Broadband Implementation Committee

Public Meeting #2 of 2

7pm Municipal Office Complex

Tom Sevigney introduces Entry Point Representative Devin Cox

Devin presents PowerPoint

Devin opens the presentation with a description of what Essential infrastructure is considered. Each home built requires water, sewer and electricity, in our case septic and water are not provided by the town but they are essential to being able to live in a home. So this poses a question as to how important internet access is to any home in this day and age. Is the internet considered an essential service? In most communities the answer is a resounding yes.

Devin continues with a definition of public versus private design. Public design means you get the maximum service with minimal cost and Private design means the minimum service for maximum cost.

He follows with the statistics about other major service providers limiting or restricting access to service to lower income and poorer neighborhoods and communities.

Questions Posed by the Audience: Questions are paraphrase where needed for brevity

Q: Are "they" laying more cable?

A: "They" referring to the company EntryPoint, not yet but yes they will be running fiber cable to every home that opts in and ultimately to every home in town. The options were described by Tom as bonding versus non-profit partnership for low interest loans. The initial rollout will provide service to the homes that subscribe to the buy in. As more and more homes and businesses opt in, the prices will drop.

Q: What will be the final cost to buy the infrastructure? Is the plan a rent to own opportunity, meaning as we pay off the loan, we gradually work toward ownership?

A: Not with the non-profit proposal we have initially considered. We are trying to avoid asking the town to consider a multi-million dollar proposal by partnering with a non-profit who will take lower interest loans which after they are paid off, the town can then approach to purchase the infrastructure. We expect to not only be able to get grants to help fund this which will reduce costs as well. In addition, the more buy-ins from the community the lower the price will be.

Q: But if we get a town bonding we own the infrastructure after we repay the bond, why not go that route?

A: Because in light of the recent twice failed referendums, we feel the Board of Finance will flinch at the request.

Q: But shouldn't that be up to the voters to decide?

A: Ultimately the best cost benefit to the town is to use town bonding, it is more expensive to get a loan.

Audience member statement: I think the people should be asked.

Q: The bonds would be backed by the town's credit rating, correct?

A: Yes

Q: There is no way a monopoly could take this over correct?

A: No, we are building an open access "road" for all to use. It is in the best interest of those who choose to use it to offer competitive pricing or be priced out of the market.

Q: Is this similar to Eversource's delivery system using different suppliers to get the service?

A: Yes but the pricing is inclusive. It is not over the top to pay for the service. For approximately $70-75 per month the service includes the infrastructure, maintenance and the ISP provider. On average the ISPs are charging around $10-20 per month and are changeable with the click of a button in a matter of minutes.

Q: So if people sign up the price starts at $70-75 per month. But if more people sign up, the price goes down?

A: Yes, the costs just keep going down as more people sign up, as grants come in.

Q: Can Comcast and Frontier use our "roads"?

A: Yes they can offer their services on our network and compete with other services to keep pricing fair for all.

Another huge advantage to this open access network is that the ISPs do not have to be local. If they are online, they can offer service to customers anywhere in the world. Think of it in terms of Amazon or Google or any other search engine tool. You want to purchase an item, so you look for that item on Amazon, but you aren't satisfied with the price. So you look at Walmart.com or Target.com or another retailer. You go for that item at the price you wish to pay.

Q: So if we partner with a non-profit, they get the benefit of the grants the town goes out to get?

A: Yes they will get a small portion of the grant money, but don't forget, the Federal Government has directed $45 million to the State of CT. In that dispersal, each town will apply to receive a portion. This application process starts in January or February we think. East Haddam falls into an UNDERSERVED category and that should guarantee us a fair portion of the grant

dispersal. However, don't forget, each town is fighting for the scraps left over after the mega-businesses get their giant portions through aggressive lobbying at the State and Federal levels. It's the reality of how our "system" works.

Q: If we reach the buy-in rate of 60%, how long will it take to see the installation happen?

A: We think, after our education campaign, which ends in March, it will be about 1 ½ years to get the Infrastructure built. This is an estimate that can be further detailed after the engineering studies to create the mapping needed to determine Poles versus underground service lines. Obviously underground service is not as easy to run. After the engineering studies we will have much more firm numbers to nail down rates.

Q: Are the underground lines real?

A: Yes a real line will run right to your house either by pole or underground. This typically follows the type of connections you presently use. It then comes to the connector at the house and then to a new box similar to the modem or router you currently use but with the technology that speaks to fiber signals.

Q: Technology is reliably unpredictable and disruptive, how can you predict this will be more stable? I have a small home in Ohio and use a T-Mobile hot spot which provides me with super fast connectivity and I can do everything off that hotspot. What happens if that same opportunity becomes available to East Haddam and people jump off the bandwagon to get one of these super fast hotspots instead? Who will foot the huge bill for that install if people back out?

A: So, there is no way a cellular service will ever beat Fiber Optic cable in terms of speed. It would be a long time before we ever see that happen. We are talking about the speed of light. The only thing holding back the speed is the technology that runs it. Everyday technology is improving and it is just a matter of time before fiber replaces all communication signals. In addition to that technology advancement, cellular service has obstructions. And to further this point look at the trajectory of internet service. It took 30+ years to develop the internet from Dial-up to Broadband. By building our network now while the opportunity is here, we are setting a baseline of technology that can only grow and expand as the future requires it. In addition, the town can have free Wifi in public spaces, including outside spaces like parks.

Finally, if the people back out the non-profit gets stuck with the bill.

**Bruce's term

Devin followed to reinforce the fact that this is an opt-in plan our town is considering. There is no obligation. The town needs a certain percentage (60%) of homes to make this a viable opportunity.

This goes back to the initial conversation-its a matter of monopoly deciding what you get, how much it costs and whether they feel that doing upkeep service is in their best interest. Private versus municipal ownership. From 1995 to about 2007 there was a tremendous consolidation slide. Comcast and Cox bought a lot of the smaller cable services. Comcast gets about $121billion

a year, Cox is at around $12billion per year, Charter and Time Warner also did this, then Charter bought Time Warner and created the biggest monopoly yet. This left us with 3 giant companies. Now experts say Fiber will replace Cable, Fiber is able to do more and will make Cable obsolete. Then AT&T partnered with Blackrock to build the biggest Fiber network. They are actively installing to provide whole communities with service. However this will come at a cost. Fewer agencies mean less competition which keep the prices high. They have nothing to lose.

The following questions were emailed and sent to Devin prior to the meeting.

Q: How can you guarantee the ISPs will join our network?

A: Basically it is the same guarantee as how many people shop online. The ISPs want your business. We can't guarantee who they will be but they will be there. Right now both Sherburne, NY and Ammon, ID have this system. Each have either 3 or 5 ISPs respectively, each have at least 3-5 other ISPs asking to join. We can't guarantee the ISPs won't change either but there will be choices to have. Think of a business called Pets.com from years ago. They may not exist still but Chewy exists and other pet store options exist. It is evolving and ever changing.

Q: Why do you insist our network will be faster and more reliable than the monopolies services?

A: Because our network is dedicated rather than shared service. Meaning that with Comcast your line is a shared line with everyone on your street. So when the kids come home and everyone is home from work, the signal is divided among the users, slowing speed. A dedicated line to your home means that it doesn't matter how many of your neighbors are online, your service is dedicated to your home exclusively.

Q: If I cut the cord (Leave the use of monopoly providers) do I need a Smart TV to stream shows?

A: No, like now if you don't have a Smart TV, you purchase a Roku or Amazon Firestick or another of the multiple options out there for streaming services. And unlike the cable company, who charges upwards of $80 per box per TV, this one time purchase saves a ton of money. And for those with bundled plans, concerns about multiple billing for each service (TV, Phone, Internet) can be streamlined by putting everything onto a credit card where it is billed once per month. In addition, telephone services for those still having landlines, can be found online. Using a service like Vonage which is a VoIP service (Voice over internet provider) or a one time purchase device like Ooma for a one time fee of about $80 to continue landline use.

Q: If the system needs repair, will the service be as good a Xfinity who come out the same day?

A: Yes, we will contract with a repair and maintenance company for fast and reliable service. And just like Xfinity or Comcast, these will be 3rd party contracts. The name on the truck is not the provider performing the repair.

Q: How can we be protected by the big monopoly taking us over?

A: Because we are setting up an open market for 100s of companies to compete in. It wouldn't do for At&T to come on and demand a monthly fee so far out of line with other ISPs.

Q: Is this as secure or more secure than the traditional internet connection?

A: An example of how servers usually work is that if you send an email from your computer to a friend in town, it leaves your house, travels to Hartford and then gets to your friend across town. In fact, we tested an email sent from our main office in Ammon, ID to another office across town. The message was traced from Idaho to Washington, from there to Oregon and on to Salt Lake and finally made it to that other office in Ammon. At any point on that trail the message could be intercepted, but with this network you can set up private networks which protect you far better. It would be similar to healthcare encryption protection. Healthcare must use secure encryption on protected server networks. You can build these secure networks right from your home. This is why we chose to build an Automated Open Access System.

Q: Will there be tutorials to help us?

A: Yes!

Devin followed to reinforce the fact that this is an opt-in plan our town is considering. There is no obligation. The town needs a certain percentage (60%) of homes to make this a viable opportunity.

A: This goes back to the initial conversation-its a matter of monopoly deciding what you get, how much it costs and whether they feel that doing upkeep service is in their best interest. Private versus municipal ownership. From 1995 to about 2007 there was a tremendous consolidation slide. Comcast and Cox bought a lot of the smaller cable services. Comcast gets about $121billion a year, Cox is at around $12billion per year, Charter and Time Warner also did this, then Charter bought Time Warner and created the biggest monopoly yet. This left us with 3 giant companies. Now experts say Fiber will replace Cable, Fiber is able to do more and will make Cable obsolete. Then AT&T partnered with Blackrock to build the biggest Fiber network. They are actively installing to provide whole communities with service. However this will come at a cost. Fewer agencies mean less competition which keep the prices high. They have nothing to lose.

As far as attracting businesses to town, having affordable, high speed, reliable internet will attract and retain business. Major companies like Comcast have a household rate and a business rate. Usually the business rate is 3x higher than the household rate. Especially because the idea that a company uses more bandwidth than a home is considered the reason. However a home streaming Netflix will use way more bandwidth than a business would. Why do they charge a business more then? Because they can get away with it. They offer allegedly more service options and other

incentives and then up the price. But owning our own municipal broadband service would be an attractive incentive for businesses to consider East Haddam.

Q: Devin, you mentioned that Frontier has reliable, symmetrical 1g service. Is this true?

A: Yes but it must certainly be limited. For example it may only be available to certain types of mainstream neighborhoods and communities in urban settings and only there in pockets and not blanket wide. There is doubt this is available in suburban or rural areas especially.

Q: Can the ISPs dial down service

A: Yes, that is called throttling and you should have policy that dictates what ISPs can and can not do on your network.

Q: Will we be the small guy that gets swallowed up by the monopoly?

A: Yes, but only if you choose to let it go. Any one of those monopolies would love to buy your network if you choose to let it go.

Q: I was especially interested to hear you say the town can control usage and allow for EMS to override public use for emergencies.

A: Yes, that is called QOS-Quality of Service and it is common for municipalities to have that in place.