Oregon Broadband Advisory Council Meeting

Draft

July 23, 2020   Virtual Meeting

Attendance
Members Present: Kurtis Danka, Miles Ellenby, Joseph Franell, Michael Heffner, Lonny Macy, Representative Pam Marsh, Rick Petersen, Jeremy Pietzold, Cheri Rhinhart, Dave Sabala, Commissioner Mark Thompson and Commissioner David Yamamoto.

Staff Present: Christopher Tamarin of Business Oregon

Guests:
Pam Berrian, City of Eugene; Fawn Barrie, OCTA; William Chapman, OSCIO; Steve Corbató, Link Oregon; Amanda Dalton, Dalton Advocacy; Cynthia Gaffney; Ben Gherezgiher, OSCIO; Jenna Jones, League of Oregon Cities; Kyle Macadam, Oregon Association of Realtors; Lori Gleichman, Bean Foundation; Danielle Gonzalez, Marion County; Paul Grove, Comcast; Montana Lewellen, Oregon Cable Telecommunications Association; Carrie Pipinich, MCEDD; Jennifer Sitton, OCTA; Nate Stice, the Governor's Office; Commissioner Lianne Thompson, Clatsop County; Barry Walton, Corning; Kelsey Wilson, OCTA.

The meeting was called to order at 9:15 am.

Welcome, Introductions
Chair Joe Franell called the meeting to order and asked for guest introductions.

Minutes
Jeremy Pietzold moved that the June 25, 2020, minutes be approved as distributed. Dave Sabala seconded the motion. The council approved the motion.

National Broadband Activity Updates
Chris Tamarin reported on the following national broadband activity regarding infrastructure deployment, technology, market trends, public policy, and illustrations of the value of broadband adoption and utilization since the council's last meeting.

Videoconferencing
The impact of the COVID-19 pandemic on telecommunications networks has been noted as the Oregon and the nation have moved to use telework, telehealth, distance learning, travel bans, and social distancing as strategies to combat infections.

Videoconferencing is expected to grow by more than three times in the next five years on the heels of the exploding work from home (WFH) and online learning trends, according to recent research from Global Market Insights.

The current market is valued at about $14 billion and is forecast to grow to $50 billion by 2026, the market research firm said on Tuesday. That's an annual growth rate of 19%.

Working from home, online distance learning, and telehealth will become the norm as companies, schools and health care providers await vaccines to treat COVID-19, Global Markets said in a report.

The government sector has witnessed rapid transformation with the adoption of digitalization. Government agencies and institutions need to have secure, efficient, and reliable communications to collaborate and update information among disparate offices in real-time. This has encouraged government authorities to adopt the video conferencing solution for meetings, public hearings, interviews, training, and press conferences.
https://www.gminsights.com/industry-analysis/video-conferencing-market

5G
AT&T has added 5G to 28 more markets, bringing the total population covered to 179 million people across 355 markets. Some areas of the new markets are using dynamic spectrum sharing (DSS), in which the same channel can be used for 4G and 5G.

The launches are in Florida (4 markets), Puerto Rico (7 markets) and Texas (5 markets). Arkansas, Hawaii, Idaho, Illinois, Michigan, Missouri, Oregon [Eugene-Springfield], Pennsylvania, Tennessee, and Utah have 1 market each. Minnesota has two—one wholly within the state and one that crosses into North Dakota. Coverage within markets is limited and typically does not extend to the entire market.

The race for 5G coverage is in high gear and to a great extent is following the template carriers chose when the technology was in its earliest development phases. In mid-May, Verizon said that it will deploy its 5G network nationwide this year. T-Mobile is advertising nationwide 5G coverage today.
https://www.telecompetitor.com/atts-addition-of-28-5g-markets-brings-nationwide-total-to-355/

5G Fixed Wireless
Fixed wireless has grown considerably in popularity in recent years with carriers who haven't historically used the technology. AT&T and Verizon both offer fixed wireless and some primarily wireline service providers use fixed wireless to provide broadband in some areas.

T-Mobile pledged to make fixed wireless service available to 90% of the U.S. population within six years at speeds of at least 100 Mbps as a condition of regulatory approval of the company's merger with Sprint, which was completed earlier this year.
https://www.telecompetitor.com/t-mobile-home-internet-expands-michigan-footprint-50-a-month-for-50-mbps/

Connect America Fund II
CenturyLink told the FCC last week that it now expects to meet its Connect America Fund (CAF II) deployment deadlines. Using fixed wireless in some areas may be key to meeting that goal, according to a letter that CenturyLink sent to the FCC. The company added that it "continues to deploy fiber-fed digital subscriber line network in CAF II areas. The CAF II program gave funding to CenturyLink and other incumbent carriers in 2015 to bring high-speed broadband to areas of their

local service territories where service was not already available. CenturyLink accepted [about $500 million](#) in CAF funding.

Carriers accepting CAF funding were required to complete construction within six years and to meet deployment milestones along the way. CenturyLink [told the FCC](#) in December that it would miss or had missed one of its deployment milestones and in May, the company [asked the FCC](#) for a deadline extension, citing delays resulting from the COVID-19 pandemic. https://www.telecompetitor.com/centurylink-turns-to-fixed-wireless-to-meet-caf-ii-deadlines/

Municipal Broadband Report

A new municipal broadband report was released this month from non-profit broadband advocacy organization US Ignite and consulting firm Altman Solon.

Eight percent of U.S. markets that are "well served" with broadband are "municipally enabled," The other 92% of well served municipalities get broadband from private service providers. Moving forward, however, public and hybrid networks may be a viable alternative for bringing broadband to communities that are not well served. The researchers estimate that there are 6,500 such communities nationwide.

There are five models:
- Full municipal broadband. This category includes more than two thirds (68%) of current municipally enabled networks. It includes deployments such as the one completed by EPB in [Chattanooga](#) in which a city or utility company owns and operates the network and serves end users.
- Publicly owned, privately serviced. With this model, which represents 17% of municipally enabled networks, one or more commercial partners serve end users and may operate infrastructure, but the municipality owns the infrastructure. An example of this comes from [Westminster, Maryland,](#) and involves private service provider Ting.
- Hybrid ownership. With this model, the city owns middle mile infrastructure, but one or more private service providers own and operate last mile infrastructure, as well as serving end users. The white paper cites an example in Lincoln, Nebraska.
- Private developer open access. This category includes municipalities where a private developer owns and operates broadband infrastructure, but private service providers serve end users. The researchers reference [Fullerton, California](#)–a market where SiFi networks, Ting, and GigabitNow have established a network of this type.
- Full private broadband. With this model, one or more service providers own and operate the network, as well as providing service to end users. While this might sound like the typical commercial network that comprises 92% of well served markets, the difference appears to be that the municipality becomes actively involved in attracting service providers by, for example, simplifying access to rights of way. Boston offers an example of this approach, the authors said.

Municipally enabled networks are not specific to a particular region, the authors note. The report [includes](#) a U.S. map indicating the percentage of homes in each state that are in cities that have been involved in making broadband available through some type of municipal broadband program. While the percentage is zero in some states, it's in the range of 20% in others. Tennessee has the highest percentage (22%), but other states, including Washington (17%) and Oregon (18%), were close behind.

https://www.telecompetitor.com/municipal-broadband-report-sees-5-public-private-hybrid-models/

Public Switched Telephone Network (PSTN)
The continuing market migration from plain old telephone service–the voice landline to mobile wireless and VoIP over broadband has been noted.

AT&T Corp. told the Washington Utilities and Transportation Commission it plans to discontinue residential local service in the state, effective October 1.

The company said it is discontinuing local service in 13 states as a competitive local exchange carrier where AT&T purchases resale local services from CenturyLink, Inc.

AT&T said it based the decision on "declining demand," as well as changes CenturyLink is making to its wholesale ordering system that are "incompatible" with AT&T's existing ordering system.

Effective July 1, 2020, Universal service charges on basic telephone services have been increased from 19.6% to 26.5% which will likely encourage additional market migration.

Standalone broadband service has reached 42% of homes nationwide, rising from 34% over the past three years, according to a report by Parks Associates.
Full Story: Telecompetitor (6/26)

Universal Service Fund Programs
As the telecommunications market and industry structure continue to evolve we have also seen changing patterns in Universal Service funding by the FCC.

CAF II–First time awards to Viasat, a satellite broadband service provider

RDOF–Providing open bidding for funds, changing from first offering funds to incumbent telephone companies.

And this month, cable operator Charter announced plans to participate in the Rural Digital Opportunity Fund, or RDOF auction. Major Cable companies-turned-broadband providers such as Charter traditionally have not participated in government funding programs. They weren't eligible for the traditional Universal Service Fund program and either didn't participate in or didn't win funding in the Connect America Fund CAF II auction, which was open to a broader range of service providers.

Charter noted that it has invested nearly $50 billion in technology and infrastructure in the past five years, including making service available to more than 1.5 million new homes and businesses, of which about 30% are in rural areas.

Depending how successful the company is in the auction, the build-out could involve multiple millions of locations and an investment of multiple billions of dollars, Charter said.
https://www.telecompetitor.com/in-a-big-cable-first-charter-plans-to-participate-in-rdof-auction-eyes-billions-in-funding-for-rural-broadband/

State Broadband Activity Updates

Chris Tamarin reported the following state broadband activity regarding infrastructure deployment, technology, market trends, public policy, and illustrations of the value of broadband adoption and utilization since the council's last meeting.

COVID-19 Broadband Funding

On Friday, June 5, 2020, the Oregon Joint Emergency Board of the Legislative Assembly approved $280 million for COVID-19 pandemic recovery programs including $20 million for broadband. $8.39 million was designated for Link Oregon, $1.61 million for school districts and $10 million for distribution through the Rural Broadband Capacity Program to support broadband projects targeting unserved and underserved areas.

The money comes from the CARES Act Coronavirus Relief Fund provided to the states for the support of infrastructure construction and emergency response projects to provide increased broadband capacity internet access for telework, telehealth, and K-12 distance learning applications in unserved and underserved areas in response to the COVID-19 public health emergency.

On Friday, June 19, 2020, Business Oregon issued a Request for Applications for broadband funding from Oregon cities, counties, ports, tribes, cooperatives, non-profit corporations, public-private partnerships, school districts, education service districts, hospitals, health systems, and private sector internet service providers for infrastructure construction and emergency response projects to provide increased broadband capacity internet access for telework, telehealth, and K-12 distance learning applications in unserved and underserved areas in response to the COVID-19 public health emergency.

A grant may be used for the following:
- Infrastructure—For the construction of broadband infrastructure capable of delivering basic broadband, a minimum of 25 Mbps downstream and 3 Mbps upstream or better.
- Emergency Response Capacity Projects—For emergency response projects to provide increased broadband capacity internet access for telehealth and K-12 distance learning applications.

The biggest challenge facing applicants for the funding is time. All projects must be completed and grant funds must be expended by December 30, 2020. Unexpended funds will be returned to the U.S. Treasury. Applications are due by 5:00 pm, July 2, 2020, another difficult timeline.

Western Governors Association Policy Resolution 2020-08, Broadband Connectivity

Western Governors underscore the importance of high-speed internet ("broadband") for rural economies and communities.

High-speed internet, commonly referred to as "broadband," is the critical infrastructure of the 21st century and a modern-day necessity for businesses, individuals, schools, and government. Many rural western communities lack the business case for private broadband investment due to the high cost of infrastructure and the low number of customers in potential service areas. This has

left many rural businesses and citizens at a competitive disadvantage compared to those urban and suburban areas with robust broadband access.

Western Governors encourage Congress and federal agencies to recognize that the current definition of broadband–25/3 Mbps–does not correspond with the requisite download and upload speeds necessary to support many business, education and health care applications that promote economic and community prosperity. We support efforts to adopt a higher, scalable standard that more accurately reflects modern innovations and bandwidth demands.

Western Governors appreciate the USDA and the FCC's efforts to promote on-farm connectivity and the growth of the precision agriculture sector. We encourage both agencies to engage with Governors' offices, state broadband representatives and state departments of agriculture as they pursue policy and program initiatives to support advanced agriculture technology development and adoption.

Western Governors encourage Congress and federal agencies to leverage community anchor institutions in rural communities to spur connectivity to surrounding areas.

Western Governors request that Congress and the FCC leverage **states' on-the-ground expertise** by providing substantial block grant funds to address rural connectivity challenges. We support the use of state block grant funds to address general broadband infrastructure issues and respond to connectivity challenges raised by the COVID-19 pandemic. **[OBAC recommendation to Governor Brown]**
https://westgov.org/images/files/WGA-PR-2020-08-Broadband-Connectivity.pdf

Governors Call for Federal Investment in Broadband
A bipartisan group of 11 governors is calling on the president and Congress to invest in broadband, which they say is "critical infrastructure" that's vitally important to the economic future of the country and national security.

As COVID-19 continues to impact both urban and rural communities, we are gravely concerned about the compromised digital access that now threatens entire communities and people's livelihoods, educational access, quality of health care, and lives. Our rural communities are particularly less prepared to mitigate the pandemic itself and adapt to what will certainly be a different world in a post-COVID economy, in large part because of the lack of access to broadband," according to the letter signed by the Governors, including Oregon Governor Kate Brown.

FCC COVID-19 Telehealth Program
WASHINGTON, July 8, 2020—The Federal Communications Commission's Wireline Competition Bureau today approved an additional 25 funding applications, the final group of approved funding applications for the COVID-19 Telehealth Program. Included in that group,

- Community Health Centers on Benton, in Corvallis, Oregon, was awarded $146,390 for laptop computers, remote monitoring devices, and a subscription to a remote specialist consultation service to provide virtual preventive care, screening, and treatment services and to maintain access to services and equipment for high-risk and vulnerable patients.

- OCHIN, in Portland, Oregon, was awarded $1,000,000 for laptop computers, smartphones, mobile hotspots, remote monitoring devices, and videoconferencing software to enhance the emergency telehealth response for low-income and underserved patients served by 54 health care providers across 12 states through telehealth technical assistance, customized emergency workflows for virtual treatment of patients with and without COVID-19, procurement and configuration of connected devices and network design support, and virtual visit software installation.

Broadband Predictions Post COVID-19

There will be a significant, lasting increase in telecommuting. Millions of people are working home who didn't before, some in jobs that employers said couldn't be done from home. It's now looking like many people will work from home for at least six weeks, by which time, we'll have proven those jobs can be done, and done well from home. In the short run, people may be eager to get back to the office, but in the long run, I think we'll see a sustained increase in telecommuting.

Progress will be made in compensating healthcare providers for telemedicine. As broadband advocates, we often hold up telemedicine as a health and safety reason for public investment in better connectivity. Public policy surrounding the compensation of doctors for telemedicine appointments has been a major roadblock to adoption. In this crisis, it is vital to keep the healthy separate from the sick, and telemedicine does that.

Video communication will play a bigger role, permanently. As people become familiar with and skilled in using the technology for both professional and for personal communications. Video is replacing the plain old phone call.

More businesses will adopt cloud computing for core applications. Cloud-based systems are reliable, secure, and flexible. Disaster recovery and mobility are no longer novel siloed concepts to businesses. More organizations will adopt cloud-based applications and will need faster internet to do it.

Public support for broadband expansion will grow swiftly in the months following the pandemic. Increasing numbers of people and policy makers now understand the value of broadband network access and the internet as essential infrastructure and service.

Without a doubt, COVID-19 will have a lasting impact on how people live and work, and it will have a positive influence on the fight for better broadband.
https://www.bbcmag.com/broadband-applications/predictions-for-broadband-after-covid-19

Presentations

Public Safety Communications Interoperability
William Chapman, Statewide Interoperability Coordinator (SWIC) ,and Ben Gherezgiher, Assistant State Chief Information Officer of the Office of the State CIO, provided a briefing on Public Safety Communications Interoperability and FirstNet.

FirstNet, the national public safety wireless broadband network continues to be developed and deployed to provide robust public safety communications nationwide.

FirstNet also make available a response fleet of deployable assets to respond to disasters. The fleet of 76 temporary service solutions includes ground-based assets such as Cell on Wheels (COWs) and heavy-duty Satellite Cell on Light Trucks or SatCOLTs. It also contains ground-breaking use of drones, Flying COWs™ (Cell on Wings), and FirstNet One—an industry-first blimp.

Adoption and utilization of FirstNet is making good progress. As of May 2020, there are 1.4 million subscribers from more than 12,000 agencies, a 20% increase from December 2019.

Oregon
- Three are currently more than 178 subscriber organizations, an increase of 48.51% since January 2020.
- More than 1,300 square miles of additional 4G-LTE coverage will be added in Oregon in 2020.
- The 2020 FirstNet build plan on track to meet year end commitments
- Currently 2 of the new 45 FirstNet tower sites are on-air so far in 2020
- 21 Additional FirstNet Sites are planning to go on-air this year.
- Band 14 connectivity is currently on the air Covering Portland, Salem, Medford, Bend, and the north coast
- 18 sites are planned for deployment in 2021
- 3 sites are planned for deployment in 2022

In response to the COVID-19 pandemic public health emergency, 11 state agencies received FirstNet equipment to help them respond and support for the transition of the State Emergency Coordination Center from Office of Emergency Management to the Oregon Department of Public Safety Standards and Training. FirstNet deployed 80 cellular devices and one deployable SATCoLT, provided temporary in-building coverage enhancement while the permanent installation was completed, and participated on Emergency Support Function (ESF-2) Coordination calls and provided network status updates. FirstNet also collaborated with Oregon Health Authority and Enterprise Telecom. Management to support the Oregon Child Abuse Hotline.

William noted that the position of SWIC was established under the State Chief Information Officer and serves as the central coordination point for statewide interoperable emergency communications efforts, supports the **State Interoperability Executive Council,** assists with the update and implementation of the *State Communications Interoperability Plan*, and serves as a member of the **National Council of SWICs.** Michael Heffner has recently been appointed by Governor Kate Brown to the **State Interoperability Executive Council** representing OBAC.

William noted that the Emergency Communications Ecosystem in Oregon consists of Land Mobile Radio, 911 & Dispatch, and Public Safety Broadband and continues to evolve with new technologies and applications.

Cable Companies: A 2020 Update
Fawn Barrie of the Oregon Cable Telecommunications Association (OCTA) the status of Cable companies in Oregon. The mission of the Oregon Cable Telecommunications Association is to promote the well-being of the cable telecommunications industry, companies such as Comcast, TDS/BendBroadband, Wave Broadband, and Charter Spectrum, through effective political and public relations, and educational activities. Cable companies collectively serve more than

1,090,000 customers across Oregon and provide service to many community anchor institutions. Cable companies are key providers of broadband internet access services. More than 72 million homes and businesses across America subscribe to broadband delivered by cable providers.

Like all telecommunications service providers, cable companies have been significantly impacted by the COVID-19 pandemic. Customers are spending more time on-line generating more demand due to the increase in people working from home, schooling from home and communicating with friends and family via the internet.

Since March 1, national downstream peak growth is up 14.3%, the national upstream peak growth is up 22.1% and upstream peak hours in many regions have shifted from late evening toward afternoon. There has also been a 36% increase in mobile data use over WiFi on Comcast Xfinity Mobile. The networks have performed well in face of the spike in demand. Provider backbone networks have significant capacity and show no signs of congestion.

Cable Companies have responded to the pandemic with special offerings for customers and for communities. Every OCTA member signed FCC's pledge to Keep America Connected, which was extended through June 30, 2020. OCTA also signed onto the Keep Americans Connected pledge as a supportive trade association. As part of the pledge, members agreed to stop all service terminations for non-payment resulting from COVID-19 financial hardships. All signatories also stopped charging late fees for residential or small business customers to ensure that Oregonians could stay connected during the public health emergency.

Cable companies stepped up and provided additional support for the communities they serve. OCTA members provided free access to Wi-Fi hotspots throughout the state to all members of the public, not just cable subscribers. Sixty days of free internet service for low-income households, students and educators, no install charges was offered along with other broadband programs available for low-income households. Service transmission speeds were increased for all customers. Free access to news, information and educational content for school-aged children is also being provided. Data caps were suspended data overage giving customers unlimited data for 4 months.

Cable companies assisted in providing nearly 300 laptops and 6 months of pre-paid internet access to low-income job seekers, provided connection for the COVID-19 emergency hospital at the Salem Fairgrounds, wired the Governor's Mansion, donated 2,800 N95 masks, contributed to the OCF Small Business Stabilization Fund, and donated airtime to run 1,000 COVID-19 public service announcement spots per week, including PSAs from the American Red Cross

With the statewide move to distance education, cable companies have partnered with Portland Community College, Portland Public Schools, Salem-Keizer School District, and other school districts and community partners to assist low-income students during the crisis and to increase awareness and to make internet more accessible for individuals and families.

Paul Grove of Comcast provided a briefing on news and activities at Comcast. Comcast service approximately 725,000 Customers in Oregon including the Portland-Metro Region and the I-5

Corridor to Eugene/Springfield. Comcast has more than 1,700 Employees in Oregon and has invested more than $1.1B in Oregon since 2011. Comcast has also served more that 52,000 households (208,000 Individuals) through its low income Internet Essentials program in Oregon since 2011.

Comcast, in particular, has responded to help communities during the CORONAVIRUS-19 pandemic across the country and in Oregon. K-12 schools and students have been under significant stress during this public health emergency and state mandates closing schools. Comcast is offering Internet Essentials (IE) 60-Days Free through the end of 2020, open Public Hot Spots (Approximately 40,000 of them in Oregon), and established the Xfinity Assistance Program (XAP), which enables customers to continue to receive Internet and Voice services for a lower price. Comcast also suspended data caps for 60 days and gave all customers unlimited data at no additional charge.

Cable companies are key providers of broadband serving 47.8% of urban households and 25.8% of rural households in Oregon.

Work Session

Broadband in Oregon 2020 report
The report of the Oregon Broadband Advisory Council (OBAC) to the Legislative Assembly on the affordability and accessibility of broadband technology in all areas of the state, and on broadband technology use in healthcare, energy management, education and government, and on the role of broadband in local, regional ,and state economies, economic development, public policy issues, and key broadband related challenges and opportunities and facing the state is due on November 1, 2020. The working draft of the 2020 report was discussed.

Public Questions/Comments
Danielle Gonzales of Marion County noted that the AmeriCorps RARE Program is working in Marion County. The program is administered through the University of Oregon's Institute for Policy Research and Engagement to assist Oregon communities by providing planning and technical assistance to help solve local issues and improve the quality of life for Oregon residents. She also noted that work is underway to expand broadband connectivity to Detroit and Idanha in the Santiam Pass, that broadband planning is underway in the cities of Silverton and Jefferson, and that a "fiber to the farm" project is being conducted by the Strategic Economic Development Corporation (SEDCOR) in Marion, Polk ,and Yamhill counties.

Meeting Schedule
The July 23, 2020, meeting of the Oregon Broadband Advisory Council was held as a virtual on-line web-conference. The next meeting of the council will be held on August 27, 2020, as a virtual on-line web-conference. Meeting information will be posted on the council website.

Meeting adjourned at 11:45 am.

Approved by:

_____   _____
Joseph Franell, Chair   Date
Oregon Broadband Advisory Council

_____   _____
Christopher Tamarin   Date
Business Oregon