



BEAD Unlicensed Fixed Wireless How-To Webinar

June 23, 2025



VIRGINIA DEPARTMENT OF HOUSING
AND COMMUNITY DEVELOPMENT
Partners for Better Communities



BEAD Restructuring Policy Notice Summary on Unlicensed Fixed Wireless (ULFW) Overbuild Prevention

- States must review FCC's National Broadband Map and notify ULFW providers of a 7-calendar day window to respond with an intention to submit evidence that BEAD funding is not required for the locations it serves.
- If notice is received, states will allow 7 calendar days to submit documentation supporting the claim that the existing ULFW services meet the same technical and service standards required for a ULFW application for a BEAD subgrant, as outlined by Appendix A of the June 6th guidance.
- States may request additional evidence from the ULFW service provider and receive information from other sources.



Virginia Office of Broadband (Va OoB) Guidance on ULFW Overbuild Prevention

- Starting June 13, concurrent with the publication and public notice of Va OoB's Policy Notice on Benefit of the Bargain Round, ULFW providers had 7 calendar days to email broadband@dhcd.virginia.gov that it intends to submit evidence. This window closed on 11:59PM on June 20.
- If an ULFW provider does provide this notice, then within 7 days after submitting the notice, the ULFW provider must submit documentation supporting these claims.
Note: This 7-calendar day window begins when the provider notifies the Va OoB that it intends to submit evidence.
- Evidentiary requirements of this supporting documentation are outlined in Appendix A of NTIA's June 6th Policy Notice, as well as in Va OoB's prior policy notice on Alternative Technologies, which is incorporated by reference.



Evidentiary Requirements of ULFW Providers

From NTIA's June 6th Policy Notice

- To ensure that the ULFW provider will have sufficient capacity to meet the statutory speed requirement of 100 Mbps download and 20 Mbps upload, the network design for ULFW projects must demonstrate the ability to provide at least 5 Mbps (100Mbps downstream service - to be scaled for higher speed commitments) of simultaneous capacity to each BSL in the project area
- ULFW applicants must demonstrate they have addressed the problems of interference from other Part 15 users
- Reserved base station capacity to account for periods of higher interference
- 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



Evidentiary Requirements of the Va OoB

The in addition to the information on the prior slide, the ULFW provider must submit the following information by email to broadband@dhcd.virginia.gov within 7 calendar days of their notice of intent.

- A. A cover letter that outlines the alternative technology that is utilized to provide broadband access to BEAD eligible locations
- B. A signed and notarized affidavit affirming the challenge and attached information is true.
- C. Minimum/maximum speeds available in the challenged area
- D. Street level data of customers receiving service within the challenged area
- E. A point shapefile or .csv of locations that identifies all BEAD eligible locations that the alternative technology provider provides broadband access to, which includes the broadband speeds available at each location via the alternative technology
- F. Heat maps indicating received signal strength indicator (RSSI) in the challenged area, accounting for terrain and peak vegetation (Note: These files must be provided in .zip file form).
- G. Challengers are required to submit verified speed tests at times of peak network usage on all or portion(s) of the challenged area. *Please see Appendix C of the FY2024 Virginia Telecommunication Initiative Guidelines for additional guidance on the number of speed tests required and acceptable practices for conducting speed tests.*
- H. The Alternative Technology provider must show that it is reasonably capable of delivering such service to some or all of these locations for at least four years after the date of Virginia's Final Proposal submission (anticipated July 2025).



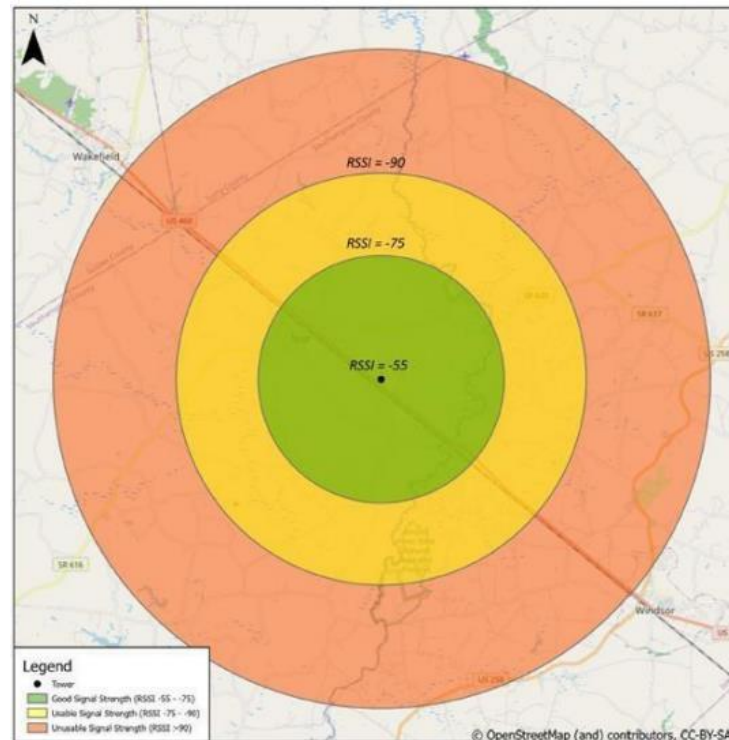
Evidentiary Requirements of the Va OoB

Received Signal Strength Indicator (RSSI)

Received Signal Strength Indicator is an estimated measure of power level that a wireless client device is receiving from an access point or router.

At larger distances, the signal becomes weaker and the wireless data rates become slower, leading to a lower overall data throughput. RSSI is measured in decibels from 0 to -120, the closer the value to 0 the stronger the signal will be, **-55 is considered the best possible signal with measures of -90 and below considered unusable signal**. Indoor best practices for mixed use networks see RSSI values of -75 to -80 and for session-based networks (Video Conferencing, Wi-Fi calling, etc.) -60 to -65.

The adjacent shows an example of the RSSI distribution around a wireless site. Please note this is not an actual representation of wireless coverage maps and shows an unimpeded representation of wireless coverage.





Evidentiary Requirements of the Va OoB

G. Challengers are required to submit verified speed tests at times of peak network usage on all or portion(s) of the challenged area. *Please see Appendix C of the FY2024 Virginia Telecommunication Initiative Guidelines for additional guidance on the number of speed tests required and acceptable practices for conducting speed tests.*

Summary of Appendix C

If challengers are required to submit verified speed tests as a part of their challenger or are requested by DHCD to submit speed test information, the number of required speed tests will be based upon the total number of challenged units. Please see the table below for the required number of speed tests.

Number of Challenged Locations	Less than 500	500 or Greater, but less than 1,000	1,000 or Greater
Required Percentage of Speed Tests	10%	7.5%	5%

In the event the challenger does not have enough customers to achieve the required percentage of speed tests, DHCD will consider field tests data to satisfy the requirement. When submitting this information to DHCD, speed tests and field tests must be listed in a spreadsheet along with the address of the unit or location at which the speed test or field test was conducted. If these materials submitted are incomplete, DHCD will consider the application invalid.



Question and Answer

broadband@dhcd.virginia.gov



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