

South Carolina 2025 Broadband Equity, Access, and Deployment (BEAD) Program

Data Dictionary

Introduction

The utilization of Geographic Information System (“GIS”) data will occur throughout the lifecycle of a project, beginning with an applicant’s initial grant submission and ending with delivery of as-built shapefiles depicting areas where construction has occurred. This exhibit outlines the type and format of GIS data required for submission to the SC BEAD Grant Program. GIS-based data will be used to evaluate grant submissions, manage grants awards, track Broadband investments over time, and closeout projects. GIS data may also be integrated into Quality Assurance measures developed by ORS to aid in the verification of work completed in compliance with the SC BEAD Grant Program.

GIS Template Shapefile Data has been created for applicants to use that match with the data schema outlined in the sections that follow. It is available for download in the SC BEAD “Maps and Data” folder on ShareFile. Note, Applicants are reminded to ensure they utilize the most current version of SC BEAD eligibility data when building their projects. Applicants are required to use the templates for developing high level designs of proposed projects they plan to submit to the SCBBO. Submissions that include incorrect, incomplete, missing, or data not formatted using the data schema below will be rejected and may disqualify an Applicant from consideration. The following is required:

1. **Due now - Proposed BSLs** (sourced from SC BEAD Eligibility Data)
 - Applicants must utilize the Proposed Served Structures File available for download in ShareFile. Applicants will submit a subset of this file for the locations (BSLs) they are applying for and MUST fill in all fields not Pre-Populated by the SCBBO using the schema listed on the next page. Note, based on the BEAD restructuring policy notice, the SCBBO will score competing applications based on this file. Applicants must submit a single CSV file with no duplicate records (cannot submit multiple bids on the same BSL).
2. **Due upon notification from the SCBBO of any provisionally accepted BSLs submitted as part of the Applicant’s main application - Proposed Fiber/Cable line layer** (required only for projects proposing wired broadband service)
 - Digitized fiber/cable lines should be separated by segments, by technology type, and deployment type, snapped to vertices of adjoining fiber/cable lines.
3. **Due upon notification from the SCBBO of any provisionally accepted BSLs submitted as part of the Applicant’s main application - Proposed Network Junction point layer**
 - Point locations where existing or new infrastructure will tie into the proposed project

Broadband GIS Data Dictionary

Below is the breakdown of data including associated attributes, data type, description, and values/comments required for submission.

Proposed BSL CSV file – **Due now**

BEAD Eligible Locations			
Layer Name	Layer Type	Description	Comments
["ISPname"]_Proposed_Served_Structures.csv	CSV File	Projected Homes/Business/Other structures (BSLs) the applicant is applying for	Applicants must use all fields from the Eligible Structures File. Applicants will submit a subset of this file they are applying for and fill in any fields not Pre-Populated by the SCBBO using the schema list below.
Field Name	Data Type	Description	Values/Comments
Location_i	Integer	FCC Location ID	*Pre-Populated by SCBBO
Elig_Type	Text	BEAD eligibility Classification derived from the NTIA Post-Challenge Data	*Pre-Populated by SCBBO Values Include: Unserved, UnderServed, Unserved/UnderServed CAI
Status	Text	Eligibility Status Flag	*Pre-Populated by SCBBO Values Include: Enforceable Commitment (NTIA Reason Code 4), V6 Removal (NTIA Reason Code 3), Pending (Pending NTIA Reason Code 4), BEC (NTIA Reason Codes 1, 2, 5)
Lat	Double	Latitude	*Pre-Populated by SCBBO
Lon	Double	Longitude	*Pre-Populated by SCBBO
Applicant	Text	Applicant's Name	Name of Applicant submitting the application
Tech_Code	Numeric	FCC Tech code	FCC Tech code for the proposed technology to be deployed at the given location 40 = Coaxial Cable / HFC 50 = Optical Carrier / Fiber to the Premises 61 = Non-geostationary Satellite 70= Unlicensed Fixed Wireless 71 = Licenses Terrestrial Fixed Wireless
Max_down	Double	Maximum download speed	The maximum download speed in Mbps upon completion of the project. <u>Value must only be a number.</u>

Max_up	Double	Maximum upload speed	The maximum upload speed in Mbps upon completion of the project. <u>Value must be only a number.</u>
Latency	Integer	Latency	Latency in ms upon completion of the project. <u>Value must be only a number.</u>
BEAD_Funds	Numeric	Amount of BEAD funds requested to deploy broadband at the given location	Amount of BEAD funds requested from the SCBBO to deploy broadband at the given location. Note: The amount requested <u>CANNOT</u> exceed 75% of the total project cost (Total_Cost). <u>Value must only be a number.</u>
Total_Cost	Numeric	Total Cost to deploy broadband at the given location. Inclusive of all permitting, engineering, construction, etc.	Total Cost to deploy broadband at the given location inclusive of any 3 rd Party funding in addition to the BEAD funds requested. <u>Value must only be a number.</u>
End_Date	Integer	Number months from NTP to Initiation of Operations	The number of months needed to initiate operations. Applicants are reminded to take into account any federal, state, and local permits which might be required that can impact a project schedule. <u>Value must only be a number less than or equal to 48.</u>

Proposed Fiber/Cable Line Layer - **Due upon notification from the SCBBO of any provisionally accepted BSLs submitted as part of the Applicant's main application**

LINE WORK			
Layer Name	Layer Type	Description	Comments
[["ISPname"]][["Project Name"]] _Proposed_Line Work.shp	Line	Proposed broadband lines work a subgrantee will construct. Drops are to be excluded.	Digitized fiber/cable lines should be separated by segments, by technology type, and deployment type, snapped to vertices of adjoining fiber/cable lines. Upon award and completion of the project, ISP must submit as-built update depicting actual locations of fiber lines that align with quantities outlined in expense reports prior to final payment.

Attribute Name	Data Type	Description	Values/Comments
FCCTech	Integer	The FCC Technology code proposed for construction	“40” = Coaxial Cable / HFC “50” = Optical Carrier / Fiber to the Premise
Length	Integer	Length in feet of a given line segment	Length in feet
DepMethod	Text	The method for which Broadband technology will be deployed at a given line segment	Aerial, Buried

Proposed Network Junction Point Layer - **Due upon notification from the SCBBO of any provisionally accepted BSLs submitted as part of the Applicant’s main application**

Network Junctions			
Layer Name	Layer Type	Description	Comments
["ISPname"] ["Project Name"]_Network_Junction.shp	Point	Point location where existing or new infrastructure will tie into the proposed project	An example of a Network Junction feature is a location where a fiber line will be spliced to extend services from an existing network
Attribute Name	Data Type	Description	Values/Comments
Status	Text	New (Proposed) or Existing Network Junction	New, Existing
Description	Text	Description of Connection Point Location	e.g., Optical Line Terminal (OLT) endpoint, splice point to extend services from existing network, etc.

PDF Map Attachment - Due upon notification from the SCBBO of any provisionally accepted BSLs submitted as part of the Applicant's main application

A PDF map for each Project Area is required as part of the Technical Capability gating criteria established by NTIA. The map should represent all BSLs contained within a project area that have been provisionally selected for award by the SCBBO. The map must include all GIS layers turned on and symbolized appropriately. The submitted map should look similar to the illustrative example below.

At a minimum, the map must contain the following elements:

1. BEAD eligible locations
2. Proposed line work
3. Network junctions
4. Basemap for relative location
5. Basic map elements

EXAMPLE - SC BEAD Main Application Network Design Map

