Montana BEAD Program

Broadband Map Guide

Version 1.0

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INTRODUCTION **3**

MAP DESCRIPTIONS **4**

Map 1: Broadband Availability Map 4

Accessing the Broadband Availability Map *4*

Map 2: Montana BEAD Application Map 4

How to Request Access to the BEAD Application Map *4*

Montana BEAD Application Map Access *5*

NAVIGATION **7**

Legend 8

How to Search the Map 9

Map Layers 11

How to configure the map settings to view the Census Block Groups *12*

FUNCTIONALITY **13**

Downloads 13

How to download Census Block Group DATA files from BEAD Application Map *13*

Printing 15

How to download and then print an image of a Census Block Group. *15*

REQUESTING TECHNICAL ASSISTANCE **16**

INTRODUCTION

This document serves as a comprehensive guide for applicants to navigate the Montana Broadband Map. The Broadband Availability Map is the outcome of Montana's BEAD Challenge process, and it identifies which locations within Census Block Groups (CBGs) are eligible for funding under the BEAD program as well as associated Community Anchor Institutions (CAIs). Each CBG outlines the number of served, underserved, and unserved locations, the total number of locations, what percentage of the CBG is eligible for BEAD funding, and the benchmarking reference price.

There are two maps available on the ConnectMT website: the Broadband Availability Map which is publicly available and the BEAD Application Map which requires applicants to register with the state to access. Both maps contain the BEAD eligible locations that have been vetted through the BEAD Challenge process, so the data present in each map is identical. This document explains the purpose of each map, outlines how to access the maps, and provides details on how to use their features and functionalities.

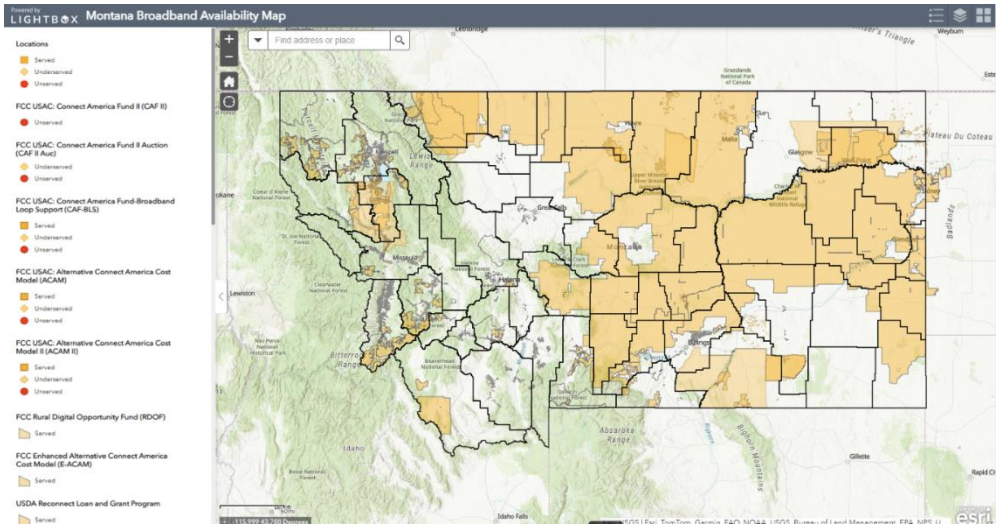
The map version information can be found on the bottom left-hand side of the map within the map description:

Map version: 4.0	Latest major version of the map
Serviceability data last updated on May 7, 2024	Last date that serviceability values were updated within the BEAD eligible locations dataset
Map last updated on July 23, 2024	Last date that map was updated to refresh data layers or text within the map

MAP DESCRIPTIONS

MAP 1: BROADBAND AVAILABILITY MAP

The Broadband Availability Map is publicly available for prospective applicants and other stakeholders to explore. It is available on the Connect MT website. This map has been built to display broadband coverage for the State of Montana.



ACCESSING THE BROADBAND AVAILABILITY MAP

The Broadband Availability Map (Map 1) can be accessed by navigating to the IIJA/BEAD page on the ConnectMT website. From here, applicants should click on “IIJA Map” and select “State Broadband Availability Map” from the dropdown menu.

MAP 2: MONTANA BEAD APPLICATION MAP

The BEAD Application Map requires prospective applicants to register and log in to explore. It is available here on the Connect MT website. This map has been built for Montana ISPs to download/extract data at a CBG level from the map to submit for applications. The data includes BEAD eligible locations as well as community anchor institutions (if applicable); the download(s) will be provided in a separate csv data file.

HOW TO REQUEST ACCESS TO THE BEAD APPLICATION MAP

If you had access to the ARPA maps your credentials should have been transferred over. If not, please go to the ConnectMT IIJA Map Description Page and follow the directions under the “Map Access Request” Tab.

OKTA ACCOUNT

Prior to requesting access to the Montana Broadband Application Map, users must have an Okta account. You can sign in to https://login.mt.gov in any of these ways:

- If this is your first time signing in, you may be able to sign in with your existing ePass Montana login email address,
- By creating a new account through https://login.mt.gov
- For additional assistance with Okta, you can visit https://okta.mt.gov/Help.

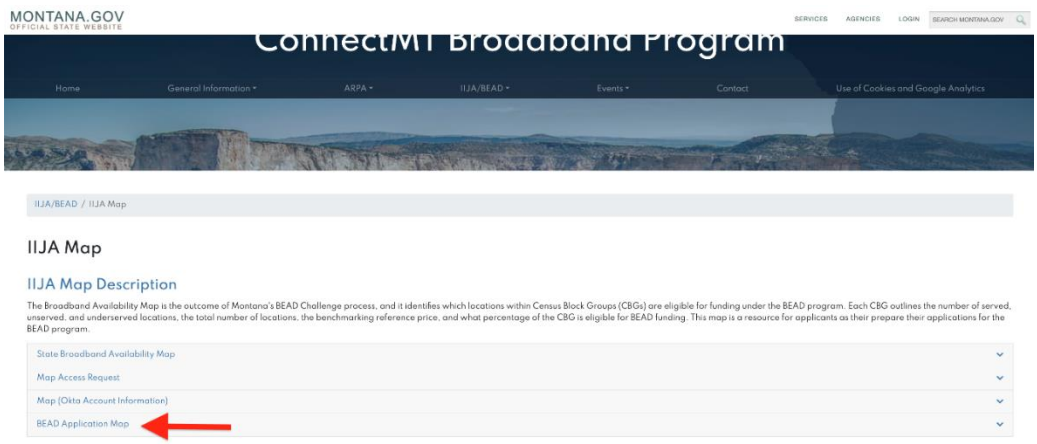
MAP ACCESS REQUEST

To request access to the Montana Broadband Application Map, please submit the form below with the necessary information. Requests will be reviewed by the Connect Montana Broadband team as quickly as possible.

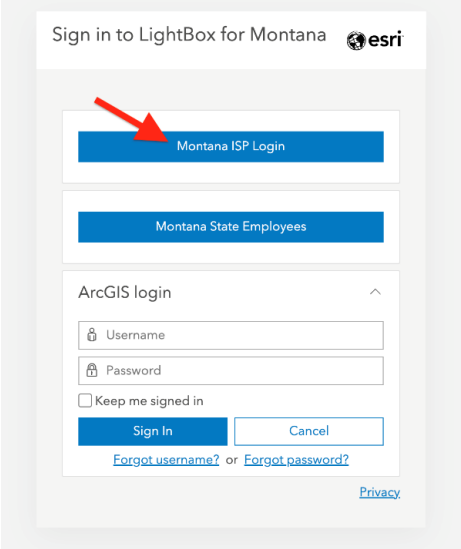
NOTE: Please ensure you have registered for an Okta account prior to filling out the request form.

MONTANA BEAD APPLICATION MAP ACCESS

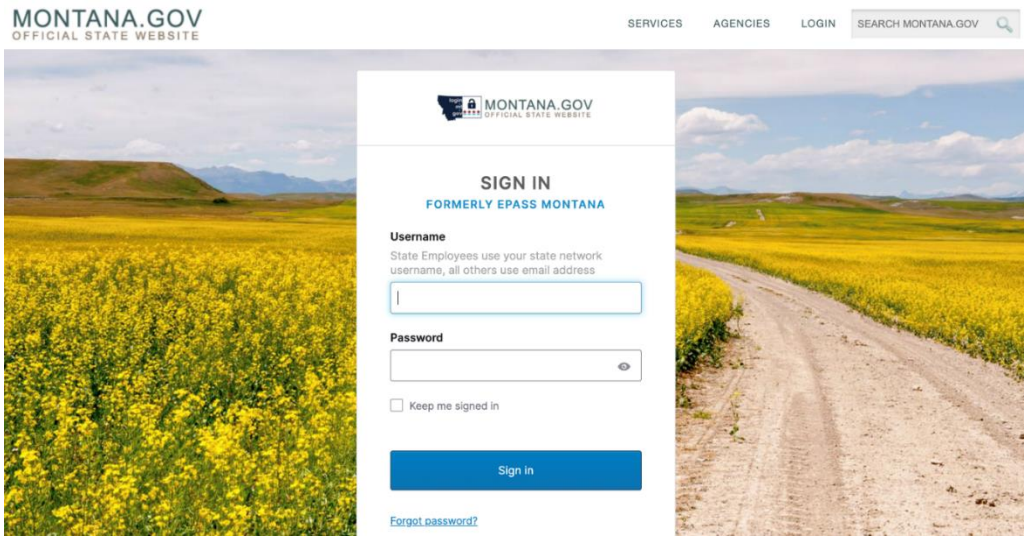
Sign in with your Montana ISP login credentials (email address and password). Once you have registered for an Okta account, please submit a Broadband Map Access Request. Once you have submitted a Broadband Map Access Request, please select the BEAD Application Map at the bottom of the drop-down menu.



Once you have selected the BEAD Application Map you will be directed to a log in screen. Please select the Montana ISP Login at the top of the screen.



Once you have selected the Montana ISP Login, you will be redirected to the BEAD Application Map login. Please log in using your ISP Login credentials. Please remember to check the box that says, “Keep me signed in.”



NOTE: This map is credentialed (i.e., a username and password are required to access). If you require credentials and have not received them yet, please contact the ConnectMT Broadband team at ConnectMTTechAssistance@mt.gov.

NAVIGATION

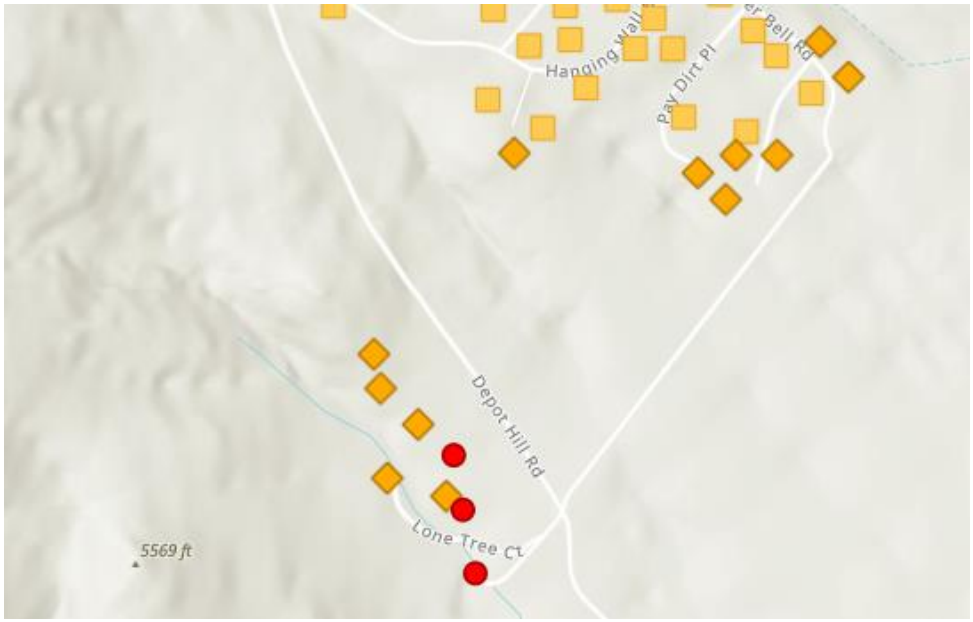
Both maps have the same navigation features. The lefthand side of the screen houses a collapsable information pane that displays the map legend, a description of what can be found on the map, a breakdown of how to define certain terms used within the map such as unserved and underserved, and supplemental information that may be useful as the applicant explores the map. The top right portion of the map screen houses the map legend, layers list, and basemap gallery pane.

Each individual location (house, building, etc.) is designated by a location point on the map and has been coded based on the current state of internet access to that address (unserved, underserved, served). The map also includes enforceable commitments, locations that have been funded by other federal programs, such as FCC USAC and USDA ReConnect. Each location will show its broadband service status.

Served locations are designated with a yellow square. They are locations where the maxspeed >=100/20 Mbps down/up + low latency (<=100 MS).

Underserved locations are designated with an orange triangle. They are locations where the maxspeed >=25/3 - <100/20 + low latency (<=100 MS).

Unserved locations are designated with a red circle. They are locations where the maxspeed <25/3 + low latency (<=100MS).



LEGEND

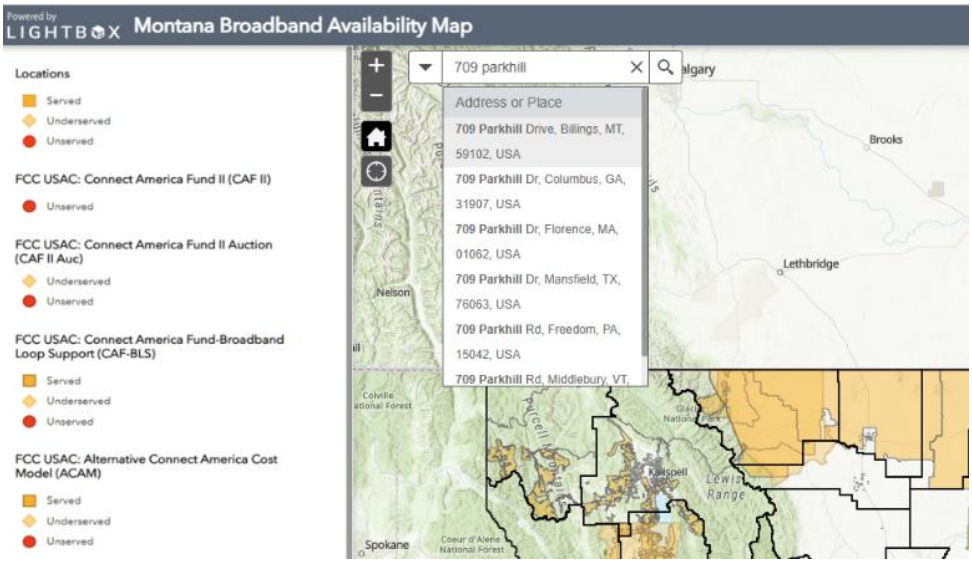
ICON	NAME OF ICON	FUNCTIONALITY
	Legend	Use the Legend to view all visible layers based on a user's zoom level in the map.
	Layer List	This button enables users to control the visibility of layers, allowing them to turn layers on or off, and displays a list of all currently loaded and available data layers on the map. A grayed-out layer indicates a user should zoom in closer to see the data (e.g., Locations). Font color for layers is indicative of whether it can be viewed at certain levels (i.e. black font for visible and grey font for not visible). For example, point layers are not visible until a user is at the city/ neighborhood/ location level.
	Basemap Gallery	Use the Basemap Gallery to turn on satellite imagery or change the underlying basemap.
	Zoom	The Zoom functionality allows a user to go in and out of the map. A user can also use the mouse scroll wheel to do this.
	Default Extent	This will return a user to the original view of the map, in which the entire state is visible.
	My Location	This feature requests permission to use a user's browser location to find and display their current position on the map, providing a shortcut to manually typing in the address.
	Search Bar	"All" will search for all four types of geography: address or place, counties, census block groups, and tribal lands. A user can also select one of the four types of geography for a more refined search. After selecting any of the four types of geography, users should revert the search back to "All."

HOW TO SEARCH THE MAP

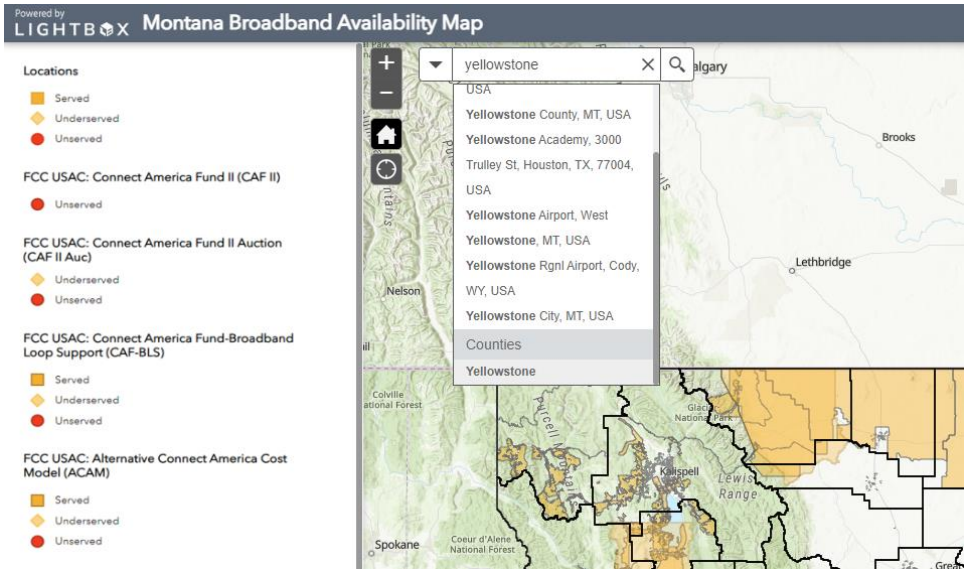
The search bar can be found on the top left side of the map. The arrow directly to the left of the search bar will allow a user to search within one of the five layers of the map: All, Address or Place, Counties, Census Block Groups, or Tribal Lands. Once a search term is entered, the map will zoom into the specified location and a pop-up box will appear with statistics about the location in question, including number of served locations, number of underserved locations, number of unserved locations, total number of locations, and what percentage of total locations are eligible for funding.

Below, please find examples of how to search using each layer of the map:

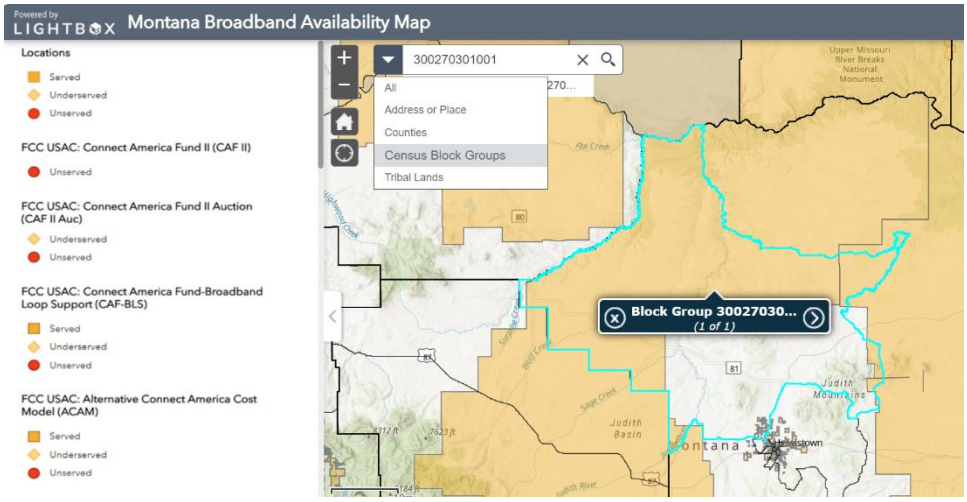
Address: Begin to type the address in question and simply select the autofill option provided once visible. Once an address has been found on the map, the user should select the X from the search window to clear this marker from the map.



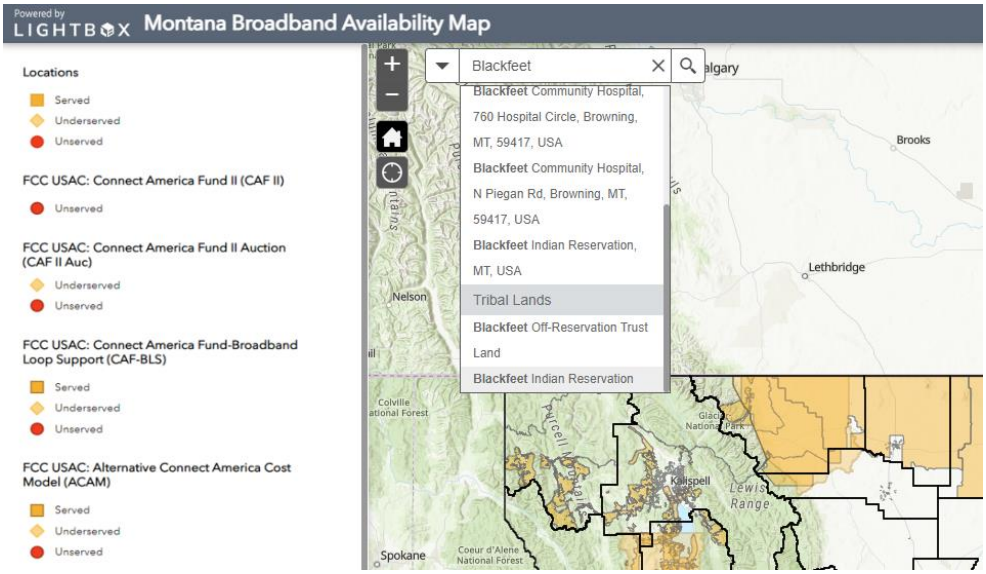
County: Type the name of the county in question and scroll down to the bottom of the drop-down list of suggested locations to find county at the bottom.



Census Block Group (CBG): Enter the number of the CBG in question and select from the drop-down list.



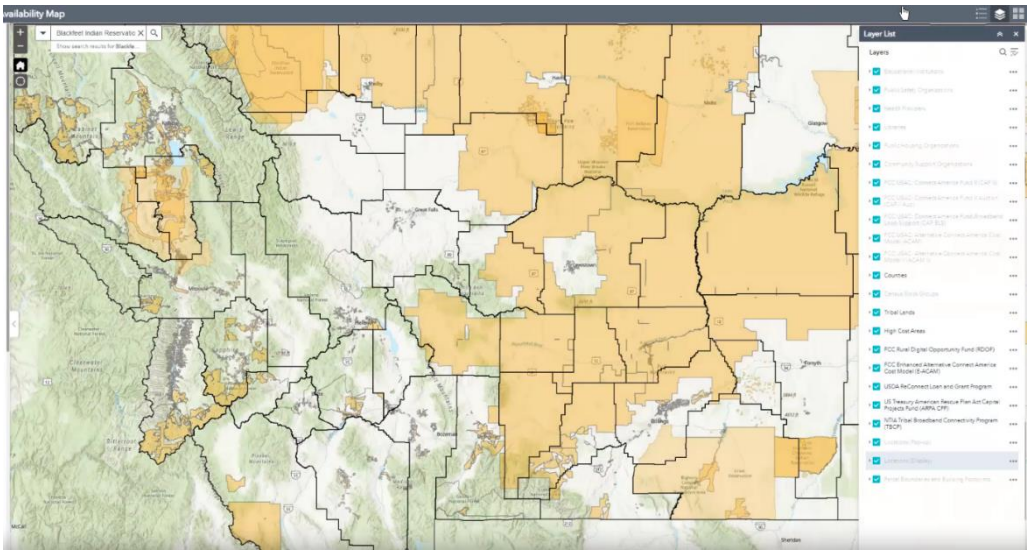
Tribal Lands: Begin typing the name of the Tribal Lands in question, then scroll to the bottom of the drop-down to find the location in question.



MAP LAYERS

To determine which layers are active on the map at any time, click on the Layer icon on the top right portion of the map. (**NOTE:** It will be in the middle of the three icons on the top right portion of the map.)

From here, the user can turn on and off map layers by checking or unchecking the boxes to the left of each option. Users can view other layers as well by selecting them individually.

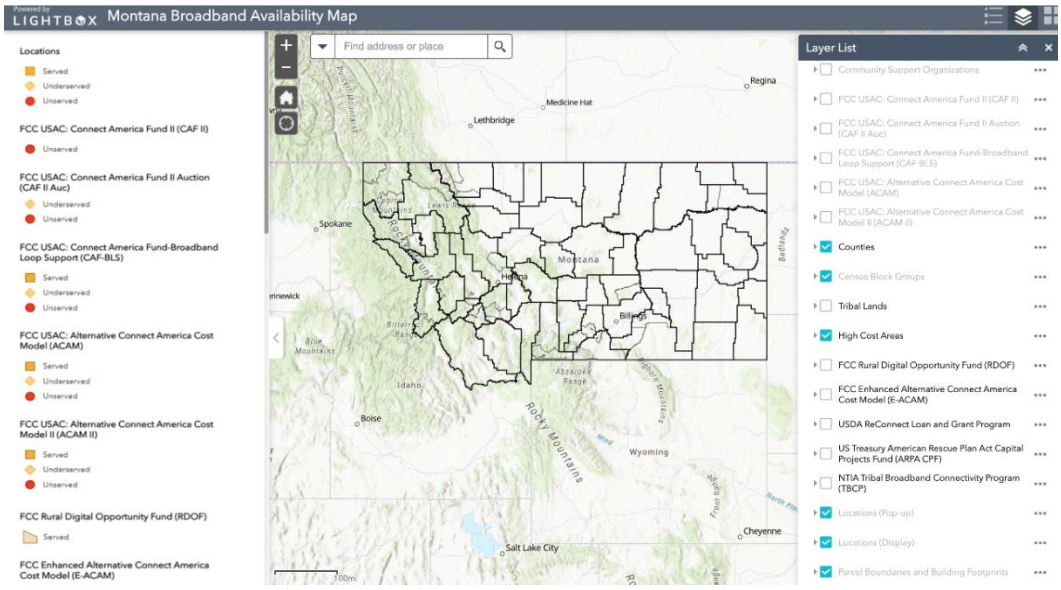


NOTE: To view BEAD Eligible Locations, turn off all the funding layers except ‘Census Block Groups’ and ‘Locations’.

Within the map layers, several other federal award programs appear including multiple FCC USAC programs, Rural Digital Opportunity Fund (RDOF), FCC Enhanced Alternative Connect America Cost Model (E-ACAM), USDA Reconnect, US Treasury American Rescue Plan Act Capital Projects Fund (ARPA CPF), and the NTIA Tribal Broadband Connectivity Program (TBCP). Each of these programs can be explored within the map.

HOW TO CONFIGURE THE MAP SETTINGS TO VIEW THE CENSUS BLOCK GROUPS

To view the Census Block Groups, remove all layers except the Counties, the Census Block Groups, the High-Cost Areas, the Locations (Pop-up), the Locations (Display), and the Parcel Boundaries and Buildings Footprints.



Utilize the Layer List to configure the map settings to view only Census Block Groups. Once the map settings are configured, zoom in to find a specific Census Block Group.

Alternatively, select the drop-down arrow on the search box and select Census Block Group. Once a user has selected the Census Block Group in the drop-down arrow, type or paste in the Census Block ID. Once the Census Block ID is entered, the map will be directed to this specific Census Block Group.

NOTE: A Census Block Group may appear grayed out as a whole which indicates that within this specific CBG, there are no eligible locations, and on the pop-up card the Eligible for Funding amount will appear as 0%.

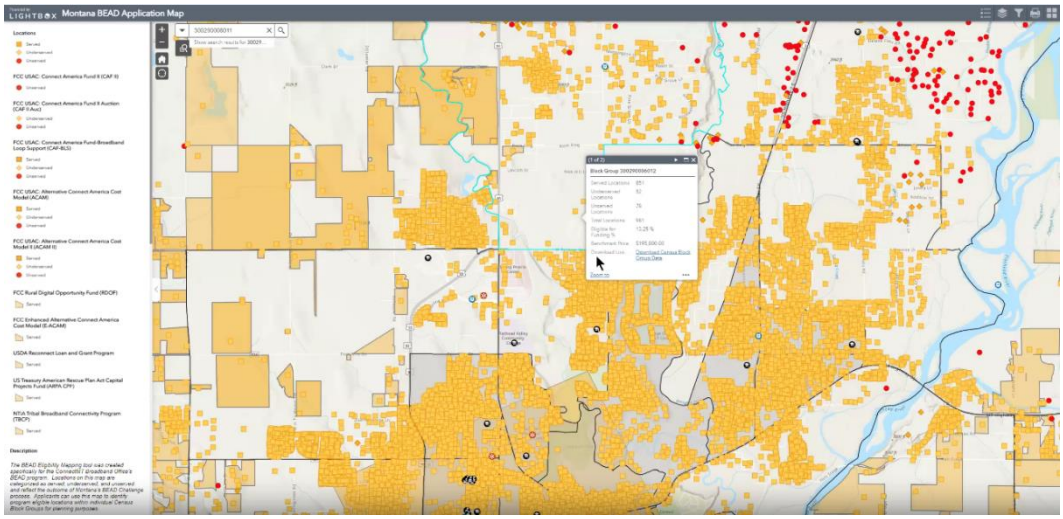
FUNCTIONALITY

DOWNLOADS

HOW TO DOWNLOAD CENSUS BLOCK GROUP DATA FILES FROM BEAD APPLICATION MAP

The BEAD Application Map allows credentialed users to download details of BEAD-eligible locations (including CAIs) by Census Block Group (CBG). Any information downloaded will be available as a csv file.

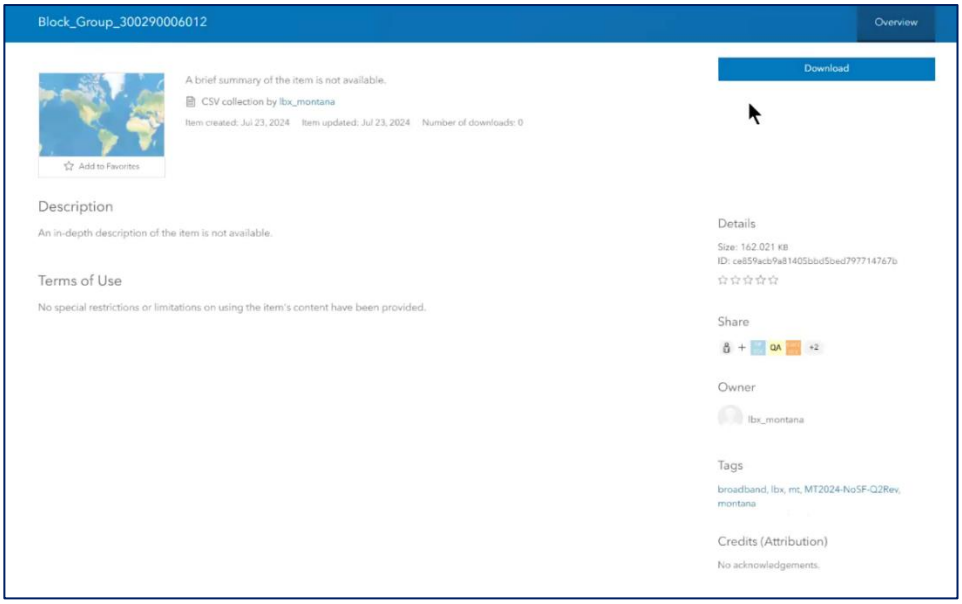
Once the user has followed the steps provided above to log into the BEAD Application Map, they can search for a Census Block Group by entering its identification number in the search bar or using the Zoom tool to manually move around the map. Upon hovering the mouse over the CBG in question, a pop-up card will appear.



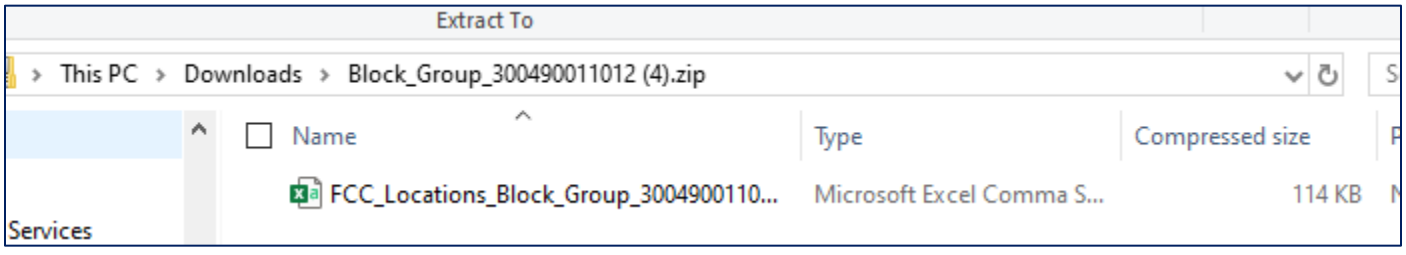
This pop-up card will include general information about the CBG (number of served locations, number of underserved locations, number of unserved locations, total number of locations, the percentage of total locations eligible for BEAD funding) as well as the benchmark price for the CBG and a link to download the data required for the application process.

NOTE: The selected CBG will appear with a teal boundary line visible.

Clicking on the download link will take the user to a new window where they can download a zip file of all location-specific data for the CBG in question, as well as any data for CAIs that may be present.



Where applicable, the zip file will consist of two files, a CAI file and an FCC Locations file, each named for the selected Census Block Group.



All locations, served, unserved, and underserved, within a given CBG will appear, regardless of their serviceability.

NOTE: If a Census Block Group does not have an Eligible Broadband Service Location but does have eligible CAIs, then only the CAIs will be present when a user downloads the data.

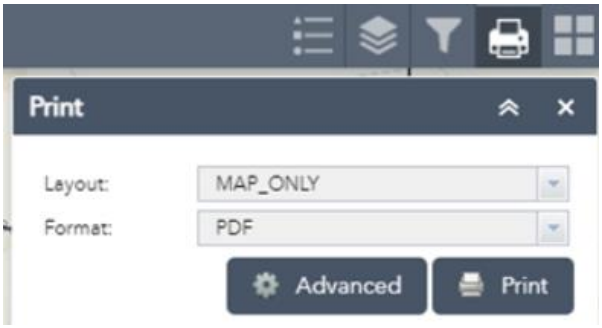
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	id	location_i	address_p	city	state	zip	zip_suffix	unit_coun	bsl_flag	building_t	land_use_	address_c	county_ge	block_geo	h3_9	latitude	longitude	fcc_rel	classifica	Land_Area	GEOID	High_Cost_Area	
2	71359	1.07E+09	255 Leon F	East Heler	MT	59635	8968	1	TRUE	R	1	2	30049	3E+14	892792640	46.58781	-111.935	7212023	Served		3E+11		
3	71671	1.07E+09	2881 Staci	Helena	MT	59601	6419	1	TRUE	R	1	1	30049	3E+14	892792646	46.58112	-111.942	7212023	Served		3E+11		
4	71672	1.07E+09	2877 Staci	Helena	MT	59601	6419	2	TRUE	R	1	1	30049	3E+14	892792646	46.58111	-111.942	7212023	Served		3E+11		

NOTE: Users are only able to download information about one CBG at a time. The process detailed above will need to be repeated for each CBG of interest.

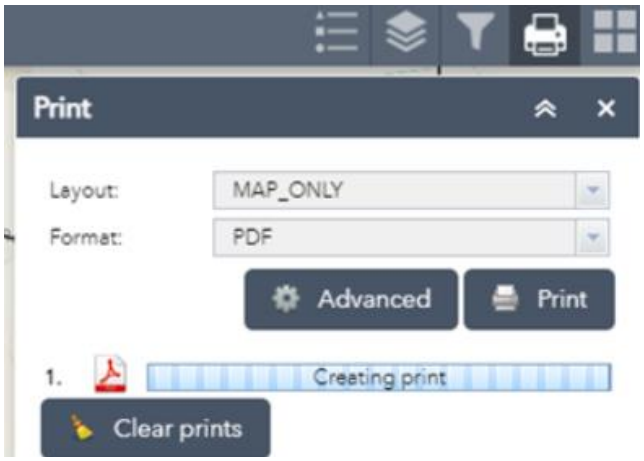
PRINTING

HOW TO DOWNLOAD AND THEN PRINT AN IMAGE OF A CENSUS BLOCK GROUP

To print, select the print icon at the top of the screen. A box will appear with both Layout and the Format options. Please make sure that Map_Only is selected for the Layout function and PDF for the Format function.



Click the “Advanced” box that is adjacent to the print box. Make sure “map scale” is selected and that the scale bar unit is in “Miles”. Once satisfied with the print settings, please hit the print box. A status bar will pop up indicating that it is “Creating print.”



Once complete, Select “1. Montana Broadband Map.” A new window will open, and the PDF will be displayed. Please use the “clear prints” button to delete all files created (To Date).

NOTE: Other options can be utilized within the Print Map dialog including using different layout options and selecting different formatting's (PNG, JPEG, etc.).

REQUESTING TECHNICAL ASSISTANCE

If experiencing technical difficulties or have questions about how to use these maps, please contact:

- Lightbox Customer Success at MontanaISPCoordinator@lightboxre.com and
- Connect Montana Broadband team at ConnectMTTechAssistance@mt.gov.

Please also review the Montana BEAD Technical Assistance Data Tools for Application Planning: Map & Benchmarking Webinar located under the past events tab on the ConnectMT site for additional detail.