



CAB MAPPING WEBINAR FOR COUNTIES

DEC. 4, 2023

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BROADBAND DATA AND MAPPING LEAD
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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

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Q

Sign In

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 potential 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).

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

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

CAB Planning Tool

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

Data

View

Survey Results Map

NC Broadband Survey

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

Data

View

nconemap.gov/pages/broadband

NCDIT

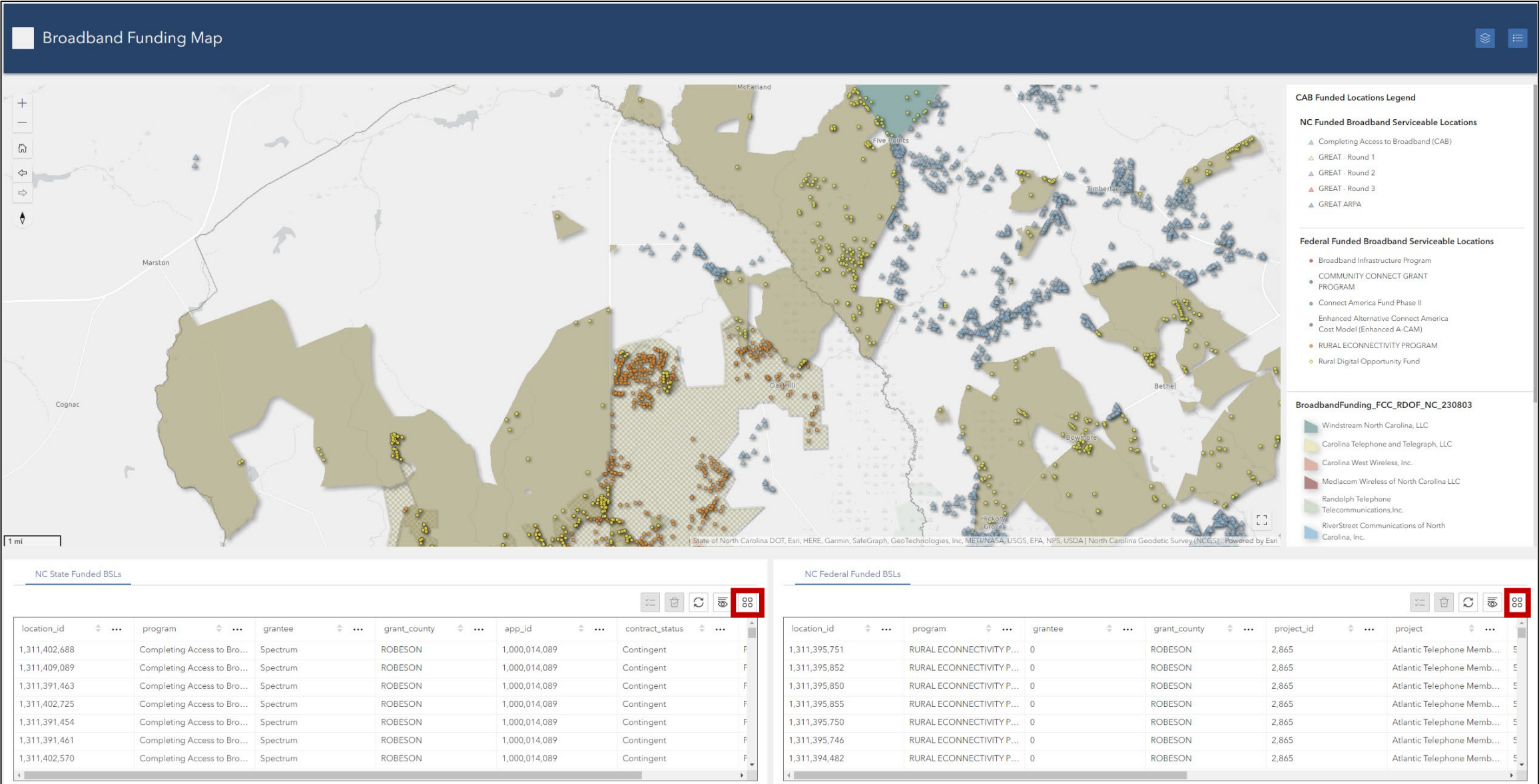
NORTH CAROLINA

DEPARTMENT OF

INFORMATION

TECHNOLOGY

BROADBAND FUNDING MAP



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 123 1,010,458,145 to 1,451,881,746
- ☐ program 6 values
- ☒ grantee 18 values
- ☐ grant_county 96 values
- ☐ project_id 123 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

The screenshot displays the NC OneMap interface. On the left, the 'Download Options' panel for 'NC Federal Funded BSLs' shows 330,518 records. A red box highlights the 'Toggle Filters' switch, which is currently turned off, with a red arrow pointing to it. Below this, a 'CSV' section indicates a file was created on Nov 30, 2023, at 17:22, with a size of 1.5 MB. A progress bar shows 'File generation in progress' with the message 'We are updating the file. This may take some time.' A blue button labeled 'Download Options' is at the bottom of this section. Further down, 'Additional Resources' are listed, including a link to 'Download Full Data Table from AWS', which is highlighted with a red arrow. The main table on the right shows 'Showing 50 of 330,518 rows' with columns 'location_id' and 'program'. The 'program' column for all visible rows is 'RURAL ECONNECTIVITY PROGRAM'. A vertical toolbar on the left of the table contains icons for edit, info, filter, download, star, share, and refresh. The download icon (a cloud with a downward arrow) is highlighted with a red box and a red arrow. The table data includes location IDs such as 1,311,395,751, 1,311,395,852, 1,311,395,850, 1,311,395,855, 1,311,395,746, 1,311,394,482, 1,311,394,492, 1,311,394,473, 1,311,394,481, 1,394,477, 1,311,394,478, 1,311,394,479, 1,311,385,906, 1,311,385,922, 1,311,385,919, 1,311,381,992, and 1,311,385,920.

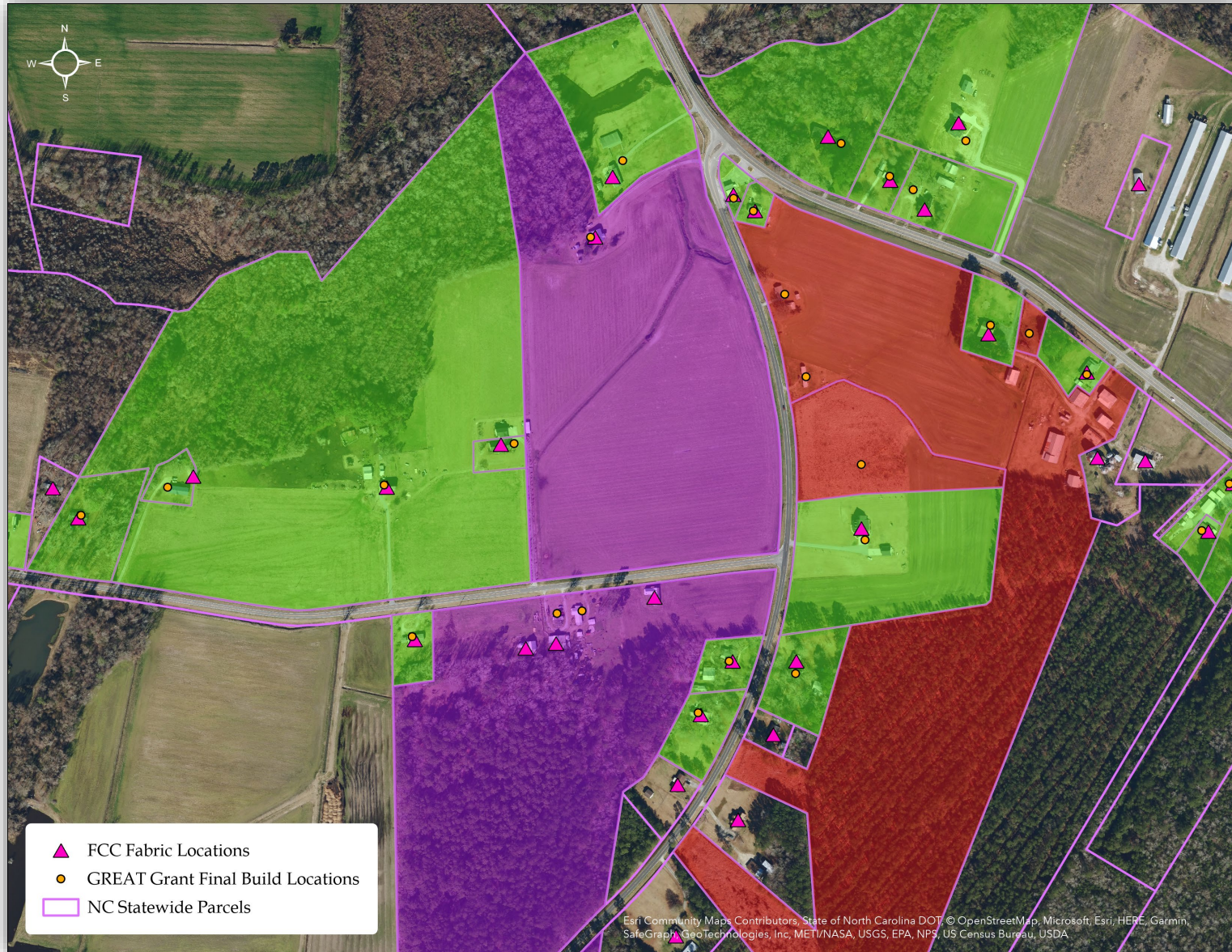
location_id	program
1,311,395,751	RURAL ECONNECTIVITY PROGRAM
1,311,395,852	RURAL ECONNECTIVITY PROGRAM
1,311,395,850	RURAL ECONNECTIVITY PROGRAM
1,311,395,855	RURAL ECONNECTIVITY PROGRAM
1,311,395,746	RURAL ECONNECTIVITY PROGRAM
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1,311,385,906	RURAL 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

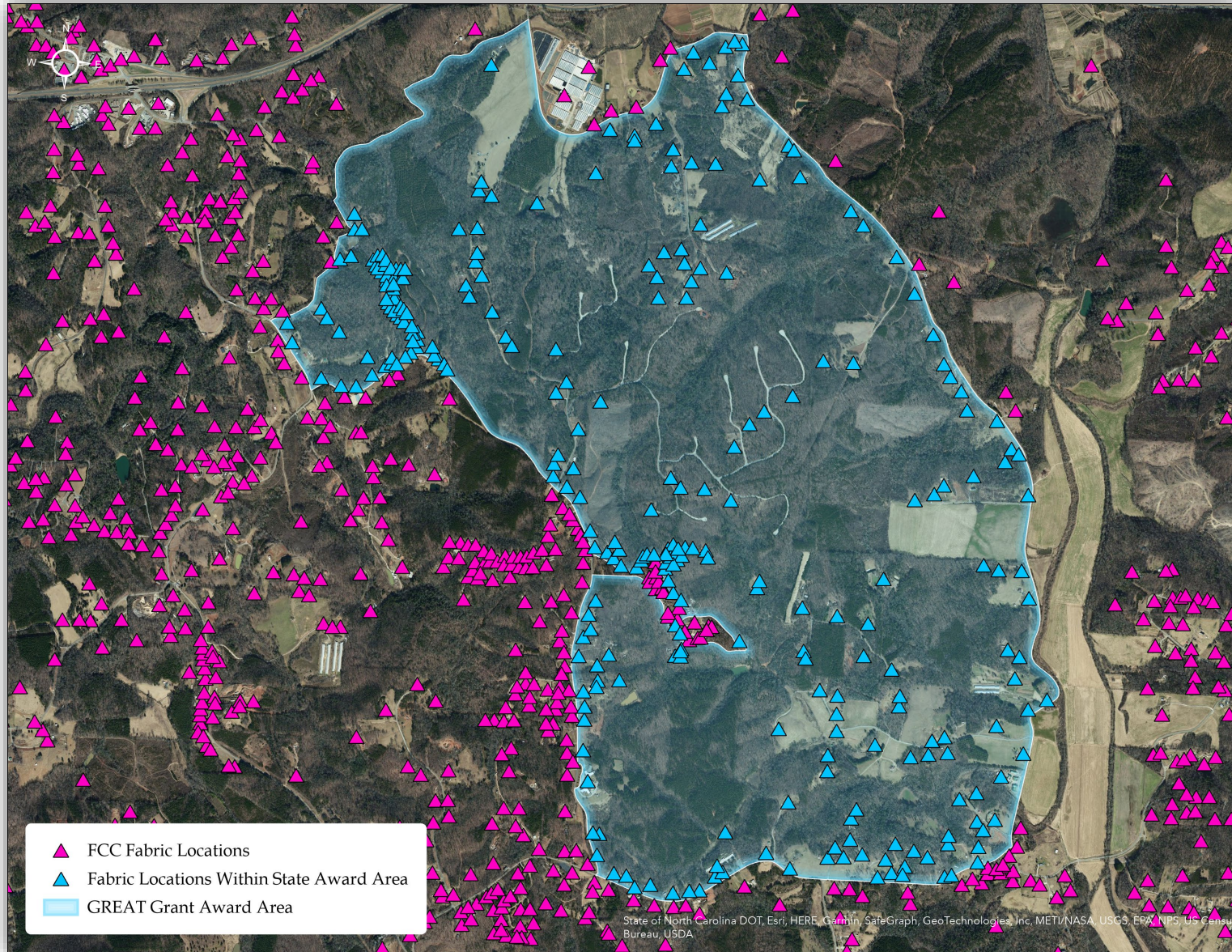


GREAT Grant Rounds 1 and 2 (2018 - 2019)

- 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

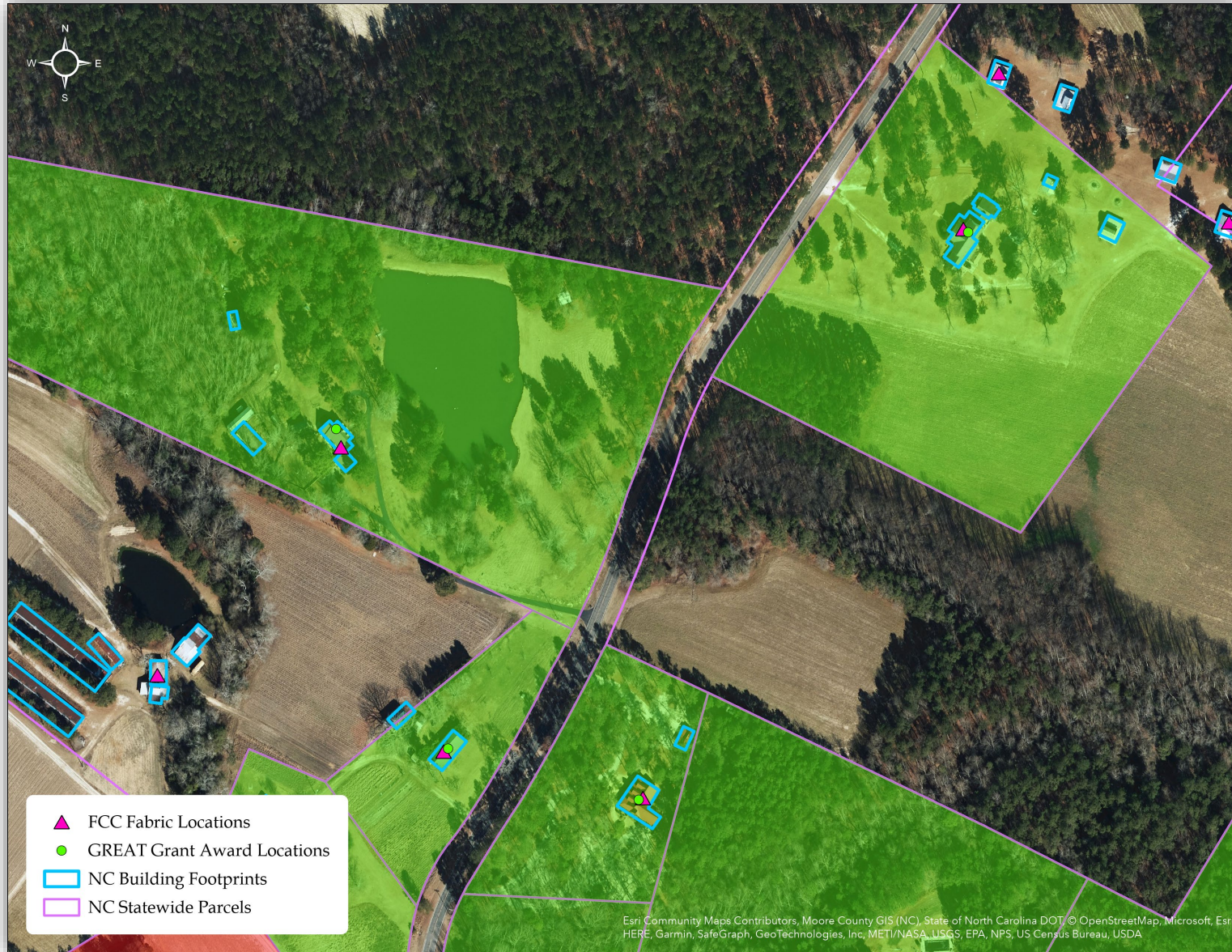


GREAT Grant Rounds 1 and 2
(2018 - 2019)

- 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

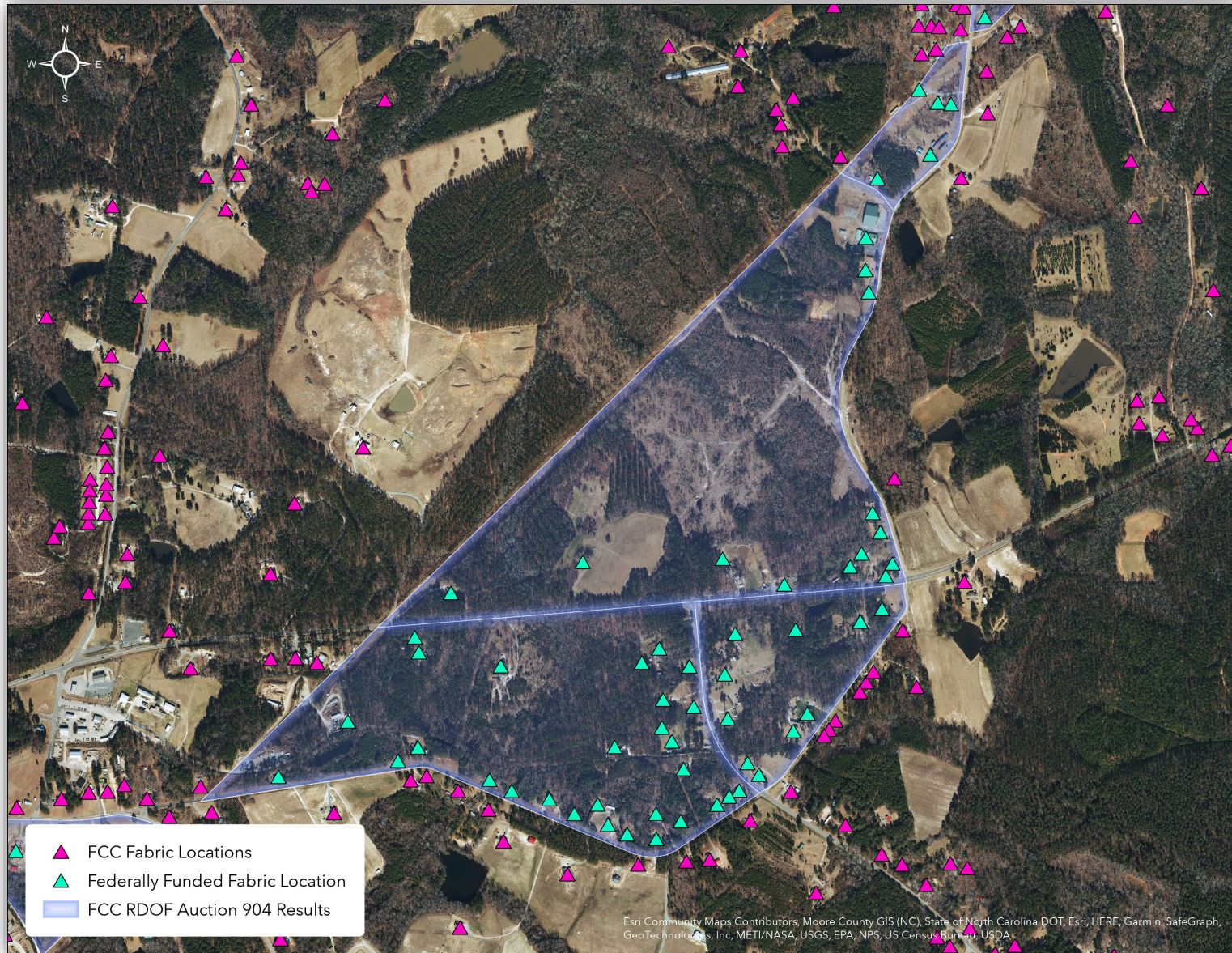


GREAT Grant Rounds 2, 3
and ARPA funded (2019 - 2023)

- 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

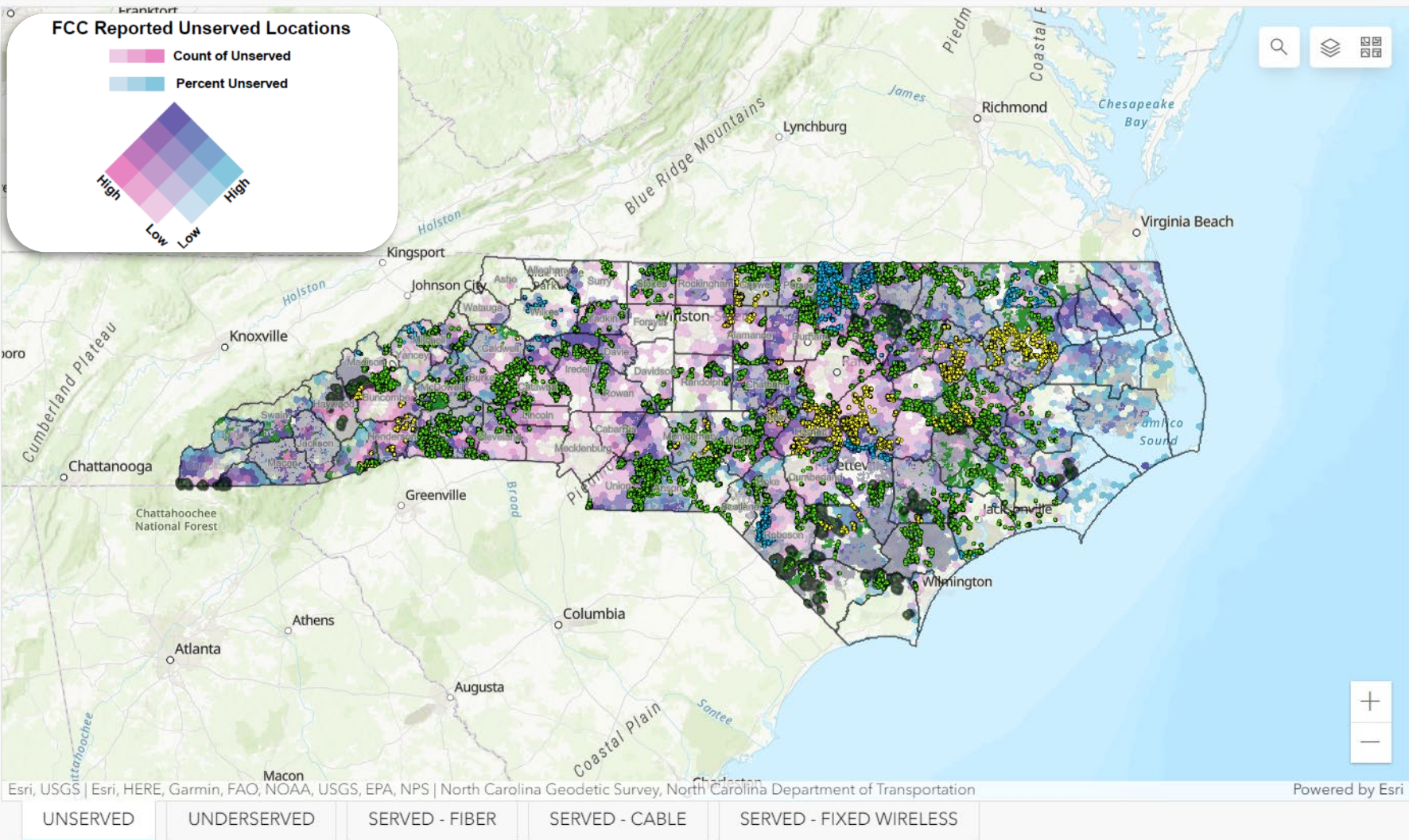
- GREAT - Contracted Project
- GREAT - Contingent Project
- CAB - Contingent Project

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.

NC Broadband Profile

Defining Eligible Project Areas

NC Completing Access to Broadband (CAB) Planning Tool

County Filter:
BURKE

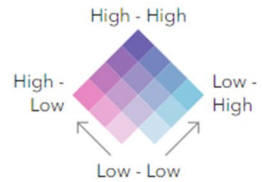
NC FCC Broadband Data
Collection Aggregated to
HexBins - UNSERVED

FCC Reported Unserved
Locations - H3 level 8

Relationship

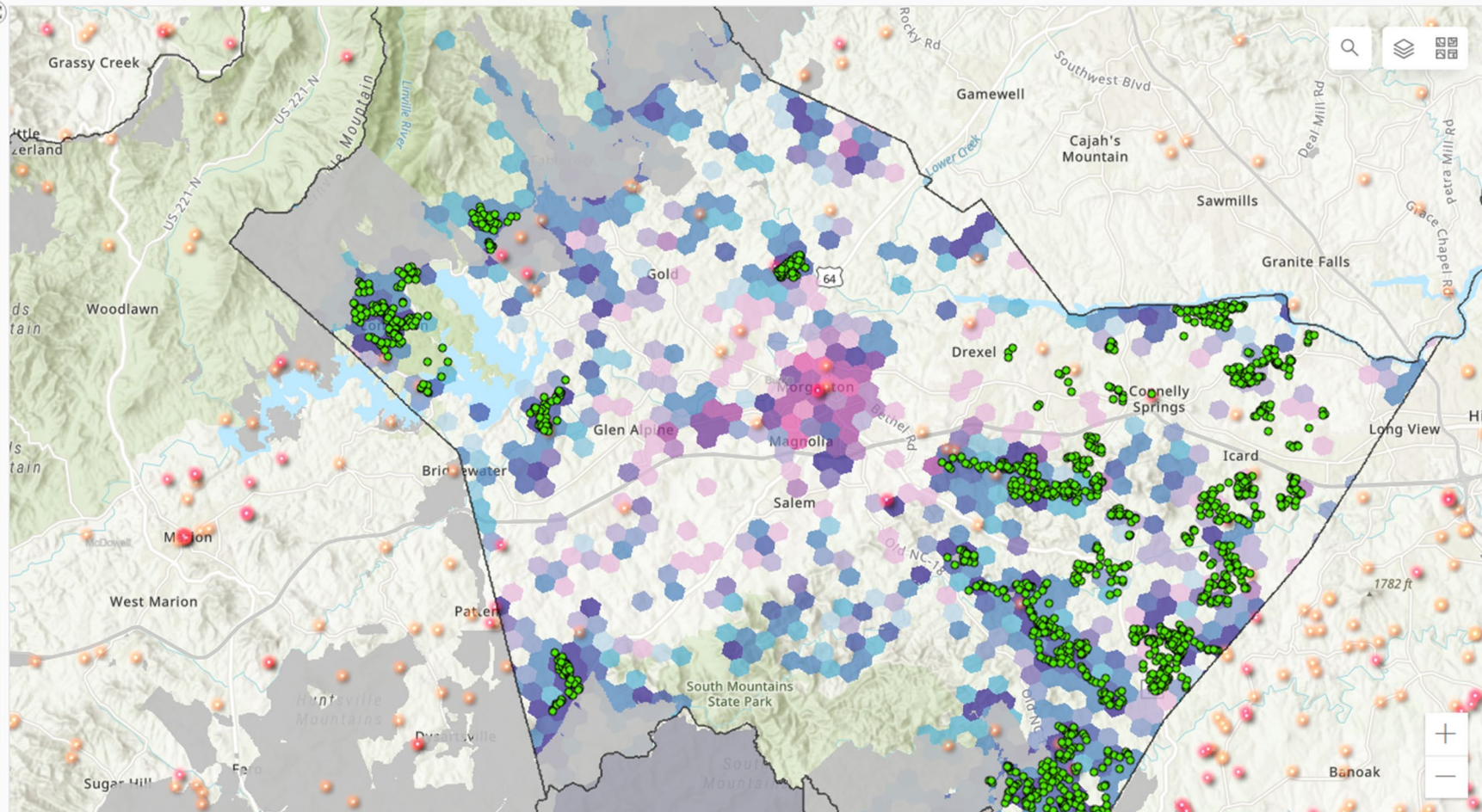
↖ Count of Unserved
Locations (Less Than
25/3)

↗ 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
- Compass 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 for internet service providers:
 - 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

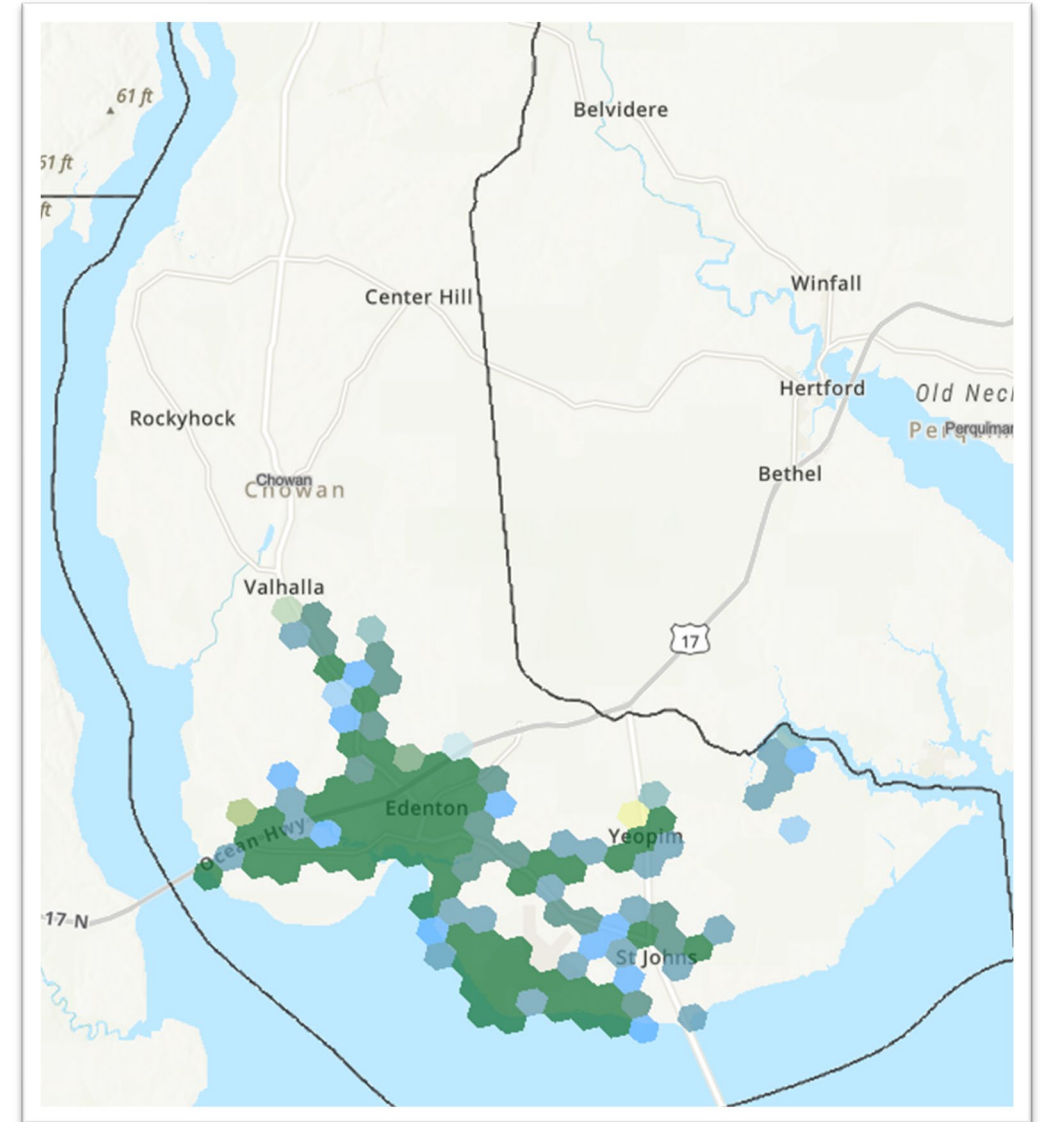
Secure Cloud Folders for Sending Data Files

- Amazon Web Services “buckets”
- ISPs and counties will each have private folder
- Shared resources folder
- Data contacts identified by county leadership and internet providers
 - 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 IDs
- Will be publicly displayed in CAB Planning Tool Map
- Level 8 H3 Hexagons



CREATING CAB COUNTY PRIORITY AREAS

- CSV file of BSL location IDs OR hexagons of interest OR narrative describing priority areas
- CSV template will be provided
- Instructions will be provided
- Hexagons map layer will be provided for download
- Will be displayed as H3 hexagons for public and non-licensed stakeholders
- County approval to finalize priority areas

ISP 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

- Next webinar - **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 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