



NORTH CAROLINA  
DEPARTMENT OF  
INFORMATION  
TECHNOLOGY

**Division of Broadband and Digital Equity**

**2022-2024  
COMPLETING ACCESS TO BROADBAND (CAB)  
PROGRAM GUIDANCE DOCUMENT**

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county cost responsibilities shall be equally apportioned.

The counties that are eligible for this category and the match requirements will be divided into sub-categories based on the amount of ARPA funds received by the county and match provided by the broadband provider. Matching fund requirements in this section are separated into the following sub-categories:

**i. Sub-Category 1 – Counties receiving \$4 million to \$8 million in ARPA funding and the Broadband Provider Match is exactly 15%.**

Responsibilities for the total estimated project cost are below:

<b>Direct ARPA Funds Received by County</b>	<b>For Broadband Provider Match of:</b>	<b>County Responsibility is:</b>	<b>State Responsibility is:</b>
\$4 million to \$8 million	15% exactly	10%, minimum	Up to 75%

**ii. Sub-Category 2 - Counties receiving \$4 million to \$8 million in ARPA funding and the Broadband Provider Match is more than 15 percent.**

Responsibilities for the total estimated project cost are below:

<b>Direct ARPA Funds Received by County</b>	<b>For Broadband Provider Match of:</b>	<b>County Responsibility is:</b>	<b>State Responsibility is:</b>
\$4 million to \$8 million	More than 15%	Half of remaining balance	Half of remaining balance

**iii. Sub-Category 3 - Counties receiving \$250,000 to \$4 million in ARPA funding and the Broadband Provider Match is exactly 15%.**

Responsibilities for the total estimated project cost are below:

<b>Direct ARPA Funds Received by County</b>	<b>For Broadband Provider Match of:</b>	<b>County Responsibility is:</b>	<b>Then the State Responsibility is:</b>
\$250,000 to \$4 million	15% exactly	5%, minimum	Up to 80%

**iv. Sub-Category 4 – Counties receiving \$250,000 to \$4 million in ARPA funding and the Broadband Provider Match is more than 15%.**

Responsibilities for the total estimated project cost are below:

<b>Direct ARPA Funds Received by County</b>	<b>For Broadband Provider Match of:</b>	<b>County Responsibility is:</b>	<b>Then the State Responsibility is:</b>
\$250,000 to \$4 million	More than 15%	Half of remaining balance	Half of remaining balance

## B. Estimated CAB Project Costs

As CAB projects are developed for individual counties, project costs and project sizes can be better defined based on the amount of direct ARPA funds received by that county and the amount of funding the county has available to invest in the project. .

Notwithstanding the funding combinations included in the matching requirements section above, in the event CAB Fund monies are insufficient to fund a project, a county may increase its share of the total estimated project cost. Alternatively, the scope of the project may be adjusted to meet the level of available funding.

As stated previously in this guidance document, per statute, the maximum investment available per county from the CAB Fund is \$8 million in a fiscal year. Depending on the number of counties that choose to participate in the CAB program, the office will determine as the program moves forward whether any counties may be considered in a future fiscal year for additional funding beyond this initial maximum of \$8 million.

While there are too many variables to provide a definitive project size statewide, an example project size for a county receiving \$8 million or more in ARPA funding could be as follows:

Example: Responsibilities for a total estimated project cost of \$12 million:

	<i>ISP Responsibility</i>	<i>County Responsibility</i>	<i>State Responsibility</i>
<b>Required %:</b>	<i>Up to 30%</i>	<i>At least 35%</i>	<i>Up to 35%</i>
<b>Amount Contributed:</b>	<i>\$3.6 million</i>	<i>\$4.2 million</i>	<i>\$4.2 million</i>
<b>Actual Percentage:</b>	<i>30%</i>	<i>35%</i>	<i>35%</i>

## C. Coordination of Funding

Once a project has been bid, awarded and an agreement executed with a broadband service provider, the county shall provide its portion of the total project costs to the office. This funding will be combined with CAB Funds awarded for the project and placed in a separate project account. Matching funds comprising the contribution from the broadband provider stay with the broadband provider.

Once a project is contracted and implementation has begun, the office shall disburse funds from the project account to the broadband service provider on a reimbursement basis, upon completion of established benchmarks in the project agreement. The percentage of matching funds required for contribution by the broadband provider must be maintained throughout the project as costs are incurred and reported.

## 6. CAB PROJECT AREAS

CAB program projects must deploy broadband infrastructure to **unserved** and **underserved** households and businesses at specific locations. The CAB legislation includes the following definitions related to project areas: **Broadband Service, Eligible Area, Project Area, Unserved or Underserved.**

- **Broadband Service:** terrestrially deployed internet access service with transmission speeds of at least 25 megabits per second (Mbps) download and at least 3 megabits per second upload (25:3). Terrestrially deployed technologies are generally understood to

include wired infrastructure (such as fiber, coax, copper) and fixed wireless. In assessing the delivery of transmission speeds for purposes of defining unserved areas, the federal definition of “reliably”, within the American Rescue Plan Act’s broadband funding, should also be considered. Areas where broadband transmission speeds are not delivered reliably may be considered unserved.

- **Eligible Area:** An area that is unserved or underserved in a county. A county that (i) is a development tier three area, as provided in the annual ranking performed by the N.C. Department of Commerce pursuant to G.S. 143B-437.08 for the 2023 calendar year and (ii) has utilized federal funding for broadband infrastructure projects on or after May 1, 2021, with the exception of funds expended under the CAB program or the GREAT grant program, shall be ineligible for participation in the CAB program.
- **Project Area:** An eligible area that is jointly determined by a requesting county and the Broadband Infrastructure Office within the N.C. Department of Information Technology as requiring project funding under the CAB program to further complete the deployment of broadband service in the county.
- **Unserved or underserved:** A location within a county that has no deployment of broadband service or that has internet access service that does not meet the definition of broadband service. Areas where a private provider has been designated to receive funds through other state or federally funded programs designed specifically for broadband deployment shall be considered served if such funding is intended to result in construction of broadband in the area within 18 months or for the duration of the federal funding program for that area, or if the funding recipient is otherwise in good standing with the funding agency’s regulations governing the funding program.

For the purposes of the CAB program and based on federal parameters under ARPA, the office is treating unserved broadband serviceable locations as those without availability of at least 25 megabits per second (Mbps) download and 3 Mbps upload fixed internet service through qualifying fiber, cable, or qualifying licensed fixed wireless service; and underserved broadband serviceable locations as those with available service equal to or greater than 25 Mbps download and 3 Mbps upload, but less than 100 Mbps download and 20 Mbps upload through qualifying fiber, cable, or qualifying licensed fixed wireless service. A full explanation of eligible locations and project areas follows below.

## A. Key Mapping Components

The Broadband Infrastructure Office and its partner, the NCDIT Center for Geographic Information and Analysis (CGIA), have published the NC CAB Planning Tool in the broadband section of the NC OneMap at: <https://www.nconemap.gov/pages/broadband> for use in this program. Within this tool, there is a data layer reflecting Eligible Locations for the CAB program. Respondents to the CAB scopes of work must use this map to identify eligible unserved and underserved locations for CAB projects.

To develop and finalize the Eligible Locations data layer, the CAB program requires multiple stages of broadband mapping processes. Key mapping components include the following:

- FCC’s Broadband Data Collection Process
- Confirmation of Broadband Protected Areas
- Publication of CAB Planning Tool and Eligible Locations Layer
- Statewide Protest Process for CAB
- County Prioritization of Areas
- County-Level Protest Process

- Utilization of CAB Data Exchange
- Development of Project Areas by Respondents

## B. FCC’s Broadband Data Collection Process

For the CAB program, the Broadband Infrastructure Office is using data from the Federal Communication Commission’s Broadband Data Collection (BDC) system. In late 2022, the Federal Communications Commission (FCC) first released data from its new BDC system to collect and publish data on broadband availability across the country (<https://www.fcc.gov/BroadbandData>). Broadband providers are required to submit data on broadband availability to the FCC every six months. Availability data is reported for all locations across the country where fixed broadband service is or could be installed. This dataset of locations is referred to as the “Fabric” of locations. The locations are referred to as Broadband Serviceable Locations (BSLs). The Fabric is developed by CostQuest in consultation with the FCC. The Fabric of locations is updated twice a year. Challenges to the Fabric or the availability status of a BSL can be submitted to the FCC. Broadband providers, state governments and local governments that want to utilize the BDC data must have a license from CostQuest to use the Fabric. Further information on the CostQuest Fabric can be found here: <https://www.costquest.com/broadband-serviceable-location-fabric/>

For the CAB program, the Broadband Infrastructure Office is using data from the BDC system and BSLs from the Fabric as the starting foundation for determining eligible locations. Modifications to the BDC data are described in the [CAB Planning Tool and Eligible Locations layer section](#) below.

## C. Broadband Protected Areas

Locations that are funded with public dollars for broadband deployment may be ineligible for additional publicly-funded broadband deployment investments if the initial investment would deem a location to be considered “served.” These locations or areas are commonly referred to as “protected areas.” Per the CAB legislation, *“areas where a private provider has been designated to receive funds through other state or federally-funded programs designed specifically for broadband deployment shall be considered served if such funding is intended to result in construction of broadband in the area within 18 months or for the duration of the federal funding program for that area, or if the funding recipient is otherwise in good standing with the funding agency’s regulations governing the funding program.”* N.C.G.S. § 143B-1373.1(a)(6).

Data on broadband protected areas is published in both the Broadband Funding map for North Carolina and also within the CAB Planning Tool. With the significant amount of federal funding available for broadband deployment projects disbursed through multiple federal, state and local programs, the Broadband Infrastructure Office will be working on a continual basis to capture and publish accurate data on funded/protected areas. In summer 2023, the FCC released the online Broadband Funding Map to publish data on federally-funded broadband deployment projects (available here: <https://www.fcc.gov/economics-analytics/funding-map>).

In December 2023, the Broadband Infrastructure Office and its partner, the NCDIT Center for Geographic Information and Analysis (CGIA), published a Broadband Funding Map for North Carolina to capture broadband deployment projects funded with federal, local-government or state dollars. The Broadband Funding Map is published on NC OneMap at <https://experience.arcgis.com/experience/c46fb30bdfb7465fb204a1748b023a38>.

Data for North Carolina’s map comes from multiple sources including award data from the FCC’s Broadband Funding Map, from broadband providers directly, and from the Broadband Infrastructure Office. For projects funded with federal dollars, the office utilized the FCC data; however, the office will work with broadband providers directly to ensure that the FCC data is

accurate, granular and comprehensive. For projects funded with local government dollars, the office is asking broadband providers to provide data on these funded areas to ensure that the projects are captured, and additional awards are not made for the same locations.

For projects funded with state dollars, the office is using its own grant award data but is also working with grantees to ensure all locations are accurately captured. Previous state broadband deployment awards have been awarded and mapped with either census block, parcel or AddressNC data. (AddressNC is the Next-Gen 911 addressing dataset for the state.) As the FCC has moved to Broadband Serviceable Locations, the office has worked in 2023 to translate protected locations/areas to the BSL Fabric for the prior state awards. The office is currently working with grantees to ensure they understand this crosswalk process for protecting areas that were funded prior to the use of BSLs.

The office will continue to coordinate with broadband service providers to compare data and ensure that the Broadband Funding Map reflects the most accurate data possible, including:

- Any federally-funded areas that may be missing from the FCC's Broadband Funding Map
- Any corrections needed to protected areas based on the process to crosswalk data to Broadband Serviceable Locations
- Any locations inside known protected areas that are outside of scope for that funding program and therefore still un/underserved
- Any locally-funded areas that should be protected
- Any BSL's representing Community Anchor Institutions (CAIs) that are served by the provider but that are not correctly or fully represented with maximum available speeds in the FCC National Broadband Map's Broadband Data Collection. This is for any BSL records that were excluded from the BDC filing system due to categorization as CAI, or any BSL records for qualifying CAIs that do not retain broadband availability data in the FCC map due to a BSL Flag field value of "False."

Data in the North Carolina Broadband Funding Map can be filtered by county, program, grantee and project ID. Once data is filtered it can be downloaded to a CSV file format which will include the Location IDs for a particular project area. Broadband providers or local governments downloading the data must have a CostQuest license allowing use of the data to map the locations of a project area utilizing these Location IDs.

Broadband providers wanting to submit data for identifying or further verifying funded areas must utilize the CAB Data Exchange secure online upload process outlined in this Guidance document. A broadband provider awarded a project area may submit data to the office to request the funded project area be deemed a protected area. For consideration as a protected area, a broadband provider should submit a comma delimited CSV file of the Location IDs of BSLs that will be served with a minimum of 100mb/s download and 20mb/s upload service through fiber, cable, or qualifying licensed fixed wireless technologies because of public funding for this project. Once the data is verified, funded project areas may be reflected or updated on the NC Broadband Funding Map as protected project areas. Broadband providers should use this same process for submission of project areas that warrant slight adjustments in specific BSLs that fall within a project area.

Broadband providers submitting data on funded/protected areas must have a CostQuest license that allows them to capture Location IDs for these BSLs. Questions on protected area data should be emailed to [broadbandmapping@nc.gov](mailto:broadbandmapping@nc.gov).

#### **D. CAB Planning Tool and Eligible Locations Layer**

The Eligible Locations Layer in the CAB Planning Tool utilizes data from the FCC's BDC system to identify locations unserved and underserved with broadband. While the BDC system provides foundational data for determination of eligible locations, the office also evaluates technology







Protests shall be submitted in writing, accompanied by all credible and relevant supporting documentation, including specific BSL, and detailed explanation and mapping demonstrating that the protesting broadband provider has installed infrastructure sufficient to provide broadband service to the specific addresses provided in the protest, along with an attestation that broadband service is available to the BSL indicated. The protesting party bears the burden of proof.

The protest shall be considered by the Broadband Infrastructure Office in connection with the statewide Eligible Locations Layer. Upon submission of evidence and explanation satisfactory to the office that the BSL is presently served, based upon the potential justifications listed above, the office may accept the protest and update the broadband availability status of the BSL in the Eligible Locations data layer. Any provider submitting a protest shall verify that the information in the protest is accurate and that the protest is submitted in good faith. As a means of resolving a protest, the office may utilize speed tests to determine if the BSL has access to broadband service.

The office will provide notice on its website at [www.ncbroadband.gov](http://www.ncbroadband.gov) to announce the dates of the statewide protest window. Protests may only be submitted during the protest window. Broadband providers submitting protest data must have a CostQuest license that allows them to capture Location IDs for BSLs being protested.

## **F. County Prioritization of Areas**

Following the statewide protest process, counties wishing to prioritize geographic areas for their county-level scope of work should submit these priority areas to the office. See also [Section 3.C. Identification of Eligible Locations and Prioritization of Areas](#).

Counties can provide prioritized areas using BSL data directly, using hexagons or through narrative descriptions. As described above, broadband providers and local governments utilizing BSLs must have a CostQuest license allowing use of the data to map the locations of a project area utilizing Location IDs.

Counties that wish to prioritize areas should submit data as follows: participating counties will submit a CSV file listing BSL location IDs, or Level 8 H3 hexagons as provided for the program on NC OneMap, or a narrative describing their prioritized areas. Narratives can be accompanied by relevant polygons of interest. The office will then map this input and upon county approval, will publish priority areas in the CAB Planning Tool, as Level 8 H3 hexagons AND as BSLs within those hexagons.

If prioritization input from the county is at the BSL level, then the priority BSLs will be specifically indicated as priority locations for broadband providers and aggregation to the Level 8 H3 hexagons will be for public visualization purposes only. If prioritization input from the county is less granular than BSL or cannot be easily and accurately linked to specific BSLs, all eligible locations within the corresponding H3 hexagon(s) will be considered part of the prioritized area. If prioritization input from a county is in the form of a polygon other than the provided H3 hexagons, an overlay will be applied in which only eligible BSLs locating within the polygon described by county input will be considered part of the prioritized area. For public visualization and discussion purposes with entities that do not have a BSL fabric license, H3 hexagons overlapping the polygon of interest (partially or entirely) will appear as part of the prioritized area, even though only some of the BSLs within partially overlapping hexagons will be prioritized for the purpose of evaluating projects that broadband providers submit in response.

The final mapped priority geographic areas will be publicly viewable in the CAB Planning Tool and a downloadable CSV file of the eligible locations with BSL Location IDs will also include a field indicating which eligible unserved and underserved locations are part of the prioritized area(s).

For counties that do not provide areas of prioritization, the CAB Planning Tool will simply display all eligible unserved and underserved locations within the county.

A full outline of evaluation criteria for the scope of work will be included in the scope of work document directly. Priority areas will be one component of the evaluation criteria.

## **G. County-Level Protest Process**

Once county priority areas are identified and published in the CAB Planning Tool, and a scope of work for the county is finalized and approved, the county-level protest window will be opened for the county.

As outlined previously, the Protest Process utilized for the CAB program includes two phases to ensure the opportunity for consideration of the most up-to-date broadband availability data. The two-phases include:

- Protests regarding statewide eligible locations upon publishing of the Eligible Locations Layer in the CAB Planning Tool
- Protests regarding eligible locations within a county prior to the procurement window for that county

The process for county-level protests is outlined below.

The CAB legislation states that “in conjunction with the bid process, a proposed project area shall be posted on the Department’s website for a period of at least 10 days. Upon submission of credible evidence, a broadband service provider may request a project scope adjustment to the office in accordance with G.S.143B-1373(e). Upon a finding that the evidence submitted by the broadband service provider is credible, the office shall work with the county to amend the scope of the project.” N.C.G.S. § 143B-1373.1(c).

Although there is a statewide protest process upon publishing of the statewide Eligible Locations Layer in the CAB Planning Tool, the office will open a second protest window for a period of 10 calendar days for the Eligible Locations for an individual county, just prior to the opening of the procurement window for that county. This county-wide map of eligible BSLs represents the possible project areas for responding to a scope of work for a county. Because the procurement process for individual counties will be implemented in a rolling process, this county-level protest window allows the office to accept protests and ensure the map reflects the most up-to-date broadband availability data just prior to receiving responses to a scope of work for that county.

During this county-level protest window a broadband service provider currently providing qualifying broadband service to a location reflected with no service, as unserved, or as underserved may submit a protest for that Broadband Serviceable Location on the grounds the BSL is served at speeds of 25/3 Mbps to less than 100/20 Mbps; or at speeds of 100/20 Mbps or higher. This is the only criteria by which a BSL may be protested under this Program. A location is considered “served” if the internet carrier can provide broadband service to a location immediately or within 10 business days upon request and without cost to the customer other than standard connection fees.

With the use of the FCC’s BDC data which is submitted to the FCC by broadband providers and is granular to the location level, the office does not anticipate a significant amount of protests. It is anticipated that a broadband provider may submit a protest due to one of the following:

- Buildout more recent than available FCC data
- Errors or unintentional omissions in submission of BDC data to the FCC

The office will not accept protests based on “planned” service. The office also will not accept protests based on the technology type data modifications outlined in [Section 6.D. CAB Planning](#)

[Tool and Eligible Locations Layer](#). The office reserves the right to deny an entire protest in bulk if any part of the protested BSLs is found to be protested with insufficient, inaccurate, unusable, or indecipherable supporting evidence, or if the protested BSLs are not submitted in the required format.

Broadband providers wanting to submit data for consideration for a protest must utilize the CAB Data Exchange secure online upload process outlined in this Guidance document. To submit a protest, broadband providers should utilize the Eligible Locations Layer to download the Location IDs of any BSLs being protested. The protesting party should then submit a comma delimited CSV file of these Location IDs of BSLs that should not be classified as no service, unserved or underserved locations due to supporting evidence from the broadband provider of the availability of higher levels of service.

Protests shall be submitted in writing, accompanied by all credible and relevant supporting documentation, including specific BSL, and detailed explanation and mapping demonstrating that the protesting broadband provider has installed infrastructure sufficient to provide broadband service to the specific addresses provided in the protest, along with an attestation that broadband service is available to the BSL indicated. The protesting party bears the burden of proof.

The protest shall be considered by the Broadband Infrastructure Office in connection with the Eligible Locations data for that county. Upon submission of evidence and explanation satisfactory to the office that the BSL is presently served, based upon the potential justifications listed above, the office may accept the protest and update the broadband availability status of the BSL in the Eligible Locations data layer. Any provider submitting a protest shall verify that the information in the protest is accurate and that the protest is submitted in good faith. As a means of resolving a protest, the office may utilize speed tests to determine if the BSL has access to broadband service.

The office will provide notice on its website at [www.ncbroadband.gov](http://www.ncbroadband.gov) to announce the dates of the protest window for an individual county. Protests may only be submitted during the protest window. Broadband providers submitting protest data must have a CostQuest license that allows them to capture Location IDs for BSLs being protested.

## **H. Utilization of CAB Data Exchange**

To support the exchange of information for the CAB program, the office has established cloud storage folders for the secure upload of files to private folders that are only accessible to the broadband provider or to the county to which they are assigned.

These folders should be used by broadband providers for the following data exchange purposes:

- Confirmation of Broadband Protected Areas
- Statewide Protest Process for CAB
- County-Level Protest Process

These folders should be used for the following data exchange purposes by county governments that are participating in CAB:

- County Prioritization of Areas

CAB data exchange folders may also be used for additional sharing of information with a county in relation to evaluating responses to scopes of work.

Upon the identification of the correct data contact person(s) at each participating broadband provider or county, secure login credentials and instructions will be provided individually to this contact. These credentials can then be used to upload the necessary files from an internet

browser. Files should be uploaded using the NCDIT Broadband Data Exchange Web Application at <https://assets.gis.nc.gov/apps/ncbio-data-exchange/index.html>. Protested and protected locations must be contained in separate files and labelled as such.

Designated data contacts (including name, email and phone number) should be emailed to [broadbandmapping@nc.gov](mailto:broadbandmapping@nc.gov). A shared resources folder will also be available within the CAB Data Exchange, containing relevant downloadable file templates, data submission instructions, and any other resources relevant to CAB.

## **I. Development of CAB Project Areas by Respondents**

Once county priority areas are identified and published in the CAB Planning Tool, a scope of work for the county is finalized and approved, and the county-level protest window has concluded, the procurement window for the county will open. The scope of work for the county will be published online along with the final Eligible Locations layer in the CAB Planning Tool.

When submitting proposed CAB projects in response to county scopes of work, broadband providers can propose to serve any eligible unserved and/or underserved locations in the county. Project locations must be submitted as a CSV file listing the BSL location IDs within the proposed project. Projects must be located “within or on” county boundaries and cannot go outside the county. Project areas do not need to be contiguous, and non-contiguous locations can be submitted as either part of a larger project or as smaller groups in separate projects.

Additional instructions for submission of project areas will be included in the scope of work, along with the evaluation criteria for evaluating project areas.