Mr. Chris Henderson  
CEO  
Universal Service Administrative Co.  
700 12th Street, NW, Suite 900  
Washington, DC 20005

Dear Mr. Henderson:

I write to seek USAC’s assistance in identifying and eradicating potential waste in the E-rate program as a result of applicants seeking funding to overbuild existing broadband networks, so that the Commission can make any necessary changes to the program to protect ratepayers.

In the Second E-rate Modernization Order, the Commission authorized the use of E-rate funding for networks constructed by applicants.₁ I dissented from the entire order, including the self-construction decision. The order put in place a cost-effectiveness review but rejected recommendations in the record that the option not be permitted in areas where broadband is already available. In meetings with outside parties, my staff and I continue to hear concerns that universal service funds are being wasted by E-rate applicants overbuilding existing networks in whole or in part. Overbuilding is especially problematic when those existing networks are subsidized by other federal funding, such as the high-cost program. In those instances, ratepayer dollars are being used to support artificial competition potentially jeopardizing service to the broader community.

Even more troubling, I recently read a news article in which a suburban county school system discussed its plans to seek E-rate funding to pay for a backup fiber network for its schools.² According to the article, there is already at least one private broadband company operating in the county that has provided service to the schools. In addition, the article indicates that the county operates its own broadband network capable of providing service to the schools. Yet, the county apparently seeks E-rate funding for yet another network, and seems convinced that the project would be eligible for such support.

As an initial matter, I do not believe that our rules permit funding for backup networks.\textsuperscript{3} Regardless, I see absolutely no justification for using E-rate funds for such a purpose. Instead, any universal service funding for broadband deployment should be targeted, through the high-cost program, to unserved communities most in need of support.

To help understand the scope of overbuilding in the program, please provide responses to the following requests to my office no later than February 17, 2017.

1. Since the \textit{Second E-rate Modernization Order}, how many applicants have sought E-rate funding for self-construction, and how much funding was requested by these applicants?
2. How many of the requests by these applicants would result in overbuilding a separate provider’s network, in whole or in part?
3. How many of the providers being overbuilt receive funding from the high-cost or rural health care programs?
4. How many of the requests by these applicants would result in overbuilding an applicant’s own network, in whole or in part?
5. How many self-construction requests were denied on cost-effectiveness grounds?
6. How many requests for self-construction have received funding commitments, and what is the total amount of funding committed for the successful requests?
7. Please detail the procedures USAC uses to review requests to determine whether self-construction is the most cost-effective option.
8. Please provide copies of any additional existing USAC materials, such as USAC training slides or videos, news briefs, or funding decisions, that explain self-construction option, including how requests are reviewed to determine whether self-construction is the most cost-effective option.
9. Please provide any rules, precedent, guidance or existing USAC materials, if any, that could be read to suggest that E-rate funding is available for backup networks.
10. Is it USAC’s view that E-rate funds may be used to build backup networks? If so, please provide specific references and cites to provisions in FCC Orders dictating this requirement.

Thank you in advance for your assistance with this timely matter.

Sincerely,

Michael O’Rielly

APS May Build Backup Fiber System Alongside County’s Network

Monday marked a milestone for the county’s multimillion dollar ConnectArlington fiber optic network: It has completed phase one of migrating Arlington Public Schools to the system and off of Comcast’s internet access.

But as APS prepares to enter phase two of the migration, it also has an open request for proposals (RFP) to build another fiber network, a potentially pricey project that it says is a “contingency plan.”

With phase one complete, 14 APS sites are now on the ConnectArlington network. Another 23 are expected be online by December.

Early last month, however, APS issued an RFP for a contractor to build a new fiber network for the school system. Proposals originally were due Monday, but the deadline has been extended to January 17. APS is supposed to choose a contractor for the project “as soon after that date as possible,” according to an addendum to the RFP. The RFP states that the new network must be constructed and functioning by April 2018.

APS says the additional fiber network is a contingency plan and ConnectArlington still will be its primary network. Therefore, APS will continue moving forward as planned with getting the next bunch of sites online with ConnectArlington by year’s end.

“APS is contracting for a backup system to remain in place until we know that ConnectArlington is complete and fully functional. With all of our instructional, testing, business functions and state reporting requirements, APS cannot risk not having a viable network infrastructure in place if ConnectArlington is delayed and not completed for any unforeseen reason,” said APS spokesman Frank Bellavia.

“Like the insurance policies we purchase to protect the investment in our buildings, buses and other critical components of APS operations, we hope we will never need the insurance, but those policies are in place — just in case,” said Linda Erdos, assistant superintendent for school and community relations.

Arlington County communications director Bryna Helfer said that the remaining 21 county and 23 school sites included in the ConnectArlington project’s phase two — which begins in March — will continue to receive Comcast service until they’re fully migrated in December.

The county says that it cannot speak for APS’ desire for another fiber network but asserted that the ConnectArlington network has been performing for nearly two years without issue.

“We are completely confident that we will install fiber into every planned county and school facility by the end of calendar year 2017, based on our previous years’ experience with the construction and operation of this project,” said James Schwartz, deputy county manager for public safety and technology.
In addition to the 14 APS buildings and 33 county buildings on the network thus far, Schwartz said, more than 130 traffic signals have been connected. Plus, the public safety radio system — previously supported by microwave antenna — has been migrated to ConnectArlington and "is operating without a problem," according to Schwartz.

"This system allows fire, EMS and police to communicate during emergencies and requires the highest reliability standard — that standard is being met by ConnectArlington," he said.

APS spokespeople say the backup fiber network is eligible for federal E-Rate funds, which assist schools and libraries with obtaining affordable telecommunications and internet access. The Federal Communications Commission explains that the discount a school district receives depends on two factors: "(1) the poverty level of the population the applicant serves and (2) whether the applicant is located in a rural or urban area."

"The RFP ensures that APS can receive a potential 50 percent reimbursement of [the backup fiber network] costs through the federal government's E-Rate funds," Bellavia said.

Because the RFP is still open, it's unclear how much the contingency network will ultimately cost. But so far APS has spent just over $400,000 for the ConnectArlington project, according to APS assistant superintendent of finance and management services Leslie Peterson.

"The county indicates the budget to complete the initial [ConnectArlington] build-out for schools is $1.9 million and they expect to come in under budget," she said.

David Talbot, a fellow at Harvard's Berkman Klein Center for Internet & Society who researches municipal fiber business models but doesn't have direct knowledge of APS' plans, said installing public fiber networks provides multiple benefits — including expanded bandwidth and reduced connectivity costs — for communities across the country.

"Fiber has huge value for public agencies, and this value will only grow with societal needs and the rise of smart-city and school applications, including to help kids at home," Talbot said. "And when public networks are used to provide service to homes and businesses, it provides competition that tends to improve service quality and drive down prices for all."

That reduced cost is one of the factors that prompted the county to pursue ConnectArlington in the first place.

"Had the county not built ConnectArlington, it could have been charged substantial annual costs to continue using the Comcast fiber network," Schwartz said.

In 2015, the county approved a plan to expand ConnectArlington beyond government and to license the dark fiber to private businesses for economic development purposes. The construction of that portion of the network was completed in March 2016; testing and configuring continued through May 2016.

Thus far, no businesses have signed licenses for the service, but "we have connected Virginia Tech and the University of Maryland-Mid Atlantic Crossroads to provide for Internet2 and research, government and higher ed connectivity," Helfer said. "And we are working with a number of interested parties from the business community whose requests for access are currently under review."
The county plans to launch a marketing campaign for the private business service "in the coming months, one that we believe will help attract and retain businesses in Arlington," Helfer said. "With our dark fiber in place, we are offering businesses a new choice for telecommunications."