

FLATHEAD COUNTY BROADBAND WORKSHOP

QUESTION AND ANSWERS

6-13-18

1. Should we be planning for 5G services as part of our broadband discussions or are rural and small towns destined to be left behind in a 5G world? *(Answer: Towers that provide 5G service must have fiber and electric power connections. Finding sites for these towers in new areas is difficult and costly so for now 5G service will be primarily in urban areas).*
2. What does “Partnership” mean to you (provider panel)? For example, in delivery broadband how can you partner with the community (vs. make a sale)? *(Answer: Providers routinely partner with each other to lease different parts of each other’s networks. Communities can partner with providers by installing conduit or dark fiber that can be leased to providers to deploy their networks. Communities can also streamline permitting processes, reduce fees and update construction standards.)*
3. What I am hearing is that CenturyLink will upgrade services for multi-millionaire CEOs (Ashley Lake example is the president who owned American Funds.) How do we serve the average Montana entrepreneur or small business owner?

What are the solutions that are being provided to CFO’s and CEOs workers that are relocating to high end homes, such as Ashley Lake and was mentioned by CenturyLink?

Please explain the upgraded CenturyLink services and locations where this is available. Are other locations going to receive the upgrades as well?

I have heard clients mention an “upgraded CenturyLink service” – Please explain this upgraded service, availability, locations, and maximum upload/download speeds.

(Answer: CenturyLink is working to increase capacity in areas where they have “exhausted service” and are unable to add new customers. They hope to resolve these issues this year. Charter has recently upgraded service to 100 mbps download speeds. Charter, MontanaSky and Velocity are expanding wireless networks to serve rural residential customers.)

4. Pleased to see Kim Crowley. What needs do you see to: 1) Cross the digital divide? 2) Make broadband access available to all – especially the bottom 1/3 of the ladder? *(Answer: The library has free wi-fi that is available 24/7. The library has public access computers that are free to anyone. The library offers digital literacy classes.)*
5. Open Access Model: Kalispell Regional Hospital (KRH) has a fiber line that follows the tracts to Libby – maybe elsewhere. Could the Open Access Model work with this for the public? *(Answer: The Health Information Exchange of Montana (HIEM) is a health care consortium that has a fiber network that extends from Libby, MT to Conrad, MT. KRH is part of the consortium but does not own or operate the network. The grant that funded this project limits the use of the fiber to consortium members and is not an open access network.)*
6. Have providers identify 1) Fixed wireless licensed and unlicensed service 2) Digital subscriber lines (copper) 3-mile limit 3) Hybrid Coax (Charter) *(Answer: Providers indicated that they will work with communities on local broadband efforts. Information on service areas can be compiled as part of these community planning processes.)*
7. In the smart funding environment, what impact does having an incumbent provider have in on community’s ability to have access to those grant funds? *(Answer: Grants for infrastructure from USDA – RUS are limited to rural areas with telephone coops or independent telco providers so these are not available to CenturyLink. EDA, Big Sky Trust Fund, USDA Rural Development planning grants do not have these limitations.)*

8. With the recent rule change from net neutrality to open Internet, FCC Chair is stating that the new rules will help rural communities because small companies can compete. How can we leverage the new rules to the advantage of Flathead County and each of our communities?

Please speak to the importance of net neutrality in the context of critical infrastructure and the digital divide (equitable access)?

(Answer: There is still much uncertainty about the impact of the net neutrality rule change. Without net neutrality, providers will be able to prioritize Internet traffic, and this may result in “fast lanes” for large users. This could impact the ability of small companies and businesses to innovate and compete.)

9. Does the utility model have to rely on a city power and light company? Could a town water/sewer utility be the entity for the utility model? *(Answer: Yes – A water/sewer utility could deliver broadband service. Almost all examples of the utility model, however, are with electric utilities. Also, some states have restrictions on the ability of municipalities to provide broadband services.)*
10. What funding sources are available for small communities like Bigfork to build out infrastructure? What type of entities can seek funding (nonprofit, city, community councils)? *(Answer: PowerPoint has links to grant resources. Communities can also leverage budget funds that are already being spent on broadband services to build their own networks. Inventory assets (public buildings, water towers,) that can be used to co-locate towers for wireless services. Local banks may provide financing for broadband improvements.*
11. Does the library have plans to increase broadband speeds to 1 Gig service? *(Answer: Would like to upgrade but currently it is not available.)*
12. Is broadband over powerlines a viable technology for Flathead County: *(Answer: Flathead Electric explained that the technology is possible but is not comparable to the capacity from a fiber network.)*
13. Can the HIEM dark fiber be leased to other providers? Can HIEM share space in the conduit? *(Answer: The funding that was used to build the HIEM network limits the fiber network to only health care consortium members. Most of the fiber network is aerial so that there is not conduit space to lease.)*
14. CenturyLink has fiber in many places, but in few places does it actually go to the home? Why? *(Answer: Most of the CenturyLink fiber is the backbone and middle mile. Most homes are still on copper connections. There is fiber to the business in some areas of the county.)*
15. What are the privacy and cybersecurity issues related to a public utility model or open access model for creating a network infrastructure (like Bigfork)? *(Answer: The fiber strands are dumb pipes. The cybersecurity concerns must be addressed at the user/consumer end.)*
16. While understanding that the residential market is challenging, is there & how can we service the remote workers who need more services/upload speeds than residential but less than enterprise market to attract ISPs. *(Answer: Charter and CenturyLink continue to upgrade networks to increase capacity and offer higher speeds. Velocity is a wireless company in the Flathead that is working on wireless solutions for the hard to serve areas in the county. Charter-Spectrum is planning to expand into wireless services.)*
17. How do we address the issue where there is broadband availability, but the ISP does not allow access – i.e. the ISP states they will not provide the service even though the last resident at that location had service or when a different service was tried and the resident can't go back to the former ISP?
- CenturyLink residential connection is being disconnected after transfer of ownership. Why and how can this be avoided?

(Answer: CenturyLink has some areas in the County that are “exhausted” and there is not capacity to add additional customers in these areas. They are working on this issue and anticipate that most of those issues will be resolved this year.)

18. Who are the contacts for each provider that myself and my clients can contact to get a written commitment of the Internet service that is provided, for a specific address and location. Please provide a contact list.

Who are the contacts for each provider that myself and my client can contact to find out exactly what is available for that specific address and location, and to receive something in writing that will guarantee the speed and availability of service:

(Answer: CenturyLink and Charter have websites that will indicate if you can get service. MWED will provide the e-mails of the panelists in a follow-up e-mail.)

19. Who is responsible for the massive outage we just experienced in the Flathead? Why are we so vulnerable to a tree falling on a fiber line? We hear that we have redundancy, but that doesn't seem to be true.

Answer: Access Montana is the contractor for Charter that was responsible for this part of the fiber network. At 8:00 am on Sunday morning a tree fell on the line. They do not have a circular ring in that area but do have two fiber lines. The fiber for Charter on the east side of Flathead Lake is aerial fiber. The tree took out both cables and it resulted in a widespread outage throughout most of Flathead County.. It was noted that there should be "path redundancy" where there are two different physical paths out of the county. CenturyLink said they have fiber on both sides of the lake.

20. Charter reaches customers within town. How does Charter plan to connect to rural residencies? *(Answer: Charter is planning to start providing wireless services.)*

21. Why are upload speeds so much lower than download speeds? *(Answer: DSL delivered over copper lines have a finite number of channels. The provider must divide those channels to be either download or upload channels. Since most consumers are streaming content/video to their devices, most of the channels are dedicated to download speeds.)*

22. How effective is the Universal Service Fund as far as actually getting broadband actually hooked up to the end user? I have heard that fiber gets built in rural settings, but never gets utilized by end users. It just sits dark. *(Answer: There have been recent changes to the Universal Service Fund which may result in funds being available to CenturyLink for broadband deployment in underserved areas. When providers install fiber they overbuild the network in order to accommodate future growth. There is dark fiber now, but it is anticipated that this will be used as communities grow.)*