

Town of Fairhaven

# Broadband Study Committee

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**April 21, 2020 7:00 p.m EST**

## **ATTENDEES:**

Sean Powers, Bob Espindola, Derek Frates, Jay Simmons, Jeff Christensen and Devin Cox, EntryPoint Networks

## **Absent:**

John Methia, Suzanne Dwyer

## **AGENDA:**

### **Review Minutes of March 21, 2020 Meeting**

Sean Powers called the meeting to order at 7:21pm and asked the committee if they had review minutes from the last meeting. Jay Simmons motioned to accept minutes Bob Espindola seconded the motion and the vote was unanimous.

Mr. Powers called for a roll call vote; Jay Simmons in favor, Derek Frates in favor, Bob Espindola in favor, and Sean Powers in favor, unanimous vote.

Sean Powers turned the meeting over to Jeff Christensen to go over the agenda.

### **April Project Milestones and Requests for Committee Members**

Mr. Christensen reviewed comparisons of different Broadband models and took a minute to go through the models to make sure all questions are answered if any about the things other towns and cities have tried. The report will have a section that summarized models and will show bias to the open access model it will be up to the committee to say if they adopt the report.

Bob Espindola stated in his opinion a decision will be made later how they would handle it and bring it to the Selectboard.

Mr. Christensen reviewed the Broadband model comparison projects, reviewed population data, and stated not all models have been successful pointing out take-rate but did state many of them were successful moving to fiber optics.

Pros and cons reviewed model competing against Comcast and the one most commonly successful municipal utility owned and operated single ISP. Mr. Christensen went on to say a number have followed the model and it is interesting to look at but Fairhaven can not follow the model due to not owning utility.

Bob Espindola stated that it was previously discussed that even though we are not one now we could become one.

Devin Cox told the committee one of reasons why this type of model is successful is because the utility already owns all equipment and infrastructure to drive down the cost and employees are skilled with working with the utility and outside infrastructure.

Dark fiber open access means the town would run all of the fiber optic infrastructure but the homeowner would choose their ISP provider. The ISP provider would be "put" on the ends of fiber once entered into a contract.

Some people are excited about this by increasing choices but it is not a sophisticated way to approach the problem. Mr. Cox said theoretically it increases choices but may not sometimes end up just being one dominant player. Mr. Christensen said the ISP's like this model because whoever does best marketing becomes the top ISP provider

Mr. Espindola questioned if the ISP looks for a contract if more providers were interested could you sign multiple contracts with multiple providers?

Mr. Christensen advised the ISP's insist on a contract because they are going to put a device at your home and don't want to take back used equipment.

Manual open access is another option to the customer. It will have a web interface to select the ISP but what actually happens is if the customer selects ISP x a message gets sent and a physical connection must be made to connect the customer to the ISP on a switch. Mr. Christensen went on to explain it's not a terrible thing but it's like the old phone switchboard days and the amount of time to do it is anywhere from 4 hrs to a day and they will not have to come out to your home.

This is an improvement over the dark fiber open access but still has network limitations. The other is the companies who have done this has taken a portion of fees and capping how low it can go.

Mr. Christensen stated Entry Point is biased over the Open Access model ISP . It is in the cloud and its software controls the ISP selections with no manual jack into a port. That would matter if you have an ISP outage you could quickly switch to another ISP.

Another model is a private sector owner operator open access. Lexington has seen improvements with this but when the town doesn't own the private network it can be sold.

Mr. Espindola questioned a Co-Op arrangement option. He was told it is an option but the town doesn't own it, a board would be chosen and then they would choose a single ISP or Open Access. The downside is some value in getting people to engage and the town can't get involved.

Mr. Christensen said he and Mr. Cox are trying to make sure any bonds are tax exempt to fund a co-op. Mr. Cox said it would be a benefit to the public where the town can own the backbone and give value to the co-op. One of the things is there are very state specific laws associated with co-ops. There would need to be some investigation into how to organize it and if it is possible. Likely need to research Mass laws and funding.

Mr. Espindola stated if we envision long term participation with the goal being rates, paying lower than now and what benefits there would be over a period of time.

Mr. Christensen said they will add the co-op as an option to keep local control over the infrastructure.

Mr. Espindola asked when cost modeling would be reviewed and if it would be after the town picks an infrastructure.

Mr. Christensen advised the committee EntryPoint will break down the Capital cost to build and the theoretical cost to operate it. Average cost seems to be close to \$70k. He stated they will model what they think the operational costs will be. Mr. Cox said when you compare private to public costs the open access costs go down once the infrastructure is paid off.

Another thing they will make a recommendation on is media. DSL is old infrastructure both on the internet and phone. At same time coaxial is what Comcast has now and then there is Fiber optic. If the town goes forward they would strongly recommend fiber. Fiber is 25x faster than the alternatives and government should not fund anything other than fiber. 5G depends on fiber so you don't have 5G if you don't have fiber.

Examples of strategic ideas: In terms of creating a vision for the town ask why is the town involved in this. Look at the list and see if there are any biases towards some items vs others. Mr. Espindola said the mitigation of risk needs to be a priority and participation of voluntary vs involuntary; It needs to be voluntary.

Mr. Espindola asked What does Solve digital divide imply? It was explained it has to do with economic status in a community, Ex: Can they access the internet? Mr. Espindola suggested this is a perfect opportunity to try and get someone from the school committee on this committee to see how this impacts the town of Fairhaven so we can ask them if they felt if its a pricing issue or if it was a bandwidth issue. Mr. Christensen said it would be both price and access.

Mr. Christensen went on to explain the nature of coax networks is that they are shared and when they are shared the speed will be slowed down to that and it may impact your speed of upload and download. If a child is trying to do something interactive for school and they have slow upload or download could this have an impact on learning and would fall under solve digital divide?

At this time due to the covid 19 nationwide this seems to be the problem with broadband and learning. Jay Simmons suggested maybe an open letter can be sent to the school committee asking the questions and seeing if anyone would be available to join the committee. Bob Espindola said there is an open seat on this committee and would be an opportunity to have someone join.

Mr. Christensen went on to review S.W.O.T analysis does anything jump out at the committee in putting in this infrastructure. Mr. Espindola said one threat would be not worrying about 5G, need to validate it will not be problem in Fairhaven to have this type of technology

Strength an economic standpoint what it could mean for the town both residential and commercial.

Weakness in a model where the town would need to operate as if it was a public utility don't know if we are set up for as a town to add that utility.

Mr. Christensen said he will send out an email to the group to get some more individual feedback for the report.

Middle mile is what will get you from Fairhaven to Boston or Providence. it will get the internet to one of those points. Mr. Christensen said he was at a meeting with Open cape and they have built a nice network with redundancy and pride themselves on up time. Open cape can get us to both RI and Boston will be added to the report. It is a higher price. Comcast is also an option.

Mr. Espindola asked if this is an additional cost? Mr. Christensen said it will actually show up in the ISP cost . Or the town buys a big pipe and the ISP buys shares of it. There are multiple ways to do this but will show up as an ISP cost middle mile portion would be approximately \$1.00-\$3.00 a month.

Mr. Christensen said he emailed Quincy and asked if they could share their Legal options document with us. They have not responded yet due to Covid-19 issues at this time.

Select neighborhoods for the cost modeling is done. Reviewed Map of town that will be used from the Assessor office. Mr. Espindola clarified we looked for a neighborhood that was representative to get the best cost effectiveness.

Derek Frates discussed Market Analysis and what has been set up; invoice collection, IT just went live. 100 townspeople to submit billing that will be sent to Entry Point minus personal information. I will also be added on Social Media. Mr. Espindola asked if we are ready to use social media to get attention to this and engage staff to participate and also add it to the Selectboard meeting agenda.

Mr. Cox said in May they will talk about a survey. We will try to gather info from the invoices and the survey because Comcast and Verizon will not provide any info and they want to get a good sense of speed and market share.

Mr. Christensen reviewed smart city/smart town . Going over Application Layer, Processing Layer, Communication Layer, Infrastructure layer. We like this model because it breaks the structure down. IF the town ends up putting in fiber optic infrastructure this is the next step to putting processes in place. A framework for where you go next.

#### **Action Items:**

Jeff Christensen will add the co-op models and language

Will use neighborhoods selected for cost modeling

Get Middle mile proposals from 2 more carriers for sampling options'

Follow up with Quincy to share legal with us

Send out email to get individual feedback on priorities and S.W.O.T

Derek Frates will be working with Erin to get the online system up to get invoices and socialize it

Mr. Espindola added if Mr. Christensen gets any legal information from Quincy he will coordinate with Town counsel to start next steps and will volunteer to reach out to the school department regarding any limitations with homeschooling along with business.

**Next Meeting:**

Next meeting on schedule for the 3rd Tuesday of May. The 3rd Tuesday would be May 19th and everyone is pretty flexible. Mr. Espindola will reach out to accommodate as many committee meeting members as possible. Try to have a resolution by end of the week and get it on the calendar.

Sean Powers asked if anyone had any questions. Bob Espindola thanked Jeff Christensen and Devin Cox for guiding us through this process.

Mr. Powers motion to adjourn the meeting, Jay Simmons seconded motion. Mr. Powers polled all meeting members, vote was unanimous and the meeting adjourned at 8:51pm