# Day 1: Maine Broadband Coalition Conference
Sponsored by Coastal Enterprises, Inc, Island Institute, and Neighbor Works
October 25, 2016

"Bringing Broadband to Maine's Rural Communities:  Insights for Maine from National Success Stories"

Four success stories were highlighted at the conference:

    Municipal:  Islesboro, ME and Leverett, MA
    Regional:  RsFiber, West-Central Minnesota, and EcFiber, East-Central Vermont

Representatives from each community presented their projects including the models for financing. Although the solution for each community was fiber, the financing, operations, and organization were all different.  The financing varied from crowdfunding, tax increases, bonds, and grants.  All of these projects were, however, larger in scope than what would be needed to bring IAH up to federal/state broadband standards.

Although most discussion was around these specific fiber projects, there was good dialog around what communities including smaller island towns could take away from these projects – regardless of the solution:

1.  Approach providers with "what can we do together" – don't pick the technology first
2.  You don't have to do it all at once
3.  Working collaboratively with other communities, counties is an option
4.  ConnectME is still a resource
5.  Small telecoms are partnering with communities in ME for solutions
6.  Community support and champions were key to each success story
7.  Understand the specific needs of the community and financing options/support

In addition to making personal connections with the Island Institute representatives, we also had the opportunity to talk with Adam Lachman from Senator King's staff and Stan Williams from EcFiber (IAH connection – married to Jenny Archibald).


# Day 2: Broadband for Islands Summit 2016
Sponsored by Island Institute
October 26, 2016

Our mission for the day - Internet and Isle Au Haut. . .Are we where we want to be?  What's next?

Context:

The Island Institute has been working with 12 unbridged Islands over the last couple of years on the common challenge of making sure that Island Residents and Visitors are not disadvantaged relative to internet access.  Increasingly, both business and personal needs are met in the online space . . . and many have expressed frustration with the current speed and reliability of cell phone and internet service on Isle Au Haut.  Speed and reliability degrades even more as you move further from the equipment in

town.  IAH upload and download speeds are well below the state and national standards, and we hear it is negatively effecting both businesses and individuals who want to be able to work from home.

Current State:

We represent one of the more challenging cases:  a large, "mountainous" topography with a population that is spread out on both sides of the ridge.  Obviously, we also know that infrastructure costs don't have many people to absorb them.  A good primer and reflection of the current situation is captured in the Tilson report available at:  http://www.islandinstitute.org/resource/broadband-study-maine-shore-islands.  Thankfully, at least the Library and School have good internet speed from the addition of a short section of fiber optic cable funded through the Maine State Library Network project.

Possibilities:

We have 3 ways to get internet service to the Island, although really only one viable one.  With the decision to move toward power independence with solar, it will not make financial sense to plan for submarine fiber optic cable.  The second option of cell towers to reach all homes on the Island is estimated to require 6 new 150' towers – both unsightly and uneconomical.  Cell phone companies would not absorb the capital cost of these because they could not come close to recovering the investment. The third option is to continue with microwave links.

Where is the weak link now that makes it very slow at peak times of day?

Today when we go online, our data travels to town by the DSL wire, is routed through the DSLAM unit (Digital Subscriber Line Access Multiplexer), and then sent via a microwave link to Stonington, to another microwave on Swans Island, to third microwave at Bass Harbor where all the Frenchboro, Swans Island, and Isle Au Haut requests are transferred from TDS hardware to Fairpoint hardware.  This is the point in the system where we seem to have a "traffic jam" now.  (It seems a bit of a miracle that it works at all!)

Action Steps:

1.  Ensure that the work to fix the bottleneck between TDS and Fairpoint gets "unstuck."
    a.  Since there were representatives from both companies present at the meeting, we took the opportunity to elevate the issue and to request monthly follow-up until it's resolved
2.  Define what we want/need as a community
    a.  A thought is that we should advocate for a download speed of 25 MBPS (the national minimum to qualify as "broadband"), and an upload speed of 10 MBPS (the Maine minimum standard).  These speeds should allow for adequate capacity for important uses like store order placing, credit card processing, or videoconferencing.
3.  Identify what is needed to improve speeds for all Island homes
    a.  While the ideal of installing fiber optic cable will likely take time and identification of outside resources, intermediate steps to "boost"   the signal could be identified and evaluated for cost/benefit