

Digital Inclusion Update

Broadband, Digital Inclusion Programs, and Digital
Inclusion Plan



Introduction

1. Chatham County Board of Commissioners adopted the Chatham County Digital Inclusion Plan at the regular meeting of the BOC in December 2024.
2. This update will serve as an update on broadband expansion, a key digital inclusion initiative, and yearly recommended adjustments to the Digital Inclusion Plan.



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Broadband Update



Technology to Know

Wired

Fiber-Optic Cable (Fiber):

Converts electrical signals carrying data to light and sends the light through transparent glass fibers about the diameter of a human hair. Max Speed 5000 Mbps (or even higher).

Copper/DSL:

Runs over traditional copper phone lines, speed dependent technology and distance. DSL speeds range from 1.5 Mbps to 80 Mbps.

Cable:

Cable modem service enables cable operators to provide broadband using the same coaxial cables that deliver pictures and sound to your TV. Max speed is about 1000 Mbps.

Non-Wired

Satellite:

A form of wireless broadband connecting the customer's home or business with satellites orbiting the earth. Max speed is about 100 Mbps.

Fixed Wireless:

Fixed wireless broadband connects a home or business to the Internet using a radio link between equipment at the customer's location and the service provider's facility. Max speed is about 1000 Mbps.

4G LTE Home:

LTE Home Internet is broadband internet service delivered via a 4G LTE wireless network. Max Speed is about 1000 Mbps.



Unserved/Underserved

Unserved

Unserved locations are areas with speeds less than 25 megabits per second (mbps) download, and 3 mbps upload.

Underserved

Underserved locations are areas with speeds between 25 mbps download/3 mbps upload, and 100 mbps download and 100 mbps upload.

Unserved < 25/3

Underserved = Between 25/3 and 100/100

Served > 100/100



Grant Programs

RDOF Grant: The Rural Digital Opportunity Fund will provide \$20.4 billion in funding over a ten-year period to support the construction of broadband networks in rural communities across the country.

GREAT Grant: A competitive grant program that provides funding to private sector broadband providers to deploy last-mile broadband infrastructure to unserved areas of North Carolina.

CAB Grant: The Completing Access to Broadband (CAB) program is a competitive bidding program that provides an opportunity for individual N.C. counties to partner with NCDIT to fund broadband deployment projects in unserved and underserved areas of each participating county.

BEAD Grant: The Broadband Equity, Access, and Deployment (BEAD) program provides more federal funding to North Carolina to expand high-speed internet access for its residents and businesses. North Carolina's BEAD Final Proposal and BEAD awards have been approved by the National Telecommunications and Information Administration (NTIA).

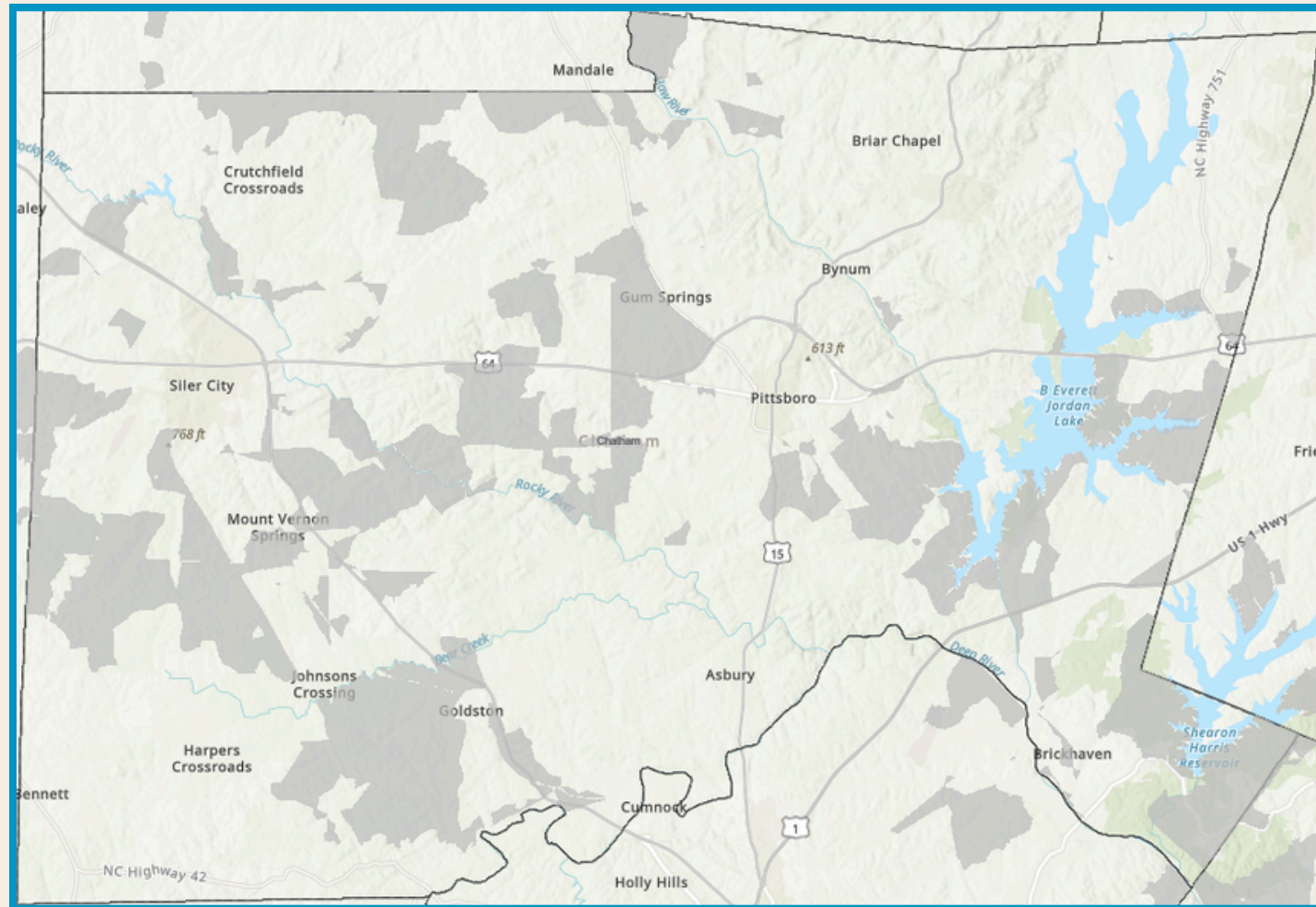
Stop-Gap Solutions: The Stop-Gap Solutions program will fund broadband line extension projects to reach individual or small pockets of households or businesses that have not been reached through the Growing Rural Economies with Access to Technology grant or Completing Access to Broadband program.



RDOF

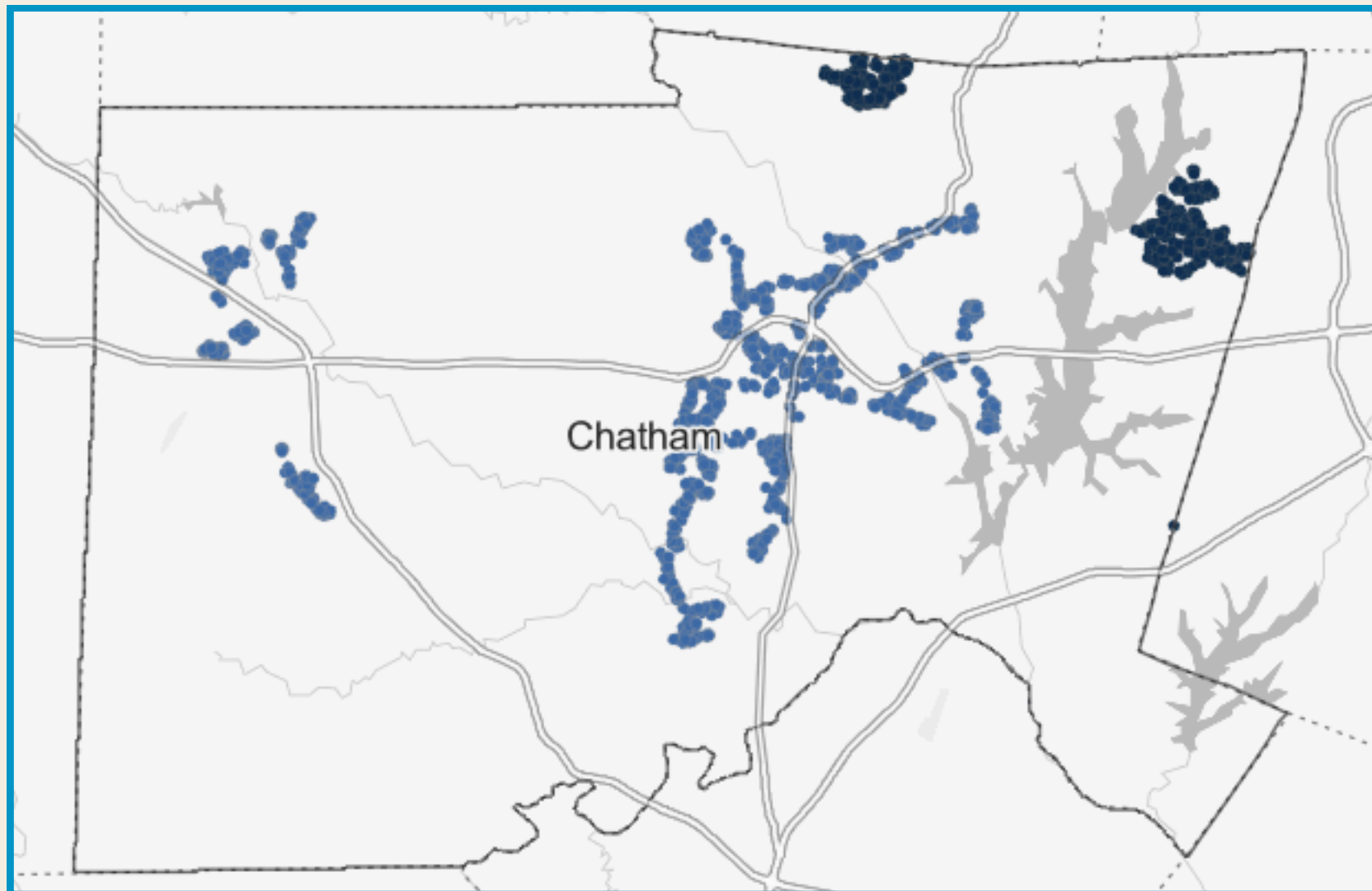
Information:

- Spectrum (Grey Areas):
 - Technology: Fiber
 - Locations: 3,445
 - Federally Awarded



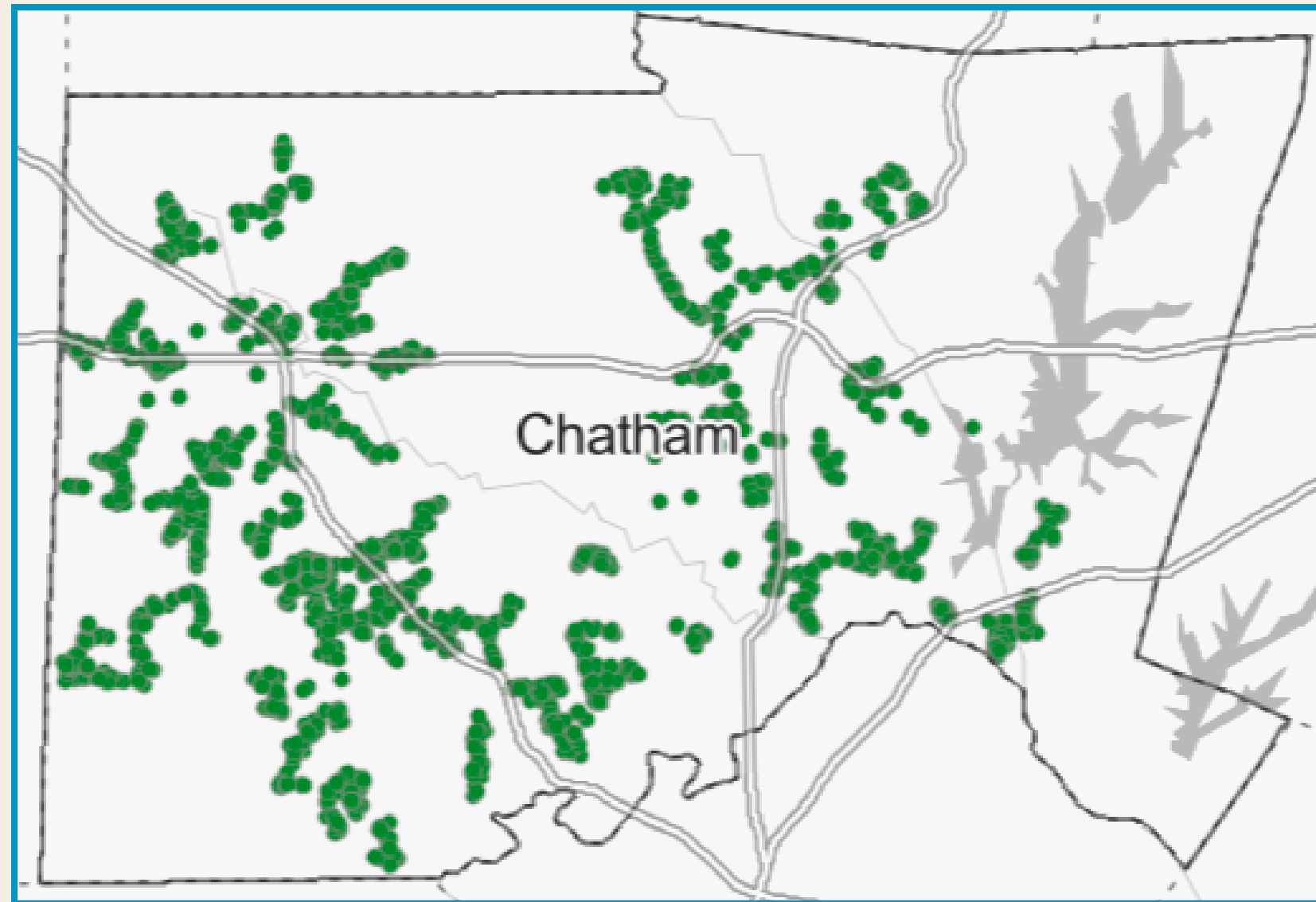
GREAT Grants

Information:



- AT&T (Dark Blue):
 - Households: 542
 - Businesses: 16
 - Status: Complete
 - NCDIT Allocation: \$1,917,919.59
 - Chatham Allocation: \$169,228.20 ARPA Funds
- Brightspeed (Light Blue):
 - Households: 1,862
 - Businesses: 52
 - Status: Finalizing Construction
 - NCDIT Allocation: \$4,000,000.00
 - Chatham Allocation: \$350,000 ARPA Funds

CAB Grant Round 1



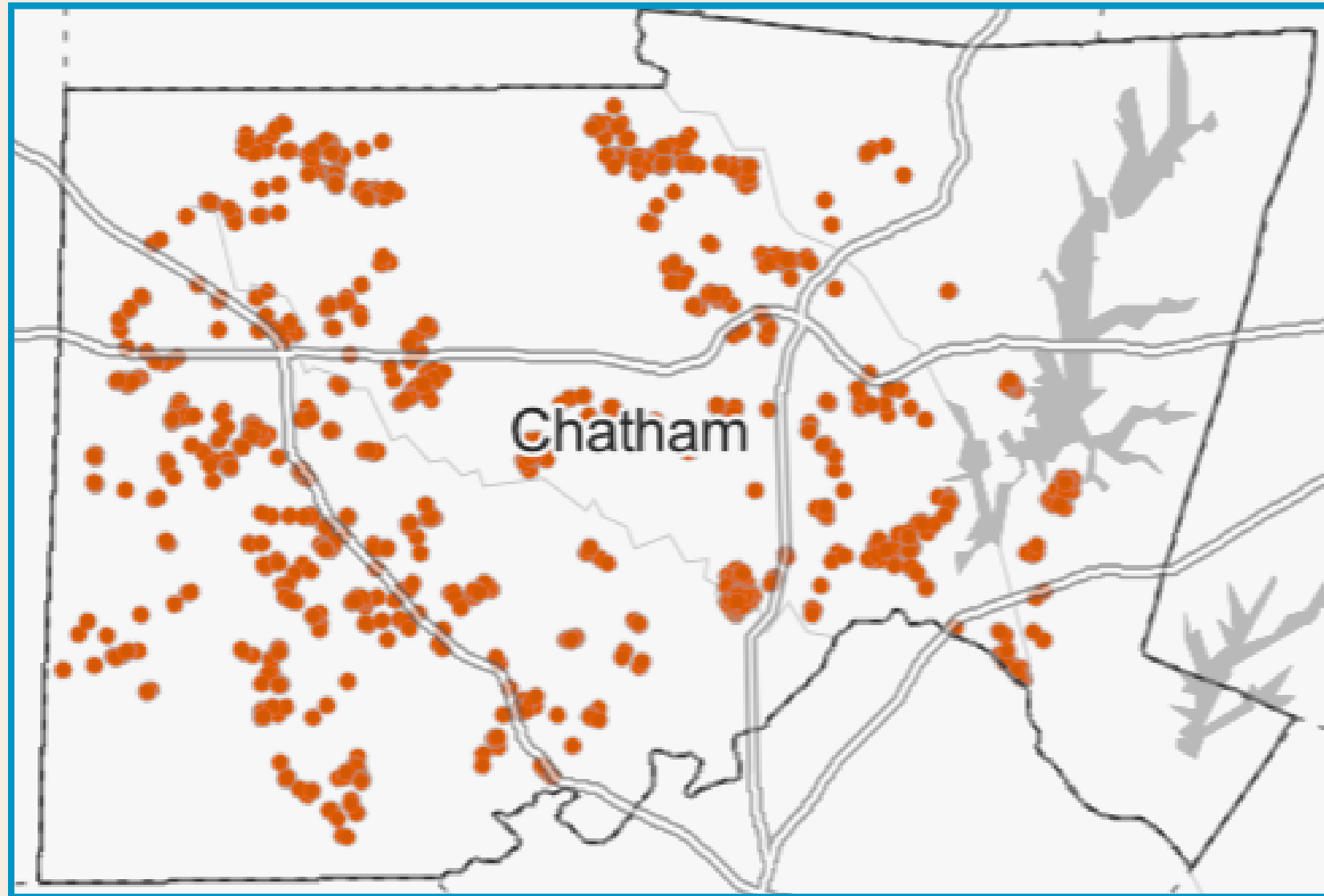
Information:

- Brightspeed (Green):
 - Households: 2,555
 - Status: Under Construction
 - NCDIT Award: \$4,531,894
 - Chatham Allocation: \$0
 - Completion Requirement: End of 2026

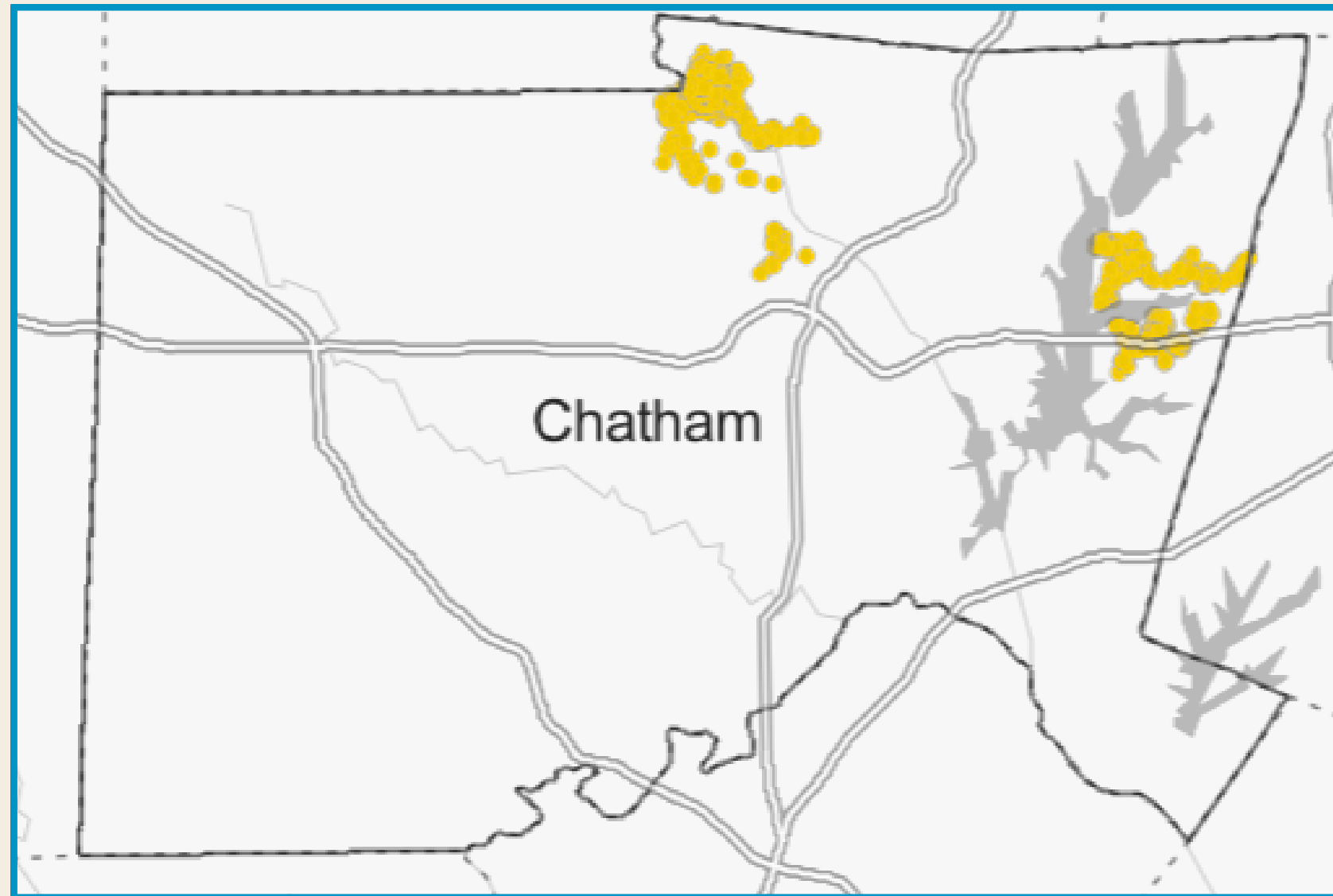
CAB Grant Round 2 - Brightspeed

Information:

- Brightspeed (Orange):
 - Households: 879
 - Businesses: 127
 - Status: Under Construction
 - NCDIT Award: \$1,894,985.60
 - Chatham Allocation: \$500,000
 - Completion Requirement: End of 2026



CAB Grant Round 2 - Spectrum

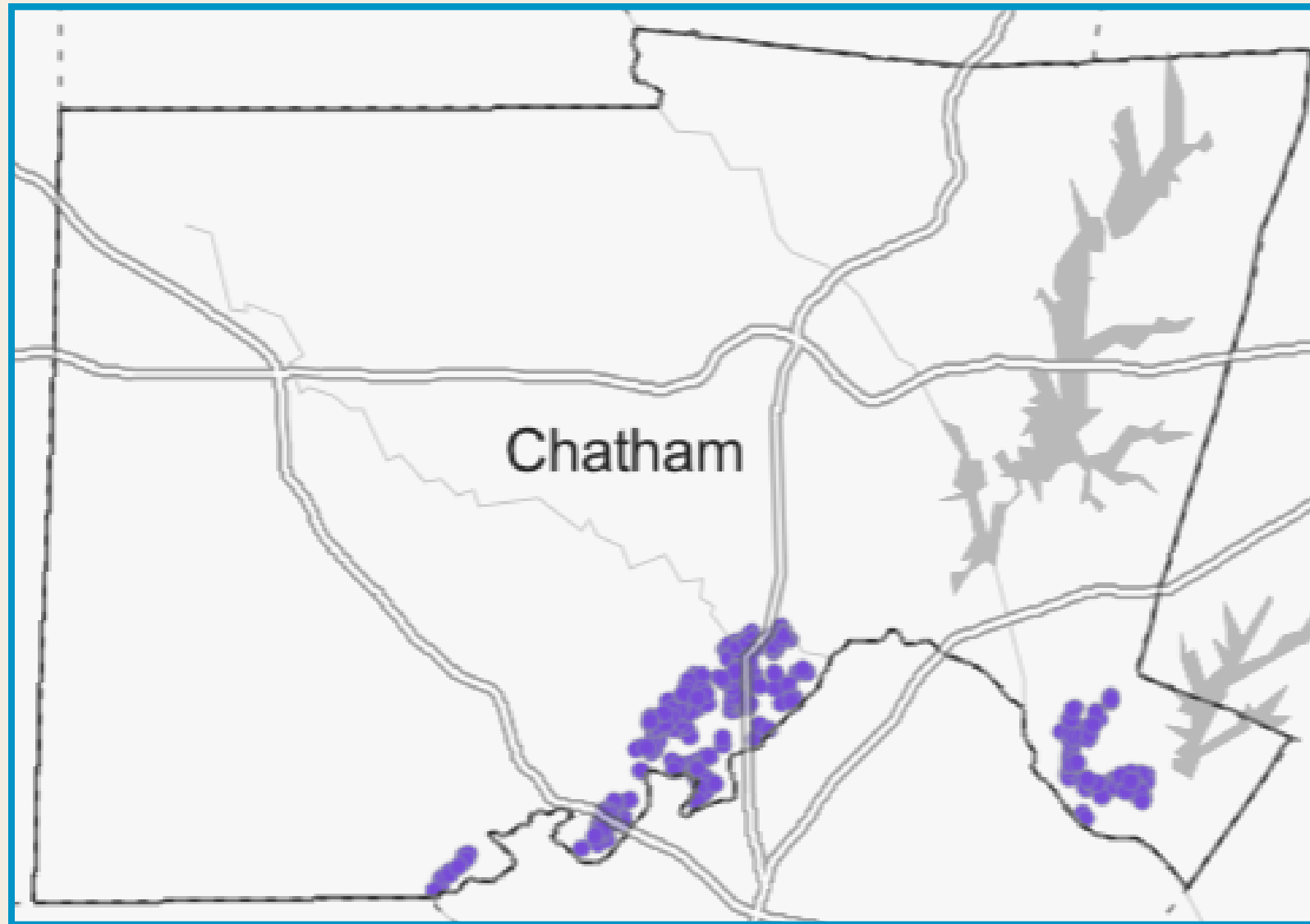


Information:

- Spectrum (Yellow):
 - Households: 525
 - Businesses: 35
 - Status: Under Construction
 - NCDIT Award: \$2,488,212.30
 - Chatham Allocation: \$0
 - Completion Requirement: End of 2026



CAB Grant Round 2 - Windstream

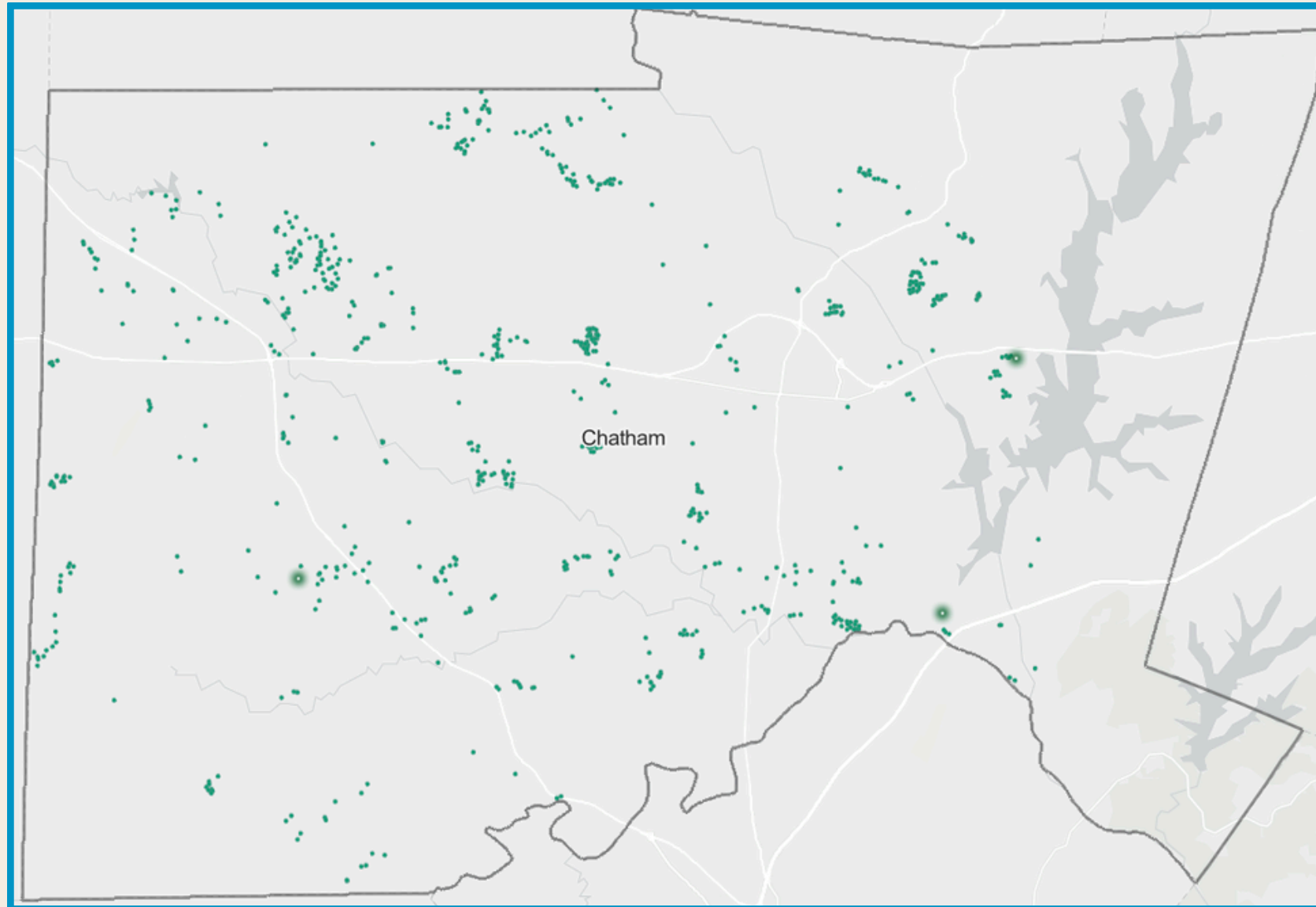


Information:

- Windstream (Purple):
 - Households: 418
 - Businesses: 59
 - Status: Under Construction
 - NCDIT Award: \$2,401,609.00
 - Chatham Allocation: \$0
 - Completion Requirement: End of 2026

Projected BEAD Award 1 - Brightspeed

Information:



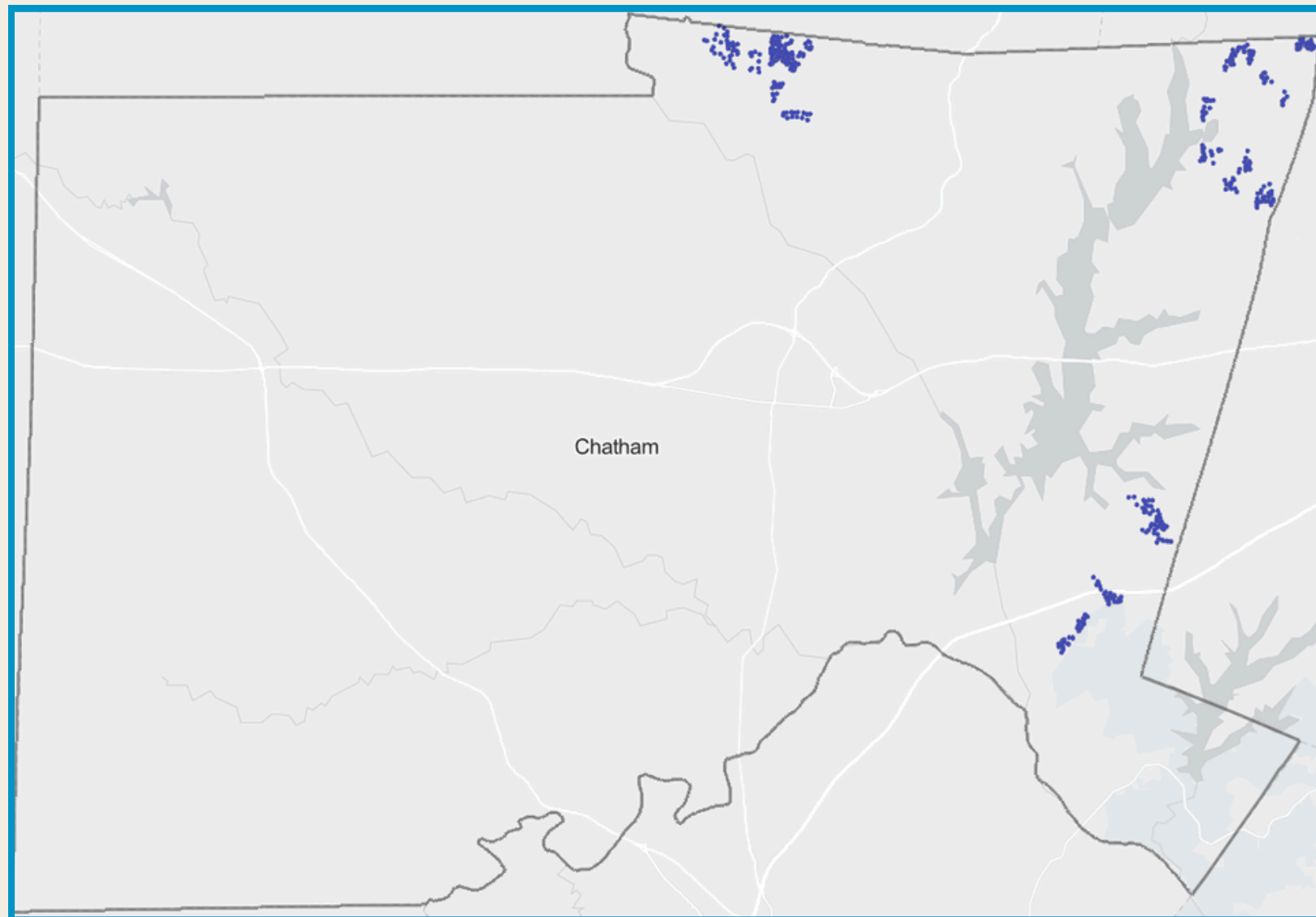
- Brightspeed (Green):
 - Technology: Fiber
 - Locations Served: 710
 - Federally Awarded



Projected BEAD Award 2 - Spectrum

Information:

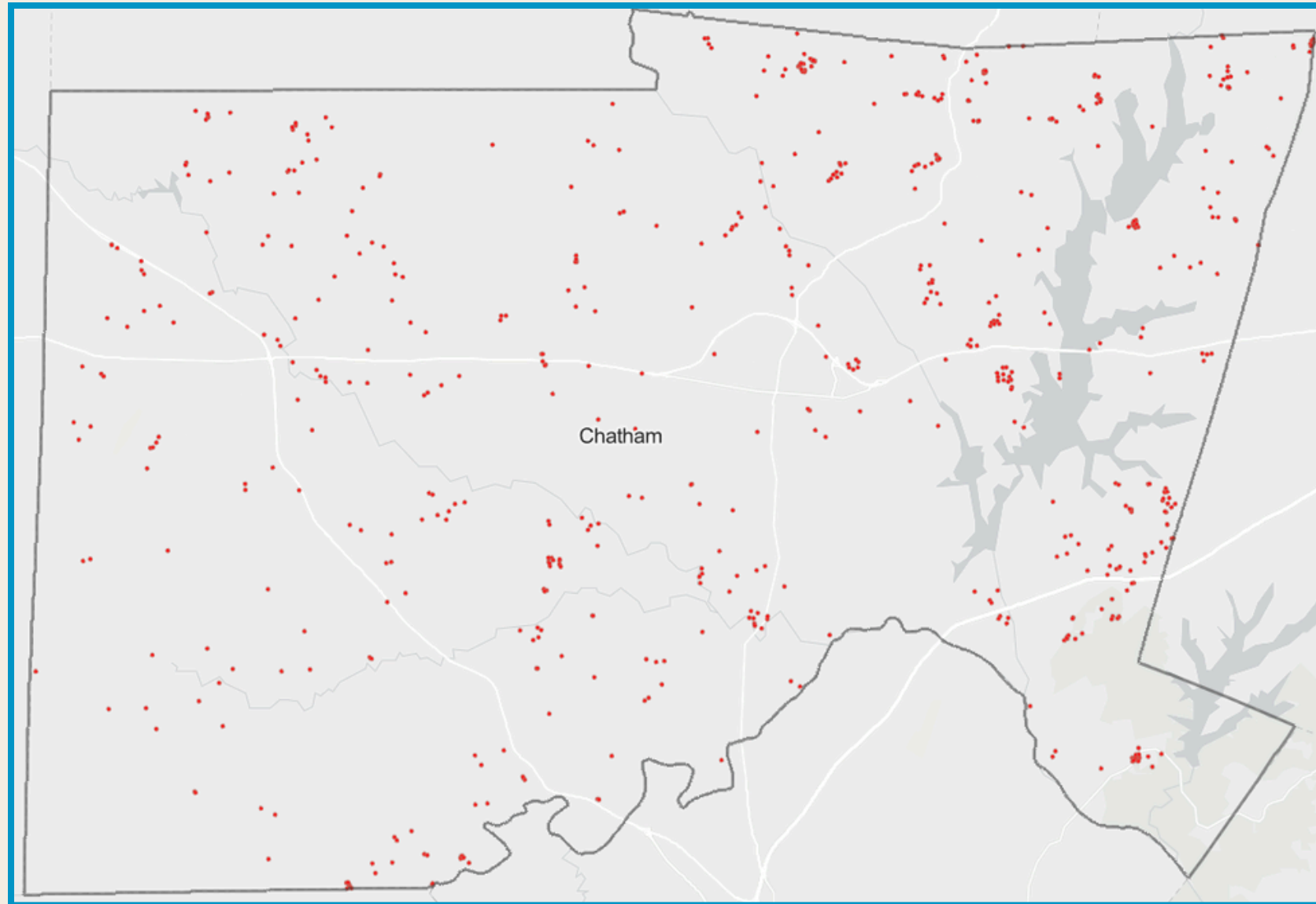
- Spectrum (Dark Blue):
 - Technology: Fiber
 - Locations Served: 456
 - Federally Awarded



Projected BEAD Award 3 - Amazon

Information:

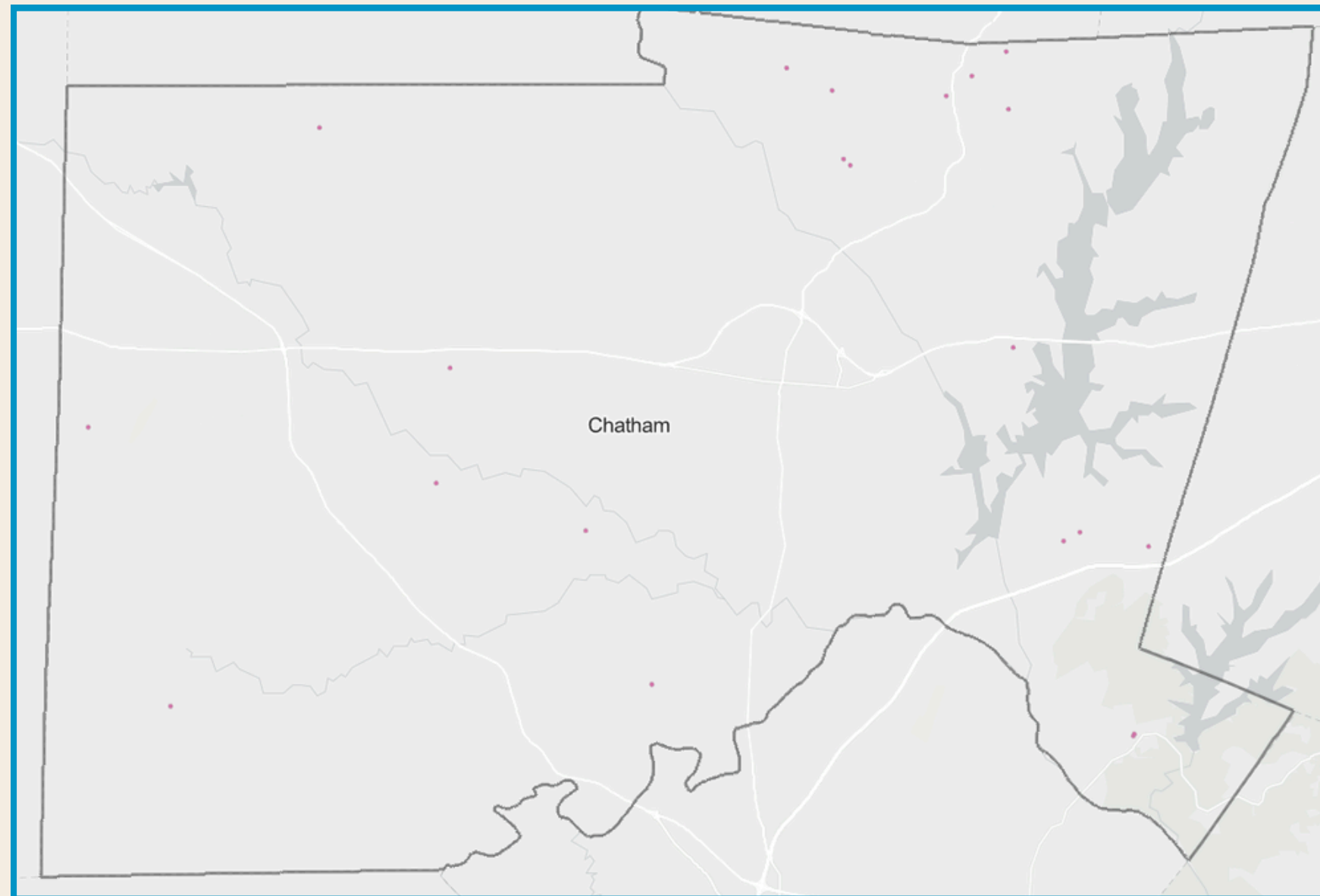
- Amazon Kuiper (Red):
 - Technology: Satellite
 - Locations Served: 622
 - Federally Awarded



Projected BEAD Award 4 - Starlink

Information:

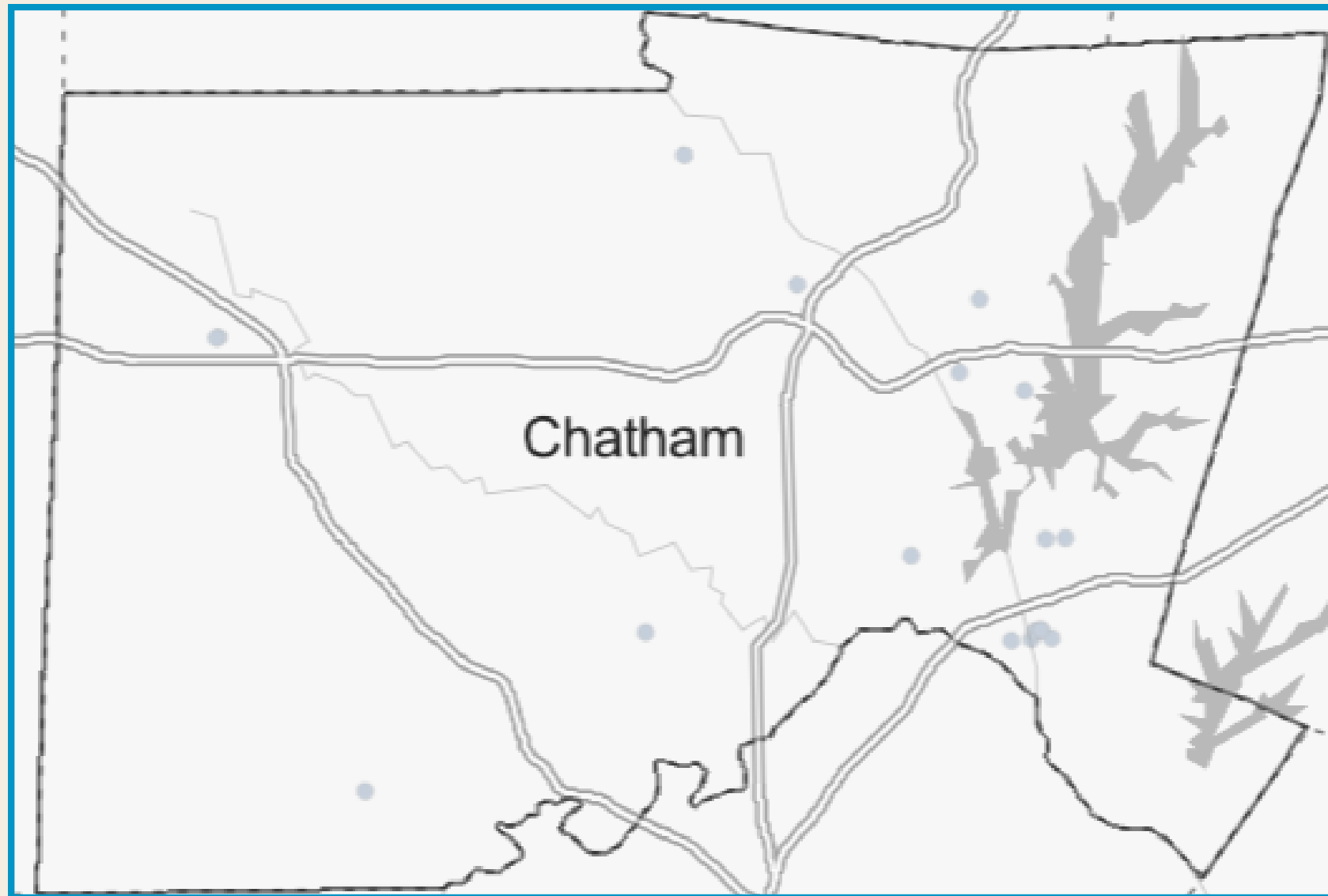
- SpaceX Starlink (Pink):
 - Technology: Satellite
 - Locations Served: 21
 - Federally Awarded



Stop-Gap Solutions Program

Information:

- Brightspeed (Gray):
 - Households: 15
 - Businesses: 5
 - Status: Contracted
 - NCDIT Award: \$17,000.00
 - Chatham Allocation: \$0



Grant Totals

- Rural Digital Opportunity Fund Awards:
 - 3,445 Locations Served
- All Broadband Infrastructure Office Awards (GREAT, CAB, Stop-Gap):
 - 6797 Locations Served
- Projected BEAD Awards:
 - 1810 Locations Served
- Projected Unserved Locations Post All Awards:
 - 186



2023 Broadband Profile



CHATHAM COUNTY BROADBAND PROFILE

Summary of broadband service in the county based on FCC reported unserved areas compared with current funding programs focusing on improving broadband in the county.

FCC Reported Unserved Locations

- Count of Unserved
- Percent Unserved

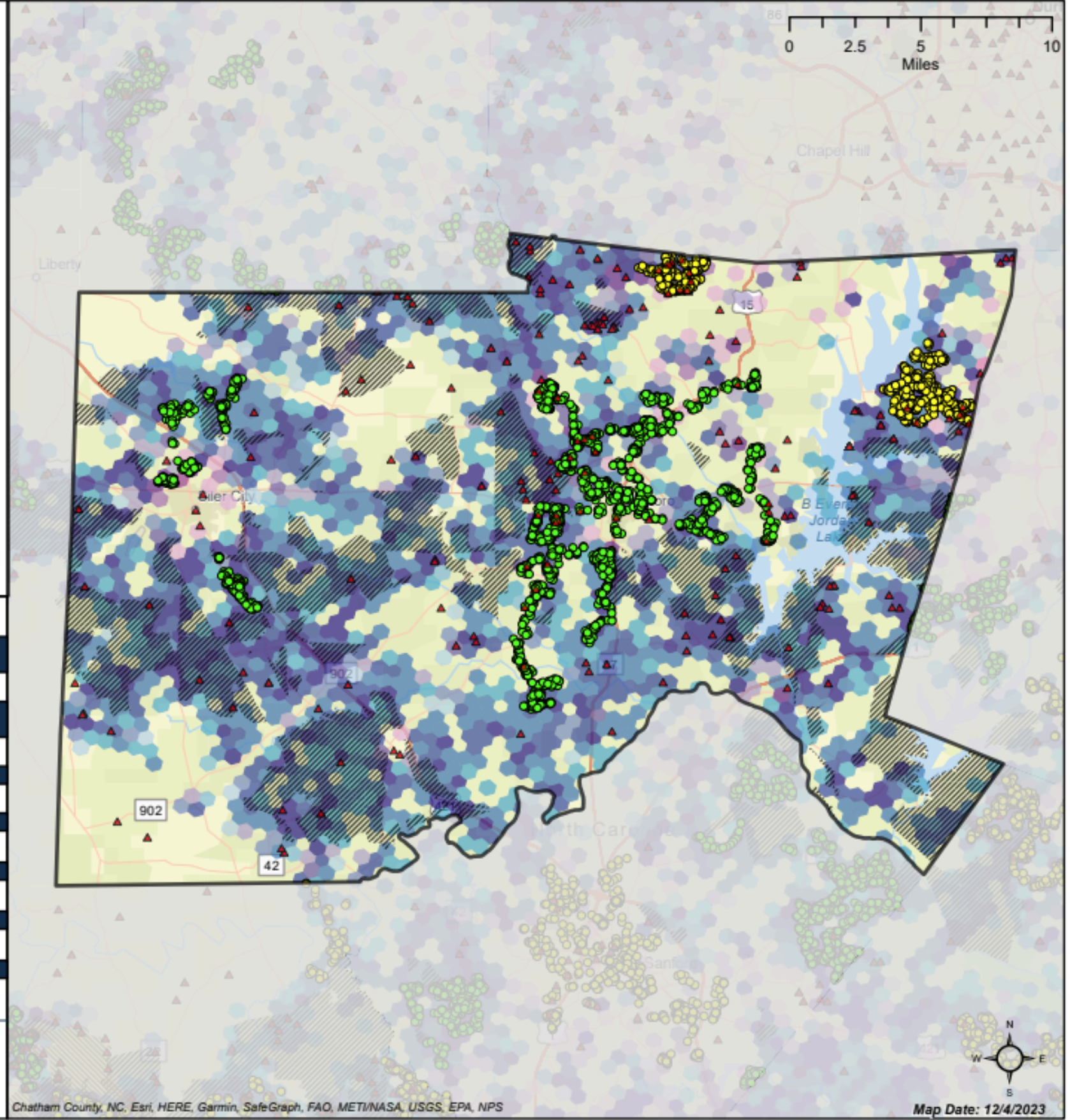
Unserved Locations from the FCC Broadband Data Collection have been aggregated into hexagon-shaped bins to show both the count and percent of unserved locations within each bin. Darker shades of pink indicate higher total counts of unserved locations. Darker shades of blue indicate a higher percentage of locations within a bin are unserved. Darker shades of purple indicate both a higher total of unserved locations and a higher percentage of total locations within a bin are unserved.

Unserved locations for American Rescue Plan Act (ARPA) funded programs in NC are defined as locations without access to fixed terrestrial internet service, through Fiber, Cable, or non-mobile Licensed Fixed Wireless technologies, of at least 25mb/s Download and 3mb/s Upload speeds.

- ▲ NC Broadband Survey - Unserved Responses
- GREAT Award Locations (ARPA Funded) - Contracted
- GREAT Award Locations (ARPA Funded) - Contingent
- CAB Award Locations (ARPA Funded) - Contingent
- GREAT Award Locations (State Funded)
- GREAT Award Areas (State Funded)
- ▨ FCC Rural Digital Opportunity Fund Grant
- ▨ Other Federal Grants

CHATHAM COUNTY ESTIMATES	
Percent Unserved * <small>(No Service 25mb/s Download and 3mb/s Upload or Greater)</small>	
27.61%	11,066 Total Locations
Percent Underserved * <small>(No Service 100mb/s Download and 20mb/s Upload or Greater)</small>	
0%	0 Total Locations
Percent with Fiber Broadband Available *	
43.27%	17,342 Total Locations
Percent with DSL Only *	
24.25%	9,720 Total Locations
Percent with Broadband Subscription **	
69.55%	
Percent with No Internet Access **	
11.4%	
Percent with No Internet Devices **	
7.8%	

DATA SOURCES:
 *FCC BDC - Federal Communication Commission Broadband Data Collection Version 3 Published November 2023 (Provider Reported as of June 30, 2023)
 **ACS - U.S. Census Bureau American Community Survey 2017-2021 5-Year Estimates



2026 Broadband Profile



CHATHAM COUNTY BROADBAND PROFILE

Summary of broadband status in the county based on FCC reported service compared with currently obligated funding programs focusing on improving broadband in the county.

- Unfunded Unserved & Underserved Locations
- Served Locations
- Federal Funded Locations
- Local Award Locations
- State Funded Locations - GREAT & CAB
- ▲ Provisional BEAD Awards
- ▼ Provisional BEAD Awards - Satellite

Unserved and Underserved Locations from the FCC Broadband Data Collection are shown on this map with funded locations overlaid. Some funded locations may still be unserved or underserved depending on project status and funding timelines. Served locations are defined as having access to fixed terrestrial service—via fiber, cable, or licensed fixed wireless (non-mobile)—providing at least 100 Mbps download and 20 Mbps upload speeds.

All BEAD Awards on this map are tentative pending final approval by the National Telecommunications and Information Administration (NTIA) and are not included in the funded location figures below.

CHATHAM COUNTY STATISTICS

Percent Served with Reliable Broadband*

79.86% 29,408 Total Locations

Percent Unserved & Underserved *

20.14 % 7,416 Total Locations

Locations Funded through State, Federal or Local Programs*

26.83% 9,881 Total Locations

Percent Funded through BEAD - All Technology*

4.90% 1,804 Total Locations

Percent Funded through BEAD - Satellite*

1.73% 638 Total Locations

Percent Unserved, Underserved, and Unfunded (Including BEAD)*

0.51% 186 Total Locations

Percent with No Computer**

5.00%

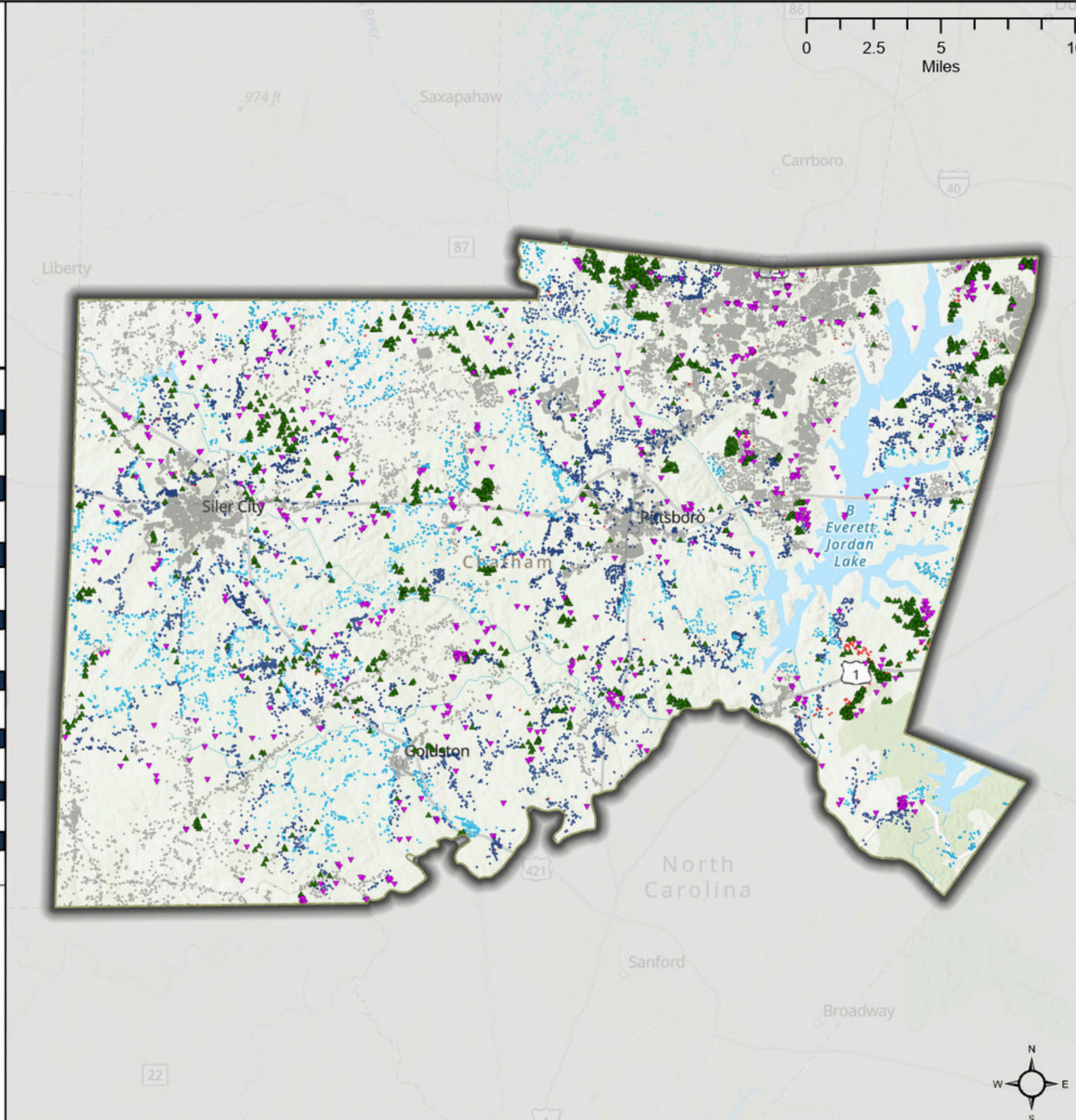
Percent with Broadband Subscription**

71.36%

DATA SOURCES:

*FCC BDC - Federal Communication Commission Broadband Data Collection Version 7 Published December 2025 (Provider Reported as of June 2024)
Funded locations may be served, unserved, or underserved depending on when the project received funding and the requirements of the specific program.

**ACS - U.S. Census Bureau American Community Survey 2019-2023
5-Year Estimates



Esri, NASA, NGA, USGS, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Map Date: 12/9/2025



Office of Digital Equity and Literacy Grant Update





KRAMDEN

GET TECH. LEARN TECH. GIVE TECH.

Advancing equitable access to devices,
connectivity, and technology education.

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Durham, NC 27713
919-293-1133
kramden.org
info@kramden.org



ABOUT KRAMDEN

Powering Digital Inclusion via a Circular Economy

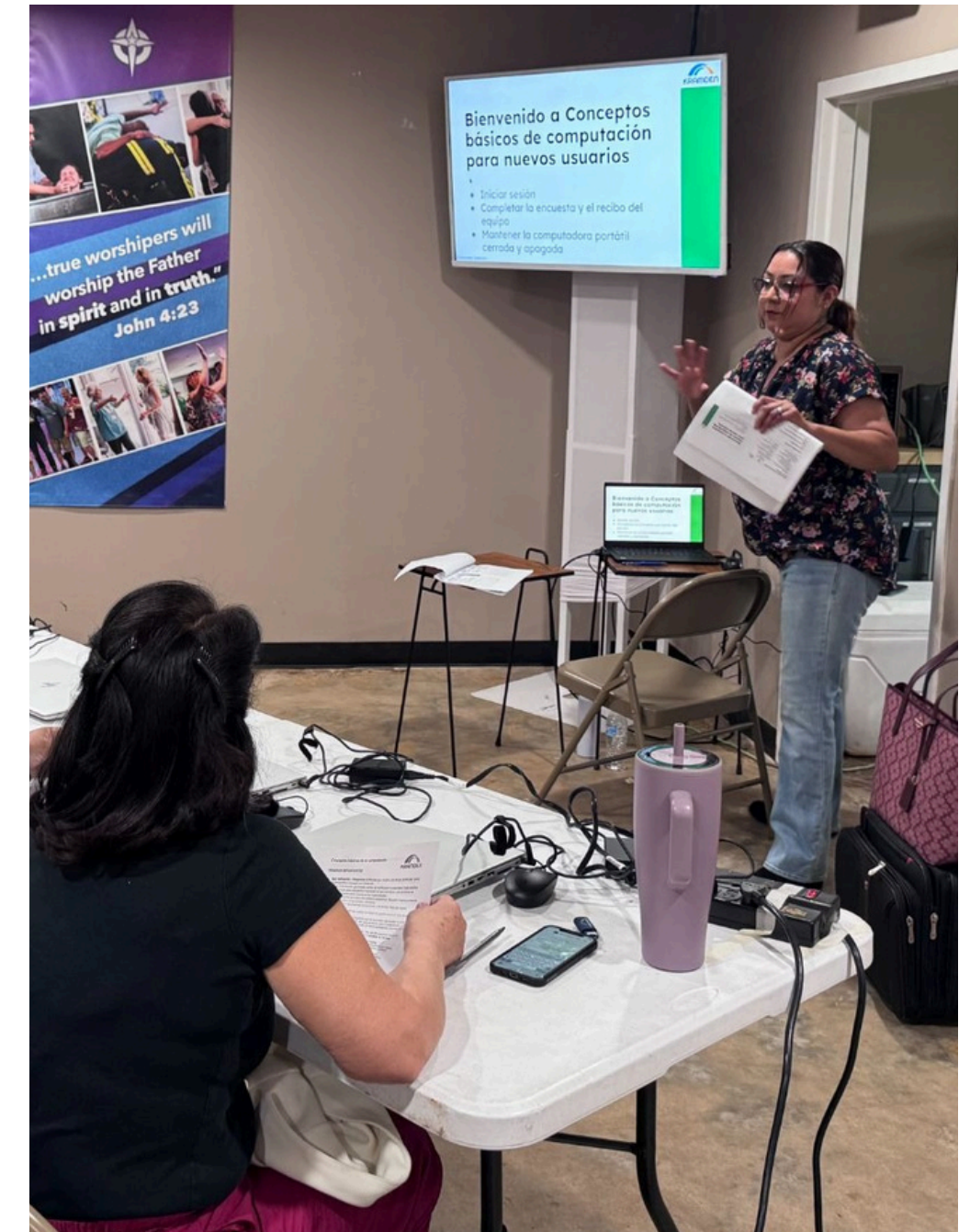
- Repurposing surplus technology for local community reuse.

Increasing Access to Computer Technology

- Providing quality computers and support to those in need.

Building Essential Digital Skills

- 12+ years of expert digital literacy and youth STEAM training.
- Rapidly scaling digital inclusion via train-the-trainer.



PROJECT OVERVIEW

The Central Pines Regional Council of Governments was awarded a digital equity grant from the state of North Carolina to provide essential digital skills to up to 1,000 adult residents of Durham and Chatham Counties.

- **Kramden Institute coordinated** program delivery, partner relationships, and instructors.
- **Classes were hosted** at various county agencies & community based organizations.
- **Participants were recruited** from various populations & locations across the two counties.



CHATHAM COUNTY TARGETS

655 adult residents have been trained on one of two curricula as of May 6.

Computer Essentials for New Users

- For those with little to no experience
- Majority of trained residents
- Spanish option



Computer Skills for Job Seekers

- Best for those with some computer experience
- Foundation for finding a new or better job
- Offerings were targeted based on need



POPULATIONS & GEOGRAPHY

655 adult residents have been trained on one of two curricula as of May 6.

Rural Residents - 115

Justice involved - 21

Language barrier - 154

Low-income - 180

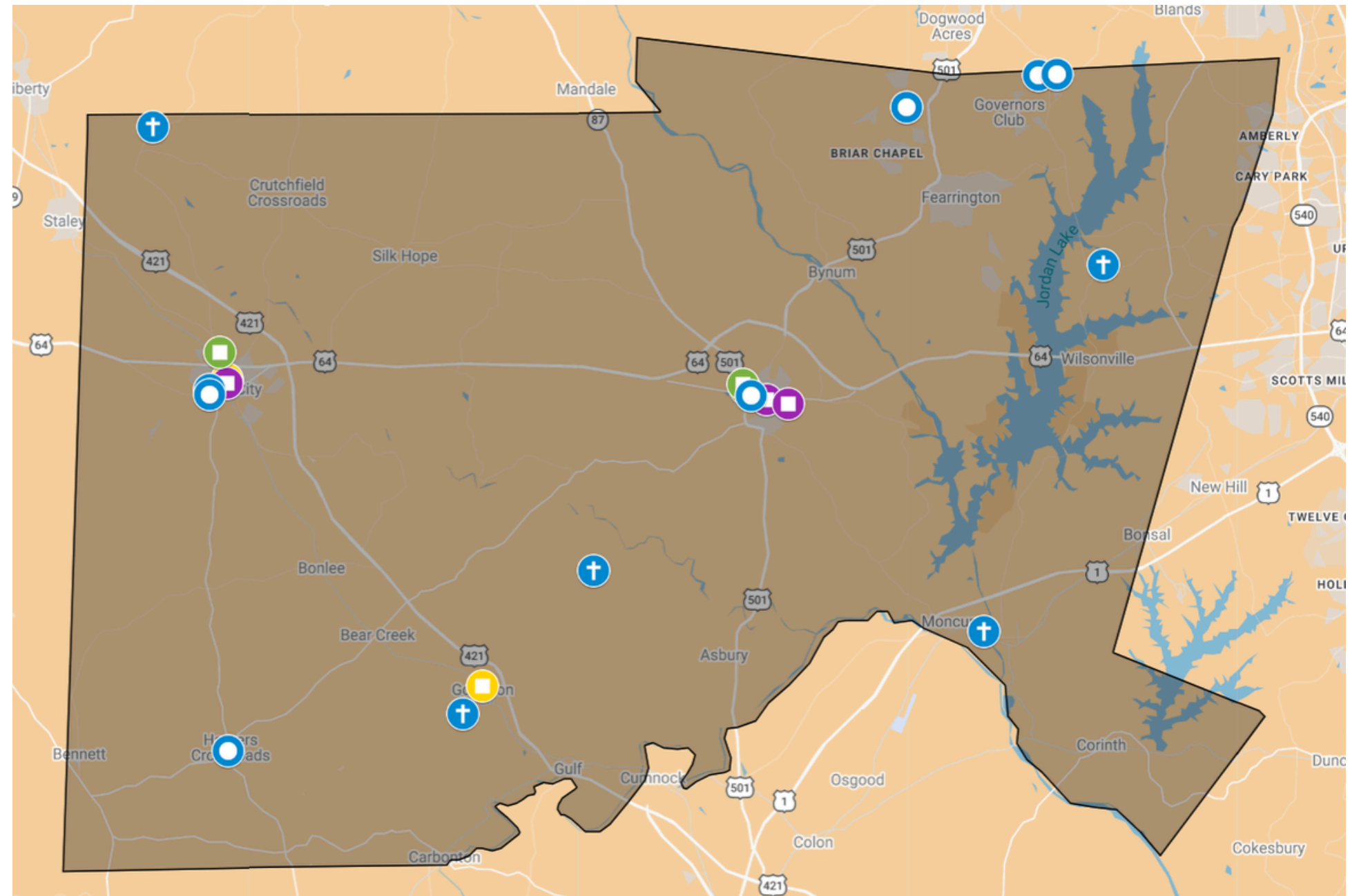
Racial or ethnic minority - 78

Disability - 54

60+ years old - 279

Veteran - 11

NONE - 19



HOST SITES

Classes were hosted at 19 unique sites across the county.

Sites hosting multiple classes

Freedom Family Church	8
Library, Chatham Community	4
Library, Goldston Public	4
Library, Wren Memorial	3
Siler City Center for Active Living	3
Pittsboro Center for Active Living	4
Fairgrounds	4
Word of Life Church	4
Nature Trail	2
Chatham Courthouse	2

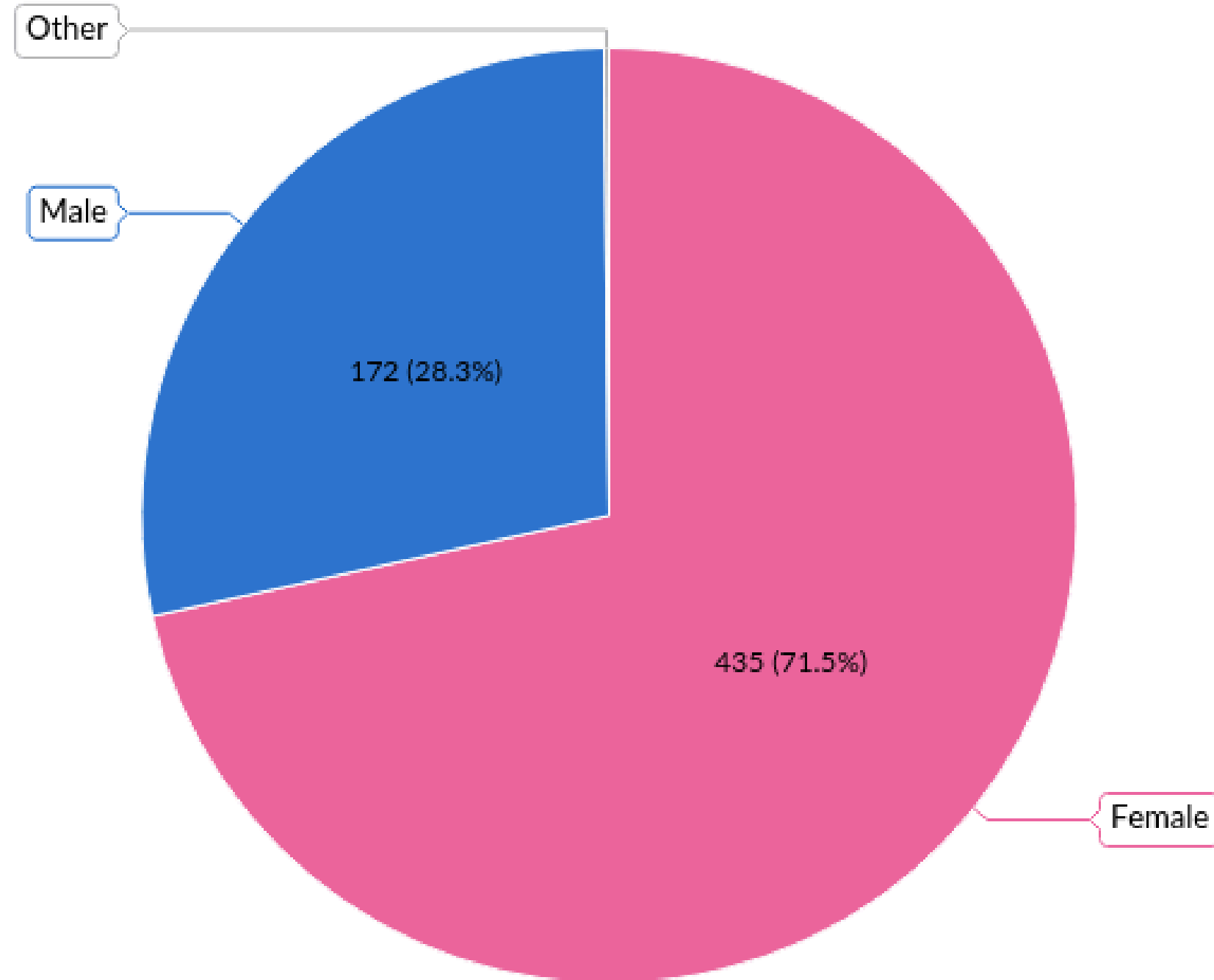
Single class sites

O'Mara Landscaping
Liberty Chapel Church - Moncure
Siler City Police Station
Union Grove Church
Habitat Community Space - Pittsboro
Roberts Chapel Missionary Baptist Church
Harper's Crossroads/Bonlee
Carolina Meadows
Holland Chapel

DEMOGRAPHIC BREAKDOWN

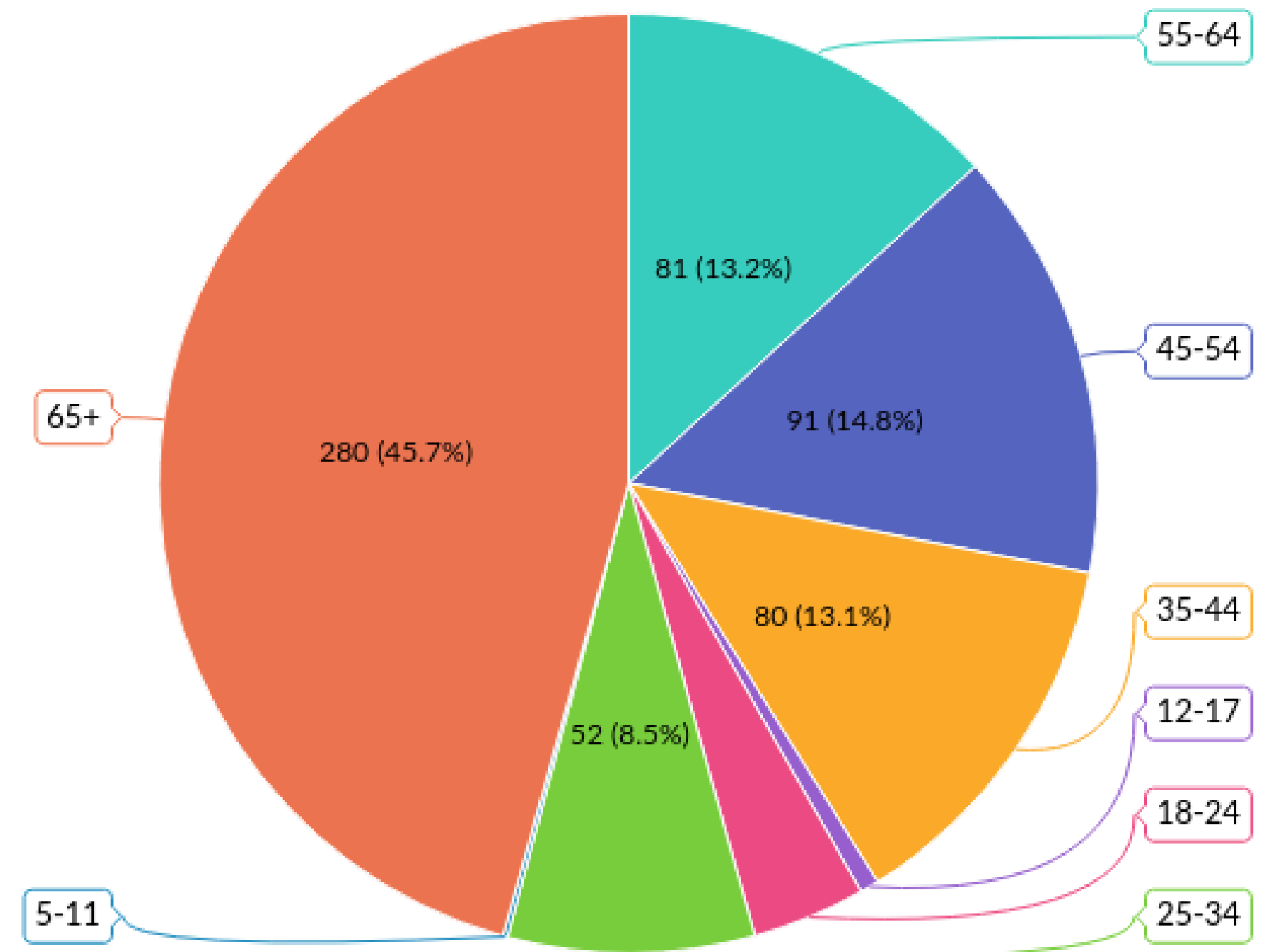
Gender

- Out of 608 respondents



Age Range

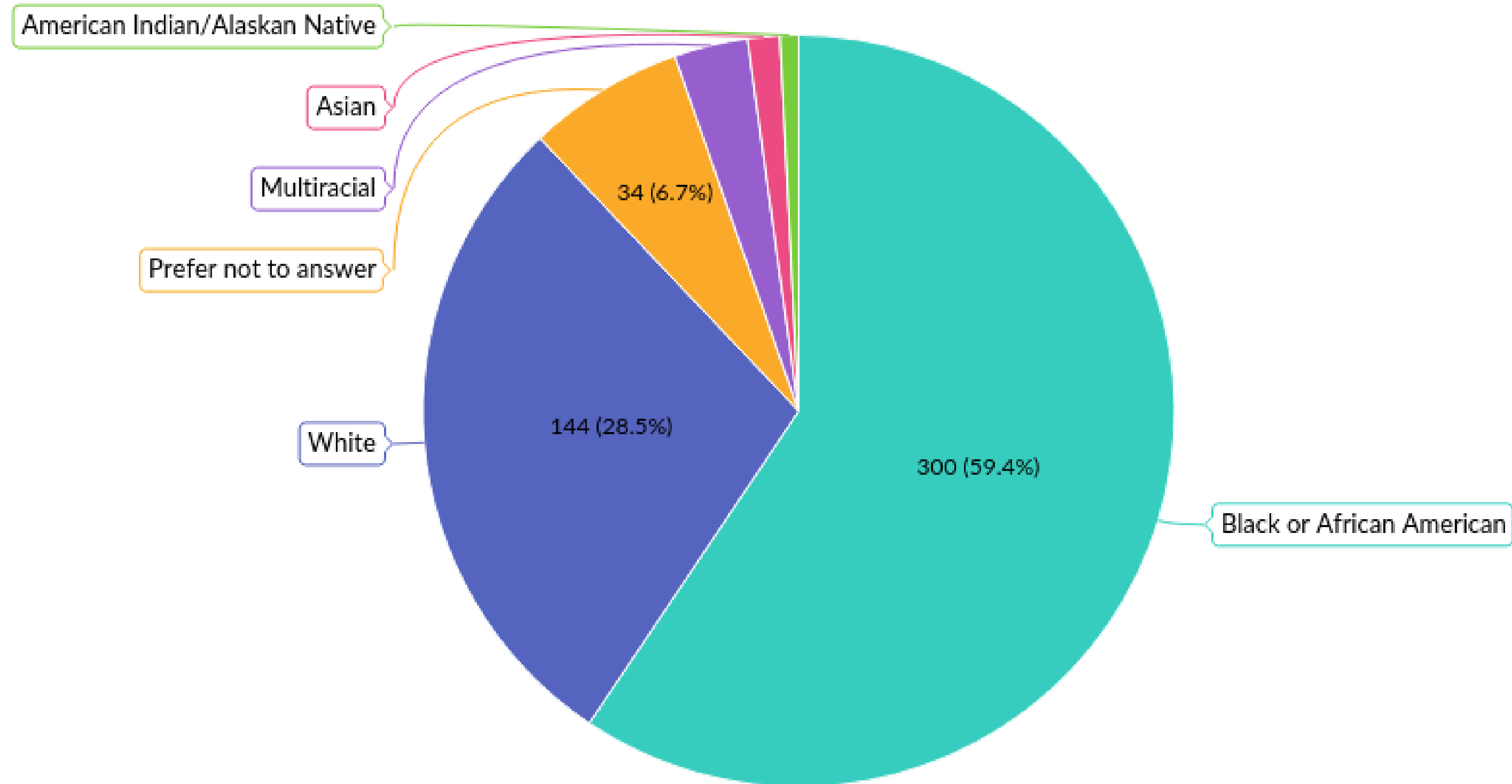
- Out of 613 respondents



DEMOGRAPHIC BREAKDOWN

Race

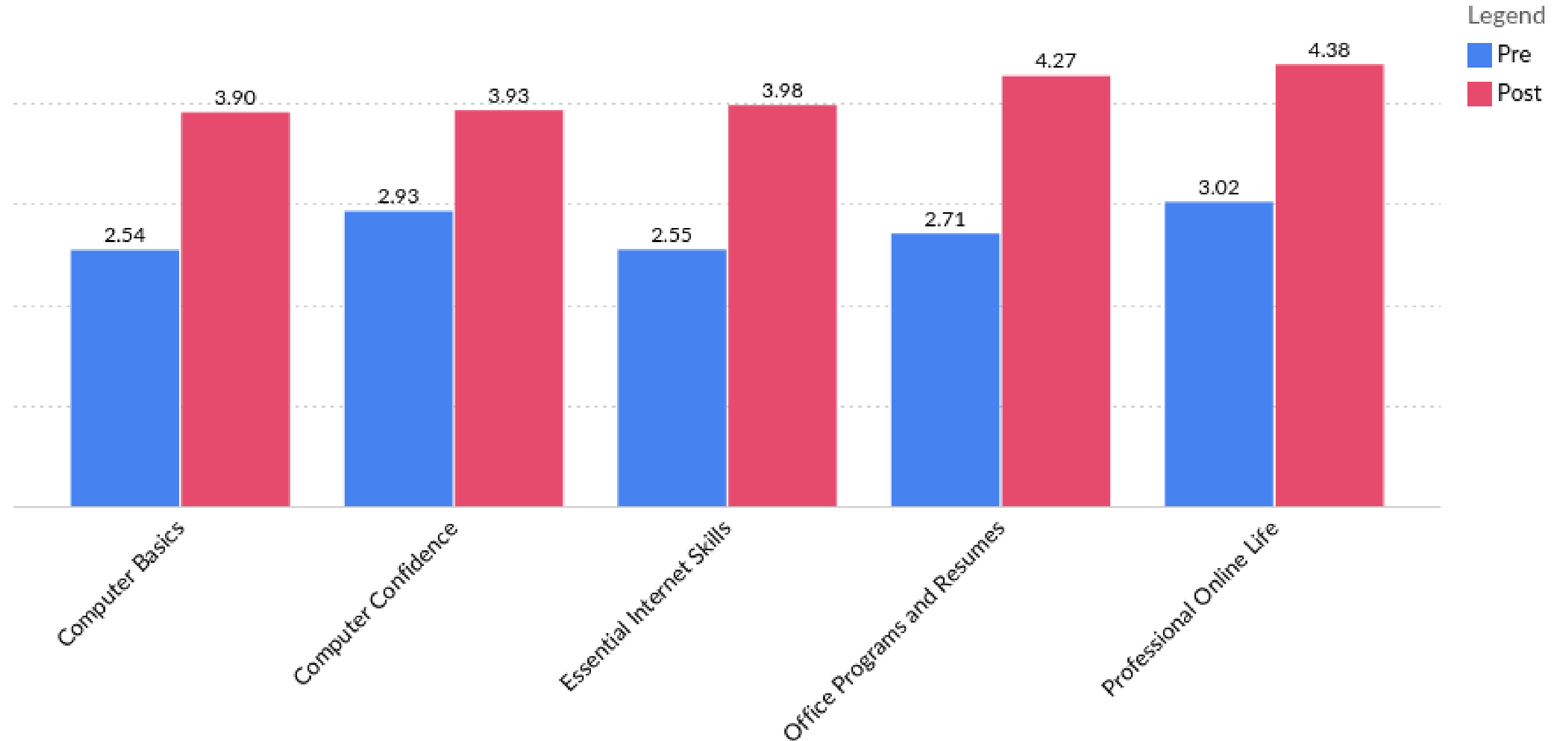
- Out of 505 respondents



PROGRAM IMPACT

Average score comparison by learning objective

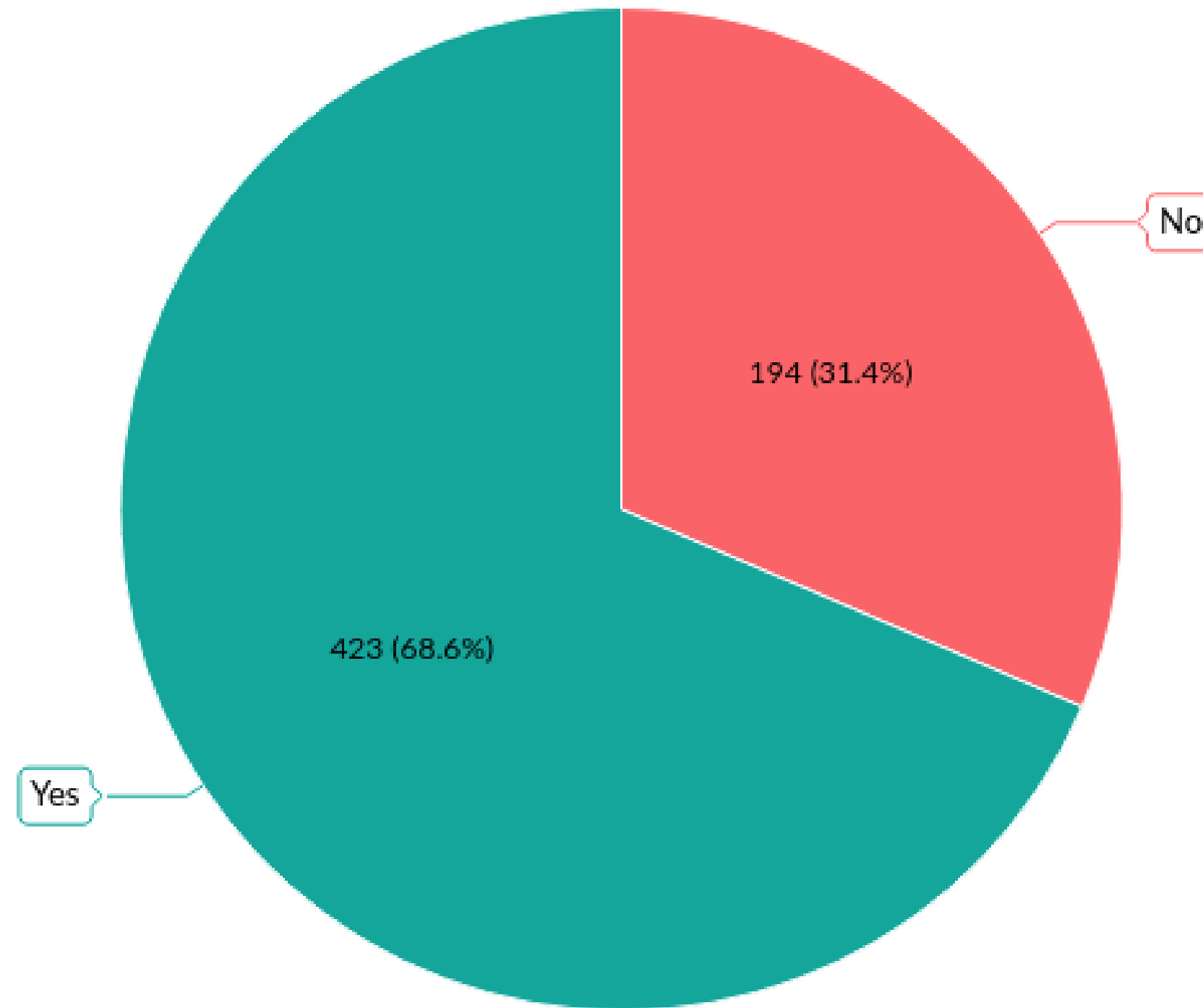
- Overall



PROGRAM IMPACT

Computer proficiency (confidence)

- Out of 617 respondents





5010 NC HWY 55
DURHAM, NC 27713

Digital Inclusion Plan Update



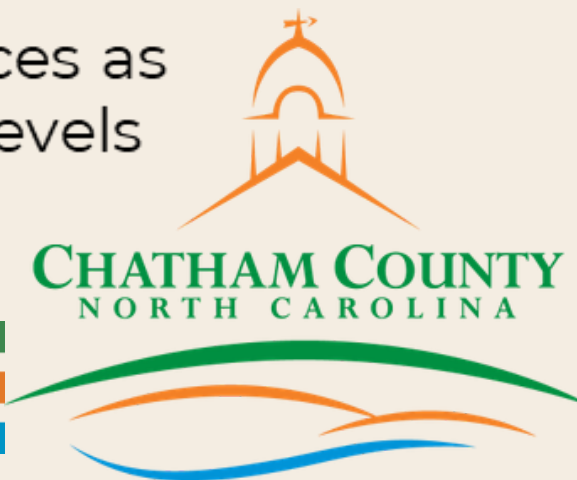
Overview

- Per the Board of Commissioners adopted Digital Inclusion Plan, the Chatham County Digital Inclusion Coalition met and suggested edits to the plan in accordance with the one-year review requirement.
- If the Board of Commissioners is amenable to these updates, staff will incorporate the recommended edits into the plan through an addendum.
- Digital Inclusion Coalition members:
 - Chatham County Manager's Office
 - Chatham County Public Libraries
 - Chatham County Diversion and Advocacy Programs
 - Chatham County Aging Services
 - Central Carolina Community College
 - Chatham County Public Schools
 - Innovate Chatham
 - Chatham County Cooperative Extension
 - Chatham Literacy
 - Right Here Right Now Project



Current Availability Goals

Goal 1	Create better broadband mapping across Chatham County.	Strategy 1.1: Encourage residents to request elected representatives change laws, and solicit for more accurate, timely, and useful maps on internet availability.
		Strategy 1.2: Promote partnerships with internet service providers and state initiatives to improve broadband mapping.
Goal 2	Coordinate increased connectivity for unserved areas.	Strategy 2.1: Utilize state and federal funding to expand availability of broadband to unserved areas based on new comprehensive mapping.
		Strategy 2.2: Prioritize rural and impoverished areas in advocating for increased broadband.
		Strategy 2.3: Advocate for increased availability in known cellular dead-zones.
Goal 3	Promote improved connectivity and stability of broadband connections.	Strategy 3.1: Encourage residents to advocate for more fiber services across the county through their internet service providers and legislative representatives.
		Strategy 3.2: Advocate for more stable and upgraded broadband networks to prevent outages.
		Strategy 3.3: Advocate for additional internet service provider plan types and availability.
		Strategy 3.4: Encourage internet service providers to provide their services as advertised (sometimes providers advertise and sell coverage at higher levels than they provide or that they can provide.)



Recommended Availability Adjustments

- No changes or updates recommended.
- The Coalition recognized that despite the growth in broadband availability, locations that remain without broadband access may face increasing challenges once grant funding and state and federal ARPA funds are no longer available.
 - Because of this, the Coalition emphasized the continued need to focus on broadband availability and to continue pursuing the goals outlined in this section.



Current Access Goals

Goal 4	Increase equitable communications for in-need communities around affordability services.	Strategy 4.1: Advertise state and federal discount programs to assist in-need residents to afford internet subscriptions.
		Strategy 4.2: Provide translated communications and information surrounding broadband affordability programs.
		Strategy 4.3: Find ways to support residents who are non-citizens.
Goal 5	Expand access to digital devices.	Strategy 5.1: Expand device ownership within the county.
		Strategy 5.2: Expand public computer access points.
		Strategy 5.3: Work with the Chatham County School System to identify, via survey, homes with little or no computer access.
Goal 6	Increase access to internet connectivity in public spaces.	Strategy 6.1: Provide free exterior Wi-Fi at designated facilities.
		Strategy 6.2: Complete the mapping of organizations that provide free Wi-Fi access across the county.
Goal 7	Increase hotspot availability.	Strategy 7.1: Address gaps in hotspot funding.
		Strategy 7.2: Create a program to allow hotspots to be loaned out by the Chatham County Public Libraries.



Reccomended Access Changes

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

Strategy 4.1: Advertise state and federal discount programs to assist in-need residents to afford internet subscriptions **if these programs return in the future. Additionally, advise residents to discuss with their Internet Service Providers the availability of discount programs.**

Objectives:

A) Utilize state and federal funding to assist residents in gaining broadband and internet access **if these programs return in the future.**

B) Provide education about programs to help in-need residents gain access to subsidies for broadband assistance **if these programs return in the future.**



Reccomended Access Changes

Goal 5: Expand access to digital devices.

Strategy 5.3: Work with **partners** to identify, via survey, homes with little or no computer access.

Objectives:

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

Strategy 5.4: Work with partners to facilitate an increased allocation of hotspots in the county.

Objectives:

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



Reccomended Access Changes

Goal 7: Increase hotspot availability.

Strategy 7.1: Address gaps in hotspot funding.

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

Goal 7 Removed - and added to strategy of goal 5



Current Adoption Goals

<p>Goal 8</p>	<p>Increase digital literacy learning across the county.</p>	<p>Strategy 8.1: Communicate and expand the availability of existing digital literacy training and courses.</p> <p>Strategy 8.2: Increase digital literacy training in all areas of the county.</p> <p>Strategy 8.3: Improve accessibility services surrounding digital literacy.</p> <p>Strategy 8.4: Increase partnerships to expand digital literacy education.</p>
<p>Goal 9</p>	<p>Create a digital inclusion steering committee.</p>	<p>Strategy 9.1: Work with partners to establish a digital inclusion program manager to oversee the digital inclusion process and plan throughout the county.</p> <p>Strategy 9.2: Work with partners to create a Digital Navigator Corps program that addresses the larger digital inclusion process — home connectivity, devices, and digital skills — with community members through repeated interactions</p> <p>Strategy 9.3: Work with partners to establish a Digital Literacy Training Coordinator.</p>
<p>Goal 10</p>	<p>Establish workforce development programs in broadband-related fields.</p>	<p>Strategy 10.1: Work with schools, colleges, and other partners, to advertise or create more programs surrounding technology fields as it pertains to broadband and digital career opportunities.</p>
<p>Goal 11</p>	<p>Create events celebrating digital inclusion.</p>	<p>Strategy 11.1: Develop and advertise a hackathon event to solve technology-based problems in the county.</p> <p>Strategy 11.2: Create Chatham County App contest to encourage digital engagement in youth.</p>



Reccomended Adoption Changes

Goal 8: Increase digital literacy learning across the county.

Strategy 8.1: Communicate and expand the availability of existing digital literacy training and courses, **including training on Generative Artificial Intelligence (AI) and data privacy.**

Objectives:

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



Reccomended Adoption Goals

Goal 9: Create a digital inclusion **working group**.

Strategy 9.1: Work with partners to establish a **digital inclusion working group to facilitate** digital inclusion process and plan throughout the county.

Objectives:

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

Removed stategies 9.2 and 9.3.



QUESTIONS?



Motion If Applicable

Motion to adopt the updates to the Chatham County Digital Inclusion Plan as presented and direct staff to incorporate the updates into the plan through an addendum.

