Public Works Department
City of Bellingham

Broadband Advisory Workgroup
Meeting Notes
Tuesday, July 6, 2021
6:00pm – 7:30pm
Zoom

Workgroup Members in attendance:	Linda Fels Kristopher Keillor Michelle Kopcha	Milissa Miller Spencer Moore Steve Spitzer RB Tewksbury
Ex Officio Members in attendance:	Atul Deshmane Terry Davis David Brinn Michael Gann	Kurt Gazow David Namura Gina Stark Allen Meeks
Guests:	Jim Lemberg, City of Anacortes Russ Elliot, Washington Dept of Commerce	
City Staff and Facilitator in attendance:	Eric Johnston, Public Works Director Marty Mulholland, City Information Technology Director Rush Duncan, Public Works Webinar Support David Roberts, Peak Sustainability Group, Facilitator	

1. **Welcome & Approval of Notes**

   David Roberts started the meeting at 6:00 PM. Notes will be re-sent for approval.

2. **Administrative and Technology Items Update**

   Eric Johnson interviewed two consulting firms with the help of Workgroup members Steve Spitzer, Linda Fels & Milissa Miller. All were agreed on the choice of consultant. An announcement of selection will be made shortly.

   On July 26, Eric and Kristopher Keillor will make a presentation to council on progress of our Workgroup.

   We expect an announcement from council regarding in-person meetings on July 12. We don't expect to meet in-person before September. The August meeting will be online.

3. **Speakers – Jim Lemberg, City of Anacortes**

   Jim Lemberg, Municipal Broadband Business Manager for the City of Anacortes, attended our meeting and provided some interesting background on the work Anacortes is doing to develop a City-wide broadband service. He covered the history of planning and deployment and the current state of operations. The recorded version of the presentation and Jim's presentation slides are on the website.

   After the presentation, the workgroup had a number of questions for Jim. His answers are shown below in italics below.

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- Was the infrastructure redundant compared to private carriers? *Yes, geographically diverse paths as well as upstream redundancy was established.*

- Did you get collaboration from private enterprise? *There was no collaboration. Very early on the City asked a local service provider to partner, but that entity was concerned that they would not be able to recover their invested capital fast enough. This led to the City to explore building a network themselves and asking smaller providers how they would operate a network they owned. They weren't comfortable with any answers they received.*

  Terry Davis added that Comcast replied to their RFP. At least one other provider had fiber and probably all three service providers have some fiber in their network.

- In your survey of 1600 responses – how many surveys and what was the response rate, how did you administer the survey? *The City recruited a few dozen volunteers to conduct a door-to-door survey of neighborhoods. There are about 7,500 households in the City and 1600 surveys responses – a very high response rate due to the survey design and approach.*

- 780 current customers are generating 15000/month, or $64 per customer. Does that meet your revenue stream goal? *Most of us feel we are behind where we would like to be, but we are ok with where we are at. The buildout looks like 2023-2024 timeframe – partly driven by availability of materials.*

- Do you have a more specific date as to when the project got underway? *I came on in April of 2019, first staff member hired several months after, reasonably staffed by early 2020.*

- Does the City have a dig once policy? *No, but staff work closely with other City departments, particularly the Streets group on paving schedules. In some cases we can get our fiber into the ground before a street gets paved. We have a "dig the least amount of times policy."*

- How are you linking the 4 different areas of town together? *We maintain our network core more or less in the geographic center of town. The optical line terminal (OLT) serves each terminal, fed with a 10 gigabit trunk line off of our router. The OLTs then transfer to GPONs in a level 2 data protocol.*

- So, at a boundary area, they have their own OLTs. Do you have parallel conduit? *In our telemetry buildout, they put 144 fiber cables where they only needed say a dozen. The rest are available to us. We use those surplus fibers for our core distribution to each area.*

- How long does someone need to be in office for when they leave for things to keep moving? *Our current Mayor started her campaign in 2014. In the Fall there will be an election of a new Mayor who will start 2022. Fortunately, the two candidates running are both current council members and part of the 3 member "Fiber Committee" that meets monthly. We feel optimistic that we will have strong support among the elected officials.*

- How did you prioritize the pilot installation? *For us, prioritizing meant that the backbone could be built aerially and the drops as well. In Anacortes, anything built after 1970 had to have utilities underground. So, ease of installation was the main criteria, not underserved areas. We have been careful not to use such criteria. The order we are extending the network is purely based on what makes sense to us logistically.*

- When do you hope to recover your investment? *We plan for 15 years before we recover the entirety of our investment and we are on track.*

- What kind of backup equipment and staff do you have? *We only have one router, but it is internally redundant – it is a highly reliable piece of equipment. We have outsourced our call center, when there is a customer issue, City staff is deployed. Most days require some sort of customer visit. We have 24/7 coverage of network technicians and rely on our outsourced technicians when needed. We will never be large enough for our own 24/7 call center or an on-call 24/7 technical response. It is an integrated model from the dollar side.*

- Does the City charge its fiber division franchise fees for the right-of-way? *The fiber division does not pay a franchise fee. We are careful to require the fiber division to apply for and acquire all the different kinds of permits to use the right-of-way.*

- Where is the capital money coming from, and can you speak to the grants? *The City council allocated $3.1 million to do the initial pilot zones. From that point, the funding was a mixture of revenues that the fiber project generated itself, and then further draws from the City's reserves. Right now, we are drawing on a line of credit from a local bank. We received a grant from US Dept of Commerce Economic Development Administration, but the grant dollars will be difficult to use. There was also an initial grant related to putting in the backbone into the waterline.*

4. Speakers – Russ Elliot, Washington Department of Commerce	Russ Elliot, Director, Washington State Broadband Office at the Department of Commerce, provided an excellent overview of state and federal funding programs and policies being implemented out of Olympia. Russ is working with many communities around the state to help them meet their broadband needs. The recorded version of the presentation and Jim's presentation slides are on the website.

After the presentation, the workgroup had a number of questions for Russ. His answers are shown below in italics below.

- What does it take to make a public private partnership work? *This is not an easy discussion! Public/private partnerships are easy to talk about but not easy to create. I am encouraged by this robust discussion and the enthusiastic participants!*

- *A new hire, the Director of Digital Equity, is expected to be announced soon.*

- If 150 megabits is the goal, is that adequate for 2028? Has the state short-changed the public? *150 symmetrical is an aggressive goal, our networks are capable of scaling, that is future proof infrastructure. Most technology that is prevalent is fiber. We want to be technologically agnostic. We are in the emerging technology phase. 150*

symmetrical will help us under promise and over deliver. Underserved will probably hit a 100-megabit threshold soon, which will open up the state.

- What are the biggest last mile issues for underserved communities*? You can get into right of way and licensing issues, but it is mostly a cost or a return on investment issue. As the under- or un-served population wanes, there is a break-even point where public money has to come in to offset the cost.*

- Is an open access model a good way to solve that issue? *This is a delicate subject, some open access networks work fantastically, others providers go down the tank fast. It is a double-edged sword. One of the challenges is there becomes a great service desert around publicly served areas where no private entity is going to provide service and it is too expensive for the public network. It requires an obligation to focus on reaching out to serve these communities. there is not one right way. It comes down to how it is planned and how it is done. Some PUDs have good financial coffers and can invest in public networks due to their capital capacity. These are open networks with good competition. I've also seen them go away as fast as they come.*

- You mentioned the FCC continuing the Broadband Benefit Program. What's the path to continue? *I'm on the phone every day with Congressional representatives and speak with FCC Commissioners. You have to apply pressure. The challenge is how they fund it. We need to run the effort from the Federal side - states cannot create a unified national program.*

- What is the state's opinion on environmental impact of broadband infrastructure? *We are blessed to be in a state with green energy, but we have to continue to invest in renewable energy. I don't have a good answer, but will think on it.*

- Are you familiar with Kentucky Wired situation? They just finished 120 counties all connected through fiber with 3,000 "middle" miles. *The last mile will be the challenge. There is no right answer. It will take creative thought. Anyone that tells you they have the right answer is wrong. It is a delicate conversation of public and private that is unique to each situation and geographic location.*

5.	Definitions Discussion?	David asked the group if it was ok to hold off on discussing the Equity definition till next meeting and the Workgroup agreed it was ok.
6.	Items for next meeting	David asked about agenda topics for the next meeting. Eric said he will provide an update on the Consultant for the Municipal Broadband Study. David suggested the group continue the discussion on Equity and define what it means to the group. He also suggested reviewing the other definitions in context.
7.	Check-in on if meetings are meeting your expectations?	David asked the Workgroup for two words that describe the Workgroup's progress to date. Here are the responses: • Kristopher Keillor: Knowledge and knowledge • Steve Spitzer: Feels slow • Linda Fels: Clarity and impatience • R.B. Tewksbury: Exciting opportunity

- Spencer Moore: Steady work
- Michelle Kopcha: Progress and standstill
- Milissa Miller: Interesting and thoughtful
- Marty Mulholland: Impressive community
- Eric Johnson: Deliberate and awesome
- Atul Deshmane: Open access?
- Gina Stark: Thought-provoking and intuitive

Meeting was adjourned at 7:40 pm.

Next meeting scheduled for Tuesday, August 3rd at 6:00pm via Zoom