In the Matter of

Modernizing the E-rate Program for Schools and Libraries

WC Docket No. 13-184

Comments of WTA – Advocates for Rural Broadband

I. Introduction and Summary

WTA – Advocates for Rural Broadband (“WTA”)\(^1\) hereby submits these comments in response to the Federal Communications Commission (“FCC”) Notice of Inquiry\(^2\) seeking focused comment on its *E-rate Modernization NPRM*.\(^3\) WTA’s members are rate-of-return regulated telecommunications carriers (“RLECs”) that serve some of the most rural hard-to-serve communities in the country and are providers of last resort to those communities. RLECs remain deeply committed to their communities and strive to meet the broadband needs of rural schools and libraries many of which their

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\(^1\) WTA – Advocates for Rural Broadband (formerly Western Telecommunications Alliance) is a trade association representing approximately 250 rural telecommunications providers offering voice, broadband and video services in rural America. WTA members serve some of the most rural and hard-to-serve communities in the country and are providers of last resort to those communities.


friends, family, and neighbors rely on for educational and community development purposes.

WTA continues to support the FCC’s E-rate modernization efforts that are aimed at bringing affordable broadband to schools and libraries across America. WTA’s members have a long history of serving the communications needs of rural schools and libraries and have already deployed advanced scalable broadband infrastructure to a majority of the schools and libraries in their service areas.\(^4\) WTA commends the FCC for focusing on the affordability of broadband as the first priority in addressing the needs of schools and libraries. The factors that contribute to this lack of affordability are often beyond the control of rural schools, libraries, and their local broadband providers including high middle mile transport and peering costs, small student/user populations, sparse community population densities, large service areas, and challenging geography. These factors also demonstrate that the FCC is correct in focusing on upgradable and scalable last-mile fiber connections, rather than prescribed speed targets that may be unnecessary or unaffordable for many small rural schools and libraries at this time. However, in order to get the most value from limited E-rate funds and to prevent wasteful spending on duplicative infrastructure, the FCC should prohibit E-rate funding for the construction of outside broadband plant where there is an already a federally supported fiber connection to a school or library. If there is a need for a last-mile fiber upgrade, the FCC should create a framework to analyze the existing broadband infrastructure serving the institution including already upgraded wire centers, the distance from the institution to fiber infrastructure, and the current plans and ability of a broadband service provider to

\(^4\) In re Modernizing the E-rate Program for Schools and Libraries, Comments of NTCA and WTA, WC 13-186 at 3 (Sept. 9, 2013) (“NTCA and WTA Comments”).
upgrade their facilities. In considering E-rate applications that seek to build external broadband infrastructure, the FCC should prioritize applications that are jointly filed by the school or library and the local broadband service provider with already upgraded broadband facilities so that such construction would use the least amount of funding possible. Additionally, as the FCC has noted, prioritizing consortium applications could prevent RLECs from serving the local schools and libraries in their community even if they are able to offer a more competitive or tailored service. To avoid this scenario, the FCC should create a process through which rural schools and libraries can consider offers that vary on terms of price and services from their local broadband service provider apart from the consortium application. This process would prevent an administrative preference for consortia from forcing rural schools and libraries into expensive or excessive broadband subscriptions. Finally, as the FCC considers eliminating E-rate support for POTS services, it must consider whether the cost savings derived from the TDM to IP voice transition will be truly sufficient to ensure that schools and libraries are able to continue to afford the critical voice services they rely on for safety and security purposes.

II. RLECs are committed to meeting the broadband needs of rural schools and libraries

RLECs have a long history of serving rural schools and libraries with high-capacity broadband, voice, video, and managed IP services. Upon analysis of WTA’s

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5 E-rate NOI at ¶ 35.
internal survey data and NTCA’s member survey, it is clear that RLECs already serve most of the schools and libraries in their service areas with broadband. Many are in the process or have already upgraded the last-mile connections to those institutions with either fiber to the premise (“FTTP”) or scalable fiber to the node (“FTTN”). In addition, RLECs have largely upgraded their wire centers and other broadband facilities to be able to scale up to FTTP last-mile connections when schools and libraries both demand and are able to afford increased bandwidth.

To demonstrate their commitment, WTA is encouraging its members to submit for the record detailed data on how they currently or plan to serve schools and libraries in their areas with scalable last-mile connections. As the FCC considers providing funding for last-mile broadband infrastructure through the E-rate program, it should take into consideration the efforts already under way to bring broadband to rural educational institutions and prevent any funding from undermining existing federally-supported private broadband infrastructure investment.

### III. The FCC is correct to prioritize addressing the affordability of broadband for schools and libraries and to emphasize scalable infrastructure rather than specific prescribed speed targets

WTA commends the FCC for recognizing that the first priority in reforming the E-rate program is to focus on the affordability of broadband for schools and libraries. As WTA has noted, a lack of affordability and not availability is the primary reason a school or library in a rural area may lack broadband speeds deemed necessary by the FCC or

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6 NTCA and WTA Comments at 12.
other education advocacy organizations. This is evident in many areas where RLECs have completed last-mile fiber upgrades capable of providing speeds of up to 1 Gbps, and yet many schools and libraries do not to subscribe to the highest available speed.

In rural areas, there are multiple factors for why a broadband capacity deemed sufficient by the Commission may be unaffordable or undesirable for some rural schools and libraries. These factors are frequently beyond the control of the local broadband provider and may include: 1) High middle mile transport; 2) declining support from the FCC’s Universal Service High Cost Fund and intercarrier compensation program, resulting in less available capital and a greater reliance on a limited amount of subscriber rates for investment in network facilities; and 3) the small student/user base of rural schools and libraries that therefore do not currently need or cannot afford the level of high-capacity broadband as contemplated by the FCC’s E-rate NPRM.\(^8\) As a result of these affordability issues, many rural schools and libraries do not yet demand high-capacity broadband. When a school is uninterested or unable to subscribe to high-capacity broadband RLECs must then focus their limited capital budgets on construction and upgrade of networks for unserved or underserved areas.

In a similar vein, the FCC’s is correct in refraining from focusing on funding specific speed targets that may be unaffordable, unsustainable, or of questionable necessity for some schools and libraries that have fewer students/users. As mentioned above, many rural schools and libraries do not have the population to support the need for high-capacity broadband at this moment in time. An arbitrary speed target set by the Commission could force schools and libraries to apply for E-rate support that far exceeds

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\(^7\) NTCA and WTA Comments at 3.  
\(^8\) E-rate NPRM at ¶ 8.
their current needs thereby overextending the E-rate fund and wasting valuable universal service dollars. Ultimately, the FCC’s focus on scalable last-mile connections to schools and libraries is the correct approach as long as it does not lead to the construction of duplicative last-mile broadband connections where there is already federally supported fiber to the institution or to the construction of last-mile fiber connections that require construction of duplicative broadband facilities in the surrounding area.

IV. Any future FCC initiative that seeks to fund last-mile fiber connections should avoid duplicative construction of broadband infrastructure

As the FCC contemplates “a long-term approach that allows applicants to scale up capacity” and begins to focus on construction of “last-mile deployments needed to connect schools and libraries that do not currently have access to high-speed connections,” the FCC should be careful in rural areas to ensure it is meeting its goal of “incentivizing cost effect purchasing decisions,” by only funding last-mile plant construction that is not duplicative of existing federally-supported broadband infrastructure funded in part by already existing federal programs including the Universal Service High Cost Fund, the Broadband Technology Opportunities Program (“BTOP”), the Broadband Infrastructure Program (“BIP”), and other financing programs available through the U.S. Department of Agriculture’s Rural Utilities Service (“RUS”). WTA remains concerned that by focusing on building last-mile broadband connections, the FCC may open the door to E-rate applications that request funding for duplicative broadband infrastructure in rural areas that will waste limited E-rate funding and

\[9\] E-rate NOI at ¶ 3.
undermine the FCC’s successful Universal Service High Cost program. In RLEC areas, schools and libraries are often the most important customers. If the FCC allows E-rate applications to overbuild existing RLEC broadband infrastructure investment, it may create what is commonly referred to as the “doughnut hole” effect, whereby one service provider is able to use federal funds to serve only large institutional customers without incurring the vitally important universal service obligations of serving the surrounding rural community. This scenario would endanger the vital investments RLECs have made in rural communities that serve students and library users outside of their operating hours.

To prevent financing wasteful duplicative broadband infrastructure construction, the FCC should take measures to ensure that E-rate applications that request funding for outside broadband plant take full advantage of existing infrastructure. The FCC can accomplish this by developing a framework by which it can evaluate E-rate applications that seek funding to build last-mile infrastructure. The framework should analyze the existing broadband connection available at the institution and its affiliated infrastructure including the existing last-mile connection, the distance existing fiber infrastructure is from the institution, whether the existing wire centers are upgraded to support fiber, and whether and to what extent the local broadband service provider is in the process of completing upgrades to any of the above mentioned facilities. The FCC should then implement clear rules that would prohibit the Schools and Libraries Program from funding duplicative last-mile connections where there is already federally funded fiber built out to an institution. Where an E-rate applicant is already served by an RLEC, but is in need of a last-mile connection upgrade, the FCC’s framework should give priority to applications that are jointly filed by the institution and its service provider to ensure that
the last-mile connection and its associated facilities are upgraded in a cost effective manner utilizing existing broadband infrastructure efficiently.

V. **The FCC should create a process by which RLECs are able to offer competitive bids to schools and libraries in rural areas that are participating in a consortium**

In order to give rural schools and libraries the flexibility to consider a variety of broadband service offerings, the FCC should enable RLECs to have a formalized opportunity to match or beat a consortium based bid with a flexible alternative both in terms of price and capacity. The FCC has indicated that it believes that prioritizing E-rate consortium applications for broadband service will drive down prices. However, the FCC has also recognized that a consortium based application prioritization may prevent rural service providers from having the opportunity to compete against a consortium even if they are able to more efficiently serve rural areas.\(^\text{10}\) While consortia may be a useful tool to drive down costs in in densely populated areas, the benefits for rural schools and libraries may be illusory if they are not able to entertain bids from efficient local service providers and are forced to subscribe to broadband capacities beyond their immediate needs at unaffordable prices.

WTA continues to believe that by prioritizing consortium bids, the FCC may compel rural schools and libraries to participate in broadband service consortiums in order to ensure that their application is approved. As a result of this consortium prioritization, local RLECs that may be able to offer lower prices or more tailored service

\(^{10}\) E-rate NOI at ¶ 35.
offerings would be prevented competing for contracts for local schools and libraries. This could allow larger urban-based service providers to serve only schools and libraries in rural areas without the obligation to serve the rest of the hard-to-reach rural community. Moreover, prioritizing consortium bidding may force rural schools and libraries that have relatively fewer students or users to subscribe higher speed services than necessary, at higher prices than they can afford, in order to participate in the consortium and be able to take advantage of the prioritization.

Enabling RLECs to offer competitive bids to schools and libraries participating in consortia will result in potential cost savings and flexibility without significantly impacting the savings other schools and libraries derive from their consortium. By giving rural schools and libraries the opportunity to entertain independent bids from their local service rural service provider, the FCC will ensure that rural schools and libraries will not be forced to purchase unnecessarily expensive or wasteful services simply because of an administrative preference for consortium bids. However, removing a rural school or library from the consortium is unlikely to have a significant impact on the overall savings the rest of the consortium schools achieve. The reasons for this are largely the same as why it is generally very expensive to serve rural schools and libraries in the first place. Rural schools and libraries are relatively small so they would not constitute a large proportion of the consortium carrier’s revenue. Additionally, there are usually high costs associated with serving rural institutions due to difficult geography and sparse populations densities that would make it uneconomical for the consortium service provider to construct broadband infrastructure in rural areas. It is likely that an urban-based broadband provider that is bidding for a consortium will be relieved it does not
have to serve rural areas since including high cost areas in the consortium would lower the overall cost-benefit ratio of obtaining the consortium contract. This could lead to increased savings for urban and suburban institutions while still allowing rural schools and libraries to take advantage of the cost savings of a consortium bidding process that will help set a competitive price.

VI. The FCC should carefully examine the impact of phasing out support for POTS services in terms of the ability of schools to have reliable phone services and the extent to which a transition to managed IP telephony will have in bringing down costs

The FCC should further analyze the effects of phasing out support for POTS services in terms of the ability of schools to have reliable voice services and the extent to which a transition to managed IP telephony will reduce costs. The FCC has proposed phasing out support for traditional voice services in favor of IP services that operate over broadband networks. While there are some cost efficiencies associated with managed IP telephony, the common refrain that “voice is just an app” does not reflect the fact that there are still costs associated with providing managed IP voice services that are independent of providing broadband services. For instance, managed IP voice services must still interconnect with 911, have backup power to replace copper infrastructure, and schools and libraries will most likely want quality of service assurances that are comparable with existing TDM voice services. Ultimately, IP voice services may cost less than maintaining the existing TDM voice infrastructure, however phasing out E-rate

11 E-rate NOI at ¶ 41.
support of voice altogether could leave schools without reliable voice services essential for safety, security, and communication to parents and the community.

VII. Conclusion

As the FCC moves forward with its E-rate reform efforts, it will find that RLECs are willing partners in creating a bright broadband future for rural schools and libraries. RLECs have already invested considerable capital and effort into serving schools and libraries in their communities and plan to continue their investment to meet the future broadband demands of rural educational institutions. The FCC’s E-rate reform effort should fully utilize RLEC’s existing infrastructure investments in the most efficient manner. To do this, the FCC should prohibit E-rate funding from being used to build duplicative last-mile fiber connections to schools and libraries. Where a school or library is in need of a last-mile fiber upgrade, the FCC should prioritize joint applications between the educational institution and the broadband service provider that has the least amount of upgrades needed to create a scalable last-mile fiber connection. To avoid creating administrative barriers for rural schools and libraries to secure the most affordable and relevant level of broadband service, the FCC should create a process by which schools and libraries can consider alternative service offerings from their local rural broadband service provider that may vary on terms of price and capacity.
Respectfully Submitted,

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