

## Minutes for the Enhanced Broadband Committee Meeting of November 30, 2015

Attending: Adam Hamilton, Hope Taylor, Eddie Gomez II, Barbara Miller, Joel Huberman, Carole Monroe, Jerry Galus, Pete Throop, George Sterling, Jeanne Dietsch, Ron McIntire, Sandy Bibace

Ron McIntire opened the meeting by providing an example of why Peterborough needs faster broadband speeds. Ron's son came for a visit. He wanted to upload 100 GB of old photos to "the cloud". The transfer took three full days to complete. I calculate that the effective upload speed was 3.1 Mbps. Ron's current Internet service is provided by Comcast. If he had been using Fairpoint DSL, the transfer would have taken even longer.

We accepted the proposed agenda for this meeting (sent to all of us by Jeanne on November 26):

- 1) Review/determine Goals for enhanced broadband in Peterborough
- 2) Status of warrant article for funding consultants to help us prioritize our options to reach those goals
- 3) Review the draft of our Broadband Plan

([https://docs.google.com/document/d/1MazCOML\\_GAkJ0Oh\\_DvWureTX0D7-ABAdIpLe5C21Z7Q/edit?usp=sharing](https://docs.google.com/document/d/1MazCOML_GAkJ0Oh_DvWureTX0D7-ABAdIpLe5C21Z7Q/edit?usp=sharing)) needs and options sections so far. (Could we re-consider the decision to extend the downtown TIF and build the parking lot since that money might provide fiber to half of Peterborough households and almost all businesses?) Also see the Options and Examples

(<https://drive.google.com/folderview?id=0B8m5ygnZJauhRG5FRll4aG1hcXM&usp=sharing>) provided by Carole.

- ENHANCED BROADBAND PLAN
- EXECUTIVE SUMMARY
- GOALS
  - PRIORITIES
- CURRENT STATUS
  - Information Economy Participation Depends upon Access Speed
  - Peterborough Telecommuters/Businesses' Potential Participation in Information Economy
- MODELS
  - models for building community support
  - ownership profiles, with pros and cons
  - operation profiles
  - design models
  - financing models
  - Municipal Network Ownership and Models
  - Retail Model
  - Open Access Model
  - Institutional Model
  - Infrastructure Participation
- OPTIONS AND RECOMMENDATIONS
  - Option 1: No Action
  - Option 2: Pursue a Broadband Enhancement Model
  - Financing
- IMPLEMENTATION
  - Construction Plan
  - Operation Plan
  - Future: Expansion, Maintenance and Upgrade Paths

## EDA Enhance Broadband Plan

PETERBOROUGH, NH ENHANCED  
BROADBAND PLAN EXECUTIVE  
SUMMARY GOALS PRIORITIES  
CURRENT STATUS Information  
Economy Participation Depends  
upon Access Speed Peterborough  
Telecommuters/Businesses' Potential  
Participation in Information Economy  
MODELS models for building  
community support ownership pro...  
[Read more...](#)

- 4) Action items a) before Dec 15 EDA meeting; b) before next Broadband mtg
- 5) Date of next Broadband mtg

As the meeting proceeded, Jeanne edited the relevant sections of the draft of the Enhanced Broadband Plan ([https://docs.google.com/document/d/1MazCOML\\_GAkJ0Oh\\_DvWureTX0D7-](https://docs.google.com/document/d/1MazCOML_GAkJ0Oh_DvWureTX0D7-)

[ABAdIpLe5C21Z7Q/edit?usp=sharing](https://docs.google.com/document/d/1MazCOML_GAkJ0Oh_DvWureTX0D7-ABAdIpLe5C21Z7Q/edit?usp=sharing)). By opening that link, readers of these minutes can see the current versions of the relevant sections (the section on Goals, for example) of the draft.

All readers of these minutes are encouraged to look at the draft of the Enhanced Broadband Plan ([https://docs.google.com/document/d/1MazCOML\\_GAkJ0Oh\\_DvWureTX0D7-ABAdIpLe5C21Z7Q/edit?usp=sharing](https://docs.google.com/document/d/1MazCOML_GAkJ0Oh_DvWureTX0D7-ABAdIpLe5C21Z7Q/edit?usp=sharing)) and suggest changes (don't worry; the changes won't be permanent until approved). If you have a Google account, you can sign in to that account so that your changes will be identified with your name. Otherwise, the author of your suggested changes will be "Anonymous". The date and time of the most recent edit to the draft can be seen by looking at the words to the immediate right of "Help" at the top of the page.

The finalized Enhanced Broadband Plan will become part of a report to the public.

All readers are also encouraged to become familiar with the four documents provided by Carole Monroe, accessible here:

<https://drive.google.com/folderview?id=0B8m5ygnZJauhRG5FRll4aG1hcXM&usp=sharing>. Two of the documents are reports from companies that are among the candidates to help Peterborough develop an optimal broadband plan. These two companies are Design Nine and Tilson (see the minutes of the November 20 meeting). The other two documents, prepared by Carole, cover common municipal broadband models and less common community broadband models.

The goals that we agreed on are:

- Every household should have potential 25 Mbps symmetrical
- Small business affordability
- Service-level agreements for businesses, particularly home businesses
- Redundancy
- Scaleability

Please note the following:

- The speed goal (25 Mbps both ways) represents a minimum, for current planning purposes. I suspect that we'll eventually consider the goal of running fiber to the home (FTTH) or fiber to the premises (FTTP) for every business and residence in Peterborough, but the goal of Town-wide FTTP or FTTH involves high capital costs and may have to wait until an appropriate funding mechanism can be worked out.
- "Service-level agreement" means guaranteed service at a certain speed, not "up to" a certain speed.
- "Redundancy" means that there are at least two pathways for data flow, so that if one pathway goes down, the other pathway will carry the load.
- "Scaleability" means that the network should be easily upgradeable. Fiber is easily upgradeable, by upgrading the signal coding and decoding (modem) equipment at each end of the fiber.

We also agreed on some priorities:

- Downtown, industrial park, hospital should be among the first priorities (George will contact school district)
- Need to have negotiating leverage

Please note:

- The hospital currently takes advantage of a New-England wide fiber network, run by Fairpoint. Fairpoint provides high-speed service to all offices at the hospital. But other areas on this network, such as Jaffrey and Rindge, are getting poorer service than the hospital. Also, the Fairpoint network lacks redundancy, so if Fairpoint fails, so does the hospital. The hospital contract with Fairpoint lasts for one more year. After that the hospital will look for additional possibilities beyond Fairpoint and will likely become a negotiating partner with the Town.
- The ConVal school system is a big user of Internet services. George Sterling will contact Brian Pickering, the high-school principal, to find out the nature of the school's current Internet contract and whether the school system would be a partner in the Town's negotiations.

We extensively discussed ownership models, design models, and financial models, without coming to any conclusions. The issues we discussed are partly covered in the four documents made available by Carole

(<https://drive.google.com/folderview?id=0B8m5ygnZJauhRG5FRll4aG1hcXM&usp=sharing>),

and partly discussed in documents provided by the towns of Leverett, MA

(<http://leverett.ma.us/content/broadband-committee>) and Sanford, ME

([http://www.sanfordmaine.org/index.asp?Type=B\\_EV&SEC={3C392B3C-67F8-4797-B999-214AB2CC4AE1}&DE={3333E21C-7666-4179-8AB2-E81233969770}](http://www.sanfordmaine.org/index.asp?Type=B_EV&SEC={3C392B3C-67F8-4797-B999-214AB2CC4AE1}&DE={3333E21C-7666-4179-8AB2-E81233969770})).

The bottom line is that sorting through all this information is difficult, and we would benefit if we were to hire a consulting company, such as Design Nine or Tilson. Hiring such a company will require funds, estimated to be \$10,000 to \$20,000. Where will the money come from? As discussed previously (see minutes of November 20 meeting), one possibility is a Town warrant article, for approval at Town Meeting next year (being explored by Pete Throop). Another possibility is a grant from the New Hampshire Charitable Foundation (being explored by Barbara Miller).

In addition to (possibly) hiring a consultant, we need to carefully read through and digest the numerous strategies that have been pursued--frequently successfully--by other towns, as described in the four documents provided by Carole (link above). Carole suggested that a subcommittee carefully read these documents, with each subcommittee member reading just one or a small number of them, because there are so many documents that reading all of them carefully would be a huge task. Jerry, Jeanne and Joel volunteered to to that careful reading, followed by summarizing. Jeanne also intends to seek help from Teresa Cadorette.

We also need to determine whether any of the proposed consultants would be interested in helping Peterborough, and how much that would cost. Carole volunteered to prepare a Request for Information (RFI) that could be sent to potential consultants.

We discussed the fact that the Town of Peterborough has many projects that require funding. How should the Broadband project be evaluated in competition with other projects? Pete suggested that priorities could be set by a town-wide forum. Priority setting should be a structured process that includes all town residents plus other stakeholders like the EDA.

The next Broadband meeting will be Monday, December 21, at 7:30 am in the Select Board Room.