Sandwich Broadband Advisory Committee

Request for Information

Who we are:
The Town of Sandwich, NH, appointed an eight-member Broadband Advisory Committee (BAC) in April 2019 to explore options for quickly achieving universal, reliable high-speed internet service for our community. Sandwich is a small town in New Hampshire's Lakes Region. It covers some 100 square miles of mostly hilly and forested terrain that includes part of picturesque Squam Lake and the southern edge of the White Mountains National Forest. The town has about 1,000 dwellings, nearly all single-family, along its +-100 miles of roadways. The year-round population of 1,350, swells to about 5,000 in summer months. We are a demographically attractive population living in a beautiful and secluded setting.

Our problem:
Despite our favorable demographics, internet service in Sandwich is seriously inadequate. The only broadband service* in Sandwich is provided by local telecom utility Consolidated Communications Inc. (CCI). CCI offers digital subscriber lines (DSL and VDSL) to its customers, and reports that about 13% can access speeds of 25/3, and about 23% can get 10 to 15 mb/s. CCI says the remaining two thirds can get only “up to” 7 mb/s. Sandwich residents anecdotally report issues of intermittent service and speeds below those for which they currently subscribe.

Existing Infrastructure:
There is no competing coaxial cable service in Sandwich. A small local fixed wireless operator called CyberPine serves about 40 customers with data rates of up to 2 mb/s.

The majority (approximately 85%) of the premises in the town are served by the New Hampshire Electric Coop (NHEC), a member-owned cooperative, with the balance of the town serviced by Eversource (formerly Public Service of NH), an investor owned utility. The geographic split is indicated by shading in the map.

About half the roughly 3,200 utility poles in town are owned by NHEC with the balance owned by Eversource or CCI.

In 2018 New Hampshire modified its pole attachment rules to require access for information service providers and "ensure rates, charges, terms, and conditions for pole attachments that are nondiscriminatory, just, and reasonable." Pole owners are required to negotiate. If poles fail to meet codes and standards, they must first be brought into compliance at the owner's cost (NH PUC 1300).
What we seek:

The BAC has tentatively determined the best current approach to solving our problem is optical fiber, making gigabit-speed access available to all homes by either FTTH or to a nearby node that allows substantially more than just the 25/3 broadband standard.

This Request for Information is intended to solicit expressions of interest and demonstrations of capabilities from parties interested in designing, constructing, operating, and financing a broadband “system” for all Sandwich residents. Information gathered will serve as the basis of the BAC’s recommendation to the Select Board on the most desirable and expedient path forward, which could include the issuance of a subsequent RFP by the BAC or Select Board.

We also seek to learn what kind of value-added features could be built in or bolted on to such a fiber network to achieve our ultimate goal: robust, highly capable, user-friendly and readily adaptable internet access to all comers here at the lowest possible cost.

We are open to any and all ideas to achieve our primary objective.

Request for Information Questions and Response Instructions

The opportunity for you:

We view this as a unique opportunity for Sandwich and its future partner(s) to create a “town of the future” internet access environment. Unhindered by cable (TV and data) competition, the operator of this system should be able to achieve high rates of customer take-up, profitability and capital recovery. So please share with us what you can do.

RFI instructions:

Please format your response using the section headers below and respond to the questions in each section. Please keep your responses tight. If we have not asked a crucial question, feel free to pose and answer that as well.

About the hardware:

If optical fiber is your suggested approach, what specifications would you recommend? What's the likely availability? Cost? Longevity? Durability? Upgradability?

What would you expect to be the “make-ready” costs for attaching to utility poles? How could this be minimized? How would you go about working with the electrical and telecom incumbents to use their poles? Have you successfully worked with electrical coops or other incumbents in other communities? Should we plan on full FTTH or would a node-and-wire configuration be more cost-effective? What kind of hardware would you recommend for that?

About system operations:

We do not want to be our own ISP or operate the system ourselves. Tell us how you would interconnect, maintain, service and handle accounting for such an ISP, at the lowest cost for reliable service. What would be the minimum revenue requirements and what might the necessary rate schedule look like for you to profitably operate in Sandwich? How could we ensure net neutrality?

About enhanced functionality:

Besides offering basic internet connections, how would you bolster the system with value-added functionality such as the features listed below.

- Privacy and security features.
- VPN availability.
- Data storage.
- AAA (authentication, authorization, accounting).
- Help desk (residential and small business).
- Smart home, smart electrical metering and IoT help.
- Support for medical monitoring and aging-in-place systems.
- Whatever else you have to offer us.

**About build out:**
We do not want to be directly involved in building a broadband solution for Sandwich. But we are willing to be helpful. Are you prepared to build what you recommend, including delivering access to the most remote of our households or broadband dependent facilities or locations? What experience do you have working in rural settings like Sandwich?

**About financing:**
How would you finance the construction and the operating entity and who would own each? We are interested in a free-market private funding approach. A recent change in state law allows for the possibility of municipal bond financing for broadband investments. We are willing to consider such bonding, but that is not our preferred option. It would only be done if the builder/operator or another party agreed to cover all principal and interest costs. Voter approval would be needed at our March annual town meeting. The town would own the assets until any bonds are retired.

**About timing:**
We would like to get a system in place ASAP. How quickly can you foresee implementing a broadband solution in Sandwich?

**About affordability:**
We are also very interested to learn of approaches and programs to subsidize access for those citizens and households that would otherwise not be able to afford broadband access. What solutions, resources, and approaches to affordability for the least-able-to-pay can you recommend or deliver and how can we help?

**About your interest:**
Is your organization intent on directly delivering on or otherwise enabling our goal of “quickly achieving universal, reliable high-speed internet service for our community”?

**What can Sandwich and the BAC bring to the party?:**
Local volunteers have expressed interest in helping solicit sign-ups to new service, including a push for pre-commitments. What else could we do to help this process along?

**How to respond:**
To expedite these efforts, please respond as soon as possible, and by November 1, 2019 to:
Catherine Graham
Administrative Assistant
Town of Sandwich PO Box 194 Center Sandwich, NH 03227
tos@cyberpine.net
603-284-7701