PUBLIC NOTICE

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DA 14-308
Released: March 6, 2014

WIRELINE COMPETITION BUREAU SEEKS
FOCUSED COMMENT ON E-RATE MODERNIZATION

WC Docket No. 13-184

Comment Date: April 7, 2014
Reply Comment Date: April 21, 2014

1. In this Public Notice, the Wireline Competition Bureau (Bureau) seeks focused comment on three issues raised in the *E-rate Modernization NPRM* that merit further inquiry as the Commission moves towards modernizing the E-rate program to meet schools' and libraries' broadband connectivity needs. The *E-rate Modernization NPRM* sought broad comment on and proposed three goals for the program: (1) ensuring that schools and libraries have affordable access to 21st Century broadband that supports digital learning; (2) maximizing the cost-effectiveness of E-rate funds; and (3) streamlining the administration of the program.[1] The Commission has received more than 1,500 comments and ex parte filings in response to the *E-rate Modernization NPRM* including numerous comments from individual educators and school administrators; school districts and consortia; librarians and library systems; E-rate vendors and educational content providers; and other interested public and private organizations.

2. The record in this proceeding demonstrates overwhelming agreement among stakeholders that the E-rate program has been a crucial part of helping our nation's schools and libraries connect to the Internet.[2] The record also shows a strong commitment to ensuring that the E-rate program quickly evolve to meet the ever-growing need for high-capacity broadband so our students and communities have access to 21st Century educational tools.[3] The record is replete with support and suggestions for how to meet the goals for the E-rate program proposed in the *E-rate Modernization NPRM*.

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[1] *Modernizing the E-rate Program for Schools and Libraries*, WC Docket No. 13-184, Notice of Proposed Rulemaking, 28 FCC Rcd 11304 (2013) (*E-rate Modernization NPRM*).

[2] *See, e.g.*, Comments of the AASA and AESA, WC Docket No. 13-184, at 2 (filed Aug. 27, 2013) (AASA and AESA Comments); Comments of the American Library Association, WC Docket No. 13-184, at 2 (filed Sept. 16, 2013) (ALA Comments); Comments of National Association of State Boards of Education, WC Docket No. 13-184, at 1 (filed Sept. 16, 2013); Comments of National Association of Secondary School Principals, WC Docket No. 13-184, at 2-3 (filed Sept. 16, 2013); Comments of Schools, Health & Libraries Broadband (SHLB) Coalition, WC Docket No. 13-184, at 3 (filed September 16, 2013) (SHLB Comments); Comments of State E-Rate Coordinators Alliance, WC Docket No. 13-184, at 3 (filed Sept. 16, 2013) (SECA Comments); Comments of Verizon and Verizon Wireless, WC Docket No. 13-184, at 1 (filed Sept. 16, 2013) (Verizon Comments); Reply Comments of the Urban Libraries Council, WC Docket No. 13-184, at summary (filed Nov. 8, 2013) (ULC Reply Comments); Comments of the International Society for Technology in Education, WC Docket No. 13-184, at 3 (filed Nov. 8, 2013) (ISTE Comments); Comments of Education & Libraries Networks Coalition, WC Docket No. 13-184, at 3 (filed Sept. 16, 2013) (EdLiNC Comments).

[3] *See, e.g.*, Comments of Amplify Education, Inc., WC Docket No. 13-184, at 6 (filed Sept. 16, 2013) (Amplify Comments); Reply Comments of the Digital Promise League of Innovative Schools, WC Docket No. 13-184, at 4-5,

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3. Based on the extensive input the Commission has received, it appears that meeting the Commission's proposed goals for the E-rate program will require that, in the near term, the program focus on providing the support necessary to ensure schools and libraries can afford high-speed connectivity to and within schools and libraries, even as the Commission develops a long-term approach that allows applicants to scale up capacity while driving down costs. More specifically, the record underscores the importance of providing consistent and broadly available support for the equipment and services needed to enable high-capacity wireless broadband within schools and libraries;[4] greater support, at least in the short term, for last-mile deployments needed to connect schools and libraries that do not currently have access to high-speed connections;[5] a support methodology that allows applicants to capture the long-term cost-efficiencies associated with access to scalable, high-speed connections;[6] less support for voice services, as the cost of voice services transition in the long run to the marginal cost of packet-based voice services provided over high-capacity broadband connections;[7] incentives for making cost-effective

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(filed Nov. 18, 2013) (Digital Promise Reply Comments); Comments of the Leading Education by Advancing Digital (LEAD) Commission, WC Docket No. 13-184, at 6-7 (filed Sept. 16, 2013); Comments of the National Association of State Utility Consumer Advocates, WC Docket No. 13-184, at 11 (filed Sept. 16, 2013); and SHLB Comments at 2-3.

[4] *See, e.g.,* EdLiNC Comments at 8-9 (testimonials from school districts on how WAPs are becoming increasingly crucial as schools continue to implement bring your own device and 1:1 technology initiatives); Comments of EducationSuperHighway, WC Docket No. 13-184, at 7-9 (filed Sept. 16, 2013) (EducationSuperHighway Comments) (internal networks are as great a constraint on digital learning as the lack of Internet connectivity to the building); Comments of the Iowa Department of Education, WC Docket No. 13-184, at 5-6 (filed Sept. 16, 2013) (Iowa Comments) (services and equipment/components are integral to providing connectivity to the device – such as routers, switches, WAPs, and integral wiring); SECA Comments at 11 (the capability of equipment located inside schools and libraries to transmit data to students and patrons is an important consideration in modernizing the E-rate fund); and Comments of Xirrus, Inc., WC Docket No. 13-184, at 2 (filed Sept. 16, 2013) (LAN is the "last leg" critical for delivering educational applications to students).

[5] *See, e.g.,* ALA Comments at 20-21 (the Commission should adopt a short-term program to fund fiber broadband connectivity to libraries and schools); Comments of AT&T, WC Docket No. 13-184, at 3-4 (filed Sept. 16, 2013) (AT&T Comments) (the Commission should set aside funds to focus on schools and libraries that do not currently have broadband services); Reply Comments of the State Library of Kansas, WC Docket No. 13-184, at 2 (filed Oct. 18, 2013) (Kansas State Library Reply Comments) (the Commission should allocate "additional temporary funding to support the deployment of 'future proof' fiber broadband capacity to schools and libraries"); EducationSuperHighway Comments at 9-12 (the Commission should create a one-time, multi-year investment fund to provide the capital for the installation of a fiber connection to every school and library); SHLB Comments at 4-5 (the Commission should create a short-term capital investment fund within the E-rate program to support the deployment of high-capacity broadband to schools and libraries).

[6] *See, e.g.,* ALA Comments at 20-21 (upfront deployment costs are the biggest hurdle in creating "future proof" fiber broadband connectivity); Comments of Merit Networks, WC Docket No. 13-184, at 6 (filed Sept. 16, 2013) (Merit Comments); Comments of Minority Media and Telecommunications Council, Rainbow Push Coalition, and the League of United Latin American Citizens, WC Docket No. 13-184, at 5-7 (filed Sept. 16, 2013) (MMTC Rainbow Comments) (broadband deployment will drive higher speeds and long-term efficiencies); Comments of Missouri Research and Education Network, WC Docket No. 13-184, at 5-7 (filed Sept. 16, 2013) (MORENet Comments) (fiber most readily provides the necessary speed and efficiencies).

[7] *See, e.g.,* SECA Comments at 22 (all telecommunications services that are exclusively used for voice should no longer receive the highest priority of funding); Comments of Mississippi Educational Technology Leaders Association Comments, WC Docket No. 13-184, at 11 (filed Sept. 16, 2013) (METLA Comments) (voice and other services that do not focus on providing adequate bandwidth to schools and classrooms should be removed from the program within three to five years); Comments of Illinois Department of Central Management Services, WC Docket No. 13-184, at 9-10 (filed Sept. 16, 2013) (Illinois CMS Comments) (recognizing voice service as an application that can be delivered over broadband platforms and that funding for applications should be phased out in order to direct funding towards high capacity broadband to and within schools); Comments of Weslaco Independent School District, WC Docket No. 13-184, at 8 (filed Sept. 16, 2013) (Weslaco ISD Comments) (supporting a phase out of

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purchasing decisions, including incentives and opportunities for schools and libraries to benefit from economies of scale in purchasing supported services;[8] and as much administrative simplicity as possible, while protecting against waste, fraud and abuse.[9]

4. In light of these themes that emerge from the record, as the Commission seeks to modernize the E-rate program, there are three issues raised in the *E-rate Modernization NPRM* that merit further focused inquiry at this time: (1) how best to focus E-rate funds on high-capacity broadband, especially high-speed Wi-Fi and internal connections;[10] (2) whether and how the Commission should begin to phase down or phase out support for traditional voice services in order to focus more funding on broadband;[11] and (3) whether there are demonstration projects or experiments that the Commission should authorize as part of the E-rate program that would help the Commission test new, innovative ways to maximize cost-effective purchasing in the E-rate program.[12] We seek further comment on how the issues below relate to the goals for the E-rate program that the Commission proposed in the *E-rate Modernization NPRM* and how they comport with relevant statutory requirements.

5. At the same time, the Commission continues to evaluate all of the input received in response to the *E-rate Modernization NPRM*. The issues we raise in this Public Notice do not define the full universe of possible changes the Commission could make in an order modernizing the E-rate program.

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voice services); Reply Comments of Education Coalition, WC Docket No. 13-184, at 5-6 (filed Nov. 8, 2013) (EdCo Reply Comments) (supports the transition from a voice-focused E-rate program to a broadband-centric enabler of digital learning as soon as possible); Comments of American Cable Association, WC Docket No. 13-184, at 12 (filed Sept. 16, 2013) (supports limiting funding for voice communications); Comments of State of Alaska Department of Education and Early Development and the Alaska State Library, WC Docket No. 13-184, at 7-8 (filed Sept. 16, 2013) (Alaska EED and Alaska State Library Comments) (supporting the phase out of voice services); Comments of CSM, Inc., WC Docket No. 13-184, at 12 (filed Sept. 16, 2013) (CSM Comments) (Commission can streamline program by eliminating support for voice); Comments of GCI, Inc., WC Docket No. 13-184, at 14 (filed Sept. 16, 2013) (GCI Comments); Comments of Communications Workers of America, WC Docket No. 13-184, at 4 (filed Sept. 16, 2013) (supporting phase down for non-broadband services such as voice telephony).

[8] *See, e.g.*, Comments of Alliance for Excellent Education, WC Docket No. 13-184, at 9 (filed Sept. 16, 2013) (supporting more bulk purchasing); Comments of Education Coalition, WC Docket No. 13-184, at 19 (filed Sept. 16, 2013); Comments of Friday Institute for Educational Innovation, North Carolina State University, Raleigh, North Carolina, WC Docket No. 13-184, at 5 (filed Sept. 16, 2013) (Friday Institute Comments) (noting that consortia procurement and central management is the only effective way to leverage economies of scale and contain costs); Comments of Illinois Fiber Resources Group, WC Docket No. 13-184, at 5, 9 (filed Sept. 13, 2013) (iFiber Comments) (agrees with the concept of encouraging consortium purchasing and ways to achieve economies of scale); Comments of Imperial County Office of Education/ California K12 High Speed Network, WC Docket No. 13-184, at 18 (filed Sept. 16, 2013) (K12HSN Comments) (Commission should encourage applicants to utilize consortium applications to build economies of scale).

[9] *See, e.g.*, Reply Comments of Bill and Melinda Gates Foundation, WC Docket No. 13-184, at 5 (filed Oct. 24, 2013) (Gates Reply Comments); Comments of Hewlett-Packard Company, WC Docket No. 13-184, at 17 (filed Sept. 16, 2013); Comments of National Association of Federally Impacted Schools, WC Docket No. 13-184, at 2 (filed Sept. 16, 2013); Kansas State Library Reply Comments at 2; Verizon Comments at 19.

[10] *E-rate Modernization NPRM*, 28 FCC Rcd at 11325-30, paras. 65-89.

[11] *Id*. at 11331-32, para. 95.

[12] *Id*. at 11356-57, para. 198.

I. FOCUSED FUNDING FOR HIGH-CAPACITY BROADBAND

6. Commenters to this proceeding have made clear the importance of focusing E-rate support on high-speed connectivity to and within schools and libraries.[13] As educational technology has improved in recent years, equipment and cabling used to deploy the interior pieces of broadband networks have become increasingly important, yet the E-rate program has provided less support and funded fewer applicants seeking support for such internal connections. Numerous commenters have identified support for internal connections as one of the program areas where modernization is most urgent and most important. Accordingly, in this section we ask about methods to improve this funding going forward. We also take this opportunity to ask about improvements to the existing priority one funding system for last-mile deployments for high-capacity broadband.

7. In seeking further comment on how best to focus E-rate funding on high-capacity broadband, we note that an initial review by Commission staff has found that the Commission can free up an additional $2 billion over the next two years to help support broadband networks in our nation's schools and libraries, offering an opportunity to assess better ways to prioritize and distribute program funding at support levels higher than the current program cap. We seek comment on how best to use such additional funds to support the Commission's efforts to provide high-capacity broadband within and to schools and libraries, as described in more detail below.

A. Broadband Deployment within Schools and Libraries

8. Stakeholders in this proceeding contend that the deployment of equipment inside school and library facilities is as essential to comprehensive broadband service at a given location as the high-speed connectivity to that facility.[14] For example, Wi-Fi has transformed computing and education, creating the possibility of one-to-one learning in classrooms and libraries, and freeing desks and work stations from wired connections.[15] A survey of school district leaders conducted by the Consortium for School Networking (CoSN) and Market Data Retrieval in 2013, however, showed that 57 percent of district leaders do not believe that their schools' wireless networks have the capacity to handle a one-to-one student-to-device deployment.[16]

9. Internal connections essential to extend broadband throughout schools and libraries are currently eligible for support in the E-rate program as priority two services. However, some commenters have expressed concern because, in most funding years, there have only been sufficient funds to provide priority two support to schools and libraries in the highest bands of the discount matrix.[17] Commenters generally agree that the rule that the Commission adopted limiting any school or library to two years of

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[13] *See, e.g.*, Comments of Comcast Corporation, WC Docket No. 13-184, at 5 (filed Sept. 16, 2013) (Comcast Comments); EducationSuperHighway Comments at 7-8; Iowa Comments at 5; AT&T Comments at 4.

[14] *See, e.g.*, Reply Comments of Cisco Systems, Inc., WC Docket No. 13-184, at 1-3 (filed Nov. 8, 2013); ISTE Comments at 10-11; Comment of TV Band Services, WC Docket No. 13-184, at 2 (filed Sept. 12, 2013) (TV Band Comments); ULC Reply Comments at 14.

[15] *See, e.g.*, Digital Promise Reply Comments at 3 (High-speed Wi-Fi is needed for every classroom); EducationSuperHighway Comments at 11 (Wi-Fi has transformed computing).

[16] *See* Reply Comments of Consortium for School Networking, WC Docket No. 13-184, at 3 (filed Nov. 6, 2013) (CoSN Reply Comments).

[17] *See, e.g.*, AT&T Comments at 3-4 (many E-rate applicants have never received priority two funding and must find alternative ways to pay for this equipment or go without); Comments of E-Rate Reform Coalition, WC Docket No. 13-184, at 4 (filed Sept. 16, 2013) (E-Rate Reform Coalition Comments) (allocating priority two funds is on the verge of ending; demand for priority one has increased to 116 percent of cap in FY2013); Comments of Funds for Learning, LLC, WC Docket No. 13-184, at 9 (filed Sept. 16, 2013) (FFL Comments) (applicants know there will be no priority two funds available for them); SECA Comments at 7-8 (experienced applicants understand the futility of applying for priority two funding unless they have a relatively high discount).

priority two support in every five year period (the two-in-five rule) does not appear to have achieved its intended goal of substantially spreading the available funds.[18] Moreover, as demand for priority one funding continues to grow, the ability to provide any priority two support is an increasing challenge.

10. Therefore, to address the need for funding for the services and equipment necessary to ensure high-capacity broadband within schools and libraries, we seek comment on whether the Commission should change the current priority two funding category (including no longer supporting legacy services that are currently eligible for priority two funding), by allocating annually a set amount of E-rate funds to provide schools and libraries with funding for LANs and Wi-Fi networks, which are essential to ensuring high-capacity broadband reaches students and library patrons.

1. Scope of Services to Be Funded

11. Under this approach, only equipment and supporting software that is essential to getting high-capacity broadband from the building's front door to the computer, tablet, or other learning devices in schools and libraries would be eligible for internal connection support. We seek comment on what equipment is essential for such purposes. Some commenters have suggested that such equipment includes internal wiring, switches and routers, wireless access points, and the software supporting these components.[19] We seek comment on whether these are the right categories of equipment and software to fund for this purpose.

12. Other commenters have suggested other technology that improves the efficiency of the broadband networks and should therefore also receive E-rate support. For example, several commenters have argued that E-rate should support caching through content servers because caching can allow schools to reduce their broadband demand by as much as half.[20] Another commenter noted that slow firewall processing, outdated content filtering, and other similar internal network problems create significant speed bottlenecks on school and library networks.[21] We now seek further focused comment on what services, software, or equipment are necessary to enable high quality, high-capacity networks inside schools and libraries, and whether such services, software and equipment should qualify for support?

2. Access to Funding

13. The Commission has acknowledged that under the current system only a small percentage of E-rate recipients receive the bulk of the internal connection funding.[22] We seek comment on ways to provide more widespread access to funding for internal connections in order to enable schools and libraries nationwide to take advantage of high-capacity broadband to their buildings with robust internal networks. We seek particular comment on three potential ways to prioritize applications for deployment costs in the event that the demand for internal connection funds exceeds availability.

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[18] *See, e.g.*, Comments of E-Rate Central, WC Docket No. 13-184, at 6 (filed Sept. 16, 2013) (E-Rate Central Comments) (the two-in-five rule has proved ineffective and complicated and should be eliminated).

[19] *See, e.g.*, Comcast Comments at 14-15; SECA Comments at 13; Comments of CenturyLink, WC Docket No. 13-184, at 10 (filed Sept. 16, 2013) (CenturyLink Comments).

[20] *See, e.g.*, Amplify Comments at 11; Comcast Comments at 25 (E-rate program should provide support for caching services); Comments of Cisco Systems, Inc., WC Docket No. 13-184, at Exhibit A at 5 (filed Sept. 16, 2013); Comments of Education Networks of America, WC Docket No. 13-184, at 26-27 (filed Sept. 16, 2013); TV Band Comments at 2.

[21] *See* EducationSuperHighway Comments at 8. *See also* ULC Reply Comments at 18 (the Commission should provide support for network security features).

[22] *E-rate Modernization NPRM*, 28 FCC Rcd at 11337, para. 118.

a. Five-Year Upgrade Cycle

14. Consistent with the method used to prioritize priority two funding today, the Commission could prioritize funding by discount level, with rotating eligibility to provide as many schools and libraries as possible access to funding over a five-year upgrade cycle.[23] Information in the record demonstrates that basic Wi-Fi and LAN equipment has a useable lifespan of five to seven years.[24] Given this information, we seek comment on limiting an applicant's ability to receive internal connections funding to once every five years while retaining the existing prioritization method.

15. If the Commission were to adopt a one-in-five rule to replace the current two-in-five rule, how much funding would be needed to ensure that funds were available to meet the needs of all eligible schools and libraries? Would the Commission need to front-load support for eligible internal connections in the first funding years to meet the existing needs of schools and libraries? Is five years the right amount of time for such a funding cycle?[25] If the Commission were to adopt this approach, should the one-in-five limitation apply at the level of applicants or, as it does today, at the level of individual school and library buildings?

16. If available funding is insufficient to fund all applicants at a particular discount level in a given funding year, how should the Commission decide which applicants to fund? Should it for example, prioritize funding for applicants within a discount level by giving preference to the applicants with the highest percentage of students receiving free and reduced school lunches?[26]

b. Rotating Eligibility

17. Alternatively, we seek comment on limiting an applicant's ability to receive funding for internal connections that support high-capacity broadband to a single funding year until all other applicants have received support or declined the opportunity to seek funding in at least one funding year, starting in funding year 2015. This approach is consistent with one proposed by the State E-rate Coordinators Alliance (SECA) and supported by other commenters.[27] This approach would ensure that all applicants are able to receive funding over time, but once they receive funding, applicants could not be certain about when they might next be eligible for internal connections funding. We seek comment on

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[23] This approach is similar to one proposed by the State E-rate Coordinators Alliance in their June 2013 White Paper. *See* Letter from Gary Rawson, State E-rate Coordinators' Alliance, to Marlene H. Dortch, Secretary, Federal Communications Commission, CC Docket No. 02-6, at 11-13 (filed Jun. 24, 2013) (attaching SECA's "Recommendations for E-rate Reform 2.0") (SECA June 2013 White Paper). A number of commenters support this general approach. *See, e.g.*, Merit Comments at 8; Reply Comments of Nebraska Department of Education, WC Docket No. 13-184, at 2 (filed Oct. 17, 2013); Comments of State of Nebraska, Office of the Chief Information Officer, WC Docket No. 13-184, at 9 (filed Sept. 16, 2013); Reply Comments of State Consortia Group, WC Docket No. 13-184, at 16 (filed Nov. 20, 2013) (SCG Reply Comments); Comments of South Dakota Department of Education and Bureau of Information and Telecommunications, WC Docket No. 13-184, at 15-17 (filed Sept. 16, 2013).

[24] *See* EducationSuperHighway Comments at 13, 21-22 (recommending that E-rate support LAN/Wi-Fi upgrades on a five- to seven-year timeline); SECA Comments at 9-10 (citing a 2005 article by NetworkWorld stating that these switches have an average life of five years).

[25] We recognize that, to the extent we can drive down costs for eligible internal connections, we will reduce the amount of funding needed to support high-capacity broadband in our schools and libraries. *See infra* Section I.C. (seeking comment on ways to encourage cost-effective purchasing).

[26] A 90 percent discount is available to the range of schools and libraries with between 75 percent and 100 percent of students eligible for free or reduced price school lunch. Under this approach, for example, a school with 95 percent of its students eligible for free or reduced price school lunch could be prioritized ahead of a school with 85 percent eligibility.

[27] *See supra* n.23.

this tradeoff. If the Commission were to adopt this approach, applicants could have an incentive to inflate their original requests in their first year of eligibility. What safeguards should we adopt to address this problem?

18. If the Commission were to use available funds to front-load support for eligible internal connections in funding years 2015 and 2016, would this obviate some of the drawbacks to this approach? If so, how much support should the Commission provide in funding years 2015 and 2016, and how much should it provide annually after that to ensure all schools and libraries have robust internal connections? If the Commission were to adopt this approach, should the rotating eligibility limitation apply at the level of applicants or, as the two-in-five rule does today, at the level of individual schools and library buildings?

19. If the Commission were to adopt this rotating eligibility approach, how should it prioritize funding for internal connections? Should it continue to fund eligible applications at the highest discount level first? If funding is insufficient to fund all eligible applications at a particular discount level in a given funding year, should the Commission give preference to the applicants with the highest percentage of students receiving free and reduced school lunches?[28]

c. Annual Allocation for Internal Connections

20. As a third option, we seek comment on adopting a funding method that would provide some support for internal connections that support high-capacity broadband to all eligible applicants in each funding year, as opposed to the cyclical funding methods discussed above. By making at least some funding available annually for each applicant, this approach would prevent a small number of applicants from disproportionately using available funding and give all schools and libraries an opportunity to upgrade at least some of their facilities each year. In the *E-rate Modernization NPRM*, the Commission sought comment on a similar allocation of funds that would apply for the entire E-rate program.[29] Many commenters were supportive,[30] but many others expressed concern that this funding approach would not fully capture the diversity of costs faced by applicants across the country.[31] Are these concerns mitigated in the context of internal connections, and particularly LAN and Wi-Fi deployments? In particular, unlike the costs of broadband connectivity to schools, we expect that the prices of many parts of LAN and Wi-Fi deployments (*e.g*., switches, routers, and wireless access points) should vary little based on the geographic location of schools and should generally scale proportionally with the size of the student body. We seek comment on these expectations.

21. More specifically, we seek comment on using a simplified version of the formula proposed by Funds for Learning and a coalition of schools and school groups to set available funding

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[28] *See supra* n.26.

[29] *E-rate Modernization NPRM*, 28 FCC Rcd at 11346-48, paras. 149-162.

[30] *See, e.g.*, Comments of E-Rate Provider Services, LLC, WC Docket No. 13-184, at 12-13 (filed Sept. 16, 2013) (EPS Comments); E-Rate Reform Coalition Comments at 9; Comments of Fairfax County Public Schools, WC Docket No. 13-184, at 2 (filed Sept. 9, 2013); Comments of Barbara Patterson, WC Docket No. 13-184, at 1 (filed Sept. 16, 2013); Comments of Richmond County Schools, Richmond, Georgia, WC Docket No. 13-184, at 2 (filed Sept. 16, 2013) (Richmond, GA Comments).

[31] *See, e.g.*, AASA and AESA Comments at 4; Comments of Administrative and Technical Consulting, Inc., WC Docket No. 13-184, at 5 (filed Sept. 16, 2013); Alaska EED and Alaska State Library Comments at 11; GCI Comments at 12-13; K12HSN Comments at 12-14; METLA Comments at 20; Comments of National Education Association, WC Docket No. 13-184, at 11 (filed Sept. 16, 2013); Comments of Gray Salada, WC Docket No. 13-184, at 3 (filed Sept. 17, 2013); E-Rate Central Comments at 6; Comments of the State Consortia Group, WC Docket No. 13-184, at 3 (filed Sept. 16, 2013); Comments of West Virginia Department of Education, WC Docket No. 13-184, at 26 (filed Sept. 16, 2013) (WVDE Comments).

levels for each applicant.[32] That simplified formula is attached as an Attachment. By identifying available funds and estimating the total pre-discount requests that could be supported with those funds, the Commission would arrive at an amount to be allocated to each applicant. Applicants would be entitled to receive funds, applying their usual discounts, towards the purchase of eligible internal connections up to the pre-discount allocation. Under this approach if, in order to ensure that small schools and libraries would receive sufficient funding, the Commission were to adopt a per-applicant or per-building minimum allocation as part of the formula, what should that minimum per-building or per-applicant support level be? If the Commission adopts such an approach for school applicants, how should it calculate the annual allocation for libraries?

22. In addition to ensuring that all applicants have the opportunity to receive at least some internal connection funding each year, adopting this annual allotment could have the benefit of providing applicants certainty about the amount of funding that would be available to them each year.[33] We seek comment on this consideration. Would funding certainty over a multi-year period create new opportunities for up-front financing to cover equipment upgrades in a given year? We also seek comment on how to best utilize any remaining funding if some applicants request less than their allocated amount. Should such funding be made available to increase the allocation to other applicants in the same funding year? Should it be held over to subsequent funding years? Or should we adopt another approach? Finally, how should the Commission allow these funds to be spent by the applicants? Should district or library systems be required to spend those funds at specific schools or libraries in certain proportions? Or should each applicant have the flexibility to spend the funds as it decides across its district or library system?

d. Other Methods to Prioritize Internal Connections Funding

23. Are there variations on the options described above or other methods the Commission should consider employing to prioritize funding for high-capacity internal connections? Should it, for example, prioritize projects by the number of students impacted per dollar of funding? Should the Commission prioritize consortia applications?

B. Broadband Deployment to Schools and Libraries

24. The record reflects that some schools and libraries do not have access to high-capacity broadband connections to their buildings, and commenters have suggested that the Commission undertake a targeted effort to help support deployment of high-capacity, scalable last-mile connections to eligible schools and libraries that do not currently have access to connections that meet the connectivity goals laid out in the *E-rate Modernization NPRM*.[34]

25. As explained in the *E-rate Modernization NPRM*, the E-rate program currently offers support for broadband construction to schools and libraries.[35] However, commenters have explained that even with the current levels of E-rate support, some schools and libraries cannot afford to pay their share of the cost of deploying last-mile high-capacity broadband.[36]

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[32] *See* FFL Comments at 26-27; E-rate Reform Coalition Comments at 8-9.

[33] *See, e.g.*, Comments of Miami-Dade County Public Schools, WC Docket No. 13-184, at 8-9 (filed Sept. 11, 2013) (Miami-Dade Comments) (provide flexibility and predictability for planning and purchasing decisions); MMTC Rainbow Comments at 19 (FFL's approach would allow schools to create a technology budget and be able to commit to projects with confidence); Weslaco ISD Comments at 9-10 (funding would be predictable).

[34] *See supra* n.5.

[35] *E-rate Modernization NPRM*, 28 FCC Rcd at 11325-26, paras. 71-73.

[36] *See, e.g.*, CoSN Reply Comments at 9 (noting that 59 percent of respondents agreed that capital or one-time costs were a major barrier in increasing bandwidth); Comments of Boston Renaissance Charter Public School, WC

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1. Scope of Services to Be Funded

26. In light of the record demonstrating that the costs of one-time construction projects, even though already supported by the E-rate program, can be cost-prohibitive, we seek comment on whether the Commission should undertake a limited initiative, within the existing priority one system, to incent the deployment of high-capacity broadband connections to schools and libraries. We invite stakeholders to offer examples of projects for which they would seek funding if the Commission adopts such an approach. Exactly what services should the Commission fund as part of this deployment effort? For instance, what types of fiber deployment or other high-capacity, scalable broadband technologies that meet the connectivity goals in the *E-rate Modernization NPRM*, should be eligible for funding?[37]

27. In the *E-rate Modernization NPRM*, the Commission sought comment on how to ensure that broadband deployment to schools and libraries is done in a way that minimizes the recurring costs for both applicants and the E-rate program once deployment is complete.[38] While the record indicates that new broadband deployments, once paid for, can dramatically lower recurring costs over time,[39] it also reveals situations where monthly charges have remained high even after new deployments are complete and costs have been fully recovered. If the Commission does decide to provide some additional support for the capital costs associated with high-capacity deployment, how can it best ensure that the recurring costs associated with providing broadband over new connections is affordable for the applicants on a going-forward basis?

28. Should the Commission change the program's funding methodology as part of this deployment initiative? Would it be sufficient for the Commission to simply raise the discount rate for all applicants seeking deployment support by 10 percent or some other percentage? Or would it be better for the Commission to adopt a flat discount rate for all applicants?[40] If so, what should this flat rate be? Are there some schools and libraries on Tribal lands, or in remote rural areas that cannot afford high-capacity broadband build-out without full support?[41] Should the Commission consider full support for all applicants seeking support for broadband connectivity? While such an approach could encourage applicants to participate in the program and greatly increase broadband deployment to schools and

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Docket No. 13-184, at 3 (filed Sept. 20, 2013); Reply Comments of FiberTower Corporation, WC Docket No. 13-184, at 3-5 (filed Nov. 8, 2013) (FiberTower Reply Comments).

[37] *See, e.g.*, Reply Comments of the Schools, Health & Libraries Coalition (SHLB), WC Docket No. 13-184, at 7 (filed Nov. 8, 2013) (stating that the Commission should consider a number of technologies including lit fiber, dark fiber, cable, and wireless); FiberTower Reply Comments at 1 (listing fiber, fixed wireless, and satellite as possible solutions for broadband deployment); GCI Comments at 7-8 (discussing fixed wireless), Nebraska OCIO Comments at 8 (discussing fixed wireless); ALA Comments at 12 (fiber connectivity offers the best, long-term way to ensure that libraries will have adequate and scalable bandwidth); Comcast Comments at 10 (noting that fiber connections are scalable to 10 Gbps).

[38] *E-rate Modernization NPRM*, 28 FCC Rcd at 11330, paras. 88-89.

[39] *See, e.g.*, Letter from John Windhausen, Consultant, The Quilt, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 13-184, at Attachment B, Slide 18 (filed Jan. 27, 2014) (demonstrating the decrease in recurring costs from 2012-14 resulting from an upfront investment in fiber in Missouri); Comments of the Health Information Exchange of Montana, WC Docket No. 13-184, at 4 (filed Sept. 16, 2013) (that new fiber deployments reduced recurring costs to health anchor institutions in the Rural Health Care program).

[40] *E-rate Modernization NPRM*, 28 FCC Rcd. at 11347, para. 156. We note that in reforming the rural health care support program, the Commission adopted a flat rate discount for all eligible services. *See Rural Health Care Support Mechanism*, WC Docket No. 02-60, Report and Order, 27 FCC Rcd 16678, 16717-18, paras. 83-88 (2012) (*Healthcare Connect Fund Order*).

[41] *See* Comments of National Indian Education Association, WC Docket No. 13-184, at 2 (filed Sept. 16, 2013) (NIEA Comments) (schools and libraries operated by the Bureau of Indian Education, Tribal governments, or those that predominantly serve Native Americans should be exempt from a matching requirement).

libraries, how would the Commission ensure that applicants do not enter into agreements requiring excessive funding for broadband deployment?

29. Some commenters have explained that vendors often limit up-front deployment costs and instead collect the costs over several years as part of the cost of recurring services.[42] Are there instances in which the Commission should authorize increased support for the recurring costs of broadband services over a period of time instead of, or in addition to, increased support for up-front costs, to the extent those recurring costs reflect time-limited recovery for capital investment? If so, over how long a period of time and under what circumstances?

2. Ensuring Equitable Distribution

30. We also seek comment on how best to distribute support among the applicants for high-speed connections to schools and libraries. In particular, if the Commission makes some additional deployment support available to eligible schools and libraries that do not already have access to high-speed scalable connections available at reasonable prices, how do we identify those schools and libraries?[43] Should we rely on the broadband speed targets identified by the Commission in the *E-rate Modernization NPRM* and require applicants for this deployment funding to demonstrate their current Internet access service does not meet that metric?[44] Should we consider future scalability of existing connections and/or available pricing when identifying eligible schools and libraries? Are there other methods the Commission should consider to determine the best projects to fund?

31. We also seek comment on ways to prioritize applications for deployment costs in the event that the demand for such funds exceeds availability. In the current E-rate program, when available funds do not meet demand, the applicants with the greatest economic need (*i.e.*, those with the highest percentage of students that qualify for free and reduced school lunches) are funded first at the 90 percent discount rate, then funding goes to those applicants eligible for 89 percent discount levels, and so on, until the available funds are exhausted.[45] Eligible libraries receive the discount rate of the school district in which they are located.[46] Should the Commission adopt a similar mechanism for distributing funding for deployment of high-capacity broadband to eligible schools and libraries?

32. As an alternative, we seek comment on adopting one or more objective impact and/or efficiency metrics to prioritize applications. For example, school applicants could be required to calculate the total number of students currently in buildings without infrastructure capable of meeting Commission-adopted speed goals. Those schools would then be upgraded to scalable, high-speed connections with E-rate support and applications could be scored based on the total cost per-student served. Should the Commission also consider prioritizing upgrades that do not increase the speed available to applicants, but dramatically reduce recurring costs following new investment (for example, if applicants sought to upgrade from Internet access using two T3s to a single 100 Mbps metro Ethernet circuit, or to purchase

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[42] *See, e.g.*, EducationSuperHighway Comments at 16; Comments of the Quilt, WC Docket No. 13-184, at 6, 8 (filed Sept. 16, 2013) (Quilt Comments).

[43] *See, e.g.*, Comments of the National Cable & Telecommunications Association, WC Docket No. 13-184, at 12 (filed Sept. 16, 2013) (recommending that the Commission only authorize fiber buildouts for schools and libraries when (1) there are no commercial alternatives, (2) there are no more cost-effective methods to receive high-speed broadband and (3) the applicant has the expertise to handle the operational burden of operating and maintaining a fiber network); CenturyLink Comments at 6 (supporting deployment using fiber owned by service providers rather than having schools and libraries dedicate resources to their own fiber IRUs or leases).

[44] *See E-rate Modernization NPRM*, 28 FCC Rcd at 11113-15, paras. 22-27.

[45] *See* 47 C.F.R. § 54.507(g)(1); *see also* USAC, Eligible Services Overview, http://www.usac.org/sl/applicants/beforeyoubegin/eligible-services/default.aspx (last visited Mar. 5, 2014).

[46] *See* 47 C.F.R. § 54.505(b)(2).

WAN upgrades that allowed them to buy Internet access at a lower-priced point-of-presence)? If so, how much weight should be given to particular levels of reductions in recurring costs? If the Commission adopted multiple objective impact and/or efficiency metrics, how should they be evaluated together? For example, how should applications that reduce recurring costs be scored against those that include speed upgrades? Are there other methods the Commission could employ to prioritize funding for up-front deployment costs in the event demand exceeds availability?

33. Within the existing priority one system, applicants can receive E-rate support for some installation and special construction charges, but the cost of large projects must be prorated over three years or more.[47] This limit may disproportionately harm rural and other applicants that face the largest deployment costs, especially because there are no exceptions for rural deployments or other unique circumstances. Would adopting one of the prioritization approaches above for deployment funding allow the Commission to relax this limit?

C. Encouraging Cost-Effective Purchasing

34. As the Commission considers how to focus E-rate funding on high-capacity connections to and within schools and libraries, are there additional steps the Commission can take to help ensure efficient use of E-rate funds spent on broadband projects? Below we seek comment on three possible ways to encourage cost-effective purchasing. We also invite commenters to offer other methods to encourage cost-effective E-rate purchasing.

35. *Consortium purchasing and bulk buying*. In the *E-rate Modernization NPRM*, the Commission sought comment on encouraging consortia and other bulk purchasing programs.[48] If the Commission moves to support a more limited set of equipment and services for high-capacity internal connections, is there an opportunity for E-rate applicants to drive down prices of the products necessary for Wi-Fi and LAN connectivity through consortium purchasing or other forms of bulk buying? If so, what steps can the Commission take to encourage cost-effective consortia or other bulk purchasing of such products? Likewise, if the Commission focuses some additional funding on high-capacity broadband deployment to schools and libraries currently unserved by broadband services, should the Commission encourage the formation of consortia to encourage providers to offer affordable services to groups of schools and/or libraries? If so, what steps can the Commission take to encourage the formation of consortia that have the tools to engage in cost-effective purchasing? Are there steps the Commission can take to encourage currently successful consortia to add members, particularly eligible entities that currently lack the kind of purchasing power enjoyed by consortia? How can the Commission help ensure that the formation of such consortia does not unfairly disadvantage smaller providers that may be efficient local providers of high-capacity services?[49]

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[47] In a 2000 order, the Commission determined that applicants must amortize over several years non-recurring charges that vastly exceed the monthly recurring charges. *See Request for Review by Brooklyn Public Library, Federal-State Joint Board on Universal Service, Changes to the Board of Directors of the National Exchange Carrier Association, Inc*., CC Docket Nos. 96-45 and 97-21, Order, 15 FCC Rcd 18598, 18606-07, para. 20 (2000) (*Brooklyn Order*) (allowing the Brooklyn Public Library to receive funding for non-recurring charges associated with capital investment in an amount equal to the investment prorated equally over a term of at least three years in duration, and requiring that it recover no more than one-third of the total non-recurring charges in one funding year). Currently, when applicants enter a multi-year contract and the upfront or non-recurring charge is $500,000 or more, USAC requires the total charge to be prorated evenly over a period of at least three years. *See* USAC, Schools and Libraries, Wide Area Networks, Capital Investment Costs, http://www.usac.org/sl/applicants/beforeyoubegin/eligible-services/wan.aspx (last visited Mar. 5, 2014).

[48] *E-rate Modernization NPRM*, 28 FCC Rcd at 11346-48, paras. 149-162.

[49] *See* Reply Comments of NTCA – The Rural Broadband Association and The Western Telecommunications Alliance, WC Docket No. 13-184, at 16-17 (filed Nov. 8, 2013) (NTCA Reply Comments) (noting that the emphasis

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36. *Technology planning*. Another possible approach to ensuring cost-effective purchasing of broadband services is to require technology planning. The Commission eliminated technology plan requirements for E-rate applicants seeking only support for priority one services in order to simplify the application process for schools and libraries.[50] The *E-rate Modernization NPRM* sought comment on whether there were lessons learned from current and previous technology plan requirements and whether these requirements should be re-instituted.[51] We now ask more specifically whether the Commission should require applicants that are seeking E-rate support for upgrading high-capacity connections to school buildings or libraries to demonstrate that they have a plan and the capacity to use those services within their buildings.

37. *Data collection and transparency*. In the *E-rate Modernization NPRM*, the Commission sought comment on how best to collect data on the speed and quality of school and library connections.[52] The Commission also sought comment on what data to collect to support the proposed goal of maximizing cost-effective purchasing.[53] As the Commission considers how best to provide support for broadband deployment within and to schools and libraries, we renew our request for comment on those data issues and on whether price transparency for E-rate supported services will help drive down those prices.

D. Streamlining the Administrative Process

38. As the Commission considers how best to support high-capacity broadband connections to and within schools and libraries, consistent with the Commission's proposed third goal of streamlining the administration of the E-rate program,[54] we seek additional comment on how best to minimize the administrative burdens and overhead associated with applying for and receiving such support. Are there for example, simple changes the Commission can make to the E-rate information collections that will ease the administrative burdens on E-rate applicants and vendors that take advantage of a modernized E-rate program?

39. Are there changes to the invoicing deadlines the Commission should adopt to take into account a focus on broadband deployment? Under the current program, all recurring services must be completed during the funding year and invoices must be submitted no later than 120 days after the last day to receive service or 120 days after the FCC Form 486 Notification Letter date, whichever is later.[55] Non-recurring charges for broadband projects, such as build-outs and special construction, must be completed by September 30 following the close of the funding year, with some exceptions.[56] Because of the possibility that complex projects could take additional time beyond the funding year, should new deployment be given 18 months to be completed and invoiced from the date the funds are committed? Should complex internal connections projects be given 18 months to be completed and invoiced from the

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on consortia could disadvantage a smaller carrier that is best suited to serve a part of a consortium, but not the entire consortium).

[50] *Schools and Libraries Universal Service Support Mechanism et al.*, CC Docket No. 02-6 et al., Sixth Report and Order, 25 FCC Rcd 18762, 18789-91, paras. 58-63 (2010).

[51] *E-rate Modernization NPRM*, 28 FCC Rcd at 11361, para. 218.

[52] *Id.* at 11315, para. 30.

[53] *Id.* at 11318, para. 43.

[54] *Id.* at 11310, 11318-20, paras. 12, 45-51.

[55] *See* 47 C.F.R. § 54.507(d); *see also* USAC, Schools and Libraries, Invoicing, http://www.usac.org/sl/service-providers/step05/default.aspx (last visited Mar. 5, 2014).

[56] 47 C.F.R. § 54.507(d) (setting out September 30 deadline for non-recurring services with four exceptions, such as for commitment letters that are issued after March 1 of a funding year).

date the funds are committed? Could invoicing deadlines be synchronized with other federal funding programs to reduce complexity for applicants?[57] Should applicants be allowed any extension of their project deadlines? If so, under what circumstances? Currently, special construction or build-outs can commence six months before the start of the funding year.[58] Should the Commission give applicants additional time before the funding year to begin special construction to schools and libraries, or to begin internal infrastructure projects?

II. REDUCED SUPPORT FOR VOICE SERVICES

40. In the *E-rate Modernization NPRM*, the Commission proposed to refocus the E-rate program on supporting high-capacity broadband connectivity to and within schools and libraries and recognized that it needed to confront the prospect of eliminating or reducing support for voice and other legacy services that do not advance the deployment of broadband.[59] As schools and libraries increasingly transition to voice over Internet protocol (VoIP) services, we expect the price they pay for voice services to decrease. While many commenters expressed support for a transition from funding voice telephony services, many such commenters also stressed the importance of phasing out support for voice services over a number of years, with several specifically endorsing a three- to five-year phase-out period.[60] Below we seek comment on several specific ways for the Commission to transition away from support for voice services, and we invite commenters to offer other suggestions for how best to redirect E-rate support from voice to broadband services.

A. Reduced E-rate Support for Voice Services

41. One way for the Commission to phase out support for voice services would be to gradually reduce the discount rate applicants receive for voice services. For example, the Commission could phase out support for voice services by 15 percentage points per year, beginning in funding year 2015, and continue to reduce support for such services by the same amount each year until funding for

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[57] Recipients of federal Title I money may spend down money in the funding cycle for which the funds were granted or a subsequent funding cycle. *See* 20 U.S.C. § 1225(b). Because of this, districts often work from multiple budgets at the same time, which creates complexity. *See generally* American Association of School Administrators, School Budgets 101, http://www.aasa.org/uploadedFiles/Policy_and_Advocacy/files/SchoolBudgetBriefFINAL.pdf (last visited Mar. 5, 2014).

[58] Currently, while the service start date stays the same, applicants can start installation up to six months prior to July 1, as long as four conditions are met: the posting of an FCC Form 470; the service must depend on the installation of the infrastructure; the underlying service may not have a service start date earlier than July 1; and no invoices can be dated before July 1. *See* USAC, Schools and Libraries, Advance Installation, http://www.usac.org/sl/applicants/step06/installation.aspx (last visited Mar. 5, 2014).

[59] *E-rate Modernization NPRM*, 28 FCC Rcd at 11330-36, paras. 90-114.

[60] *See, e.g.*, Alaska EED and Alaska State Library Comments at 7 (recommending a phase out of support for voice service beginning in funding year 2015 which would require applicants to pay an increasing percentage each year through funding year 2018, until they are carrying the full burden of the service without E-rate support); ALA Comments at 15 (stating that support for voice services should be phased out gradually over a period of five years); Comments of Pennsylvania Association of Intermediate Units (PAIU), WC Docket No. 13-184, at 4 (filed Sept. 16, 2013) (supporting funding voice telephony services at a flat 40 percent discount and continued funding, at least through Funding Year 2017); METLA Comments at 11 (stating that the primary focus of the E-rate program is to get broadband into the classroom and that other services, such as voice, that do not accomplish this should be phased out over the next three to five years); Illinois CMS Comments at 12 (recognizing voice service as an application that can be delivered over broadband platforms and recommending that funding for applications should be phased out); GCI Comments at 14 (agreeing that the Commission could streamline E-rate by eliminating support for voice services); Comments of International Association for K-12 Online Learning (iNACOL), WC Docket No. 13-184, at 14 (filed Sept. 16, 2013) (78 percent of iNACOL members surveyed would support the removal of landline telephone services as an eligible service to expand support for broadband access).

voice services is fully phased out in funding year 2020.[61] We seek comment on this approach, as well as any other options for reducing E-rate spending on voice services. A gradual approach to reducing support for voice services should give schools and libraries time and the incentive to find lower priced solutions, and could also provide the Commission a period to evaluate whether it should adjust the phase out schedule. Although such an approach will result in some applicants receiving no support for voice services prior to funding year 2020, the most economically disadvantaged applicants — *i.e.* those that are currently eligible for a 90 percent discount rate — would be eligible for a 75 percent discount on voice telephony in funding year 2015, a 60 percent discount in funding year 2016, a 45 percent discount in 2017, a 30 percent discount in funding year 2018, and a 15 percent discount in funding year 2019.[62]

42. We expect that the diminished availability of E-rate funding for voice services will be ameliorated by the fact that many applicants have transitioned or will transition to VoIP,[63] which is generally considered to be more cost-efficient than traditional voice services.[64] Although some commenters have suggested that the initial costs, including the cost of new handsets, to transition to VoIP

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[61] In the *E-rate Modernization NPRM,* the Commission sought comment on shifting support for voice telephony services to broadband connectivity and whether this would better serve this proceeding's proposed priority of connecting a majority of our nation's schools and libraries with high-capacity broadband. *E-rate Modernization NPRM*, 28 FCC Rcd at 11335, para. 105. The *E-rate Modernization NPRM* also sought comments on SECA's June 2013 White Paper recommendation to implement a tiered five-year phase out of E-rate support for telecommunications that are used only for voice communications, about the potential hardships schools and libraries would face if voice telephone service was eliminated from the list of supported services, and whether we should consider any statutory limitations. *Id.* at 11335-36, paras. 107-110. *See also* SECA June 2013 White Paper at 6.

[62] This is similar to the tiered phase out for voice services suggested by Alaska EED and Alaska State Library in their comments. Alaska EED and Alaska State Library Comments at 7. They suggest that, for example, beginning in funding year 2015, applicants pay their discounted amount multiplied by 0.75, pay a discounted amount multiplied by 0.5 in funding year 2016, pay a discounted amount multiplied by 0.25 in funding year 2017, and that support for voice would be removed entirely by funding year 2018. *Id.*

[63] In its recent *Technology Transitions Order*, the Commission recognized that the transition to Session Initiation Protocol (SIP)/IP [SIP/IP]-based transport and signaling enables an ongoing technological transition at the application layer. Specifically, providers and third parties are transitioning customers' services from purpose-built networks to new applications that can ride over more general broadband transport networks. It also noted that time-division multiplexed (TDM)-based switched voice services are being replaced in many places by interconnected VoIP services that rely on SIP/IP networks. *See Technology Transitions et al.*, GN Docket No. 13-5 et al., Order, Report and Order and Further Notice of Proposed Rulemaking, Report and Order, Order and Further Notice of Proposed Rulemaking, Proposal for Ongoing Data Initiative, FCC 14-5, para. 17 (rel. Jan. 31, 2014) (Technology Transitions Order).

[64] In its 2013 ICT Market Review and Forecast, the Telecommunications Industry Association (TIA) states that due to the increase in broadband penetration, the VoIP market has swelled in recent years, and its advantages over traditional circuit-switched lines include cost savings and enhanced features that come standard with the service. *See Telecommunications Industry Association's 2013 ICT Market Review and Forecast,* at 3-45 (TIA's 2013 ICT Market Review and Forecast). Additionally, it states that enterprise customers experience cost savings with VoIP not just through the lower price of the service itself, but because of the way it can be provisioned. For example, business VoIP has evolved into a unified communications system treating all forms of communications, voice, data, and facsimiles as pieces of data; this reduces infrastructure costs and utilizes the same management tools. Moreover, telephones can be connected wherever there is a broadband connection, making it less costly relocate staff, and long-distance charges are eliminated between buildings or offices. *Id.* at 3-51 to 3-52. Also, the enhanced features that come standard with many VoIP systems, such as conference calling, call forwarding, and caller ID, are typically charged as add-on fees by the traditional telephone companies. *Id.* at 3-52. *See also* Waring, *Should Your Business Move Over to VoIP for Phone Service?*, Business 2 Community, Jan. 12. 2014, http://www.business2community.com/tech-gadgets/business-move-voip-phone-service-0738916 (last visited Feb. 10, 2014).

is cost prohibitive for them,[65] others indicate that they are embracing this trend.[66] Our approach also takes into consideration that the growth of competitive options for voice services, such as VoIP, should drive down costs for voice services.[67]

43. If the Commission elects to phase out support for voice beginning in funding year 2015, will schools and libraries have adequate time and resources to make needed adjustments? Commenters should consider that as the E-rate program increasingly supports high-capacity broadband, applicants may be eligible for increased levels of support for broadband services to and within schools and libraries.[68] Will increased funding for these other types of services assist schools and libraries adjusting to decreasing levels of E-rate support for voice telephony services?[69] Will increased support for high-capacity broadband networks to and within schools and libraries put applicants in a better position to transition to VoIP, and would E-rate still be supporting voice services, albeit indirectly, by supporting the infrastructure and services over which VoIP will ride? Would it be appropriate, therefore, to phase out support for voice services only once a school or library has gained access to high-capacity broadband? If so, we seek comment on whether we should adopt different voice phase-out dates on a case-by-case basis for individual schools or libraries, such as within one year after they have broadband that meets the goals for high-capacity broadband established in this proceeding.

44. We also seek comment on whether the entries for telephone services, telephone components, and interconnected VoIP in the Eligible Services List (ESL) include all of the types of voice services and components that should be covered by the five year phase out.[70] Are there any services in these entries that should be excluded from the phase out? Are there other types of telephone services that are not specifically listed in the current ESL that should be subject to the phase out? Commenters should provide details on the specific voice services for which support should be phased out and provide detailed reasons for why certain services should be included or excluded from the list of targeted voice services.

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[65] *See infra* n.75.

[66] *See, e.g.,* ALA Comments at 15 (recommending a five-year phase out period for most library applicants except for those located in areas where alternatives to POTS are either not available or cost prohibitive, but that this "exemption" should be revisited every two years under the assumption that in due course, high-capacity broadband will be available in all but the most remote areas of the country); Comments of the State of Hawaii, WC Docket No. 13-184, at 9-10 (filed Sept. 16, 2013) (suggesting that the transition from legacy voice services to VoIP is expected to progress significantly in within five years); Comments of San Diego County Office of Education, WC Docket No. 13-184, at 4 (filed Sept. 13, 2013) (SDCOE Comments) (stating that the convergence of voice and data now allows for increased efficiencies through VoIP).

[67] VoIP currently provides a cost saving to business customers. *See TIA's 2013 ICT Market Review and Forecast,* Telecommunications Industry Association, The Outlook for VoIP, Chapter 3: The Landline Market at 3-56. Average monthly spending of $64 per month per line in 2012 was less than half of the $142 average for circuit switched lines. *Id.*

[68] Many applicants that have received priority one support for voice telephone services, have forgone funding requests for other projects such as internal connections because they have become accustomed to these needs going unmet due to the high demand on the fund, and current funding prioritization rules. *See supra* n.17.

[69] Currently, internal connections used for the delivery of voice services are supported as priority two eligible services. Will discontinuing support for those services drive applicants to more cost-effective voice solutions?

[70] *See* USAC, Eligible Services List, at 3, 4-5, http://www.usac.org/_res/documents/sl/pdf/ESL_archive/EligibleServicesList-2014.pdf 2014 ESL (last visited Mar. 5, 2014) (listing interconnected VoIP, telephone services such as local, long distance, cellular, and Centrex service, and telephone components such as text messaging and directory assistance charges as services eligible for E-rate support).

B. Alternatives

45. The Commission may also decide to eliminate voice more quickly or to modify in some other way the current approach to supporting voice services. Therefore, we also seek comment on a number of alternative ways to approach funding for voice services, and we invite comment on the approaches we identify below, as well as variations on or alternatives to any such options.

46. *Elimination of voice support*. As an alternative to a phase down of voice support, should the Commission consider eliminating all support for voice services starting in funding year 2015? Such an approach would more quickly accomplish the Commission's goal of transitioning the E-rate program to supporting high-capacity broadband, but would also result in a more stark loss of support for applicants. Would it be more appropriate to provide additional time for applicants to make necessary budgetary changes by eliminating all support for voice services, but in a later funding year?

47. *Lower priority for voice services*. In the alternative, we also seek comment on retaining support for voice services under a lower priority. For example, SECA recommends that the Commission establish a new priority category for particular services, including voice services, to be funded at a flat 50 percent discount and that all applicants have equal access to the services in this category.[71] Would it be more manageable for applicants to adjust to a larger reduction in funding the first year we implement a discount reduction for voice services because they know they will continue to receive such funding in future years?[72] If we were to take such an approach, would it encourage applicants to move to more cost-effective solutions or would we need to take additional steps to encourage such transitions?

48. *Benchmark for VoIP support*. As voice communications technologies migrate from traditional TDM to IP should the Commission encourage this transition for schools and libraries using the E-rate program? Some commenters suggested that rather than phasing out E-rate support for all voice services, the Commission should continue to provide support for VoIP solutions.[73] A possible middle ground would be for the Commission to identify inexpensive VoIP solutions for schools and libraries and use such services as a benchmark for how much support the E-rate program will provide for voice services.

49. If the Commission establishes a benchmark support amount, should the benchmark be on a per-user basis or some other basis? If the Commission establishes a per-user benchmark, how would applicants establish the number of users they have that provide the basis for the amount of their requested support? If the Commission establishes a benchmark support amount, should the E-rate program use this benchmark to support all voice services, regardless of the technology used? Or should the Commission use the benchmark derived support amount only to fund VoIP service and phase down support for all other voice services? Does the transition to VoIP services offer applicants an opportunity to use consortium purchasing or other forms of bulk buying to drive down the cost of services while ensuring service quality? If so, what steps can the Commission take to encourage such purchasing?

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[71] SECA Comments at 22-24.

[72] For example, K12HSN suggests that voice services can be transitioned to a lower priority two category assuming the category will receive funding based on funds that are available after completing funding of the priority one category and the funding cap will increase. K12HSN Comments at 10.

[73] Comments of Broadcore, Inc., WC Docket No. 13-184, at 1 (filed Sept. 16, 2013); Comments of Carnegie Library of Pittsburgh, WC Docket No. 13-184, at 7-8 (filed Sept. 16, 2013) (Carnegie Library Comments) (supporting a tiered phase down of support for voice service only if VoIP service continues to be covered). However, others argued that E-rate currently encourages applicants to pursue expensive VoIP options involving building and operating their own systems. *See* Friday Institute Comments at 6.

C. Other Issues Related to Voice Services

50. As the Commission considers how to treat voice services as part of a modernized E-rate program, we seek comment on several specific issues relating to the funding of voice services and invite commenters to raise other issues.

51. *Internal connections*. We also seek comment on whether the Commission should end support for internal connections used for the delivery of voice services which are currently supported as priority two eligible services.[74] Will discontinuing support for the internal connections used to deliver voice discourage applicants that had been considering a transition to VoIP? If VoIP is the most cost-effective option for voice services, we seek comment on whether the E-rate program should offer some short term incentive to applicants to transition to VoIP. Some commenters have already explained in this proceeding that they are reluctant to switch to VoIP for a variety of reasons.[75] Would it be a sufficient incentive for applicants to transition to VoIP if the E-rate program provided an additional, one-time discount, such as 10 to 20 percent, to applicants in order to help defray the up-front costs necessary for the first year of a transition to VoIP?

52. *Rural areas or areas that lack access to broadband*. If the Commission decides to decrease support for voice services, some commenters have suggested that it continue to provide support for traditional voice services for those schools and libraries in remote rural areas, on Tribal lands, or elsewhere that lack access to high-capacity broadband and therefore will find it more challenging to adopt affordable VoIP options.[76] For example, Alaska EED and Alaska State Library ask the Commission to consider extending the eligibility of voice services for locations that rely on satellite Internet service.[77] We seek further comment on such an approach, and specific comment on how, if the Commission adopts such an exemption, it should determine which applicants should qualify? Would it be sufficient, for example, to simply require applicants to certify that there are no alternatives to POTS service in their geographic location?

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[74] *See supra* para. 10.

[75] Some commenters express concern about switching costs. *See, e.g.,* Miami Dade Comments at 6 (explaining that its existing PBX platforms would be costly to transition to VoIP); Comments of School District of Philadelphia, WC Docket No. 13-184, at 8 (filed Sept. 16, 2013) (explaining that to take advantage of newer VoIP technology, it would have to rewire entire schools and purchase a new voice communications system and end-user equipment); Comments of Clark County School District, WC Docket 13-184, at 6 (filed Sept. 16, 2013) (explaining that many schools and libraries incur additional voice equipment and licensing costs when transitioning to VoIP). Other commenters express concern about losing E-rate funding for POTS services dedicated to elevators, alarm systems and for other safety-related purposes. *See, e.g.,* Reply Comments of the Chicago Public Schools et. al., WC Docket No. 13-184, at 5 (filed Nov. 8, 2013) (noting that landlines are required for essential safety features such as elevator car communications in the event of a breakdown and connections of emergency services in the event of a disaster); Comments of Council of the Great City Schools, WC Docket No. 13-184, at 10 (filed Sept. 16, 2013) (stating that landline service is necessary for safety plans, emergency systems and telecommunications services for schools); WVDE Comments at 42 (stating that VoIP systems go down when criminal or weather-related events take out a network). However, the record indicates that organizations have been able to make successful transitions to VoIP service. *See, e.g.,* Carnegie Library Comments at 8 (stating "we utilize VoIP exclusively and have found it to not only be a viable alternative to public-switch service, but actually provides many additional benefits that traditional phone service cannot easily provide, such as emergency broadcasting, conferencing abilities, ease of use, faster and more efficient customer service").

[76] Some commenters assert that reducing or eliminating E-rate support for voice telephony should not be applicable to rural or insular areas. *See, e.g.,* Comments of the State of Arkansas, WC Docket No. 13-184, at 15-16 (filed Sept. 16, 2013); Comments of E-rate Consultants, LLC, WC Docket No. 13-184, at 3 (filed Sept. 16, 2013); EPS Comments at 7; iFiber Comments at 8.

[77] Alaska EED and Alaska State Library Comments at 10.

53. Above we ask whether we should adopt different voice phase-out dates for individual schools or libraries, such as within one year after they have the high-capacity broadband that meets the goals established in this proceeding. Should we adopt this approach for rural schools and libraries, and require that for rural entities to qualify for an exemption from phase-out, they do not have the high-capacity broadband meeting the goals laid out in this proceeding?[78] Should waivers or exemptions for those applicants in areas where VoIP is not available also be available for those applicants that can upgrade to VoIP but choose not to for financial or other reasons? Are there other types of schools and libraries that have unique needs meriting continued E-rate support for voice services at current levels? How should we define the areas or circumstances where support for voice service would continue to be supported under an alternative like this?

D. Easing Administrative Burdens

54. We seek comment on how best to reduce the administrative burden on E-rate applicants, regardless of which approach to supporting voice services the Commission takes in modernizing the E-rate program. If, for example, the Commission decides to phase down or phase out support for voice services, will calculating the correct amount of support due to applicants be administratively challenging? If so, what can the Commission do to ease the administrative burdens? Commenters have generally supported easing the burdens for multi-year contracts for recurring services,[79] is that something that would be particularly useful in this context? Likewise, if the Commission moves to supporting voice using a per-user cost for VoIP services as a benchmark, are there administrative challenges the Commission should take into account, and are there things the Commission can do to ease the administrative burden of such an approach on schools and libraries?

III. DEMONSTRATION PROJECTS

55. In the *E-rate Modernization NPRM*, the Commission sought comment on innovative approaches to encouraging efficiency in the E-rate program.[80] Many commenters offered examples for how new approaches to planning and procuring services might be either (or both) more cost effective or more administratively efficient.[81] At the same time, many commenters argued that local needs vary and local decision making has been one of the hallmarks of the E-rate program.[82] As the Commission considers how best to meet the high-capacity connectivity needs of schools and libraries cost effectively, commenters supported the use of E-rate funds for projects of broad relevance to help identify and accelerate the development of best practices for achieving cost savings and innovation within E-rate.[83]

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[78] Or should the Commission use the speed goals set in other proceedings, such as in Connect America Fund – Phase II? *Connect America Fund*, Report and Order, 28 FCC Rcd 15060, 15070, para. 23 (Wireline Comp. Bur. 2013) (requiring price cap carriers accepting model-based support to certify that 95 percent or more of all peak period measurements (also referred to as observations) of network round trip latency are at or below 100 milliseconds).

[79] *See, e.g.*, CenturyLink Comments at 24; Comcast Comments at 34-35; NIEA Comments at 3; NTCA Reply Comments at 20; Richmond, GA Comments at 2; SDCOE Comments at 4; Comments of the Wireless Internet Service Providers Association, WC Docket No. 13-184, at 6 (filed Sept. 16, 2013); Quilt Comments at 2-3, 10-11.

[80] *See E-rate Modernization NPRM*, 28 FCC Rcd at 11362, paras. 220-23.

[81] *See, e.g.*, ALA Comments at 23-24 (suggesting processes to decrease burden on consortia); Comments of Internet2, WC Docket No. 13-184, at 18-21 (filed Sept. 16, 2013) (supporting efforts to simplify the application process for cost-effective measures).

[82] *See, e.g.*, EdLiNC Comments at 3, 8-9; Letter from Michael A. Resnick, Associate Executive Director, National School Boards Association, to Chairman Wheeler, FCC, WC Docket No. 13-184, at 1 (filed Nov. 8, 2013).

[83] *See, e.g.*, Comments of State Educational Technology Directors Association, WC Docket No. 13-184, at 20-21 (filed Sept. 16, 2013) (Commission's proposals will help identify best practices that will accelerate achievement of E-rate program goals); iFiber Comments at 10 (encouraging the use of pilot programs to test the revised paradigms and provide lessons learned); MOREnet Comments at 10 (supporting pilot programs to determine the effectiveness

(continued…)

56. We therefore now seek further comment on providing limited funding for well-defined, time-limited demonstration projects aimed at identifying and testing different approaches to meeting schools' and libraries' connectivity needs. Like the recently adopted *Technology Transitions Order* that solicited a broad set of experiments in order to develop facts and data,[84] such projects would be set up as proof of concept experiments on innovative approaches to maximizing cost-efficient use of E-rate funding.[85] These projects, although experimental, would provide needed services and equipment to E-rate eligible participants. We seek comment on funding a number of different types of demonstration projects based on Commission and stakeholder proposals. We also invite suggestions of other types of projects the Commission should conduct, the amount that should spend on any individual project, and the total budget for such projects.

57. As one example, the Commission sought comment on whether to allow experimentation in bulk purchasing of E-rate eligible services and equipment.[86] We received a mixed reaction in response to the *E-rate Modernization NPRM* on whether the Commission should create a formal bulk buying program.[87] While commenters expressed concern about the potential rigidity of requiring applicants to use such a program, they supported promoting the use of statewide or consortia bulk purchasing.[88] We therefore seek further comment and proposals on how to conduct one or more initial experiments with bulk purchasing. A structured bulk buying demonstration project could test the cost-effectiveness and flexibility of such a program using just a small number of services or products, and would have the benefit of providing applicants with products and services they need as part of their broadband networks. For example, stakeholders could propose a project to gather data on bulk purchasing by a state, consortia, or regional research and education network for certain internal connection components, commercial internet access, or a VoIP solution that would replace traditional voice service. We seek comment on these types of projects and how to foster innovative and scalable practices.

58. A demonstration project could also provide an opportunity to gather information and test proposals for implementation of a technical assistance program. For example, a demonstration project could test the effectiveness of hiring technical assistance experts to assist in network design or technical planning in a small number of districts, schools, and/or libraries whose costs fall outside a standard range for E-rate applicants. Another could test the use of consultants who are experts on connectivity costs and are un-affiliated with broadband providers.

59. We also seek comment on other proposals in the record. The American Library Association, for example, suggested a pilot program aimed at temporarily increasing the discount level for targeted libraries, prioritizing based on public-private partnerships, and providing technical assistance in

(Continued from previous page)
of competitive bidding and consortia proposals); Comments of Riverside Unified School District Technology Department, WC Docket No. 13-184, at 14 (filed Sept. 16, 2013) (Riverside USD Comments) (agreeing with proposed experiments with consortia efforts and bulk buying opportunities).

[84] *See generally Technology Transitions Order*, FCC 14-5.

[85] For example, the Rural Health Care Connect Pilot Program has demonstrated methods to drive down prices, improve service quality, and reduce administrative overhead through bulk buying opportunities. *Healthcare Connect Fund Order*, 27 FCC Rcd at 16720, para. 93.

[86] *See E-rate Modernization NPRM*, 28 FCC Rcd at 11354, 11362, paras. 187, 221. A negotiated bulk purchase price could also be used as a reference price for equivalent services or products.

[87] *Compare, e.g.*, Riverside USD Comments at 14 *with* CenturyLink Comments at 17-18.

[88] *See, e.g.*, E-rate Central Comments at 10 (supporting consortia purchasing); Gates Reply Comments at 4 (supports coordinated state and local planning incenting consortia and bulk buying); AT&T Comments at 10; EdCo Reply Comments at 2, 11 (requests a priority for consortia and an additional five percent discount); EducationSuperHighway Comments at 31 (permit state organizations, public entities, and other community anchor institutions to join schools).

order to "catalyze innovation" in advancing library services.[89] If we were to fund such a project, how much funding should we provide and over what period of time? What sort of support could we expect the private sector to bring to such a project? Are there particular needs of libraries that we should focus on? What types of technical assistance would be particularly valuable, and to what end? What data should the Commission collect, as part of such a pilot program, and how should we use that data to measure progress towards success? Are there ways in which libraries' connectivity needs differ from those of schools? Are there other types of demonstration projects aimed at addressing the unique needs of libraries that the Commission should fund? With respect to all proposed demonstration projects, we request commenters be as specific as possible about the goals, the amount of funding, the process for selecting participants, the data to be collected and the timeline for any projects they propose or support.

60. Commenters also contributed other ideas, such as a pilot program to link last-mile infrastructure to BTOP funded networks,[90] experiments on the use of consortia efforts,[91] or projects that target rural areas.[92] Another proposed a project to implement bulk purchasing of a platform to facilitate affordable access to advanced information services.[93] We seek comment on these proposals and how such projects could be structured to gather data and evaluate success. These examples are not meant to be exhaustive. We welcome further ideas from stakeholders on the types of demonstration projects that can help identify cost efficiencies and drive down the cost of E-rate supported services. Are there other approaches used by enterprise customers to drive down their broadband costs that the Commission should experiment with in the E-rate program?

61. We seek specific comment on the process for selecting such proposals. In determining projects, should the Commission focus on experiments that examine cost impacts or consider other types of criteria, such as innovativeness? How should the Commission prioritize project funding? Should the length of any given demonstration project be limited to a single year? Should they be tied to specific E-rate funding years? Should the Commission select different kinds of projects to evaluate the different models' effects on driving down costs of E-rate eligible services? These projects should be designed to help the Commission gather data needed to inform decision-making and make future reforms. Therefore, we seek detailed comment on the data goals and how to evaluate the projects during and after selection. We also seek further ideas on how to share information and empower applicants to replicate project successes across the country.

62. Numerous commenters have confirmed the importance of streamlining the administration of the E-rate program. Therefore, as we consider demonstration projects, we also invite experiments that find ways to reduce the administrative burden on E-rate applicants.

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[89] *See* ALA Comments at 21-23.

[90] *See* Reply Comments of Massachusetts Broadband Institute, WC Docket No. 13-184, at 8 (filed Oct. 17, 2013).

[91] *See* CSM Comments at 23; Riverside USD Comments at 14; Comments of Wisconsin Department of Public Instruction, WC Docket No. 13-184, at 11 (filed Sept. 15, 2013).

[92] *See* Comments of Vermont Agency of Education, WC Docket No. 13-184, at 2 (filed Sept. 12, 2013). The recent *Technology Transitions Order* seeks to gather information through rural experiments regarding the impact of technology transitions on community anchor institutions, including schools and libraries, which may inform these E-rate demonstration projects. *See Technology Transitions Order*, FCC 14-5, para. 94.

[93] *See* Comments of Digital Public Library of America, WC Docket No. 13-184, at 1-2 (filed Sept. 16, 2013).

IV. PROCEDURAL MATTERS

A. Regulatory Flexibility Analysis

63. The *E-rate Modernization NPRM* included an Initial Regulatory Flexibility Analysis (IRFA) pursuant to 5 U.S.C. § 603, exploring the potential impact on small entities of the Commission's proposals.[94] We invite parties to file comments on the IRFA in light of this additional notice.

B. Paperwork Reduction Act Analysis

64. This document seeks comment on a potential new or revised information collection requirement. If the Commission adopts any new or revised information collection requirement, the Commission will publish a separate notice in the Federal Register inviting the public to comment on the requirement, as required by the Paperwork Reduction Act of 1995, Public Law 104-13 (44 U.S.C. 3501-3520). In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, 44 U.S.C. 3506(c)(4), the Commission seeks specific comment on how it might "further reduce the information collection burden for small business concerns with fewer than 25 employees."

C. Ex Parte Presentations

65. This matter shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.[95] Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (*e.g.*, .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

D. Comment Filing Procedures

66. Comments and Replies. We invite comment on the issues and questions set forth in the Public Notice and IRFA contained herein. Pursuant to sections 1.415 and 1.419 of the Commission's rules,[96] interested parties may file comments on this Public Notice by April 7, 2014 and may file reply comments by April 21, 2014. **All filings related to this Public Notice shall refer to WC Docket No. 13-184**. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies. *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://fjallfoss.fcc.gov/ecfs2/.

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[94] *See E-rate Modernization NPRM*, 28 FCC Rcd at 11458-68, App. D.

[95] 47 C.F.R. §§ 1.1200 *et seq.*

[96] 47 C.F.R. §§ 1.415, 1.419.

- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing.

    - Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

    - All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

67. People with Disabilities. To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

68. In addition, one copy of each paper filing must be sent to each of the following: (1) the Commission's duplicating contractor, Best Copy and Printing, Inc., 445 12th Street, SW, Room CY-B402, Washington, DC 20554; website: www.bcpiweb.com; phone: (800) 378-3160; (2) Lisa Hone, Telecommunications Access Policy Division, Wireline Competition Bureau, 445 12th Street, SW, Room 6-A326, Washington, DC 20554; e-mail: Lisa.Hone@fcc.gov; and (3) Charles Tyler, Telecommunications Access Policy Division, Wireline Competition Bureau, 445 12th Street, SW, Room 5-A452, Washington, DC 20554; e-mail: Charles.Tyler@fcc.gov.

69. Filing and comments are also available for public inspection and copying during regular business hours at the FCC Reference Information Center, Portals II, 445 12th Street, SW, Room CY-A257, Washington, DC 20554. Copies may also be purchased from the Commission's duplicating contractor, BCPI, 445 12th Street, SW, Room CY-B402, Washington, DC 20554. Customers may contact BCPI through its website: www.bcpi.com, by e-mail at fcc@bcpiweb.com, by telephone at (202) 488-5300 or (800) 378-3160 or by facsimile at (202) 488-5563.

70. Comments and reply comments must include a short and concise summary of the substantive arguments raised in the pleading. Comments and reply comments must also comply with section 1.49 and all other applicable sections of the Commission's rules. We direct all interested parties to include the name of the filing party and the date of the filing on each page of their comments and reply comments. All parties are encouraged to utilize a table of contents, regardless of the length of their submission. We also strongly encourage parties to track the organization set forth in this Public Notice in order to facilitate our internal review process.

71. For additional information on this proceeding, contact James Bachtell at (202) 418-2694 or Regina Brown at (202) 418-0792, in the Telecommunications Access Policy Division, Wireline Competition Bureau.

- FCC -

ATTACHMENT

Allocation Formula

$$Available\ Support = Greater\ of \begin{cases} Per - Student\ \ Allocation\ x\ \ Number\ of\ Students\ x\ Discount\ Rate \\ Per - Building\ Allocation\ \ x\ \ Number\ of\ Buildings\ x\ Discount\ Rate \end{cases}$$