June 18, 2025

Note: This document includes a list of the evidence ULFW service providers will be expected and required to submit when claiming to provide BEAD-level service to locations currently identified as unserved or underserved by high-speed broadband. The final list of required evidence will be posted on June 24, 2025. All other information in this document – including notices of relevant deadlines – is final.

Unlicensed Fixed Wireless - Evidence Required for Service Claims for the Idaho BEAD Program

Background

On June 6, 2025, the National Telecommunications and Information Administration (NTIA) released its BEAD Restructuring Policy Notice,[1] introducing significant updates to the Broadband Equity, Access, and Deployment (BEAD) Program. Among the most impactful changes is NTIA's decision to permit providers using Unlicensed Fixed Wireless (ULFW) (FCC Tech Code 70) to participate in BEAD funding opportunities—provided they meet newly defined technical criteria.

In addition, ULFW providers may submit evidence to support a claim that any currently designated BEAD-eligible locations that they currently serve meet the technical specifications defined in Appendix A of the BEAD Restructuring Policy Notice. If the evidence is sufficient, these locations will be designated as ineligible for BEAD funding.

Instructions

1. ULFW providers that **intend to claim** they offer service meeting BEAD-level requirements to Broadband Serviceable Locations (BSLs) currently listed as underserved or unserved must first notify the Idaho Office of Broadband (IOB) of their intention to submit these claims with supporting evidence. **ULFWs have seven days from the date of this notice to notify IOB of their intention.**

   A ULFW must notify IOB of its intention to submit evidence by accessing and completing required fields in the Intent to Submit Evidence form. The ULFW's responses to the survey will serve as the IOB's official list of ULFW providers that intend to submit evidence. No other method of notification will be accepted.

[1] https://www.ntia.gov/sites/default/files/2025-06/bead-restructuring-policy-notice.pdf

The deadline for ULFWs to register their intention to submit evidence is June 24, 2025, at 5:00 p.m. MT.

2. Following the June 24, 2025, deadline, a ULFW that has notified IOB of their intention to submit evidence refuting the BEAD-eligible locations within its service area, will receive instructions via email from IOB on how to submit all required evidence demonstrating that their network can deliver 100 Mbps download and 20 Mbps upload speeds reliably. This includes signal strength data, coverage maps, and performance test results. Providers must also detail their strategies to manage potential interference with other users of the same spectrum band. Evidence details are included below. [2]

   The deadline for ULFWs to submit evidence is July 1, 2025.

Required Evidence

1. General Information

Provide the following general information:

- Entity Name: Entity name and / or doing-business-as name(s) associated with the entity
- Holding Company/Common Control Name: The parent company name or other name used to associate all commonly owned or commonly controlled entities, if applicable
- Contact Email and Phone Number
- ULFW Frequency Band(s)
- FCC Technology Code: 70, 71, or 72 (see chart below)

	If Service is Offered Using These Spectrum Types:			Use This Code:
	Unlicensed	Licensed	Licensed-by-Rule	
Only one spectrum type	✓			70
		✓		71
			✓	72
A combination of spectrum types	✓	✓		71
	✓		✓	72
		✓	✓	71
	✓	✓	✓	71

Terrestrial fixed wireless technology codes from the Broadband Data Collection - Data Specifications for Biannual Submission of Subscription, Availability, and Supporting Data, Section 4.1.1.

[2] It is recommended that ULFW providers follow the FCC guidelines that apply in the *Broadband Data Collection - Data Specifications for Biannual Submission of Subscription, Availability, and Supporting Data*

2. Broadband Serviceable Locations

Select broadband serviceable locations (BSL) to submit for service claim consideration using the functionality in the Idaho BEAD Restructuring - Location Availability Challenge map.

Provide a propagation map(s) showing signal strength (as geospatial data) from each tower that services BSLs for service claim consideration in a shapefile format. Label each tower with a unique identifier.

3. Network Capability Overview

Provide a narrative describing the ability of the network serving the selected BSLs to meet the following criteria:

- At least 5 Mbps per Broadband Serviceable Location (BSL) concurrently, scaled to meet or exceed 100/20 Mbps
- Base stations have enough capacity to maintain performance during high demand
- Backhaul links can support aggregate traffic from all connected BSLs
- Network can easily scale speeds over time to meet the evolving connectivity needs of households and businesses
- Network can easily support the deployment of 5G, successor wireless technologies and other advanced services
- Adherence with network equipment manufacturer best practices or guidance regarding items such as:
    - Capacity/loading of base station radios with respect to number of, and provisioned bandwidth of, subscribers
    - Minimum signal strength necessary to meet speed and latency requirements
    - Backhaul requirements for base station deployments

4. Towers

Provide the following for each tower (or vertical structure) that serves the BSLs submitted for consideration.

- Tower ID: Unique identifier of tower or vertical structure
- Location: Physical address of the tower or latitude/longitude
- Number of Existing Subscribers: Number of subscribers served by the tower
- Number of Sectors: Number of sectors served in the area (if applicable)
- Total Possible BSLs: Total number of BSLs that can be served from the tower location
- Clutter Category Description: FCC category description for clutter based on the defined Clutter Codes from 0-19[3]

[3] https://www.fcc.gov/sites/default/files/how%20to%20format%20your%20clutter%20data.pdf

5. Technology

Identify the existing technology (e.g., LTE/4G, 5G NR, Tarana Wireless Air Interface Protocol, Ubiquiti AirMAX/LTU) used by each base station at each tower.

6. Base Station Capacity

Provide capacity information for each base station at each tower location.

- Tower ID: Unique identifier of tower or vertical structure
- Base Station ID: Unique identifier of each base station at each tower
- Number of Existing Subscribers: Number of existing subscribers served from the base station
- Number of Radios: Number of radios
- Provisioned Bandwidth per Subscriber: Guaranteed minimum amount of bandwidth allocated to each subscriber
- Space Available: Number of rack units available in the cell site equipment shelter for future equipment

7. Signal Strength

Provide the following for validation that signal levels meet minimum thresholds for speed and latency. Tests must be run within 30 days of claim submittal.

- Base Station ID: Unique identifier of each base station at each tower
- Radio ID: Unique identifier of each radio at the tower site
- Transmitter Power: The power output of the wireless transmitter. (Value must be greater than 0dBm)
- Antenna Gain: The effectiveness of both the transmitting and receiving antennas in directing and capturing the radio signal. (Value must be greater than or equal to -20 dBi and less than or equal to 40 dBi)
- Path Loss: The signal weakening due to distance and obstacles in the propagation path. (Value must be greater than or equal to 0 dB and less than or equal to 10 dB)
- Cable Loss: Loss due to cabling, connectors, and other hardware in dB
- Noise: Total noise from thermal and receiver noise. (Value must be less than 0 dBm)
- Receiver Sensitivity: The minimum signal strength the receiver needs to successfully decode the data (Value must be less than 0 dBm)
- Date Tested

8. Backhaul

Provide the following information about the backhaul to each tower.

- Tower ID: Unique identifier of tower or vertical structure
- Base Station ID: Unique identifier of each base station at each tower

- Backhaul Type: Method of backhaul delivery used to connect a base station (e.g., fiber, licensed microwave, unlicensed wireless links)
- Backhaul Speed: Speed of backhaul type

9. Performance Testing

Conduct performance testing[4], submit test results, and provide the test methodology in the Speed Test Results and Latency Test Results in the ULFW Service Claim Evidence Template according to the following process. Details about each field in the Test Results can be found in the Performance Test Results Data tab in the ULFW Service Claim Evidence Template.

- Conduct speed and latency tests for each location.
- Performance tests (speed and latency) shall be conducted, at a minimum, once per hour from 6:00 PM to 12:00 AM for a minimum total of six passing tests per location. See Draft Performance Measures for BEAD Last-Mile Networks Policy Notice for details on how to conduct the tests. If the test packets cannot get through due to subscriber usage, you may run the tests between 12:00 AM and 6:00 AM—both sets of test results (6:00 PM to 12:00 AM and 12:00 AM to 6:00 AM) must be submitted. It is therefore encouraged to run the tests as soon as possible to allow for any necessary additional testing.
- Tests shall be conducted from the premises of the selected **active subscribers** to a remote test server located at, or reached by passing through, an FCC-designated Internet exchange point (IXP), which is any building, facility, or location housing a public Internet gateway that has an active interface to a qualifying Internet Autonomous System (ASN) as defined in the Draft Performance Measures for BEAD Last-Mile Networks Policy Notice.
- Testing date, methodology, and test results shall be recorded using the Performance Test Results Template and Latency Test Results Template. At least 80 percent of the test results must be at a minimum of 80 percent of 100/20 Mbps for download and upload. A latency measurement under 100 milliseconds must be provided for each hour of testing.

The methodology found in the Draft Performance Measures for BEAD Last-Mile Networks Policy Notice, Section 3.6 explains how performance metrics are collected through active measurements—using software or devices that send test traffic to edge servers—rather than traditional network management systems. Providers may use TR-069/TR-369 protocols, built-in capabilities of customer premises equipment (CPE), or dedicated hardware. Software-based tests using provider-supplied CPE do not require subscriber consent, while hardware installations do, though incentives may be offered.

[4] The required performance testing aligns with the requirements in the Draft Performance Measures for BEAD Last-Mile Networks Policy Notice with modifications due to the time constraints of the claim process. https://www.ntia.gov/sites/default/files/2024-12/draft_performance_measures_for_bead_last-mile_networks_policy_notice.pdf

10. Reliability/Downtime

Provide the number of minutes each base station at each tower has been out of service in the last 180 days. Reference the Draft Performance Measures for BEAD Last-Mile Networks Policy Notice for the expected average annual outage time for a reliable network and other reliability information.

11. Interference Mitigation Strategies

Provide a narrative of your interference mitigation strategy plans to manage potential interference issues with other users of the unlicensed or licensed-by-rule spectrum. This may include some or all of the following:

1. **Beam Forming and/or Beam Nulling**
   Use directional antennas at both base stations and subscriber units to reduce interference.
2. **Dynamic Management**
   Employ software or hardware-based solutions to dynamically manage interference that may arise.
3. **Advanced Non-Line-of-Sight (NLOS) Capabilities**
   Network is designed to maintain performance even in obstructed environments.
4. **Reserved Base Station Capacity**
   Allocate extra capacity to handle peak interference periods.
5. **Conservative Link Budgets**
   Design links with margins to account for interference and congestion.

Adherence to Manufacturer Best Practices
Follow vendor guidelines for optimal signal strength, antenna placement, and interference thresholds.