Town of Mt. Desert Broadband Committee

January 26, 2016 / 4:00 pm @ Town Office

Committee Members Present: Jeff Burnham, Ed Ganz, Phil Koch, Lili Pew, Wendell Oppewall, John Fehlauer (via phone), ex-officio members Durlin Lunt, Dennis Shubert, Matt Hart

Public Present: Mia Thompson, Mike Edgecomb (Time Warner), Cameron Kilton (Redzone), Jason Ingalls (City of Ellsworth IT)

Meeting called to order at 4:00 pm

- Both Mike Edgecomb (TWC) and Cameron Kilton (RZ) were present, so Jeff explained the two basic focuses of the Committee:
 - 1. Addressing broadband coverage gaps within TMD
 - 2. Long term view regarding high quality broadband access for entire town
- The question was posed to each guest, "What can you do to address the coverage gap (possibly with assistance from the Town)?"

Mike Edgecomb from TWC addressed the subject first:

- The Franchise Agreement covers cable television, not telephone or broadband services (Durlin explained that our current agreement is lapsed, and we are in the long process of trying to renegotiate this along with several other communities). It seems they still use the Franchise Agreement for a means of determining where broadband is offered, however.
- The standard is currently 20 houses per mile (rough average) for TWC to be obligated to offer service. The lowest contractual requirement Mike has seen is 15 houses per mile (and as high as 70 in non rural areas). Durlin later added that the group negotiations for a new TWC agreement are pushing for 16 houses per mile, but TWC has countered with 18.
- TWC sometimes extends service to areas that fall below this average, so long as the ROI is 7 years or less (Business Class customers—such as those with a home office and long term contract—could possibly impact this).
- Mike stated that the approximate cost of TWC extending their service is \$25,000 per mile. That figure
 can sometimes be less, but can easily increase due to "making ready" costs such pole replacement,
 navigating intersections, etc.
- TWC uses a hybrid fiber/coax system in which nodes are fed by fiber, and then distributed to end users via coax cable. The coax typically serves customers within a half mile of the node.
- Concern was expressed by various Committee members regarding the accuracy of the TWC coverage
 map (see attachment from 1/12/16 minutes). Woods Road, for example, is shaded in blue (indicating
 service), but John reported that neither he nor the neighbors he has asked have been told TWC service
 is available. Mike suggested that any resident in a blue area who is told service is unavailable contact
 him directly.

- Mike indicated that TWC is open to working with municipalities to extend coverage into areas that meet neither the 20 house/mile nor 7-year ROI standards. Such a project would require either government or private investment (in addition to their own) to make up for any difference. TWC would still own all aspects of such a buildout.
- When asked about TWC's ability to do the work in a timely manner if/when funding was provided, he indicated the biggest hang-up would be waiting for pole permits to be approved. Lili shared that this has been a major issue in her involvement with Ellsworth as well, and it takes 6+ months to get approval.

Cameron Kilton from Redzone addressed what his firm might be able to offer in dealing with this coverage gap as well:

- Redzone has gone through several transitions since first offering a mesh network years ago, and currently is backed by private capital (much from here in Maine). The company has placed its focus on fixed LTE solutions, and has partnered with UMaine to lease part of their "educational broadband spectrum," and utilizes Alcatel-Lucent (now Nokia) equipment.
- RZ can attach LTE antennas to existing towers (called "Metro"), which would be the fastest deployment. But the main benefit of their architecture is to solve the wireless terrain issue by deploying small cells closer to customers. RZ has been working with Fairpoint to attach "Small Cells" to existing and new 52' poles to address LTE broadband.
- Although topography and trees are still an issue, Small Cells create new line of site opportunities. They operate at 2.5ghz at about 10 watts of power (can run up to 60 watts). Weather does not have a large impact on Small Cells. Wendell later pointed out that a 2.5ghz signal at 10 watts might not cut through dense forest as well as we would like.
- Most of the small cells would be fed by fiber. The cost or time of this fiber deployment was not discussed.
- Redzone is currently testing small cells in Rockland, where they are seeing "real world" speeds of 97mbps down, and 13mbps up, with one trial customer. Cameron believes the potential speeds are much greater than that.

Cameron said that RZ's network designers are currently putting together a design for the TMD along with a rough cost estimate which he should have ready to share in the next week or two. He indicated that they have had lots of requests from other municipalities to do the same. Although Cameron could not comment on potential financial partnerships and how that might impact the speed of an LTE rollout in TMD, he did indicate that the goal is to eventually offer the service to the entire state.

Jason Ingalls from the Ellsworth IT Dept. was also on hand to share some input and discuss his experiences with Ellsworth

- Jason stated that he was very impressed with both presentations, but particularly interested in the LTE technology RZ is focusing on, given the way technology is advancing.
- An overview of the Ellsworth project was given, which has just reached the construction stage.
- Regarding concerns over Tilson, Jason shared that overall he has been happy working with Tilson and
 that they really know their stuff. He added, however, that communication within Tilson itself regarding
 various aspects of the project can sometimes be less than ideal and requires follow-up. Additionally,
 when Ellsworth issued an RFP for the project, Tilson was the only bidder.

• Jason also suggested the Committee contact TWC to formally request an estimate for extending their broadband coverage to the entire town.

Next Steps

- Meeting minutes from January 12 were approved unanimously by the Committee.
- Phil moved that the TMD contact Mike Edgecomb to formally request an estimate from TWC to extend broadband coverage to the entire town. Ed seconded the motion, and it was approved unanimously.
- Jeff will contact the Chair of Bar Harbor's broadband committee to discuss collaboration, sharing information, a joint meeting, etc.
- Those Committee members who are available and able to do so will attend the public meeting regarding broadband in Bar Harbor on Feb. 4.
- John will get in touch with some neighbors on Woods Rd. and request they contact TWC regarding the availability of service as a means to measure the accuracy of their coverage map. The information gathered will be shared with the Committee and with Mike Edgecomb.
- A potential funding request for the May Town Meeting was discussed (in addition to the consulting
 funding already included in the Community Development request). Due to awaiting further information
 from TWC and RZ in addition to that already gathered from Fairpoint, a request could not be
 formulated. Dennis suggested that given the tight timeline, the Committee focus on gathering all info
 and coming up with a firm plan and associated cost estimate for the May 2017 Town Meeting.
- The Committee will await project estimates from both Redzone and Time Warner, and the <u>next meeting</u> will be scheduled for the Tuesday following the arrival of each.
- The meeting was adjourned at 6:10 pm.

Respectfully Submitted,

Matthew Hart