



CAB MAPPING WEBINAR FOR BROADBAND PROVIDERS

DEC. 1, 2023

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BROADBAND DATA AND MAPPING LEAD
BROADBAND INFRASTRUCTURE OFFICE

TOPICS TO COVER TODAY

1. CAB Program Updates
2. Broadband Funding Map / Protected Areas
3. CAB Planning Tool and CAB Eligible Locations
4. Protest Process for CAB
5. Submission of Data through AWS Folders
6. County Prioritization of Areas for CAB
7. Broadband Provider Project Areas for CAB Scopes of Work
8. CostQuest Licenses

CAB PROGRAM UPDATES

Prequalification of Broadband Providers

- Awards for Broadband Expansion and Access RFP
 - Prequalified Providers eligible to participate in CAB
 - Finalizing Convenience Contract
 - NCDIT will share with counties the list of broadband providers eligible to participate
- Other providers can participate in Funded Area data and Protest process

CAB PROGRAM UPDATES

NCDIT/County Collaboration Process

Preparation for Procurement Process

- County Commitment Form with “up to” amount and source of funds
- County-Level Scope of Work and Evaluation Criteria
- Identification of Eligible Locations and Prioritization of Areas
- Selection of Evaluation Team Members

NC ONEMAP BROADBAND PAGE

NC OneMap DATA PROJECTS ANNOUNCEMENTS TERMS CONTACT US HELP ABOUT

North Carolina Broadband

Discover Geographic Data Related to Broadband Availability, Adoption, and Related Topics

The NC Broadband Infrastructure Office serves as statewide resource for broadband access, first response communications and classroom connectivity initiatives led by the State of North Carolina. Mapping plays an integral role in identifying current broadband access and adoption in an effort to identify the most unserved or underserved areas around the state.

Questions or comments about Broadband in NC? Please visit <http://www.ncbroadband.gov/contact>

For broadband-specific mapping questions, please email: Broadbandmapping@nc.gov.

County Profiles

Download maps of broadband service and funding for each county in North Carolina.
Maps have been updated to reflect current grant funding from the GREAT Grant and CAB Grant Programs.
Last update: 11/28/23 (version 7).

nconemap.gov/pages/broadband

Planning

Data and applications related to Broadband Project Planning for grant efforts by Federal and State government organizations aimed at expanding broadband access across North Carolina.

Take the North Carolina Broadband Survey and get added to the map!
<https://www.ncbroadband.gov/broadband-nc/north-carolina-broadband-survey>

NC Broadband Funding

This funding data and map reflects the most accurate data possible from the FCC location data for all Federal, State, and Local funding programs.

[Data](#) [View](#)

Broadband Planning

Completing Access to Broadband (CAB) planning dashboard provides many datasets useful for project planning purposes.

[Data](#) [View](#)

Survey Results Map

The NC Broadband Survey is designed to gather information on locations in the state without adequate internet access and speeds.

[Data](#) [View](#)

BROADBAND FUNDING MAP

Broadband Funding Map

CAB Funded Locations Legend

NC Funded Broadband Serviceable Locations

- ▲ Completing Access to Broadband (CAB)
- ▲ GREAT - Round 1
- ▲ GREAT - Round 2
- ▲ GREAT - Round 3
- ▲ GREAT ARPA

Federal Funded Broadband Serviceable Locations

- Broadband Infrastructure Program
- COMMUNITY CONNECT GRANT PROGRAM
- Connect America Fund Phase II
- Enhanced Alternative Connect America Cost Model (Enhanced A-CAM)
- RURAL ECONNECTIVITY PROGRAM
- Rural Digital Opportunity Fund

BroadbandFunding_FCC_RDOF_NC_230803

- Windstream North Carolina, LLC
- Carolina Telephone and Telegraph, LLC
- Carolina West Wireless, Inc.
- Mediacom Wireless of North Carolina LLC
- Randolph Telephone Telecommunications, Inc.
- RiverStreet Communications of North Carolina, Inc.

NC State Funded BSLs

location_id	program	grantee	grant_county	app_id	contract_status	
1,311,402,688	Completing Access to Bro...	Spectrum	ROBESON	1,000,014,089	Contingent	F
1,311,409,089	Completing Access to Bro...	Spectrum	ROBESON	1,000,014,089	Contingent	F
1,311,391,463	Completing Access to Bro...	Spectrum	ROBESON	1,000,014,089	Contingent	F
1,311,402,725	Completing Access to Bro...	Spectrum	ROBESON	1,000,014,089	Contingent	F
1,311,391,454	Completing Access to Bro...	Spectrum	ROBESON	1,000,014,089	Contingent	F
1,311,391,461	Completing Access to Bro...	Spectrum	ROBESON	1,000,014,089	Contingent	F
1,311,402,570	Completing Access to Bro...	Spectrum	ROBESON	1,000,014,089	Contingent	F

NC Federal Funded BSLs

location_id	program	grantee	grant_county	project_id	project	
1,311,395,751	RURAL ECONNECTIVITY P...	0	ROBESON	2,865	Atlantic Telephone Memb...	F
1,311,395,852	RURAL ECONNECTIVITY P...	0	ROBESON	2,865	Atlantic Telephone Memb...	F
1,311,395,850	RURAL ECONNECTIVITY P...	0	ROBESON	2,865	Atlantic Telephone Memb...	F
1,311,395,855	RURAL ECONNECTIVITY P...	0	ROBESON	2,865	Atlantic Telephone Memb...	F
1,311,395,750	RURAL ECONNECTIVITY P...	0	ROBESON	2,865	Atlantic Telephone Memb...	F
1,311,395,746	RURAL ECONNECTIVITY P...	0	ROBESON	2,865	Atlantic Telephone Memb...	F
1,311,394,482	RURAL ECONNECTIVITY P...	0	ROBESON	2,865	Atlantic Telephone Memb...	F

BROADBAND FUNDING MAP

NC OneMap

Filters
NC Federal Funded BSLs

grantee

- Spectrum 38.35%
- North-State Telephone Co. 26.62%
- Yadkin Valley Telephone Membership Corporation 12.34%
- Wilkes Telephone Membership Corporation 7.96%
- 0 7.63%

Search 13 more values

Select attribute filters (11)

- location_id 1,010,458,145 to 1,451,881,746
- program 6 values
- grantee 18 values
- grant_county 96 values
- project_id 2,608 to 9,221
- project 2,000 values

Showing 50 of 330,518 rows

location_id	program	grantee	grant_county	project_id
1,311,395,751	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,395,852	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,395,850	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,395,750	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,395,746	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,394,482	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,394,492	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,394,473	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,394,481	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,394,477	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,394,478	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,394,479	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,385,906	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,385,922	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,385,919	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,381,992	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,385,920	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,382,126	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,428,835	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,428,879	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865
1,311,428,885	RURAL ECONNECTIVITY PROGRAM	0	ROBESON	2,865

Federal or State Funded Location Download Options

- Filter by:
 - County
 - Program
 - Grantee
 - Project ID

BROADBAND FUNDING MAP

NC OneMap

Download Options
NC Federal Funded BSLs

Records: 330,518
Toggle Filters:

CSV
File created: Nov 30, 2023, 17:22
File size: 1.5 MB

File generation in progress
We are updating the file. This may take some time.

Download Options

Additional Resources
These options cannot be filtered

- Data Source
- [Download Full Data Table from AWS](#)

Showing 50 of 330,518 rows

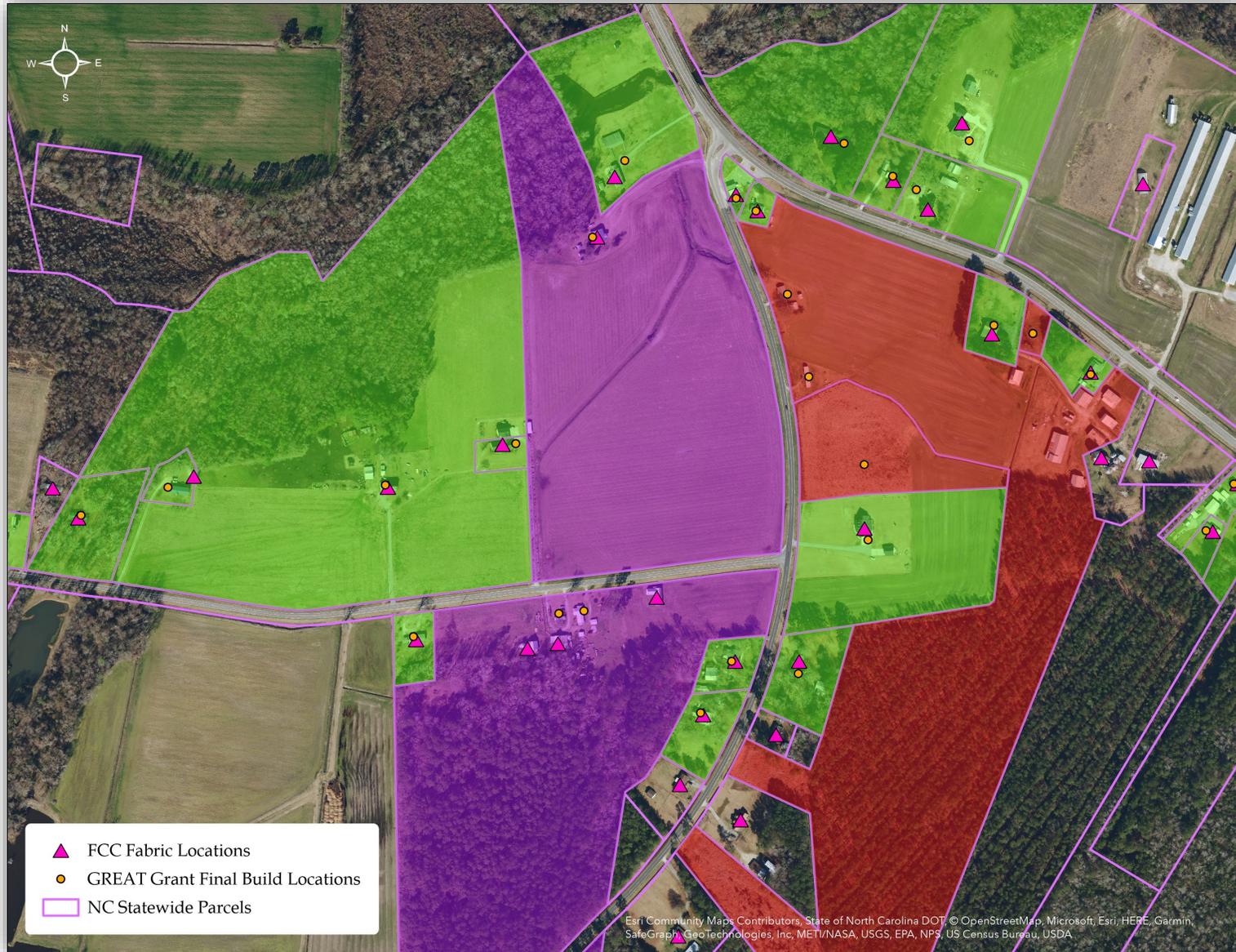
location_id	program
1,311,395,751	RURAL ECONNECTIVITY PROGRAM
1,311,395,852	RURAL ECONNECTIVITY PROGRAM
1,311,395,850	RURAL ECONNECTIVITY PROGRAM
1,311,395,855	RURAL ECONNECTIVITY PROGRAM
1,311,395,746	RURAL ECONNECTIVITY PROGRAM
1,311,394,482	RURAL ECONNECTIVITY PROGRAM
1,311,394,492	RURAL ECONNECTIVITY PROGRAM
1,311,394,473	RURAL ECONNECTIVITY PROGRAM
1,311,394,481	RURAL ECONNECTIVITY PROGRAM
1,394,477	RURAL ECONNECTIVITY PROGRAM
1,311,394,478	RURAL ECONNECTIVITY PROGRAM
1,311,394,479	RURAL ECONNECTIVITY PROGRAM
1,311,385,906	RURAL ECONNECTIVITY PROGRAM
1,311,385,922	RURAL ECONNECTIVITY PROGRAM
1,311,385,919	RURAL ECONNECTIVITY PROGRAM
1,311,381,992	RURAL ECONNECTIVITY PROGRAM
1,311,385,920	RURAL ECONNECTIVITY PROGRAM

Federal or State Funded Location Download Options

- Once data is filtered, download subsets of the data to CSV file format
- Includes Location ID field from FCC/CostQuest location data
- Will need CostQuest license to map the locations locally

NC Grant Crosswalk

Moving Past Awards into FCC Location Fabric

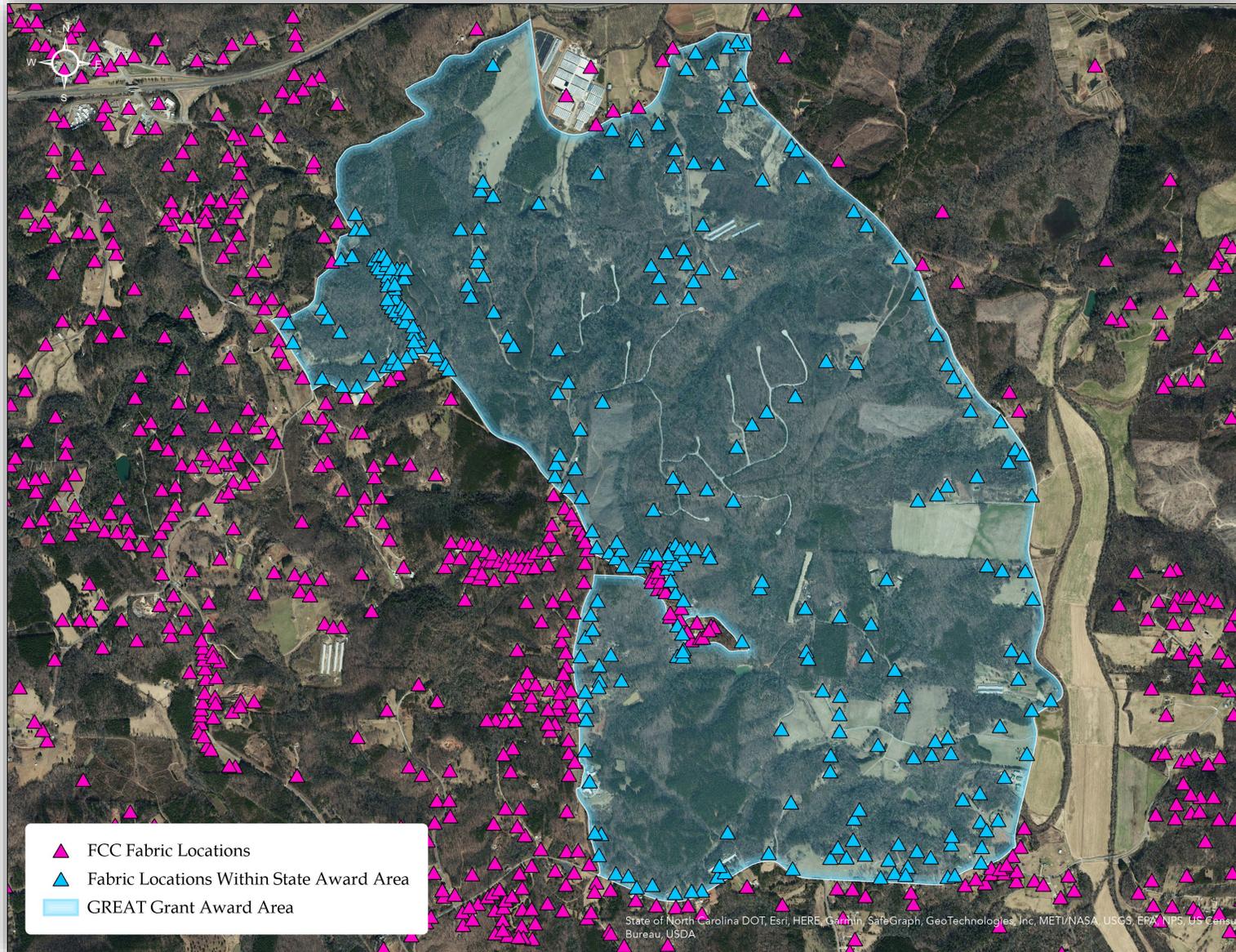


GREAT Grant Rounds 1 and 2 (2018 - 2019)

- Validated build location data intersected with parcels
- Version 3 of FCC Broadband Serviceable Locations selected for the corresponding parcels
- Varying degrees of matches between award data and fabric locations
- Some instances of multiple award locations correlating to one fabric location
- Some instances where an award location has no corresponding fabric location

NC Grant Crosswalk

Moving Past Awards into FCC Location Fabric

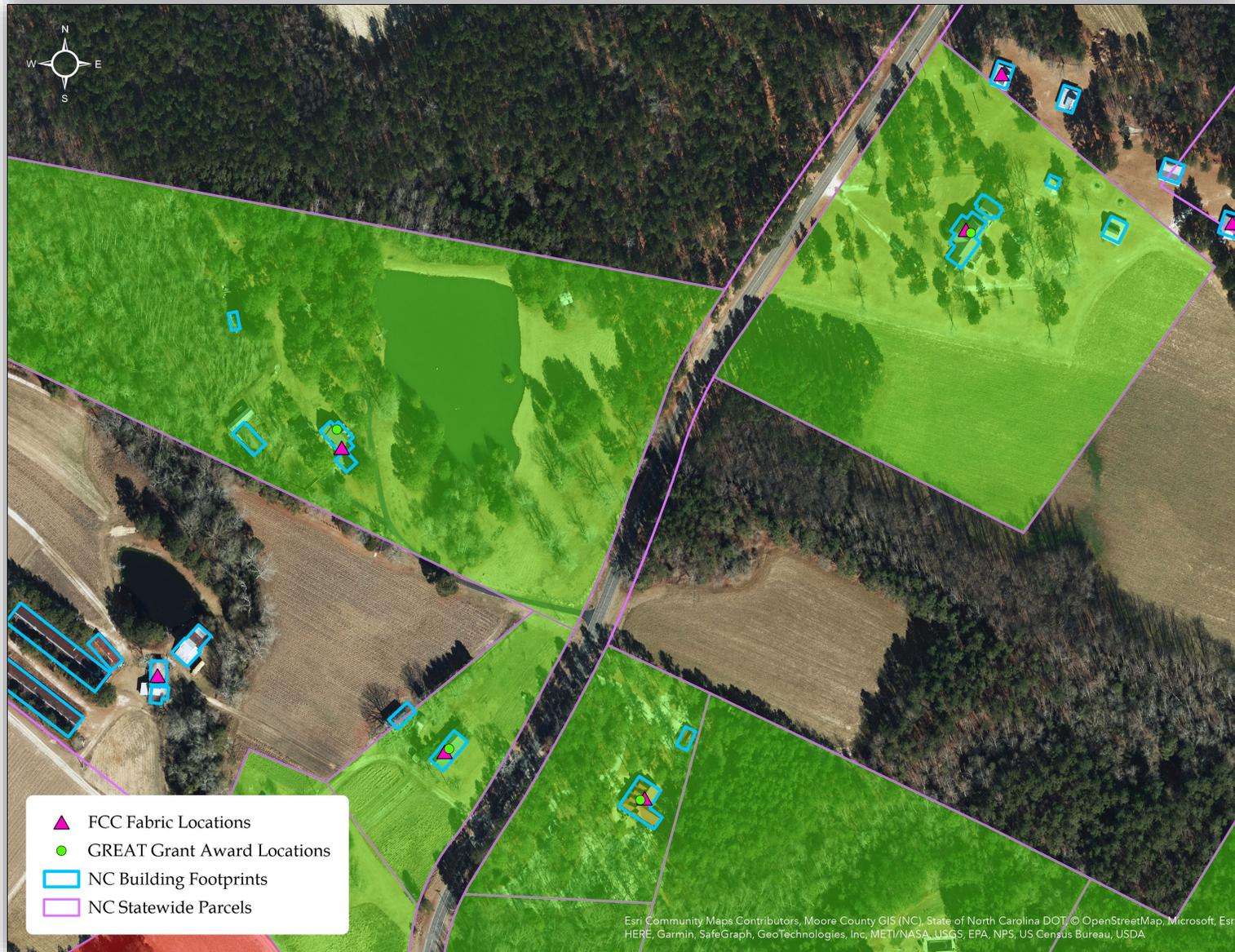


GREAT Grant Rounds 1 and 2
(2018 - 2019)

- Award polygon data intersected with parcels when final builds have not been submitted and validated
- Version 3 of FCC Broadband Serviceable Locations selected for the corresponding census blocks and polygons

NC Grant Crosswalk

Moving Past Awards into FCC Location Fabric



GREAT Grant Rounds 2, 3, and ARPA-funded (2019 - 2023)

- Award location data intersected with parcels
- Version 3 of FCC Broadband Serviceable Locations selected for the corresponding parcels

NC Grant Crosswalk

Moving Past Awards into FCC Location Fabric

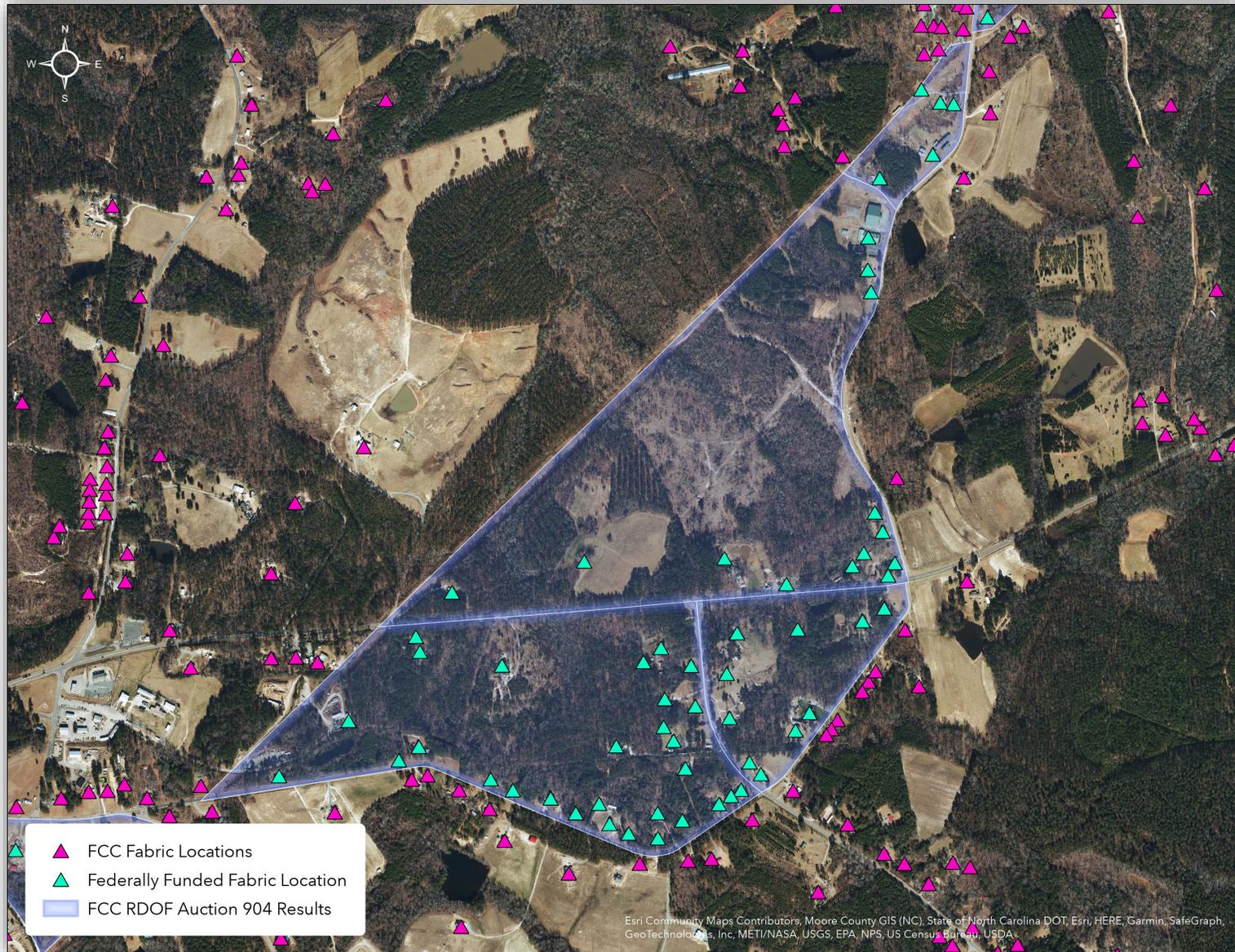


GREAT Grant Rounds 2, 3
and ARPA funded (2019 - 2023)

- Varying degrees of matches between award data and fabric locations
- Some instances of multiple award locations correlating to one fabric location
- Some instances where an award location has no corresponding fabric location

NC Grant Crosswalk

Moving Past Awards into FCC Location Fabric



Federal Awards

- Award Areas downloaded from FCC Broadband Funding Map: fundingmap.fcc.gov/home
- FCC Fabric Locations selected that intersect award polygons
- Focus on Unserved and Underserved Fabric Locations from version 3 of the FCC Broadband Data Collection

CAB PROTECTED AREAS INPUT FROM PROVIDERS

- Broadband Infrastructure Office seeking data on:
 - Any corrections needed to the protected areas based on crosswalk
 - Any locally-funded areas that should be protected
 - Any locations inside known protected areas that are outside of scope for that funding program and therefore still un/underserved
- Seeking CSV files with Broadband Serviceable Location (BSL) location IDs and additional fields, and supporting documentation
- Files to be submitted online via secure upload
- CSV template and further details will be provided

CAB PLANNING TOOL

NC Completing Access to Broadband (CAB) Planning Tool

County Filter:
ALL COUNTIES

NC Broadband Grant Addresses (ARPA Funded)

NC Broadband Grant Addresses

Funding Program - Contract Status

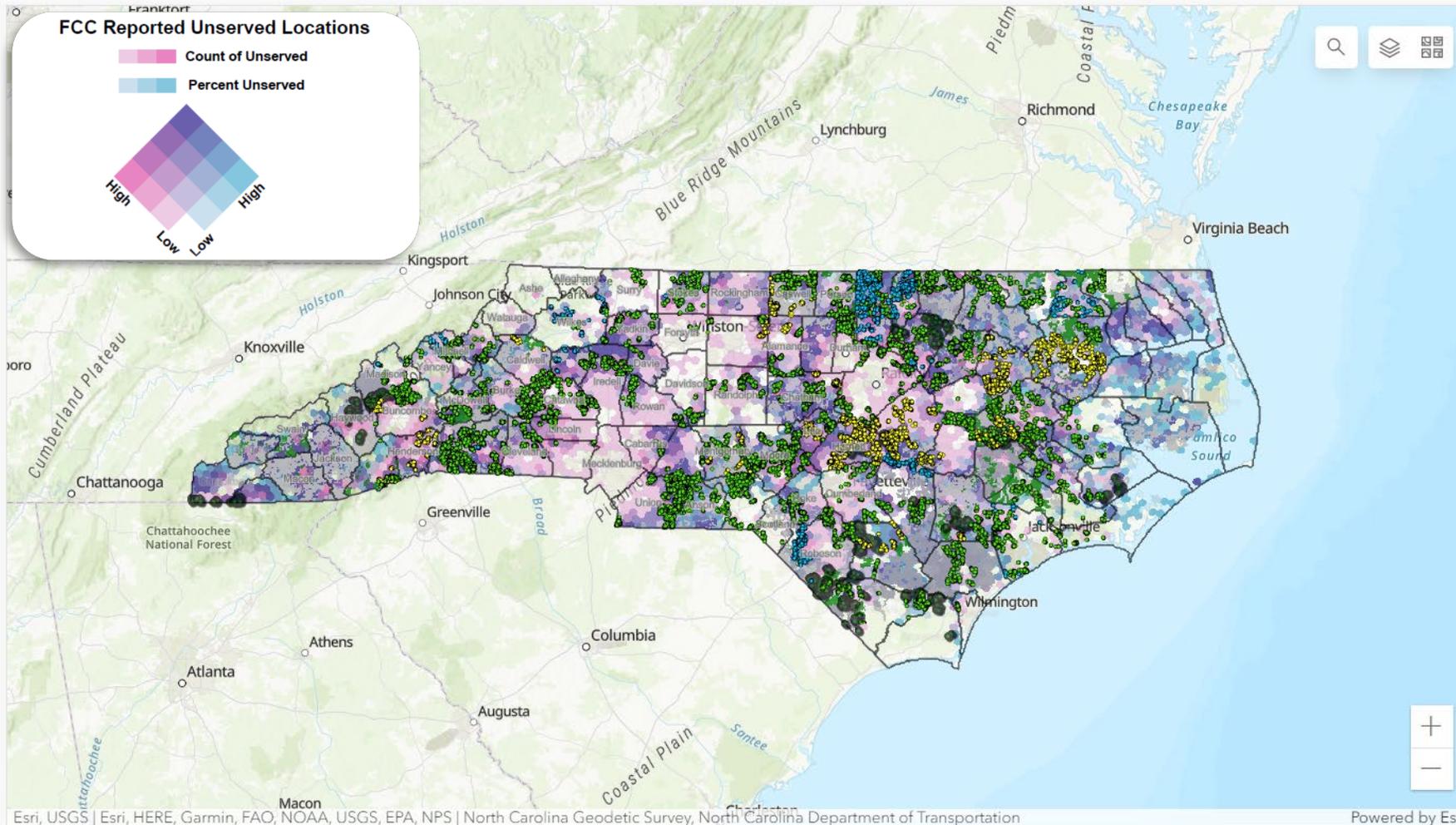
- GREAT - Contracted Project
- GREAT - Contingent Project
- CAB - Contingent Project

GREAT Grant Awarded Areas and Address Locations 2018-20220

Great Grant Award Addresses

For detailed instructions for this tool and additional information on the data included in this map, use the [NC CAB Planning Tool Help](#).

Filter by county using the dropdown in the upper right corner of this dashboard. Once a county filter has been



Filter by County and then Select list item to see Broadband Provider Reported Service Area in the Unserved and Underserved Maps*

Selection required on one or more elements

*Locations reported as served at any speed level in latest FCC Broadband Data Collection.

Esri, USGS | Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS | North Carolina Geodetic Survey, North Carolina Department of Transportation

Powered by Esri

- UNSERVED
- UNDERSERVED
- SERVED - FIBER
- SERVED - CABLE
- SERVED - FIXED WIRELESS

NC Broadband Profile

Defining Eligible Project Areas

NC Completing Access to Broadband (CAB) Planning Tool

County Filter:
BURKE

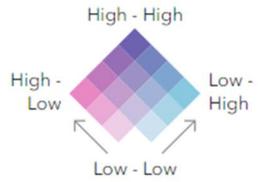
NC FCC Broadband Data Collection Aggregated to HexBins - UNSERVED

FCC Reported Unserved Locations - H3 level 8

Relationship

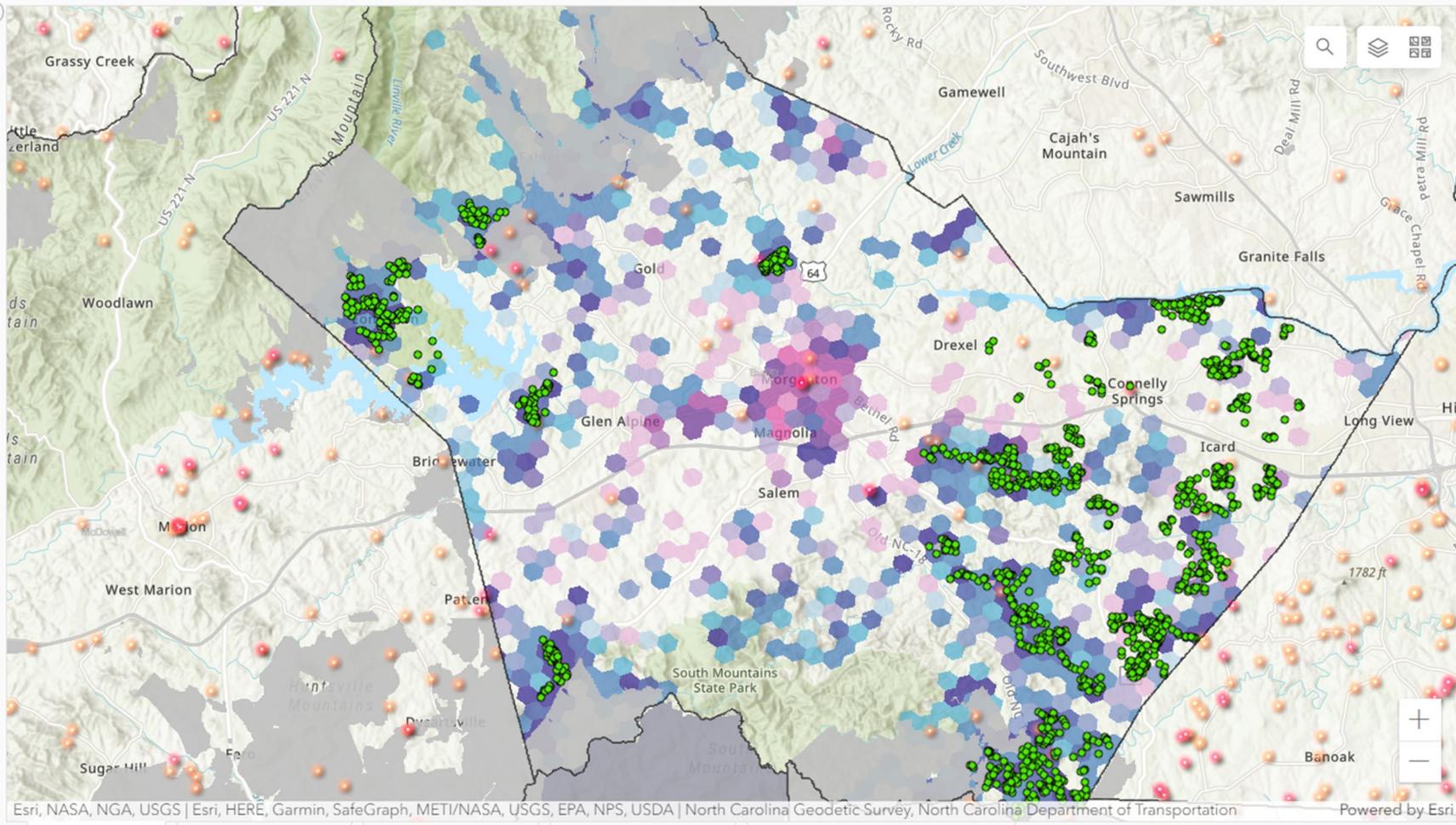
↖ Count of Unserved Locations (Less Than 25/3)

↗ Percent Unserved Out of All Locations in Area



For detailed instructions for this tool and additional information on the data included in this map, use the [NC CAB Planning Tool Help](#).

Filter by county using the dropdown in the upper right corner of this dashboard. Once a county filter has been



Esri, NASA, NGA, USGS | Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA | North Carolina Geodetic Survey, North Carolina Department of Transportation

Powered by Esri

- UNSERVED
- UNDERSERVED
- SERVED - FIBER
- SERVED - CABLE
- SERVED - FIXED WIRELESS

Filter by County and then Select list item to see Broadband Provider Reported Service Area in the Unserved and Underserved Maps*

- AT&T Inc - Copper
- AT&T Inc - Fiber
- AT&T Inc - Licensed Fixed Wireless
- Brightspeed - Copper
- Brightspeed - Fiber
- Carolina West Wireless - Licensed Fixed Wireless
- Charter Communications Inc - Cable
- Charter Communications Inc - Fiber
- Compas X Stream - Cable

*Locations reported as served at any speed level in latest FCC Broadband Data Collection.

DATA MODIFICATIONS

- FTTH: served where speeds meet or exceed thresholds
- Cable: served where speeds meet or exceed thresholds
- DSL: unserved (consistent with ARPA-funded GREAT grant)
- Unlicensed Fixed Wireless: unserved (consistent with ARPA-funded GREAT, grant and BEAD)
- Licensed Fixed Wireless:
 - Over Mobile Networks: unserved (consistent with ARPA-funded GREAT, grant)
 - Over traditional fixed wireless networks: underserved
 - Licensed By Rule: unserved

PROTEST PROCESS FOR CAB

- Two-step Protest process:
 - Submissions regarding statewide eligible locations prior to CAB program launch
 - Submissions regarding eligible locations within a county prior to procurement window for that county
- Submit CSV file of BSL location IDs, additional fields about proposed corrections, and supporting documentation
- CSV template will be provided
- Providers alerting us to any areas already served today that may still be showing as unserved and eligible in CAB Planning Tool
 - Buildout more recent than available FCC data
 - Errors or unintentional omissions
 - Does not include planned service

CAB Data Exchange

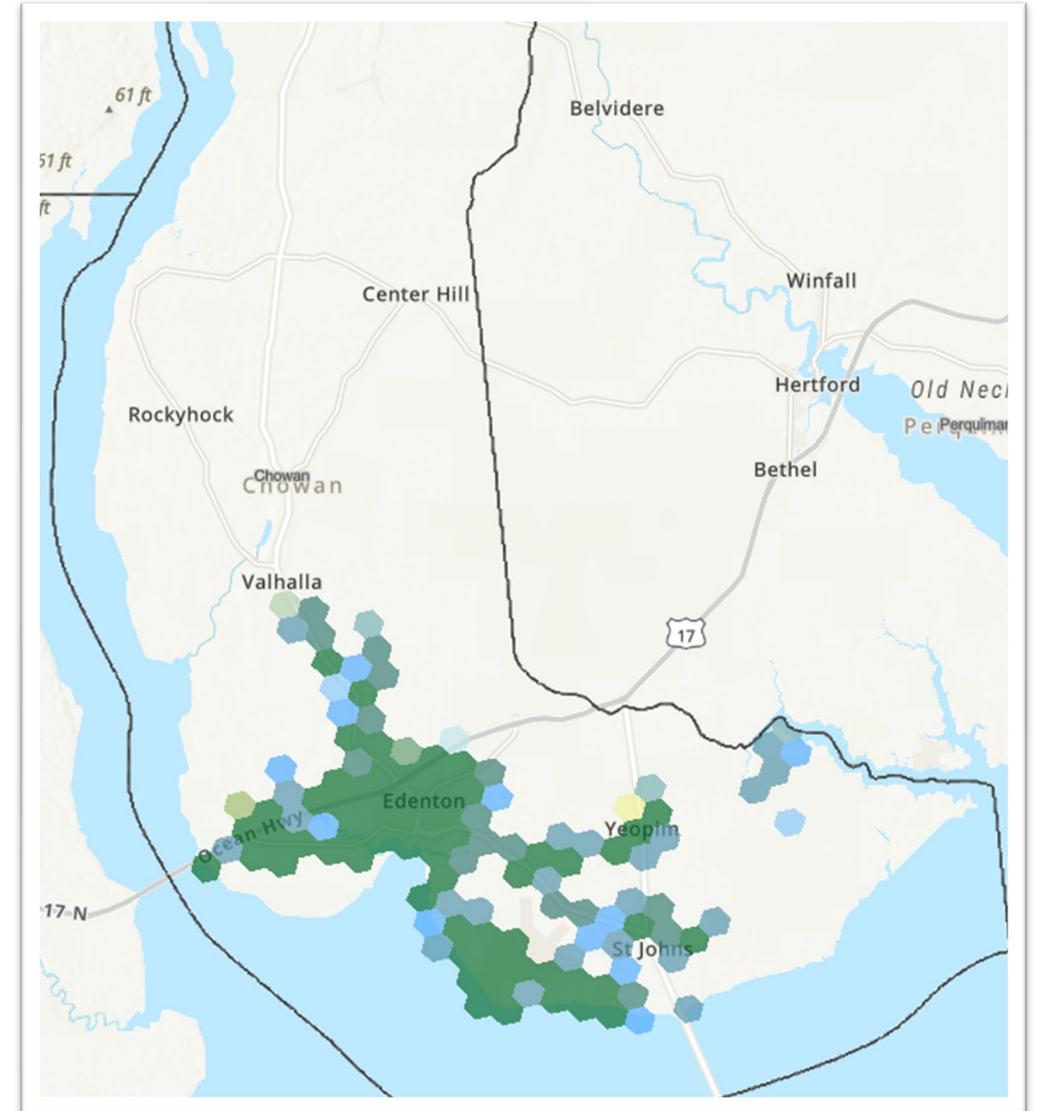
Secure Cloud Folders for Sending Data Files

- Amazon Web Services “buckets”
- ISPs and counties will each have private folder
- Shared resources folder?
- Data contacts identified by internet provider
 - Send data contact’s name, email and phone number to broadbandmapping@nc.gov
- Secure credentials issued to each ISP data contact
- Upload files securely from browser
- Instructions will be provided



CAB COUNTY PRIORITY AREAS

- Created by counties in partnership with Broadband Infrastructure Office
 - Eligible locations countywide prioritized equally if no county input
- Will define Scope of Work for each county
- Downloadable CSV file indicating prioritized BSL location ID's
- Will be publicly displayed in CAB Planning Tool Map
- Level 8 H3 Hexagons



SUBMITTING PROPOSED CAB PROJECT AREAS

- CSV file of BSL location IDs and proposed service information
- CSV template will be provided
- Instructions will be provided
- Will be aggregated to H3 hexagons for public and non-licensed stakeholders
- Hexagons map layer will be provided for download
- Advantageous to reach as many eligible BSLs within county prioritized scopes of work as possible
- Advantageous to reach all unserved and underserved in as many hexagons as possible

CostQuest Licenses

Required for Using BSL Fabric for CAB Program

- Webinar next week - **Thursday, Dec. 7 at 11 a.m.**
- Tier D licenses for internet service providers
- Tier E licenses for participating counties
- Purpose: allowable uses of Broadband Serviceable Location (BSL) data for ARPA, BEAD, other federally-funded work
- Will cover steps to obtain licenses
- Will cover how licensees can use data



NEXT STEPS AND QUESTIONS

- Updates to CAB Program Guidance document at ncbroadband.gov/CAB
- Distribution of email to providers on funded areas (and collection of data adjustments)
- Finalizing CAB Eligible Locations Map and opening of statewide protest process
- CAB Webinar on programmatic updates – Monday, Dec. 18
- Please submit mapping questions to broadbandmapping@nc.gov and program questions to CABprogram@nc.gov