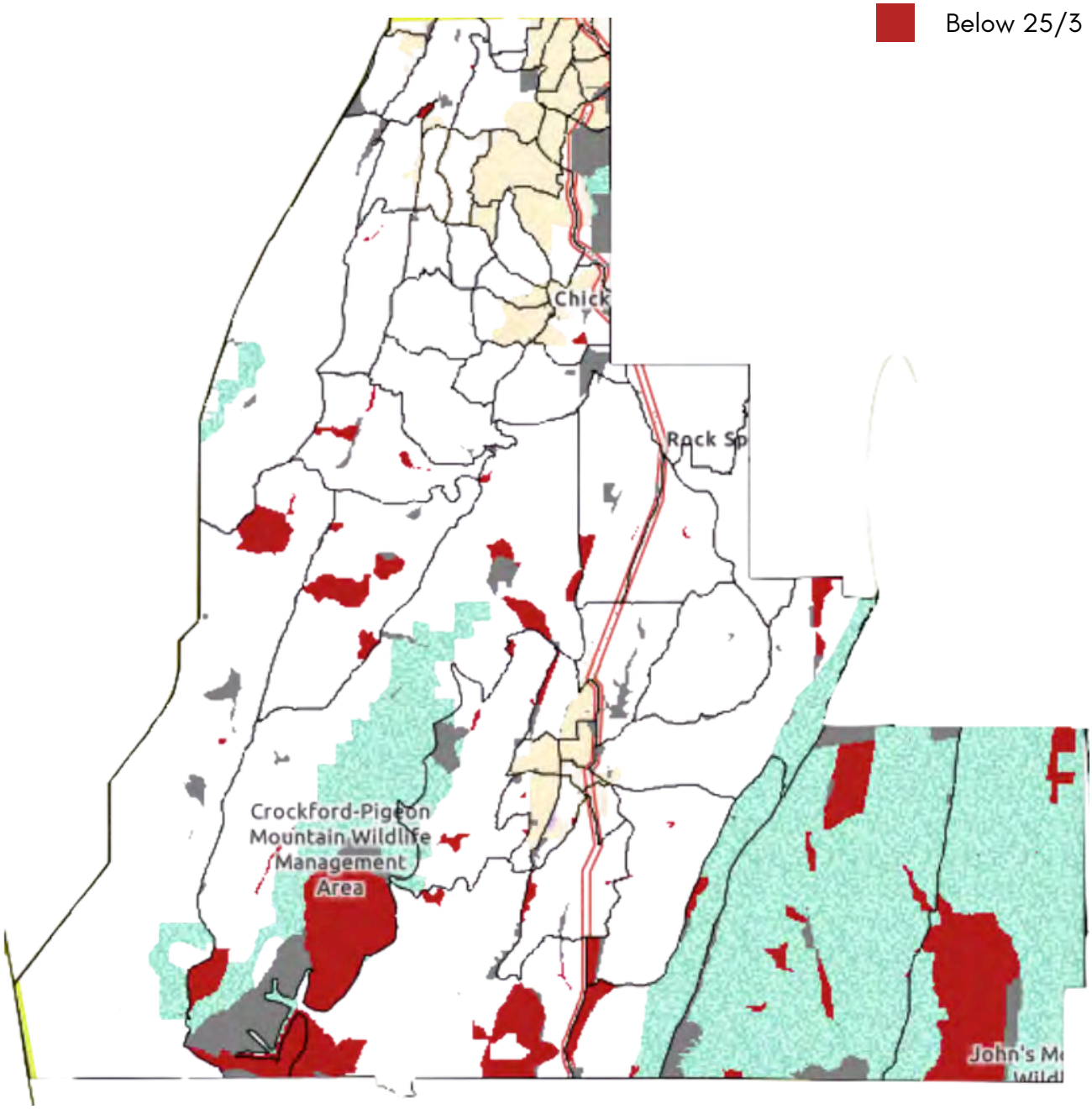
## MAP 16: OOKLA SPEED TESTS



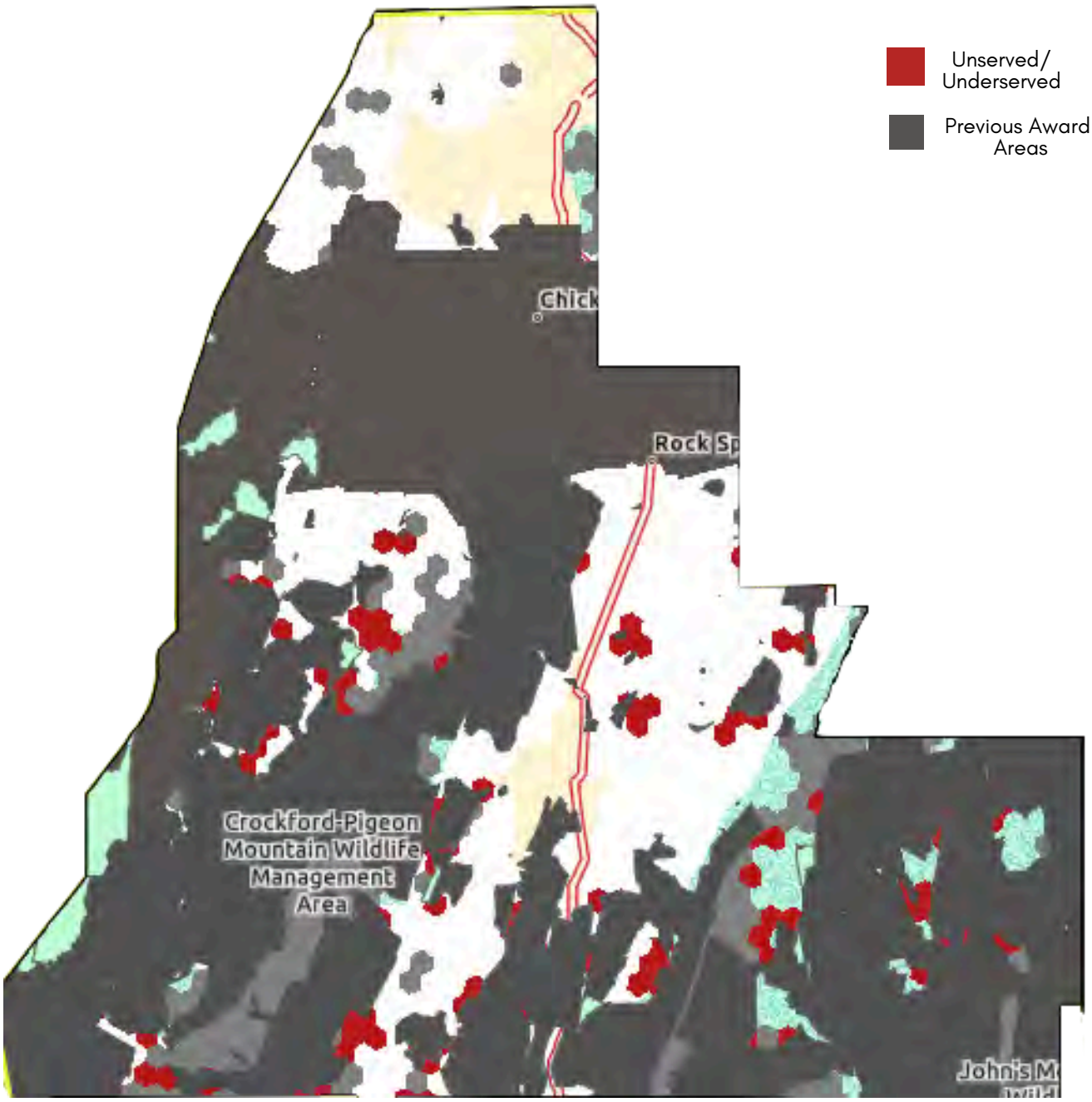
## MAP 17: UNDERSERVED



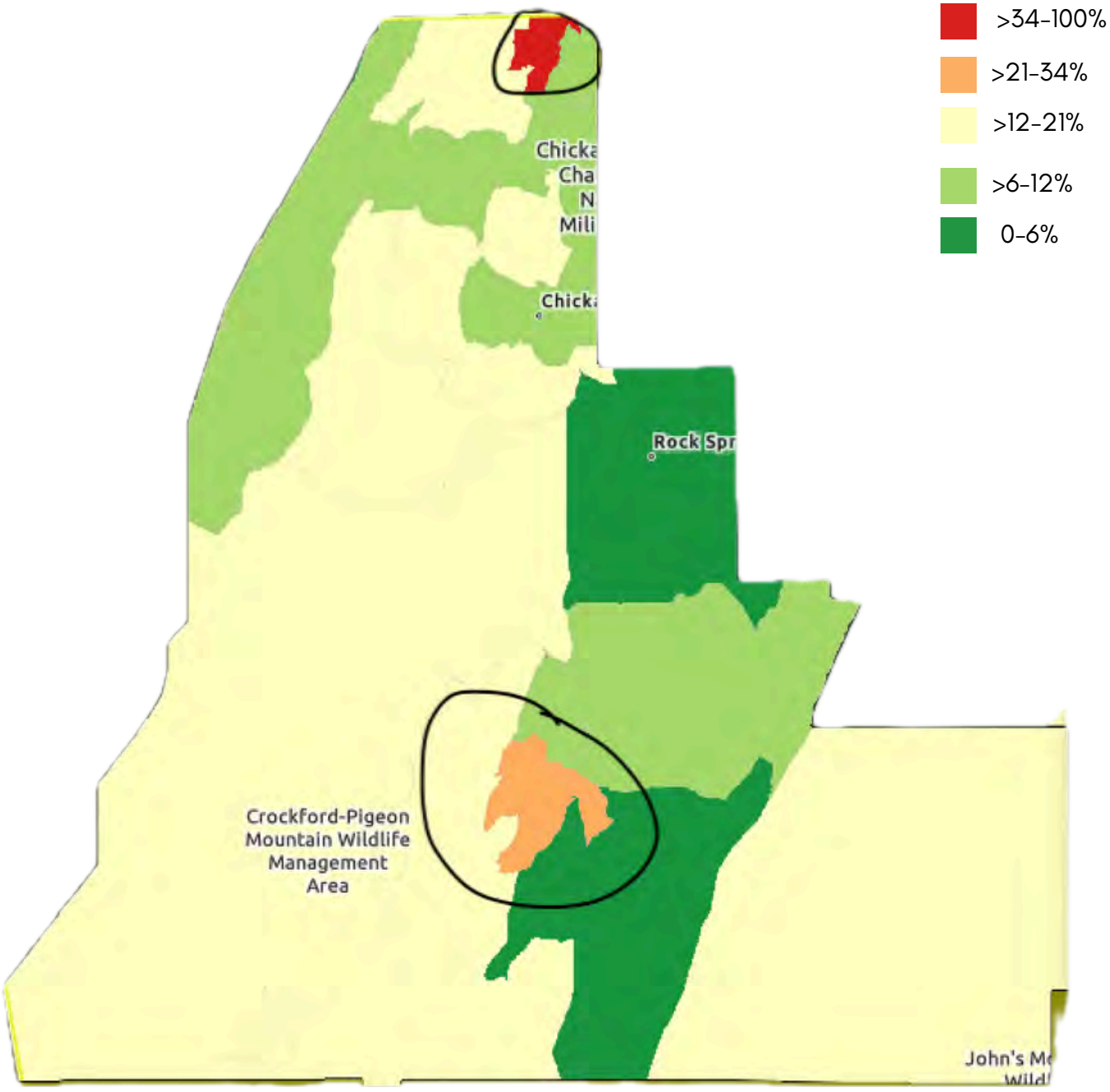
## MAP 18: UNSERVED



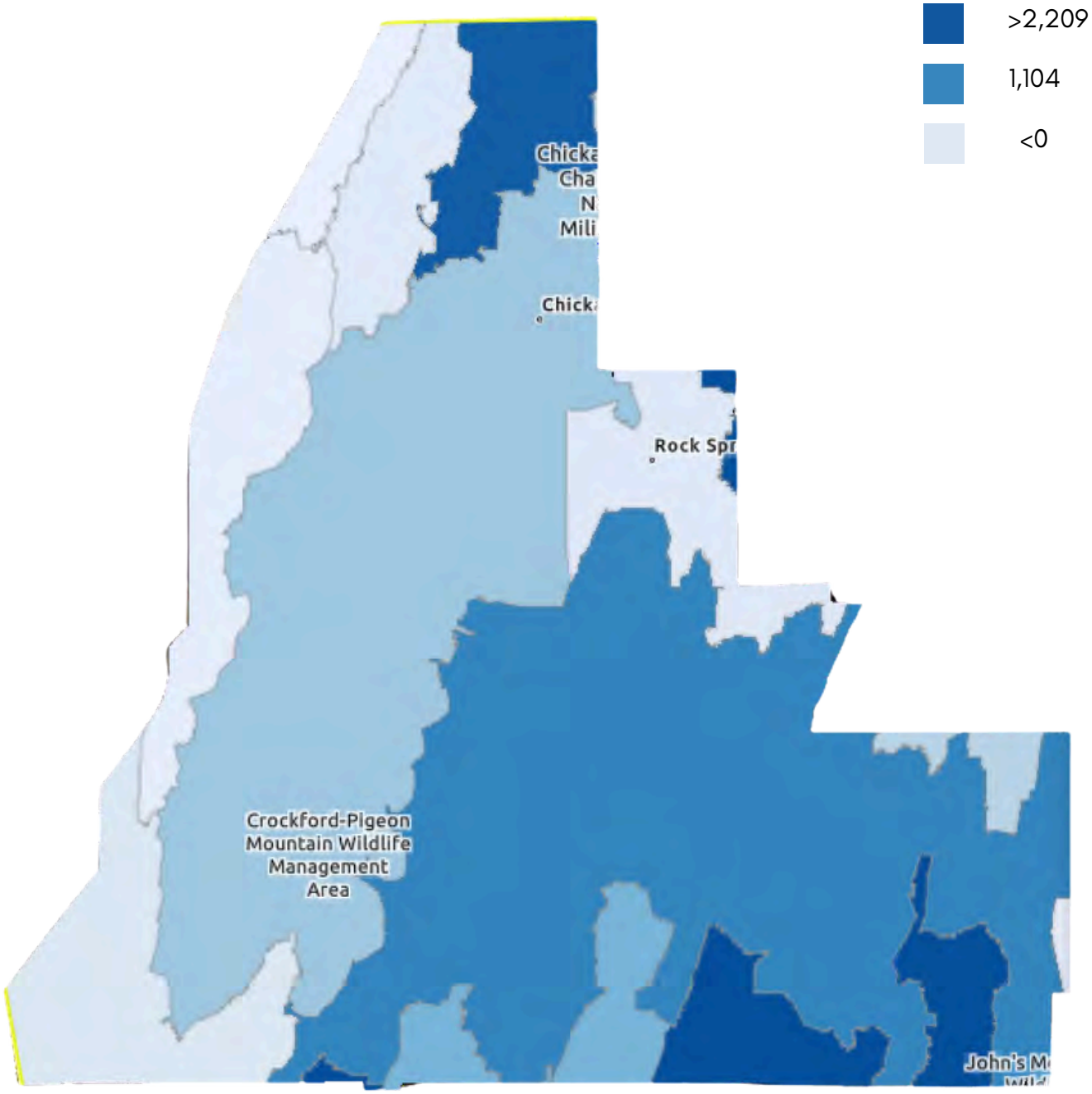
## MAP 19: POTENTIAL AWARD AREAS



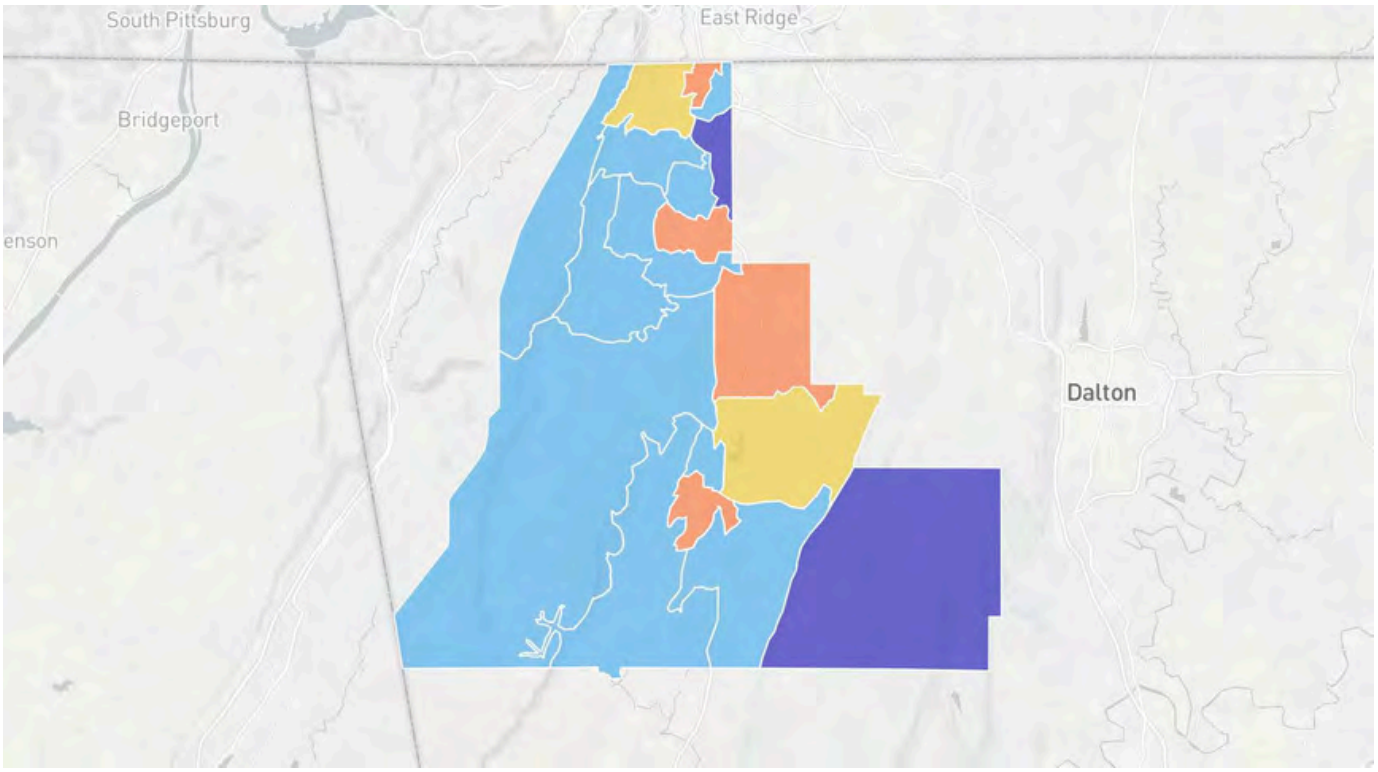
## MAP 20: HOUSEHOLDS WITH NO INTERNET



## MAP 21: AFFORDABLE CONNECTIVITY PROGRAM ENROLLMENT (COUNT)



## MAP 22: TRACT HAZARD RISK SCORE MAP




- Very Low
- Relatively Low
- Relatively Moderate
- Relatively High
- Very High

## APPENDIX C: INTERNET SERVICE PROVIDERS TOTAL COVERAGE TABLE

| ISP | Top Tech | Total Census Units | % of Total Units | Sq. Mile Coverage | % Square Mile |
|---|---|---|---|---|---|
| EPB | Fiber | 7,988 | 27.42% | 32 | 7.24% |
| Xfinity | Cable Modem | 6,652 | 22.83% | 93 | 20.95% |
| Chickamauga Telephone Corp. (now operating as Arriva) | DSL, Fiber | 5,577 | 19.14% | 51 | 11.50% |
| Georgia Windstream, LLC. | DSL, Fiber | 3,848 | 13.21% | 149 | 33.43% |
| AT&T Inc | Fiber | 2,309 | 7.92% | 4 | 0.86% |
| Ringgold Tele Co/Rtc Solutions combined | Fiber | 1,482 | 5.09% | 11 | 2.51% |
| Trenton Telephone Co. | Fiber | 612 | 2.10% | 39 | 8.85% |
| Charter Communications Inc | Cable Modem | 266 | 0.91% | 6 | 1.30% |
| Windstream Georgia Communications, LLC | DSL, Fiber | 125 | 0.43% | 13 | 2.98% |
| T-Mobile US | Licensed Fixed Wireless | 93 | 0.32% | 5 | 1.23% |
| VERIZON | Licensed Fixed Wireless | 60 | 0.21% | 4 | 0.90% |

Note: If an ISP is listed for a census block, even with no census unit, then it is included in that ISP total

**Addresses sourced from housing for sale on Zillow in the following zipcodes: 30728, 30739, 30741, 30750, 30707, 30725, 30742. Addresses were random and did not correspond to unserved vs served designations. Additionally, although addresses picked may not have service currenlty available, does not mean other locations in that same zip code may not be servicable. This is just an example of potential availability and pricing across service providers for the same addresses. Pricing sourced September 25, 2024.**

| Provider | Availability Notes | Plan Speed/Name | Service Type | Advertised Monthly Fees | Service Details | ISP Reported Speeds (download/upload, latency) | What does the ISP say that means? |
|---|---|---|---|---|---|---|---|
| **AT&T** | Not available at addresses searched for these cities: LaFayette, Rock Spring, Lookout Mountain, Chickamauga | | | | | | |
| | | Internet Air (Rossville) | Not specified | $60 | $65/month for unlimited data, Advertised price after $5/month AutoPay discount (within 2 bills). Paperless billing required. Late payment fees $9.99, $200 for non-return of equipment fee; Visit att.com/aiadiscounts for available billing discounts and pricing options for broadband service bundled with other services like video, phone, and wireless service, and use of your own equipment like modems and routers. AT&T may temporarily slow data speeds if the network is busy. | 75-225 Mbps/10-30 Mbps 36-60 milliseconds (ms) | |
| | | Internet 25 (Flintstone) | Copper | $60/month (usually $70) | Monthly price $70, $99 installation fee, $9.99 late payment fee, $150 non-return equipment fee; taxes vary by location. Visit att.com/bbdiscounts for available billing discounts and pricing options for broadband service bundled with other services like video, phone, and wireless service, and use of your own equipment like modems and routers. 1.5 TB data; $10/50GB data charged for additional usage. | 32.5 Mbps/5.3 Mbps, 29 ms | With 25 Mbps you have enough bandwidth for: good for video streaming on multiple devices, sharing videos and photos, light gaming |
| | | Internet 50 (Ft Oglethorpe) | Copper | $60/month (usually $70) | Monthly price $70, $99 installation fee, $9.99 late payment fee, $150 non-return equipment fee, taxes vary by location. Visit att.com/bbdiscounts for available billing discounts and pricing options for broadband service bundled with other services like video, phone, and wireless service, and use of your own equipment like modems and routers. 1.5 TB data; $10/50GB data charged for additional usage. | 58 Mbps/11.6 Mbps, 26 ms | |
| **Charter** | **Not available in any addresses searched** | | | | | | |

**Addresses sourced from housing for sale on Zillow in the following zipcodes: 30728, 30739, 30741, 30750, 30707, 30725, 30742. Addresses were random and did not correspond to unserved vs served designations. Additionally, although addresses picked may not have service currenlty available, does not mean other locations in that same zip code may not be servicable. This is just an example of potential availability and pricing across service providers for the same addresses. Pricing sourced September 25, 2024.**

| Provider | Availability Notes | Plan Speed/Name | Service Type | Advertised Monthly Fees | Service Details | ISP Reported Speeds (download/upload, latency) | What does the ISP say that means? |
|---|---|---|---|---|---|---|---|
| **Arriva (formerly Chickamauga Telephone Co)** | Not available in addresses searched for these cities: LaFayette, Rossville, Lookout Mountain, Flintstone, Fort Oglethorpe | | | | | | |
| | | 400 Mbps symmetrical | | $57.99 | | | With 400 Mbps you should have enough bandwidth for: light streaming, HD streaming up to 2 devices, single player online gaming, smart home device connected (both plans include a local phone line at no additional cost!) |
| | | 1 Gig symmetrical | | $67.99 | | | With 1 Gig you should have enough bandwidth for: heavy data users, little to no buffering when multiple users are streaming, gaming, and browsing on multiple devices at the same time, ideal for 4k and 8k streaming, unlimited connected devices, best for smart home device support, multiplayer online gaming |
| **EPB** | Limited to Rossville area | | | | | | |
| | | 300 Mbps | Fiber | $57.99 | | | With 300 Mbps you should have enough bandwidth for: fastest speeds for individuals and couples with basic bandwidth demands, dependable speed, buffer-free streaming, video chatting and more |
| | | Gig | Fiber | $67.99 | | | With 1 Gig you should have enough bandwidth for: faster than average uploads and downloads for learning, working, streaming and connecting on multiple devices at once |

**Addresses sourced from housing for sale on Zillow in the following zipcodes: 30728, 30739, 30741, 30750, 30707, 30725, 30742. Addresses were random and did not correspond to unserved vs served designations. Additionally, although addresses picked may not have service currenlty available, does not mean other locations in that same zip code may not be servicable. This is just an example of potential availability and pricing across service providers for the same addresses. Pricing sourced September 25, 2024.**

| Provider | Availability Notes | Plan Speed/Name | Service Type | Advertised Monthly Fees | Service Details | ISP Reported Speeds (download/upload, latency) | What does the ISP say that means? |
|---|---|---|---|---|---|---|---|
| | | Gig 2.5 (includes wifi) | Fiber | $97.99 | | | With Gig 2.5 you should have enough bandwidth for: insanely fast for tech-savvy homes with dozens of gaming, working, entertainment, and smart home devices |
| | | Gig 10 | Fiber | $299.99 | | | With Gig 10 you should have enough bandwidth for: for transferring enormous files, hosting online servers or managing at home datacenters |
| **Georgia Windstream** | No address search available for Rock Spring, Rossville, Lookout Mountain, Flintstone, Fort Oglethorpe | | | | | | |
| | | 3 Mbps (LaFayette only) | | $40 | $40 with autopay otherwise $45, months 1-12 $45 then increases to $55 thereafter; Paper bill fee $2 | 3 Mbps/728 Kbps, 40 ms | |
| | | 300 Mbps (Chickamauga) | | $39.99 | $39.99 with autopay otherwise $44.99/month for the first 12 months. $64.99 months 13+, Paper bill fee $2 | 300 Mbps symmetrical, 25 ms | With 300 Mbps you should have enough bandwidth for: video calling, HD streaming, online gaming |
| | | 1 Gig (Chickamauga) | | $69.99 ($39.99 for first three months) | Months 1-3 $44.99, months 4-24 $74.99, months 25+ $94.99 and a $5 discount/month for autopay, Paper bill fee $2 | 1000 Mbps symmetrical, 25 ms | With 1 Gig you should have enough bandwidth for: glitch free video calling, buffer-free 4k streaming, multiplayer gaming |
| | | 2 Gig (Chickamauga) | | $99.99 | Months 1-24 $104.99, months 25+ 124.99, $5 discount/month for autopay, Paper bill fee $2 | 2000 Mbps symmetrical, 25 ms | With 2 Gig you should have enough bandwidth for: highest quality group video calling, instant 8k multi-stream 4k viewing, pro-level gaming and VR with ultra low lag |
| **Ringgold Telephone Company** | **All addresses outside of listed territory** | | | | | | |
| **T Mobile** | Not available at addresses searched in LaFayette, Rock Spring, Lookout Mountain, Fort Oglethorpe | | | | | | |

**Addresses sourced from housing for sale on Zillow in the following zipcodes: 30728, 30739, 30741, 30750, 30707, 30725, 30742. Addresses were random and did not correspond to unserved vs served designations. Additionally, although addresses picked may not have service currenlty available, does not mean other locations in that same zip code may not be servicable. This is just an example of potential availability and pricing across service providers for the same addresses. Pricing sourced September 25, 2024.**

| Provider | Availability Notes | Plan Speed/Name | Service Type | Advertised Monthly Fees | Service Details | ISP Reported Speeds (download/upload, latency) | What does the ISP say that means? |
|---|---|---|---|---|---|---|---|
| | | Home Internet Unlimited | | $50 | Discount for plans using auto pay and online discount, unlimited data. $55 monthly price, $35 device connection charge | 72-245 Mbps/15-31 Mbps, 19-37 ms | With Home Internet Unlimited you should be able to: stream shows, video conference, complete homework, and more |
| | | Home Internet Plus | | $70 | Unlimited data, $75 montly price or $70 with autopay, taxes and fees included, $35 device connection fee | 72-245 Mbps/15-31 Mbps, 19-37 ms | With Home Internet Plus you should be able to: get faster speeds and more powerful performance, ideal for more devices |
| | | Home internet backup (for staying connected when main internet service has an outage.) | | $20 | $25 without autopay, includes 130 GB data (enough for 7 days estimated), 5G wifi gateway. $35 device connection charge | 72-245 Mbps/15-31 Mbps, 19-37 ms | |
| Trenton Telephone Company | Search function not available | | | | | | |
| | | 1 Gig Symmetric | Fiber | $69.95 | Unlimited Internet Access, includes voice at no additional cost. | | |
| Verizon | Not available to addresses searched in LaFayette, Lookout Mountain, Fort Oglethorpe | | | | | | |
| | | 5G Home (100 Mbps) | | $60 | Router included, deposit based on credit check ($0-400), late fee $7 or 5% of past due balance, $10 discount for auto pay and paperless billing, unlimited data | 50-85 Mbps/5-10 Mbps, <30ms | With 5G Home you should have enough bandwidth for: 1080p HD video streaming |
| | | 5G Home Plus (300 Mbps) | | $80 | Router and whole-home wifi included, deposit based on credit check ($0-400), late fee $7 or 5% of past due balance, $10 discount for auto pay and paperless billing, unlimited data | 85-250 Mbps/10-20 Mbps, <30ms | With 5G Home Plus you should have enough bandwidth for: ultra HD 4k video streaming |
| Xfinity | Not available to addresses searched in LaFayette, Lookout Mountain | | | | | | |

**Addresses sourced from housing for sale on Zillow in the following zipcodes: 30728, 30739, 30741, 30750, 30707, 30725, 30742. Addresses were random and did not correspond to unserved vs served designations. Additionally, although addresses picked may not have service currenlty available, does not mean other locations in that same zip code may not be servicable. This is just an example of potential availability and pricing across service providers for the same addresses. Pricing sourced September 25, 2024.**

| Provider | Availability Notes | Plan Speed/Name | Service Type | Advertised Monthly Fees | Service Details | ISP Reported Speeds (download/upload, latency) | What does the ISP say that means? |
|---|---|---|---|---|---|---|---|
| | | 150 Mbps | | $30 | $40/month for 12 months afterwhich is $66/month. There is no term contract. Plan includes access to Xfinity WiFi public hotspots. This price does not include the autopay and paperless discount of up to $10/mo. Optional modem or gateway lease $0 for the first 12 months and the monthly price after 12 months is $15/mo. Optional xFi Complete $10/month. This is a promotional price; the monthly price after 12 months is $25/mo. Includes Unlimited Data, Gateway Lease, Tech Upgrade, Advanced Security on the Go, and Whole Home Wifi. Professional Install Fee (only option) $100. 1.2 TB data included. $10/50 GB after that, with a maximum of $100/month. Or $30 unlimited data for customer-owned modems. | 175.96 Mbps/23.37 Mbps, 20.083 ms | With 150 Mbps you should have enough bandwidth to: browse web, stream music and movies |
| | | 300 Mbps | | $45 | $55 monthly price for 12 months (requires 12 month contract). $86/month after 12 months. Includes access to Xfinity wifi public hotspots. Up to $10 in discounts with autopay and paperless billing. $10/month for Optional xFi complete for first 12 months, than $25/month (unlimited data, gateway lease, tech upgrade, whole home wifi), self-installation fee $39.99, professional installation fee $100, late payment fee $10, early termination fee $110, taxes vary, 1.2TB data and $10/50 GB after, $30 for unlimited data for customer owned modems | 351.04 Mbps/23.37 Mbps, 19.316 ms | With 300 Mbps you have enough bandwidth to: download medium files, download music and podcasts, stream in HD quality |
| | | 500 Mbps | | $55 | $65/month for 24 months, after it is $96/month. Includes public hotspots and available for additional discounts with autopay and paperless billing ($10), $10/month for Optional xFi Complete for first 24 months than $25/month. $39.99 self-installation fee, $100 professional install fee, $10 late payment, $230 early termination fee, taxes vary, 1.2 TB data and than $10/50 GB with max of $100/month, $30 unlimited data for customer-owned modems | 583.13 Mbps/23.37 Mbps, 14.123 ms | With 500 Mbps you have enough bandwidth to: download medium files quickly, work and learn from home, low lag when streaming |

**Addresses sourced from housing for sale on Zillow in the following zipcodes: 30728, 30739, 30741, 30750, 30707, 30725, 30742. Addresses were random and did not correspond to unserved vs served designations. Additionally, although addresses picked may not have service currenlty available, does not mean other locations in that same zip code may not be servicable. This is just an example of potential availability and pricing across service providers for the same addresses. Pricing sourced September 25, 2024.**

| Provider | Availability Notes | Plan Speed/Name | Service Type | Advertised Monthly Fees | Service Details | ISP Reported Speeds (download/upload, latency) | What does the ISP say that means? |
|---|---|---|---|---|---|---|---|
| | | 1000 Mbps | | $65 ($75 in Chickamauga + Fort Oglethorpe) | $85/month for 24 months and then $116/month. $10/month discount with autopay and paperless billing, $10/month for Optional xFi Complete for first 24 months than $25/month. $39.99 self-installation fee, $100 professional install fee, $10 late payment, $230 early termination fee, taxes vary, 1.2 TB data and than $10/50 GB with max of $100/month, $30 unlimited data for customer-owned modems | 1141.94 Mbps/23.27 Mbps, 14.478 ms | With 1000 Mbps you should have enough bandwidth to: download large files, stream all favs, ultra low lag |
| | | 1200 Mbps | | $95 | $105/month after additional fees. This monthly price is an introductory rate for 24 months. This monthly price requires a 24 month contract. he post introductory price for this plan is currently $126/mo and is subject to change. Includes access to Xfinity WiFi public hotspots. This price does not include the autopay and paperless discount of up to $10/mo. Modem or gateway lease $15/month. Self-installation plus fee $39.99. Professional Install Fee $100. Unlimited data for customer-owned modems $30. Charges for Additional Data Usage $10/50 GB (comes with 1.2 TB) | 1302.26 Mbps/40.52, 14.209 ms | With 1200 Mbps you should have enough bandwidth to: share and download at lightning-fast speeds, connect and stream in 4k on every device, ultra low lag |

# APPENDIX D: COMMUNITY ANCHOR INSTITUTIONS

## COMMUNITY ANCHOR INSTITUTIONS ASSET INVENTORY

The following is a narrative of the different organizations, community anchor institutions, and resources that exist in Walker County.

**Cedar Grove Community Center**
Located in Chickamauga, GA, the Cedar Grove Community Center is a meeting center that targets its outreach to help the youth of the area. "Everything is to help kids" - Sam Bowman. The fundraisers throughout the year are to raise money to sponsor kids to go to camp. They also provide bookbags for back to school with all the supplies that are needed. This year they donated 100 bookbags. The majority of the events and meetings held do not require connectivity. Everything they do is free and open to the public. It is more about providing a space and place for people to connect with each other. The building is a disaster relief center, owned and managed by the county, with smart technology that controls the building (to include a 24x7 public wifi access point). Cedar Grove Community Center is there to help people. People come to connect with each other. It is not a place people are coming to thinking about accessing the internet or being online. Yet, it is a location that is available for rent and would be able to facilitate skills training due to its connectivity.

**Cherokee Regional Library System**
The Cherokee Regional Library System, with branches in Chickamauga, Rossville, and LaFayette, as a community anchor institution believes their goal is to be all things to all people. They believe in open access to all - the aging, incarcerated, veterans, children, individuals with disabilities, with language barriers, of low income or low literacy, ethnic or racial minorities. They recognize that each community in Walker County is unique and the libraries located in those communities need to vary in response to the interests and needs of those communities. Chickamauga, for example, has had the highest demand for books which aligns with the growth of the city. During COVID many government resources closed their doors and moved online (the department of labor, child services, food stamps, etc); the libraries opened their doors and extended their hours, making their wifi 24x7 in the parking lot, so even if their doors were closed, access was not. People come to the library because there is a person who is there to help.

- For the aging population, the Cherokee Regional Library System has identified they are the most likely to need help with digital skills. Everything from how to use a phone or education on scams. They are the population that utilizes the library the most for help in this area.
- The Cherokee Regional Library System worked with the Dade County Sheriff to develop a Next Chapter Program[68], a re-entry program for the Dade County Jail. Through a grant, they were able to fund a videographer to create video modules that teach basic digital literacy along with financial and life skills. The program is overseen by the Dade County Jail and the video courses were developed by the Cherokee Regional Library System. In order to participate, inmates must have committed a non-violent crime and commit to completion of the program.
- The Cherokee Regional Library System partners with the YMCA in literacy programming.

Lecia Eubanks, Director of Cherokee Regional Library System, shared that most people make it a priority to get a device even if they cannot really afford it. The people who come to the library typically are those who really have a need and do not have their own device (or do not have enough devices to meet everyone's needs in a household), do not have internet service (to include cell service), live in dead zones, or who rely on hotspots for access to the internet.

[68] Next Chapter

*Resources:* Device access and internet are the primary two offerings. The libraries provide device access, device lending, wifi, and hotspot lending. The library system takes pride in the fact that there is no disparity between the library locations - they all have exceptional speeds. The library system all has very reliable 1Gb speeds. They use Parker FiberNet for their service and believe it to be exceptionally reliable. The number of devices at the individual libraries fit the size of the community it is in. They are a chrome device environment and guests can check these devices out and use them in the library or can take them home. The hotspots can also be checked out as well as renewed for continued home use. The hotspots are to be used for educational purposes and can restrict streaming services (except youtube) and also enable video conferencing.

*Programming:* is heavily geared towards youth but does include some aging population programming as well. They offer a tutor program that is funded through a local foundation that averages 350 sessions each month systemwide, with June of 2024 being their busiest month yet. Although the tutoring is not for digital skills or literacy, it shows the capacity of the Cherokee Regional Library System for offering one on one educational assistance and a resource the community relies on. They do offer programming to the aging population, however they have not been well attended and have found it is better to offer one on one training or help. As part of the monthly programming, they offer cybersecurity content on how to be aware of scams etc. They work with external partners to provide this.

*Identified needs:* Funding. The library system participates in ERATE for internet subscription coverage which is applied for by the state and distributed at the county level. Funding support is external and is often grant dependent. Although grants are wonderful, the library system is short staffed and grants are time consuming to apply for and to report on. Public libraries are vulnerable because they are not constitutionally mandated - each branch has to raise funds locally. Currently, Walker County, the cities of Chickamauga, Rossville, and LaFayette, and the board of education all are funding the Cherokee Regional Library System but these funds are not guaranteed year after year. The hourly rate of their staff needs to be increased with the rising cost of living. They are vulnerable to staffing loss due to their limited financial resources. As grants are often on one year funding cycles, they cannot be fundraising annually for salaries. Additionally, they cannot afford to continue to provide the twenty five hotspots they were providing during COVID (due to the data plan costs). Currently they are providing five per library and twenty five devices per branch. As part of ERATE, there is an opportunity to apply for cybersecurity funding but that would require an assessment of their needs. The library system needs a dedicated technologist salaried position, who can manage this, as well as serve as a digital navigator for their library system. The library system has also identified the need for generators for each of their locations in the case of emergencies - the library is a place to have people come beyond shelters in times where help is needed to have access to essential services.

*Potential:* When people are new to the area, the library is one of the first places they come. There is an opportunity to be a resource for information sharing. They provide a safe environment for those who come; they are a community hub for many residents. The library is free to use during the day (and can be rented for a small fee at night). It is a place for people to come, to congregate, to socialize. They have heard time and time again that if they had not been there, people would not have known where to go for help.

**LaFayette Housing Authority**
Marlena Smith, Housing Manager, at the LaFayette Housing Authority, shared that the majority of low income individuals who live at the LaFayette Housing Authority are elderly and disabled and do not want or cannot afford the internet. In an increasing age of digital technology, services and resources are moved online, yet the residents do not know how to access or navigate these. Often residents seek help from Marlena Smith and the other staff for how to apply for benefits, health insurance, or how to use a smartphone. The LaFayette Housing Authority has a community room in their main office which is a resource that can be used for hosting digital skills or cybersecurity training in the future through partnership with digital equity stakeholders.

**Next Chapter**
A re-entry program that was a collaboration between the Dade County Jail, Seth Houts, and the Dade County Public Library, a branch of the Cherokee Regional Library System. After several years of work, with research and community engagement, Chelsea Kovalevskiy, Assistant Director of the Cherokee Regional Library System, was brought on board to help with the implementation stage. Through a grant opportunity with the Cherokee Regional Library System equipment was able to be procured and professional videographers engaged. Although this program is being conducted in Dade County, there is potential to expand to Walker County as the program is open to inmates outside of Dade County. Currently there are 633 registered users with the self-guided niche academy program. The program has had a good response thus far. The pilot program is still out and consists of parenting, financial resources, adult "101" classes. They work with libraries since they are everywhere. The program includes digital skills training, cybersecurity, and resume writing as well. The program's origins began in the Cherokee Regional Library system with a simple statement from a man saying “I’m not in orange”. The goal of the program is to help support inmates before re-entry so that they will not return to jail or to prison.

**North Georgia Community YMCA**
The North Georgia Community YMCA Program Center is located on the campus of Fort Oglethorpe United Methodist Church and is a strong partner with the Walker County School System. The majority of the work being done in Walker County is directed to youth, specifically those who are of lower socioeconomic status, those with low literacy, and rural populations. The North Georgia Community YMCA provides meals for youth through a program called “Backpack Blessings”. There are currently approximately 830 students per week who are provided food for the weekend. John Donahoo, District Vice President, spoke to the fact that many children move a lot over the course of a year and are vulnerable to food insecurity. The program provides children 2-3 lbs of food per week to each of the 830 students. The YMCA also provides an after school program (a 2 star quality rated child care center) and cares for 160 students at four Walker County schools. As part of the afterschool program, they provide math and reading tutoring, using almost 1:1 iPad technology, for 45 minutes to an hour each day. They are on a mission to reduce screen time as they recognize the impact to health and development, yet still provide impactful educational assistance.

*Opportunities:* The YMCA is working towards a monthly parent meeting which is a platform for parent engagement and a resource to support and partner with parents, such as providing basic digital skills training or helping to sign up for benefits.

*Potential:* The YMCA has great support from the county and the school system. They are able and willing to fill gaps. “We don’t usually do it alone. We will go where the support is.” - John Donahoo

**North Georgia Technical College**
North Georgia Technical College is the largest college in NW Georgia with six campuses and an aviation center. 95% of students receive financial aid, and part of those receive complete tuition. There is a large population of low income, first generation college students, and primary language other than English (Spanish). The student population is as much as 10% veterans. Most classes tend to be online except for certain technical courses. The college has received an award for being a technical innovator. Every class is required to have an online component (or hybrid capability). Courses are Windows based classes. North Georgia Technical College is not a chrome book environment, especially those who take IT courses. Programs are Windows based and device access can be an issue. There are tutoring labs on each campus and each student has to take a Comp1000 (literacy course) with basic Microsoft Office and Windows skills taught. This course is also available to anyone in the public, offered online or in person at at least 5-6 campuses. It is also taught in the high schools for dual enrollment credit.

There are computer labs on campus which are closed Saturday and Sunday with limited hours during the week. 20% of students are working full time and the expectation is they would have difficulty accessing the computer lab. Students who have their own device must have enough memory and disk space; less than 10% do not have strong enough machines which is a barrier for them. The college does lend out laptops for use to certain students and also has online virtual machines available for students. A dedicated fiber line from Rome's campus runs to each campus, providing broadband service. Broadband access is a necessity. Given the area, a fair number of people only have dial up internet through Windstream. Students taking certain classes are not able to participate with dial up where speeds need to be minimum 100 Mbps and above. Many go to the public library or to a friend's or relatives' homes. Tech failure is not an excuse for not doing work.

**Walker County Senior Life Services**
Preston Lewis, Manager of the Walker County Senior Life Services, shared that very few of the individuals who come to the center have computers and many have hearing or sight impairments, needing adaptive technology. The center has guest speakers who come as part of the programming, which include cybersecurity information. However, they do not have the ability to expand their facility and are limited on space and cannot accommodate any computer room on premises as compared to the Catoosa County Senior Center. Additionally, they do not have the funding for laptops or equipment as their staffing is critical and the priority. The center is open 8am-1pm. They are a resource for information sharing and hosting programs related to digital literacy and cybersecurity.

**Walker County Health Department**
Services are currently only available in person. There are no available online resources.

**Walker County School System**
“If we don’t embrace technology, we are missing a huge opportunity. The Walker County School system is teaching students how to best use devices and technology to serve them and those around them. Connectivity shows students, who for the most part do not leave the county, what is possible, what is out there. Connectivity is what bridges the gap for the students.” - Superintendent Raines

The Walker County School system consists of fifteen public schools and serves 8,500 students currently, including low income, low literacy, disabled, ethnic and racial minority groups, individuals with language barriers and those who live in rural areas. All schools are Title 1 schools (except Fairyland ES) and all schools (to include Fairyland ES) are qualified under the Community Eligibility Provision (CEP) for free breakfast and lunch for the next four years. Kids are changing and so is education. Teachers are facilitators in the school. During the pandemic, Walker County Schools outfitted their buses with wifi and parked them throughout the county to provide hotspots for families in rural areas without internet access. This was funded through a two year grant. The school is currently working on outfitting two buses specifically for work with the ESOL population (language barrier populations) to provide digital training and engagement. These buses will respectively service north and south schools except Fairyland Elementary. They will deploy in early 2025. The school system recognizes that most students have cell service generally; it is estimated around half have home internet access. Due to the lack of internet access at home, the school system is shifting teaching such that they are not sending work home that requires technology. Students below 6th grade are only sent reading home. They are all given digital library cards so that if they do have internet access, they can read online. The schools have a one to one device program (devices stay at the school and generally do not go home). Teachers have Macbooks, K-2 are provisioned with iPads, 3rd-8th use chromebooks. For students 9th-12th grade, they are issued their own chromebook device which upon graduation will be theirs to keep. With current device lifetimes being five to seven years, and with many students not being able to afford their own device, the school started this program to empower students with devices for college or beyond. However, the school system is actually shifting away from the amount of time students spend on screens due to the negative effects of technology. There are “no screen days” one day per week. Safety and security is one of the primary concerns and requirements for connectivity. They have camera systems that are connected to 911 and have mapping to all doors to direct security to. Providing a safe environment is of top priority.

*Resources:* 90% have google classrooms, with smartboards in every classroom, and many teachers are google certified. There is a Parent and Family Engagement Coordinator (which is required and part of the budget) who identifies those families who are having issues with connectivity and informs the school system so they can provide a hotspot or additional resources as needed. Wifi is available to students in the school parking lots and playground, which is open after school hours. Currently the wifi is not public access. The State of Georgia provided outside access points and they are running at full power so users can get wifi before you even see the school and enables full access to google, ClassDoJo, which have appropriate firewalls, based on state restrictions. These are being used mostly by bus drivers (they track usage) compared to during COVID. However, users can bring any device to login and there are no bandwidth limitations. Keyboarding and computing classes are taught in the schools and there are technology standards from 3rd-12th grades according to the state ELA standards. One aspect of this is the career pathways which are offered starting in 7th grade. Additionally, students are taught how to care for a machine, the costs of what it takes to maintain, repair and replace it. They are also taught the value of appropriate filters, which is part of being taught good digital habits. The IT department is trained through state cybersecurity training and information is dispensed to teachers. They provide the required State of Georgia training on “know before” and phishing scams and have gotten their click rate to only 1%. The state tests their systems to maintain and guard against any potential compromise. The school uses software that give alerts if keywords are searched specifically that relate to suicidal ideation or mental health issues. Parents are given access to ClassDojo for parent-teacher communication along with PowerSchool and Remind. The Parent and Family Engagement Coordinator helps parents with access such as logging in and how to use the platform.

*Opportunities:* Broadband issues continue in the school district. They have already rewired the buildings so all devices can connect and to resolve bandwidth issues. The Network Operations Supervisor, Bob Swanson, has migrated disparate systems (three different ones) and flattened them to just one creating equality across all schools so they experience the same service. The schools get service through the state and they have enough bandwidth to divide amongst the schools to properly run the google classrooms. They also run a second system for normal browsing and internet traffic and a redundant system with firewalls and core switching.  However, fiber gets cut and goes out. The school system has moved to days without technology and are prepared for how to teach when this happens. Two years ago, the Walker County School system had an expert assess their system and they went from 400 access points to 1400 after, in response to the number of devices on the system. The real vulnerability is testing week as this impacts state reporting if the internet goes down and student testing is impacted. Resiliency is needed. All utilities are on the same poles - it doesn't matter who the vendor is, all services are vulnerable when a pole goes down. Power companies own all the poles. The Network Operations Supervisor has tried working with the local ISP's to create a round robin line that would connect the schools such that they would have an inside county connection to feed back - if north schools went out it would feed back from south schools and vice versa. It is estimated to cost $1.6 million to build this out for emergency preparedness. They are thinking of implementing starlink as a secondary/redundant backup with load balancing and firewall but the cost would be $800/site implementation + $100/month/site use and then $800-1000/site for licensing and watchdog. There was an incident with a semi a couple years ago on I-75 in TN which took out two poles causing the schools to be out of internet for ten days. To repair the line required the State of TN to shut down an interstate to run lines across six lanes of traffic to restore internet access in Georgia schools. The systems as built are vulnerable.

*Potential:* The school is focused on teaching lessons in good digital citizenship. The school system is always open to partnerships. They know they cannot do it alone. They are focused on developing citizens and the future workforce. They are willing to do anything to help their kids. There is potential to set up guest access for public wifi. It would have bandwidth limitations, unlike student access, and would only take two days to get it done but due to capacity issues, this is not a priority at this time.

*"Regarding Technology, I will speak on our department's behalf regarding truancy and connectivity. Our 1:1 initiative compiled with our safety systems (formerly GoGaurdian) now, Securly, allows students to work from anywhere in the world regarding communication platforms such as Google Classroom etc. However, that is not the reason for truancy to be down in Walker County. The systems/processes we have in place with our Mission Support Team (School Teachers/Staff, Guidance and Administrators) working together to make sure that student and parent relationships with the schools is the biggest factor. Technology is great but the relationships that have been built with our processes have been irreplaceable. Students don't just go missing for weeks or months anymore. Conversations are had and plans are put into place to help aid families and situations as they arise. Mitigation strategies working with all the great partners that our Superintendent has solidified has helped bridge the gap from past shortcomings and communications as a whole. We have resources to help make sure that no student/parent fails for a lack of support. It's not about numbers here in Walker County, it's about the whole child. It's everyone doing what is best for the kids and families potentially going through a tough time and or crisis and eliminating those obstacles for them. Making sure that they know we are aware and knowledgeable and most importantly, willing to help them meet the needs for their families.*

*Internet connectivity is vital for a communication hub and collaboration efforts but I want to make sure that it is very clear that this is not the fix all for what we have been able to accomplish as a District. Our graduation is up from the past of being at 58% just 13 years ago, our scores on our testing sources are up and growing, as well as our overall ACT scores are averaging around a 23 as a District. This took the implementation of a process that Superintendent Raines brought to the table.*

*This was a vision of his and Mission Support was a result of that vision. The leadership direction of our school system was such that relationships would play a key part in our future success. No longer would we let kids fail and fall out of school without the family being provided options and services to aid them. Then 2020 AKA, COVID happened.... The need for technology and connectivity for ALL of our students was at the greatest of all times.*

*Many strategies were put into place to connect students at that time. We literally were partnering with local linemen to hang our internet broadcast hubs on the tops of telephone poles in area of weak service, we had technology specialists (Aaron Watkins to name one), climbing on top of barns to install connection devices so that families could stay connected during that time. We also installed connection devices on school buses and placed them throughout our community. Since then we continue to value the need to communicate and for students/parents stay informed of options. We continue to find better ways to keep our students safe while surfing the net but allowing them to stay connected to our teachers and instruction.*

*Lastly, although it's not just about the numbers in Walker County, it's truly about the families and kids first, we continue to see our kids strive to new heights. Our students are receiving more dual enrollment credits than ever before, our students are passing and earning more AP Classes and that is a result of the efforts from everyone continuing to buy into the processes and keeping our kids best interests first. Connectivity is super important to our District and helps as a key component of helping aid the process but isn't the reasoning for all of the success of our students. The success starts at the very top and the vision has been bought into by all in order to make Walker County Schools great!"* - Scott Harden, Coordinator of Technology

**Walker Family Connection**
Family Connection is in all counties in Georgia and is a hub for connecting agencies and people in need to the appropriate resources. It is a coordination service - understanding people's needs and how to meet those needs and then connecting them to the appropriate resources. Very often the people who come to Family Connection for assistance are suffering poverty and trauma. Walker Family Connection works closely with the school system as it is one of the easiest ways to reach people and families.

Walker County's landmass is unique and large. It presents its own problems of access. According to Laura Beth Newsom, of Walker Family Connection, many pockets without internet access tend to be in areas with high poverty. The immigrant population generally does not yet have the paperwork to get the services they need and are a very high poverty population and a vulnerable population. Those who do have service generally have poor service and do not have the correct devices for their needs. Laura Beth Newsom shared how many of the families she works with have to access wifi at McDonald's or Walmart because they do not have internet access in their homes and also do not have phone numbers (due to lack of paperwork) and can only work off of wifi on their devices.

Transportation is a huge issue - not having reliable transportation or only one car per household is limiting. Without areas where wifi is walkable, access is further out of reach. The majority of people live more than two miles out of town and cannot access the public hotspots. Laura Beth Newsom shared of a woman she was working with who could not get to a facility for counseling because she did not have reliable transportation. The woman also did not have reliable internet service and was not even able to conduct a telehealth appointment which also required the use of a translation app for the appointment. Residents of Walker County who have lack of access are usually experiencing more than one barrier to access.

*Needs:* Digital literacy training. Many residents are frustrated with everything being online and the difficulty they are experiencing with lack of skills. Being able to reach people where they are at and provide them with the resources that already exist is a challenge. Maintenance and management of devices is critical.

"Access to digital services puts everyone at an even playing field, where they can access the same info and resources to be successful. Every child should be able to access the information they need." - Laura Beth Newsom

**Additional Resources:**
Additional community resources identified in Walker County in the research and writing of this plan include but are not limited to:

- Assistive Technology in Walker County School System
- Veterans Services in LaFayette, GA
- Chamber of Commerce in Rock Spring, GA
- Walker State Prison in Rock Spring, GA
- Center Post Community Center
- Chickamauga City School District
- Chickamauga Senior Life Services
- Rossville Senior Center
- Armuchee Valley Community Center
- Mt. Pleasant Community Center

## DIGITAL EQUITY ASSET INVENTORY

| Asset Category | Description | Key Resources | Population Served | Availability |
|---|---|---|---|---|
| **1. Infrastructure** | Physical resources supporting digital access. | | | |
| *Public Wi-Fi* | Locations with public Wi-Fi access. | Cherokee Regional Library System, Community Centers (Cedar Grove, Armuchee Valley, Mt. Pleasant), County facilities including the courthouse and civic center campus | Public | 24 x 7 |
| *Computer Labs* | Community or organization-owned computer labs. | Cherokee Regional Library System, Georgia Northwest Technical College | Public | Monday-Friday during business hours |
| *Device Loan Program* | Programs offering device loans to underserved individuals. | Cherokee Regional Library System | Public | Availability to rent out and use for the duration of the loan program |
| *Device Access Program* | Ability to access 1:1 device use | Walker County Schools, North Georgia YMCA After School program | Students | During school hours and after-school program hours |
| *Digital Literacy Centers* | Centers providing digital literacy training and resources. | None identified | | |

| | | | | |
|---|---|---|---|---|
| **2. Devices** | **Availability of computing devices.** | | | |
| *Laptops* | Number and availability of laptops. | Walker County Schools | Students | 1:1 |
| *Tablets* | Number and availability of tablets. | Walker County Schools, North Georgia YMCA After School program | Students | 1:1 |
| **3. Training & Support** | **Programs and resources for digital literacy training.** | | | |
| *Digital Literacy Programs* | Digital literacy training and resources. | Georgia Northwest Technical College | Public | Online or in-person |
| *Digital Literacy Workshops* | Availability of workshops and training programs. | None identified | | |
| *Online Learning Platforms* | Platforms for online courses and resources. | Georgia Northwest Technical College, Next Chapter | Public, Inmates | |
| *Technical Support* | Availability of technical support for digital issues. | Georgia Northwest Technical College; Walker County School System | Students | During school hours |
| *Digital Instructors* | Trained individuals or volunteers providing instruction. | Cherokee Regional Library System | Public | During business hours |

## DIGITAL EQUITY EVALUATION PLAN TEMPLATE

This Digital Equity Evaluation Plan Template is being made available as a framework example for the county's future use in strategic planning to evaluate Walker County's digital equity goals and how they align with those of the State.

| ***Outcomes*** | ***Impact*** | ***Progress*** |
|---|---|---|
| *Economic and Workforce Development* | [Insert narrative describing how the community's Digital Equity Plan has impacted the State's economic and workforce development goals, objectives, and plans]. | [Insert narrative describing Walker County's progress towards addressing the State's priorities, i.e., not started, on-going, in progress, complete, etc.] |
| *Education Outcomes* | [Insert narrative describing how the community's Digital Equity Plan has impacted the State's educational goals, objectives, and plans]. | [Insert narrative describing Walker County's progress towards addressing the State's priorities, i.e., not started, on-going, in progress, complete, etc.] |
| *Health Outcomes* | [Insert narrative describing how the community's Digital Equity Plan has impacted the State's health-related goals, objectives, and plans]. | [Insert narrative describing Walker County's progress towards addressing the State's priorities, i.e., not started, on-going, in progress, complete, etc.] |
| *Civic and Social Engagement* | [Insert narrative describing how the community's Digital Equity Plan has impacted the State's civic and social engagement goals, objectives, and plans]. | [Insert narrative describing Walker County's progress towards addressing the State's priorities, i.e., not started, on-going, in progress, complete, etc.] |
| *Other Essential Services* | [Insert narrative describing how the community's Digital Equity Plan has impacted the State's essential services goals, objectives, and plans]. | [Insert narrative describing Walker County's progress towards addressing the State's priorities, i.e., not started, on-going, in progress, complete, etc.] |

## APPENDIX E: COMMUNITY SURVEY RESPONSES

Digital Equity and Inclusion Community Survey Response
Survey Period: June 17-September 16, 2024
Total Responses: 31 as of September 17, 2024
Survey Purpose: To assess the digital connectivity needs and challenges within our community and gather input on potential solutions.
Areas received responses from: Chattanooga Valley, Flintstone, Chickamauga, Kensington, Center Post, LaFayette, Villanow, Rossville, Lookout Mountain

**Why do you think it is important for your community to be digitally connected?**

- Jobs and sources of employment, to include secondary sources of income
- Emergency response services (to include alerts)
- Part of today's everyday life for information, paying bills, shopping, learning, remote work
- Remote job opportunities - enables living where one desires and the ability for people to move to Walker County
- Access to information
- Means of communication
- Education to include continuing education
- Tele-health
- Entertainment
- Home resale value
- World centers around being connected
- Small businesses necessity
- Weather information (to include alerts)
- Creates sense of community

**What barriers do you currently face in being digitally connected?**

- High prices - to get good internet service requires having to pay for extra speed.
- Lack of ISP's willing to service area
- Current service is far too expensive (one resident reported paying over $200 for 12 Mbps download)
- Slow speeds
- Starlink being the only option area
- Unreliable service
- Slow response to outages by ISPs
- Increasing costs
- Issues with employment when working remote and unreliable service
- Poor customer service by ISP's
- Lack of ISP options
- Services vulnerable to weather

**When you can access the internet, do you feel confident that you have the skills necessary to use it?**

The overwhelming majority felt confident in their skills. Yet there were a few specific responses that targeted areas of potential for digital skills training including, specifically for workforce development and understanding how to use different types of devices.

**Where in the community do you prefer to use resources, go for help in regards to skills training, or for digital access such as free public wifi?**

- Places of employment
- Cherokee Regional Library System
- Coffee shops
- Walmart
- Government buildings
- Church
- Community Center
- Neighboring county
- McDonald's parking lot

**What do you see already happening in the community that is helping to provide digital connection?**

- Residents reported not seeing any action being taken to provide digital access
- Residents reported believing competition was being blocked
- Residents reported seeing fiber coming closer to home and are encouraged but others are frustrated by not having answers or a timeframe for connection.

**What have been the challenges accessing existing resources? Are there specific suggestions on making them more accessible?**

Challenges:

- Survey respondent does not believe taxpayers should pay to help people learn digital literacy/skills
- Costs

Suggestions:

- Fiber to all customers
- ISP transparency
- Secure public access to the internet
- Enough coverage to connect everyone
- More digital choices
- Reliability
- Wifi in public parks

**What would you like to see prioritized in our Walker County Connectivity Plan?**

- Resiliency in infrastructure planning, to use underground cables where possible rather than ariel (as trees take down the lines), and making sure there is future growth accounted for
- More affordable high speed internet availability in rural areas
- Cost savings
- Fiber optics
- Access in rural areas
- Connecting all addresses to broadband
- More stable connections
- High speed internet
- More provider choice
- More communication through more outlets in addition to more comprehensive communication

Examples of self-reported speed testing : 272.53/23.56, 894 Mbps (download speed), 12/1, 0.1 Mbps (upload speed), 85/16, 36/1, 95.2 (download speed), 25/18, 26.84/23.41, 27.31/1.8, 18/1, 8.07/1.12, 1.91/0.42, 76.7/15.6 , 11.92/4.69

As evidenced, the speeds in Walker County are far from consistent or equitable. There is a wide variance of self-reported speeds amidst the same communities in Walker County.

Many survey responses cited the desire for EPB to expand their service and revealed a need to share the reasons why EPB is not able to expand their digital footprint in Walker County. In 2016, the Sixth Circuit of the U.S. Court of Appeals struck down an order from the FCC that would have allowed municipally-owned telecommunication companies to expand beyond their traditional service footprint. This ruling restricted EPB from being able to expand further than their current footprint, and is not a possible solution to broadband infrastructure expansion in Georgia[69].

Survey responses also revealed satisfaction with Chickamauga Telephone Company's (now operating as Arriva) service in Chickamauga.

[69] FCC Releases Order Preempting TN Municipal Broadband Restrictions

# Walker County, GA

**Geographic identifier: 13295**

Overall hazard risk percentile is
**Relatively High (62/100)**

# Primary natural hazards

*Risk scores are national percentile ranks derived from Expected Annual Building Loss estimates in the National Risk Index. Expected Annual Building Loss represents the average economic loss for a community in dollars resulting from natural hazards each year. Click here to read more about how Expected Annual Loss scores are calculated.*

Tornado

87/100

Earthquake

81/100

Lightning

80/100

Riverine Flooding

79/100

Ice Storm

73/100

Hail

72/100

Cold Wave

59/100

Strong Wind

52/100

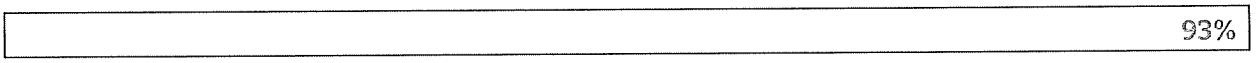
# Broadband access

*"25/3" and "100/20" are broadband speed profiles denoting internet connections with download/upload speeds of 25 Mbps/3 Mbps and 100 Mbps/20 Mbps, respectively. The former is considered the minimum threshold for broadband service by the federal government, suitable for basic online activities, while the latter offers faster speeds, supporting more bandwidth-intensive tasks like video streaming.*

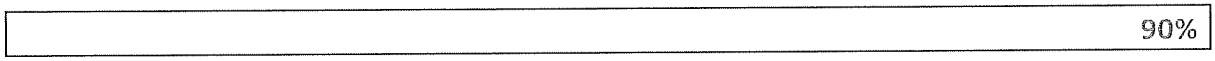
*Fiber access refers to internet connectivity provided through fiber-optic cables, utilizing light signals to transmit data at incredibly high speeds, resulting in reliable and efficient connections.*

*Broadband serviceable locations are residential and business locations (or structures) in the U.S. where fixed broadband internet access service is or can be installed.*

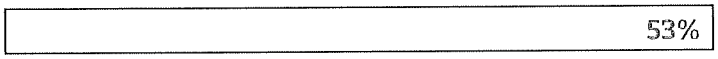
Percent of locations with access to **25/3**




Percent of locations with access to **100/20**




Percent of locations with access to **fiber**

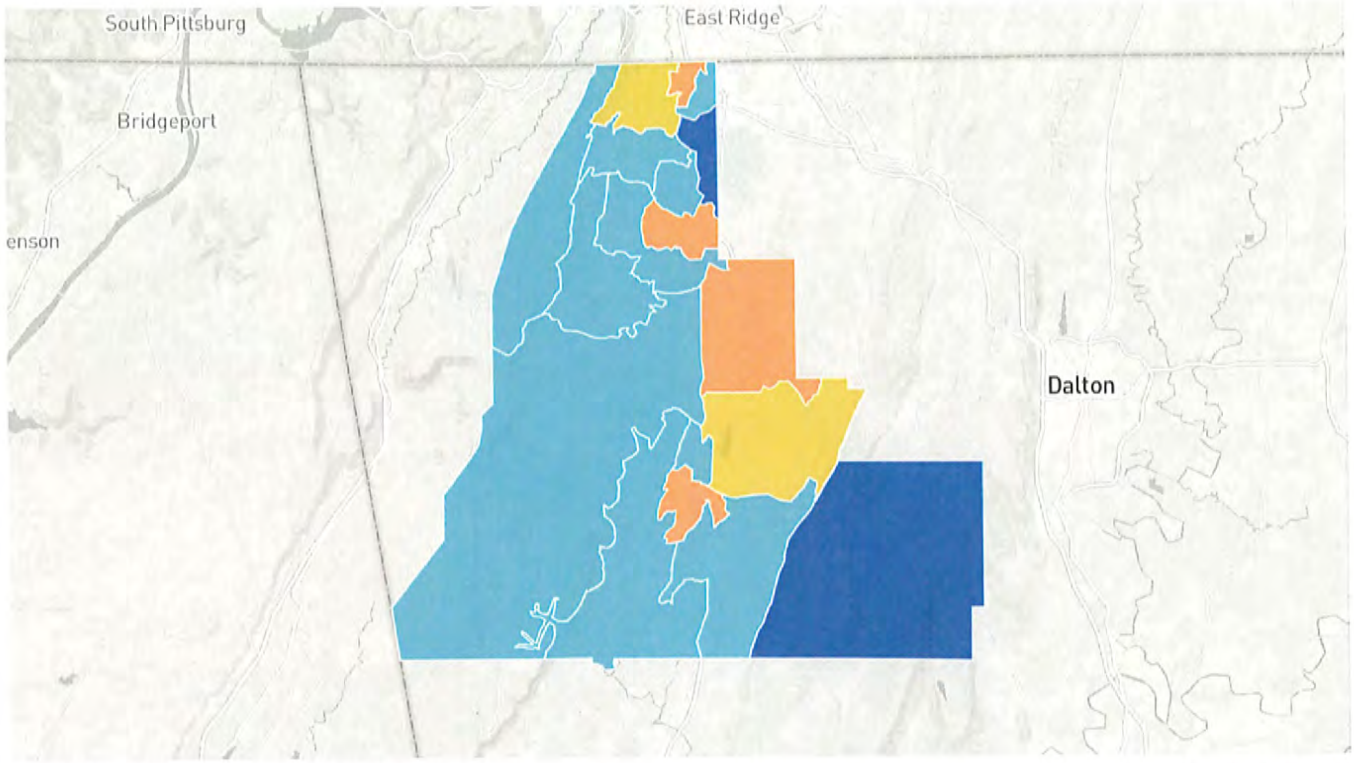


# Explore tract hazard risk and broadband access

*Click on a tract below to view detailed risk and broadband data*

◉ Hazard risk score ○ 25/3 access ○ 100/20 access ○ Fiber access

Very Low | Relatively Low | Relatively Moderate | Relatively High | Very High






Download map data

# About our application: Broadband Climate Risk Mitigation Tool

Welcome to the Broadband Climate Risk Mitigation Tool, a web application designed by the Center on Rural Innovation to help communities and organizations make informed decisions about broadband deployment while considering natural hazard risks. Our tool combines hazard risk data with broadband access information so communities can maximize the resilience and effectiveness of their broadband infrastructure projects funded under the Broadband Equity Access and Deployment (BEAD) program.

## The challenge: Weather- and climate-related risks to broadband networks

Broadband networks play a critical role in connecting communities and fostering economic growth. However, networks face numerous challenges posed by extreme weather. Wildfires, extreme temperatures, flooding, tornadoes, hurricanes, and other weather-related events can disrupt and damage broadband infrastructure, leading to service outages and hindering emergency response efforts. Since retrofitted and new infrastructure for broadband might be expected to have a lifetime of 20 years or more, entities applying for BEAD funding must account not only for current risks but also for the changing climate and increased frequency of extreme weather events.

## Our solution: Informed decisions for resilient broadband deployment

The Broadband Climate Risk Mitigation Tool provides entities with a comprehensive set of resources to evaluate and address weather- and climate-related risks during broadband infrastructure planning and deployment. Our application enables the following:

1. **Initial hazard screening and identification:** Identifies which geographic areas require an initial hazard screening for current weather-related risks. By inputting location data, users can assess potential hazards affecting the proposed broadband infrastructure. Hazard risk and broadband access data are overlaid so that users can identify hazard risks in areas with the greatest broadband need.
2. **Mitigation strategies:** From selecting appropriate technology platforms to adopting alternative siting and redundancy measures, the tool offers high-level recommendations to safeguard broadband assets.

## Data sources

1. **FCC:** Broadband Data Collection (BDC) provides information about the internet services available to broadband serviceable locations (BSLs) across the country.

As part of the BDC, all ISPs must file data with the FCC twice a year on where they offer mass-market Internet access service using their own broadband network facilities. Our tool uses BDC data last updated on July 25, 2023.

2. **FEMA:** The National Risk Index (NRI) is a measure of the relative risk of natural hazards for each county and census tract in the United States. In our application, we focus on the NRI's Expected Building Loss estimates as a proxy for broadband infrastructure vulnerability. The source includes data on natural hazards, social vulnerability, and community resilience.

## Key terms

- **Expected Annual Building Loss** is the average economic loss to buildings in dollars resulting from natural hazards each year. Click here to learn more about how Expected Annual Loss is calculated.
- **Risk scores** are national percentile ranks derived from Expected Annual Building Loss estimates.
- **Historic Building Loss Ratio** is a natural hazard consequence factor that represents the estimated percentage of the exposed building value expected to be lost due to a natural hazard occurrence. Arizona State University's SHELDUS loss data are used to calculate Historic Loss Ratio for most hazard types.
- **Annualized Frequency** is the expected frequency or probability of a hazard occurrence per year.
- **Building Exposure** is defined as the dollar value of the buildings determined to be exposed to a hazard. The maximum possible building exposure of a geographic area (census block, census tract, or county) is its building value as recorded in Hazus 6.0.
- **Hazard ratings** are provided in one of five qualitative categories describing the geographic area's Expected Annual Building Loss values in comparison to all other communities at the same geographic level. Rating categories range from "Very Low" to "Very High."
    - Very High: 80th to 100th percentiles
    - Relatively High: 60th to 80th percentiles
    - Relatively Moderate: 40th to 60th percentiles
    - Relatively Low: 20th to 40th percentiles
    - Very Low: 0th to 20th percentiles

## Questions?

To learn more, reach out to us at **broadband@ruralinnovation.us**

## Support

Development of this tool was made possible with support from Connect Humanity.

| Org Name | Source | Funder Description / Mission | Org Type | What geographies do they fund? The fund only in one state, portion of a state, a few states, all of appalachia, all of america? | Do they fund broadband or connectivity related initiatives? | Funding Areas (in case you're exploring opportunities to combine your DE or broadband efforts) | Website | Funder Location (ST) | Opportunities |
|---|---|---|---|---|---|---|---|---|---|
| Appalachian Community Capital | AFN | ACC and its members are committed to 1) providing affordable financial products and high-quality technical assistance to Black, Brown, Indigenous, and woman-owned small businesses in Appalachia , as well as to small businesses in coal-impacted and other distressed rural communities that have been overlooked for too long, and 2) building the capacity of the CDFI ecosystem to support these clients. | CDFI | All appalachian states | Yes | Blended Finance Facility, Knowledge & Learning Platform, Technology Transformation, Structured Finance Facility | https://appalachiancommunitycapitalcdfi.org/ | VA | |
| Best Buy Foundation | Foundation Center | The Best Buy Foundation™ funds organizations that strengthen the communities we serve. Our primary focus is building brighter futures for teens through tech, whether through the Best Buy Teen Tech Center® program or other youth- and technology-focused initiatives. We also have regional priorities to promote vibrancy in our hometown communities of Minneapolis-St. Paul and Seattle. | 501(c)(3 | National | Yes | The Best Buy Foundation™ is a 501(c)(3) organization that supports educational and career opportunities for teens and promotes vibrant communities. | https://www.bestbuyfoundation.org/ | MN | |
| Chorus Foundation | AFN | The Chorus Foundation works for a just transition to a regenerative economy in the United States. We support communities on the front lines of the old, extractive economy to build new bases of political, economic, and cultural power for systemic change. | Foundation | National | Yes | Education, Economic Development, Community Development, Health | https://chorusfoundation.org/ | MA | |
| Educational Foundation of America | AFN | The Educational Foundation of America advances progressive change through support for creative initiatives working toward sustainability, justice, and equity. | Family foundation | National | Not specifically | Arts, environment, reproductive health and justice, make democracy work | https://www.thefa.org/ | | |
| Ford Foundation | Foundation Center | Across eight decades, our mission has been to reduce poverty and injustice, strengthen democratic values, promote international cooperation, and advance human achievement. | Private foundation | International | Yes | Technology and Society, Gebder, Racial and Ethnic Justice, Disability Rights, Creativity and Free Expression, Civic Engagement and Government | http://WWW.FORDFOUNDATION.ORG | NY | |
| Instructional Telecommunications Foundation Inc | Foundation Center | Instructional Telecommunications Foundation, Inc. is a nonprofit corporation that that got its start transmitting educational video programs to schools in the mid-80s using frequencies regulated by the Federal Communications Commission (FCC). ITF, Inc.continues to provide services to schools and nonprofits nationwide, engage in philanthropic programs centered on social equality, and participate in other entrepreneurial endeavors. For more information about ITF's full range of offerings and initiatives, please contact us. | Nonprofit | | Yes | | http://WWW.ITFITV.ORG | CO | |
| John S. and James L. Knight Foundation, Inc. | Foundation Center | We are social investors who support a more effective democracy by funding free expression and journalism, arts and culture in community, research in areas of media and democracy, and in American cities and towns where the Knight brothers once published newspapers. | Nonprofit foundation | National* | Yes | Media and democracy, polling and research, impac assessments, | http://www.knightfoundation.org | FL | |
| Lyndhurst Foundation Inc | Foundation Center | The Lyndhurst Foundation invests in collaborative endeavors that improve the well-being and vitality of people, places, and natural systems in the Chattanooga region through strategies that support equitable, inclusive, and sustainable outcomes. | Grant-making Foundation | A tri-state, sixteen-county region including and surrounding Chattanooga and portions of the Lower Tennessee River and Upper Coosa River watersheds. | Yes | Access & equity, arts & culture, conservation, parks & recreation, Urban design & development | http://www.lyndhurstfoundation.org | TN | |
| Marconi Society Inc | Foundation Center | The Marconi Society encourages and celebrates innovators who push the technical, creative and entrepreneurial boundaries of information and communications technology for the benefit of humanity. We pursue this goal through prestigious awards, events and programs. | Nonprofit | | Yes | | http://WWW.MARCONISOCIETY.ORG | IL | |
| MOZILLA FOUNDATION | Foundation Center | The Mozilla Foundation works to ensure the internet remains a public resource that is open and accessible to us all. | Global nonprofit | International* | Yes | | https://foundation.mozilla.org | CA | |
| National Science Foundation Employees Association | Foundation Center | NSF was established in 1950 by Congress to:<br><br>Promote the progress of science.<br>Advance the national health, prosperity and welfare.<br>Secure the national defense. | Independent federal agency | all 50 states and U.S. territories | Yes | Discovery and Innovation, Partnerships, Infrastructure, Education, | http://www.nsf.gov/ | VA | |
| Partner Community Capital | AFN | By providing flexible capital and advisory services to small businesses, non-profits, and farms, Partner Community Capital (PCAP) catalyzes environmentally and socially responsible business development and wealth creation in rural, minority, and low-wealth communities. | CDFI | Central Appalachia and the Southeast, including West Virginia and North Carolina and the Appalachian regions of Maryland, Ohio, Kentucky, Tennessee, Virginia, South Carolina and Georgia | Yes | Economy, Equity, Environment | https://partnercap.org/ | WV | |
| Richard King Mellon Foundation | Foundation Center | Since 1947, the Richard King Mellon Foundation has funded visionaries with bold ideas to advance prosperity in Southwestern Pennsylvania, and environmental conservation across the United States. | | National | Yes | The Foundation has six funding programs: Conservation; Economic Development; Economic Mobility; Health & Well-Being; Organizational Effectiveness; and Social-Impact Investments. | http://WWW.RKMF.ORG | PA | |
| Rural LISC | AFN | With residents and partners, Rural LISC supports resilient and inclusive rural communities as great places to live, work, and innovate. Rural LISC strives to identify priorities and opportunities and deliver the most appropriate support to meet local needs. We achieve this through integrated strategies and programs focused on five pillars of rural community development: Creative Capital, Broadband & Infrastructure, Workforce Development, Housing, and Disaster Solutions. | | Rual communities (National) | Yes | Creative Capital, Broadband & Infrastructure, Workforce Development, Housing, and Disaster Solutions. | https://www.lisc.org/rural/ | N/A | |
| Truist | AFN | We're here to care for our clients and communities in every way we can imagine—and in new ways we discover every day. From thoughtfully designed checking accounts to free financial education, here are just a few ways we're making it happen. | Bank | | Yes* (cannot find anything on site but they have worked with CH) | | https://www.truist.com/ | N/A | |
| United States Appalachian Regional Commission | Foundation Center | The Appalachian Regional Commission (ARC) is an economic development partnership entity of the federal government and 13 state governments focusing on 423 counties across the Appalachian Region. ARC's mission is to innovate, partner, and invest to build community capacity and strengthen economic growth in Appalachia. | Federal–state partnership | Appalachia | Yes | | https://www.arc.gov/ | DC | https://www.arc.gov/grants-and-opportunities/ |

| Org Name | Source | Funder Description / Mission | Org Type | What geographies do they fund? The fund only in one state, portion of a state, a few states, all of appalachia, all of america? | Do they fund broadband or connectivity related initiatives? | Funding Areas (in case you're exploring opportunities to combine your IDE or broadband efforts) | Website | Funder Location (ST) Opportunities |
|---|---|---|---|---|---|---|---|---|
| United States Economic Development Administration | Foundation Center | To lead the federal economic development agenda by promoting innovation and competitiveness, preparing American regions for growth and success in the worldwide economy. | Federal government agency focused exclusively on economic development | National | Yes | | https://www.eda.gov/ | DC |
| United States Institute of Museum and Library Services | Foundation Center | The mission of IMLS is to advance, support, and empower America's museums, libraries, and related organizations through grantmaking, research, and policy development. | Independent agency of the US | National | "Support broad-based efforts to provide museums, libraries, and archives with resources to advance digital access and inclusion." | Museums and libraries and their communities. | http://www.imls.gov | NIA |
| United States National Institute Of Food And Agriculture | Foundation Center | NIFA supports research, educational, and extension efforts in a wide range of scientific fields related to agricultural and behavioral sciences. | Federal agency within the United States Department of Agriculture (USDA) | National | Yes | Ecology, farms, health & science, etc | https://nifa.usda.gov/ | DC |
| United States National Institute Of Standards And Technology | Foundation Center | All 50 states and U.S. territories | Agency of the United States Department of Commerc | National | Yes | Advanced communications, AI, Bioscience, buildings & construction, chemistry, climate, cybersecurity, electronics, energy, environment, fire, forensic science, health, IT, infrastructure, manufacturing, materials, math, metrology, nano tech, neutron research, and more | http://www.nist.gov/ | MD |
| United States National Institutes of Health | Foundation Center | NIH's mission is to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability. | Agency of the United States | National | Yes | | https://www.nih.gov/ | MD |
| United States Rural Utilities Service | Foundation Center | USDA's Rural Utilities Service (RUS) provides much-needed infrastructure or infrastructure improvements to rural communities. These include water and waste treatment, electric power and telecommunications services. All of these services help to expand economic opportunities and improve the quality of life for rural residents. | Part of U.S. Dept of Agriculture | | Yes | Addressing Climate Change and Environmental Justice, Advancing Racial Justice, Place-Based Equity, and Opportunity, Creating More and Better Market Opportunities | http://www.rd.usda.gov/about-rd/agencies/rural-utilities-service | DC |
| United States Small Business Administration | Foundation Center | The U.S. Small Business Administration (SBA) helps Americans start, grow, and build resilient businesses.<br><br>SBA was created in 1953 as an independent agency of the federal government to aid, counsel, assist and protect the interests of small business concerns; preserve free competitive enterprise; and maintain and strengthen the overall economy of our nation. SBA reviews Congressional legislation and testifies on behalf of small businesses. It assesses the impact of regulatory burden on small businesses. | Independent agency of the United States government | National | Yes | | https://www.sba.gov/ | DC |
| Access to Capital for Entrepreneurs | Appalachian Comunity Capital | ACE is a Georgia 501(c)(3) nonprofit and community development financial institution (CDFI) that provides capital, coaching, and connections to help borrowers create and grow sustainable businesses that generate jobs. We have provided more than $200 million in loans and business advisory services to support 2,600+ small business owners and helped create or save 21,000+ jobs for Georgians. | CDFI 501(c)(3) | Serving 100 Georgia Counties, including all of North Georgia, Metro Atlanta, the Savannah region – and now South Georgia | No* | Commitment to providing affordable loans to underserved small and medium businesses | www.aceloans.org | GA |
| LiftFund | Appalachian Comunity Capital | LiftFund's mission is to provide credit and services to small businesses and entrepreneurs who do not have access to loans from commercial sources and to provide leadership and innovation in the microlending industry. | CDFI, CDC | Alabama, Arkansas, Florida, Georgia, Houston, Kentucky, Louisiana, Mississippi, Missouri, New, Mexico, Oklahoma, SOuth Carolina, Tennessee, Texas | | | www.liftfund.com | TX –serving selected Appalachian states |

## APPENDIX H: ADDITIONAL RESOURCES

### SPEED TESTS

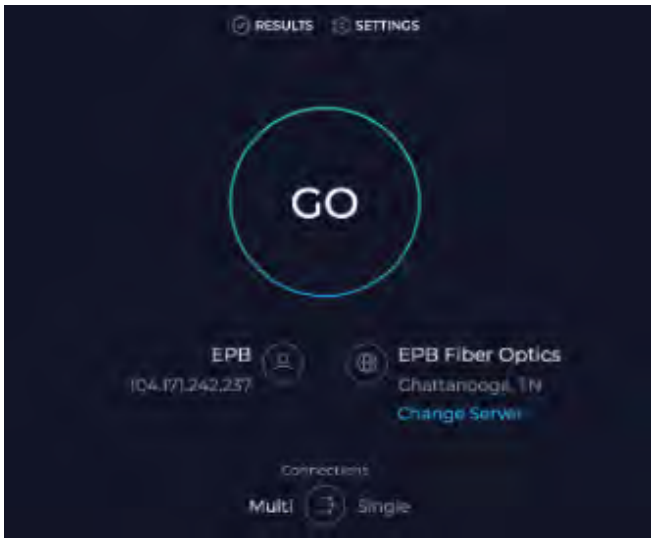
**Why are speed tests important:** Speed tests provide measurements that reflect the quality of service - the speed and performance of the internet provided. Internet performance is about connection - “low latency” for gaming, high-quality video streaming (such as watching movies on Netflix or Hulu), upload speeds for video calls (like facetime or over zoom), and download speeds for fast page load times while browsing online.

**Suggested website (app) for speed tests:** Ookla (https://www.speedtest.net/)

**What is happening during a test:** While the test is being run, multiple “requests” to multiple services are sent to check your connection. The Speedtest app determines your device connectivity strength based on the success of these requests.

Speedtest by Ookla will “ping” nearby servers and choose the server with the lowest response time (the shortest time between sending and receiving a response to the server). The server with the lowest response time is considered closest. For more information you can visit the support page at speedtest.net.

**How to perform a speed test:** Go to https://www.speedtest.net/. Click or tap on the “GO” button (not “start” or “click here” as these are advertisement buttons). It will take a few seconds until your download and upload speeds have been analyzed. The download speeds will run first, followed by the upload speeds.




The circle around the Go button is color coordinated to signal whether your device is online or not. A blue/green circle indicates you are connected. A yellow circle means that something is not working as it should. A red circle means you are most likely disconnected. You will be able to take a speedtest with either a green or yellow circle. If you are on a mobile device, such as a cell phone, and have a red circle, you will need to search for a better signal before taking the test. If you have a red circle on a wifi or fixed broadband, such as with a computer, that means there is an issue with your internet connection.

## BANDWIDTH

**What is bandwidth?**
The network bandwidth describes the maximum capacity of a network connection in a given amount of time. Bandwidth is not a measure of network speed although it is represented by the number of bits, kilobits, megabits, and/or gigabits that can be transmitted per second.

**Why does it matter?**
The larger the bandwidth, the more data can be sent or received at the same time. The higher the bandwidth, the higher the cost of a network connection. That means if your plan is for up to 250 Mbps it will be less expensive than 1 Gbps will cost you. Understanding your bandwidth needs are important for selecting the right network plan and only paying for what you need.

**How do speed and bandwidth differ?**
Speed is the rate at which data can be transmitted while bandwidth is the capacity for that speed. Speed is how quickly the data is transmitted while bandwidth is the amount of data over a set amount of time.

**How does your bandwidth impact your connection?**
Multiple devices that are connected on the same network share the same bandwidth. Some devices or uses require larger bandwidth and can “hog” the bandwidth. Bandwidth impacts speed on multiple devices.

**Calculate what you need:**

1. How many devices do you have in your home that share a network (ex smart tv, computer(s), smart phone(s))?
2. How are these devices being used (ex: tvs streaming videos or a computer used for web browsing)?
3. Determine the bandwidth requirements of these devices.
4. If multiple devices are performing the same use, multiply the number of devices by the bandwidth requirements.
5. Add all the bandwidth requirements together.

# APPENDIX I: SOURCES

## CONNECT HUMANITY DATA SOURCES

| Source Name | Source Type | Source Description | Data Collected & Analyzed | Purpose |
|---|---|---|---|---|
| **Federal Communications Commission (FCC)** | Public | Federal Agency responsible for implementing and enforcing America's communications law and regulations (Federal Communications Commission (2022). About the FCC. Available at: https://www.fcc.gov/about/overview) | FCC Form 477 | Determine broadband incumbents and technology penetration |
| **BroadbandNow & BroadbandSearch** | Private | Online databases of internet service options available in a given area (BroadbandNow (2022). About BroadbandNow's Team. Available at: https://broadbandnow.com/about; Broadbandsearch (2022). About. Available at: https://www.broadbandsearch.net/about) | Advertised internet service offerings including providers, speed, price and technologies | Determine broadband speed and corresponding price |
| **FiberLocator** | Private | Online telecommunications database of fiber infrastructure (FiberLocator (2022). Resources: Available at: https://www.fiberlocator.com/) | Existing fiber infrastructure in the County | Define metro fiber networks (regional level - middle mile; local level - last mile) to evaluate network redundancy. Define long haul fiber networks (national level) to be leveraged by the County to connected middle mile |

## SOURCES


[1] https://nationalskillscoalition.org/wp-content/uploads/2024/06/GA-Digital-Divide-Fact-Sheet-Final.pdf

[2] https://www.atlantafed.org/community-development/publications/partners-update/2023/08/10/baseline-for-work-92-percent-of-jobs-require-digital-skills

[3] U.S. Census Bureau. "ACS Demographic and Housing Estimates." American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP05, 2022, https://data.census.gov/table/ACSDP5Y2022.DP05?g=050XX00US13295. Accessed on August 12, 2024.

[4] https://www.dca.ga.gov/sites/default/files/walkerco.chickamauga.lafayette.lookoutmountain.rossville.jointcomprehensiveplan.2022adopted.pdf

[5] U.S. Census Bureau. "ACS Demographic and Housing Estimates." American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP05, 2022, https://data.census.gov/table/ACSDP5Y2022.DP05?g=050XX00US13295. Accessed on August 12, 2024.

[6] U.S. Census Bureau. "Selected Housing Characteristics." American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP04, 2022, https://data.census.gov/table/ACSDP5Y2022.DP04?q=dp04&g=050XX00US13295. Accessed on August 12, 2024.

[7] U.S. Census Bureau. "Selected Social Characteristics in the United States." American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP02, 2022, https://data.census.gov/table/ACSDP5Y2022.DP02?q=dp02&g=050XX00US13295. Accessed on August 12, 2024.

[8] U.S. Census Bureau. "Income in the Past 12 Months (in 2022 Inflation-Adjusted Dollars)." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1901, 2022, https://data.census.gov/table/ACSST5Y2022.S1901?g=050XX00US13295. Accessed on August 12, 2024.

[9] U.S. Census Bureau. "Employment Status." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2301, 2022, https://data.census.gov/table/ACSST5Y2022.S2301?q=unemployment rate&g=050XX00US13295. Accessed on August 12, 2024.

[10] U.S. Census Bureau. "Poverty Status in the Past 12 Months." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1701, 2022, https://data.census.gov/table/ACSST5Y2022.S1701?g=050XX00US13295. Accessed on August 12, 2024.

[11] U.S. Census Bureau. "Disability Characteristics." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1810, 2022, https://data.census.gov/table/ACSST5Y2022.S1810?g=050XX00US13295. Accessed on August 12, 2024.

[12] U.S. Census Bureau. "Age and Sex." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S0101, 2022, https://data.census.gov/table/ACSST5Y2022.S0101?q=age&g=050XX00US13295. Accessed on August 12, 2024

[13] U.S. Census Bureau. "Educational Attainment." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1501, 2022, https://data.census.gov/table/ACSST5Y2022.S1501?q=education&g=050XX00US13295. Accessed on August 12, 2024.

[14] U.S. Census Bureau. "Language Spoken at Home." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1601, 2022, https://data.census.gov/table/ACSST5Y2022.S1601?q=s1601&g=050XX00US13295. Accessed on August 12, 2024.

[15] U.S. Census Bureau. "Veteran Status." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2101, 2022, https://data.census.gov/table/ACSST5Y2022.S2101?q=veterans&g=050XX00US13295. Accessed on August 12, 2024.

[16] https://livingwage.mit.edu/counties/13295

[17] https://livingwage.mit.edu/states/13
[18] U.S. Census Bureau. "Income in the Past 12 Months (in 2022 Inflation-Adjusted Dollars)." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1901, 2022, https://data.census.gov/table/ACSST5Y2022.S1901?g=040XX00US13. Accessed on August 13, 2024.
[19] U.S. Census Bureau. "Selected Economic Characteristics." American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP03, 2022, https://data.census.gov/table/ACSDP5Y2022.DP03?q=workforce&g=050XX00US13295. Accessed on August 13, 2024.
[20] https://nationalskillscoalition.org/wp-content/uploads/2024/06/GA-Digital-Divide-Fact-Sheet-Final.pdf
[21] U.S. Census Bureau. "Poverty Status in the Past 12 Months." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1701, 2022, https://data.census.gov/table/ACSST5Y2022.S1701?q=poverty level&g=040XX00US13. Accessed on August 13, 2024.
[22] https://nces.ed.gov/ccd/
[23] U.S. Census Bureau. "Food Stamps/Supplemental Nutrition Assistance Program (SNAP)." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2201, 2022, https://data.census.gov/table/ACSST5Y2022.S2201?q=food stamp&g=050XX00US13295. Accessed on September 5, 2024.
[24] https://www.dca.ga.gov/sites/default/files/jtc_2024_final_map.pdf
[25]https://www.dca.ga.gov/sites/default/files/walkerco.chickamauga.lafayette.lookoutmountain.rossville.jointcomprehensiveplan.2022adopted.pdf
[26] U.S. Census Bureau. "Educational Attainment." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1501, 2022, https://data.census.gov/table/ACSST5Y2022.S1501?q=educational attainment&g=050XX00US13295. Accessed on August 13, 2024.
[27] https://walkercountyga.gov/discover/business-economic-development/#:~:text=Walker%20County%20is%20also%20home,from%20NBC%20affiliate%20WRCB%2DTV.
[28] U.S. Census Bureau. "Selected Characteristics of Health Insurance Coverage in the United States." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2701, 2022, https://data.census.gov/table/ACSST5Y2022.S2701?q=health insurance&g=050XX00US13295. Accessed on August 13, 2024.
[29]https://www.dca.ga.gov/sites/default/files/walkerco.chickamauga.lafayette.lookoutmountain.rossville.jointcomprehensiveplan.2022adopted.pdf
[30] U.S. Census Bureau. "SELECTED HOUSING CHARACTERISTICS." *American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP04*, 2017, https://data.census.gov/table/ACSDP5Y2017.DP04?q=rent&g=050XX00US13295. Accessed on August 13, 2024.
[31] U.S. Census Bureau. "Selected Housing Characteristics." *American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP04*, 2022, https://data.census.gov/table/ACSDP5Y2022.DP04?q=rent&g=050XX00US13295. Accessed on August 13, 2024.

[32] https://sparkmap.org/report/?
REPORT=%7B%22name%22%3A%22Standard%20Report%22%2C%22style%22%3A%22sparkmap-free%22%2C%22contentId%22%3A%22%23cdt-report-content%22%2C%22output%22%3A%7B%22countylist%22%3Afalse%2C%22statelist%22%3Atrue%2C%22ziplist%22%3Afalse%2C%22tractlist%22%3Afalse%2C%22map%22%3Atrue%2C%22breakout%22%3Atrue%7D%2C%22indicatorUid%22%3A%5B%2215%22%2C%22721%22%2C%22240%22%2C%22470%22%2C%22462%22%2C%226307%22%5D%2C%22indicator%22%3A%5B102%2C104%2C112%2C118%2C120%2C133%5D%2C%22location%22%3A%7B%22type%22%3A%22county%22%2C%22remove_county%22%3Afalse%2C%22show_county%22%3Atrue%2C%22show_state%22%3Atrue%2C%22show_zip%22%3Afalse%2C%22show_tract%22%3Afalse%2C%22key%22%3A%22county%22%2C%22id%22%3A%5B%2213295%22%5D%2C%22name%22%3A%5B%22Walker%20County%2C%20GA%22%5D%7D%7D

[33]https://www.dca.ga.gov/sites/default/files/walkerco.chickamauga.lafayette.lookoutmountain.rossville.jointcomprehensiveplan.2022adopted.pdf

[34] https://walkercountyga.gov/2019/10/17/lafayette-rossville-selected-for-housing-program/

[35] U.S. Census Bureau. "Selected Housing Characteristics." American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP04, 2022, https://data.census.gov/table/ACSDP5Y2022.DP04?q=rent&g=050XX00US13295. Accessed on August 13, 2024.

[36] U.S. Census Bureau. "Selected Housing Characteristics." American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP04, 2022, https://data.census.gov/table/ACSDP5Y2022.DP04?q=rent&g=050XX00US13295. Accessed on August 13, 2024.

[37] https://sparkmap.org/report/?
REPORT=%7B%22name%22%3A%22Standard%20Report%22%2C%22style%22%3A%22sparkmap-free%22%2C%22contentId%22%3A%22%23cdt-report-content%22%2C%22output%22%3A%7B%22countylist%22%3Afalse%2C%22statelist%22%3Atrue%2C%22ziplist%22%3Afalse%2C%22tractlist%22%3Afalse%2C%22map%22%3Atrue%2C%22breakout%22%3Atrue%7D%2C%22indicatorUid%22%3A%5B%2215%22%2C%22721%22%2C%22240%22%2C%22470%22%2C%22462%22%2C%226307%22%5D%2C%22indicator%22%3A%5B102%2C104%2C112%2C118%2C120%2C133%5D%2C%22location%22%3A%7B%22type%22%3A%22county%22%2C%22remove_county%22%3Afalse%2C%22show_county%22%3Atrue%2C%22show_state%22%3Atrue%2C%22show_zip%22%3Afalse%2C%22show_tract%22%3Afalse%2C%22key%22%3A%22county%22%2C%22id%22%3A%5B%2213295%22%5D%2C%22name%22%3A%5B%22Walker%20County%2C%20GA%22%5D%7D%7D

[38] https://georgiawildlife.com/crockford-pigeon-mountain-wma and https://www.lulalake.org/conservation.html

[39] https://walkercountyga.gov/tsplost/

[40] https://walkercountyga.gov/2021/10/26/walker-county-commissioners-asked-to-invest-in-project-to-bring-clean-safe-and-healthy-drinking-water-to-50000-residents/

[41]https://www.dca.ga.gov/sites/default/files/walkerco.chickamauga.lafayette.lookoutmountain.rossville.jointcomprehensiveplan.2022adopted.pdf

[42] https://walkercountyga.gov/residents/walker-transit/

[43] https://walkercountyga.gov/2024/01/30/walker-transit-a-popular-ride-in-2023/

[44] https://walkercountyga.gov/2024/05/01/appalachian-regional-commission-selects-chickamauga-battlefield-connector-trail-for-funding-in-walker-county/

[45]https://www.dca.ga.gov/sites/default/files/walkerco.chickamauga.lafayette.lookoutmountain.rossville.jointcomprehensiveplan.2022adopted.pdf

[46] https://nationalskillscoalition.org/wp-content/uploads/2024/06/GA-Digital-Divide-Fact-Sheet-Final.pdf

[47] https://nationalskillscoalition.org/wp-content/uploads/2024/09/Georgia-Public-Perspectives.pdf

[48] U.S. Census Bureau. "Poverty Status in the Past 12 Months." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1701, 2022, https://data.census.gov/table/ACSST5Y2022.S1701?q=poverty&g=050XX00US13295. Accessed on August 13, 2024.
[49] https://www.census.gov/library/stories/2023/05/persistent-poverty-areas-with-long-term-high-poverty.html
[50] Map generated through ESRI using U.S. Census Bureau's 2020 Census Demographic and Housing Characteristics information
[51] Map generated through ESRI using U.S. Census Bureau's American Community Survey (ACS) 2018-2022 5-year estimates, Table(s) B18101, B18102, B18103, B18104, B18105, B18106, B18107, C18108
[52] Map generated through ESRI using U.S. Census Bureau's American Community Survey (ACS) 2018-2022 5-year estimates, Table(s) B18101
[53] Map generated through ESRI U.S. Census Bureau's American Community Survey (ACS) 2018-2022 5-year estimates, Table(s) B17020, C17002
[54] https://walkercountyga.gov/2022/02/02/walker-county-government-awarded-multi-million-dollar-grant-to-improve-rural-broadband-access/
[55] https://drive.google.com/file/d/17BSe8J6DfCSvZgbeGnyXgMPQYUf5STp_/view
[56] https://broadband.georgia.gov/maps
[57] https://drive.google.com/file/d/1HjCm23x62Ig1CuSWf83Dbh7R13kzTZJU/view
[58] https://drive.google.com/file/d/11yQLusmsI9MpLbx3VRvgZ1LQHoSh3JxG/view
[59] U.S. Census Bureau. "Types of Computers and Internet Subscriptions." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2801, 2022, https://data.census.gov/table/ACSST5Y2022.S2801?q=internet adoption&g=050XX00US13295. Accessed on August 13, 2024.
[60] U.S. Census Bureau. "Types of Computers and Internet Subscriptions." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2801, 2022, https://data.census.gov/table/ACSST5Y2022.S2801?q=internet adoption&g=050XX00US13295. Accessed on August 21, 2024.
[61] https://livingwage.mit.edu/counties/13295
[62] U.S. Census Bureau. "Household Income in the Last 12 Months (in 2022 Inflation-Adjusted Dollars) by Presence and Type of Internet Subscription in Household." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B28004, 2022, https://data.census.gov/table/ACSDT5Y2022.B28004?q=Telephone, Computer, and Internet Access&g=010XX00US_040XX00US13_050XX00US13295_1400000US13295020100,13295020101,13295020102,13295020200,13295020301,13295020302,13295020400,13295020501,13295020502,13295020503,13295020504,13295020505,13295020506,13295020601,13295020602,13295020700,13295020701,13295020702,13295020800,13295020901,13295020902,13295020903,13295020904. Accessed on August 23, 2024.
[63] https://www.dca.ga.gov/sites/default/files/walkerco.chickamauga.lafayette.lookoutmountain.rossville.jointcomprehensiveplan.2022adopted.pdf
[64] U.S. Census Bureau. "URBAN AND RURAL." Decennial Census, DEC Demographic and Housing Characteristics, Table H2, 2020, https://data.census.gov/table/DECENNIALDHC2020.H2?q=urban population&g=010XX00US_040XX00US13_050XX00US13295. Accessed on August 13, 2024.
[65] Broadband Climate Risk Mitigation Tool
[66] https://www.dca.ga.gov/sites/default/files/walkerco.chickamauga.lafayette.lookoutmountain.rossville.jointcomprehensiveplan.2022adopted.pdf
[67] https://broadbandusa.ntia.gov/funding-programs/policies-waivers/BEAD-Letter-of-Credit-Waiver
[68] https://www.chrl.org/services/next_chapter_program.php
[69] https://www.fcc.gov/document/fcc-releases-order-preempting-tn-nc-municipal-broadband-restrictions