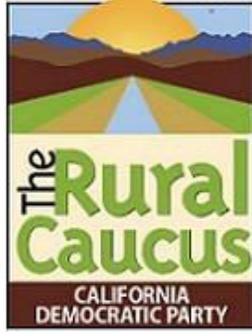


April 2, 2019



Broadband Update



Dear Fellow Rural Caucus Members, I am excited to send you an update on Broadband.

I was honored to be included at dinner and next day meetings with FCC Chairman Ajit Pai. We were 16 at table, including: Asm Cecilia Aguiar-Curry, CalOES Director Mark Ghilarducci, CETF President Sunne Wright McPeak and Chief Innovation Officer for UC Agriculture and Natural Resources Gabe Youtsey. As you know, much can be accomplished over California food and wine!

The headline has to be that the FCC would match funds with any state that puts up significant dollars dedicated to extending broadband into rural areas. This is Pai's passion and his goal, and he wants to work with us. He did it for New York two years ago. And, he said, the FCC would follow our plan, in other words, be a silent partner. He mentioned Connect America Phase III. I feel he practically invited us to come to him with a proposal.

I am campaigning for two specific ideas for consideration, leveraging state and federal dollars:

1. Mapping farm fields for Broadband connectivity/gaps
2. Networking the Fairgrounds for Public Safety

The key I believe is focusing on rural. That is where The Chairman's heart lies. He mentioned being inspired by Robert Caro's biography of LBJ and reading about the transformation brought to the Texas Hill Country with rural electrification. Rural Broadband is the modern equivalent, except that then there was one provider – yeah or nay, and today the carriers protect potential market share, blocking anyone else from coming in, even if they have no intention of providing coverage.

The stated reason is that it doesn't pencil out. But that is because they are looking at number of households as opposed to economic activity. According to the Sacramento Area Council of Governments, investing in food systems shows a 1.82 economic multiplier, and that every on-farm job generates two off-farm jobs to the broader economy, including high value-added food processing jobs. Such significant returns to the community make Rural Broadband a matter of Public Policy, in the absence of a market solution.

Ag Tech:

At Muller Ranch outside of Woodland, Frank Muller, who serves with me in the CDFA Board, did a show and tell, demonstrating the old school way of testing for soil moisture vs. the new, which he cannot use for lack of connectivity.

(Frank was a participant in the Yolo County AgTech Pilot, which connected three farms to technology companies being supported by the AgStart Incubator in Woodland. The Pilot was conducted by Valley Vision with funding from the California Emerging Technology Fund).

Much of the discussion focused on how broadband affects the whole value chain from farm, ranch and dairy to the eater ... as well as increased sustainability, conserving water, cutting down on inputs, food security, food safety, and better nutrition.

Susan Strachan from CSU Chico made a great presentation, showing the gap between real and reported broadband speeds on actual farms (155 in Yolo County). Of particular note is the lack of up-load capability, which is essential for getting data from the field into the cloud.

In addition, the Connected Capital Broadband Consortium provided maps on wireline service grades in Yolo County and the region, which, using PUC data, show the levels of services speed, reliability and cost from a number of providers. Most striking is the large, gray swath where there is little or no coverage, graded as an F.

Chico State's study, the only such study of its kind in the country, could/should serve as a bench program for farm field broadband testing, providing proof of concept for a proposed pilot project that would cover

the Sacramento Valley and San Joaquin Valley. Cost is TBD, but in range of \$125,000. Then, the process can be scaled up for the state and the nation.

I feel there is appeal in mapping all the agricultural land in the US for Broadband, with California leading the way.

On Twitter Chairman Pai said, " Precision Agriculture is a key benefit to closing the digital divide".

Public Safety Communications:

A key goal is to network the 78 fairgrounds in the state as the staging areas for first responders and evacuees, for organizations like the Red Cross, and to serve emergency housing with permanent, gold standard, high speed Internet covering the entire fairground.

The Fairgrounds should become "Safety Grounds", providing reliable connectivity in a disaster, and not a market share grab on the part of the telecommunication firms.

The premise is we need public access to what CalOES Director Mark Ghirlarducci calls Public Safety Grade Communication and not just for first responders. We know from Paradise that videos on social media posted by evacuees showed what roads were open to get to safety. Connectivity is essential for people to be able to tell family and friends they are safe; and for filing insurance claims. The quality of the communications needs to be at a level that thousands of people, regardless of carrier, can communicate at once. It also is well documented that broadband coverage is critical for businesses to get back up and running as soon as possible; otherwise, business failure rates are high.

During the 2017 Wine Country Fires, the cell towers at the Sonoma Fairgrounds burned. It took CalFire 24 hours to get communications and Verizon three days to being in cell sites on wheels (COW). The cost and time lag of deploying temporary, mobile units every time make this an unsatisfactory response, when we know we are going to have more fires more often and should be working on preparedness.

It is also worth noting that AT&T has raised one tower in California for First Net since winning the federal contract and their system is restricted to first responders, with *possible* extension for commercial use.

Plus, when not in use for disaster response and recovery, this network would also serve as a platform for economic growth by attracting businesses. The cost estimate is \$250,000 per fairground or about \$20 million total.

I believe Asm. Aguiar Curry has potential legislation in mind for funding. I am meeting with her on Thursday and will learn more.

I am feeling very optimistic. We are making progress. Momentum is building in our favor.

I look forward to seeing you in San Francisco.

Until then,



Joy Sterling | Rural Caucus Chair | 707 484 0013 | joy@ironhorsevineyards.com
www.cdpruralcaucus.org

STAY CONNECTED

Iron Horse Vineyards | 9786 Ross Station Road, Sebastopol, CA 95471
Sent by joy@ironhorsevineyards.com