CORNING

Fiber for Frye Island

How Sebago Fiber Stepped Up for Frye Island, Maine

Before Install

When Andrew Davis purchased a property on Frye Island in the middle of Maine's 47-square-mile Sebago Lake, it quickly became clear that working from his new home would be problematic. And as global director of engineering for a software company, it was imperative to have high-speed broadband.

The only options for internet connectivity on the 550-home island were DSL and, in some cases, fixed wireless – neither of which provided the symmetrical speeds and reliability needed. The quest to obtain better internet connectivity on the island started with Davis working with the incumbent to improve the reliability of their copper DSL. Ultimately, it drove him to become an internet service provider himself, founding Sebago Fiber, where he is owner and manager.

When Davis initially evaluated the financial viability of this new venture, he received discouraging advice. He met with an engineering firm that outlined two potential problems with the plan. First, they claimed that it wouldn't be possible to operate a network profitably with fewer than 5,000 passings due to large up-front capital costs. Second, it would likely take years to get through the pole licensing process.

Davis, however, was determined to make it work. By taking a software engineer's perspective rather than the traditional telecom approach, and by using preconnectorized fiber, Sebago Fiber deployed fiber throughout 96% of the island in less than two years, at a cost that was 30-40% less than the engineering firm had estimated.

The speed of deployment was particularly impressive. Access to the island is limited to a ferry that runs for only six months of the year.

Knowing most residents consider the island a respite, Davis's company also sought to minimize disruption to potential customers by concentrating fiber deployment into just a few weeks in the spring and fall.

"The number one challenge was the timeline, which forced us to do things differently," said Davis.

Problem Solving

Davis and his team quickly realized that traditional splicing would be time consuming, so they opted to investigate preconnectorized fiber solutions. While some suppliers had no interest in talking to a small company like Sebago, Davis said, "That wasn't the case with Corning."

Sebago first installed Corning's FlexNAP™ system cables with preconnectorized terminals and drops to reach 42 homes on the north end of the island, where existing internet connectivity was the most limited. Using the product enabled Sebago to build and activate the entire northern network in just five days.

Using FlexNAP is now the company's standard practice.

"FlexNAP saves so much time," said Davis. "It lets us build in phases, street by street, like Legos. We design the whole network to be connectorized with Corning FlexNAP, but then only deploy specific neighborhoods, or even streets, when the demand is there to justify the capital investment."

Preconnectorized systems also reduced labor costs. That's a particularly important concern on Frye Island where the cost of labor is high compared with other places—and splicing would have been a major contributor to those higher costs.

"A lot of the savings is in labor," explained Davis. "You save on splicing costs, but you really save on the schedule. And if you build faster and more predictably, you get to revenue sooner."

Davis noted that contractors tend to prefer jobs with a lot of splicing because traditionally the contractors make more money that way. But, with Sebago's approach, contractors "get more fiber hung in a day and they realize they can make good money deploying FlexNAP and complete projects even in bad weather," Davis noted.

Another factor that enabled Sebago to deploy fiber more quickly than expected involved replacement of poles owned by other companies on which Sebago wanted to deploy fiber. That process, known as make-ready, could have spanned multiple seasons. Davis's company was able to avoid long waiting times by getting a pole attachment license from the Maine Public Utilities Commission and then becoming the second company in Maine to adopt One Touch Make Ready. By collaborating with pole owners and understanding their needs, Sebago has been able to expedite the make-ready process.

"We have licensed poles in as little as five days. One Touch requires the applicant to take ownership of make ready process but can have huge savings on timeline," said Davis.

While it might have been possible for Sebago to obtain government funding to cover some of the costs of the Frye Island deployment, the company opted not to go that route.

Self-funding afforded Davis the opportunity to build and light up his fellow island neighbors far sooner. "Grant requirements could have doubled costs and quadrupled the deployment time," Davis said. "We planned to build 60% of the island over three years, but our phased approach and community interest led us to build 100% of the island."

Positive Outcomes

Property values on Frye Island have increased since fiber broadband was installed.

"Now people can stay all summer without missing necessary work commitments," Davis noted. "Our customers' only complaint is that fiber is so reliable, they can't take days off work and blame their internet connection."

Davis has been so pleased with what the company accomplished on Frye Island that he expects to begin deploying fiber this year in towns surrounding Sebago Lake.

Moving forward, Davis said: "Working on an island forced us to optimize fiber buildouts. We can apply those new methods to other landlocked islands of unserved areas in Maine. We plan to focus on those unserved and underserved areas, with a goal to bring reliable fiber internet access to all of Sebago Lake, and help Maine become a leader in solving the challenges of rural broadband with new and innovative approaches."

Learn more about **Sebago Fiber**

Learn more about FlexNAP system at corning.com/flexnap