Broadband Alliance of Mendocino County

June 13, 2017

Mr. Robert Wullenjohn California Public Utilities Commission 505 Van Ness Avenue San Francisco CA 94104

Dear Mr. Wullenjohn,

Thank you for this opportunity to provide input into CASF reform. Although the Alliance was not able to attend the May 25th workshop in person, I participated via conference call to hear other stakeholder perspectives, and we have since analyzed your white paper. As a county Mendocino is 30.8% from our county's 98% goal (over 10,500 "gap" households). In fact, although we compromise only .26% of the state households, these households represent 3.04% of all unserved households in the state. With reform, the CASF could be a tool to help us close this urban/rural digital divide that even the PUC itself has recognized. We offer support/opposition to staff-proposed strategies, and in addition make some new recommendations for consideration.

The Alliance works with all willing providers in the county, and we are concerned that the proposed strategies unfairly tilts the grant program towards ILECS while creating "barriers to entry" for smaller ISPs/CLECs, which we believe would harm not only our county but all of California in the long term. The monopoly providers AT&T (and formerly Verizon) operating in our county has failed to deploy broadband to low-density areas for years, and without meaningful competition they will have no incentive to improve or expand services. In fact, the FCC has recently identified our county as one of 15 rural counties that is considered "non-competitive." Meanwhile, the need for Internet and data usage have risen steadily.

Below we discuss some of the staff strategy proposals in more detail.

¹ Page 5 of 2016 Annual Report, ", "The data confirms that there is an urban versus rural broadband availability divide."

² From FCC BDS order released 5-15-17

Strategy 1: Rely on Charter and Frontier Buildout Obligations

The Alliance agrees with the CD staff conclusion that this strategy cannot be prospectively measured and in its current state cannot be relied on to achieve California's broadband goal of 98%

Given that as part of the Commission's approvals of acquisitions by these two providers they committed to provide significant broadband services to additional households, we recommend that the Commission reengage these two providers. The Commission should request Charter and Frontier to submit deployment plans against their commitments to the Commission, by December 31, 2017. Actual deployment plans from these two providers would inform the Commission, regional consortia, and consumers as what to expect and what areas still needed to be reached. In essence, unless we all know where and when they will meet their commitments to the Commission we need to proceed on the assumption that they will not help attain the goal.

Strategy 2: Rely on CAF Phase II Commitments

The CD staff makes the case why this strategy involving Frontier and AT&T should not be relied on to achieve California's broadband goal. The Alliance agrees that this is not a reliable strategy for several reasons. First and foremost, these buildout do not meet the minimum PUC upload standards and so will not help us meet our goal of reaching the 10,535 "gap" households in Mendocino County. CAF expansion can help move unserved households closer to served status and is therefore an important piece an overall strategy, but the CASF program should not rely on this federal funding to fulfill our state responsibility.

When the CASF program was being considered back in 2006, in Rulemaking 06-06-028 (p 4) it was stated, ".... The CASF program should provide leadership in promoting broadband deployments in CA and not *rely on federal programs to solve CA problems*."

In addition, CAF providers do not work with communities, broadband advocates, nor consortiums in sharing their long-term deployment plans. This creates a "market overhang" which can potentially stall other broadband builds for years into the future, as communities and other providers wait for networks that may *or may not* be built.

At best, this strategy is a major step backwards for California involving the use of dated infrastructure and technology, and providing access at speeds below the existing California standards.

Strategy 3: Align CASF Program with the FCC's CAF II Program

The Alliance does *not* agree with CD conclusion that "it makes sense to align the CASF and CAF speed thresholds", but will agree that the Commission should expect strong pushback from consumer groups that 10/1 does not meet existing nor future community needs. Again, this strategy is a step backwards for California.

In 2006 when the CASF fund was being considered, the threshold was 3/1; thresholds are moving forward and should *remain moving forward*, just as data usage only goes up and not down. Projects that are funded now must be capable of meeting future demand as well if the program is to provide for the "necessary infrastructure" envisioned in Decision 07-012-054 (2007) which established the CASF.

Lowering the current speed standards would harm California. For rural areas to be able to compete in the global digital economy they must be capable of being *producers* of content, which means adequate *upload* speeds. Over 62% of businesses in Mendocino are small home businesses which utilize a home broadband connection.³ Videoconferencing and other 2-way communication applications, music production, large file sharing, cloud storage, etc all require adequate upload speeds. The economic development of California's rural counties depend on adequate download *and* upload speeds.

ILECS will claim that without this adjustment of speed thresholds, that the PUC is "precluding" the leveraging of federal funds with state funds and that residents will be asked to "pay twice" if these speeds are not adjusted. They also state that the PUC is required to include details of efforts to leverage non-CASF funds in their annual report. However, you do not reach a desired outcome (more served households) by changing the definition of the desired outcome itself, so that it looks like you have magically reached your goal. The PUC standards existed prior to the ILECs acceptance of CAF money, and those standards should at a bare minimum, stand, and ideally be increased to match the federal definition 25/3. ILECs could in fact leverage their federal funds simply by increasing their upload service level by only .5 Mbps, thereby making the area truly meet the definition of PUC "served" and keeping any potential competition out. Then by applying to the CASF program for eligible adjacent Census blocks state funds could be leveraged with federal funds. This would also keep competitive pressure on the ILECs to move forward with their builds in an expeditious manner. If their technology is not able to provide a .5 Mbps upload speed increase now, how can it be expected to be "adequate" in 5 or 10 years?

Leveraging funds can be an important way to get "bang for the buck", but not if it jeopardizes core values such as *long-term* infrastructure investment, *universal service*, and it harms competition - the necessary ingredient for a robust broadband ecosystem. Strategy 3.b proposes

³ From the 2011 Mendocino Economic and Demographic Profile

⁴ see Frontier's comments on implementation of SB 745, page 6

⁵SB 745 amended the Public Utilities Code Section 914.7 to require that the PUC annual report include details of efforts to leverage non-CASF funds such as CAF.

focusing funding on CAF "gaps" and concludes it's a "solid opportunity" to upgrade adjacent census blocks. This leveraging of funds is fine, but not if it harms other non-CAF associated grant applications and creates a uneven playing field for providers. It's also important to remember that there are many counties where there may be no known CAF plans. For example, in Mendocino County Frontier has provided no public CAF plans. These areas should not be at a funding disadvantage, nor have to wait "in limbo" for years until possible plans are made public.

Other changes to align the CASF program to the CAF program are proposed in 3c, with the first bullet-point being the most troubling (CAF II focus on ILECs and CASF focus on non-ILECs). The Alliance would strongly opposed any change to the CASF program to make it more ILEC-centric, and in fact believes that lack of participation by smaller providers is a major problem in the program that needs to be addressed. The ILECs have cherry-picked areas for buildout in rural counties for years, leaving large areas unserved. There are many smaller providers, including non-profit providers, who accept smaller RoIs, already provide free services to Anchor Institutions, and want to expand. Funding help from a state broadband program that addresses their needs would be a tremendous boon to them and the communities they serve. We request that the CD survey such smaller providers/Non-profits to determine what these barriers to participation are, and to provide leadership to address their concerns and barriers to entry.

We believe the California should strive for true leadership and vision by aligning state speed standards with the FCC 25/3 standards, and maintain alignment with FCC standards going forward.

Strategy 4: Fund Effective Solutions

Strategy 4a: Focus on Unserved and Underserved Households in Territories of Frontier and AT&T

There are two reasons this strategy is flawed. First, it makes the CASF Program non-competitive by precluding other providers the opportunity to seek a CASF grant to mount a project. And as CD notes in footnote 38 of the white-paper, the CPUC cannot compel these ILECs to deploy broadband in their territories. They have had the opportunity for years, and have not done so. Given how competitive pressure is what often makes incumbents decide to upgrade their infrastructure, it is crucial to keep a level playing field for all providers.

Strategy 4b: Focus on Underserved Households in General

The CD staff concludes focusing on underserved households is too limiting as it runs the risk that unserved communities will remain unserved, and we agree. However, pockets of unserved areas are often found in these underserved areas. Mendocino has had CASF grants for purely underserved areas, and hybrid unserved-underserved projects. Therefore, we recommend that future CASF grant funded areas include unserved, underserved, or combination areas.

Strategy 4c: Rely on Fixed Wireless

Fixed Wireless *must* be part of the complete strategy to meet the needs of rural California, and so program modifications should be made specifically to accommodate FW applications. CD should seriously consider all input by smaller WISPs, and in addition actively survey such WISPs as to their barriers to participation (especially those WISPs who have submitted applications). In Mendocino we are aware of WISP challenges such as the difficulty in mapping out a finished network, inability to provide 100% coverage in an area, financial requirements for new entrants, inability to meet matching portion of grant requirement, and biggest of all - lack of resources for an onerous application process. Please see the comments from Yahel Ben-David, a very successful WISP operator on the south coast of Mendocino who offers *symmetrical* speeds that are capable of 65 Mbps at subscriber locations, and *unlimited* data. He does not utilize the CASF program, even though such funding could greatly accelerate his deployments.

Fixed Wireless could also be very cost-effective, but the CASF application process must have needed flexibility to meet the unique needs of an area. This technology is challenging in heavily forested areas so hybrid applications in such circumstances should be encouraged and promoted. Any fixed wireless projects to be funded must be able to meet speed standards, no data limits (or very large data limits) and have bandwidth potential growth over time. As mentioned, the unique needs of FW providers and smaller providers must involve changes in the application requirements so that barriers are removed. We would be in favor of funding for recurring fixed costs (backhaul) while the network is developed at each subscriber premise location. *Input from the providers themselves is the key to a successful program utilizing Fixed Wireless technology*.

Recognizing that wireless technologies of any kind (mobile or fixed) require a strong wired infrastructure, middle-mile projects should be funded as *open-access* middle mile projects only. This builds a foundation upon which more last-mile projects can be built next by smaller providers which can fill in the broadband gaps.

Strategy 5: Fund Commission Identified Areas

The Commission is in a position of authority with much experience and expertise in the field, and as such we believe that the Commission should have role in defining priority areas, confirming such areas with the county, and attracting providers to build out networks. Attracting providers for projects is a significant a problem for Mendocino. We have areas that need service but no providers willing to apply to the CASF fund for a project.

The adjusting of the 3 filters in the white paper (60%, FW, Terrain) and the resulting households from the use of such filters provided interesting results. However, it was disappointing for Mendocino that all these adjustments still resulted in zero eligible areas for us. I assume this is because the base filter was a household density of 150 Households per square mile. We have an

average population density of 10 HH/square mile (compare to 88 HH/sq mile statewide), and in a superficial look at a population density map for our county, we have 9 areas that *maybe* would qualify for this metric⁶, and all of these are in the more populated areas/towns where providers are already operating. The use of this base filter therefore eliminates our entire county for any possible "high-impact" designation. In addition, none of the previous CASF grants for Mendocino would have qualified under this scenario with a 150 HH/sq mile filter. If population density becomes the focus for projects going forward, technically the state may be able to reach the 98% goal while leaving virtually all of the rural areas behind.

The low density issue was discussed in Alliance comments for the first white paper, where we said that the CASF program was not designed to get the most "bang for your buck" because that is the model already being used by the providers; instead these are high-cost areas, exactly the kind that the CASF program was meant to subsidize. We recognize that the CD is in a difficult situation with the mandate to get households served with limited funds. Our lawmakers must prioritize funding for *all* of California so that we can prosper together, and the CASF staff should emphasize and advocate for the "universal service" aspect of the program *on our behalf*, and not provide unfair advantage to the more densely populated areas. If we don't help the rural areas of California to have the tools needed to prosper economically, the divide between urban and rural will only deepen to the detriment of all. There is more at stake here than just technically reaching the 98%.

The Alliance likes the idea of the CD using their knowledge, data, and expertise to help identify the most promising project areas. Given the density problem described above (which leaves virtually all of rural northern California behind) here are a few possible ideas we ask the Commission to consider:

- Advocate for a goal of 98% of served households by county
- Identify the most promising areas for a project within each county (the top "high-impact" area by county)
- Recognize that FW projects do not necessarily depend on population density, but on line of sight. What metric could you use to identify the most households served for a FW project?

The challenge of what to do *after* identifying potential areas is also interesting question, and we are not opposed to the three ideas offered in this regards (fast-tracking applications, request for application process and an auction/reverse auction). We suggest that CD staff:

- Have flexibility to work with smaller providers
- Streamline the application process for funding and consider ideas such as: the lower the amount of the ask, the easier the application process; or, the smaller the company, the easier the

⁶ At a population density of 100-500 these areas are: Gualala, Point Arena, Mendocino, Fort Bragg, Ukiah, Willits, Laytonville, Boonville, Covelo. Therefore some of them may be less than the 150 HH/sq mile metric.

process. Some of these providers literally only have a couple of employees. You could get "bang for your buck" by helping them.

Strategy 6: Fund Line Extensions

The Alliance supports this strategy as a component of an overall strategy.

Strategy 7: Fund Expenses Beyond Deployment Costs

We also support this strategy to fund limited operating costs which may be necessary in beginning stages to make a network sustainable.

The Commission should investigate why the loan program is underutilized, when matching portions of the grant requirements are often problematic for smaller ISPs.

Conclusion

Thank you for this opportunity to provide input into the CASF process. Mendocino County residents are paying into this fund, but getting little back in return. We would really like to see a robust and strong state broadband program that provides funding support for projects of all shapes, sizes, and technologies throughout the state; a program that is easy to understand, and that providers consider easy to work with and easy to comply with - commensurate with the level of funding. Providing service to all the rural hard-to-serve areas takes a lot of time and commitment on the part of providers, leaving little time to spend in the office on difficult applications with little chance of success. I have seen discouraged applicants from the various programs (FCC, USDA, CASF) decide such grant applications are "not worth it" while our communities are in need. If the CD staff can help change this, we sincerely ask that you try.

Thank-you,

Trish Steel

Trish Steel

Broadband Alliance of Mendocino County

Chair