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## Public Works Department City of Bellingham

**Broadband Advisory Workgroup**  
Draft Meeting Notes  
Tuesday, December 7, 2021  
6:00pm – 7:30PM  
Zoom

Workgroup Members in attendance: Linda Fels Kristopher Keillor  
Michelle Kopcha Milissa Miller  
RB Tewksbury Terry Davis

Ex Officio Members in attendance: Michael Gan  
Gina Stark  
Atul Deshmane  
Kurt Gazow

Members excused: Spencer Moore  
Steve Spitzer

Ex-officio excused: David Namura

Guest Presenters: Jory Wolf, Magellan Advisors LLC  
Greg Laudeman, Magellan Advisors LLC

City Staff and Facilitator in attendance: David Roberts, Facilitator  
Eric Johnston, Public Works Director  
Don Burdick, Information Technology, GIS Services Administrator  
Rush Duncan, Public Works Webinar Support

1. Welcome, Introductions,  
Agenda Review, Approval of  
Notes

**Eric Johnston:** The library sent a notice about the survey to around 30K people on their email list. Will connect with different groups as discussed previously.

2. Administrative & Technology  
Items Update

Don Burdick is replacing Marty Mulholland.

**Kristopher Keillor** will be giving an update to City Council on 12/13/2021.  
**Broadband Workgroup Member:** recommends encouraging Council to watch previous meeting recording related to ex-Officio presentations to increase understanding of factors and entities involved.

3. Magellan Advisors Update

Survey Update:

**Greg Laudeman** reported that the survey is up and running and is getting a fantastic response. Still having issues/concerns with speed test: internal checks reveal it is working well.

- They been having unexpectedly high results on Comcast Multi-gigabit connections (such as 3 gig upload speed) which indicates Comcast Pro

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is being used. The normal 2 gig upload speed is occasionally surpassed.

- They received excellent GIS data which will be the foundation of the design and analysis work and we anticipate starting in the new year. We are well positioned to take this study to the next level.

**Question:** is there a way to confirm survey responders are within City limits?

**Greg Laudeman:** Yes, we can run an analysis. The data cleanup process includes limiting to only within the city limits.

**Terry Davis** shared that Comcast offers Comcast Pro. It is not readily available to everyone, but some customers are choosing that service as well as Comcast Business for their residence. We have a lot of options in terms of tiers and service. Let's make sure we can discern between a wireless connection that is limited by the piece of equipment and not necessarily the service level.

**Eric Johnston** pointed out that the nature of these surveys is that there will be outliers on both ends. Critics of the survey will point to the one outlier and point to the entire thing as being incorrect.

**Greg Laudeman** noted that they are getting both geographic coverage and coverage over time. In theory, different times of day and different traffic patterns, with a very high number of responses, will be averaged in to the results.

**Question:** Are we looking at the data from Bellingham urban growth area?

**Greg Laudeman** shared they could possibly map that to addresses if there is an easy way to get that information. **Don Burdick** shared the City has address points if Magellan wants to get to that specific level of analysis.

**Question:** Is this (the survey) all online? **Greg Laudeman:** Yes. **Eric Johnston** said he would check with library staff to see if there were any paper responses to the survey.

**Greg Laudman** pointed out they are getting the quantity of responses that nominally qualify as statistically reliable. They will compare the results later in the study with the demographics of the respondents and the census demographics. The survey responders tend to be better educated, older, and there can be a systematic bias from folks that have internet and care about it.

**Comment:** There may be a potential systemic bias within the speed test because it is not a load test. This should be clarified to the public.

Business Model Update:

*(Greg Laudeman shares a PowerPoint on different broadband business models)*

**Question:** Can you explain the differences between infrastructure and open access? **Greg Laudeman:** The "infrastructure only" model is hands off. It is only about leasing an asset, not promotion. The "open access/wholesale" model

is more of an economic development strategy. It can range from relatively hands off to technically advanced and is more of an active model.

**Terry Davis** suggested the study include success and failure rates of the different broadband business models. He noted that the failure rate is significantly higher as you move up the ladder. He pointed out that Tacoma prided itself on its connectivity and it still failed. **Greg Laudeman** shared that he has worked on systems that were successful and others that imploded. He noted there are complex factors that go into whether communities are successful. It also depends on how you define success: losing money vs. digital inclusion; or supporting community institutions. These must be part of the consideration around which model is chosen. **Greg Laudeman** noted that Tacoma could be a case study, but it really comes down to leadership and a unique combination of technological savvy and strong political business leadership for success.

**Question:** How common is it for communities like Bellingham, that have good internet service, to go into a public option, direct retail to the consumer. That seems counterproductive. **Greg Laudeman** responded that it is very uncommon, but it is also uncommon to have a market with Bellingham's level of service. The marketplace is rapidly evolving. There are a series of upcoming wireless technologies being pushed by Facebook and Microsoft, for example. It will be a mix of different types of services and interesting to see how the marketplace evolves. It is very unusual to see a municipality or local government wade in where there is a vibrant marketplace and high level of service. But that is changing. Another consideration is to determine where a local government fits in the marketplace. Fiber is a real asset but also critical infrastructure. It often becomes a public policy consideration. Does the public have an interest in investing in this infrastructure? Is this a critical asset in your community? If you want businesses to invest in your community, shouldn't government be investing also? These are important questions with challenging answers.

There was a conversation about the original intent of the workgroup. A suggestion was provided to include a review in an upcoming meeting.

**Greg Laudeman** shared that telecom has traditionally been inwardly-focused with market takers vs market makers. Telecom companies can't rapidly change their locations and how they run their businesses. The big difference with community broadband is that it is a grassroots community engaged local process.

**Jory Wolf** pointed out that Bellingham's situation is not a question of access - the bandwidth is good. We can't speak to reliability and customer service without the survey. The mapping indicates adoption opportunities, not just access. There are a large number of households within Bellingham that are underserved with lower than 25 megabits which meets Federal standards for underserved. The infrastructure already exists. It is about providing discounted rates through service providers or providing other digital equity opportunities.

**Comment and question:** As a person who built fiber in many communities along the I-5 corridor, the biggest hurdles are permitting and the hoops to get the fiber installed in the poles or in the ground. The communities could have had policies which help facilitate that work, to avoid passing along the costs along to the customers. Do the residents understand this? **Greg Laudeman**

responded that it is not for lack of trying. This comes up with every client Magellan works with. Broadband friendly policies and managing your underground spaces is very important. There are a range of issues and options for improving local policies. To address your question, we push this on our clients. But at the end of the day, changing policies and practices in local governments is extremely challenging. It takes strong leadership and strength in both formulating and executing those policies.

**Comment:** Looking at Resolution 2020-31, the purpose is to explore the possibility of municipally owned infrastructure. We have heard that conduits are infrastructure. We've heard that dig once is not a legal obligation. We've heard about joint trench policy and expedited permitting. These can help build a better system. Magellan Advisors is doing a great job of showing our options.

**Greg Laudeman** shared that this technology is moving faster than ever, particularly in the wireless space. You should also think about cyber security. The more you are online the more you are exposed to these threats. As more folks are getting connected the threat space is changing. There is a bigger risk vs. reward than might be immediately perceived.

**David Roberts** asked if Magellan plans to review the City's current policies to see if they support broadband expansion. **Greg Laudeman** replied that they did not include a public policy analysis in their contract, but can provide a best-practices and "broadband friendly policies" to the Workgroup. **Jory Wolf** asked the Workgroup to let them know if there are specific policies to address with our best practices document.

#### 4. Discussion Questions

**David Roberts** led the group in a discussion based on questions he sent out earlier to the Workgroup.

*(Group discussion)*

##### 1. **What have we accomplished so far?**

- a. We have worked on definitions. We have focused the conversation on what is important for the City.
- b. We have enlisted advisors and consultants. Success will be shown over the long term. Leadership in broadband will change as technology evolves.
- c. We have come a long way in our understanding based on presentations and conversations with other cities. The final graph in Magellan's presentation was helpful. Leadership to champion changes is important.
- d. Finances have to be redistributed based on what is happening in a community. We can choose a model anywhere on the Magellan graph. We have to be aware of what is currently available and what the underprivileged need to be in a position of equity.
- e. Wireless technologies rely on a physical backbone. Nothing on the horizon will replace fiber. Trying to figure out where Bellingham can fit in that continuum is our next big step. The business model and where we go from here could be our biggest discussion.

##### 2. **How has the focus of the group changed from the earliest meetings?**

- a. At first, we were trying to figure out what the resolution was asking us to do. We were also focused on hiring a consultant. We have worked on the definitions some. We need to decide how we are going to make our decisions for recommendations.

- b. When we started, we were looking at a range of questions – do we want to be the 21<sup>st</sup> C technological city etc. I sense we are now focused on meeting the needs of everyone in the community at a very basic level.
3. **Where do we have agreement, and not?**
- a. There are strongly held opinions about business models and where the City should position itself. My opinion is that it is better to own (a broadband network) than rent.
  - b. We do not have to agree because we are not making this decision. The City of Bellingham’s decisions will be made by the voters, the City Council, and the Mayor. It is up to the voters to make their position clear, and elected officials to make their platforms clear.
  - c. I hope we can agree to disagree and present a variety of options to City Council, so they can make the best decision based on the will of the voters and their position. We don’t have to agree.
  - d. The strength of the leadership is true, but they can’t be strong for every single issue the City has, from housing, to food, to Internet, to schools – all of the things the City has to focus on. The interest of the voters is what is important. There is only so much money. Our leadership changes every 2 to 4 years and people come and go.
  - e. Full retail is a very serious, long-term endeavor. I am very enamored of Magellan’s business model graph. As we put our report together, we might be able to evaluate and offer advice on each business model to give City Council a fuller picture of what we considered.
  - f. We have agreement on serving the low-income residents of the City.
  - g. Have we formally adopted the State’s targets for 2028 or are we leaving it up to some arbitrary speed? What is the level of speed for the lowest level of service? David Roberts: The speed question has not been resolved in the definitions.
  - h. Referring back to the resolution, it does say the FCC 25 down 3 up is increasingly outdated. It is within our mission to determine a better standard for Bellingham going forward. The state has adopted a new standard 100 by 20, the law already changed I believe to make that the new definition. Gina Stark: 100 by 20 and 100 by 70 (unserved vs underserved) has been passed by the legislature, there are two different categories.
  - i. The State standard might be different by the time we prepare our report. We should recommend that the City meet the State standard. This should be discussed further. Several members of the group are not here. I would like to include them in the conversation. David Roberts: We can revisit this when we work on the definitions.
4. **Is there anything anyone would like to discuss in the last few minutes?**
- a. This discussion time is important to include going forward. Perhaps we should ask for questions to be submitted before the next meeting, and then ask those in the next meeting.
  - b. Are we going to hear an update from Gina Stark or Atul Deshmane? David Roberts: Gina Stark and Atul Deshmane can present an update on collaboration between Port, PUD, and the county. They will also do a project update and show the model they are using.
  - c. Updating the definitions will wait until we get more information from Magellan.

5. Next Meeting Agenda

Update from Magellan

Update on the Port and PUD collaboration (Gina Stark and Atul Deshmane)

Discussion time. (Submit questions to David.)

Meeting adjourned 7:50 PM.

**Next meeting scheduled for Tuesday, January 4<sup>th</sup>, 2022 at 6:00 PM via Zoom or possibly in person at the Fairhaven Library (Fireplace Room)**