

## **Request for Information – Broadband, Equity, Access and Deployment program technical workshop**

### **Project description, goals, and background**

The Vermont Community Broadband Board is committed to extending fiber to every possible address in the state of Vermont, except for those locations where the costs are prohibitively expensive. These locations will be defined as Extremely High-Cost Locations (EHCL) as prescribed by the Broadband, Equity, Access, and Deployment (BEAD) program. Further information regarding the Vermont BEAD program can be found here - [Broadband Equity, Access, and Deployment Program | Department of Public Service \(vermont.gov\)](#)

Vermont has identified three BEAD eligible technologies that are suitable for serving these EHCLs that will work effectively in the State of Vermont –

- Fixed wireless technology that works in Non-Line-of-Sight conditions through use of multi-path reconstruction, that also uses nulling techniques to mitigate interference and enables frequency reuse of 1 (same carriers on all devices).
- Technology that provides non-blocking symmetrical Gigabit bandwidth services to subscribers over existing telephone wire or coaxial cable over extended distances.
- Starlink

The Vermont Community Broadband Board will be holding a Technical Workshop at a place to be determined on June 28<sup>th</sup>, 2024. The workshop will consist of demonstrations in the morning and technical discussions in the afternoon.

### **The Vermont Community Broadband Board (VCBB)**

The VCBB was established by legislation through Act 71 during the 2021 session. This legislation was developed to accelerate community broadband deployment—to coordinate, facilitate, support, and accelerate the development and implementation of universal community broadband solutions. The Board was established to develop policies and programs to accelerate community efforts that advance the State’s goal of achieving universal access to reliable, high-quality, affordable, fixed broadband achieving speeds of at least 100 Mbps symmetrical. Further information about the VCBB can be found here - [VT Community Broadband Board \(VCBB\) | Department of Public Service \(vermont.gov\)](#)





## **Vendor requirements**

In addition to the specific requirements identified in Project description, goals, and background, any solution considered must work effectively within the topography of Vermont. Vermont consists of heavily forested areas and rough terrain of mountains and hills. As a result, fixed wireless signals are heavily attenuated by foliage during the summer. Many Broadband Serviceable Locations (BSLs) are in pockets and behind hills, which means fixed wireless signals cannot get to those areas. When signals do penetrate, they are attenuated and vary by reflected radiation. Any wireless solution will need to take these properties into account.

Existing BSLs are served by copper pairs to meet the needs of Plain Old Telephone Services (POTS) and to meet the requirements of the Carrier(s) of Last Resort. Some of these drops are buried. The cost of buried construction is high in Vermont due to the rocky subsoils and high prevalence of granite. The use of suitable copper pairs will be helpful in determining the most cost-effective solution for these locations.

Starlink is the only Low Earth Orbiting satellite that has created a program that meets the BEAD requirements.

## **Submission instructions**

Please provide your technology solution and interest in participating in the June 28, 2024 workshop by responding with an email to [christine.hallquist@vermont.gov](mailto:christine.hallquist@vermont.gov) by the end of the day (11:59pm) on May 3, 2024. Please include your company name, a brief description of the solution and company experience, as well as pricing.

