



October 17, 2014

Chairman Tom Wheeler  
Commissioner Mignon Clyburn  
Commissioner Jessica Rosenworcel  
Commissioner Ajit Pai  
Commissioner Mike O’Rielly  
445 12<sup>th</sup> St. SW  
Washington, DC 20554

**RE: Ex parte presentation in WC Docket No. 13-184**

Dear Mr. Chairman and Commissioners:

The SHLB Coalition hereby submits into the E-rate Modernization proceeding the attached study estimating the one-time costs of deploying fiber optics to the schools and libraries without such broadband infrastructure. The study, called “A Model for Understanding the Cost to Connect Schools and Libraries with Fiber Optics,” was prepared for the SHLB Coalition by CTC Technology & Energy, one of the nation’s premier engineering and business consulting firms. CTC has engaged in engineering studies for hundreds of fiber networks across the country and has enormous expertise in costing and designing fiber networks. CTC developed six cost models that reflect the actual costs encountered in different geographic regions of the U.S.<sup>1</sup>

This cost study documents the investment in broadband that is needed to ensure that our nation’s schools and libraries have scalable, high-capacity broadband for the future. The SHLB Coalition believes that the E-rate program must explicitly encourage greater capital investment to accomplish the broadband connectivity goals set forth by the FCC in its July 2014 E-rate Modernization Order and by the President in his ConnectED Initiative. Investing in long-lasting, “future-proof” facilities will yield significant cost savings in the future, because the recurring costs of operating state-of-the-art fiber networks are often less than the costs of maintaining outdated network technologies. Capital expenditures to support scalable, high-capacity fiber networks are thus likely to yield more affordable recurring rates for schools and libraries. Most important, investing in this infrastructure will lay the foundation for students, teachers, and learners of all ages to develop the technological skills needed to participate in the 21<sup>st</sup> century economy.

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<sup>1</sup> Because of the unique geographic characteristics of Alaska, the study was not able to address the costs of deploying fiber in that state. We recommend additional study of the broadband deployment costs for schools and libraries in Alaska.

This study also highlights the need to focus special attention on the broadband needs of schools and libraries in rural areas. Rural schools and libraries cannot and should not be left behind in the transition to broadband; rather, the Commission should adopt additional measures to make the resources available to ensure that rural schools and libraries literally get “up to speed” with their urban counterparts. This study documents what it will take to close the “Rural Fiber Gap” identified by Chairman Wheeler in his speech to the 2d Ed Tech Summit last month.<sup>2</sup> The data also provides support for closing the “capacity gap” identified by several library and school organizations in their joint letter filed on Oct. 14.<sup>3</sup> The survey released earlier this week by the Consortium for School Networking (CoSN) and AASA – the School Superintendents Association shows that over 80% of school districts believe the E-rate program’s current funding levels are not meeting their needs, and found that “[c]apital, upfront non-recurring costs [are] the second biggest barrier to increasing robust Internet connectivity in school districts.”<sup>4</sup>

The SHLB Coalition has previously submitted several comments in this proceeding in support of enhancing the E-rate program’s support for capital investment in broadband networks, especially in rural areas. We take this opportunity to summarize below our recommendations for changes to the E-rate program that will provide greater incentives for capital investment and cost savings:

1. Additional funding is necessary for the E-rate program to accomplish the objectives of connecting all schools and libraries with high-capacity broadband.
2. Schools and libraries should have the option to self-construct their own fiber networks when it is cost-effective, as is permitted in the Healthcare Connect Fund.
3. The treatment of dark fiber and lit fiber should be equalized, so that dark fiber is not discriminated against and so that schools and libraries can choose this option if it is more cost-effective than other options.
4. Schools and libraries should have the option to amortize capital deployment costs over several years (not limited to 3 years or 5 years) in order to reduce the monthly expenses.
5. Establishing a maximum contract length of just 5 years will be detrimental to state master contracts. State master contracts are often over 5 years in length, and limiting the simplified process for E-rate applications to contracts of five years or less will make it difficult to take advantage of the lower rates available in state master contracts.
6. A certain portion of any increase in E-rate funding should be allocated specifically for capital expenditures (build-out) in rural areas. The CapEx program would be open to all providers and would be available over the next 5-8 years (to give schools/libraries the time to apply).
7. The FCC should explicitly allow E-rate supported services/networks to be shared with health care and other community uses. E-rate funded networks should also be open to

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<sup>2</sup> <http://www.fcc.gov/document/fcc-chairman-tom-wheeler-remarks-second-ed-tech-summit>.

<sup>3</sup> <http://apps.fcc.gov/ecfs/document/view?id=60000973304>.

<sup>4</sup> <http://cosn.org/about/news/k-12-report-affordability-adequate-funding-biggest-technology-barriers>.

interconnection by other networks (as long as the E-rate program does not pay for these additional uses.) By allowing interconnection, schools and libraries can often become intermediate “jumping off” points from which it can be possible to serve the surrounding community. By permitting network sharing, the E-rate program can facilitate cost-savings by taking advantage of existing investments made by incumbent telcos, cable providers, municipalities, research and education networks, and other competitive providers.

8. The FCC should allow “remote rural” schools/libraries an additional five percent increase in E-rate support, thereby increasing the maximum to 95% (and lowering the match to 5%). Further, in order to encourage the use of consortia, the FCC should allow all consortia approved by state government school and/or library agencies to receive an additional five percent discount, regardless of the size of the consortia.

9. The FCC should adjust the newly-adopted definition of “urban” so that schools and libraries in urban clusters are considered "rural" and receive the additional rural discount.

10. The FCC should allow broadband providers expedited recovery of capital expenses in one or two years in exchange for a commitment to offer more affordable rates thereafter (in other words, award capex funds only on condition that the provider guarantees affordable rates).

11. The FCC should enable USAC to approve multi-year awards (as in the rural Healthcare Connect Fund).

Sincerely,

A handwritten signature in black ink that reads "John Windhausen, Jr." with a stylized flourish at the end.

John Windhausen, Jr.  
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