CLACKAMAS COUNTY BOARD OF COUNTY COMMISSIONERS <u>Policy Session Worksheet</u>

Presentation Date: July 10, 2018 Approx. Start Time: 1:30 Approx. Length: 60 min.

Presentation Title: Approval Granting Clackamas Broadband eXchange (CBX) the Authority to Explore Internet Service Provider Options.

Department: Technology Services

Presenters: Dave Cummings, Duke Dexter, Dave DeVore

Other Invitees: Laurel Butman, Chip Larouche (City of Lake Oswego)

WHAT ACTION ARE YOU REQUESTING FROM THE BOARD?

Clackamas Broadband eXchange (CBX), a division of Clackamas County Technology Services, is requesting the Board consider granting CBX the authority to explore expanding the fiber network as well as services it currently offers. CBX is asking the Board to review: a bid for a dark fiber network for the Tigard-Tualatin School District; expansion of services by developing as an internet service provider (ISP); and a partnership with the City of Lake Oswego.

EXECUTIVE SUMMARY:

Item 1: The Clackamas Broadband eXchange is notifying the Board of its intent to place a bid on the Tigard-Tualatin School District's request for a dark fiber network.

In February 2017, CBX had a policy session asking the Board for approval to place bids and build fiber networks for public agencies adjacent to Clackamas County. The Board granted CBX this authority. For this work session, CBX is notifying the Board that the Tigard-Tualatin School District will be requesting bids for a new dark fiber network to connect all of their schools. CBX will complete a bid and submit it for this dark fiber project.

Item 2: CBX is requesting Board approval to offer internet services.

In February of 2018, CBX issued a Request for Information (RFI) for local telecommunication companies to create partnerships with CBX to provide the citizens of Clackamas County with better, more affordable internet services. The RFI received only two responses, one from Comcast (although Comcast stated in the first paragraph "Comcast is not submitting a formal response") and another from Government Camp Cable. Neither submitted response offered any partnership plans to provide enhanced internet services. CBX is asking that the Board approve CBX to continue seeking partnerships with the local telecommunication companies and, if no partnerships present themselves, for CBX to proceed with exploring offering ISP as an enhanced service of CBX.

Item 3: The Clackamas Broadband eXchange (CBX) is requesting Board approval to develop an Intergovernmental Agreement for a Fiber to the Home (FTTH) project in partnership with the City of Lake Oswego.

In June 2017, CBX completed a new fiber build for the Lake Oswego School District. Since then, CBX has added additional connectivity to the City of Lake Oswego. At approximately the same time, the City of Lake Oswego explored the idea of creating a city owned and operated ISP for the citizens of Lake Oswego. Although the City initiative was ultimately defeated, with the expansion of the CBX network within the City of Lake Oswego, it creates a new opportunity to revisit the idea of a city owned ISP. CBX is asking that the Board approve for CBX the authority to explore a partnership with the City of Lake Oswego to build a fiber network and provide ISP services to the citizens of Lake Oswego.

FINANCIAL IMPLICATIONS (current year and ongoing):

Item 1, Tualatin-Tigard School District: The process of public agency funding of new fiber construction and transferring ownership to CBX is very beneficial to both entities. The agency receives significant long-term savings and services, while CBX increases its fiber presence that can be further utilized. The cost of construction is the financial responsibility of the public agency receiving connections to the fiber.

Item 2, Expanding ISP services: Further exploration of either a partnership with a communication company or developing CBX into an ISP is covered under this budget cycle.

Item 3, Partnership with the City of Lake Oswego: The funding of the fiber expansion and the creation of the ISP would be funded and managed by the City of Lake Oswego by creating a Local Improvement District (LID). No funding would be required from CBX or Clackamas County.

Is this item in your current budget? X YES 🗌 NO

Internally self-funded construction projects are budgeted in the CBX budget. Agency funded construction projects are added to the CBX budget as required via supplemental budgets authorizing CBX to proceed with the build and bill the agency as a reimbursement for the construction.

What is the cost? \$ See below What is the funding source? CBX Construction Fund

Item 1, Tualatin-Tigard School District: The Tigard-Tualatin School District dark fiber project is similar in cost and scope as the Lake Oswego School District fiber project. There would be no General Fund or cost allocation impact from CBX participating in the bidding process.

Item 2, Expanding ISP services: There is no cost to either CBX or Clackamas County at this time. CBX is just looking to explore more options to partner with incumbent communication companies or what might be needed for CBX to provide ISP services.

Item 3, Partnership with the City of Lake Oswego: The funding for the fiber project and the equipment for the ISP would come from the LID created by the City of Lake Oswego. No general funds from Clackamas County would be used for this project.

STRATEGIC PLAN ALIGNMENT:

• How does this item align with your Department's Strategic Business Plan goals?

These proposed items would help CBX align with key measures:

- Increase annual savings for public agencies through their utilization of CBX
- Increase the total size (linear feet) of the CBX fiber optic network available for new and current sites
- Increase communication potential and capability between partnering agencies and institutions throughout the County and region
- How does this item align with the County's Performance Clackamas goals?

The proposed process aligns with the following Performance Clackamas goals:

- Grow a Vibrant Economy

Additional expansion of fiber and services will provide new economic opportunities for citizens of Clackamas County

- Build a Strong Infrastructure Fiber optic network expansion provides a stronger, more flexible and capable fiber infrastructure throughout Clackamas County and the region
- Ensure Safe, Healthy & Secure Community
 Fiber expansion allows critical fire, life, and safety agencies to be connected and utilize the high-speed communications capabilities of CBX

LEGAL/POLICY REQUIREMENTS:

For all three items, County Counsel will be involved to ensure all legal requirements are met. All proposed partnerships and Intergovernmental Agreements will be reviewed by County Counsel as the agreements are developed.

From a policy perspective, CBX is asking two things: the authority to explore partnerships with communication companies; and at the same time, what it would take for CBX to become an ISP and if CBX can develop a partnership with the City of Lake Oswego for a FTTH project.

PUBLIC/GOVERNMENTAL PARTICIPATION:

Item 1, Tualatin-Tigard School District: CBX works directly in partnership with many public and governmental agencies, assisting them to connect to and use the CBX network in support of their public service needs. If CBX is chosen for the Tigard-Tualatin School District bid, this would only increase the potential partnerships available between CBX and public agencies.

Item 2, Expanding ISP services: The authority to further explore either a partnership with a communication company or developing CBX into an ISP is covered under this budget cycle.

Item 3, Partnership with the City of Lake Oswego: CBX has a history of successful partnerships with other municipalities (i.e.. City of Sandy for SandyNet). Partnering with the City of Lake Oswego would further solidify that CBX is willing to share its experience and knowledge to better serve the citizens of Clackamas County.

OPTIONS:

Item 1, Tualatin-Tigard School District:

Option 1: No decision is required from the Board. The Tigard-Tualatin School District bid is for informational purposes.

Item 2, Expanding ISP services:

Option 1: Approve CBX request to further explore the option of enhanced ISP services within Clackamas County. CBX will explore becoming an ISP or work with a local communications company.

Impacts:

- CBX would have the opportunity to make major expansions into new areas of opportunity thus increasing overall plant size and new connection potential.
- Regional public agencies with large projects would be able to utilize CBX and take advantage of the long-term savings.
- Regional citizens would be the beneficiaries of enhanced ISP options.
- Option 2: Do not approve CBX to further explore becoming an ISP or working with a local telecommunication company.

Impacts:

CBX would not have the opportunity to make major expansions into new areas of opportunity.

Item 3, Partnership with the City of Lake Oswego:

Option 1: Approve CBX request to partner with the City of Lake Oswego to explore the FTTH infrastructure and internet services, either with CBX as the ISP or provide ISP through a partnership with a communication company.

Impacts:

- CBX would have the opportunity to make major expansions into new areas of services thus increasing overall plant size and new connection potential.
- The citizens of Lake Oswego would be the beneficiaries of enhanced ISP options.
- Option 2: Approve CBX request to partner with the City of Lake Oswego to explore the FTTH infrastructure and the City of Lake Oswego being the ISP.

Impacts:

- CBX would have the opportunity to make major increases in regards to the overall plant size.
- Regional public agencies with large projects would be able to utilize CBX and take advantage of the long-term savings.
- Option 3: Do not approve CBX to proceed with exploring a partnership with the City of Lake Oswego

Impacts:

- CBX would not have the opportunity for the expansion of services to the citizens of Lake Oswego.

RECOMMENDATION:

Item 1, Tualatin-Tigard School District: No recommendation.

Item 2, Expanding ISP services: Staff respectfully requests the BCC approve Option 1, granting CBX the ability to expand on its current list of services to include becoming an ISP, either by developing an ISP or partnering with a communications company.

Item 3, Partnership with the City of Lake Oswego: Staff respectfully requests the BCC approve Option 1, granting CBX the ability to explore the partnership with the City of Lake Oswego to include expansion of the fiber network along with providing ISP services as either the internet provider or partnering with a communications company.

Staff further recommends the Board delegate the authority to the Technology Services Director to sign agreements necessary in the performance of such bids, subject to County Counsel review and approval of those agreements, with Board of County Commissioners approval over \$150,000.

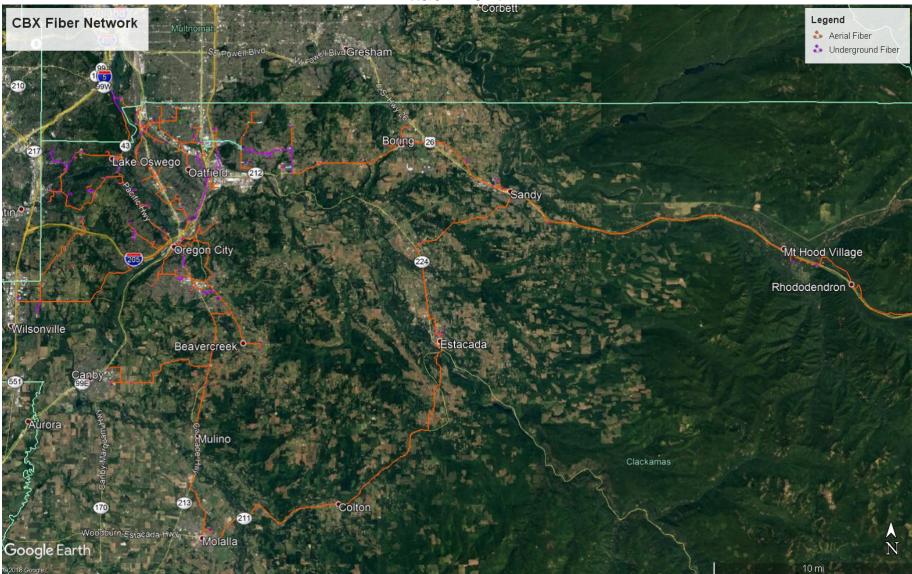
ATTACHMENTS:

- Attachment A: Current map of CBX fiber network
- Attachment B: Email from the NTIA on expansion of BTOP Fiber projects
- Attachment C: Responses from the CBX RFI issued in February 2018
- Attachment D: Letter of support from Clackamas County Economic Development Commission
- Attachment E: City of Lake Oswego partnership proposal

SUBMITTED BY:	
Division Director/Head Approval	DD
Department Director/Head Approval	DC
County Administrator Approval	LB

For information on this issue or copies of attachments, please contact Duke Dexter @ 503-722-6663

Attachment A



From: Moyer, Timothy Date: April 1, 2016 at 6:47:30 AM CDT Subject: RE: Clackamas County Inquiry about BTOP Grant

Duke,

Thanks for your email. NTIA supports and encourages the expansion of BTOP networks. In addition, NTIA does not have any restrictions on local market competition. During the award period, NTIA was concerned about overbuild to ensure the best use of BTOP funding. Therefore, if there was an existing network able to provide requisite service levels NTIA did not authorize funding a BTOP network in the same area. Now that the award period is over, since Federal funding is not being used, NTIA does not have any network build out or competition restrictions.

Regards, Tim

Timothy C. Moyer *BroadbandUSA and BTOP* National Telecommunications and Information Administration United States Department of Commerce www.ntia.doc.gov/broadbandusa Attachment C



May 3, 2018

County of Clackamas Procurement Division Public Services Building 2051 Kaen Road Oregon City, OR 97045

Re: Achieving Clackamas County's Affordable Broadband Connectivity Objectives Through Reliance on Comcast's Fiber, Cable, and WiFi Network

Dear Office of Procurement:

I am writing to you on behalf of Comcast of Oregon II, Inc. and Comcast Cable Communications Management, LLC (collectively, "Comcast"), both wholly owned subsidiaries of Comcast Corporation. Comcast has provided broadband services in Clackamas County ("County") for many years over an advanced and evolving network that is well positioned to meet the County's objectives of ensuring expansive access to affordable broadband. Comcast is not submitting a formal response to the County's Request for Information ("RFI") issued on February 26, 2018 with respect to the "CBX Broadband Expansion" Project (the "Proposed Project"). However, we respectfully submit this letter in an effort to further engage with the County about how Comcast's existing network and infrastructure can achieve the County's stated objectives, without imposing any public financial investment or material risk.

Comcast shares the County's objective of bringing world-class connectivity to the residents and businesses in Clackamas County through an evolving and advancing level of broadband access. We also note the County's representation in the RFI that, at this stage, the County has no firm preference as to technology or business model and is willing to consider any approach that will enable it to obtain high-quality, gigabit-level services and capabilities for households, businesses, educational institutions, and other agencies in the County. It is in that spirit that we present our unique status as an established provider of broadband services – which serves more of the County than any other provider – and to underscore our financial and operational capabilities, which enable us to continue extending our network and bringing innovative, new services to Clackamas County residents and businesses.

Comcast wishes to engage in a dialogue with the County centered on the Proposed Project's goals and requirements, to identify areas where additional infrastructure may be needed, and to explore further outreach efforts to ensure that Comcast's services are accessible and affordable to additional residents and businesses. We are confident that our broadband network and service capabilities are already targeted to meet the County's vision for its residents and businesses, and respectfully submit that the County would be ill served by investing scarce public dollars in an effort to duplicate services that Comcast and others already provide. Comcast looks forward to furthering the discussion about the County's broadband needs, and to hearing about the County's ideas for future broadband infrastructure deployment and connectivity.

Comcast's History with the County

Comcast and its predecessor companies have served Clackamas and the surrounding areas for many decades. Since rolling out its first cable modem service in Clackamas County approximately 20 years ago, Comcast has continued to enhance the capabilities of its networks and has increased the speed, capacity, and quality of broadband service. Comcast now has extensive geographical coverage in Clackamas County, and it serves more customer locations in the County than any other provider. Backed by the resources of its national platform and diversified operations, Comcast representatives work every day to ensure that the company's network is positioned to meet the needs of residential, business, and institutional customers both today and tomorrow.

Comcast's Existing Network and Service Platform Position Comcast Will Help to Meet the County's Needs

Comcast maintains a robust, route-diverse, and fiber-rich hybrid fiber coax ("HFC") network that reaches both urban and rural areas of Clackamas County, connected to a fiber backbone of over 151,000 route miles. In Clackamas County alone, our network has over 500 miles of fiber and coaxial plant. All Comcast services are provided over this highly reliable network with extensive redundancy for critical network elements and backup power in the event of commercial power outages. Comcast manages its network through national Network Operations Centers ("NOC") and Excellence in Operations Centers ("XOC"), as well as via thousands of engineers, call-center support staff, and a vast technical and responsive operations team.

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Comcast's network is constructed around a "fiber to the node" architecture, with the "last mile" delivered by coaxial cable. The HFC model offers the most flexibility and best economics for now and in the future, as Comcast can surgically add speed, capacity, and fiber where needed. This existing network was configured for innovation and has allowed for Comcast to add services over the network without costly rebuilds. Comcast's network and services are scalable and capable of expanding to meet evolving community needs for both residential and business services. Comcast currently offers a range of services over its network, which include video, voice, mobile, Internet, and home automation. Comcast's data service offerings cover a range of speeds and price points, and include the <u>current</u> capability to deliver 1 Gigabit data service to all residential and business subscribers.

Our Gigabit service, which we launched throughout Clackamas County last May, made it possible for residential and business customers to receive Gigabit speeds over the communications lines that most customers already have in their homes and offices. A major benefit of our DOCSIS 3.1 technology is that we can deliver Gigabit speeds without any special installations, new construction, or community disruption in the form of digging up streets, sidewalks, or yards. As a result, the network has the potential to reach more homes even faster and allows for broad deployment of new services across the County, not just to select streets or neighborhoods.

Connecting to Gigabit speeds in the County is as simple as customers signing up for the service and plugging in a DOCSIS 3.1-enabled modem, no matter where in our footprint they are located. This innovative network technology marks a major step forward in the evolution of ultra-high-speed broadband. Our new DOCSIS 3.1-enabled modem is the most powerful on the market and capable of Gigabit in-home Wi-Fi speeds. Comcast is excited to bring this product to our Clackamas County customers; when more people have access to the fastest speeds, the door is open to the next generation of innovation in the County's tech and startup communities and ultimately in every home we serve in the County.

DOCSIS 3.1 launched with options for customers to have broadband speeds of 1 Gigabit down and 35 Mbps up in order to maximize downstream speeds, since the majority of customers' online activities are downloading content, with an increase in those speeds as demand requires Additionally, our DOCSIS 3.1 network technology has been tested and proven to perform 5 Gigabits down and 1 Gigabit up. Technology enabling 10 Gigabits symmetrical is being tested this year.

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Finally, regarding our ancillary WiFi service, Comcast already maintains an extensive network in Clackamas County, including approximately 200 outdoor hotspots and tens of thousands of wireless gateways. The WiFi network can certainly be expanded in response to the County's identification of specific areas where this service is desired. Comcast WiFi hotspot locations can be found by using the Xfinity Hotspots app http://wifi.xfinity.com/.

Comcast's Continued Investment in its Network in the County Enhances Reliability

Over the last several years, Comcast has made extensive, multi-million dollar investments in new coaxial and fiber facilities throughout the County, which help ensure that Comcast's services to both business and residential customers provide an unparalleled capacity to perform consistently and reliably, even during peak levels. Comcast's existing infrastructure provides s high availability of service, based on the redundancy, reliability, and resilience of its network. This service quality is made possible by a level of capital investment that we believe the public sector would find difficult to match.

Comcast has extended infrastructure to more and more businesses since launching its commercial service approximately 10 years ago, bringing competition and lower prices to the small, medium, and large business sectors. We are continuing an aggressive and proactive construction investment effort to extend our fiber facilities even deeper within the County. Our multi-million dollar investments throughout the County were designed with the goal of achieving a highly efficient network that virtually eliminates traffic bottlenecks.

Comcast has been on a pace of doubling network capacity every 18 to 24 month, which ensures that we stay well ahead of customer demand, and we have increased broadband speeds for our customers 17 times in the past 17 years. Our network scalability allows our coax and fiber infrastructure to expand to meet evolving community needs, such as increased data capacity and the integration of newer technologies.

Comcast's network services today include broadband offered on a wired and WiFi basis in homes, businesses, and public locations. Comcast's broadband service capabilities include up to 10 Gigabit symmetrical services to businesses (and as high as 100 symmetrical Gigabits for businesses that meet specific criteria), and our residential broadband speeds range from 10 Mbps up to 2-Gigabit symmetrical.

Comcast's Network is Secure

Comcast's network in the County, like its more than 600,000 route miles of fiber-optic and coaxial plant nationwide, is proactively monitored and maintained 24/7 by teams of dedicated local and national Information Technology, Network Engineering, and Customer Service professionals. This approach helps Comcast detect and resolve potential signal problems before they impact customer services.

Comcast constantly monitors and maintains its network and will continue to do so going forward. Comcast employs a comprehensive and vigilant approach to ensuring the integrity of its outside plant. This approach includes local technician activity and a sophisticated network monitoring capability. Comcast would be pleased to discuss further details with the County in an appropriate setting in which the confidentiality of this network security information would be preserved.

Comcast's network, operations, and policies fully comply with all applicable privacy laws and security requirements. For business and governmental clients with mission-critical applications that require even greater levels of security and reliability, Comcast can customize its offering to meet each client's specific needs.

Comcast Already Serves Business and Residential Customers in the County

The RFI reflects the County's view that broadband is a critical factor in lowering business costs, attracting and retaining highly skilled residents, attracting new data-driven industries, and creating sustainable jobs in an entrepreneurial economy based on innovation and creativity. Comcast's business services already provide broadband connectivity to everything from single-owner, home-based businesses, to professional offices, and multi-site national enterprises. Our business Ethernet services include Private Line, Virtual Private Line, and Network Service for any-to-any configurations, as well as dedicated Internet.

Comcast's secure Ethernet data services help County hospitals and other healthcare service providers meet their increased storage needs, as well as the large bandwidth needed for applications such as retrieving records and imaging data. Healthcare providers in Clackamas County also rely on Comcast for their data and other business services. Comcast has extensive experience supporting research-intensive institutions like universities and hospitals and can support any research and development group in need of secure, scalable, reliable, big-data access. Comcast is also an experienced provider in using the federal E-Rate program, which helps schools and libraries cover the costs of broadband access.

Residential customers and small and medium-sized businesses have access to a wide array of Comcast's voice, video, and Internet services and packages that are designed to satisfy various usage patterns and demands. For example, Comcast offers small and medium-sized businesses in Clackamas County a variety of voice services and plans that include multiple lines and calling features, as well as Internet services that accommodate significant bandwidth and networking needs.

For enterprise services, which are available to Comcast's government and municipal customers, Comcast connects users to a diverse ecosystem of communications services and networks, including data centers, cloud service providers, and the public-switched telephone network, and it optimizes traffic delivery on a dedicated managed network. Comcast provides point-to-point, point-to-multipoint, and multipoint-tomultipoint solutions, as well as cellular backhaul, all of which give Comcast the capability to provide secure, scalable internal networks for geographically dispersed organizations. Comcast's government and municipal customers also benefit from dedicated service teams, monitoring, and the ability to customize solutions.

Comcast is on the Cutting Edge of Utilizing the "Internet of Things"

The RFI reflects the County's desire to promote cutting edge services. Comcast shares that desire. For example, we note that there are many applications emerging to utilize the "Internet of Things," or "IoT." Comcast has launched machineQ, our innovative new IoT service. Comcast can help the County connect to the smarter and more efficient technologies that leverage IoT to help improve the functioning of government and the provision of public services in the County. Comcast offers a customizable IoT platform that empowers communities and their partners to create and deploy tailored solutions, in addition to offering best-of-breed solutions that use the latest sensor, network, and software technologies to give communities and businesses a digital understanding of the physical world. Comcast is also capable of helping the County equip physical infrastructure –like buses, buildings, streets, utility meters, and parking spaces – with the capability to securely gather and transmit information. That information can then be used by the County to enhance its citizens' ability to connect with and benefit from government and its services. Each of these connected solutions is unique and can be customized for a variety of applications, including hospitals, airports, malls, universities, supermarkets, County infrastructure, agriculture, laboratories, amusement parks, and many other facilities. Comcast's solutions can even adapt to work with existing IoT deployments. Comcast would be pleased to discuss how to expand the scope and extend the success of this program in Clackamas County to meet the County's needs.

Comcast is Dedicated to Closing the Digital Divide

Clackamas County wants to ensure that all residents, especially low-income families and individuals, will benefit from high-capacity broadband services and capabilities. With respect to the County's focus on closing the "digital divide" (that is, ensuring that lower income residents have access to affordable broadband service), Comcast offers the "Internet Essentials" program. Internet Essentials is the largest and most expansive broadband adoption effort that any U.S. company has ever undertaken. Launched in the fall of 2011, Internet Essentials is available in more than 30,000 schools and 4,000 school districts, spanning 39 states and the District of Columbia. To date, Comcast nationally has connected more than 4 million low-income Americans, in one million households, to low-cost, high-speed broadband service at home through Internet Essentials. The program has connected more low-income Americans to the Internet than all other similar programs *combined*.

Internet Essentials provides low-cost high-speed Internet service for \$9.95 a month plus tax; the option to purchase an Internet-ready computer for under \$150; and multiple options to access free digital literacy training in print, online, and in-person. To be eligible for Internet Essentials, an applicant must receive HUD housing assistance, or be a family with a child eligible for the National School Lunch Program. Comcast currently works with school districts, non-profits, and other organizations to promote Internet Essentials throughout our footprint in Clackamas County, such as our partnership with the Oak Grove Boys & Girls Club. Any expansion of Comcast's network within Clackamas County would automatically make the Internet Essentials program available within those areas.

In Formulating its Broadband Policies, the County Should Ensure Equal Treatment and Facilitate an Even Playing Field for Competition

The market for Internet access service is highly competitive, and the County must ensure that its consideration of the Proposed Project does not distort that market. Regardless of the responses submitted to the RFI, providers should have equal access to public rights-of-way and municipal property in order to

meet the County's stated goal of broadband ubiquity. Regulatory requirements should be managed in an even-handed manner that does not favor one provider or one technology platform over another. A robust competitive market in Clackamas County will ultimately be the best tool to provide for widely-available, technologically-advanced broadband access.

The urban areas of Clackamas are currently served by multiple broadband providers that already offer Internet speeds of 1 Gigabit or more, with price-points that are affordable due to the competitive nature of the private sector providers. However, Comcast would most certainly be willing to engage in discussions with the County on innovative ways to provide broadband to those areas that currently are underserved – more specifically those more rural areas that are adjacent to Comcast's network. The identification of those areas that are considered "underserved" by the County would be most helpful – as Comcast could then determine the viability of expanding service to those areas, and work with the County on creative ways to ensure that broadband is available to all local businesses and residents.

Comcast is poised and ready to offer innovative solutions that the County's project goals seek to achieve, without the need for the additional taxpayer investment, physical disruption to the area, tax dollars, ongoing maintenance, or risks that a County-controlled network would entail.

Comcast is energized and optimistic about the opportunity to tailor its industry-leading products and services to help realize the County's vision for a broadband-connected future. Comcast sincerely values its longstanding relationship with the County and hopes to serve as a trusted resource and partner. We look forward to further discussing opportunities for infrastructure growth and outreach as the County moves toward its broadband connectivity objectives.

Respectfully,

Rodrigo Lopez Regional Senior Vice President

Government Camp Communications

Response to The Clackamas County Technology Services Department Request for Information

May 3,2108

Government Camp Communications, LLC, (GCC) is owned and operated locally. By locally we mean members of the immediate community. Our mission is to bring affordable high-speed internet connectivity to the underserved community of Government Camp. GCC was established in December of 2016 with the acquisition of the local cable company. The old enterprise was poorly run and in dire need of new ownership. This was evident by the poor quality of delivery of cable television throughout the community. Over the past year and a half, we, in partnership with Clackamas County, have improved cable television delivery dramatically and, almost immediately, our community began asking for internet connectivity. We listened and we have responded.

To date, we have invested over 200k into the community's core infrastructure, laying over a mile of 144 count fiber optic cable on the main roads and streets throughout town. Early last year, as a gesture of community goodwill, we connected the fire station and local school to this essential service. Presently, we are in the process of completing phase one of the build out. Completed, phase one will result in broadband connectivity to most of the local businesses including our Heritage Museum, Skibowl Ski and Summer Resort, Huckleberry Inn, Charlies Mountain View, Cascade Ski Club and The Ratskeller.

This request for assistance from Clackamas county is to work with us on the build out of phases two and three. This will allow us to provide broadband connectivity to all residences throughout Government Camp. This request for assistance includes design and deployment, funds to help offset the high build out costs and financial assistance with the purchase of the necessary head-end equipment.

History

In 2012, our local Community Planning Organization approved over \$300k in state allocated funds to help pay for fiber optic cable to be brought from Sandy to us here on the mountain. Unfortunately, that project terminated at the junction of highway 26 and Government Camp Loop road. While this completed a vital portion of the project, it did nothing for the hundreds of residents or the thousands of visitors who stay and play here on the mountain every year. The feeling throughout the community was one of distrust for the county for not going the final mile to build the network to locations throughout town that would allow providers to access the main line and therefore offer internet services to local homes, hotels and businesses.

Government Camp Communications, while a legal enterprise, is in reality our community's effort to finish the Clackamas County fiber optic initiative of four years ago. It has taken us the last four years to work through our community's discontent of what was considered a failure by not bringing the necessary fiber optic cable into Government Camp proper, where we live.

In December 2016, GCC was formed to purchase the existing cable company. This allowed us access to the conduit and pole attachments necessary to eventually complete the fiber optic initiative while offering improved cable television to the community. We are proud that our Franchise Agreement with Clackamas County allows us to offer reduced price television services and, over the past year, we have been perfect partners. In fact, the county has not received a single customer complaint over our joint services.

In addition to television services, we have worked diligently within the community to garner enough support to justify moving forward with the fiber optic network build out. Over the past year, after meeting with HOA's, the Community Planning Organization and local business owners, we were able to receive enough commitments for service to justify the expense necessary to complete phase one of the project.

Our first connection was Mt. Hood Academy and the adjacent fire station. At present, we have spent over 200k to complete phase one of the project and have commitments for service from 80% of the businesses in town.

Community

Government Camp, OR, located in Clackamas County, has approximately 860 homes, 223 full time residents and is the one of Oregon's most visited tourist attractions. The town is projected to double its housing units, permanent residents and most likely tourist visits over the next ten years.

Late last year, the US Forest Service was ordered by Congress to allow the land swap of over 80 acres of National Forest property directly North and West of Government camp proper in exchange for Cooper Spur Resort. The exchange, approved for residential development, will nearly double the size of local residential property adding additional full-time residents and many more lodging units.

Partnerships

In addition to our existing partnership with Clackamas County, our community project has some vital partners including **SandyNet**, **Warm Springs Reservation**, and **PGE**. PGE granted their first ever exception to their insurance coverage requirements, so our enterprise could afford to continue the phase one build out last summer and Sandy Net, in its partnership with **Clackamas county**, is our main provider of bulk line Internet.

Being a community-based initiative, an important element of our mission is to partner with other local Clackamas County companies who offer products and services that help us achieve our goal we like to call "Internet for Everybody".

Requests

- Assistance with the Design and mapping of Phase two and three of the project. Scott Brown and Duke Dexter have been very helpful thus far and we would request their time, attention and expertise. We would also request the use of the county's mapping software to assure the map process is accurate and acceptable for use and longevity.
- As a company and a community, we are both underserved and underfunded. The community and GCC lack the financial resources necessary to complete the initiative. We are requesting \$395,000 from the county, its affiliates or other county resource to assist with the materials, labor installation of fiber optic cable throughout the rest of the community.

Benefits

- Job Growth We are always looking to create new year around employment opportunities on the mountain. Our labor pool is small. It is the area from Government Camp west to Sandy. With plans to operate our company here in Government Camp, the goal is to offer new Clackamas County residents full time employment, so they can enjoy an improved quality of life for them and their families.
- Increased Tourist Visits We are seeing a large increase in the number of tourist visits each year. Unfortunately, some of them will not return. We simply lack the upgraded infrastructure to meet the expectations of those who visit us. We plan on using the technology upgrade to partner with Timberline, Skibowl, Grand Lodges, Collins Lake Resort and our local small business owners in a joint effort to better promote our mountain community as a world class tourist destination.
- Win Win The public private partnership (PPP) initiative of Clackamas County aligns perfectly with our goals of providing affordable, reliable and efficient internet connectivity to the underserved communities throughout the county. We look forward to expressing our appreciation of this PPP to our employees, residents and those that visit us up here on the mountain.

If you have further questions or need any additional information, please contact me directly using the information below.

Scott Connors Government Camp Communications 303.862.0507 scotconnors@gmail.com Clackamas County Board of Commissioners 2051 Kaen Road Oregon City, Oregon 97045

Dear Chair Bernard and Members of the Commission:

We at the Clackamas County Economic Development Commission (EDC) are writing to express our enthusiastic support for the Clackamas Broadband eXchange (CBX), a division of Clackamas County Technology Services, to expand the CBX program beyond just a dark fiber provider and become an Internet Services Provider (ISP).

Our largely rural community is depending on an advanced and cost effective technology infrastructure to help us compete in a more technological and global economy. Though once dependent on our natural resources, we have been making progress toward a more diversified economic future. Expanding the CBX programs offerings to include ISP services, either in partnership with local telecommunication companies or as a standalone ISP, can have a positive overall economic impact on Clackamas County.

The EDC fully supports CBX expanding on its services by becoming an ISP and it should be leveraged for the public benefit and long-term sustainability of Clackamas County. We hope you will see fit to grant CBX the authority to further explore providing Clackamas County with ISP services so we can continue building our technology future.

Sincerely, (on behalf of the EDC Members)

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Wilda Parks, Chair Economic Development Commission

ACTION

Provide feedback and direction to staff.

INTRODUCTION/BACKGROUND

In a November 2016 advisory vote, Lake Oswego residents indicated they were opposed to creation of a municipal broadband utility. Leading up to the vote, the City Council had been concerned about potential financial risk to the city.

Since then, a number of things have happened that may change the picture:

- An analysis of election results showed that a majority of the precinct that is in Multnomah County (much of Mountain Park) voted in favor of the measure. Demographically, Mountain Park residents tend to be younger, and more likely to have "cut the cord" for cable TV and land line phone service, using the Internet exclusively.
- CenturyLink began offering fiber service, but still at high prices and only in the parts of the city that have overhead wires (i.e., Comcast is the only option in Mountain Park for broadband service).
- The Mountain Park HOA Board of Directors expressed strong support for municipal fiber service to their property owners as well as to the HOA facilities.
- Contracts with Clackamas County ("CBX") by the school district and city mean that the county now operates a fairly extensive "middle mile" fiber ring within Lake Oswego.
- Clackamas County Commissioner Ken Humberston is very interested in partnerships between the county and cities to use the CBX network and expertise to provide "last mile" service (we met with him and CBX staff on the concept on March 14).
- The City of Ammon, Idaho pioneered a municipal fiber concept that eliminates risk to the city.

The Ammon Model

Ammon's concept is brilliant and simple. The essence of their approach is they separate the capital (construction) cost from the cost of operating the ISP. They use tried-and-true Local Improvement District funding for the former, and treat the operating cost as a user fee, similar to other fees on a typical utility bill.

In a typical sewer or street LID, all the benefitting properties on a block contribute to the LID. In the Ammon model, *only the property owners who choose to connect to the service* are part of, and pay for, the LID. Those who choose to opt out don't pay. When we asked them, "What happens if someone later changes their mind and wants in?" they replied that they made no promises to those property owners: future connection or LID costs might be substantially higher. There is thus some incentive to jump on the bandwagon.

As with other LIDs, the city would get the necessary commitments up-front before proceeding with the project. The capital costs are then secured by the property. An advantage of this is that banks typically require these liens to be paid off when property is bought or refinanced, so future homeowners only see the operating cost. In any case, the LID charges end when the LID bonds are paid off, typically around 20 years.

Based on preliminary cost estimates from Clackamas County, it appears the LID cost might be around \$32/month (probably billed annually with other property taxes, or half-yearly for \$186 per half year). To clear the lien would cost \$5,300 or less,

depending on how much principal had been paid. The LID payments are tax-deductible for federal income tax purposes, to the extent that people still deduct state and local taxes with the new cap.

The cost of operating the ISP would be billed monthly, as part of the regular city utility bill. The preliminary estimate for this cost is around \$30/month for **gigabit** Internet service. Most ISP costs (Internet access fees, service calls, etc.) vary with the number of customers, so there is relatively little financial risk associated with these costs.

Partnership with Clackamas County

Under the partnership proposed by Clackamas County, the City would form and administer the local improvement district, and handle customer billing. The county would do everything else, including:

- Design and construction of the network
- Operation of the ISP, including installations, response to service calls, payment of Internet access charges, and all other elements of operation.

There are several advantages to structuring a partnership (intergovernmental agreement) in this way:

- 1. It takes advantage of the experience Clackamas County has gained over the past decade in building and operating a fiber network.
- 2. For local government partners, CBX is operated on a break-even basis, yielding the lowest possible cost to Lake Oswego residents and businesses.
- 3. Having Lake Oswego be the "face" of the ISP for billing and marketing purposes taps into the City's brand reputation, and the marginal cost to our billing system would be negligible.

Proposed Pilot Project

Due to the interest expressed by Mountain Park voters and the Board of Directors of the Mountain Park HOA, we propose a pilot project using the LID model to install a gigabit fiber network in Mountain Park. The estimates above assume that 1,691 of the total 3,383 housing units participate in the LID.

If the pilot project is successful, it could be expanded to other parts of the city. It could be a powerful economic development and marketing tool with the owners of Kruse Way office properties, and properties in the Southwest Employment Area, for example.

It would consume some staff time in developing an agreement with Clackamas County, and in creating and managing the local improvement district. Much of work to establish the LID could be done by an intern, at a cost of no more than \$8,400.

RECOMMENDATOIN

Direct staff to 1) prepare for Council consideration a draft agreement with Clackamas County; and 2) work with CBX staff to prepare refined cost estimates, and develop a process for formation of a local improvement district (also subject to Council approval to proceed).