

POLICY MEMO

Improving Rural Broadband: Expanding the FCC’s Alternative Connect America Cost Model

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April 2021

The COVID-19 pandemic has shone a blinding spotlight on the importance to American families of access to high-speed broadband. Thanks in no small part to broadband technology, many who would not have been able to do so otherwise have continued to be employed, connected, fed, educated, and entertained while remaining socially distant. While too many households still lack sufficient broadband—by any measure, millions live in areas with substandard service—current broadband availability would be much worse if the private sector had not invested in, upgraded, and expanded broadband networks over the years. The decisions to undertake these activities have been praiseworthy, as have providers’ steadfast efforts to ensure continued operations, both at the service and network levels, during the pandemic.

Similarly, Congress, the Federal Communications Commission (FCC), and other federal and state agencies deserve much credit for a range of efforts and solutions instituted over the previous decade to aid broadband buildout in areas where private investment alone couldn’t justify the total associated expenditures required. Credit is particularly due to the FCC for initiatives that have increased its support programs’ efficiency and for ones that have required funding recipients to meet enforceable deployment obligations through such mechanisms as incentive-based regulation. One such effort that I helped spearhead during my time at the FCC is the Alternative Connect America Cost Model, or “A-CAM,” which enabled rate-of-return providers to elect to participate in a program providing them fixed support over a predetermined time interval in exchange for meeting mandatory buildout obligations. The A-CAM

program has achieved measurable results in bringing broadband service to rural areas.

In spite of its accomplishments to date, still more can be done to leverage the A-CAM program's success, as the proposal recently submitted by a group of A-CAM providers demonstrates. The proposal includes expansion of the program's provider support term in exchange for these providers' supplying significantly higher broadband speeds and accelerated deployment. Although I disagree with those demanding an increase in the Commission's broadband speed standard while millions remain completely without access, if that is the direction in which leaders are determined to proceed, the new A-CAM proposal provides a promising approach to deliver much faster speeds deployed quickly. In particular, the proposal's plan to give electing providers additional years of funding certainty without increasing funding levels appears to be a productive way to advance broadband in rural America. I believe this proposal is worthy of serious consideration and that its adoption, in some form, would result in many more American families gaining access to high-speed broadband.

A-CAM History & Successes

A-CAM came about as the result of years spent in preparation, comment, and budget runs, ultimately receiving FCC approval in 2016 as part of a much more comprehensive effort to reform rate-of-return regulation. The Commission subsequently added additional funding to the program to generate even greater broadband buildout. In 2018 in what is colloquially known as "A-CAM II," the FCC expanded the program even more, with a specific focus on money, buildout obligations, and eligibility. As it currently stands, the program's total annual budget is approximately \$1.1 billion.

Specifically, A-CAM gave rate-of-return providers a voluntary opportunity to move from a plan in which they operated under a legacy support system based on recovery of individual

company costs to one stipulating a defined term of model-based support and specified buildout requirements. The Commission's A-CAM efforts have proven to be popular among providers, attracting those serving 466 of the 1,100 total rate-of-return study areas. In sum, almost 1.2 million locations are or will be served under the A-CAM program, all in rural areas and many in the country's most rural areas.

While the timing of the initial A-CAM offers corresponded with uncertainty facing traditional rate-of-return funding, thus helping entice certain companies into participating, the key ingredient to the program's success has been the accuracy of its cost-estimation model. Adjusting for area, terrain, population density, and other critical input factors, the model generated the estimated capital and operating costs necessary to bring fiber broadband builds to those areas of the country that have been most costly to serve. However, despite the best of intentions and the work involved in the model's creation, like all mathematical modeling, the assumptions on which A-CAM's is based and the factors incorporated in it are only as precise as the data used to derive them. Consequently, before being given the choice of electing A-CAM participation, providers were allowed adequate time to analyze the model's cost and subsidy estimates for their respective service areas. However, industry experts acknowledged the model outputs as valuable and, further, have reported them to be reasonably accurate representations of their network build costs.

Participating providers are currently in the process of fulfilling their A-CAM buildout commitments and bringing broadband to their service areas. Under A-CAM I, just over 450,000 locations must be served at 25/3 Mbps, and almost 170,000 locations will ultimately receive 10/1 Mbps service. By expanding program eligibility conditions, A-CAM II increased the number of locations subject to the 25/3-Mbps requirement by over 360,000, an impressive result given that these locations are generally in very rural areas having extremely low population densities.



Chart 1. Final Buildout Obligations for A-CAM 1 and A-CAM II Companies

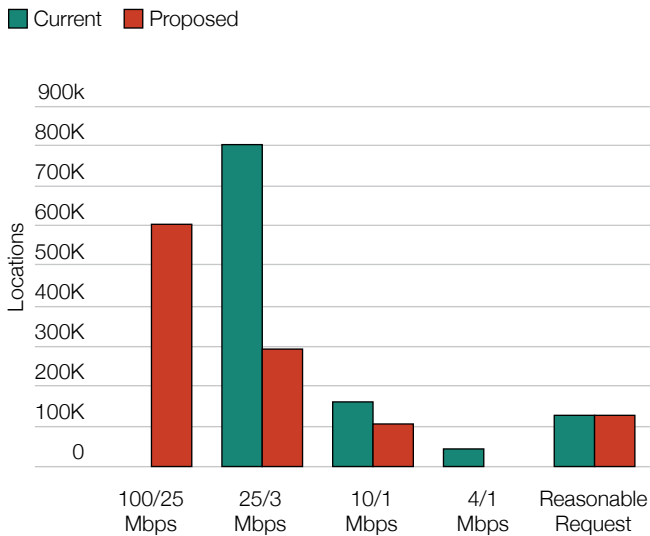


Chart 1 Supporting Data: A-CAM I and A-CAM II Companies

FINAL BUILDOUT OBLIGATIONS	CURRENT	PROPOSED
100/25 Mbps	—	605,373
25/3 Mbps	804,871	300,074
10/1 Mbps	165,725	115,376
4/1 Mbps	50,227	—
Reasonable Request	132,034	132,034

Source: Petition for Rulemaking, ACAM Broadband Coalition, October 30, 2020.

New A-CAM Petition

In October 2020, a group of A-CAM recipients, the A-CAM Broadband Coalition, submitted a petition to the Commission proposing a revision and expansion of the current program. In response to the Coalition’s request for a Notice of Proposed Rulemaking (“NPRM”), the Commission automatically issued a public notice regarding the proposed change, which generated a handful of comments. Procedurally, the Commission’s next step is to digest these comments and others sent in reply that were filed in December of last year and then decide whether to issue an NPRM, a logically sound action for the Commission to take.

Specifically, the petition proposes adding six years of funding at current levels to the end of A-CAM I and A-CAM II’s life, or through 2034, in exchange for vastly improved buildout requirements across the providers’ service areas, including service of up to 100/25 Mbps in certain locations. Chart 1 from the petition, which is shown below, breaks down these increases and the corresponding decreases in relatively low speed offerings.

As shown in the supporting data above, under the proposal, all 4/1 Mbps locations would be migrated to higher speed offerings; 30.4 percent of 10/1 Mbps locations would be upgraded to 25/3 Mbps service; and 62.7 percent of 25/3 Mbps locations would be upgraded to 100/25 Mbps service. The 600,000+ locations that would become subject to 100/25 Mbps buildout obligations represent 52.5 percent of all A-CAM locations.

As with the original A-CAM’s funding, that of the revised A-CAM would not be sufficient to fully cover the costs of new buildout commitments; thus, recipients would be required to invest other funds to meet their obligations. In addition, given the longer funding timeline, recipients would have to “front load” their spending and construction efforts, with many of the new buildout commitments under the petition to be reached by 2028 or 2029, the beginning of the additional support term.

Recommendations and Observations

The A-CAM Broadband Coalition’s petition presents interesting issues and tradeoffs. First, A-CAM was initiated prior to

the FCC’s implementation of reverse auctions to distribute broadband subsidies (first, in the Connect America Phase II auction and then in its successor, the Rural Digital Opportunity Fund auction)—a reform applied in relatively low-cost price-cap areas that attracted many bidders and one that I helped champion. Expanding the current A-CAM program beyond its current support term would apparently shield A-CAM locations from inclusion in future reverse auctions, thus precluding their access to the additional efficiencies and cost savings that reverse auctions could provide these areas. Additionally, since A-CAM participation eligibility extends only to rate-of-return legacy telephone companies, the program is distinctly non-technology neutral. Therefore, while A-CAM doesn’t require its recipients to rely on a particular technology in meeting their performance requirements, it likely discourages use of certain technologies, such as wireless- or satellite-based ones, given the nature of the areas served, even though these technologies could adequately serve many A-CAM locations.

At the same time, the Coalition’s proposal would offer fairly extensive benefits to the communities served by A-CAM providers and at a relatively low cost to Universal Service Fund ratepayers. While the support term itself would be expanded, subsidy levels would not increase year to year. Moreover, with proven track records in fulfilling their buildout obligations, A-CAM providers tend to be local businesses with deep ties to and understanding of their communities. Further, excluding A-CAM locations from future reverse auctions might not negatively impact those areas or lead to USF ratepayers’ paying higher than necessary costs, as A-CAM-eligible areas are uneconomical ones to receive absent universal service funding. And, since A-CAM areas represent such a small part of the country in comparison to Connect America Fund Phase II price-cap areas, excluding A-CAM locations from future reverse auctions may have only a minor, or *de minimis*, impact.

Of the comments received in response to the Commission’s public notice, only WISPA’s was not fully supportive of moving

forward to an official NPRM. The source of its concerns was that some of its members could be able to serve A-CAM areas through use of wireless technologies, and it didn’t want them to not receive the funding to serve these areas for such a long period.

With these considerations in mind, several options could be pursued, none of which are necessarily mutually exclusive:

1. **Tee Up an NPRM Favoring the Petition:** The benefits delivered by the A-CAM program to date indicate what could be expected with the expanded funding term. It would help guarantee more American families access to increasingly higher speed broadband to meet their online needs and at a reasonable overall cost. While some concerns have been raised in the record, the issues so raised can be examined and debated as part of the NPRM proceeding and need not prevent the proposal from moving forward at this time. Issuing an NPRM to address the A-CAM enhancement plan would allow it to be examined in greater detail and would provide an opportunity for consideration of the ideas expressed below.
2. **Turn the Dials:** The companies forming the A-CAM Broadband Coalition have a proven track record of providing the Commission with sound facts and data, and they have, without doubt, invested great thought and care into formulating their proposed plan. At the same time, the potential for fine-tuning is always present. For example, some of the proposal’s variables, such as the number of years funding would be extended as well as the number of locations to be upgraded to differing performance tiers, could be adjusted to meet public policy goals. Adopting new buildout requirements for “reasonable request” locations or increasing the number of locations included in an A-CAM recipient’s service territory could also be possible. Like all good petitions, this one should not be viewed as “take it or leave it.”



3. Synchronize the Timing: As a proponent of reverse auctions and technology neutrality, I appreciate concerns about extending the current A-CAM funding term. However, aligning the timing of an A-CAM extension with the expiration of other, high-cost programs, such as the RDOF support term, could allow the Commission to implement the proposal's goals without prejudging the policy mechanism best suited to fund broadband to rural consumers at the end of the A-CAM's extended support term. For example, the Commission could extend A-CAM support for a shorter term with modified obligations so as to match the RDOF Phase I's conclusion, projected to be in 2032. Harmonizing the Commission's high-cost

programs in this manner would not only be administratively simpler, but it would also eliminate anachronistic regulatory asymmetries and promote good public policy.

Expanding broadband availability for Americans, especially in the midst of the COVID-19 pandemic, will require traveling down multiple paths. To date, the A-CAM program has succeeded in bringing broadband to some of the more remote, rural areas of our nation. Acting on the A-CAM Broadband Coalition's pending petition to increase program term and speed requirements—whether in whole, in part, or in some other variation thereof—seems a prudent and worthwhile action.

The opinions expressed in this paper are those of the author and are not intended to be a submission to the Federal Communications Commission with the intent to influence agency employees in the performance of their official duties in any current or future Commission matter.



About the Author



Michael O'Rielly is a visiting fellow with Hudson Institute's Center for the Economics of the Internet. He served as a Commissioner at the Federal Communications Commission from November 2013 to December 2020. Previously, he worked for nearly twenty years in various staff positions in the U.S. Senate and House of Representatives, concluding with the Office of the Senate Republican Whip.

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