

The California Broadband Council (CBC) met on Thursday, December 8, 2016 at 9:30 a.m. in the State Capitol, Room 126, Sacramento.

Council Attendees:

A quorum was met with the following council members and/or designees in attendance:

- Amy Tong, Director, California Department of Technology
- Catherine Sandoval, Commissioner, California Public Utilities Commission
- Sunne Wright-McPeak, President, California Emerging Technology Fund (CETF)
- Ben De Alba, Assistant Secretary, Transportation Agency (for Secretary Brian Kelly)
- Jay Jefferson, Legislative Director, Office of Assemblymember Mike Gipson (for Asm. Mike Gipson)
- Jerry Winkler, Director, California Department of Education (for Superintendent Tom Torlakson)
- Mitch Medigovich, Deputy Director, California Office of Emergency Services (for Dir. Mark Ghilarducci)
- Brent Jamison, Deputy Director, Department of General Services (for Director Daniel Kim)

Agenda Item 1 – Introduction

Chair Amy Tong introduced herself as the new Director of the California Department of Technology and as the new Chair of the CBC. An overview of recent changes in broadband legislation were noted and offered support to help the state continue on its trajectory of providing broadband for all Californians.

Agenda Item 2 - Affirmation of the Chair

By unanimous vote, Amy Tong was affirmed as the Chair of the California Broadband Council.

Agenda Item 3 – Presentation from the California Office of Emergency Services (CalOES)

The purpose of this presentation was to provide an update on the California First Responder Network (CalFRN) as well as an update on First Net at the federal level.

Patrick Mallon, a member of the CalFRN Board, presented on behalf of CalOES. In 2014, CalFRN held eight town hall meetings across California, each meeting with a different theme. FirstNet is soon to release information that will help all states better understand what state compliance with FirstNet would look like. The challenges with compliance that the State of California faces are: a population of almost 40 million, vast size, large rural area, and the tribal communities without access to broadband. In November 2016, CalFRN released a Request for Information (RFI) in order to gather information on how California might approach implementation, and whether there might be other options. Regardless, CalFRN is interested in working with FirstNet as they develop a state plan.

Mike Poth, CEO for FirstNet, stated that FirstNet is an independent authority working with 56 states and territories. The FirstNet Request for Proposal (RFP) is in its final stages and a contract should be issued to a vendor in the next two to three months. He reminded the CBC that should a state opt-out, it must develop and implement a similar system that must be operable with the federal network. While

FirstNet's state plan is still being formulated, he is optimistic that the state will be pleased with aspects of the plan when it is released. Mr. Poth projected that billions of dollars will be generated by the system over a 25-year period with funds collected in excess of costs to be reinvested in the network.

Sunne Wright-McPeak raised the question of what the relationship to FirstNet should be if an outside company wants to provide network separately from FirstNet, and whether anticipated public funds can support FirstNet, and in which capacity. Mr. Mallon said that the state plans to address these matters through the information gathered from the RFI, which is due January 2, 2017. The private sector should propose how they would interconnect with FirstNet, while addressing financial sustainability. If the network were to be built with large capacity, it could generate revenues to help fund deployment in rural areas.

Commissioner Catherine Sandoval asked how a seamless network would be ensured when it is covering the whole state. Mr. Poth stated that FirstNet is looking at \$30-\$50 billion to build the network, but investments would hopefully be recuperated over time with revenues from each state's first responder user base and the potential to commercialize aspects of the network. Mr. Poth also stated that FirstNet is expecting to release a state plan with an emergency response time of hours, not days or weeks, which is critical during emergencies and natural disasters.

Agenda Item 4 – Presentation by Assemblymember Lloyd Levine, Ret., Co-Founder, Center for Broadband and Digital Literacy, School of Public Policy, UC Riverside

Mr. Levine presented a Powerpoint presentation which will be made available to the public on the CBC website. The Center for Broadband and Digital Literacy was formed to create public policy and academic research that was initially lacking when the internet first emerged. The Center is available as a resource for policy makers in the CBC, Congress, the California Legislature, the Public Utilities Commission and the Federal Communications Commission.

Sunne Wright-McPeak asked what is needed to connect to the California TeleHealth Network (CTN). North Carolina funds telemedicine statewide, so the first answer would likely be money through the General Fund. The second answer would be leadership. Ms. Wright-McPeak asked the School of Public Policy and the School of Medicine at UC Riverside to work with CETF and the CTN to improve telehealth in California.

Commissioner Sandoval stated that some tribes cannot deliver on grants received for the purpose of improving health given the lack of broadband internet in tribal reservations, where dial-up internet is the only option. In other cases, such as the Morongo Reservation, telephone service is only just now being provided. Mr. Levine expressed interest in working with tribes and other rural areas.

Ms. Wright-McPeak requested Commissioner Sandoval to help Mr. Levine connect with appropriate funding sources for tribal access and get more residents from the Inland Empire online with CTN. For example, a roundtable was held in Barstow with Praxis to see how to take advantage of the fiber node there.

Agenda Item 5A – Presentation by the California State Transportation Agency (CalSTA)

The California Department of Transportation (CalTrans) provided an update on AB 1549 (2016), which requires the department, in consultation with stakeholders, on or before January 1, 2018, to develop guidelines to facilitate the installation of broadband conduit on state highway rights-of-way. CalTrans is working on developing guidelines and identifying local governments, non-profit organizations, and cable and telecommunications corporations to communicate with as they develop a plan. The CBC offered to help identify these entities and a list of existing assets.

Ms. Wright-McPeak suggested that CalTrans communicate with the California Transportation Commission (CTC) and expressed the importance of reaching out to companies early so they can be involved. CalTrans stated it expects to involve CTC in the planning documents. Ms. Wright-McPeak said that as the new law is implemented, it is possible that not all new highway construction projects will need conduit. However, it is necessary that the department ask if any entity wants to place conduit in a new trench. Further, even if no entity comes forth, the state should ask if the corridor is strategic for the placing of conduit.

Agenda Item 5B – Presentation by Jeff Morales, CEO, California High Speed Rail Authority (HSRA)

Mr. Jeff Morales, CEO of the HSRA, made a Powerpoint presentation which will be made available to the public on the CBC website.

Mr. Morales said the HSRA is building more than just a bullet train. With the construction of a new train comes the construction of a new corridor along Highway 99, and the laying of new conduit in trenches that will run through the Central Valley. Mr. Morales stated that HSRA is not in the business of capitalizing on the new conduit, which is why they are partnering with the Corporation for Education Network Initiatives in California (CENIC). Mr. Morales presented a video to show construction in the City of Fresno. HSRA looks forward to working with CENIC to provide high-speed internet in more communities in the Central Valley.

Agenda Item 5C – Presentation by Louis Fox, CEO, Corporation for Education Network Initiatives in California (CENIC)

CENIC is a 501(c)(3) with a backbone of 3,800 miles of optical fiber. The network includes about 10,000 institutions, serves roughly 20 million users, and is partnered with 500 private-sector collaborators. The network carries 47 petabytes in a month (4,700 terabytes), whereas the Library of Congress has about 200 terabytes of data, by comparison. Mr. Fox said the HSRA partnership is designed to serve communities and work with the private sector in order to extend service to many communities beyond the HSRA network. CENIC plans to identify key public and private stakeholders along the corridor. CENIC is looking forward to developing an engagement strategy and identifying key stakeholders to help strengthen relationships between broadband and transportation and broadband and agriculture. Commissioner Sandoval expressed appreciation for the two high speed networks, CENIC and HSRA, connecting to each other.

Chair Amy Tong shared that the California Department of Technology also recently entered into an MOU with CENIC and applauded the work that CENIC is doing throughout California.

Agenda Item 6 – Presentation by Sunne Wright-McPeak, California Emerging Technology Fund (CETF)

Ms. Wright-McPeak stated that while California has made great progress in the deployment of broadband internet, there are still 80,000-100,000 households that lack access to broadband. This needs to be funded through the California Advanced Services Fund (CASF), or some other mechanism. CETF estimates 84% of households have access to broadband, but 14% of households are through smartphone only. CETF is working on legislation to increase this with the goal of 90% adoption by 2023. That would be administered through the CPUC, or another state agency designated by the legislature. Ms. Wright-McPeak said the Internet for All Now Act will remain a priority in the coming legislative session.

Commissioner Sandoval expressed that CAF II funds are expected to be spent by 2021 and that the federal government has not yet designated money for Extremely High Cost Areas under the Connect America Fund (CAF).

Agenda Item 7 – Presentation by Commissioner Catherine Sandoval, California Public Utilities Commission (CPUC)

Commissioner Sandoval said the CPUC recently awarded grants to a number of CASF regional consortia. She also presented on the Water/Energy Nexus Workshop findings. The relationship between utilities and emergency response is critical. She has a proposed decision that addresses the issue of emergency communications. Currently, setting up a Cell on Wheels (COW) can take up to 14 days. She said the state has heard from first responders about how communications deficiencies hamper rescue efforts. Many counties are bringing back community sirens, because modern technologies have failed, time and again. Fires have taken out fiber, copper, and wireless technology. For example, in Humboldt, people rely on ham radios as backup to 9-1-1 for emergency response. And in the Rim Fire, calling for help came down to a single payphone in the area. People crowdsourced rolls of quarters and drove them to the town so people could call outside.

One proposal is to have utilities look at how to improve emergency response. While FirstNet is coming, there are risks. These are exacerbated by failures in call completion, reliability, and slow response time. Commissioner Sandoval is looking forward to improved designs that support resiliency and diversity in telecommunications.

Commissioner Sandoval also provided a brief update on the Low Income Oversight Board, which strives to make sure low-income households have access to the internet at home. In a visit to the Yurok Reservation, the lack of communications facilities prevented residents from measuring water quality in their tank. In this case, the tribal Chairman came down with e coli poisoning as a consequence. She also stated the need for low-income residents to participate in demand aggregation and is proposing partnerships between energy utilities and lifeline providers.

Agenda Item 8 – Presentation by Adelina Zendejas, California Department of Technology (CDT)

Adelina Zendejas, Deputy Director of Broadband and Digital Literacy at CDT, provided an overview of the progress the CBC has made since its inception in 2010.

For Working Group 3, CDT created a State Property Inventory database for internet service providers (ISPs) interested in co-locating on state property. Moreover, CDT streamlined the Radio Vault Application Form and created instructional videos to assist with the application process. Finally, CDT created an ombudsman position to assist ISPs with the application process. All these resources are available on the CBC website and the CDT website.

For Working Group 1, CDT created a partnership with the California Prison Industry Authority CalPIA. Through CalPIA's youth offender program that refurbishes computers, state surplus computers have been provided for free to public schools. As an example of the Working Group's success, 38 refurbished PC's were provided to Alvord Unified in Riverside; 60 PCs were provided to Luther Burbank High School, and 40 PCs to Sutter Middle School in Sacramento. Ms. Zendejas said CalPIA is discussing a possible partnership with UC Santa Cruz regarding the acquisition of surplus computers from the UC campus. Should this effort be successful, there is potential to expand the program to the UC and CSU systems.

The CBC voted unanimously to accept Ms. Zendejas' recommendation that the tasks for Working Group 1 and 3 are complete, with the understanding that the State Surplus Computer Working Group will continue to serve communities and schools.

Agenda Item 9 – Public Comment

Robert Tse, State Broadband Coordinator, USDA California Rural Development

Mr. Tse emphasized the need for public funding for broadband. In agriculture, wireless broadband access in the farm field is necessary. He's met with John Deere and confirmed there aren't any studies currently examining this need and how to meet it. CETF is funding a small pilot study to look at broadband access in the farm field. He also supports the effort to fund emergency broadband at county fairgrounds, given California is unique in its use of fairgrounds as emergency staging grounds.

Marla Bowen and Stephen Ross, MediaCom

Marla Bowen said MediaCom is putting a fiber link over the Sierras. They also offered a microwave link to the state during the Kern Fire. For their current network construction project in Kern County, they hope to have a NEPA document out soon.

Matthew Rantanen, Southern California Tribal Chairman's Association

Mr. Rantanen said his association is working on securing potential broadband funds at the federal level with the support of the state. He also expressed concern about the fate of net neutrality under the Trump Administration. He said that tribes will work to preserve net neutrality.

Pat Furr, Computers for Classrooms

Ms. Furr said her organization is an R2-certified computer refurbisher and provides hard drive wiping services for used computers. She said Computers for Classrooms has expanded operations beyond the Chico area.