

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 54

[WC Docket No. 13–184; FCC 14–99]

Modernization of the Schools and Libraries “E-Rate” Program

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In this document, the Federal Communications Commission (Commission) takes major steps to modernize the E-rate program (more formally known as the schools and libraries universal service support mechanism). Building on the comments the Commission received in response to the *E-rate Modernization NPRM*, and the *E-rate Modernization Public Notice*, as well as recommendations from the Government Accountability Office (GAO), the program improvements the Commission adopts as part of this document begin the process of reorienting the E-rate program to focus on high-speed broadband for our nation’s schools and libraries.

DATES: Effective September 18, 2014, except for amendments in §§ 54.502(b)(2), (3), and (5), 54.503(c), 54.504(a) and (f), 54.507(d), 54.514(a), 54.516(a) through (c), and 54.720(a), which are subject to the Paperwork Reduction Act and will become effective upon announcement by the FCC in the *Federal Register* of OMB approval of the subject information collection requirements; and except for amendments in §§ 54.500, 54.501(a)(1), 54.502(a), 54.507(a) through (c) and (e) through (f), 54.516, and 54.570(b) and (c), which shall become effective on July 1, 2015; and amendments in §§ 54.504(f)(4) and (5) and 54.514(c), which shall become effective on July 1, 2016.

FOR FURTHER INFORMATION CONTACT: James Bachtell or Kate Dumouchel, Wireline Competition Bureau, Telecommunications Access Policy Division, at (202) 418–7400 or TTY: (202) 418–0484.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission’s Report and Order, in WC Docket No. 13–184; FCC 14–99, adopted on July 11, 2014 and released on July 23, 2014. The full text of this document is available for public inspection during regular business hours in the FCC Reference Center, Room CY–A257, 445 12th Street SW., Washington, DC 20554. Or at the following Internet address: <http://www.fcc.gov/document/fcc-releases-e->

rate-modernization-order. The Further Notice of Proposed Rulemaking (FNPRM) that was adopted concurrently with the Report and Order is published elsewhere in this issue of the *Federal Register*.

I. Introduction

1. In this Report and Order we take major steps to modernize the E-rate program. In so doing, we recognize E-rate’s extraordinary success as the federal government’s largest education technology program. Over the last 17 years, the E-rate program has helped to ensure that our nation’s schools and libraries are connected to the digital world. At the same time, we acknowledge and embrace our responsibility to make sure the program evolves as the needs of schools and libraries evolve. In particular, the E-rate program must evolve to focus on providing support for the high-speed broadband that schools need to take advantage of bandwidth-intensive digital learning technologies and that libraries need to provide their patrons with high-speed access to the Internet on mobile devices as well as desktops. Access to high-speed broadband is crucial to improving educational experiences and expanding opportunities for all of our nation’s students, teachers, parents and communities. Building on the comments we received in response to the *E-rate Modernization NPRM*, 78 FR 51597, August 20, 2013, and the *E-rate Modernization Public Notice*, 79 FR 13300, March 10, 2014, as well as recommendations from the GAO, the program improvements we adopt as part of this Report and Order begin the process of reorienting the E-rate program to focus on high-speed broadband for our nation’s schools and libraries.

2. The record clearly demonstrates the power of high-speed broadband connectivity to transform learning. High-speed broadband, to and within schools, connects students to cutting-edge learning tools in the areas of science, technology, engineering and math (STEM) education, necessary for preparing them to compete in the global economy. High-speed broadband also creates opportunities for customized learning, by giving our students and their teachers access to interactive content, and to assessments and analytics that provide students, their teachers, and their parents real-time information about student performance while allowing for seamless engagement between home and school. Finally, high-speed broadband expands the reach of our schools and creates

opportunities for collaborative distance learning, providing all students access to expert instruction, no matter how small the school they attend or how far they live from experts in their field of study.

3. High-speed broadband is also a critical component of 21st Century libraries. In many communities, libraries are the only source of free, publicly available Internet access. As a result, high-speed broadband at libraries provides library patrons, many of whom have no other Internet access, the ability to participate in the digital world. Broadband services at libraries are crucial for enabling and fostering life-long learning, and they enable students at all stages of their education to perform research and complete their homework. Broadband at libraries is also crucial for students studying for and taking their General Educational Development (GED) tests and allows students to take and study for college and graduate-level courses. Broadband at libraries enables patrons to seek and apply for jobs; learn new skills; interact with federal, state, local, and Tribal government agencies; search for health-care and other crucial information; make well-informed purchasing decisions; and stay in touch with friends and family.

4. In adopting this Report and Order, we recognize the critical role the E-rate program plays in the lives of our students and communities and the importance of ensuring that the program supports sufficient, equitable, and predictable support for high-speed connectivity to and within schools and libraries. It is a crucial part of the Commission’s broader mandate to further broadband deployment and adoption across our nation. We therefore adopt a number of the proposals made in the *E-rate Modernization NPRM* and begin the process of re-focusing the E-rate program on providing the necessary support to ensure our nation’s schools and libraries have affordable access to high-speed broadband.

5. To maximize the benefits of the E-rate program to our nation’s schools and libraries, we adopt the proposal made in the *E-rate Modernization NPRM* to establish clear goals and measures for the program. The three goals we adopt for the E-rate program are: (1) Ensuring affordable access to high-speed broadband sufficient to support digital learning in schools and robust connectivity for all libraries; (2) maximizing the cost-effectiveness of spending for E-rate supported purchases; and (3) making the E-rate application process and other E-rate

processes fast, simple and efficient. We also adopt approaches for measuring our success towards meeting those goals.

6. In addition, we adopt the following updates to the E-rate program aimed at furthering each of those goals:

- To ensure affordable access to high-speed broadband sufficient to support digital learning in schools and robust connectivity for all libraries, we:

- Set an annual funding target of \$1 billion for funding for internal connections needed to support high-speed broadband within schools and libraries;

- test a more equitable approach to funding internal connections for applicants who seek support in funding years 2015 and 2016; and

- reorient the E-rate program to focus on supporting high-speed broadband by phasing down support for voice services and eliminating support for other legacy services.

- To maximize the cost-effectiveness of spending for E-rate supported purchases, we:

- Adopt transparency measures to encourage sharing of cost and connectivity data;

- encourage consortia purchasing; and

- emphasize that providers must offer the lowest corresponding price.

- To make the E-rate application process and other E-rate processes fast, simple and efficient, we:

- Streamline the application process by:

- Simplifying the application process for multi-year contracts;

- exempting low-cost, high-speed business-class broadband Internet access services from the competitive bidding requirements;

- easing the signed contract requirement;

- removing the technology plan requirement;

- requiring electronic filings; and

- enabling direct connections between schools and libraries.

- Simplify discount rate calculations by:

- Requiring a district-wide discount rate;

- modifying the definition of urban and rural;

- addressing changes to the national school lunch program (NSLP); and

- modifying the requirements for applicants using surveys.

- Simplify the invoicing and disbursement process by:

- Allowing direct invoicing by schools and libraries; and

- adopting an invoicing deadline.

- Create a Tribal consultation, training and outreach program.

- require the filing of all universal service appeals initially with USAC.

- direct USAC to adopt additional measures to improve the administration of the program by:

- Speeding review of applications, commitment decisions and disbursements;

- modernizing USAC's information technology systems;

- adopting open data policies;

- improving communications with E-rate applicants and providers.

- Protect against waste, fraud, and abuse by:

- Extending the document retention deadline; and

- ensuring auditors and investigators access to an applicant's premises upon request.

7. The most fundamental step we take today is to overhaul the support system for internal connections, including the deployment of high-speed Wi-Fi in classrooms and libraries nationwide. When the E-rate program was created, the idea of wired connections to classrooms was revolutionary. Today, students and teachers can and do take their devices with them wherever they go, which means they need to have Internet connectivity throughout their schools. Likewise, in 1997, desktop computers offered state of the art connectivity in libraries. Now, library patrons bring their own devices and use those that belong to their libraries. By modernizing the E-rate program to expand schools and libraries access to more predictable E-rate funding that is sufficient to meet their needs for Wi-Fi connectivity, and other internal broadband connections.

8. Of course, Wi-Fi in classrooms and libraries requires broadband connectivity to schools and libraries. We therefore also take steps in this Report and Order to ensure that all eligible schools and libraries will continue to be able to receive E-rate support to purchase broadband services to their buildings.

9. At the same time, we are mindful of the importance of continuing to improve the E-rate program in order to achieve the goals we adopt herein. In order to ensure the E-rate program evolves to meet the connectivity needs of our nation's schools and libraries, we leave the record open in this proceeding to allow us to address in the future those issues raised in the *E-rate Modernization NPRM* that we do not address today. We also issue an accompanying Further Notice of Proposed Rulemaking (FNPRM) to seek comment on some additional issues.

II. Performance Goals and Measures

10. Based on overwhelming support in the record, and consistent with the Congressional directives in sections 254(b) and (h) of the Communications Act (the Act), we adopt three goals modeled on those proposed in the *E-rate Modernization NPRM*: (1) Ensuring affordable access to high-speed broadband sufficient to support digital learning in schools and robust connectivity for all libraries; (2) maximizing the cost-effectiveness of spending for E-rate supported purchases; and (3) making the E-rate application process and other E-rate processes fast, simple, and efficient. We also adopt associated performance measures and targets to determine whether we are successfully achieving these goals. Clearly articulating goals for the E-rate program, along with specific performance measures and targets, will help us focus our efforts as we modernize the E-rate program, monitor our progress over time, and adjust course as needed. In choosing these goals, performance measures, and targets, we also recognize the need to be sufficiently flexible to accommodate the evolving technological and connectivity needs of schools and libraries.

11. Establishing clear performance goals is also consistent with the Government Performance and Results Act of 1993 (GPRA), which requires federal agencies to engage in strategic planning and performance measurement. In 2007, the Commission adopted measures to safeguard the universal service fund (USF or Fund) from waste, fraud, and abuse as well as measures to improve the management, administration, and oversight of the USF generally. More recently, the Commission has adopted goals in the other USF programs it has modernized over the last few years. In the *E-rate Modernization NPRM*, while the Commission recognized the importance of these measures, it also acknowledged the subsequent finding by the GAO that the E-rate program, specifically, lacked sufficient performance goals and measures. In its 2009 report, the GAO emphasized that successful performance measures should be tied to goals, address important aspects of program performance, and provide useful information for decision making. The goals, measures, and targets we adopt today respond directly to the GAO's recommendations and place the E-rate program on a clear strategic path, consistent with the GPRA.

12. Throughout this Report and Order, we use these three goals as guideposts for our decisions about how to close the

gap between the broadband needs of schools and libraries and their ability to obtain those services. As part of the performance measures, we set connectivity targets by which we will evaluate progress towards meeting our goals. We also adopt reporting obligations for USAC and for E-rate program participants that will enable us to measure progress towards meeting the goals. While we identify specific reporting obligations, we delegate authority to the Bureau, working with the Office of the Managing Director (OMD), to finalize the format and timing of those reporting obligations.

13. Using the adopted goals and measures, we will, consistent with the GPRA, monitor the performance of the E-rate program over time, and regularly reassess our rules and policies to ensure that they are continuing to support our goals. If we find that the E-rate program is not making progress towards meeting the performance goals, we will consider corrective actions. Likewise, to the extent that the adopted targets and performance measures do not help us assess program performance, we will revisit them.

A. Ensuring Affordable Access to High-Speed Broadband Sufficient To Support Digital Learning in Schools and Robust Connectivity for All Libraries

1. Goal

14. We adopt as our first goal ensuring affordable access to high-speed broadband sufficient to support digital learning in schools and robust connectivity for all libraries. This goal is widely supported by commenters and implements Congress's directive in section 254(h) of the Act that the Commission "enhance access to advanced telecommunications and information services" to schools and libraries "to the extent technically feasible and economically reasonable," and determine a discount level for all E-rate funded services that is "appropriate and necessary to ensure affordable access to and use of such services."

15. Our record demonstrates that high-speed broadband is essential for students, teachers, and library patrons seeking to take advantage of the rapidly expanding opportunities for interactive digital learning. As the Commission observed in the *E-rate Modernization NPRM*, the availability of high-speed broadband in schools transforms learning opportunities and expands school boundaries by providing all students access to high-quality courses and expert instruction. We also agree with commenters that high-speed broadband connections should be

available to students and teachers *throughout* a school, enabling them to utilize online materials and blended learning throughout the day and as part of their curriculum.

16. High-speed broadband is also critical in libraries, where it provides patrons with the ability to access the Internet, search for and apply for jobs, engage with governmental entities, learn new skills, and engage in life-long learning. High-speed broadband to and within libraries is especially important in communities where many lack home access to broadband, including minority and low-income communities. Libraries in these communities provide broadband access during non-school hours to students who do not have home access to broadband.

17. The record demonstrates that schools and libraries, recognizing the importance of high-speed broadband to utilize the variety of Wi-Fi-enabled devices for educational purposes, are racing to deploy and upgrade their networks. Specifically, schools and libraries are working to upgrade local area networks (LANs) and wireless local area networks (WLANs or Wi-Fi networks) to deliver high-speed broadband to every student and patron device. School districts are increasingly implementing one-to-one student to device initiatives and bring your own device (BYOD) programs that require high-density Wi-Fi coverage in every classroom and common area. The WLAN upgrades necessary to support one-to-one digital learning may include upgraded switches, wireless routers, Cat 6 or fiber cabling, and 802.11n (or better) wireless access points (WAPs). Though the increasing number of Wi-Fi-enabled devices in schools provides exciting educational possibilities, 57 percent of school districts responding to a recent survey by the Consortium on School Networking do not believe that they have Wi-Fi capacity capable of handling a one-to-one deployment.

18. Libraries are also seeing a rapid increase in bandwidth demand driven by Wi-Fi-enabled devices and the public's need for broadband access. The percentage of libraries providing free Wi-Fi to the public grew from 37 percent in 2006 to 91 percent in 2012. Several commenters note that the public library is sometimes the only place offering free Internet access to the community. Many libraries report that patron-owned devices connected to their network will soon surpass library-provided devices. New technologies such as digital media labs, interactive learning tools for adult education, and videoconferencing services also

contribute to increasing bandwidth demand in libraries.

19. Finally, it is also crucial that high-speed broadband to schools and libraries be affordable, consistent with section 254(b)(1). The record makes clear that, in some areas today, schools and libraries are unable to afford high-speed broadband services or the services they can afford provide insufficient bandwidth to support digital learning or provide their patrons with robust Internet access. We have collected voluminous data on the current state of connectivity to schools and libraries, and the prices schools and applicants are paying for their connectivity. The record reveals a wide variance in the speed and price of connectivity at schools and libraries nationwide. Location, access to fiber connections, financial resources, access to a research and education network (REN), statewide or regional coordination, ISP competition, and a well-informed IT staff are among the many factors that can affect a school's or library's ability to procure high-speed connectivity at a reasonable price.

2. Measures

20. We will evaluate progress towards our first goal by comparing connectivity to and within schools and libraries with widely accepted connectivity targets that are based on digital learning and library needs. As illustrated in Figure 2, the connectivity needs of schools can be divided into three components:

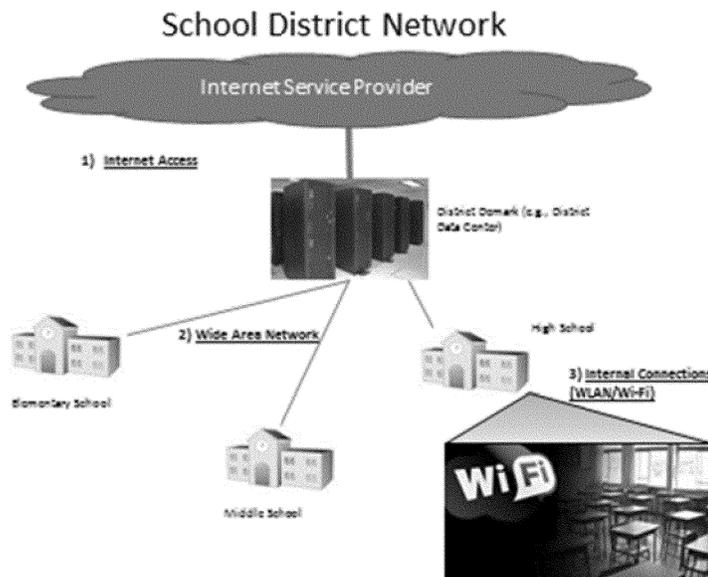
- *Internet Access*—School districts and some library systems purchase Internet access for the entire district or system at a single point of aggregation. For the purposes of this measure, we refer to "Internet access" as the connection or connections that allow traffic to flow from that aggregation point to the public Internet. As part of the purchase of Internet access, the school district (or library system) may purchase dedicated connectivity (e.g., dedicated transport) from its point of aggregation to its Internet Service Provider's (ISP's) point of presence. For schools and libraries that are not connected to a district Wide Area Networking (WAN), Internet access simply refers to the school's or library's direct connection to the public Internet.
- *WAN/Last-Mile*—As just described, school districts and library systems frequently connect individual schools and libraries to a central aggregation point, such as a district, county, or regional data hub, that hosts the Internet demarcation point for the entire district, county, regional, or library system. We refer to these connections as WAN or last mile connections.

• *Internal Connections*—This category encompasses the infrastructure necessary to deliver Internet access from

the edge of a school or library to the actual student, faculty, or patron end-

user device. Internal connections include Wi-Fi.

Figure 2 – Taxonomy of Broadband Connectivity for Schools and Libraries



21. For each of these three network components, we adopt separate measures of progress, including distinct connectivity targets.

a. Internet Access

22. *Connectivity Targets.* We adopt the State Education Technology Directors Association's (SETDA) target recommendation of Internet access for schools of at least 100 Mbps per 1,000 students and staff (users) in the short term and 1 Gbps Internet access per 1,000 users in the longer term. We agree with those commenters who support both the shorter and longer-term connectivity SETDA targets as reflecting schools' bandwidth needs as they increasingly adopt digital learning strategies and one-to-one device initiatives. SETDA's long-term targets are also consistent with President Obama's initiative to connect 99 percent of students to high-speed broadband within five years.

23. We will measure Internet connectivity at the district level for school districts and at the school level for schools that are not members of a district (e.g., private schools). We recognize that the SETDA target for Internet access connectivity may not be appropriate for every school or school district, especially very large or very small districts or individual schools, and will take that into account when

measuring success towards the targets we set today. Large school districts often keep a significant amount of traffic on their internal networks and are able to oversubscribe Internet connections, thereby requiring less per-student Internet access bandwidth. For example, the Los Angeles Unified School District's (LAUSD) network has approximately 750,000 total users and LAUSD is implementing a district-wide one-to-one initiative. LAUSD anticipates that 90 Gbps Internet access connectivity, or approximately 120 Mbps per 1,000 students, will deliver sufficient bandwidth to every classroom and device with the help of bandwidth optimization measures that compress data and eliminate redundant traffic. We will continue to analyze data on broadband demand.

24. This ongoing examination of our Internet connectivity targets should include regular input from schools and libraries. We therefore direct the Bureau to seek, as part of the application process, feedback from schools and libraries on the sufficiency of their Internet access bandwidth to meet their needs. The Bureau will consider all responses, in conjunction with usage and demand data, when refining the Internet connectivity targets.

25. With respect to libraries, we initially adopt as a bandwidth target the American Library Association's

recommendation that all libraries that serve fewer than 50,000 people have broadband speeds of at least 100 Mbps and all libraries that serve 50,000 people or more have broadband speeds of at least 1 Gbps. We agree with commenters that the size of the community served by a library must factor into the library target.

26. *Affordability.* To measure affordability, we will track pricing as a function of bandwidth. We direct the Bureau, working with OMD and USAC, to regularly report normalized pricing (e.g., price per Mbps) for Internet access connectivity and to identify any outliers.

b. WAN

27. *Connectivity Targets.* We adopt as a target for WAN connectivity the total number of schools that have a connection capable of providing a dedicated data service scalable to the SETDA long-term WAN target of 10 Gbps per 1,000 students. At this time, the vast majority of districts and libraries that operate WANs do not have demand for, and therefore do not purchase, 10 Gbps circuits. Indeed, schools and districts have varying broadband needs that will increase at different rates. For example, some elementary schools may not require the same bandwidth per student as middle or high schools. Very small schools with

fewer than 100 students, particularly those that are part of small districts, may not require WAN connections scalable to 1 Gbps (equivalent to 10 Gbps per 1,000 students). However, in some instances small schools in small districts may require more bandwidth per student because they may not be able to take advantage of high oversubscription ratios or conserve bandwidth by using network optimization tools to the same extent as larger schools and larger districts. Conversely, large school districts may be able to optimize their networks to deliver very high speed broadband to the classroom without having WAN connectivity of 10 Gbps per 1,000 students. We therefore adopt a target that focuses on the *scalable capacity* of school district WAN connections to 10 Gbps per 1,000 students. In most cases, a 1 Gbps fiber connection can be readily scaled to 10 Gbps with upgraded networking equipment.

28. The WAN connectivity target that we adopt today is the result of careful analysis of the record and our programmatic experience. Several commenters agree that the SETDA WAN targets accurately reflect the rapidly increasing broadband demand in schools. Others argue that the SETDA WAN targets are too low given the increasing bandwidth demands of standardized testing, educational applications, streaming video, and the growing number of Wi-Fi-enabled devices in schools. Many school districts report that they have doubled their WAN bandwidth in recent years and are planning for future increases. Commenters opposed to adoption of the SETDA WAN targets express concerns about uniform targets for all schools because districts have widely varying student populations, broadband availability, and financial resources. Other commenters recommend that the Commission conduct a comprehensive analysis of schools' actual broadband needs before establishing specific bandwidth targets.

29. We find that a WAN connectivity target measured by the capacity of connections available to schools properly balances the concerns identified by commenters opposed to the SETDA bandwidth targets with the need to ensure that all schools have affordable access to high-speed broadband that supports digital learning. Several factors are driving the need to increase bandwidth to and within schools. School districts across the country are implementing one-to-one and BYOD programs that require more robust connectivity. Cisco notes that the density of devices and demand

on the network in many schools surpasses the demand of other high-density environments such as hotels, restaurants, and corporate offices. The peak bandwidth usage of media-rich curriculum and streaming video applications far exceeds the usage of basic web browsing and email. Online assessments will require high-speed connections that are also highly reliable and secure. A target of ensuring that all schools connected to WANs have a connection scalable to 10 Gbps per 1,000 students will ensure that schools have access to bandwidth sufficient to meet growing demand while maintaining the flexibility to purchase the bandwidth that meets their needs.

30. We direct the Bureau to continue analyzing data on WAN connectivity. As with the Internet connectivity targets, this ongoing examination should consider input from schools and libraries. We therefore direct the Bureau to seek feedback from schools and libraries, as part of the E-rate application process, on its WAN connectivity and whether its WAN provides sufficient bandwidth to meet the schools' and libraries' needs.

31. For libraries, our record is not sufficiently developed to establish a performance measure and a WAN connectivity target at this time. However, to the extent that libraries are connected by a WAN, similar to our approach with schools, we will measure the total number of libraries that have a connection capable of providing a data service scalable to at least 10 Gbps.

32. *Affordability.* As with Internet access, we will measure affordability of WAN connections by tracking pricing as a function of bandwidth. We also direct the Bureau, working with OMD and USAC, to regularly report normalized pricing (e.g., price per Mbps) for WAN connectivity and to identify any outliers.

c. Internal Connections

33. *Connectivity Targets.* Pending the development of a suitable available bandwidth measure for internal connectivity, we find that a survey of school districts and libraries is the best method to gauge the sufficiency of internal connections at this time. Our record is not sufficiently well developed at this time to allow us to identify the appropriate level of bandwidth per device in either schools or libraries. We are also concerned that schools and libraries would find such a measure difficult to report, as the responsible individuals may not have access to the necessary technical data. We therefore decline to adopt such a measure at this

time, but direct the Bureau to continue to develop the record on this issue.

34. Several commenters emphasize that Wi-Fi performance is best measured by throughput to the student or library patron device rather than classroom or library coverage. Other commenters suggest that the high-density Wi-Fi demands of schools require at least one high-capacity wireless access point (WAP) per classroom. Library commenters discuss increasing Wi-Fi demand, but generally did not endorse specific Wi-Fi targets. At this time, we do not think counting the number of WAPs is the right approach to measuring connectivity within schools and libraries. Several unique considerations impact WLAN design. For example, some school districts opt for very high-capacity WAPs that deliver ample bandwidth to multiple classrooms, while others have installed multiple lower-speed WAPs per classroom. Distribution of WAPs in libraries depends on specific factors such as user density and building design. Therefore, we agree with commenters that available bandwidth per device is a more suitable measure to determine whether internal connections are sufficient to support the needs of each individual user at a school or library. However, we need further information from schools and libraries before we adopt a specific measure. We therefore direct the Bureau to seek feedback from schools and libraries, as part of the survey, on the sufficiency of their LAN/WLAN capacity and coverage to support the educational or library activities conducted at their school or library site. The answer to this question will help provide the Commission with insight on progress towards the stated goal pending the development of a more technical measure.

35. *Affordability.* Consistent with our decision to use a survey to measure internal connections availability pending the development of a more precise measure, we direct the Bureau, as part of the survey, to also seek feedback from those schools and libraries that have insufficient WLAN capacity and coverage to support the educational or library activities conducted at their school or library site as to the reason for the lack of sufficient capacity and coverage (e.g., affordability of equipment, or lack of demand for Wi-Fi).

3. Reporting and Further Development of Measures and Targets

36. We direct the Bureau to revise the information collections from E-rate applicants and vendors to collect data regarding the specific measures

adopted. The Bureau should analyze data collected from applicants to track progress toward meeting program goals and to inform revisions to the performance measures and E-rate program rules, and if necessary, to the goals themselves. We also agree with commenters that data should be publicly accessible so that applicants can make informed decisions regarding broadband purchasing and network design.

37. In addition to the connectivity and affordability measures adopted, we agree with commenters who recommend that the Commission evaluate actual bandwidth usage and network performance statistics to continually refine our connectivity targets over time. Digital education and the technologies that deliver it are rapidly evolving. In such a dynamic environment, it is important that we understand changes in the bandwidth demands of school and library networks supported by E-rate as well as the performance of those networks. We direct the Bureau to work with school districts and libraries to develop network measurement methods that gather data on network usage and performance.

B. Maximizing the Cost-Effectiveness of Spending for E-Rate Supported Purchases

1. Goal

38. We adopt as our second goal maximizing the cost-effectiveness of spending for E-rate supported purchases, thereby minimizing the contribution burden on consumers and businesses and maximizing the benefit of each dollar spent on services for schools and libraries. Our rules require that applicants “select the most cost-effective service offering.” Moreover, when evaluating bids, applicants “may consider relevant factors other than the pre-discount prices . . . , but price should be the primary factor considered.” Commenters broadly support the Commission’s proposal to adopt cost-effectiveness as a goal of the E-rate program, in recognition of the limited amount of E-rate funds available to meet the connectivity needs of all schools and libraries throughout the nation. This goal is also consistent with section 254(h)(2)(A) of the Act, which requires that support to schools and libraries be “economically reasonable.” As the Commission recognized in the *E-rate Modernization NPRM*, we have a “responsibility to be a prudent guardian of the public’s resources.”

2. Measures

39. We will focus our evaluation of progress towards this goal by measuring the prices paid for the E-rate services delivered to schools and libraries. We will separately measure and track the prices paid for the E-rate services delivered to schools and libraries for *connections to* and for *connections within* schools and libraries. Detailed pricing information is essential to our goal of maximizing cost-effectiveness as well as “affordability” under our first goal. We thus direct the Bureau and OMD working with USAC, as necessary, to develop the process by which we will measure, track, and report on the prices paid for E-rate services. In addition, we will continue to monitor the results of USAC’s audits and other reports to track progress in reducing improper payments and waste, fraud and abuse.

40. For connectivity to school and library locations, we will measure and report on prices paid as a function of bandwidth (e.g., dollars per Mbps) and also as a function of number of users (or unique devices). In addition, we will track pricing as a function of various potential cost drivers, which may include physical layer type (e.g., fiber, copper, coax, fixed wireless), service type (e.g., DSL, cable modem, metro Ethernet, Internet access), geography (e.g., rural, urban), carrier, carrier type, and purchasing mechanism (e.g., individual school, district, regional consortium).

41. An equally important component of cost-effectiveness is the matching of capacity purchased with need. We direct the Bureau, working with USAC, to develop and maintain best practices and benchmarks regarding network utilization, network architectures, network performance, and network optimization and management.

42. For connectivity within schools and libraries, we will measure and report pricing as a function of number of users or unique devices. We will track pricing of eligible expenses associated with LANs and WLANs (e.g., Wi-Fi), including pricing of eligible network components (e.g., switches, routers, wireless access points, cabling), managed services, and other eligible services associated with LANs and WLANs. In addition to tracking the pricing and capacity, we will seek to track utilization and performance of these internal connections to more fully measure the value delivered with E-rate support. We will also track replacement and upgrade cycles and LAN/WLAN architectures to accurately measure cost-effectiveness.

C. Making the E-Rate Application Process and Other E-Rate Processes Fast, Simple and Efficient

1. Goal

43. We adopt as our third goal making the E-rate application process and other E-rate processes fast, simple, and efficient. Each year, USAC reviews tens of thousands of funding requests from schools and libraries, and processes thousands of appeals, invoice requests, deadline extension requests, and additional inquiries from schools, libraries, and other parties requesting information. Simplifying and improving these procedures will help applicants receive their funding in a timely fashion, which will allow them to plan better and maximize the impact of their support. Simplification of the E-rate application process also eases the administrative burden on applicants—which is particularly important for smaller schools and libraries that lack extensive administrative support. Conversely, complexity and delay discourage participation and ultimately result in fewer schools and libraries fully investing in needed high-speed broadband connections.

44. Commenters overwhelmingly agree that making E-rate process fast, simple, and efficient is critical to the overall success of E-rate. Commenters specifically highlight, among other things, the importance of simplicity and transparency in the application submission and review process, and the need for timeliness in making funding commitments and paying invoices, reclaiming unused funds, and completion of the application and selective review processes. We recognize that there are a number of considerations that compete with our efforts to simplify the program for applicants, speed processing of applications and appeals, and minimize overhead costs. For example, we will need to appropriately balance our need for data to appropriately monitor program performance, with our efforts to minimize the application burden on applicants. Likewise, we must ensure that a simplified E-rate program does not open the door to waste, fraud, or abuse.

2. Measures

45. In 2007, the Commission adopted certain E-rate performance measurements related to the application and invoicing processes and the resolution of appeals submitted to USAC. Building on that work, in the *E-rate Modernization NPRM* the Commission sought comment on what additional measures we should adopt to

support the goal of making the E-rate application process and other E-rate processes fast, simple and efficient. While commenters are very supportive of streamlining and simplifying the administrative process, few offer actual performance measures to support this goal.

46. Based on our experience with the E-rate program, as an initial measure, we will evaluate progress towards our third goal by measuring the timely processing of funding commitments to eligible schools and libraries by USAC by tracking the processing time against an established target. Working with OMD, USAC has dramatically improved its rate of application processing for this funding year (funding year 2014). In both funding year 2013 and 2014, USAC received applications requesting between \$2.6 and \$2.7 billion in priority one E-rate support. By July 1, 2013, USAC had only committed approximately \$181 million in support. By contrast, as of July 1, 2014, USAC has already committed approximately \$1.22 billion in support. In 2013, USAC did not reach \$1 billion in commitments until October.

47. We applaud the progress USAC and OMD have made in improving the timeliness of processing of funding commitments to eligible schools and libraries. In light of this progress, and to ensure continued progress and further expedite the commitment process and increase the timeliness of funding commitment decisions, we direct USAC to aim to issue funding commitments or denials for all “workable” funding requests by September 1st of each funding year. A September 1st deadline provides USAC with approximately five months beyond the application filing window deadline to review all timely filed and complete funding requests and gives applicants certainty regarding a funding decision for those timely filed and complete requests by the beginning of the school year. “Workable” means that a funding request is filed timely and is complete, with all necessary information, to enable a reviewer to make the appropriate funding decision, and the applicant, provider, and any consultants are not subject to investigation, audit, or other similar reason for delay in a funding decision. Funding requests from applicants that decline to respond to USAC inquiries over the summer may be considered “unworkable” for purposes of this performance goal, though USAC will process these applications as quickly as possible when school staff return for the year. USAC shall continue to report at least monthly on its progress toward this goal, based on the dollars of

requests processed and the total count of schools and libraries represented in those requests, as well as any other specific metrics OMD identifies, and on any obstacles to achieving the application processing target.

48. In adopting this target, we recognize that even “workable” funding requests may be time consuming for USAC to process and may, after initial review, require further input from the applicant before USAC can issue a funding commitment. Our adoption of a specific application processing target should not affect in any way USAC’s contacts with applicants to seek additional information concerning a funding request and USAC’s thorough review of each application. USAC must continue to provide applicants with an opportunity to respond to their questions. While we seek to expedite USAC’s processing of applications, we remain committed to guarding against waste, fraud, and abuse in the E-rate program. We note that failure of an applicant to timely respond to requested information could constitute an obstacle to receiving a funding decision by the target date. Therefore, we strongly encourage applicants to timely respond to USAC requests for information.

49. We will also evaluate our progress towards the third goal by having USAC survey applicants and service providers about their experience with the program. A survey will provide useful and useable information to USAC and to the Commission about what is working and what needs to be improved.

50. These performance measurements, taken together, will help provide greater certainty to applicants and providers, and will assist applicants in more timely deployment of eligible services. Additionally, these measures will help to ensure that the E-rate program is operated as efficiently as possible by minimizing the need for the submission and review of other requests, such as service delivery deadline extensions, service substitutions, service provider identification number (SPIN) changes and FCC Form 500 filings to change contract expiration dates, which are often necessitated due to the delay in the issuance of timely funding commitment decisions letters.

III. Ensuring Affordable Access to High-Speed Broadband Sufficient To Support Digital Learning in Schools and Robust Connectivity for All Libraries

51. Having set our goals for the E-rate program, we now turn to the process of modernizing the program to meet each of those goals. In this section, we begin to update the E-rate program to ensure that schools and libraries have

affordable access to the high-speed broadband connections needed for digital learning. The record in this proceeding and our own analysis of the program lead us to a particular focus on the internal connections, including Wi-Fi, needed for robust broadband connectivity in all classrooms and libraries.

52. Wi-Fi is a transformative technology for education, allowing schools and libraries to transition from computer labs to one-to-one digital learning. Yet, in most funding years, the E-rate program has been able to provide priority two support for internal connections, including Wi-Fi, only to schools and libraries entitled to the highest discount levels. In funding year 2012, for instance, the program committed approximately \$800 million for internal connections and was only able to fund applicants at the 90 percent discount level. As a result, nearly 60 percent of that funding went to urban applicants—almost double the share of students in urban schools nationwide. In 2013, for the first time ever, no E-rate support was available for internal connections.

53. By contrast, the E-rate program has always been able to meet demand for services that provide connectivity to schools and libraries. However, only about half of the \$2.4 billion E-rate budget is used to support priority one funding requests focused on broadband connectivity to schools and libraries.

54. In short, the E-rate program has become increasingly ill-equipped to meet the demands of the modern classroom and library. Therefore, we now act to modernize E-rate to ensure more equitable, reliable support for Wi-Fi networks, and other internal connections supporting broadband services, within schools and libraries. While we focus in this Report and Order on providing funding for internal connections, we remain committed to ensuring schools and libraries have high-speed connections to their buildings. In order to help ensure E-rate funding is available to support high-speed broadband to and within schools and libraries, we also eliminate support for certain legacy, non-broadband services to help free up funding for these internal broadband connections. We begin, however, with a short review of our legal authority to set the list of E-rate supported services and define the mechanisms of E-rate support.

A. Legal Authority

55. Sections 254(c)(1), (c)(3), (h)(1)(B), and (h)(2) of the Communications Act collectively grant the Commission broad and flexible authority to set the list of

services that will be supported for eligible schools and libraries, as well as to design the specific mechanisms of support. This authority reflects Congress's recognition that technology needs are constantly "evolving" in light of "advances in telecommunications and information technologies and services."

56. In creating the E-rate program in 1997, in the *Universal Service First Report and Order*, 62 FR 32862, June 17, 1997, the Commission designated all commercially available telecommunications services as services eligible for support (or discounts) under the E-rate program. At the same time, the Commission determined that it could provide E-rate support for additional, non-telecommunications services, particularly Internet access, email, and internal connections, provided by both telecommunications carriers and non-telecommunications carriers. The Commission reasoned that such services enhance access to advanced telecommunications and information services for public and non-profit elementary and secondary school classrooms and libraries.

57. We update this eligible services framework for today's needs. Revisiting our approach to this issue is consistent with 254(c)(1)'s definition of universal service as an "evolving level" of service, which the Commission must revisit "periodically," "taking into account advances in telecommunications and information technologies and services." We are also guided by section 254(h)(2)(A)'s directive that we "enhance, to the extent technically feasible and economically reasonable, access to *advanced* telecommunications and information services" for schools and libraries.

58. Taken together, and considered in light of the Commission's "responsibility to be a prudent guardian of the public's resources," these provisions lead us to take a more focused approach to the definition of E-rate eligible services today than was adopted in 1997. In particular, based on the record of this E-rate modernization proceeding, and as described in more detail, we find that E-rate support should be transitioned to focus specifically on those telecommunications and information services, including associated inside wiring, necessary to support broadband to and within schools and libraries. The Commission has long supported these types of services, and we think it clear that the statute authorizes their support. Section 254(c)(1) and (c)(3) each provide ample authority for the support of broadband telecommunications

services, and sections 254(c)(3), (h)(1)(B), and (h)(2) provide authority to support advanced telecommunications and information services, including associated inside wiring.

59. At the same time, in order to focus E-rate funding on these services, we must redirect funding away from services that are less essential to education, less directly tied to educational purposes, and/or more likely to be affordable without E-rate support than when the program began, including fixed and mobile voice service. The statute also amply supports this decision. Even if the E-rate fund was not capped at its current level, we have a responsibility to be prudent stewards of universal service funds, knowing that that those funds are ultimately paid for by consumers. Because the amount of available E-rate funding is finite, we must make thoughtful decisions about what services are not just permissible to support, but are the most essential to support for schools and libraries. We have relied on the record to inform these choices.

60. As we focus E-rate support on high-speed broadband, we recognize that we will ultimately reach a point where E-rate no longer supports voice service, which we have defined as the 254(c)(1) supported service for purposes of the High Cost (Connect America Fund) and Lifeline programs. But nothing in section 254(c)(1) or elsewhere bars the Commission from establishing different supported services for different elements of the overall Universal Service Fund.

61. Indeed, in establishing the definition of the telecommunications services that are supported by the Federal universal service support mechanisms, the Commission is charged with considering the extent to which the telecommunications services meet the criteria section 254(c)(1)(A) through (D). This list of criteria implies that the definition of supported services can vary depending on the particular universal service program at issue. For example, section 254(c)(1)(A) requires the Commission, in designating supported services to consider the extent to which services "are essential to education, public health, or public safety." Congress recognized that telecommunications services deemed essential for education (and by extension the E-rate program) may well not be the same as telecommunications services essential for health (or the Rural Health Care program). Likewise, what is consistent with the public interest, convenience and necessity in section 254(c)(1)(D) could vary

depending on the specific universal service program at issue.

62. Moreover, reading section 254(c)(1) to bar the Commission from establishing different eligible services for different universal service programs would place section 254(c)(1) in tension with section 254(b), which requires the Commission to ensure that rates charged to consumers nationwide are "just, reasonable, and affordable," and therefore to keep universal service contributions, typically passed through in customers' rates, as low as possible. We think the better reading of 254(c)(1) provides the Commission authority to support services in more granular ways, such as only in the specific USF programs where the Commission concludes that such a definition of supported services is warranted after considering the (c)(1) factors, and thereby minimize the overall USF burden on consumers who pay into the Fund.

63. Finally, in the sections that follow we change to some extent the mechanisms by which E-rate support is allocated and the discount levels provided under the program. Sections 254(c) and 254(h) give the Commission broad authority to design these mechanisms and set discount rates at the level "appropriate and necessary to ensure affordable access to and use of" E-rate supported services. This authority amply supports the changes we make here.

B. Providing More Equitable Funding for Broadband Within Schools and Libraries

64. In this section, we focus on providing schools and libraries more equitable access to funding for Wi-Fi networks and other internal connections that allow high-speed connectivity within schools and libraries. We begin by designating internal connections that support broadband connectivity as "category two" services, rather than "priority two" services in recognition of the importance of Wi-Fi networks in connecting students and library patrons. In the short term, in order to provide schools and libraries more access to category two funds over the next two funding years, we accept the recommendation of commenters who suggest that we focus the additional E-rate funds identified by the Bureau earlier this year on internal connections. Consistent with this focus, and with the record in this proceeding on the funding needs for Wi-Fi and other internal connections, we also set an annual budget target of \$1 billion for category two services. Next, we increase the minimum contribution rate for these

category two services from 10 to 15 percent to encourage applicants to pursue the most cost-effective options. For applicants that apply for category two support during the next two funding years, we also test reasonable maximum per-student and per-library pre-discount budgets for category two services in order to ensure greater access to category two funding sufficient to deploy robust LANs and WLANs. Finally, we update our rules regarding eligible services to align with this new focus on providing E-rate support to services necessary for broadband connectivity and direct the Bureau to update the ESL accordingly.

1. Providing Support for Internal Connections

65. As an initial matter, we change the E-rate program's existing priority funding nomenclature. We agree with commenters that schools and libraries should take a "whole network" approach to planning their purchase of E-rate eligible services that bring connectivity both to the building and to devices. In place of the priority nomenclature, we designate the services needed to support broadband connectivity to schools and libraries as "category one" services, and those needed for broadband connectivity within schools and libraries as "category two" services because we recognize that deploying internal connections is an important element in connecting schools and libraries to high-speed broadband.

66. For category one services, we are confident that the changes we make to the E-rate program in this Report and Order will ensure that we can continue funding all eligible category one requests, as we continue to evaluate the long-term, overall program needs. For category two services, the additional funding announced by the Bureau earlier this year will allow the Commission to make \$1 billion available over each of the next two years. Building on the use of the identified program funds for the next two years, and to give applicants longer-term visibility into our approach, we also set a funding target of \$1 billion annually for category two services on an ongoing basis. In contrast to the current system, providing a target of \$1 billion a year annually for category two services will ensure greater access to E-rate support for the Wi-Fi networks needed to connect 10 million students a year to 21st Century educational tools. We recognize the concern of some commenters, however, that, in the absence of a full review of long-term program needs, a hard funding

allocation for category two services could put at risk our ability to provide sufficient support for category one requests. For that reason, the budget we adopt will remain a target, rather than a fixed allocation, as we continue to evaluate the long-term program needs, and we direct USAC to shift funds targeted for category two services to meet all eligible requests for category one services, in any funding year in which demand for category one services exceeds available funds. Given the availability of funding for the next two years, the need for continued analysis of longer-term trends in category one demand, as well as savings from the reforms we adopt today and future additional reforms, we do not increase the overall cap at this time, but seek additional comment on that issue in the accompanying FNPRM.

67. If demand for internal connections exceeds the available funding for category two services, we will prioritize access to internal connections funding based on concentrations of poverty. Those schools and libraries entitled to a higher discount will receive internal connections funding ahead of those entitled to a lower discount rate. If there is insufficient funding available to meet the need at a particular discount rate for category two, we will prioritize funding within a discount rate based on the percentage of students that are eligible for free and reduced school lunches within each applicant's school district. Funding for libraries will be prioritized based on the percentage of free and reduced lunch eligible students in the school district that is used to calculate the library's discount rate. Funding for individual schools that are not affiliated financially or operationally with a school district, such as private or charter schools that apply individually, will be prioritized based on each school's individual free-and-reduced student lunch eligible population.

68. This prioritization method maintains the core of the existing system that E-rate applicants are familiar with, and gives applicants serving the highest poverty populations first access to funds, while allowing us to fund within a discount-band even where funding is not sufficient to reach all schools in that band. As explained, however, and unlike the existing system, we adopt additional measures in an effort to provide the opportunity for a broader range of applicants to obtain funding for category two services.

69. In the event that requests for category one services are less than the available funding and demand for category two services is higher than the \$1 billion target for category two

services at the close of the funding year window, the Bureau, working with OMD and USAC, may redirect the excess funding to category two services in the same funding year. If USAC does not commit the entire category two budget for a funding year, or committed funds are not used or returned, such funds may be carried forward to be used in subsequent funding years. Each year such funds are available, we direct the Bureau, working with OMD and USAC, to determine the proportion of carry-forward funds to be used for category one and category two services.

2. Increasing the Minimum Applicant Contribution Rate for Category Two Services

70. In order to ensure more equitable access to limited internal connections funds, we will increase the minimum contribution applicants must make towards E-rate supported category two purchases from 10 to 15 percent. We agree with commenters that requiring applicants to pay a larger share of the cost of E-rate supported category two purchases will spread available universal service funds more widely and increase the incentive for applicants to find the most cost-effective options that meet their internal connection needs.

71. In deciding to reduce the top discount rate for internal connections from 90 percent to 85 percent, as with other changes we are making to the E-rate program, we remain mindful of the challenges faced by our most vulnerable schools and libraries in areas with the highest levels of poverty. Taken together, the changes we make in this Report and Order should benefit all schools and libraries, including those receiving the highest discount rate. At the same time, we have taken a measured approach in making changes that could negatively impact applicants entitled to the highest discount rates. For example, we reduce the top discount rate only for category two services, and only by five percent. Likewise, we phase down support for voice services over several years, to give applicants time to adjust to the loss of support for such services. We also seek to counterbalance potential reductions in funding by adopting proposals aimed at driving down the prices all applicants will pay for E-rate supports services, including increased pricing transparency and encouraging consortia purchasing and bulk buying.

72. We expect that requiring higher matches will lead applicants that have been eligible for 90 percent discounts for priority two services to pursue lower prices for eligible category two services

more aggressively. Commenters note that applicants in the highest discount level spend more in pre-discount dollars than those that have a larger required match. Consistent with this analysis, E-rate Central, a member of USAC's 2003 Task Force on Waste, Fraud, and Abuse, observes "many examples of excessive spending by applicants at the highest discount levels, often driven by overly aggressive sales efforts by vendors targeting the poorest schools and libraries." Thus, as the Iowa Department of Education argues, requiring applicants to "[h]av[e] more 'skin in the game' . . . will guard against waste, fraud, and abuse." We therefore set the highest discount level for category two services at 85 percent. Applicants that would have been eligible for discounts of 86 to 90 percent will now be eligible for an 85 percent discount, and those eligible for a discount of 85 percent or less will see no change. This decision is consistent with a similar change to the Rural Health Care program that requires recipients of the new Healthcare Connect fund to contribute 35 percent of the costs of the support services, which the Commission found "appropriately balances the objectives of enhancing access to advanced telecommunications and information services with ensuring fiscal responsibility and maximizing the efficiency of the program."

73. Although some commenters recommend even higher minimum applicant contribution rates—20, 25 or even 30 percent (80, 75 or 70 percent maximum discount rates, respectively)—we recognize the concerns voiced by some stakeholders that we not raise the net cost to the most disadvantaged schools and libraries above levels that they can afford. Therefore, in order to minimize the impact of this change on these schools and libraries, we reduce the maximum discount rate only by five percent and only for category two services as a first step. We note that the per-student and per square foot applicant budgets for funding year 2015 and 2016 described below mitigate some of the concerns about overspending at this time. Other commenters agree that the discount level should be changed, but ask for it to be a temporary change. We see no reason, however, why the greater incentives for cost-effective purchasing introduced by a slightly higher applicant match would be appropriate in the near term but less so in the future; to the contrary, we believe such incentives will remain important over time, whereas changing the discount rate from year-to-year could distort

efficient decision making. Finally, because we are only reducing the maximum discount rate by five percentage points, and only for category two services, we make this change fully effective for funding year 2015 rather than phasing it in over multiple years.

3. Setting Applicant Budgets

74. In order to provide broader and more equitable support for category two services, we adopt budgets for applicants who apply for category two discounts during the next two funding years, as we continue to evaluate long term program needs. Under this approach, schools in districts that seek category two funding during funding years 2015 or 2016 will be eligible to request E-rate discounts on purchases of up to \$150 (pre-discount) per student for category two services over a five-year period. Likewise, library systems and libraries that seek category two funding in funding years 2015 or 2016 may request E-rate discounts on purchases of up to \$2.30 (pre-discount) per square foot over a five-year period. If an applicant receives funding for category two services in funding year 2015 or 2016, the five-year budget will apply in the subsequent five funding years, in lieu of the existing "two-in-five" rule.

75. We agree with commenters that E-rate must maintain its historic focus on poverty in distributing support. Therefore, as described, we will continue to use the discount matrix to calculate applicants' E-rate support on their eligible costs, and applicants that have a higher percentage of students eligible for NSLP will continue to receive a larger proportion of support. For example, over a five-year period, schools or districts at the 80 percent level will be able to request up to \$120 in E-rate support per student (an 80 percent discount on \$150 in services) and be required to pay 20 percent of the cost of eligible category two services that they purchase. Districts at the 20 percent level will be able to seek up to \$30 per student over a five-year period, and be required to pay 80 percent of the costs of the eligible category two services that they purchase. Similarly, a library with 10,000 square feet would be eligible for discounts on purchases of up to \$23,000, so a library at the 80 percent discount level could request up to \$18,400 in E-rate funding, while a library at the 20 percent discount level could request up to \$4,600 over a five-year period.

76. We recognize that this approach represents an important change to our handling of applicant requests, and we are committed to ensuring that the new five-year budgets not in any way

compromise the program's fundamental commitments to providing sufficient support and to permitting local flexibility to address localized conditions, even as they expand access to program funds. Therefore we will consider funding years 2015 and 2016 to be a two-year test period, subject to further review by the Commission.

a. Methodology

77. It would be impossible to identify, building-by-building, the precise amount of funding each eligible school and library will require in a given year to deploy or upgrade LANs and WLANs necessary to support broadband services within their buildings. As commenters note, building size, construction characteristics, where applicants are in their upgrade cycle, and other factors make each deployment unique. We can, however, establish a multi-year budget for category two services that will serve our goal of ensuring affordable access to high-speed broadband for schools and libraries by ensuring that (a) eligible schools and libraries have greater access to E-rate funding for internal connections necessary to distribute high-speed broadband within their buildings and (b) that category two budgets will be sufficient to ensure that eligible schools and libraries will be able to afford the deployment or upgrade of those internal connections. In setting such a budget, and the related budget-cycle, to fund internal connections, we find support from a broad array of cost data in our record.

78. *Budget Cycle.* As an initial matter, for applicants that receive support in funding years 2015 or 2016, we establish a five-year budget cycle for category two services. The record demonstrates that most category two equipment has a typical lifecycle of approximately five years. After that point, schools and libraries likely will need additional support to upgrade their networks. This five-year budget cycle will give applicants the flexibility to determine when to make upgrades or changes.

79. *School Budget.* We set a pre-discount budget of \$150 per student over five years for schools. The record demonstrates that \$2,500 per classroom, which is equal to just under \$150 per student based on a ratio of 17 students per classroom, should be a sufficient budget to deploy LANs/WLANs to elementary and secondary school classrooms and common areas across the nation. States and districts submitted into our record specific cost data for recent upgrades to state-of-the-art deployments that were largely under this per-classroom amount. Likewise,

participants at the E-rate Modernization Workshop described spending differing amounts per classroom below this \$2,500 range, from \$1,300 to an average of \$1,900 per classroom. North Carolina, which is in the middle of a statewide upgrade to Wi-Fi in its schools and libraries, originally estimated the upgrade cost at \$2,200 per classroom, and has found actual deployment costs below this initial estimate, ranging from approximately \$2,100 per classroom for a comprehensive high school upgrade to \$900 per classroom for a more limited high school upgrade. In some parts of Mississippi, the \$500 cost per classroom is well below this budget.

80. Based on NCES data for average class sizes and other sources, commenters estimate that there are 18 to 20 students per classroom in the United States, an estimate supported by consultations with district technology officials and equipment vendors. Data in the record from a sample of states and districts suggests that the true number is slightly lower, however. In particular, statewide data from three states representing almost five million students (approximately 10 percent of all students in the country) give an average of 17.8 students per classroom, likely because not all classrooms are in use at all times of the day. Several individual districts also submitted classroom counts, both rural and urban, with an average of 19.6 students per classroom. Combined, the state and district data provide information on schools serving over 5.6 million students, with an average of 18 students per classroom. We believe it makes sense to use a relatively conservative estimate to ensure support levels are sufficient for schools with smaller class sizes, such as smaller rural schools. Accordingly, in translating the various per-classroom cost estimates in our record into per-student costs (and vice-versa), we use an estimate of 17 students per classroom. Dividing \$2,500 by 17 gives a per-student budget of \$147, which we round up to \$150 for simplicity of administration.

81. A pre-discount budget of \$150 per student over five funding years, or \$30 per student annually, is also consistent with the market rate for elementary and secondary school managed Wi-Fi solutions, described. Because these costs include installation and maintenance, we find them to be a strong, market-driven representation of all-inclusive, per-student LAN/WLAN deployment costs. For example, Education Networks of America (ENA) currently provides managed Wi-Fi to 82 percent of public and charter high schools in Idaho for \$21 per student and

teacher per year, including installation, management, maintenance, and content filtering. C-Spire Fiber has several deployments in Mississippi that average an annual cost of \$19 to \$29 per student for the managed Wi-Fi product it is piloting. In Ohio, several Information Technology Centers offer a managed Wi-Fi service to member school districts for \$9–15 per student per year plus vendor installation charges.

82. Commenters also submitted three different Wi-Fi cost models into our record: The EdSuperHighway/CoSN ConnectED Cost Model, the EdSuperHighway/CoSN Ongoing Cost Model, and the Cisco Model. The first of these, the EdSuperHighway/CoSN ConnectED Cost Model, produces the lowest estimate of required costs, producing a nationwide, average cost of approximately \$21 per student per year, well below the budget we set here. This model assumes substantial existing infrastructure however, the extent of which will vary greatly between districts, so it is poorly suited to setting reasonable, nationwide budgets that will be sustainable on an ongoing basis. We thus do not rely on this model.

83. The remaining models confirm our conclusion based on the record evidence discussed that a pre-discount \$150 per student five-year budget we adopt here is reasonable. In contrast to the EdSuperHighway/CoSN ConnectED Cost Model, the EdSuperHighway/CoSN Ongoing Cost Model and the Cisco Model each attempt to estimate the full, ongoing costs of internal connections deployments, averaged over the lifecycle of the equipment used. Both models consist of two basic components: An overall framework for estimating costs and a set of inputs for various costs and equipment lifecycles. Although they differ somewhat, the frameworks of both models appear to provide generally reasonable approaches to estimating Wi-Fi deployment costs. The deployment and maintenance cost estimates generated by the EdSuperHighway/CoSN Ongoing Cost Model and the Cisco Model differ, with EdSuperHighway/CoSN estimating an annual average cost of \$869 per classroom, or \$44 per student, and Cisco estimating an annual average of \$1,081 per classroom, or \$59 per student. The staff's sensitivity analysis of the key cost drivers, however, shows that the range of reasonable cost estimates that can be produced by the basic model frameworks is quite a bit wider than shown by these two data points. Specifically, with plausible changes to a small number of inputs, the models could support annual cost estimates ranging from approximately \$22 all the

way to \$75 per student. The \$150 per student five-year budget we adopt here falls comfortably within this range, albeit toward the lower end. The EdSuperHighway/CoSN Ongoing Cost Model and the Cisco Model thus help confirm the conclusions we draw from the diverse data on real world deployment costs and the market-driven costs of managed Wi-Fi services, and, based on these data sets, we are comfortable choosing an estimate toward the lower end of the range produced by the models.

84. In sum, the record suggests \$150 per student is a reasonable budget, with many schools able to complete Wi-Fi deployments or upgrades for less than that amount. Some schools may still choose to spend more than \$150 per student on their wireless deployments based on individual design decisions, and nothing in the approach we adopt prevents these decisions. Because the evidence shows that \$150 per student has proven sufficient in numerous deployments over several geographic areas, however, we limit E-rate discounts to this budget.

85. In finding that \$150 per student over five years should provide sufficient support for category two services, we acknowledge that some cost variation exists across or even within LAN or Wi-Fi networks. For example, different building construction materials and variations in labor costs can affect upgrade costs. However, in contrast to some other costs, such as the costs of digging trenches for fiber deployment, the majority of the costs of LAN and Wi-Fi networks are commodity equipment costs, and therefore cost variation for efficient upgrades is far less than that for connectivity to schools and libraries. For the same reason, schools' costs for LAN or Wi-Fi networks generally should scale linearly by the number of classrooms (and therefore the number of students). We therefore conclude that a per-student system of setting budgets for category two funding (combined with a poverty-based discount rate and subject to the funding floor, as discussed below) reasonably suits the manner in which category two costs are incurred.

86. *Library Budget.* We set a pre-discount budget of \$2.30 per square foot over five years for libraries. Square footage provides a simple to calculate, predictable, and reasonably accurate method of setting budgets. Some commenters suggest that we should use patron counts, average daily users, peak hour users, or other metrics to help set reasonable internal connections budgets for libraries. We decline to adopt any of these other suggested metrics at this time because (a) we have identified no

available sources of data on these metrics for all libraries, and (b) patron count, average daily users, and peak hour users may vary dramatically and could be difficult to measure. As a result, using these metrics at this time could reduce predictability, complicate the application process, and slow down application reviews.

87. We choose \$2.30 per square foot over five years as the budget amount based on three data sets in our record. First, Vermont libraries submitted state data showing the average equipment cost for deploying wireless networks in 35 libraries in the state to be approximately \$0.81 per square foot. Second, the Urban Libraries Counsel (ULC) urged the adoption of a budget of \$4 per square foot for libraries, which was supported by a number of libraries. Finally, the ALA filed an analysis reporting per square foot costs for a variety of libraries in the range of \$1.79 to \$2.29, which focused more specifically on E-rate eligible costs.

88. Considering the range of all the cost data in the record and recognizing that the \$2.30 budget is a cap, not a grant, we find that ALA's recommendation of \$2.30 per square foot, taken with the \$9,200 funding floor over five years as set below, is a reasonable budget level. The ALA recommendation is based on a more thorough analysis and specifically limited to E-rate eligible costs. While we note that a number of libraries supported the ULC proposal, in general, these commenters did not provide sufficiently detailed data for the Commission to ensure that the estimates included only E-rate eligible services. Further, four ULC member libraries that did provide more specific cost data in response to requests from Commission staff indicate a range of \$0.82 to \$3.08 per square foot. Even so, we consider ULC's data in evaluating all the cost data in the record and selecting the \$2.30 per square foot funding budget.

89. Finally, we note that nationwide, schools have a median of approximately 150–175 square feet per student. The \$150 per-student budget we adopt therefore equals about \$0.86 to \$1.00 per square foot for schools. The budget we select for libraries today is substantially above this amount. Therefore, we believe that \$2.30 represents a generous figure that will not unnecessarily restrict library funding. Since our record suggests that usage density is unlikely to be substantially higher in libraries than it is in schools, the school costs in our record provide additional support for our finding that ALA's proposed \$2.30 per square foot funding budget will

provide sufficient support for library deployments.

90. Notwithstanding this analysis, we recognize that the library data are less robust than that for schools. Accordingly, in the accompanying FNPRM we seek additional comment on these issues.

91. *Funding Floor.* To ensure the category two budgets we set are sufficient to meet the minimum demand that certain schools and libraries might have regardless of size, we also establish a pre-discount funding floor of \$9,200 in category two support available for each school or library. While WLAN costs tend to scale by classroom size, schools and libraries will need the baseline funding to purchase a router and/or switch, at least one small wireless access point, and cabling necessary to deploy WLANs in even the smallest buildings. Our record is not, however, as well developed on this point as we would like, and so we take the conservative approach of adopting ALA's recommended floor of \$9,200, based on ALA's consultation with its library members. Our record indicates that \$9,200 should be sufficient to cover the costs to purchase necessary equipment, cabling, and installation for these libraries. We set the floor for schools at the same level to ensure equity and because the costs of deployment in small schools and libraries should be similar. Increasing the floor by this amount has a minimal budget impact. Therefore, all schools and libraries, including smaller schools and libraries, will be eligible to request pre-discounted support for up to at least \$9,200 for category two services over any given five-year period.

92. *Per-Entity Basis.* Applicants will be required to seek support for category two services on a school-by-school and library-by-library basis, although school districts will use a single district-wide discount rate for all of their schools, as will library systems for all of their libraries. Under this approach, school districts, whether public or made up of more than one independent school under central control, will have the flexibility to request support for any school or group of its schools each funding year, using the number of students in any school getting LAN/WLAN upgrades to determine the maximum eligible pre-discount amount in a given funding year for that school. This flexibility will allow districts to decide how to sequence deployment of LANs/WLANs based on their individual needs. For example, a large district may choose to upgrade one fifth of its schools in each of the five funding years, while a small district may request

support to upgrade all of its schools in one funding year. To the extent that a district seeks or receives funding commitments for less than the category two budget for E-rate support available to a school, it may request additional category two E-rate support up to that budget in the following four funding years. The costs for services shared by multiple entities shall be divided between the entities for which support is sought in that funding year. Likewise, library systems that include multiple libraries will have the flexibility to request support for all or a portion of their library branches each year, using the floor area of the libraries being updated to determine the maximum budget available each year.

93. Similarly, eligible schools that operate independently of a public school district, such as a private or charter school, are eligible for E-rate discounts on the purchase of eligible internal connections services up to \$150 per student (or a minimum of \$9,200). If an independently operated school seeks or receives less than the maximum amount of internal connections E-rate support available to that school in year one, it may request additional internal connections E-rate support up to that maximum in the following four funding years. Likewise, libraries that are not part of a library system may request E-rate support for a pre-discount purchase of up to the greater of \$9,200 or \$2.30 per square foot, and any amount less than that will be available in the following four funding years. For example, a 10,000 square foot library may request support for a purchase of up to \$23,000 over five years. If it seeks E-rate support for a purchase of \$13,000 in the first funding year, it may request discounted support for another \$10,000 in eligible services over the next four years.

94. *Application of Budgets to Funding Years 2015 and 2016 and Five-Year Funding Cycle.* The question of applicant budgets is closely linked to the question of the long-term funding levels for category two services. As described, at this time we set funding for category two as a budget target rather than a firm allocation. In light of the funding identified by the Bureau earlier this year, we are confident we can meet this target for the next two funding years, and therefore we apply the budget approach adopted here to those two funding years. We will evaluate the longer-term application of this approach in conjunction with our evaluation of the overall, longer-term program needs.

95. While the budget approach will only apply to applicants that receive funding in funding years 2015 and 2016,

we clarify that the budget themselves are five-year budgets. In other words, for schools in districts seeking funding in years 2015 and 2016, we adopt a rolling funding cycle of five years for category two services and remove the two-in-five rule that applied to priority two internal connections. As explained, Wi-Fi equipment has a lifecycle of approximately five years. Therefore, excluding any priority two support received before funding year 2015, schools in districts that seek category two support in funding years 2015 or 2016 will calculate their available support budget as \$150 per student, multiplied by their discount, less any E-rate support received in the prior four years. In the first funding year that an applicant requests category two support, the full amount of the pre-discount \$150 per student budget will be available to request. In later years, applicants will calculate the available budget based of \$150 per student less any support received in the prior four funding years. Applicants that receive support in funding year 2015 will have \$150 per student available divided over funding years 2016, 2017, 2018, and 2019. Applicants that receive support in funding year 2016, but not in funding year 2015, will have a budget of \$150 per student divided over funding years 2017, 2018, 2019, and 2020. Likewise, libraries in library systems that receive support in funding years 2015 or 2016 will calculate support over the five-year funding cycle using the number of square feet less any support received in the prior four funding years. This approach will allow schools and libraries to plan for how best to upgrade their facilities, and plan for future upgrades based on their own prior spending. In contrast, adopting a shorter budget, such as a two-year budget, would create a mismatch between the budget cycle and real equipment lifecycles, and would likely encourage applicants to inefficiently front-load expenses in the next two years.

b. Reasons for a Multi-Year Budget Approach

96. Our decision to limit applicants' total category two requests based on a five-year budget reflects broad consensus in the record that some reasonable limits on requests are necessary to spread support more broadly than under the current system. In the *E-rate Modernization Public Notice*, the Bureau outlined three options for such limits, and invited comments on alternatives. The five-year budget that we adopt here is a middle course between two of these options—an annual per-student allocation and a

one-in-five rotating funding schedule. After carefully evaluating the arguments for these and other options, we conclude that the approach we adopt today will bring several important benefits to applicants and the program.

97. First, the approach we take to distribute category two funding provides greater predictability. Since funding year 1999, applicants have had no certainty from year-to-year that category two services would be supported. As such, administrators, budget managers, and technology planners have been discouraged from planning for E-rate support for Wi-Fi in their schools and libraries because annual funding was far from assured. Some commenters express concern regarding the predictability of other approaches, such as a rotating approach or a one-in-five approach. On the other hand, some commenters support an allocation approach in order to provide needed certainty. Unlike in previous years, when there was no funding for internal connections, or funding went to connect a small percentage of the nation's students and library patrons, the approach we adopt today provides greater predictability and will be able to provide support for 10 million students and thousands of libraries each year.

98. Second, the approach we adopt today maintains the E-rate program's priority for the highest poverty schools and libraries. We continue to use poverty measures when distributing support under this approach. Applicants with the highest percentage of students eligible for free and reduced lunch will receive a greater proportion of E-rate support and be eligible earlier in the five-year cycle if demand exceeds the annual budget for category two services.

99. At the same time, this approach guarantees a broader distribution of funding for internal connections—adjusted as appropriate to reflect greatest levels of poverty—by setting reasonable limits on category two requests in order to deploy Wi-Fi networks to a far greater number of eligible applicants. Many applicants debate the costs and benefits of different distribution approaches, but focus on a core principle that distribution must be made more equitable. As we noted earlier, the existing priority two methodology has resulted in E-rate funding for priority two services being distributed only to schools and libraries with the highest discount levels. Additionally, a disproportionate amount of available funding has gone to urban schools. Commenters point out that some proposals, like a one-in-five limitation, would not help to achieve a

more equitable distribution of support. Similarly, an increase in the cap without these additional measures to encourage efficient purchasing would not achieve more equitable distribution. This five-year budget approach should provide sufficient support per student or per square foot for far more schools and libraries to access needed funding, but places a limit on less cost-efficient spending requests.

100. Importantly, this approach to funding category two connectivity also provides flexibility to districts, schools, and libraries to deploy and maintain Wi-Fi as best suits their own circumstances. Many commenters argue that flexibility is essential for setting reasonable budgets each year, and this five-year budget approach allows applicants to decide the rate at which school networks are updated. This approach allows applicants to plan how to deploy their networks over five years, whether by requesting support for all or just a portion of entities each year, or by purchasing a managed Wi-Fi service through which a third party provider installs and manages the necessary LAN and WLAN.

101. Finally, the approach we take today promotes cost-effective purchasing by applicants while providing support that the record demonstrates should be sufficient to support these badly needed deployments. In the past, applicants at the top discount levels had an incentive to overbuy or use less cost-effective network design. A limit on category two support will encourage more cost-efficient purchasing.

102. In contrast to the approach we adopt here, we find the alternative approaches that commenters suggest as well as those outlined by the Bureau in the *E-rate Modernization Public Notice*—such as maintaining the existing system but temporarily eliminating support for applicants that have recently received support, a rotating schedule of funding for different discount bands, or single-year budgets, implemented with or without the existing discount matrix—would each be less effective at solving the structural problems with how the E-rate program has historically funded internal connections. For instance, as pointed out by commenters, both the rotating eligibility approach and the one-in-five approach outlined by the Bureau in the *E-rate Modernization Public Notice* lack certainty for schools and libraries absent incentives for more cost-efficient purchasing in the highest discount bands, and would likely fail to distribute support more broadly than is the case today. In contrast, providing

applicants with a constant, single-year budget would fail to account for the reality that individual applicants will have different needs in different years, depending on where they are in their upgrade cycle.

c. Other Applicant Budget Issues

103. *Student Count.* We move to a district-wide calculation of applicants' discount rates. In order to determine the budget available each funding year, districts should calculate the number of students per school at the time that they calculate their district-wide discount rate annually. We recognize that there will be some instances, such as the construction of a new school, that will make calculating the number of students more difficult for districts. We will permit schools and school districts to provide a reasonable estimate of the number of students who will be attending a school under construction during a particular funding year and seek support for the estimated number of students. However, if an applicant overestimates the number of students who enroll in that school, it must return to USAC by the end of the next funding year any funding in excess of that to which it was entitled based on the actual number of enrolled students. This means a school at the 80 percent discount level, which estimates that it will have 1,000 students, may request E-rate support of up to \$120,000. If, however, enrollment after the school opens is only 750 students, the school will have to return any committed support exceeding \$90,000. We note, however, that there may be funding years in which an entity loses students and therefore spent more than its available budget in the prior four funding years. In these instances, we will not require repayment of any E-rate support, but there will be no available funding for that funding year. Students who attend multiple schools, such as those that attend educational service agencies (ESAs) part-time, may be counted by both schools in order to ensure appropriate LAN/WLAN deployment for both buildings.

104. *Cost-Effective Purchasing.* Our goal in setting a per-student limit is to ensure schools and libraries can purchase the internal connections they need while discouraging them from purchasing unnecessary equipment or using an inefficient network design. At the same time, we emphasize that the pre-discount \$150 budget per student is not a block grant. Applicants may only request funding for discounts on eligible category two services, and schools must continue to pay the non-discounted portion of the supported services. These

requirements remain in place. We will not, however, second guess schools' and libraries' decisions to purchase additional equipment or services with other sources of funding if they determine that it is the most cost-effective service offering for what they have decided they need.

105. *Rural Remote Applicants.* We decline to adopt the request made by some commenters that we provide additional category two funding or a rebuttable presumption allowing USAC or the Bureau to waive the budget for applicants in rural remote areas at this time. As described, we find that LAN/WLAN costs are largely based on the costs of equipment, and therefore tend to have consistent prices nationwide. To the extent there are price variations, it is often the case that internal connections upgrades are less expensive in rural areas because labor costs are lower, permitting is easier, and buildings are newer and/or easier to renovate. Therefore, we conclude that the benefits of additional funding for rural remote areas are outweighed by the added administrative burden and the additional costs to the Fund of providing such additional support.

4. Setting an Annual Funding Target for Internal Connections

106. Based on the five-year school and library budgets we find sufficient above, total category two pre-discount requests over the next five-years will amount to no more than \$8.8 billion to deploy LANs and WLANs in schools and libraries throughout the country. After accounting for the non-discounted share paid by applicants, with a 15 percent minimum applicant contribution, we estimate that E-rate discounts will support approximately 67 percent of the total pre-discount cost of \$8.8 billion for eligible category two services. In addition, we estimate that there will be schools and libraries that do not seek funding or request less than the full budgeted amount to upgrade and maintain their LANs/WLANs over time. We therefore reduce the five-year budget by approximately 15 percent to avoid over-budgeting and set the five-year budget at \$5 billion, plus annual inflation adjustments. We adopt an annual target of \$1 billion, plus any annual inflationary changes, for category two services, which is equal to one-fifth of the five-year estimate of E-rate support. In addition to this annual budget, the Bureau may allocate any available carry forward funding to meet category two demand.

5. Focusing Support on Broadband

a. Core Components of Broadband Internal Connections

107. In order to help deploy LANs/WLANs necessary to permit digital learning in schools and libraries throughout the nation, we focus the category two ESL on broadband. With one narrow exception, we limit internal connections support to those broadband distribution services and equipment needed to deliver broadband to students and library patrons: Routers, switches, wireless access points, internal cabling, racks, wireless controller systems, firewall services, uninterruptible power supply, and the software supporting each of these components used to distribute high-speed broadband throughout school buildings and libraries. Some form of each of these services has previously been designated as eligible for E-rate support, and we find they are necessary to ensure delivery of high-speed broadband services to students and library patrons via LANs/WLANs. We do not limit these eligible services by form, and therefore agree that equipment that combines functionality, like routing and switching, is also eligible. Similarly, we recognize that some functionalities can be virtualized in the cloud, such as cloud wireless controllers, and therefore will permit such services to be eligible for purchase by schools and libraries.

108. To focus support on only those internal connections necessary to enable high-speed broadband connectivity, beginning in funding year 2015, we eliminate E-rate support for the priority two components that had been in the following ESL entries: Circuit Cards/Components; Interfaces, Gateways, Antennas; Servers; Software; Storage Devices; Telephone Components, Video Components, as well as voice over IP or video over IP components, and the components, such as virtual private networks, that are listed under Data Protection other than firewalls and uninterruptible power supply/battery backup. In recognition of our need to be a "prudent guardian of the public's resources," we find that eliminating these priority two components from the ESL ensures that there is more E-rate support available to deploy the LANs/WLANs needed to improve digital learning in schools and libraries. It is also consistent with section 254(h)(2)(A) of the Act, which requires that support to schools and libraries improve access to advanced services in a manner that is "technically feasible" and "economically reasonable." We direct the Bureau to release for comment a draft ESL for funding year 2015

consistent with this Report and Order, and encourage applicants to carefully review the eligible components included in the modernized category two section in that draft ESL. Some components that had been listed in the ESL as priority two may be relocated or described in updated or more generic terminology.

109. Also, despite support from some commenters, we decline at this time to designate further network security services and other proposed services in order to ensure internal connections support is targeted efficiently at the equipment that is necessary for LANs/WLANs. Many commenters agreed that a limited list of eligible services would help ensure available funds are targeted and therefore available to more applicants. As we noted, we leave the record open on these services to allow for further comment as we evaluate the changes in the first funding year.

b. Basic Maintenance, Managed Wi-Fi, and Caching

110. *Basic Maintenance.* For funding years 2015 and 2016, we will continue to provide support for basic maintenance services subject to each school or library's overall budget on E-rate eligible category two services. In the *E-rate Modernization NPRM*, the Commission proposed phasing out support for basic maintenance because the same high-discount school districts received ample funding, while most school districts received none. Commenters point out however, that basic maintenance is needed to ensure networks operate properly, particularly as networks become more complicated. We believe that we can achieve the stated goal of broader funding distribution through other means, including a reasonable and equitable limit on the total amount of E-rate support available per student and per square foot which will discipline districts and libraries in basic maintenance purchasing decisions. In particular, applicants are unlikely to seek support for unnecessary basic maintenance given these limits on the total amount available, but providing support to ensure these networks function effectively may aid those districts with limited resources. Support will only be available for maintenance on equipment and services on the ESL and not for any of the legacy services phased out in this Report and Order.

111. *Managed Wi-Fi.* In light of the applicant budgets for funding years 2015 and 2016, we are persuaded by commenters who argue that managed Wi-Fi, which we call managed internal broadband services in the rules to cover

the operation, management, or monitoring of a LAN or WLAN, should be eligible for internal connections support. In the past, applicants could seek internal connections support only for the purchase of internal connections and basic maintenance. Unlike the traditional approach to internal connections, for managed Wi-Fi service contracts, schools and libraries obtain LANs/WLANs as a service for a period of three to five years from a third party who manages the entire system, providing operations and maintenance for the life of the contract. In other cases, the school or library may own the equipment, but have a third party manage it for them.

112. The record demonstrates that applicants would benefit from greater flexibility to choose among managed Wi-Fi options. In particular, the variations of managed Wi-Fi services can provide substantial benefits and cost savings to many schools and libraries, particularly small districts and libraries without a dedicated technology director available to deploy and manage advanced LANs/WLANs quickly and efficiently. Therefore, pursuant to our authority under section 254 of the Act, we find that providing support for managed internal broadband services, including managed Wi-Fi, will "enhance . . . access to advanced telecommunications and information services" for schools and libraries, and we direct the Bureau to include managed internal broadband services on the ESL for funding years 2015 and 2016.

113. Under the five-year applicant budget approach we adopt, a district, school, or library will be able to seek annual support for a managed Wi-Fi service, up to an average pre-discount rate cost of \$30 per student per year or one-fifth of the budget available to libraries based on floor area. This is consistent with the price of managed Wi-Fi services in the market today and limits the likelihood of waste or abuse in these managed Wi-Fi contracts. As noted below, we will allow districts and libraries to sign multi-year contracts, but we will not make multi-year commitments. Our short-term budget will be sufficient to fund these smaller multi-year contracts and we will continue to evaluate whether additional changes are needed in the long-term, but emphasize that there is no guarantee of funding.

114. We disagree with commenters who argue that managed Wi-Fi should be a category one service. Despite our recognition that virtualization and management may send some amount of information beyond the walls of the

school or library building in order to manage the internal networks, we find that services used to distribute bandwidth throughout the school are internal connections services. We therefore remove the presumption in our rules that such a service is not an internal connection.

115. Competitive bidding rules still apply to procurement of managed Wi-Fi services. We encourage districts to request bids in technologically neutral ways and compare the cost-effectiveness of bids for self-provisioned networks with those for managed Wi-Fi contracts. We also encourage schools and libraries considering managed Wi-Fi to evaluate the value of joining a consortium of schools and libraries to increase their buying power and drive down costs.

116. We also clarify that E-rate support for managed Wi-Fi is limited to those expenses or portions of expenses that directly support and are necessary for the broadband connectivity within schools and libraries. Eligible managed Wi-Fi expenses include the management and operation of the LAN/WLAN, including installation, activation, and initial configuration of eligible components, and on-site training on the use of eligible equipment. Eligible managed Wi-Fi expenses do not include a managed voice service, for example. For bundled pricing that includes eligible and ineligible expenses, applicants are required to cost allocate eligible from ineligible services to ensure only eligible services are supported.

117. Finally, we delegate to the Bureau the authority to determine how best to interpret managed services for the purposes of the ESL as we gain experience with funding of these services through the E-rate program. Wireless access as a managed service is a market that is still being developed, and we believe it will facilitate the efficient and effective support of these services to provide the Bureau flexibility to adjust our approach as this market develops. As always, parties may appeal any Bureau decision to the full Commission.

118. *Caching.* Due in part to the applicant budgets for funding years 2015 and 2016 limiting waste or abuse, we agree with commenters who argue that caching functionality should be eligible for internal connections support. Caching functionality enables the local storage of information so that the information is accessible more quickly than if it is transmitted across a network from a distant server. By placing previously requested information in temporary storage, caching functionality can, in certain

circumstances, optimize network performance, and potentially result in more efficient use of E-rate funding. The record indicates that caching functionality can be an integral component of some LANs and WLANs. As commenters point out, caching can provide a more affordable way to achieve bandwidth goals. This is consistent with the goal we adopt in this Report and Order, as well as the Commission's authority to ensure affordable access to E-rate supported services. As such, we disagree with commenters who argue that caching functionality should not be supported by E-rate funds. Instead, we designate caching functionality as an eligible service that "enhance(s), to the extent technically feasible and economically reasonable, access to advanced telecommunications and information services" for schools and libraries. As with the core components of broadband internal connections, we agree that equipment that combines caching functionality with other functionalities is also eligible. However, equipment that combines caching functionality with an ineligible functionality must be cost allocated. We therefore delegate to the Bureau the authority to define caching functionality, as well as the necessary software or equipment, such as caching servers, for the purposes of the funding years 2015 and 2016 Eligible Services List. As always, parties may appeal any Bureau decision to the full Commission.

119. *Eligibility After Funding Years 2015 and 2016.* We make these determinations about eligibility in light of the applicant budgets we set out that mitigate some of our concerns about waste or abuse. We therefore direct the Bureau to include basic maintenance, managed internal broadband services, and caching functionality on the ESL for funding years 2015 and 2016. The Commission will evaluate the benefits and drawbacks of these eligibility determinations in future funding years as it continues its work modernizing the program. Absent Commission action, in funding year 2017 and in subsequent funding years, support for basic maintenance, managed internal broadband services, and caching functionality, as an internal connection, will be available only to those applicants that received support in funding years 2015 and 2016 and are operating under a five-year applicant budget.

6. Other Issues

120. *Category Two Installation Can Begin on April 1.* We also amend our rules for category two non-recurring

services to permit applicants to seek support for category two eligible services purchased on or after April 1, three months prior to the start of funding year on July 1. This will provide schools with the flexibility to purchase equipment in preparation for the summer recess and provide the maximum amount of time during the summer to install these critical networks. We agree with commenters who note that the last day of school is often in May or June and schools need to be able to use the entire summer recess to ensure the networks are ready when students return to school. This is consistent with our previous decision to allow advance installation and construction under certain conditions.

121. *Administration.* In accordance with this section, we make necessary changes to §§ 54.500, 54.502, 54.505, and 54.507 of our rules. We recognize that these represent major changes to the structure and distribution of support for internal connections. Because unanticipated technical or operational issues may arise that require prompt action, we reaffirm the delegation of authority to the Bureau to interpret our rules "as necessary to ensure that support for services provided to schools and libraries . . . operate to further our universal service goals."

C. Phasing Down and Ending Support for Legacy and Other Non-Broadband Services

122. In funding year 2013, approximately 50 percent of priority one E-rate funding was committed to high-speed broadband services, while approximately one third went to fixed voice and mobile services. Phasing down support for voice services and eliminating support for certain legacy services will allow us to focus E-rate program funding on the high-speed broadband needed by schools to enable digital learning and by all libraries to meet the broadband needs of their patrons. After the first two years of the phase down, the Bureau will issue a report evaluating the impact of the reduction in support for voice services. If the Commission takes no further action, the voice services phase down will continue.

1. Phasing Down Support for Voice Services

123. Many commenters support reducing E-rate support for voice services to focus the E-rate program on broadband. We agree that voice services, while important for schools and libraries, are not as essential as high-speed broadband is for meeting the educational needs of students and

library patrons. Instead of immediately eliminating support for voice services, we will reduce voice support each funding year by subtracting the discount rate applicants receive for voice services by 20 percentage points every funding year. In funding year 2015, the discounts applicants receive for voice services will be reduced by 20 percentage points from their discount rates for other eligible services, and in funding year 2016, the discounts applicants receive for voice services will be 40 percentage points lower than their discount rates for other eligible services. In each subsequent funding year, the discounts applicants receive for voice services will be reduced by an additional 20 percentage points. Over the first two years of the phase down for voice services support, we direct the Bureau to evaluate the impact of the phase down on eligible schools and libraries and study the transition of eligible schools and libraries to VoIP services and issue a report to the Commission as we continue to reduce voice support by 20 percentage points each year. If, by the opening of the funding year window for funding year 2018, the Commission takes no further action, the voice phase down will continue.

124. Voice services have been eligible for E-rate program funding since the Commission determined that the E-rate program should support all commercially available telecommunications services in the *Universal Service First Report and Order*. When the Commission established the E-rate program in 1997, the goal was to provide schools and libraries discounts on the broadest class of telecommunications services and advanced services available at that time, and to provide schools and libraries the flexibility to purchase new technologies as they became available. However, the options for Internet access then were generally limited to dial up modem services offered over POTS lines, and the data links provided by T-1 and T-3 lines.

125. Today, a much broader array of high-speed broadband services are available to and needed by schools and libraries to support modern digital learning initiatives. Moreover, support for voice services today consumes approximately one third of E-rate commitments while many schools and libraries are unable to access the funding they need for internal connections to provide high-speed broadband throughout schools and libraries. In order to meet our goal of funding high-speed broadband services to support digital learning in schools

and robust connectivity for all libraries, we conclude that we can no longer continue to fund voice services at the same discounts rates as applied to other eligible services that provide broadband access. Instead, we will gradually reduce E-rate funding for voice services and shift these funds to support those services that provide high-speed broadband. Accordingly, we remove the reference to E-rate supporting “all commercially available telecommunications services” in § 54.502(a) of our rules so that it is clear to applicants that the telecommunications services that are supported by E-rate are listed in the ESL, rather than potentially sending a confusing message that any telecommunications service available on the market is eligible for E-rate discounts. This is important now that we are phasing down support for voice services and eliminating support for some of the services associated with telephone service as explained herein. We also add to the rules our schedule for phasing down support for voice services.

126. We recognize that many schools and libraries consider E-rate support for voice services an important part of their overall budgets. However, several factors should help ameliorate the impacts of gradually phasing down support for these services. First, voice is now a competitive offering in many areas, and the availability of VoIP services, particularly for those with broadband, provides a cost-effective option for many schools and libraries. This expansion of competition, particularly from VoIP offerings, represents a substantial shift since the E-rate program was created in 1997. Whereas changes in the voice market are reducing the costs of voice service over time, the shortage of funding for broadband services has increasingly become an impediment to balancing all of the Commission’s requirements under section 254(h). Second, because we will initially reduce the maximum discount available for voice services to 70 percent in 2015, and 50 percent in 2016, our approach strikes a balance between those commenters supporting elimination of discounts for voice services with those school and library commenters that stressed the importance of retaining some level of support over a defined period of time. Third, as a result of the other measures we take in this Report and Order, the applicants affected by this change will have opportunities to seek funding for broadband infrastructure that may not have been available to them previously.

To some degree, this may offset changes in their overall budgets. Finally, our decision does not alter the Commission’s requirement that providers of eligible services must provide supported services at a lowest corresponding price (LCP). While voice service remains a supported service, the Commission’s LCP rule serves as a safeguard for affordability because service providers cannot submit bids for or charge E-rate applicants a price above the LCP for E-rate services; E-rate discounts are then applied to a service provider’s LCP.

127. Several stakeholders suggest that in lieu of gradual transition, we give schools one or two years more of full support for voice service, but then eliminate support for voice altogether in funding years 2016 or 2017. While that approach might benefit recipients seeking voice support for the next one or two funding years, it would eliminate funding for voice services altogether before the Commission has had a chance to study the impact of the gradual phase down of support for voice services on eligible schools and libraries. The approach we take today is more gradual while allowing us to begin redirecting E-rate funding to broadband next year. We agree that our revised interpretation of section 254 requires us to redefine eligible services and shift support away from voice services and towards broadband services, but eliminating support in 2016 or 2017 would cause a more abrupt change in schools and library budgets in those funding years, which we believe many applicants would find difficult to absorb—particularly those serving the highest poverty communities. Phasing down support for voice services over several funding years preserves some funding for applicants at least for the next several funding years, with the most economically disadvantaged schools and libraries receiving the highest discounts as they consider alternatives in the marketplace.

128. In the *E-rate Modernization Public Notice*, the Bureau sought comment on phasing out support for voice services by 15 percentage points per funding year. We now conclude that a per-year reduction of 20 percentage points is appropriate because we find a more straightforward percentage point decrease should be easier for applicants to calculate, and will help ensure that sufficient funding for is available for supported services. Beginning in funding year 2015, when the maximum discount rate for category one services will be 90 percent, eligible applicants shall receive a maximum discount rate of 70 percent for voice services. We

disagree with those commenters who argue that reductions will be difficult for applicants to understand and for USAC to administer. The discount rate for voice services will be based on an applicant’s already established discount rate and will require only a simple 20 percentage point subtraction from the discount rate any applicant would otherwise be required to calculate to receive support from the program. We change the FCC Form 471 to enable applicants to seek support for voice services using a separate funding request number (FRN) from other eligible services starting in funding year 2015. Combining voice and non-voice services in a single FRN would cause delays in processing if USAC had to separate out the services during the application review process.

129. The reduced discount rates for voice services will apply to all applicants and all costs incurred for the provision of telephone services and circuit capacity dedicated to providing voice services including: Local phone service, long distance service, plain old telephone service (POTS), radio loop, 800 service, satellite telephone, shared telephone service, Centrex, wireless telephone service such as cellular, and interconnected VoIP. Although there was some support in the record for excluding VoIP from the voice services phase down, we agree with those commenters that assert that retaining a higher level of funding for VoIP services while reducing the discount rate only for non-IP voice services would provide VoIP providers a competitive advantage in serving schools and libraries. Because the marginal cost of delivering VoIP services should be lower once schools and libraries have robust broadband, we expect the price of these services to continue to drop over the coming years, alleviating the need to retain higher discounts for VoIP funding. Similarly, a few commenters argue that we should retain support for wireless telephone services, while others support eliminating wireless telephone services in funding year 2015. As with VoIP services, eliminating support for wireless telephone service in 2015, or subjecting wireless telephone services to a separate phase out track, would provide non-wireless providers a competitive advantage over wireless providers in serving schools and libraries.

130. Some commenters argue that, because the *USF/ICC Transformation Order*, 76 FR 76623, December 8, 2011, included voice telephony service in the definition of universal service, we are compelled to include voice telephony as an eligible service for E-rate support

under sections 254(c)(3) and 254(h)(1)(B) of the Act. However, as explained, nothing in section 254(c)(1) bars the Commission from establishing different supported services for different elements of the overall Universal Service Fund, and in this Report and Order, consistent with the purpose of the E-rate program, we find that it is necessary and appropriate to phase down voice services.

131. During the initial two years of the phase down of support for voice services, we direct the Bureau to study the impact of these discount reductions for voice support on E-rate recipients and to study the transition of eligible schools and libraries to VoIP services. The Bureau shall report its findings to the Commission by October 1, 2017, after completion of funding year 2016. If, at the conclusion of this study, no further action is pursued by the Commission before the application filing window opens for funding year 2018, the phase down will continue.

2. Eliminating Support for Telephone Features, Outdated Services, and Non-Broadband Services That Do Not Facilitate High-Speed Broadband

132. Pursuant to sections 254(c)(1), (c)(3), (h)(1)(B), and (h)(2) of the Act, we eliminate support for other legacy and non-broadband services effective for funding year 2015. Our decision to stop supporting these services reverses prior Commission and USAC decisions, however, we find many of these services to be important, but not essential to education, and E-rate funding is not sufficient to support these services at the risk of not being able to fund the services identified herein that advance our program goals. Within the Commission's authority under section 254 of the Communications Act to designate telecommunications and additional services rests our equal authority to withdraw services from eligibility, especially as the needs of schools and libraries evolve. The record supports our decision.

133. Beginning in funding year 2015, we will no longer provide E-rate support for components of telephone service, outdated services such as paging and directory assistance, and services that may use broadband but do not provide it, including email, voice mail, and web hosting. Applicants may continue to seek support for individual data plans and air cards, but only when they can demonstrate, consistent with our current rules, that the purchase of such services is the most cost-effective way to connect students on school premises or library locations to the Internet.

a. Telephone Features and Outdated Telephone Services

134. The record supports eliminating E-rate support for paging, and telephone service components such as text messaging and directory assistance beginning in funding year 2015. There is widespread agreement among commenters that paging service is largely outdated and can be retired from funding. Similarly, there is agreement that the features listed as "Telephone Service Components" should no longer receive E-rate support. The Telephone Service Components to be removed from the ESL are directory assistance charges, text messaging, custom calling services, direct inward dialing, 900/976 call blocking, and inside wire maintenance plans.

135. Although a few commenters argue that paging serves an educational purpose because sometimes it is the only way to reach a key staff member in an emergency, other commenters asserted that paging is not really critical, and has been replaced by other services. Similarly, a few commenters argue that we should continue to support text messaging because students prefer it for quick communication, and it is used for a variety of work related tasks for administrators and teachers in way that does not disrupt the classroom. These are all valid assertions and while we recognize that these services are worthy to certain applicants, we conclude that continuing to fund them diverts funding away from the high-speed broadband services that have become essential to schools and libraries.

136. Notably, those commenters recommending a longer adjustment period for the phase down of funding for voice services did not request a commensurate phase down timeline for telephone components, or assert that a transition period would be critical for schools and libraries. This is consistent with our view that a protracted phase out for telephone components is not necessary, and that these services should be eliminated from the list of those that are eligible for E-rate support beginning in funding year 2015. Funding commitment data is not available for several of the telephone features we will eliminate, however, funding year 2012 commitments totaled approximately \$898,045.00 for paging and text messaging. Some commenters point out that removing these services will not result in sizable cost savings for the Fund. However, we agree with other commenters who argue that we should eliminate support for these features and services because it will allow us to direct some additional funds towards

meeting our high-speed connectivity targets without imposing undue hardship on applicants.

137. We recognize that removing telephone components from the ESL in funding year 2015 will require some providers to change their billing practices or require some applicants to cost allocate the cost of those services from their requests for support. However, because these services are typically provided as an add-on or enhanced services for an extra fee, they are often presented as separate line items on telephone bills. Accordingly, it should not be overly burdensome for applicants to seek funding for the voice component of the telephone service only, and provide a cost allocation for any telephone features we remove from the ESL. Under the Commission's rules, if a product or service contains ineligible components, costs should be allocated to the extent that a clear delineation can be made between the eligible and ineligible components. The clear delineation must have a tangible basis and the price for the eligible portion must be the most cost-effective means of receiving the eligible service. For telephone feature costs that are bundled with the cost of voice services, one way to determine the cost of the feature is for an applicant to seek an appropriate cost allocation from its service provider. We find that the benefits of streamlining support for voice services by removing funding for these services to enable that support to be used for essential educational purposes outweigh any burdens applicants may face in the next few funding years as they adjust to these changes, which the record leads us to predict generally should be minimal.

b. Email, Web Hosting, Voicemail

138. We eliminate E-rate support for email, web hosting, and voicemail beginning in funding year 2015 and delete the reference to "electronic mail services." As many commenters recognize, these services are applications delivered over broadband service, and do not themselves deliver high-speed broadband. There is also evidence in the record that applicants seeking E-rate support for these services may not be getting the most cost-effective solutions, and that some service providers package web hosting and email service offerings to E-rate customers in a way that has created a risk that E-rate funds will pay for ineligible services. We recognize that email, web hosting and voicemail services may be important services for the day-to-day operations of many schools and libraries and that some of

them have come to rely on E-rate support for those services. However, continuing to fund these services diverts E-rate funding away from essential high-speed broadband services. Therefore, removing E-rate support for email, web hosting, and voicemail services aligns with our restructuring of the E-rate program under section 254.

c. Data Plans and Air Cards for Mobile Devices

139. Data plans and air cards for mobile devices will continue to be eligible for E-rate support only in instances when the school or library seeking support demonstrates that individual data plans are the most cost-effective option for providing internal broadband access for portable mobile devices at schools and libraries. We agree with commenters that it is generally not cost effective for applicants to purchase on-campus use individual data plans that provide service on a one plan per-device basis when a school or library has robust internal wireless networks that provide Internet connectivity to multiple devices within a school or library. Some commenters also contend that these individual data plan services generally do not provide users with enough high-speed connectivity to access certain educational and informational materials.

140. Some schools and libraries already have wireless networks that support one-to-one device initiatives. Moreover, with the increased availability of E-rate funds as a result of our decisions in this Report and Order, many more will be able to install high-speed internal broadband networks to support one-to-one learning programs in schools and reliable public Internet access in libraries. We consider funding for individual data plans or air cards for individual users to be not cost effective when those users can already access the Internet through internal wireless broadband networks on wireless-enabled devices without the help of stand-alone data plans or air cards. In general (i.e., assuming no showing of cost effectiveness), for applicants that receive data plans bundled with voice, only the voice services in the plan will remain eligible for funding in accordance with the phase down reductions we implement; the applicant must remove from its funding request the costs associated with all other services in a bundled plan that are ineligible.

141. We recognize that there are a few locales where WLANs are impracticable or difficult to install, such as library bookmobiles. There may also be some

schools or libraries where installation of a wireless network is possible but would be more costly than using individual data plans because the school or library location serves a very small number of students or patrons. Therefore, we will allow applicants to seek funding for individual data plans where the applicant is able to demonstrate that individual data plans are the most cost-effective option for providing internal broadband access for mobile devices. In order to ensure that individual data plans are the most cost-effective option, applicants that seek funding for individual data plans must be able to demonstrate either that installing a WLAN is not physically possible, or must provide a comparison of the costs to implement an individual data plan solution versus a wireless local area network solution. The cost comparison may be established through the competitive bidding process by seeking and comparing bids on both internal wireless networks and individual data plans. Applicants should be prepared to demonstrate to the Commission and USAC that individual data plans are the most cost-effective option for their situation by submitting the cost comparison information upon request.

3. Impact on Multiyear Contracts

142. In response to commenters asking that we permit funding for phased-out services until multi-year contracts expire for those services, we decline to provide exceptions or allow “grandfathering” for multi-year contracts. This decision will simplify the elimination of funding for these components and services for applicants and for USAC, and is consistent with our need to transition funding in the program to high-speed broadband without undue delay. Although the Commission permits applicants to enter into multi-year contracts for eligible services, the Commission has never adopted a rule insulating applicants and service providers from changes in program rules simply because a multi-year contract was utilized.

IV. Maximizing the Cost-Effectiveness of Spending for E-Rate Supported Purchases

143. To maximize the cost-effectiveness of spending for E-rate supported services, we focus in this section on driving down costs for the services and equipment needed to deliver high-speed broadband connectivity to and within schools and libraries. There is widespread agreement in the record about the importance of encouraging cost-effective purchasing in

the E-rate program. Every dollar spent inefficiently for E-rate supported services is one less dollar available to meet schools’ and libraries’ broadband connectivity needs.

144. Moreover, there appears to be substantial room for improvement in E-rate-supported purchasing. Although E-rate applicants are required to seek competitive bids for E-rate supported services and to select the most cost-effective bid they receive, there remain large variations in the amount of money spent on similar services. Some variation is to be expected due to differences in local needs and conditions, such as between large urban schools and small rural schools. However, pre-discount prices also vary in ways that are unexpected. For instance, prices paid for telecommunications and Internet access in urban areas are often higher than those in rural areas. This is the opposite of what we would generally expect, given that the economies of scale and distance should generally make broadband deployment more expensive to smaller districts in rural America. In major metropolitan areas, the quartile of schools paying the most for 100 Mbps of Internet access services pays nearly three times more than the quartile paying the least and the quartile paying the most for 1 Gbps WAN connections pays nearly four times more than the quartile paying the least. Even in the same state, prices for rural broadband services can vary widely. For example, the Idaho Commission for Libraries explains that prices range from \$3.33/Mbps/month to \$397.56/Mbps/month in its state’s rural libraries, while ALA notes that the cost for a T1 line can vary from a few hundred dollars to more than two thousand dollars per month in Pennsylvania.

145. This variation suggests there is more we can do to drive down prices for E-rate services. It also suggests that applicants need more information about purchasing decisions. Therefore, in this section, we adopt changes to increase pricing transparency, encourage consortium purchasing and amend our LCP rule to clarify that potential service providers must offer eligible schools, libraries and consortia the LCP.

A. Increasing Pricing Transparency

146. To assist schools and libraries in finding the best prices for E-rate supported services, we adopt transparency requirements for E-rate recipients and vendors beginning in funding year 2015. We agree with those commenters who argue that transparency is an essential tool to help applicants make educated buying

decisions. Transparent pricing will give schools and libraries greater visibility into pricing and technology choices for their peers, which we expect will help applicants in negotiations with equipment and service providers.

147. Shining a light on prices paid for E-rate supported services will help the Commission and third parties ensure that variations in prices paid are in accordance with the program rules and that schools and libraries are purchasing E-rate supported services cost effectively. As several commenters explain, the public should have a simple method to ensure that their students are getting the high-speed connectivity needed for digital learning at the lowest price. Making the pricing data publicly available will also improve analyses performed by the Commission, state coordinators, and third parties regarding the program's effectiveness and whether more needs to be done to improve cost-efficient purchasing by schools and libraries. Finally, pricing transparency will help third parties identify best practices for purchasing and reduce waste across the program.

148. Therefore, to increase pricing transparency in the E-rate program, we will make information regarding the specific services and equipment purchased by schools and libraries, as well as their line item costs, publicly available on USAC's Web site for funding year 2015 and beyond. This information is currently collected on FCC Form 471, Block 5, Item 21 ("Item 21s"). In addition, we agree with commenters that the information contained in the Item 21s should be standardized to provide meaningful information that is easy to compare across applications. We delegate authority to the Bureau to revise and oversee form standardization, while directing the Bureau to be mindful of the need to keep all forms as simple as possible in light of our goal of streamlining administration of the program. Because pricing and purchasing information will be of greatest benefit if it is available in electronic, searchable forms, we also direct OMD to work with USAC to ensure ready availability of the information in these forms, such as through publicly available APIs and/or bulk data files posted on USAC's Web site.

149. A few commenters express concern that a state law, local rule, or an existing long-term contract may explicitly prohibit pricing disclosure. In light of these concerns, we will allow applicants to opt out of making pricing data public where such applicants can

certify and cite to a specific statute, rule, or other restriction barring publication of the purchasing price data, such as a court order or a contract in existence prior to adoption of this order.

Applicants making this certification shall retain necessary documentation to demonstrate the restriction in the event of a Program Integrity Assurance (PIA) review or audit. Contracts executed after the effective date of this Report and Order, however, may not contain such restrictions, and any such restrictions will have no effect.

150. We recognize the arguments of some commenters that price transparency increases the risk of anti-competitive behavior by service providers. It is true that in certain market conditions, publication of prices can raise the risk of collusion or price harmonization. But given the level of public scrutiny of the E-rate program, we think price transparency will shine a light on any anti-competitive behavior. Moreover, the benefits to applicants from better pricing information are likely to outweigh any increased risks of collusion or price harmonization among providers. As many commenters note, some pricing information is already publicly available through state master contracts and state public records laws in a piecemeal fashion—a state of affairs that carries most of the collusion risks of broader publication with many fewer benefits. Sophisticated vendors interested in their competitors' pricing are most likely to be able to avail themselves of public records laws, while individual school and library applicants are less likely to have the practical ability to navigate these processes. In contrast, centralized, easily accessible data about pricing for purchased services will be more useful for applicants and program oversight, while doing little to increase the risk of collusion. For all these reasons, on balance, we conclude that increasing pricing transparency is likely to increase competition and drive down prices.

151. Some commenters also argue that transparency will reduce the number of vendors competing to provide E-rate supported services because vendors will leave the program rather than allow their prices to be made public. Again, we are not persuaded. As described, in many states pricing information is already publicly available in some fashion, and there is no evidence in the record that this has lowered participation in those states. Moreover, schools and libraries, like all community anchor institutions, are valuable customers. Indeed, greater pricing transparency should help those vendors offering the best prices attract

market interest in their services and equipment, which should help foster a competitive marketplace.

152. We also disagree with the argument that school districts and libraries will find pricing information too confusing to be useful. As many commenters note, individual school districts or libraries often have unique characteristics that make the prices available to them lower or higher than national or regional averages. For example, small rural schools may legitimately face higher prices for broadband connectivity than large urban schools because of their distance from the nearest fiber, the dearth of other broadband customers in their immediate vicinity, and lack of competitive options. But E-rate applicants are already required to make judgments regarding the costs of proposed services. To the extent a school or library arms itself with price information from its peers and requests a price that a vendor believes is unreasonably low for some equipment or service, we are confident that the vendor will be appropriately incented to explain any unique circumstances that justify its higher price. In sum, even acknowledging that applicants will face varying circumstances that affect the prices available to them, we find that transparency will aid applicants in making smarter spending judgments in accordance with their obligation to select cost-effective services.

153. Although we require publication of prices for goods and services purchased by applicants, we decline at this time to require public disclosure of other pricing information, including available pricing from service providers or bid responses. Many commenters argue that submitting bid information is burdensome, and the goods and services selected by applicants should represent the most cost-effective solution for their needs following a competitive bidding process, with price as the primary factor. Therefore, we are persuaded that the current burden to applicants of submitting comprehensive bid information to USAC outweighs any incremental benefit to the public from the publication of prices for non-winning bids, which, by definition, were not the most cost-effective choice. At the same time, we take this opportunity to remind applicants and vendors that they are responsible for the retention of all documents related to their applications, including bids submitted in response to a solicitation, in accordance with our rules. Applicants still may be required to provide all bid responses during PIA

review of an application or during an audit.

154. We also decline to require disclosure of pricing information for past funding years. Pricing information on Item 21s has not been published in the past, and the Commission has redacted pricing information from Freedom of Information Act responses at the request of service providers claiming it was proprietary information. Given stakeholders' expectations when prior-year applications were submitted, we will continue to treat recent Item 21 information as potentially sensitive for funding year 2014 and before. However, this Report and Order serves as notice to all service providers that the receipt of E-rate support will be conditioned on disclosure of this pricing information beginning in funding year 2015.

155. Finally, we terminate the program the Commission created in the *Second Report and Order*, 68 FR 36931, June 20, 2003, testing an online list of internal connections equipment eligible for discounts. USAC no longer updates the database in part because of the burdens it placed on USAC and vendors. Meanwhile, the publication of pricing data as provided will provide a less burdensome and more accurate representation of the goods and services being purchased by applicants with E-rate support, as well as the prices paid. We received no comments objecting to termination of the eligible products database.

B. Encouraging Consortia and Bulk Purchasing

156. Consortium purchasing can drive down the prices paid by schools and libraries for E-rate supported services. In this section, we reduce or eliminate some of the existing barriers to applicants' participation in consortia. As an initial matter, we direct Commission staff to work with USAC to prioritize review of consortia applications. We also adopt rules to make it easier for applicants to take advantage of consortium bidding and clarify some apparent misconceptions about consortia participation. In response to concerns raised by E-rate applicants about the current method for allocating E-rate support among members of an E-rate consortium, in the accompanying *FNPRM*, we propose to amend the way consortia determine the amount of support to be received by their members to ensure that E-rate applicants that choose to join a consortium do not risk receiving less support, and seek comment on other ways to encourage consortium purchasing.

1. Speeding Review of Consortium Applications

157. In order to address applicants' complaints that consortia applications have historically received reviews late in the application review process, we direct OMD and the Bureau, working with USAC, to prioritize application review for state and regional consortia applicants. OMD and USAC have already undertaken an initiative to speed review of all E-rate applications, with a particular focus on broadband applications. We applaud that work and want to build on the positive results, particularly with respect to state and regional consortia applications. We expect that the improved processing times for consortia applications will result in more funding commitments flowing faster to schools and libraries, which will motivate more applicants to join consortia in future funding years.

2. Preferred Master Contracts

158. To further encourage applicants to take advantage of bulk buying opportunities, we delegate authority to the Bureau to designate preferred master contracts for category two equipment. The Bureau may make such a designation for the purpose of (a) exempting the preferred master contract from the FCC Form 470 filing requirement and (b) requiring applicants to include the preferred master contract in their bid evaluations even if the master contract is not submitted as a bid in response to the applicant's FCC Form 470. The Bureau has authority to institute either one or both of these exceptions for a preferred master contract and must re-evaluate its decision to designate a contract as a preferred master contract every two funding years.

159. We authorize the Bureau to designate a master contract as a preferred master contract if it offers eligible entities nationwide the opportunity to obtain excellent pricing for category two services as reported on FCC Form 471. National availability of the equipment offered on a preferred master contract will ensure that all E-rate applicants have the opportunity to take advantage of its pricing.

160. We limit preferred master contracts to equipment used in category two internal connections at this time. Commodities such as the equipment used in internal connections lend themselves to bulk purchasing arrangements, and can be shipped nationwide. The more varied nature of services, such as broadband services and internal connection installation services, makes implementing bulk

purchase arrangements more complicated. We therefore choose not to authorize the designation of preferred master contracts for such services at this time.

161. We agree with commenters who support national bulk buying opportunities because of the unmatched economy of scale national purchasing allows. In order to help ensure such scale (and thus maximize the benefit to applicants and the E-rate program), we authorize the Bureau to limit the number of master contracts it designates as preferred. Recognizing, however, that E-rate applicants may still be able to negotiate better pricing from vendors not associated with a preferred master contract, we decline to require applicants to purchase services from a preferred master contract at this time.

a. FCC Form 470 Exception

162. Allowing applicants to take internal connections equipment from a preferred master contract without filing an FCC Form 470 will ease the administrative burden on applicants without compromising cost-effectiveness. Several commenters encouraged us to eliminate the FCC Form 470 filing requirement for certain master contracts because of the administrative burdens associated with competitive bidding. Although competitive bidding is vital to limiting waste and ensuring that services are provided at the lowest possible rates, in the limited case of equipment available on a preferred master contract, we find that it is not necessary for applicants to file an FCC Form 470 because the terms of the preferred master contract assure us that applicants will receive the best possible pricing on the services they order. We cannot at this time exempt master contracts that are not preferred master contracts from any competitive bidding requirements because we do not have the same assurances with respect to pricing for all master contracts.

163. Applicants who wish to take services from a preferred master contract without filing an FCC Form 470 would indicate on their FCC Form 471 that they are purchasing services from a preferred master contract instead of citing to an FCC Form 470.

b. Bid Evaluation Requirement

164. Requiring applicants to include preferred master contracts in bid evaluations helps ensure that applicants make cost-effective purchases while enabling them to select the services that best suit their needs. Applicants will only be required to include equipment available on a preferred master contract in their bid evaluations if it is the same

equipment the applicant sought on its FCC Form 470. Applicants would still have the ability to select bids submitted by service providers in response to the FCC Forms 470, as long as the applicants' evaluation treats the price of eligible equipment as the primary factor in bid selection and the selected bid is the most cost-effective.

3. Authority To Seek Consortium Bids

165. To further increase cost-effective purchasing by applicants, we next amend our rules to permit a consortium lead to identify on its consortium's FCC Form 470 the schools, school districts and libraries for which it has authority to seek competitive bids for E-rate eligible services even if it does not have authority to order services for those entities. Our rules currently require the FCC Forms 470 and FCC Forms 471 be signed by a person authorized to order eligible services for the applicants and do not distinguish between authority for E-rate consortium leads to seek bids and authority for consortium leads to purchase the services. As a result, consortium members who are unwilling to cede authority to purchase E-rate eligible services to the consortium lead release their own FCC Form 470 and likely do not attract the number of competitively priced bids, if any, from competitive vendors. By aggregating potential demand in the bidding process, and using the FCC Form 470 process to attract bidders, a consortium can drive down the price of eligible services even for its members who wish to order services on their own. This rule change will take effect for funding year 2015. Our rules will continue to permit consortium leads to purchase services on behalf of some or all of their members and we encourage consortium leads to seek both forms of authorization, as appropriate.

4. Correcting Misconceptions

166. We also take this opportunity to correct misconceptions about consortia applications that appear to have prevented some applicants from joining consortia, and to remind applicants and service providers about already-existing rules that should work to encourage participation in consortia. We remind applicants that E-rate rules do not require a consortium to solicit or select a single vendor to provide service to all consortium members and that applicants can authorize a consortium lead to act on their behalf for multiple years.

167. *Consortia selection of multiple service providers.* Some commenters argue that consortia purchasing may actually increase prices by excluding

smaller service providers who are not able to serve the full needs of a consortium. In light of these comments, we remind all stakeholders that consortia do not need to solicit or select a single vendor able to provide service to all members of a consortium. Rather, a consortium may invite vendors to bid on services to a subset of consortia members, and may find that a combination of different service providers offer the most cost-effective solution for consortium members. Even though a larger service provider may enjoy economies of scale and scope, it will not necessarily be able to provide competitively priced service in every area in which a consortium's members are located. Therefore, consortia applicants should make clear in their FCC Forms 470 and any associated RFPs that they are not required to select a single provider that can meet the needs of all members. While some consortia select a single service provider, many others select a combination of service providers to meet the needs of their consortium members. In light of the apparent confusion on this issue, we direct USAC to remind applicants and vendors, during USAC training and other outreach, that consortia can solicit bids from service providers to cover a portion of the services sought by the consortia.

168. *Multi-year authorization.* We also clarify that applicants can authorize a consortium lead to act on their behalf for multiple years, and need not reaffirm that authorization every funding year. In order to ensure that a consortium lead is not seeking bids or applying for support on behalf of schools and libraries without their knowledge or consent, our rules have required and continue to require FCC Forms 470 and FCC Forms 471 to be signed by a person authorized to seek or order services for the applicants. To show that it is authorized to seek or order eligible services for the applicants, a consortium lead may provide copies of relevant state statutes or regulations requiring members to participate in the consortium or some other proof that each consortium member is aware that it is represented in the application.

169. Another common way for a consortium lead to demonstrate its authority to seek or order eligible services on behalf of its members is to solicit letters of agency (LOAs) from consortium members. Some commenters ask us to ease consortia's administrative burdens by reducing the frequency with which applicants provide LOAs or eliminate the practice of applicants providing LOAs to consortium leads. We decline to eliminate the LOA

practice altogether because, in many circumstances, an LOA could be the only means a consortium lead has to demonstrate its authority to seek or order services on behalf of a specific consortium member. We can, however, clarify that applicants may provide consortia leads with LOAs that cover multiple funding years as long as those years are specified in the LOA and as long as the authorization includes the type of services covered by the LOA.

5. Other Rules Changes

170. We also add a definition of "consortium" in our rules that is based on the definition of "library consortium" that has long been a part of our rules. In the definition, we also make it clear that consortia may include health care providers eligible under the Rural Health Care program and public sector (governmental) entities, including, but not limited to, state colleges and state universities, state educational broadcasters, counties, and municipalities. This change does not alter requirements for applicants and service providers.

C. Offering the Lowest Corresponding Price

171. In order to help ensure that E-rate applicants make cost-effective purchasing decisions, we remind service providers that they not only must charge eligible schools, libraries, and consortia the LCP when providing E-rate services, but also must offer eligible entities the LCP when submitting competitive bids to provide E-rate supported services.

172. The LCP rule prohibits an E-rate provider from "charg[ing]" E-rate applicants a price higher than the lowest price that provider charges to non-residential customers who are similarly situated to a particular school, library, rural health care provider or consortium that purchase directly from the service provider. In authorizing the creation of the E-rate program, Congress imposed an obligation on telecommunications carriers to provide services to schools and libraries at rates less than the amounts charged for similar services to other parties. To ensure that schools, libraries and consortia participating in the E-rate program receive all services at the lowest rates available, the Commission extended this requirement to apply to all providers of E-rate supported services. The LCP rule benefits E-rate applicants and the Fund by ensuring that the price for E-rate supported services is no more than the market price for those services, absent a showing by a provider that it faces

demonstrably higher costs to serve a particular school or library.

173. While the LCP rule does not expressly mention an obligation to “offer” eligible entities the LCP, this obligation was articulated in the *Universal Service First Report and Order* where the Commission described the LCP provision as requiring service providers to “offer” services that comply with the LCP. To ensure that applicants receive the best possible bids from service providers in response to their FCC Forms 470, consistent with the Commission’s intent, we take this opportunity to reemphasize that our LCP rule, as it is now codified in our rules, means that providers must both (i) submit bids to applicants at prices no higher than the lowest price they charge to similarly-situated non-residential customers for similar services; and (ii) charge applicants a price no higher than the LCP. In abundance of caution, we also modify our LCP rule to better reflect the dual nature of this obligation.

174. Because the LCP rule makes prices more affordable for schools and libraries, as contemplated by the statute, we also take this opportunity to agree with those commenters who support stepped-up enforcement of our LCP rule. We therefore direct the Enforcement Bureau to devote additional resources to investigating, and where appropriate, bringing enforcement actions against service providers who violate the LCP rule.

V. Making the E-Rate Application Process and Other E-Rate Processes Fast, Simple and Efficient

175. In this section, we focus on making the E-rate application process and other E-rate processes fast, simple and efficient. There is broad agreement on the need to simplify the administration of the E-rate program in order to reduce the burden on applicants, make the most efficient use of E-rate funding, and foster greater participation in the E-rate program. We therefore adopt a host of programmatic changes in this section, including simplifying the application process by, among other things, providing a process for expediting the filing and review of applications involving multi-year contracts; eliminating technology plans for internal connections; simplifying and clarifying applicants’ discount rate calculations; simplifying the invoicing and disbursement process; and requiring all USF requests for review to be filed initially with USAC. As we streamline the program, we remain mindful of our need to gather relevant data from applicants and to protect against waste, fraud, and abuse.

Accordingly, in this section, we also adopt measures to protect against waste, fraud, and abuse.

176. We also direct USAC to take steps to reduce the administrative burden on applicants by processing and managing applications more efficiently, modernizing its E-rate information technology (IT) systems, timely publishing all non-confidential E-rate data in an open and standardized format, and communicating more clearly with E-rate applicants and service providers. We recognize that, as part of this modernization effort, USAC, working with OMD and the Bureau, already has made great strides, and we expect that they will continue to work together closely to push these reforms forward.

177. USAC, working with the Bureau and OMD, will implement the administrative changes we adopt today in funding year 2015, unless otherwise noted. In the *Universal Service Third Report and Order*, 62 FR 56118, October 29, 1997, the Commission delegated authority to the Bureau to issue orders interpreting our E-rate rules as necessary to ensure that support for services provided to schools and libraries operate to further our universal service goals. We re-affirm that delegation. We also direct the Bureau, working with OMD and other Commission staff, to make changes to the E-rate forms, as needed, and to provide direction to USAC to implement the changes, including providing clarification and guidance in the case of any ambiguity that may arise. These changes, taken together, will result in a program that is easier to navigate for applicants and vendors, will improve program efficiency by eliminating unnecessary complexities, and will constrain USAC’s administrative expenses, ultimately resulting in a cost savings to the E-rate program that can be used for the benefit of schools and libraries.

A. Simplifying the Application Process

178. We agree with those commenters who support simplifying the E-rate application process as an important part of streamlining the administration of the E-rate program. We therefore adopt a simplified application process for multi-year contracts; eliminate the requirement for technology plans; ease the signed contract requirement to allow applicants to seek E-rate support once they have entered into a legally binding agreement with a service provider; exempt from our competitive bidding requirements purchases of commercially available high-speed broadband services that cost less than \$3,600 per year;

require the use of electronic filings; and enable direct connections between schools and libraries.

1. Simplifying the Application Process for Multi-Year Contracts

179. As an initial matter, we simplify the application process for funding requests that involve multi-year contracts for eligible services. This simplified application process will be available to any applicant, beginning in funding year 2015, when: (1) The applicant has a multi-year contract for E-rate supported services that is no longer than five years, and (2) any changes in the requested services or to the terms and conditions under which those services are provided are within the scope of the establishing FCC Form 470 and the applicable contract. As the Commission proposed in the *E-rate Modernization NPRM*, applicants that elect to use the multi-year contract funding review process will only be required to submit a complete FCC Form 471 for the first funding year in which they are seeking E-rate support under the multi-year contract. All applicants, even those currently in the middle of a multi-year contract, will be required to file a complete FCC Form 471 once. In subsequent funding years covered by a multi-year contract, applicants will be permitted to use a streamlined application process that will be shorter, require less information from the applicants, and be approved through an expedited review process, absent evidence of waste, fraud, or abuse.

180. By minimizing pre-commitment application review by USAC in subsequent years of a multi-year contract, we anticipate USAC will be able to review applications more quickly while lowering the administrative burdens on applicants and without increasing the likelihood of waste, fraud and abuse. While applicants taking advantage of this new process will benefit greatly from expedited review and the reduced administrative burden, this process does not guarantee funding in subsequent years, even for the same services. E-rate funding will continue to be committed and disbursed on an annual basis. Applicants must be eligible for E-rate support in each of the years funding is sought, and the services must be eligible for support in each such year.

181. We agree with those commenters who suggest that five years is an appropriate maximum length of time for contracts seeking to use a multi-year contract application process. Commenters note that a five-year contract length is consistent with other

procurement models in the education industry. We therefore find that the three-year limit the Commission proposed in the *E-rate Modernization NPRM* is too restrictive. Although we do not adopt a maximum contract length in this Report and Order, in the accompanying FNPRM we do seek further comment on setting a maximum contract length for E-rate supported services.

182. To facilitate these changes to our application process, we direct the Bureau and OMD to work with USAC to revise the application process for multi-year contracts so that an applicant is not required to complete the full FCC Form 471 after the first year the applicant seeks funding for services provided pursuant to a multi-year contract that has a maximum term of five years. Under this revised application process, applicants must file a complete FCC Form 471 in the first year of a multi-year contract that is eligible for this streamlined review process, but in subsequent contract years applicants will only need to provide basic information identifying the applicant, confirm that the funding request is a continuation of an FRN from a previous funding year based on a multi-year contract, and identify and explain any changes to their application, such as changes in the discount rate, the membership of a consortium, or the services ordered. (All such changes must be within the scope of the establishing FCC Form 470 and the underlying agreement.) While USAC and the Commission staff, of course, remain able to request other information necessary to reach a commitment decision, we direct USAC to aim to minimize such requests.

183. Although some commenters would prefer to file a single FCC Form 471 to cover multiple years of a multi-year contract, we find that a streamlined filing and review process for subsequent contract years of a multi-year contract balances the applicant's desire for expedited review and administrative convenience with USAC's need to confirm basic information about the request in subsequent years, and to verify an applicant's interest in applying for funds for that funding year. USAC will review the initial FCC Form 471 applications associated with multi-year contracts as thoroughly as it reviews applications covered by one-year contracts. In subsequent years of a multi-year contract, however, where USAC has already reviewed a funding application for the first year of a multi-year contract, USAC will be able to streamline its pre-commitment review. If there are no changes to the services

purchased, conducting the same review for each subsequent year of the contract is not likely to identify errors in the application.

184. While we amend our rules to simplify applicants' use of multi-year contracts, we decline to allow applicants to receive multi-year funding commitments. In the *E-rate Modernization NPRM*, the Commission sought comment on allowing multi-year funding commitments. The Commission cited to its recent decision to allow multi-year funding commitments in the *Healthcare Connect Fund Order*, 78 FR 38606, June 27, 2013, in which the Commission noted that, by eliminating the need for applicants to file every year, multi-year funding commitments would reduce uncertainty and minimize the administrative burden for applicants and for USAC. Despite support from commenters for similar multi-year funding commitments in the E-rate context, important differences between the Healthcare Connect Fund and the E-rate program prevent us from adopting multi-year funding commitments in the E-rate program. Unlike the Healthcare Connect Fund, demand for E-rate funds significantly outstrips supply. Further, there is no record yet on the effect of the *Healthcare Connect Fund Order* on the Healthcare Connect Fund or as a constraint on funding available for other applicants in the fund. Although multi-year commitments may slightly increase administrative efficiency for applicants and USAC, obligating funds years in advance of their use would be detrimental to the management of the program. Moreover, the multi-year contract application process we adopt today should allow the E-rate program and applicants to achieve many of the efficiencies of a multi-year funding commitment process.

2. Eliminating the Technology Plan Requirements

185. In the interest of reducing the administrative burden on E-rate applicants, beginning with funding year 2015, we eliminate from our rules the technology plan requirements for applicants seeking E-rate support for category two services. The Commission previously eliminated the technology plan requirements for priority one services, and having considered the record, we now agree with commenters that the burden of our requirement that applicants for internal connections and basic maintenance of internal connections have certified technology plans outweighs the benefits, particularly for small applicants with limited resources.

186. We agree with those commenters who argue that technology planning is an important step in the process of long-term planning on how best to procure and utilize internal connections. We are certain though that, even absent this rule, technology planning will continue to occur because technology has become a central part of school and library infrastructure, and technology planning has become integrated into applicants' core strategic planning. We also expect that the structural changes we make to the E-rate program's approach to providing support for internal connections and basic maintenance of internal connections will encourage good planning. We strongly encourage all applicants, both large and small, to carefully review existing plans given the many changes to the E-rate program that we adopt in this Report and Order. However, we find that the burden of getting formal approval and certification of these technology plans outweighs the benefits to the program.

3. Exempting Low-Dollar Purchases of Commercially Available Business-Class Internet Access From Competitive Bidding Rules

187. We create an exemption in our competitive bidding rules for applicants seeking E-rate support to purchase commercially available, business-class Internet access services that cost \$3,600 or less for a single year. An Internet access service will be eligible for this exemption only if it offers bandwidth speeds of at least 100 Mbps downstream and 10 Mbps upstream for a pre-discount price of \$3,600 or less annually, including any one-time installation and equipment charges, and the service and price are commercially available. Based on our review of commercial offerings online, this \$3,600 annual limit is a reasonable maximum that will allow some applicants to purchase commercially available business-class Internet access. We clarify that the \$3,600 annual limit is the pre-discount amount for the service per school or library. So, for example, a library system with three library branches could qualify for this exemption if it purchased 100 Mbps downstream and 20 Mbps upstream Internet access service for each of its three branches at a cost of \$250 per month for each branch. Each school or library building must receive the eligible service at a cost of less than \$3,600 annually and applicants may not average the cost of services across a number of schools or libraries. This exemption will become effective in funding year 2015. As explained, applicants may purchase services with a

multi-year contract, such as a two-year term, but we will not make multi-year commitments. Applicants will therefore still be required to file an FCC Form 471 in the second year of the service.

188. We recognize that competitive bidding is an essential component of the E-rate program. At the same time, the record supports a finding that administrative costs associated with the Commission's competitive bidding rules and requirements may deter program participation by entities requesting low-dollar Internet access services. We are particularly concerned that smaller schools and libraries may not be purchasing high-speed Internet connectivity through the E-rate program due to these administrative costs. Consistent with the goals we adopt today to increase broadband and streamline the administrative process, we expect this limited exemption to competitive bidding will encourage additional bandwidth purchases and increased program participation. This exemption is likely to be particularly attractive to small applicants that face a disproportionate administrative burden from the competitive bidding process and encourage these entities to increase bandwidth speeds in the short term. Moreover, the bandwidth speeds required to qualify for this program are consistent with the goals we have outlined in this Report and Order, albeit typically for "best efforts" class services rather than dedicated connections. We believe that such "best efforts" service will frequently be sufficient for smaller entities with fewer students or patrons or in rural areas where fiber has not been deployed. For example, ALA notes that "[o]ver half of all rural libraries have internet speeds of 4 Mbps or less . . . and only 17 percent of rural libraries have speeds greater than 10 Mbps." As of 2012, only nine percent of all libraries have speeds greater than 100 Mbps. For these entities and others, this exemption will provide a simple and efficient method to purchase business-class Internet access and quickly increase connectivity speeds.

189. With respect to their purchase of such services, applicants will be exempt from the competitive bidding rules under § 54.503(a) through (c), the certification requirement under § 54.504(a)(1)(vi), and the corresponding rule on the selection of a provider of eligible services under § 54.511(a) of our rules. Such applicants will use the FCC Form 471 to certify to their purchase of an eligible commercially available business-class Internet access service. We remind applicants of their obligation to comply with record retention rules when purchasing eligible Internet

access. We also caution applicants and vendors that our gift rules will continue to apply even where a purchase arrangement is exempt from the competitive bidding process.

190. We find that purchasing high-speed Internet access with at least 100 Mbps/10 Mbps for no more than a pre-discount price of \$3,600 is a cost-effective service offering, particularly in light of the benefits for smaller schools and libraries. In order to ensure that the benefits of removing the administrative burden continue to outweigh the costs of exempting competitive bidding, we also delegate authority to the Bureau to lower the annual cost of broadband services or raise the speed threshold of broadband services eligible for this competitive bidding exemption, based on a determination of what rates and speeds are commercially available and will meet the needs of at least some subset of schools and libraries. We decline to adopt a *de minimis* exemption for other eligible services at this time, but we keep the record open on this issue and look forward to learning from the experience of applicants who take advantage of the exemption from competitive bidding that we adopt today.

4. Easing the Signed Contract Requirement

191. In order to further increase the efficiency of the administrative process and simplify the application process for applicants, we revise § 54.504(a) of our rules to require that applicants have a signed contract or other legally binding agreement in place prior to submitting their FCC Forms 471 to USAC. The rule had required applicants to submit their FCC Forms 471 requesting support for services "upon signing a contract for eligible services." While this rule ensures that applicants have negotiated and agreed to contractual terms prior to the filing of an FCC Form 471 requesting support for E-rate services, there are many instances where applicants have an agreement in place with their service provider or are already receiving services, but have difficulty obtaining signatures prior to the submission of their FCC Forms 471. Although we received no comments on this issue, in many instances, applicants have sought a waiver of this rule after having failed to obtain signatures prior to the submission of their FCC Forms 471. The Commission has consistently waived the requirement of a signed contract for petitioners who have demonstrated that they had a legally binding agreement in place for the relevant funding year. Rather than requiring applicants to seek such waivers, we now revise our rules

to require applicants to have a signed contract or other legally binding agreement in place prior to filing their FCC Forms 471. This revision to our rules will be effective beginning in funding year 2015.

192. Applicants and service providers should understand that, although no longer required, a signed contract will constitute the best evidence that a legally binding agreement exists. Absent the existence of a signed contract, in determining whether a legally binding agreement is in place, we direct USAC to consider the existence of a written offer from the service provider containing all the material terms and conditions and a written acceptance of that offer as evidence of the existence of a legally binding agreement. For example, a bid for the services that includes all material terms and conditions provided in response to an FCC Form 470 would be sufficient evidence of an offer and an email from the applicant telling the service provider the bid was selected would suffice as evidence of acceptance. In addition, after a commitment of funding, an applicant's receipt of services consistent with the offer and with the applicant's request for E-rate support will also constitute evidence of the existence of a sufficient offer and acceptance. A verbal offer and/or acceptance will not be considered evidence of the existence of a legally binding agreement. Revising the rule in this manner will provide applicants with sufficient flexibility to finalize their service agreements after filing their FCC Forms 471 while protecting the Fund against waste, fraud, and abuse. We also remind parties that they must retain all relevant documents for 10 years, consistent with our revised document retention rules.

5. Requiring Electronic Filing of Documents

193. We also agree with commenters who suggest that, in order to streamline the administration of the program, we should require E-rate applicants and service providers to file all documents with USAC electronically and USAC to make all notifications electronically, and therefore direct USAC, in consultation with the Bureau and OMD, to phase in such a requirement over the next three funding years. As the Commission noted in the *E-rate Modernization NPRM*, the electronic submission of FCC forms will improve the efficiency of submitting and processing applications, resulting in faster commitments and disbursements of E-rate funding. Furthermore, electronic filing will reduce the

program's administrative costs because USAC will not have manually entered data into its electronic system from paper submissions. Electronic filing will result in fewer errors on forms and other communications between USAC and applicants and service providers. Therefore, beginning in funding year 2017, we will require the submission of all filings and notifications electronically.

194. Some commenters argue that E-rate applicants and service providers should have the option of filing paper copies. We recognize that applicants vary widely in connectivity, technical resources and administrative resources, and a limited exemption to our mandatory electronic filing requirement would allow applicants and USAC to reap many of the benefits of electronic filing while allowing the program to respond to the needs of all applicants and service providers. We will therefore allow applicants who can demonstrate that they have insufficient resources to make electronic filings to file paper copies of applications and other documents. We direct the Bureau and OMD, working with USAC, to determine the circumstances under which applicants may be exempt from this mandatory electronic filing requirement and the process for applicants to seek permission to file paper copies of documents.

6. Enabling Direct Connections Between Schools and Libraries

195. In the interest of promoting access to high-speed broadband connections in the simplest and most efficient manner possible, we take action consistent with a suggestion made by the ALA, and supported by other commenters, that we allow rural schools and libraries eligible for E-rate support to establish direct connections for the purpose of accessing high-speed broadband services. As ALA explains, in many rural communities, a library with low bandwidth may be in close proximity (e.g., across the street) to a school with significantly higher bandwidth and could be easily added to the school WAN. We find that allowing these connections will afford some schools and libraries that presently lack access to high-speed broadband the opportunity to quickly and efficiently benefit from such connections.

196. We recognize that it will likely be necessary to waive some of our rules to allow E-rate support for such connections. However, the record is not fulsome enough for us to determine with certainty what rules will need to be waived for each particular direct connection project. We therefore

encourage applicants to file waiver requests for the purpose of seeking E-rate support for such direct connections. We also direct the Bureau to expeditiously consider such waiver requests and, as appropriate, to waive our rules, as is necessary, to grant such requests, including the rule that would otherwise require both the school and the library to apply for E-rate support. We further direct the Bureau to report back to us on any such projects so that we may consider whether to amend our rules in the future to allow for such projects.

B. Simplifying Discount Rate Calculations

197. In the interest of making the E-rate application process and other E-rate processes fast, simple and efficient, we adopt four changes to the procedures for applicants to use in calculating their E-rate discounts. First, we require school districts to calculate and use district-wide discount rates for each application, thus eliminating the need to calculate different discount rates depending on which schools in a district are receiving services. Second, we modernize our definitions of "rural" and "urban" for purposes of determining applicants' discount rates. Third, we provide direction on how schools and school districts that receive funding under the new community eligibility provision (CEP) of the United States Department of Agriculture's (USDA) National School Lunch Program (NSLP) should calculate their E-rate discount rates. Finally, in order to protect the program against waste, fraud and abuse, we also direct USAC to require schools that calculate discount eligibility based on projections from school-wide surveys to base their E-rate discount rate only on the surveys they actually collect.

1. Adopting District-Wide Discount Rates

198. Consistent with our goal of making the E-rate application process and other E-rate processes fast, simple and efficient, we adopt the proposal in the *E-rate Modernization NPRM* to amend our rules to require each school district to calculate and use a single district-wide discount rate, rather than calculating and using building-by-building discount rates. This requirement will be effective beginning with funding year 2015. The record demonstrates that E-rate applicants find the current building-by-building discount calculation approach to be confusing, time-consuming, and fraught with the potential for errors. It is also a significant source of delay in USAC's

application review process. We agree with commenters that adopting a district-wide discount rate will simplify and streamline the E-rate application process for applicants as well as USAC, while creating a more equitable system of determining the discount schools and libraries should receive for eligible services.

199. Requiring the use of a district-wide discount ensures the E-rate program provides higher discount rates for higher poverty school districts, while more closely matching the E-rate funding mechanism to the actual accounting practices and organizational structure of school districts. Individual schools within a district do not have their own local taxing authority nor do they generally have a budget that is legally separate from the district's budget. Moreover, the tax base of a district is the entire district population, not just the population associated with a subset of schools. While individual schools within a district may have more or fewer student eligible for NSLP, school districts develop consolidated budgets and allocate resources to support comprehensively all of the district's students. As such, we find that it is more appropriate to gauge a district's relative need for funding based on its entire student population.

200. The record demonstrates the many benefits of adopting a district-wide discount. For example, districts will no longer need to complete multiple steps to calculate the appropriate discounts for each building. Districts will also no longer need to file separate FCC Forms 471 for different combinations of schools that produce different discount level requests. Also, by using a district-wide discount, districts will no longer have to make difficult determinations regarding non-instructional facilities (NIFs). For example, adopting a district-wide discount approach will eliminate the confusing and possibly misleading calculation for a NIF with a classroom that requires the applicant to rely on a snapshot of students on a single day for the specific discount. Consortia applications will also be simpler and more equitable since each member of the consortium, whether an individual school or an entire district, will use the discount level for the district in which it is located, calculated on a district-level basis.

201. The record also demonstrates that a district-wide approach will reduce the administrative burden on USAC by removing the need to identify and verify each school's discount rate. Commenters note that associated USAC efforts to validate the calculation are

time-consuming. Reducing the burden of verifying each school's discount rate should speed the review process, and therefore help speed funding decisions to the benefit of all applicants.

202. Modifying our rules so that schools calculate a district-wide discount rate should also benefit libraries, which already use the district-wide discount rate of the school districts in which they are located. We anticipate libraries will benefit from this change because school districts will have to determine their district-wide discount rates to submit their FCC Forms 471 and thus libraries should have an easier time getting that information in a timely fashion from the relevant school districts.

203. Several commenters express concern that a district-wide discount calculation could deprive schools and libraries in higher poverty neighborhoods of internal connection funding. However, the revisions we make in this Report and Order to funding internal connections will provide predictable support for internal connections for all schools and libraries, and provide a greater discount for higher poverty school districts and the libraries located in those school districts.

204. School districts rarely purchase broadband on a school or neighborhood basis but instead buy on a larger scale. Cost efficiencies and budgeting realities result in school districts purchasing telecommunications and Internet services on a district-wide basis or in geographic areas within that district that align with service provider availability. Although commenters also express concern that school districts will be unable to target E-rate resources to schools and libraries in lower-income neighborhoods if a district-wide discount calculation is in place, the Commission's decision to adopt a district-wide discount will not affect school districts' ability to apply for funding based on the connectivity needs of individual schools. We also take this opportunity to remind school districts that they are under an obligation to ensure "that the most disadvantaged schools and libraries that are treated as sharing in the service receive an appropriate share of benefits from those services."

205. In light of the benefits to school districts and libraries of adopting a district-wide discount, we revise § 54.505(b)(4) of our rules to require school districts to calculate their E-rate discounts by: Dividing the total number of students in the district eligible for NSLP by the total number of students in the district and comparing that single

figure against the discount matrix to determine the school district's discount rate for E-rate supported services. All public schools and libraries within that public school district will receive the same discount rate. For the sake of simplicity, library systems that have branches or outlets in more than one public school district should use the address of the central outlet or main administrative office to determine which public school district the library system is in, and should use that public school district's discount rate when applying as a library system or on behalf of individual libraries within that system.

206. In addition, our adoption of a district-wide discount allows us to permit applicants to add schools within their districts that were inadvertently omitted from a district's E-rate funding applications even post-commitment. Our rules currently require schools and libraries to list on their FCC Forms 471 every entity that will receive E-rate supported services under that application. Even when a school district is intending to use the requested service to serve all the schools in its district, it sometimes inadvertently omits an eligible school from the application. The district has the opportunity to correct such an omission if it catches the error when it receives from USAC its Receipt Acknowledgement Letter (RAL), which summarizes the district's application and funding requested. However, if it does not notice the error by the time its funding commitment letter is issued, but it is later discovered by USAC as part of a post-commitment review—for example, an audit or other assessment—that eligible school technically is not allowed to receive E-rate funding, under the current procedures, even though it is an eligible school and the services were meant to serve the entire district. This procedure exists because omission of one school from a discount rate calculation can change the discount the district receives, as each school's discount is calculated separately. With our move to a district-wide discount calculation, districts will be including all the students from all their schools in their discount calculation. As such, we find that an applicant can add eligible schools within its district that were inadvertently omitted from its applications, even after the deadline for making changes to the FCC Form 471.

207. We recognize that some schools use a federally approved alternative mechanism, such as a survey alternative, to determine their discount percentage. We do not anticipate any negative ramifications to districts with any such schools because, regardless of

the method a school district uses to establish its discount, it must determine a district-wide percentage of students eligible for the free and reduced lunch program from the total student population.

208. While we do not specifically define the term "school district," an applicant should determine its discount using all E-rate eligible students in schools that fall under the control of a central educational agency. Commenters note that private and charter schools generally operate independently of the main public school district and are individually responsible for their finances and administration. We therefore agree with commenters that these educational entities and local public school districts should calculate their discounts separately if not affiliated financially or operationally with a school district. Independent charter schools, private schools, and other eligible educational facilities that are seeking support for more than one school building should factor all students in facilities under the control of their central administrative agency into the discount calculation.

209. Consortia applications will continue to use a simple average of all members' discounts to calculate the overall consortium discount, but will now be required to use each member's district-wide discount. Consistent with current Commission rules, we require that for services used only by an individual institution, the applicable discount rate for the services will be determined based on the applicable district-wide discount rate for that individual school or library, not the consortium's overall discount rate. We realize that there will be shared services that cannot, without substantial difficulty, be identified with particular users or be allocated directly to particular entities. In those situations, we will continue to require the state, school district, or library system to "strive to ensure" that each school and library in a consortium receives the full benefit of the discount on shared services to which it is entitled. Using the district-wide average, should help prevent consortia applications from being held up due to changes in building status, such as school closings and consolidations, so long as there is no indication of waste, fraud or abuse at the invoicing stage. We realize, however, that using a district-wide average in place of the individual consortium member discount still does not provide a "weighted average" for consortia members that better indicates the discount to which members would have been entitled if they had applied

for E-rate services on their own. Therefore, we seek additional comment on a proposal to use a weighted average in the accompanying FNPRM.

2. Updating the Definition of “Rural”

210. In keeping with our commitment to ensuring that rural schools and libraries are able to afford E-rate supported services, we adopt the U.S. Census Bureau (Census) definitions of rural and urban for the purpose of determining whether an E-rate applicant qualifies for an additional rural discount. In so doing, we adopt one of the approaches the Commission proposed in the *E-rate Modernization NPRM* to modernizing the definitions of “rural” and “urban” in § 54.505(b)(3) of our rules. While many commenters supported an alternative proposal to adopt the U.S. Department of Education’s National Center for Education Statistics (NCES) definition for determining whether a school is rural, we find that using Census data avoids several administrative challenges that would arise were we to adopt the NCES classification system. For instance, commenters noted that there can be delays in obtaining NCES codes for new schools and some E-rate-eligible entities do not have an NCES designation. Using Census data ensures that all E-rate-eligible schools and libraries, even those without an NCES code (or the library-equivalent FCES code) can readily determine their urban/rural status. We also note that the Census definition fully overlaps with the geography defined by NCES as “rural.”

211. Our current definition of “rural” for purposes of the E-rate program is outdated. By contrast, the Census data is relatively new and, the urban boundaries are adjusted annually to remain current. The Census definition classifies a particular location as rural or urban based on population density and geography, and other criteria involving non-residential development. For the 2010 Census, the Census Bureau defined urban areas as the densely settled core of census tracts or blocks that met minimum population density requirements (50,000 people or more), along with adjacent territories of at least 2,5000 people that link to the densely settled core. “Rural” encompasses all population, housing, and territory not included within an urban area. Therefore, beginning with funding year 2015, schools and libraries located in areas that are not located in urban areas, as defined by the most recent decennial Census, will be considered rural for the purposes of the E-rate program. We direct USAC to post a tool on its Web

site that will allow schools and libraries to obtain information regarding whether they are classified as urban or rural under the new definition. We note that the Census Bureau already offers a tool on its Web site that provides the urban/rural status of any U.S. address.

212. In the *E-rate Modernization NPRM*, we sought comment on how to treat school districts and library systems with a combination of rural and urban schools and libraries. We conclude that any school district or library system that has a majority of schools or libraries in a rural area that meets the statutory definition of eligibility for E-rate support will qualify for the additional rural discount. This approach mirrors the methodology used by NCES to determine whether a school district is urban or rural and is supported by commenters in the record. This approach is also consistent with the method the FCC uses in the rural health care program context. We further direct USAC to take steps to minimize the burden of reporting rural or urban classification in conjunction with the requirement to phase in all-electronic filing over the next three years.¹ For example, USAC should ensure that the FCC Form 471 allows applicants to certify that the location of the schools or libraries listed have not changed from the previous year’s filing, or does not require applicants to provide classification data in cases where the applicant’s status as “urban” or “rural” does not affect their discount rate.

3. Addressing the NSLP Community Eligibility Provision

213. Consistent with our goal of making the E-rate application process and other E-rate processes fast, simple and efficient, beginning with funding year 2015, we will allow schools and school districts that are participating in the NSLP CEP to use the same approach for determining their E-rate discount rate as they use for determining their NSLP reimbursement rate. Specifically, schools utilizing the CEP shall calculate their student eligibility for free or reduced priced lunches by multiplying the percentage of directly certified students by the CEP national multiplier. This number shall then be applied to the discount matrix to determine a school district’s discount for eligible E-rate services. Libraries’ discount percentages will continue to be based on that of the public school district in which they are physically located. Schools participating in the CEP will not be considered to have a greater than 100 percent student eligibility for

purposes of determining the district-wide discount rate for E-rate services, priority access to category two services, or for any other E-rate purposes.

214. Traditionally, schools that participate in the NSLP collect, on an annual basis, individual eligibility applications from each of their students seeking free or reduced-priced lunches. Schools use the NSLP eligibility data for many other purposes, including calculating an applicant’s E-rate discount rate. However, schools increasingly have the option of participating in the CEP, which neither requires nor permits schools to collect individual student eligibility information. A school is eligible for community eligibility if at least 40 percent of its students are “directly certified,” i.e., identified for free meals through means other than household applications (for example, students directly certified as receiving benefits from the Supplemental Nutrition Assistance Program). To compensate for low-income families not reflected in the direct certification data, schools apply a standard, national factor (multiplier), currently set at 1.6, to their identified student population in order to determine the total percentage of meals for which they will be reimbursed by the USDA. Schools are required to renew their direct certification numbers once every four years. If, during the four-year cycle, a school’s percentage of identified students increases, the school may use the higher percentage in determining USDA reimbursement. If the percentage of identified students decreases, the school may continue to use the original percentage for the remainder of the four-year eligibility period.

215. We agree with commenters who recommend that we allow schools and school districts that participate in the CEP to determine their discount rate for E-rate by treating the number of directly certified students multiplied by the national multiplier as the percentage of students eligible for NSLP. The record demonstrates that the CEP provides an estimate of the percentage of students eligible for free and reduced-price meals in participating schools comparable to the poverty percentage that would be obtained in a non-CEP school, and does not unfairly inflate E-rate discounts on eligible services. As E-Rate Central notes in its comments, schools and school districts electing the CEP already have high low-income populations and most are already at the current 90 percent discount level. Thus, a multiplier that raises the percentage of students eligible for NSLP from, for example, an 81 percent to 89 percent level, would have

¹ See *supra* section VI.A.5.

no effect on the school's E-rate discount rate.

216. Allowing schools and school districts that participate in the CEP to use their CEP data to determine eligibility for E-rate support will also, as the West Virginia Department of Education explains, help to alleviate confusion and additional burdens on schools and school districts by eliminating the need for additional paperwork and administrative costs. Moreover, by relying on a USDA change intended in large part to reduce paperwork and other burdens on schools, this decision is consistent with our other measures taken in this Report and Order to alleviate applicant administrative burdens. Additionally, as the State E-rate Coordinators' Alliance notes, permitting the use of the CEP data for E-rate discount eligibility provides a predictable means of calculating the discount level for new CEP schools.

217. We realize that the USDA has the statutory authority to change the multiplier to a number between 1.3 and 1.6, and to apply a different multiplier for different schools or local educational agencies beginning on or after July 1, 2014. To simplify schools' administrative burden, we will require CEP applicants to use the same multiplier under the E-rate program for determining their poverty level as required by the USDA for their reimbursement under the CEP. Unlike applicants to the current E-rate program, CEP applicants will not be required to calculate their discount rate every year, but for clarity and administrative ease, shall use the calculation that they use during the course of a four-year CEP cycle. However, if an applicant adjusts that calculation for purposes of the CEP, it must also adjust it for purposes of E-rate support.

4. Modifying the Requirements for Using School-Wide Income Surveys

218. We also direct USAC to revise its procedures to require schools and school districts seeking to calculate their E-rate discounts by using a school-wide income survey to base their E-rate discount rate only on the surveys they actually collect beginning with funding year 2015. Under the E-rate program, instead of using NSLP data, schools and school districts can choose to use a federally approved alternative mechanism, such as a survey, as a proxy for poverty when calculating E-rate support. Until now, a school using a school-wide income survey needed to collect surveys from at least 50 percent of its students. It could then calculate the percentage of NSLP-eligible students from the returned surveys, and project

that percentage of eligibility for the entire school population, for purposes of determining its discount rate under the E-rate program. We agree with New Hope that allowing schools to use an alternative method for determining eligibility is essential. However, we are concerned that permitting schools to project the number of NSLP-eligible students may provide an artificially higher eligibility percentage. Therefore, in order to help protect against incentives to artificially inflate eligibility percentages, beginning with funding year 2015, schools electing to use a school wide income survey to determine the number of students eligible for NSLP must calculate their discount based only the surveys returned by their students that demonstrate that those students would qualify for participation in the free and reduced school lunch program to determine the school's discount level. For example, a school with 100 students that distributes and collects 60 surveys showing that 52 students meet the eligibility criteria for the free and reduced lunch program would be considered to have a 52 percent eligibility percentage and therefore qualify for an 80 percent discount rate.

219. We considered the proposal offered by the Alaska Department of Education & Early Development to allow projections based on a 75 percent return rate. We agree that would be more accurate than the current 50 percent return rate. But, on balance, we find that it is more equitable to base the discount rate for schools that conduct surveys on the actual number of students whose survey responses demonstrate that they meet the NSLP criteria. We thus direct USAC to amend its procedures to require actual survey results for determining a school's NSLP-eligibility from the surveys. We also take this opportunity to remind applicants that, upon request from any representative (including any auditor) appointed by a state education department, USAC, the Commission, or any local, state or federal agency with jurisdiction over the entity, they are required to provide copies of all returned surveys supporting their discount eligibility.

C. Simplifying the Invoicing and Disbursement Processes

220. Consistent with our goal of reducing the administrative burdens on applicants and service providers, we take several measures related to the invoicing process to simplify and expedite funding disbursement. First, we revise our rules to allow an applicant that pays the full cost of the E-rate supported services to a service

provider to receive direct reimbursement from USAC. Second, we adopt rules codifying USAC's existing invoice filing deadline, while allowing applicants to request and automatically receive a single one-time 120-day extension of the invoicing deadline. Taken together, these modifications will yield an invoicing process that is simpler and clearer, while still providing protections against waste, fraud, and abuse.

1. Allowing Direct Invoicing

221. In response to widespread support in the comments, we revise §§ 54.504 and 54.514 of our rules to allow an applicant that pays the full cost of the E-rate supported services to a service provider to receive direct reimbursement from USAC, beginning with funding year 2016. We agree with the commenters who argue this change would improve the administrative process by eliminating unnecessary invoicing steps, which in turn would speed disbursements to schools and libraries. We also agree with applicants and service providers who argue that revising the invoicing process to allow applicants to receive direct reimbursement from USAC is a common-sense approach to simplifying the administration of the E-rate program. Further, we agree with those commenters who argue that providing an option for reimbursing schools and libraries that have paid upfront for E-rate supported services is consistent with section 254 of the Act. As the courts have found, section 254 of the Act gives the Commission broad discretion in administering the E-rate program. Nothing in the Act prevents the payment of universal service funds directly to applicants in the schools and libraries program. The only requirement in the Act regarding reimbursement is that the service provider is made whole, either through an offset against their contribution obligations, or using the Commission's universal service mechanism. We find that the revised Billed Entity Reimbursement (BEAR) process we adopt today provides sufficient documentation to demonstrate that the applicant has fully paid for the requested services and is entitled to direct reimbursement from USAC, thereby satisfying Congress's statutory requirement.

222. Under the current E-rate program's Billed Entity Applicant Reimbursement (BEAR) process, if an applicant agrees to pay its service provider in full before USAC has reimbursed the provider for E-rate supported services, the applicant must submit an FCC Form 472 (BEAR form)

to USAC but only after getting approval from the service provider. After making a funding commitment and receiving invoices for eligible services, USAC will then process payments to the service provider, which in turn passes funds through to the applicant. The BEAR process requires significant coordination between the applicant and service provider for the applicant to receive payment. If a service provider is unable to process a BEAR form because, for example, the service provider has gone out of business or has filed for bankruptcy protection prior to the applicant submitting the BEAR form, another service provider (the Good Samaritan) can agree to serve as the conduit and receive payment from USAC for purposes of passing the payment through to the applicant. By removing the requirement that E-rate funds pass through the service provider to the applicant, we remove the need for a Good Samaritan procedure.

223. This change we adopt today will only affect applicants that avail themselves of the BEAR process and elect to pay the entire cost of the discounted service in advance of USAC's reimbursement. Some commenters express concern that applicants should continue to have the option of the SPI process, paying only their portion of the price of eligible services and requiring the service provider to wait for payment from USAC for the remaining portion of the price of the eligible services. We take this opportunity to reiterate that E-rate applicants continue to have the option of electing BEAR or SPI reimbursement. Thus, when the applicant pays only the discounted cost of the services directly to the service provider through the SPI process, the service provider will continue to file a SPI form with USAC to receive reimbursement.

224. Under the revised BEAR process we adopt today, an applicant filing an FCC Form 471 and selecting reimbursement through the BEAR process will be required to have on file with USAC current and accurate information concerning where payments should be sent. In accordance with the Debt Collection Improvement Act of 1996 (DCIA), all universal service disbursements must be made by electronic funds transfer. Accordingly, schools and libraries that choose to utilize the BEAR process must provide USAC with bank account information from a bank that can accept electronic transfers of money. We expect there will be additional information that USAC will also need to process payment to applicants, and we direct the Bureau and OMD to work with USAC to collect

from applicants that use the new BEAR process all the information USAC will need to process such payments while protecting the integrity of the program. Further, for purposes of program integrity, payments will not be made to consultants, but only directly to schools or libraries.

225. We direct the Bureau and OMD to work with USAC to implement the new direct reimbursement process. We recognize that the current FCC Form 472 requires a service provider to certify that: (1) It must remit the discount amount authorized by the fund administrator to the Billed Entity Applicant; (2) it must remit payment of the approved discount amount to the Billed Entity Applicant; and (3) it is in compliance with the rules and orders governing the schools and libraries universal service support program. Because service providers will no longer serve as a pass-through for payment, they will not be required to approve every FCC Form 472. However, the service provider certifications on the current FCC Form 472 are crucial for protecting the program against waste, fraud and abuse. We therefore revise § 54.504(f) of our rules by adding a paragraph requiring each service provider to certify on the FCC Form 473 that the service provider has complied with the E-rate invoicing rules and regulations. Specifically, the service provider will be required to certify that the bills or invoices that it provides to applicants are accurate, and that the services it provides are eligible for E-rate support.

2. Adopting Invoicing Deadlines

226. We also codify USAC's existing invoice filing deadline to allow applicants to request and automatically receive a single one-time 120-day extension of the invoicing deadline. Codifying the invoicing deadline will provide certainty to applicants and service providers. Providing certainty on invoicing deadlines will also allow USAC to de-obligate committed funds immediately after the invoicing deadline has passed, providing increased certainty about how much funding is available to be carried forward in future funding years. The invoice deadline extension rule will be effective beginning in funding year 2014.

227. As the Commission has explained, filing deadlines are necessary for the efficient administration of the E-rate program. We agree with commenters that the current invoice deadline—the latter of 120 days after the last day to receive service, or the date of the FCC Form 486 notification

letter—provides the right balance between the need for efficient administration of the program, and the need to ensure that applicants and service providers have sufficient time to finish their own invoicing processes. We also agree that codifying the existing deadline provides certainty to program participants, while generally providing sufficient flexibility based on an applicant's or service provider's specific circumstances.

228. At the same time, we agree with commenters that there may be circumstances beyond some applicants' or service providers' control that could prevent them from meeting the 120-day invoice filing deadline. Therefore, we adopt a rule allowing applicants to seek and receive from USAC a single one-time invoicing extension for any given funding request, provided the extension request is made no later than what would otherwise be the deadline for submitting invoices: The latter of 120 days after the last day to receive service, or the date of the FCC Form 486 notification letter. By adopting such a rule, we eliminate the need for applicants and service providers to identify a reason for the requested extension and the need for USAC to determine whether such timely requests meet certain criteria, which will ease the administrative burden of invoice extension requests on USAC. In the interest of efficient program administration, USAC shall grant no other invoicing deadline extensions. Moreover, in considering waivers of our new invoicing rules, we find that it is generally not in the public interest to waive our invoicing rules, and therefore the Bureau should grant waivers of those rules in extraordinary circumstances.

229. In light of our codification of the invoice deadline, we direct USAC, working with OMD, to determine the appropriate de-obligation date for funds against which an invoice has not been received for a particular funding year, taking into account the existence of pending appeals, holds, investigations, and other matters. Our goal is to have USAC establish, working with OMD, a date on which the bulk of undisbursed funds from a given funding year can be de-obligated. By de-obligating those funding commitments, USAC will have greater certainty with respect to the amount of funds from past funding years that can be carried forward for future requests.

230. With respect to appeals or requests to USAC or the Commission seeking permission to submit invoices after USAC's invoicing deadline for earlier funding years, we direct USAC

and the Bureau to consider whether such requests were made in good faith and within a reasonable time period after the services were provided or whether other extraordinary circumstances exist that support such a request. In the *Canon-McMillan Order*, the Bureau established a precedent of granting relief to petitioners demonstrating good faith in complying with the invoicing deadline despite submitting very late invoices. At the same time the Bureau recognized that invoice filing deadlines are necessary for the efficient administration of the E-rate program and that as schools and libraries continue to participate in the E-rate program, participants should “become more experienced with the invoice requirements of the program.” Until now, USAC had allowed unlimited invoice extensions under certain circumstances, and the Bureau, acting on delegated authority, has been generous when deciding invoicing deadline appeals. As reflected in the rules we adopt today, we find that while USAC’s procedures were reasonable in the past, firmer limits on invoicing extensions are required at this time. Therefore, with respect to invoicing deadlines for earlier funding years, absent extraordinary circumstances justifying the failure to timely submit invoices, we expect the Bureau and USAC to deny any requests or appeals seeking an invoicing deadline extension of more than 12 months after the last date to invoice.

D. Creating a Tribal Consultation, Training, and Outreach Program

231. As part of our overall effort to modernize the E-rate program, we take several actions today to raise the profile of the E-rate program and ensure that Tribal schools and libraries are able to participate effectively in the program. Specifically, we commit to enhance the Commission’s Tribal consultation, training, and outreach, and we seek to gain a better understanding of the current state of connectivity among Tribal schools and libraries to enable the Commission to take steps that will reduce the digital divide and promote high-speed broadband connectivity to Tribal lands.

232. The Commission recognizes the historic federal trust relationship and responsibilities it has with federally recognized Tribal Nations. Accordingly, we have a longstanding policy of promoting Tribal self-sufficiency and economic development and have developed a record of helping to ensure that Tribal Nations and those living on Tribal lands obtain access to communications services. It is well

documented that communities on Tribal lands have historically had less access to both basic and advanced forms of telecommunications services than any other segment of the U.S. population. We recognize that a digital divide persists and extends not only to residents of Tribal lands, but also to Tribal anchor institutions such as schools and libraries located on Tribal lands. Given the challenges many Tribal Nations face in lacking access to even basic services, we recognize the important role of universal service support and the E-rate program in helping provide telecommunications services to and on remote and underserved Tribal lands. We thus take these actions today to gain a better understanding of the current state of connectivity among Tribal schools and libraries and to empower Tribal Nations to meet the high-speed broadband needs of their schools and libraries.

233. *Consultation.* We find that more extensive government-to-government consultation with Tribal Nations is necessary to understand both the need for E-rate support on Tribal lands and how to successfully connect Tribal schools and libraries with modern high-speed communications. One benefit of consultation will be the opportunity to collect better data on the connectivity needs of Tribal schools and libraries. While some data was provided in response to the *E-rate Modernization NPRM*, we need to know much more about connectivity and the use of E-rate support on Tribal lands. In particular, we recognize the need for data on how E-rate has impacted connectivity on Tribal lands to date, which Tribal schools and libraries receive E-rate and for what uses, what services are available to those schools and libraries, what the price structure is on Tribal lands, what speeds are available and needed on Tribal lands, and where broadband infrastructure still is most needed. We recognize that, without Tribal-specific data, we cannot make the most informed decisions for provision of E-rate support to Tribal Nations.

234. Many Tribal commenters agree and advocate for the need to collect data to ensure that all schools and libraries, including Tribal schools and libraries, have affordable access to high-speed broadband that supports digital learning and educational mandates. NCAI also advocates for coordination with certain inter-Tribal organizations to collect the necessary data. We therefore delegate authority to the Office of Native Affairs and Policy (ONAP), in coordination with the Bureau and OMD, to conduct government-to-government consultation for the purpose of determining how best

to gather data on current connectivity levels and help the Commission better determine the need for E-rate support among Tribal schools and libraries. We expect that ONAP’s experience in working with Tribal Nations will inform their decisions on how best to conduct this consultation, in coordination with the Bureau and OMD. Our hope is that, by gaining a better understanding of the current state of connectivity among Tribal schools and libraries, we will be in a better position to more effectively meet the high-speed broadband needs of the Native Nations of the United States.

235. *Training.* We find that training tailored to the specific and often unique needs of Tribal schools and libraries is necessary to ensure that Tribal Nations are informed and empowered to participate fully in the E-rate program. In response to several Tribal-specific inquiries in the *E-rate Modernization NPRM*, commenters stressed the need to adopt E-rate program reforms that serve to increase access to high-speed broadband technologies for Tribal lands, specifically Tribal anchor institutions, and encouraged both rule changes and administrative changes. For example, NNTRC requested Tribal-specific training and outreach to ensure that Tribal schools and libraries are aware of the E-rate program and have at least a basic understanding of the E-rate process, services, and eligibility, all to ensure that Tribal Nations have equal access to participation in the E-rate program. The Confederated Tribes of the Colville Reservation stated that Tribal Nations are unable to fully benefit from the E-rate program due to a lack of available training on the program. Further, a 2011 study of Tribal libraries by the Association of Tribal Archives, Libraries, and Museums (ATALM) found that the top three barriers to Tribal library participation in the E-rate program are lack of awareness of the program, uncertainty about eligibility, and a complicated application process. This study found that, while 46 percent of Tribal libraries are the only source of free public Internet access in their communities, less than 5 percent of Tribal libraries benefit from the E-rate program (as compared to 51 percent of public libraries).

236. USAC currently conducts a series of applicant trainings during the fall of each year, usually located in large cities and focused on issues of general importance to E-rate applicants. As part of the training we adopt today, we envision that ONAP, in coordination with USAC, would help provide E-rate specific training to schools and libraries. We therefore direct USAC to work with ONAP to develop and provide Tribal-

specific E-rate training targeted to Tribal schools and libraries. We direct ONAP, in consultation with the Bureau and OMD to advise USAC on the most appropriate timing and mechanism to provide such training, outreach, and materials to Tribal schools and libraries. We also direct ONAP to coordinate with USAC E-rate training materials when mobilizing the Native Learning Lab.

237. *Outreach.* In conjunction with the training described, we direct USAC, in close coordination with and under the guidance of ONAP, the Bureau, and OMD, to create a formal Tribal liaison at USAC to assist with Tribal-specific outreach, training, and assistance. We expect that USAC's Tribal liaison will coordinate closely with ONAP, the Bureau, and OMD on all Tribal training initiatives. The Tribal liaison's responsibilities will require direct communication with Tribal schools and libraries throughout the E-rate process and will include helping to conduct and coordinate Tribal-specific trainings and training materials, initiating and responding to Tribal "Helping Applicants To Succeed" requests and visits, fielding questions from Tribal schools and libraries regarding the E-rate program and process, and attending national and regional Tribal conferences or meetings where Tribal school and libraries are present. The creation of this position at USAC and the required coordination with ONAP, the Bureau, and OMD, will further our goal of ensuring that Tribal schools and libraries can participate fully and effectively in the E-rate program.

E. Requiring Filing of Appeals With USAC

238. Consistent with our goal of streamlining the administration of the E-rate program and improving the E-rate appeals process, we revise § 54.719 of our rules to require parties aggrieved by an action taken by a division of USAC, including the Schools and Libraries Division, to first seek review of that decision by USAC before filing an appeal with the Commission. The standards for evaluating the merits of these appeals will be unchanged and affected parties will still have the right to seek Commission review of such decisions, as provided in the Commission's rules. This rule change will become effective 30 days after the publication of this Report and Order in the **Federal Register**.

239. Currently, any party may seek Commission review of an action taken by USAC without first seeking review of that decision by USAC. One result of the current system is a growing number of

E-rate appeals with the Commission. While we have made a concerted effort to reduce the backlog of appeals, a backlog remains and we continue to receive numerous appeals on a monthly basis. The appeals backlog is further exacerbated by the fact that aggrieved parties often decline to seek review from USAC and appeal directly to the Commission.

240. We find that requiring parties to first file appeals of USAC decisions with USAC itself before seeking Commission review will improve efficiency in the appeals process. It will reduce the number of appeals coming to the Commission, and allow USAC an initial opportunity to correct any of its own errors, and to receive and review additional information provided by aggrieved parties without having to involve the Commission staff. We remind parties filing an appeal with USAC to follow USAC's appeals guidelines and provide USAC with all relevant information and documentation necessary for USAC to make an informed decision on an appeal. USAC cannot waive our rules; therefore parties seeking only a waiver of our rules are not governed by this requirement, but instead must seek relief directly from the Commission or the Bureau.

F. Directing USAC To Adopt Additional Measures To Improve the Administration of the E-Rate Program

241. We adopt a number of additional measures to ease the burden upon applicants, expedite commitments, and ensure that all applicants receive complete and timely information to help inform their decisions regarding E-rate purchases. In particular, we adopt a specific application review and funding commitment target for all category one funding requests as a performance measure in evaluating our progress towards this goal; continue to work on modernizing USAC's E-rate Information Technology (IT) systems; require the publishing of all non-confidential E-rate data in open, electronic formats; and direct USAC to make its communications simpler and clearer so that applicants and service providers will have no difficulty understanding the information and direction that USAC provides them.

1. Speeding Review of Applications, Commitment Decisions and Funding Disbursements

242. Many of the rule revisions we adopt today will help speed review of applications, funding commitment decisions and funding disbursements. In this proceeding, we received many comments complaining about the delay

in receiving funding commitments. We recognize that those delays have real and substantial impacts on schools and libraries' willingness and ability to purchase high-speed broadband services. USAC, working closely with OMD, has already committed to overhaul its application review process for the current funding year 2014 and the initial results are impressive. As noted, by July 1, 2013, USAC had only committed approximately \$181 million in support. By contrast, as of July 1, 2014, USAC has already committed approximately \$1.22 billion in support. In 2013, USAC did not reach \$1 billion in commitments until October.

243. We applaud the work that USAC and OMD have done in the last few months. Building on that momentum, we adopt a specific application review and funding commitment target for all funding requests as a performance measure in evaluating our progress toward meeting our goal of streamlining the administrative process. We believe that establishing a specific target will help to hold USAC further accountable for more quickly reviewing and issuing category one funding commitments in future funding years. We again remind applicants that failure to timely respond to requested information by USAC could delay the issuance of a commitment, and we therefore encourage applicants to respond expeditiously and completely to all information and documentation requests by USAC.

2. Modernizing USAC's E-Rate Information Technology Systems

244. We also direct USAC and OMD to continue to work on modernizing USAC's E-rate IT systems. Numerous commenters express frustration with USAC's E-rate IT systems, and recommend that USAC create an online portal with pre-populated information for returning applicants and service providers to reduce administrative burden and errors, and to provide applicants and service providers with easy access to historic information as well as information about the status of their funding and invoice requests.

245. OMD and the Bureau have already begun the process of working with USAC to modernize its E-rate IT systems. We recognize that this is a long-term project. We therefore direct OMD and the Bureau to continue USAC's IT modernization work, with a focus on easing the administrative burdens on E-rate applicants and service providers, while protecting against waste, fraud and abuse, and on collecting high-quality data that will assist us in measuring our progress

towards the goals we adopt today. We note that measuring progress towards our goals, particularly the first two goals, will require USAC to collect a wealth of data from applicants and service providers in a manner that will allow us the flexibility to manipulate and analyze that data in a variety of ways.

3. Requiring Open and Accessible E-Rate Data

246. We direct USAC to timely publish through electronic means all non-confidential E-rate data in open, standardized, electronic formats, consistent with the principles of the Office of Management and Budget's (OMB's) Open Data Policy. USAC must provide the public with the ability to easily view and download non-confidential E-rate data, for both individual datasets and aggregate data. We further direct USAC to design open and accessible data solutions in a modular format to allow extensibility and agile development, such as providing for the use of application programming interfaces (APIs) where appropriate and releasing the code, as open source code, where feasible. USAC's solutions must be accessible to people with disabilities, as is required for federal agency information technology. The solutions must also, on a going-forward basis, incorporate international standards and best practices for security and privacy controls.

247. The record supports USAC releasing E-rate data in as open a manner as possible so that the schools and libraries that receive support from the program and their associated service providers can track the status of their E-rate applications and requests for reimbursement and so that they and the public at large can benefit from greater program transparency and public accountability. Making non-confidential E-rate data open and accessible will allow members of the public to develop new and innovative methods to analyze E-rate data, which will benefit all stakeholders, including this Commission as we continue to improve the program. Releasing E-rate data in this manner should also enable greater integration with other datasets such as those maintained by NCES and those maintained by IMLS. This integration will create opportunities for new and innovative analyses about connectivity to and within our nation's schools and libraries.

4. Adopting Plain Language Review

248. We are concerned that many of USAC's standard communications are

excessively lengthy and difficult to understand. Because the E-rate program has a wide range of large and small stakeholders, USAC should be particularly careful to communicate in a simple, direct, and user-friendly manner. Plain language is an essential tool for communicating information effectively to the public about decisions and benefits. We therefore direct USAC to work with OMD to implement a full review and revision, as appropriate, of USAC's most commonly used correspondence using plain language, before the beginning of funding year 2016. We find that this review and the improvement to USAC's communications that result will reduce applicant confusion and ensure parties have the information necessary to comply with or appeal USAC's decisions. These requirements will be effective beginning in funding year 2015.

G. Protecting Against Waste Fraud and Abuse

249. While we seek to modernize the E-rate program and ease the burdens upon applicants and service providers, we are extremely mindful of our commitment to ensuring the program's integrity by protecting against waste, fraud and abuse. We believe that proper documentation is crucial for demonstrating applicant and vendor compliance with E-rate rules, and for uncovering waste, fraud and abuse in the program, whether through compliance audits or investigations. Therefore, we revise our document retention requirements and compliance procedures and clarify that applicants must permit inspectors on their premises as described below.

1. Extending the E-Rate Document Retention Requirements

250. We revise § 54.516(a) of our rules to extend the document retention period from five to 10 years after the latter of the last day of the applicable funding year, or the service delivery deadline for the funding request. As the Commission explained in the *E-rate Modernization NPRM*, the current five year document retention requirement is not adequate for purposes of litigation under the False Claims Act (FCA), which can involve conduct that occurred substantially more than five years prior to the filing of a complaint. We recognize commenters' concerns that extending the mandatory document retention period to 10 years may create additional administrative burdens and incur document storage costs. However, we agree with the San Jacinto School District that electronic storage of

documents can dramatically reduce these costs. We therefore strongly encourage schools, libraries, consortia, and service providers to take advantage of digital storage mechanisms. As the Commission did in both the *USF/ICC Transformation Order and FNPRM*, 76 FR 78384, December 16, 2011, and *Lifeline Reform Order*, 77 FR 12784, March 2, 2012, we conclude that the benefits to the integrity of the program outweigh the burdens of extending our document retention rules to 10 years. Our action thus ensures greater consistency across the various universal service programs.

251. We also modify § 54.516 of our rules to refer to "schools, libraries and consortia" rather than just "schools and libraries," thereby providing clarity that all applicants (as well as all service providers) are required to comply with our document retention and other auditing rules.

2. Allowing Access for Inspections

252. To support E-rate compliance audits and enforcement investigations, we also revise § 54.516 to clarify that E-rate applicants and service providers must permit auditors, investigators, attorneys or any other person appointed by a state education department, USAC, the Commission or any local, state or federal agency with jurisdiction over the entity to enter their premises to conduct E-rate compliance inspections. Allowing auditors and investigative personnel to inspect an applicant's premises is necessary to ensure that the applicant is in compliance with E-rate rules. The list of entities entitled to appoint representatives to enter the premises of an applicant or service provider parallels the list of entities entitled to seek production of records from applicants and service providers.

VI. Delegation To Revise Rules

253. Given the complexities associated with modernizing the E-rate program, modifying our rules, and the other programmatic changes we adopt in this Report and Order, we delegate authority to the Bureau to make any further rule revisions as necessary to ensure the changes to the program adopted in this Report and Order are reflected in our rules. This includes correcting any conflicts between new and/or revised rules and existing rules as well as addressing an omissions or oversights. If any such rule changes are warranted the Bureau shall be responsible for such change. We note that any entity that disagrees with a rule change made on delegated authority will have the opportunity to file an

Application for Review by the full Commission.

VII. Procedural Matters

A. Final Regulatory Flexibility Analysis

254. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Federal Communications Commission (Commission) included an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in the *E-rate Modernization NPRM* in WC Docket No. 13–184. The Commission sought written public comment on the proposals in the *E-rate Modernization NPRM*, including comment on the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

B. Need for, and Objectives of, the Proposed Rule

255. The Commission is required by section 254 of the Communications Act of 1934, as amended, to promulgate rules to implement the universal service provisions of section 254. On May 8, 1997, the Commission adopted rules to reform its system of universal service support mechanisms so that universal service is preserved and advanced as markets move toward competition. Specifically, under the schools and libraries universal service support mechanism, also known as the E-rate program, eligible schools, libraries, and consortia that include eligible schools and libraries may receive discounts for eligible telecommunications services, Internet access, and internal connections.

256. In July 2013, the Commission issued a Notice of Proposed Rulemaking seeking public comment on proposals to update the E-rate program to focus on 21st Century broadband needs of schools and libraries. Then, in February 2014, the Wireline Competition Bureau issued a Public Notice seeking focused comment on issues raised in the *E-rate Modernization NPRM*. In this Report and Order, the Commission adopts a number of the proposals put forward in the *E-rate Modernization NPRM* and discussed in the *E-rate Modernization Public Notice*.

257. This Report and Order continues the Commission's efforts to promote broadband access for schools and libraries. In it, we adopt goals and measures for the E-rate program to (1) ensure affordable access to high-speed broadband sufficient to support digital learning in schools and robust connectivity for all libraries, (2) maximize the cost-effectiveness of

spending for E-rate supported purchases, and (3) make the E-rate application process and other E-rate processes fast, simple and efficient.

258. The rule changes we adopt support these goals and fall into three conceptual categories. First, we ensure affordable access to high-speed broadband sufficient to support digital learning in schools and robust connectivity for all libraries by providing more reliable and equitable funding for broadband without schools and libraries and by phasing down support for legacy services. Second, we maximize the cost-effectiveness of spending for E-rate supported purchases by increasing transparency in the purchasing process, encouraging consortium purchasing, and amending the lowest corresponding price (LCP) rule. Third, we make the E-rate application process and other E-rate processes fast, simple, and efficient by simplifying the application process; simplifying discount rate calculations; simplifying the invoicing and disbursement process; requiring filing of appeals with USAC; directing USAC to adopt additional measures to streamline the administration of the E-rate program; and protecting against waste, fraud, and abuse.

C. Summary of Significant Issues Raised by Public Comments to the IRFA

259. No comments specifically addressed the IRFA.

D. Description and Estimate of the Number of Small Entities to Which the Proposed Rules May Apply

260. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted. The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.” In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act. A small business concern is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA). Nationwide, there are a total of approximately 28.2 million small businesses, according to the SBA. A “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”

261. Nationwide, as of 2002, there were approximately 1.6 million small organizations. The term “small governmental jurisdiction” is defined generally as “governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.” Census Bureau data for 2002 indicate that there were 87,525 local governmental jurisdictions in the United States. We estimate that, of this total, 84,377 entities were “small governmental jurisdictions.” Thus, we estimate that most governmental jurisdictions are small.

262. Small entities potentially affected by the proposals herein include eligible schools and libraries and the eligible service providers offering them discounted services.

263. *Schools and Libraries.* As noted, “small entity” includes non-profit and small government entities. Under the schools and libraries universal service support mechanism, which provides support for elementary and secondary schools and libraries, an elementary school is generally “a non-profit institutional day or residential school that provides elementary education, as determined under state law.” A secondary school is generally defined as “a non-profit institutional day or residential school that provides secondary education, as determined under state law,” and not offering education beyond grade 12. For-profit schools and libraries, and schools and libraries with endowments in excess of \$50,000,000, are not eligible to receive discounts under the program, nor are libraries whose budgets are not completely separate from any schools. Certain other statutory definitions apply as well. The SBA has defined for-profit, elementary and secondary schools and libraries having \$6 million or less in annual receipts as small entities. In funding year 2007, approximately 105,500 schools and 10,950 libraries received funding under the schools and libraries universal service mechanism. Although we are unable to estimate with precision the number of these entities that would qualify as small entities under SBA's size standard, we estimate that fewer than 105,500 schools and 10,950 libraries might be affected annually by our action, under current operation of the program.

264. *Telecommunications Service Providers.* First, neither the Commission nor the SBA has developed a size standard for small incumbent local exchange services. The closest size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is

small if it has 1,500 or fewer employees. According to Commission data, 1,307 incumbent carriers reported that they were engaged in the provision of local exchange services. Of these 1,307 carriers, an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees. Thus, under this category and associated small business size standard, we estimate that the majority of entities are small. We have included small incumbent local exchange carriers in this RFA analysis. A “small business” under the RFA is one that, inter alia, meets the pertinent small business size standard (e.g., a telephone communications business having 1,500 or fewer employees), and “is not dominant in its field of operation.” The SBA’s Office of Advocacy contends that, for RFA purposes, small incumbent local exchange carriers are not dominant in their field of operation because any such dominance is not “national” in scope. We have therefore included small incumbent carriers in this RFA analysis, although we emphasize that this RFA action has no effect on the Commission’s analyses and determinations in other, non-RFA contexts.

265. Second, neither the Commission nor the SBA has developed a definition of small entities specifically applicable to providers of interexchange services (IXCs). The closest applicable definition under the SBA rules is for wired telecommunications carriers. This provides that a wired telecommunications carrier is a small entity if it employs no more than 1,500 employees. According to the Commission’s 2010 Trends Report, 359 companies reported that they were engaged in the provision of interexchange services. Of these 300 IXCs, an estimated 317 have 1,500 or fewer employees and 42 have more than 1,500 employees. Consequently, the Commission estimates that most providers of interexchange services are small businesses.

266. Third, neither the Commission nor the SBA has developed a definition of small entities specifically applicable to competitive access services providers (CAPs). The closest applicable definition under the SBA rules is for wired telecommunications carriers. This provides that a wired telecommunications carrier is a small entity if it employs no more than 1,500 employees. According to the 2010 Trends Report, 1,442 CAPs and competitive local exchange carriers (competitive LECs) reported that they were engaged in the provision of competitive local exchange services. Of

these 1,442 CAPs and competitive LECs, an estimated 1,256 have 1,500 or fewer employees and 186 have more than 1,500 employees. Consequently, the Commission estimates that most providers of competitive exchange services are small businesses.

267. *Wireless Telecommunications Carriers (except Satellite)*. Since 2007, the Census Bureau has placed wireless firms within this new, broad, economic census category. Prior to that time, such firms were within the now-superseded categories of “Paging” and “Cellular and Other Wireless Telecommunications.” Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees. Because Census Bureau data are not yet available for the new category, we will estimate small business prevalence using the prior categories and associated data. For the category of Paging, data for 2002 show that there were 807 firms that operated for the entire year. Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more. For the category of Cellular and Other Wireless Telecommunications, data for 2002 show that there were 1,397 firms that operated for the entire year. Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more. Thus, we estimate that the majority of wireless firms are small.

268. Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. As noted, the SBA has developed a small business size standard for Wireless Telecommunications Carriers (except Satellite). Under the SBA small business size standard, a business is small if it has 1,500 or fewer employees. According to the 2010 Trends Report, 413 carriers reported that they were engaged in wireless telephony. Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees. We have estimated that 261 of these are small under the SBA small business size standard.

269. *Common Carrier Paging*. As noted, since 2007 the Census Bureau has placed paging providers within the broad economic census category of Wireless Telecommunications Carriers (except Satellite). Prior to that time, such firms were within the now-superseded category of “Paging.” Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees. Because Census Bureau data

are not yet available for the new category, we will estimate small business prevalence using the prior category and associated data. The data for 2002 show that there were 807 firms that operated for the entire year. Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more. Thus, we estimate that the majority of paging firms are small.

270. In addition, in the *Paging Second Report and Order*, the Commission adopted a size standard for “small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments. A small business is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years. The SBA has approved this definition. An initial auction of Metropolitan Economic Area (“MEA”) licenses was conducted in the year 2000. Of the 2,499 licenses auctioned, 985 were sold. Fifty-seven companies claiming small business status won 440 licenses. A subsequent auction of MEA and Economic Area (“EA”) licenses was held in the year 2001. Of the 15,514 licenses auctioned, 5,323 were sold. One hundred thirty-two companies claiming small business status purchased 3,724 licenses. A third auction, consisting of 8,874 licenses in each of 175 EAs and 1,328 licenses in all but three of the 51 MEAs, was held in 2003. Seventy-seven bidders claiming small or very small business status won 2,093 licenses.

271. Currently, there are approximately 74,000 Common Carrier Paging licenses. According to the most recent Trends in Telephone Service, 291 carriers reported that they were engaged in the provision of “paging and messaging” services. Of these, an estimated 289 have 1,500 or fewer employees and two have more than 1,500 employees. We estimate that the majority of common carrier paging providers would qualify as small entities under the SBA definition.

272. *Internet Service Providers*. The 2007 Economic Census places these firms, whose services might include voice over Internet protocol (VoIP), in either of two categories, depending on whether the service is provided over the provider’s own telecommunications facilities (e.g., cable and DSL ISPs), or over client-supplied telecommunications connections (e.g., dial-up ISPs). The former are within the category of Wired Telecommunications Carriers, which has an SBA small business size standard of 1,500 or fewer employees. The latter are within the

category of All Other

Telecommunications, which has a size standard of annual receipts of \$25 million or less. The most current Census Bureau data for all such firms, however, are the 2002 data for the previous census category called Internet Service Providers. That category had a small business size standard of \$21 million or less in annual receipts, which was revised in late 2005 to \$23 million. The 2002 data show that there were 2,529 such firms that operated for the entire year. Of those, 2,437 firms had annual receipts of under \$10 million, and an additional 47 firms had receipts of between \$10 million and \$24,999,999. Consequently, we estimate that the majority of ISP firms are small entities.

273. *Vendors of Internal Connections: Telephone Apparatus Manufacturing.* The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be standalone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, LAN modems, multi-user modems, and other data communications equipment, such as bridges, routers, and gateways." The SBA has developed a small business size standard for Telephone Apparatus Manufacturing, which is: all such firms having 1,000 or fewer employees. According to Census Bureau data for 2002, there were a total of 518 establishments in this category that operated for the entire year. Of this total, 511 had employment of under 1,000, and an additional seven had employment of 1,000 to 2,499. Thus, under this size standard, the majority of firms can be considered small.

274. *Vendors of Internal Connections: Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing.* The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: Transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment." The SBA has developed a small business size standard for firms in this category, which is: All such firms

having 750 or fewer employees.

According to Census Bureau data for 2002, there were a total of 1,041 establishments in this category that operated for the entire year. Of this total, 1,010 had employment of under 500, and an additional 13 had employment of 500 to 999. Thus, under this size standard, the majority of firms can be considered small.

275. *Vendors of Internal Connections: Other Communications Equipment Manufacturing.* The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment)." The SBA has developed a small business size standard for Other Communications Equipment Manufacturing, which is having 750 or fewer employees. According to Census Bureau data for 2002, there were a total of 503 establishments in this category that operated for the entire year. Of this total, 493 had employment of under 500, and an additional 7 had employment of 500 to 999. Thus, under this size standard, the majority of firms can be considered small.

E. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

276. Several of our rule changes will result in additional recordkeeping requirements for small entities. For all of those rule changes, we have determined that the benefit the rule change will bring for the program outweighs the burden of the increased recordkeeping requirement. Other rule changes decrease recordkeeping requirements for small entities.

1. Increase in Projected Reporting, Recordkeeping and Other Compliance Requirements

277. *Compliance burdens.* All of the rules we implement impose some burden on small entities by requiring them to become familiar with the new rule to comply with it. For many new rules, such as those codifying invoicing deadlines, increasing price transparency, phasing down support for voice services, eliminating support for telephone features, and reducing the maximum discount rate for internal connections, the burden of becoming familiar with the new rule in order to comply with it is the only burden the rule imposes.

278. *Connectivity metrics.* The metrics we adopt will require applicants to provide data on connectivity, demand

costs and LAN/WLAN capacity. The benefit collection of this data will provide us by giving us a better understanding of how the E-rate program is accomplishing its goals outweighs the burden it will impose on small entities.

279. *Internal connections funding.* Our rule change to provide more funding for internal connections will increase recordkeeping burdens on small entities who previously did not apply for funding for internal connections because funding was not available to them. The benefit of receiving funding for internal connections clearly outweighs the burden on applying for this funding.

280. *Preferred master contracts.* Our rule change to allow the Bureau to designate preferred master contracts that applicants would be required to include in their bid evaluations even if the master contract was not submitted as a bid would increase recordkeeping requirements on small entities because it would require many small E-rate applicants to consider an additional bid in their evaluations. The significant savings the Fund and applicants would realize from including preferred master contracts in bid evaluations justifies this added burden.

281. *Price transparency.* We allow applicants to opt out of public disclosure by USAC of their E-rate pricing data if such disclosure would violate a state law, local rule, or an existing long-term contract by certifying and citing to the specific statute, rule or other restriction barring publication of pricing data. Making this certification will increase recordkeeping requirements for those applicants who wish to opt out, but allowing the certification is necessary to ensure consistency between E-rate rules and state and local laws.

282. *Determining rurality for school districts.* Requiring applicants to determine whether a majority of their schools are in rural areas increases recordkeeping requirements. The benefit to rural applicants of receiving an additional discount justifies this additional burden.

283. *Document retention.* Extending the retention period from five to 10 years after the latter of the last day of the applicable funding year, or the last day of delivery of services for that funding year increases recordkeeping requirements and costs for E-rate recipients and service providers. Our interest in combatting waste, fraud and abuse by litigating matters under the False Claims Act, which can involve conduct that relates back substantially

more than five years, justifies this additional burden.

284. *Electronic filing.* Although filing electronically is easier than filing on paper for most applicants, we recognize that requiring electronic filing may impose additional burdens for applicants who are unfamiliar with the electronic filing process. Nonetheless, the efficiencies for USAC that requiring electronic filing creates outweigh the burden on applicants.

285. *Maximum term for multi-year contracts.* Our requirement that contracts for E-rate supported services not exceed five years, which an exception permitting contracts for deployment of new fiber to schools or libraries to not exceed ten years, could increase reporting requirements for some applicants by requiring them to negotiate contracts more frequently than they otherwise would. Our interest in promoting cost-effective purchasing justifies this additional burden.

286. *Requiring filing of appeals with USAC.* Requiring applicants to first file appeals with USAC before appealing decision to the Commission could increase recordkeeping requirements by requiring applicants who planned to appeal directly to the Commission to file an additional appeal before doing so. The benefit of reducing the Commission's E-rate appeal backlog outweighs this burden.

287. *Changes to ESL.* We recognize that the changes to focus the category two Eligible Services List (ESL) on broadband may require applicants to cost allocate newly-ineligible services. E-rate recipients have always been required to cost allocate ineligible components. In many instances, cost allocation should not be difficult because these services appear on separate line items on bills. Even when ineligible services do not appear as separate line items on bills, the savings to the program from these changes to the ESL outweighs the administrative burden of cost allocation for program participants.

2. Decrease in Projected Reporting, Recordkeeping and Other Compliance Requirements

288. *Focusing support on broadband.* Limiting internal connections support to routers, switches, wireless access points, internal cabling, wireless controller systems, data protection services, and the software supporting each of these components used to distribute high-speed broadband throughout school buildings and libraries will decrease recordkeeping requirements for small entities because they will no longer go through the

application process for services that have been made ineligible.

289. *Simplified application process for multi-year contracts.* Our new procedure for funding commitments for multi-year contracts for priority one services that is no longer than five years will alleviate reporting burdens on small entities because, in many circumstances, applicants will only be required to submit an FCC Form 471 for the first year of a multi-year contract. For subsequent years, applicants will be permitted to use a streamlined application process.

290. *Eliminating technology plan requirements.* We eliminate the technology plan requirement for applicants seeking category two services, which will decrease recordkeeping requirements.

291. *Exempting certain low-dollar purchases from competitive bidding rules.* The exemption to our competitive bidding rules that allows E-rate applicants to purchase certain business-class Internet access reduces recordkeeping requirements related to the competitive bidding process. Although the requirement that applicants certify that they have purchased services that are eligible for an exemption imposes a minimal recordkeeping requirement, the overall effect of the rule change is a reduction in recordkeeping requirements.

292. *Preferred master contracts.* We also permit applicants to take services on a preferred master contract designated by the Bureau without filing an FCC Form 470. This reduces the burdens associated with filing an FCC Form 470 and conducting a bid evaluation.

293. *District-wide discount rates.* The requirement that applicants use a district-wide data to determine their discount rates will reduce reporting requirements because districts will no longer have to perform a discount rate calculation for each school within a district.

294. *Invoicing.* Applicants who submit a Billed Entity Application for Reimbursement (BEAR) Form may now receive reimbursement directly from USAC, rather than having the service provider serve as an intermediary. This alleviates reporting requirements on the service provider.

295. *Plain language review.* The plain language review of USAC's standard forms that we order make it easier for small entities to comply with our rules by reducing applicant confusion and ensuring that entities have the information necessary to comply with our rules.

3. Steps Taken To Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

296. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities."

297. This rulemaking could impose minimal additional burdens on small entities. We considered alternatives to the rulemaking changes that increase projected reporting, recordkeeping and other compliance requirements for small entities.

4. Alternatives Permitted

298. *Electronic filing.* To accommodate applicants who have insufficient connectivity or other administrative resources to file electronically with USAC, we permit an exception to our electronic filing requirement that allows those applicants to file applicants and other documents with USAC using paper.

299. *Document retention.* We encourage applicants to take advantage of electronic storage of documents to mitigate the additional expense our increase of the document retention requirement from five to 10 years imposes.

5. Alternatives Considered and Rejected

300. *Connectivity metrics.* The best source for obtain the data we need for connectivity metrics is applicants. Although we could obtain this data from service providers, it is less burdensome for an applicant to provide connectivity data for itself than it would be for a service provider to furnish it for all of its customers who receive E-rate support.

F. Report to Congress

301. The Commission will send a copy of this Report and Order, including this FRFA, in a report to be sent to Congress pursuant to the SBREFA. In addition, the Commission will send a copy of the Report and Order, including the FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the

Report and Order and the FRFA (or summaries thereof) will also be published in the **Federal Register**.

G. Paperwork Reduction Act Analysis

302. This Report and Order contains new information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104–13. It will be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the revised information collection requirements contained in this proceeding. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107–198, the Commission previously sought specific comment on how it might further reduce the information collection burden on small business concerns with fewer than 25 employees.

H. Congressional Review Act

303. The Commission will include a copy of this Report and Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act.

304. For additional information on this proceeding, contact James Bachtell at (202) 418–2694 or Kate Dumouchel at (202) 418–1839 in the Telecommunications Access Policy Division, Wireline Competition Bureau.

VIII. Ordering Clauses

305. Accordingly, it is ordered, that pursuant to the authority contained in sections 1 through 4, 201 through 205, 254, 303(r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151–154, 201–205, 254, 303(r), and 403, and section 706 of the Telecommunications Act of 1996, 47 U.S.C. § 1302, this Report and Order is Adopted effective September 18, 2014, except to the extent expressly addressed below.

306. It is further ordered, that pursuant to the authority contained in sections 1 through 4, 201 through 205, 254, 303(r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. 151–154, 201–205, 254, 303(r), and 403, and section 706 of the Telecommunications Act of 1996, 47 U.S.C. 1302, Part 54 of the Commission's rules, 47 CFR part 54, is Amended as set forth below, and such rule amendments shall be effective September 18, 2014 of the Report and Order in the **Federal Register**, except for §§ 54.502(b)(2) through (3) and (5), 54.503(c), 54.504(a) and (f), 54.507(d),

54.514(a), 54.516(a) through (c), and 54.720(a), which are subject to the Paperwork Reduction Act and will become effective upon announcement in the **Federal Register** of OMB approval of the subject information collection requirements; and except for amendments in §§ 54.500, 54.501(a)(1), 54.502(a), 54.507(a) through (c) and (e) through (f), 54.516, and 54.570(b) and (c), which shall become effective on July 1, 2015; and amendments in §§ 54.504(f)(4) and (f)(5) and 54.514(c), which shall become effective on July 1, 2016.

307. It is further ordered that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, Shall Send a copy of the Report and Order, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

Federal Communications Commission.

Sheryl D. Todd,
Deputy Secretary.

Final Rules

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR part 54 as follows:

PART 54—UNIVERSAL SERVICE

Subpart A—General Information

■ 1. The authority citation for part 54 continues to read as follows:

Authority: Sections 1, 4(i), 5, 201, 205, 214, 219, 220, 254, 303(r), and 403 of the Communications Act of 1934, as amended, and section 706 of the Communications Act of 1996, as amended; 47 U.S.C. 151, 154(i), 155, 201, 205, 214, 219, 220, 254, 303(r), 403, and 1302 unless otherwise noted.

■ 2. Amend § 54.5 by revising the definition of “Internet access” to read as follows:

§ 54.5 Terms and definitions.

* * * * *

Internet access. “Internet access” includes the following elements:

(1) The transmission of information as common carriage; and

(2) The transmission of information as part of a gateway to an information service, when that transmission does not involve the generation or alteration of the content of information, but may include data transmission, address translation, protocol conversion, billing management, introductory information content, and navigational systems that enable users to access information services, and that do not affect the

presentation of such information to users.

* * * * *

Subpart F—Universal Service Support for Schools and Libraries

■ 3. Amend § 54.500 by removing the alphabetical paragraph designations and adding in alphabetical order definitions for “basic maintenance,” “consortium,” “internal connections,” “managed internal broadband services,” and “voice services” to read as follows:

§ 54.500 Terms and definitions.

Basic maintenance. A service is eligible for support as a “basic maintenance” service if, but for the maintenance at issue, the internal connection would not function and serve its intended purpose with the degree of reliability ordinarily provided in the marketplace to entities receiving such services. Basic maintenance services do not include services that maintain equipment that is not supported by E-rate or that enhance the utility of equipment beyond the transport of information, or diagnostic services in excess of those necessary to maintain the equipment's ability to transport information.

* * * * *

Consortium. A “consortium” is any local, statewide, regional, or interstate cooperative association of schools and/or libraries eligible for E-rate support that seeks competitive bids for eligible services or funding for eligible services on behalf of some or all of its members. Consortium may also include health care providers eligible under subpart G, and public sector (governmental) entities, including, but not limited to, state colleges and state universities, state educational broadcasters, counties, and municipalities, although such entities are not eligible for support. Eligible schools and libraries may not join consortia with ineligible private sector members unless the pre-discount prices of any services that such consortium receives are generally tariffed rates.

* * * * *

Internal connections. A service is eligible for support as a component of an institution's “internal connections” if such service is necessary to transport or distribute broadband within one or more instructional buildings of a single school campus or within one or more non-administrative buildings that comprise a single library branch.

* * * * *

Managed internal broadband services. A service is eligible for support as

“managed internal broadband services” if provided by a third party for the operation, management, and/or monitoring of the eligible components of a school or library local area network (LAN) and wireless LAN.

* * * * *

Voice services. “Voice services” include local phone service, long distance service, plain old telephone service (POTS), radio loop, 800 service, satellite telephone, shared telephone service, Centrex, wireless telephone service such as cellular, interconnected voice over Internet protocol (VoIP), and the circuit capacity dedicated to providing voice services.

* * * * *

■ 4. Amend § 54.501 by revising the section heading and paragraph (a)(1), by removing paragraph (c)(1), and by redesignating paragraphs (c)(2) and (3) as paragraphs (c)(1) and (2), respectively.

The revisions read as follows:

§ 54.501 Eligible recipients.

(a) * * *

(1) Only schools meeting the statutory definition of “elementary school” and “secondary school” as defined in § 54.500 of this subpart, and not excluded under paragraphs (a)(2) or (3) of this section shall be eligible for discounts on telecommunications and other supported services under this subpart.

* * * * *

■ 5. Revise § 54.502 to read as follows:

§ 54.502 Eligible services.

(a) *Supported services.* All supported services are listed in the Eligible Services List as updated annually in accordance with paragraph (b) of this section. The services in this subpart will be supported in addition to all reasonable charges that are incurred by taking such services, such as state and federal taxes. Charges for termination liability, penalty surcharges, and other charges not included in the cost of taking such service shall not be covered by the universal service support mechanisms. The supported services fall within the following general categories:

(1) *Category one.* Telecommunications services, telecommunications, and Internet access, as defined in § 54.5 and described in the Eligible Services List are category one supported services.

(2) *Category two.* Internal connections, basic maintenance and managed internal broadband services as defined in § 54.500 and described in the

Eligible Services List are category two supported services.

(b) *Funding years 2015 and 2016.* Libraries, schools, or school districts with schools that receive funding for category two services in funding years 2015 and/or 2016 shall be eligible for support pursuant to paragraphs (b)(1) through (6) of this section.

(1) *Five-year budget.* Each eligible school or library shall be eligible for a budgeted amount of support for category two services over a five-year funding cycle. Excluding support for internal connections received prior to funding year 2015, each school or library shall be eligible for the total available budget less any support received for category two services in the prior four funding years.

(2) *School budget.* Each eligible school shall be eligible for support for category two services up to a pre-discount price of \$150 per student over a five-year funding cycle. Applicants shall provide the student count per school, calculated at the time that the discount is calculated each funding year. New schools may estimate the number of students, but shall repay any support provided in excess of the maximum budget based on student enrollment the following funding year.

(3) *Library budget.* Each eligible library shall be eligible for support for category two services, up to a pre-discount price of \$2.30 per square foot over a five-year funding cycle. Libraries shall provide the total area for all floors, in square feet, of each library outlet separately, including all areas enclosed by the outer walls of the library outlet and occupied by the library, including those areas off-limits to the public.

(4) *Funding floor.* Each eligible school and library will be eligible for support for category two services up to at least a pre-discount price of \$9,200 over five funding years.

(5) *Requests.* Applicants shall request support for category two services for each school or library based on the number of students per school building or square footage per library building. Category two funding for a school or library may not be used for another school or library. If an applicant requests less than the maximum budget available for a school or library, the applicant may request the remaining balance in a school’s or library’s category two budget in subsequent funding years of a five year cycle. The costs for category two services shared by multiple eligible entities shall be divided reasonably between each of the entities for which support is sought in that funding year.

(6) *Non-instructional buildings.* Support is not available for category two services provided to or within non-instructional school buildings or separate library administrative buildings unless those category two services are essential for the effective transport of information to or within one or more instructional buildings of a school or non-administrative library buildings, or the Commission has found that the use of those services meets the definition of educational purpose, as defined in § 54.500. When applying for category two support for eligible services to a non-instructional school building or library administrative building, the applicant shall allocate the cost of providing services to one or more of the eligible school or library buildings that benefit from those services being provided.

(c) *Funding year 2017 and beyond.* Absent further action from the Commission, each eligible library or school in a school district, which did not receive funding for category two services in funding years 2015 and/or 2016, shall be eligible for support for category two services, except basic maintenance services, no more than twice every five funding years. For the purpose of determining eligibility, the five-year period begins in any funding year in which the school or library receives discounted category two services other than basic maintenance services. If a school or library receives category two services other than basic maintenance services that are shared with other schools or libraries (for example, as part of a consortium), the shared services will be attributed to the school or library in determining whether it is eligible for support.

Support is not available for category two services provided to or within non-instructional school buildings or separate library administrative buildings unless those category two services are essential for the effective transport of information to or within one or more instructional buildings of a school or non-administrative library buildings, or the Commission has found that the use of those services meets the definition of educational purpose, as defined in § 54.500.

(d) *Eligible services list process.* The Administrator shall submit by March 30 of each year a draft list of services eligible for support, based on the Commission’s rules for the following funding year. The Wireline Competition Bureau will issue a Public Notice seeking comment on the Administrator’s proposed eligible services list. The final list of services eligible for support will be released at least 60 days prior to the

opening of the application filing window for the following funding year.

■ 6. Amend § 54.503 by revising paragraphs (c), (d)(2)(i), and (d)(4) and adding paragraph (e) to read as follows:

§ 54.503 Competitive bidding requirements.

* * * * *

(c) *Posting of FCC Form 470.* (1) An eligible school, library, or consortium that includes an eligible school or library seeking bids for eligible services under this subpart shall submit a completed FCC Form 470 to the Administrator to initiate the competitive bidding process. The FCC Form 470 and any request for proposal cited in the FCC Form 470 shall include, at a minimum, the following information, to the extent applicable with respect to the services requested:

(i) A list of specified services for which the school, library, or consortium requests bids; and

(ii) Sufficient information to enable bidders to reasonably determine the needs of the applicant.

(2) The FCC Form 470 shall be signed by a person authorized to request bids for eligible services for the eligible school, library, or consortium, including such entities.

(i) A person authorized to request bids on behalf of the entities listed on an FCC Form 470 shall certify under oath that:

(A) The schools meet the statutory definition of “elementary school” or “secondary school” as defined in § 54.500 of these rules, do not operate as for-profit businesses, and do not have endowments exceeding \$50 million.

(B) The libraries or library consortia eligible for assistance from a State library administrative agency under the Library Services and Technology Act of 1996 do not operate as for-profit businesses and have budgets that are completely separate from any school (including, but not limited to, elementary and secondary schools, colleges, and universities).

(C) Support under this support mechanism is conditional upon the school(s) and library(ies) securing access to all of the resources, including computers, training, software, maintenance, internal connections, and electrical connections necessary to use the services purchased effectively.

(ii) A person authorized to both request bids and order services on behalf of the entities listed on an FCC Form 470 shall, in addition to making the certifications listed in paragraph (c)(2)(i) of this section, certify under oath that:

(A) The services the school, library, or consortium purchases at discounts will be used primarily for educational purposes and will not be sold, resold, or transferred in consideration for money or any other thing of value, except as allowed by § 54.513.

(B) All bids submitted for eligible products and services will be carefully considered, with price being the primary factor, and the bid selected will be for the most cost-effective service offering consistent with § 54.511.

(3) The Administrator shall post each FCC Form 470 that it receives from an eligible school, library, or consortium that includes an eligible school or library on its Web site designated for this purpose.

(4) After posting on the Administrator’s Web site an eligible school, library, or consortium FCC Form 470, the Administrator shall send confirmation of the posting to the entity requesting service. That entity shall then wait at least four weeks from the date on which its description of services is posted on the Administrator’s Web site before making commitments with the selected providers of services. The confirmation from the Administrator shall include the date after which the requestor may sign a contract with its chosen provider(s).

(d) * * *

(2) * * *

(i) The terms “school, library, or consortium” include all individuals who are on the governing boards of such entities (such as members of a school committee), and all employees, officers, representatives, agents, consultants or independent contractors of such entities involved on behalf of such school, library, or consortium with the Schools and Libraries Program of the Universal Service Fund (E-rate Program), including individuals who prepare, approve, sign or submit E-rate applications, or other forms related to the E-rate Program, or who prepare bids, communicate or work with E-rate service providers, E-rate consultants, or with USAC, as well as any staff of such entities responsible for monitoring compliance with the E-rate Program; and

* * * * *

(4) Any service provider may make charitable donations to an eligible school, library, or consortium that includes an eligible school or library in the support of its programs as long as such contributions are not directly or indirectly related to E-rate procurement activities or decisions and are not given by service providers to circumvent competitive bidding and other E-rate

program rules, including those in paragraph (c)(2)(i)(C) of this section, requiring schools and libraries to pay their own non-discount share for the services they are purchasing.

(e) *Exemption to competitive bidding requirements.* An applicant that seeks support for commercially available high-speed Internet access services for a pre-discount price of \$3,600 or less per school or library annually is exempt from the competitive bidding requirements in paragraphs (a) through (c) of this section.

(1) Internet access, as defined in § 54.5, is eligible for this exemption only if the purchased service offers at least 100 Mbps downstream and 10 Mbps upstream.

(2) The Chief, Wireline Competition Bureau, is delegated authority to lower the annual cost of high-speed Internet access services or raise the speed threshold of broadband services eligible for this competitive bidding exemption, based on a determination of what rates and speeds are commercially available prior to the start of the funding year.

■ 7. Revise § 54.504 to read as follows:

§ 54.504 Requests for services.

(a) *Filing of the FCC Form 471.* An eligible school, library, or consortium that includes an eligible school or library seeking to receive discounts for eligible services under this subpart shall, upon entering into a signed contract or other legally binding agreement for eligible services, submit a completed FCC Form 471 to the Administrator.

(1) The FCC Form 471 shall be signed by the person authorized to order eligible services for the eligible school, library, or consortium and shall include that person’s certification under oath that:

(i) The schools meet the statutory definition of “elementary school” or “secondary school” as defined in § 54.500 of this subpart, do not operate as for-profit businesses, and do not have endowments exceeding \$50 million.

(ii) The libraries or library consortia eligible for assistance from a State library administrative agency under the Library Services and Technology Act of 1996 do not operate as for-profit businesses and whose budgets are completely separate from any school (including, but not limited to, elementary and secondary schools, colleges, and universities).

(iii) The entities listed on the FCC Form 471 application have secured access to all of the resources, including computers, training, software, maintenance, internal connections, and electrical connections, necessary to

make effective use of the services purchased, as well as to pay the discounted charges for eligible services from funds to which access has been secured in the current funding year. The billed entity will pay the non-discount portion of the cost of the goods and services to the service provider(s).

(iv) The entities listed on the FCC Form 471 application have complied with all applicable state and local laws regarding procurement of services for which support is being sought.

(v) The services the school, library, or consortium purchases at discounts will be used primarily for educational purposes and will not be sold, resold, or transferred in consideration for money or any other thing of value, except as allowed by § 54.513.

(vi) The entities listed in the application have complied with all program rules and acknowledge that failure to do so may result in denial of discount funding and/or recovery of funding.

(vii) The applicant understands that the discount level used for shared services is conditional, for future years, upon ensuring that the most disadvantaged schools and libraries that are treated as sharing in the service, receive an appropriate share of benefits from those services.

(viii) The applicant recognizes that it may be audited pursuant to its application, that it will retain for ten years any and all worksheets and other records relied upon to fill out its application, and that, if audited, it will make such records available to the Administrator.

(ix) Except as exempted by § 54.503(e), all bids submitted to a school, library, or consortium seeking eligible services were carefully considered and the most cost-effective bid was selected in accordance with § 54.503 of this subpart, with price being the primary factor considered, and it is the most cost-effective means of meeting educational needs and technology goals.

(2) All pricing and technology infrastructure information submitted as part of an FCC Form 471 shall be treated as public and non-confidential by the Administrator unless the applicant specifies a statute, rule, or other restriction, such as a court order or an existing contract limitation barring public release of the information.

(i) Contracts and other agreements executed after adoption of this rule may not prohibit disclosure of pricing or technology infrastructure information.

(ii) The exemption for existing contract limitations shall not apply to

voluntary extensions or renewals of existing contracts.

(b) *Mixed eligibility requests.* If 30 percent or more of a request for discounts made in an FCC Form 471 is for ineligible services, the request shall be denied in its entirety.

(c) *Rate disputes.* Schools, libraries, and consortia including those entities, and service providers may have recourse to the Commission, regarding interstate rates, and to state commissions, regarding intrastate rates, if they reasonably believe that the lowest corresponding price is unfairly high or low.

(1) Schools, libraries, and consortia including those entities may request lower rates if the rate offered by the carrier does not represent the lowest corresponding price.

(2) Service providers may request higher rates if they can show that the lowest corresponding price is not compensatory, because the relevant school, library, or consortium including those entities is not similarly situated to and subscribing to a similar set of services to the customer paying the lowest corresponding price.

(d) *Service substitution.* (1) The Administrator shall grant a request by an applicant to substitute a service or product for one identified on its FCC Form 471 where:

(i) The service or product has the same functionality;

(ii) The substitution does not violate any contract provisions or state or local procurement laws;

(iii) The substitution does not result in an increase in the percentage of ineligible services or functions; and

(iv) The applicant certifies that the requested change is within the scope of the controlling FCC Form 470, including any associated Requests for Proposal, for the original services.

(2) In the event that a service substitution results in a change in the pre-discount price for the supported service, support shall be based on the lower of either the pre-discount price of the service for which support was originally requested or the pre-discount price of the new, substituted service.

(3) For purposes of this rule, the two categories of eligible services are not deemed to have the same functionality as one another.

(e) *Mixed eligibility services.* A request for discounts for a product or service that includes both eligible and ineligible components must allocate the cost of the contract to eligible and ineligible components.

(1) *Ineligible components.* If a product or service contains ineligible components, costs must be allocated to

the extent that a clear delineation can be made between the eligible and ineligible components. The delineation must have a tangible basis, and the price for the eligible portion must be the most cost-effective means of receiving the eligible service.

(2) *Ancillary ineligible components.* If a product or service contains ineligible components that are ancillary to the eligible components, and the product or service is the most cost-effective means of receiving the eligible component functionality, without regard to the value of the ineligible component, costs need not be allocated between the eligible and ineligible components. Discounts shall be provided on the full cost of the product or service. An ineligible component is “ancillary” if a price for the ineligible component cannot be determined separately and independently from the price of the eligible components, and the specific package remains the most cost-effective means of receiving the eligible services, without regard to the value of the ineligible functionality.

(3) The Administrator shall utilize the cost allocation requirements of this paragraph in evaluating mixed eligibility requests under paragraph (e)(1) of this section.

(f) *Filing of FCC Form 473.* All service providers eligible to provide telecommunications and other supported services under this subpart shall submit annually a completed FCC Form 473 to the Administrator. The FCC Form 473 shall be signed by an authorized person and shall include that person’s certification under oath that:

(1) The prices in any offer that this service provider makes pursuant to the schools and libraries universal service support program have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to those prices, the intention to submit an offer, or the methods or factors used to calculate the prices offered;

(2) The prices in any offer that this service provider makes pursuant to the schools and libraries universal service support program will not be knowingly disclosed by this service provider, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and

(3) No attempt will be made by this service provider to induce any other concern to submit or not to submit an

offer for the purpose of restricting competition.

(4) The service provider listed on the FCC Form 473 certifies that the invoices that are submitted by this Service Provider to the Billed Entity for reimbursement pursuant to Billed Entity Applicant Reimbursement Forms (FCC Form 472) are accurate and represent payments from the Billed Entity to the Service Provider for equipment and services provided pursuant to E-rate program rules.

(5) The service provider listed on the FCC Form 473 certifies that the bills or invoices issued by this service provider to the billed entity are for equipment and services eligible for universal service support by the Administrator, and exclude any charges previously invoiced to the Administrator by the service provider.

■ 8. Amend § 54.505 by revising paragraphs (b)(1), (b)(2), (b)(3)(i), (b)(3)(ii), (b)(4), (c) and adding paragraph (d) to read as follows:

§ 54.505 Discounts.

* * * * *

(b) * * *

(1) For schools and school districts, the level of poverty shall be based on the percentage of the student enrollment that is eligible for a free or reduced price lunch under the national school lunch program or a federally-approved alternative mechanism. School districts shall divide the total number of students eligible for the National School Lunch Program within the school district by the total number of students within the school district to arrive at a percentage of students eligible. This percentage rate shall then be applied to the discount

matrix to set a discount rate for the supported services purchased by all schools within the school district. Independent charter schools, private schools, and other eligible educational facilities should calculate a single discount percentage rate based on the total number of students under the control of the central administrative agency.

(2) For libraries and library consortia, the level of poverty shall be based on the percentage of the student enrollment that is eligible for a free or reduced price lunch under the national school lunch program or a federally-approved alternative mechanism in the public school district in which they are located and should use that school district's discount rate when applying as a library system or on behalf of individual libraries within that system. Library systems that have branches or outlets in more than one public school district should use the address of the central outlet or main administrative office to determine which school district the library system is in, and should use that school district's discount rate when applying as a library system or on behalf of individual libraries within that system. If the library is not in a school district, then its level of poverty shall be based on an average of the percentage of students eligible for the national school lunch program in each of the school districts that children living in the library's location attend.

(3) * * *

(i) The Administrator shall designate a school or library as "urban" if the school or library is located in an urbanized area as determined by the most recent rural-urban classification by

the Bureau of the Census. The Administrator shall designate all other schools and libraries as "rural."

(ii) Any school district or library system that has a majority of schools or libraries in a rural area qualifies for the additional rural discount.

(4) School districts, library systems, or other billed entities shall calculate discounts on supported services described in § 54.502(a) that are shared by two or more of their schools, libraries, or consortia members by calculating an average discount based on the applicable district-wide discounts of all member schools and libraries. School districts, library systems, or other billed entities shall ensure that, for each year in which an eligible school or library is included for purposes of calculating the aggregate discount rate, that eligible school or library shall receive a proportionate share of the shared services for which support is sought. For schools, the discount shall be a simple average of the applicable district-wide percentage for all schools sharing a portion of the shared services. For libraries, the average discount shall be a simple average of the applicable discounts to which the libraries sharing a portion of the shared services are entitled.

(c) *Matrices.* Except as provided in paragraph (d) of this section, the Administrator shall use the following matrices to set discount rates to be applied to eligible category one and category two services purchased by eligible schools, school districts, libraries, or consortia based on the institution's level of poverty and location in an "urban" or "rural" area.

% of students eligible for National School Lunch Program	Category one schools and libraries discount matrix		Category two schools and libraries discount matrix	
	Discount level		Discount level	
	Urban discount	Rural discount	Urban discount	Rural discount
< 1	20	25	20	25
1-19	40	50	40	50
20-34	50	60	50	60
35-49	60	70	60	70
50-74	80	80	80	80
75-100	90	90	85	85

(d) *Voice Services.* Discounts for category one voice services shall be reduced by 20 percentage points off applicant discount percentage rates for each funding year starting in funding year 2015, and reduced by an additional 20 percentage points off applicant

discount percentage rates each subsequent funding year.

* * * * *

■ 9. Revise § 54.507 to read as follows:

§ 54.507 Cap.

(a) *Amount of the annual cap.* The aggregate annual cap on federal universal service support for schools

and libraries shall be \$2.25 billion per funding year, of which \$1 billion per funding year will be available for the category two services, as described in § 54.502(a)(2), unless demand for category one services is higher than available funding.

(1) *Inflation increase.* In funding year 2010 and subsequent funding years, the

\$2.25 billion funding cap on federal universal service support for schools and libraries shall be automatically increased annually to take into account increases in the rate of inflation as calculated in paragraph (a)(2) of this section.

(2) *Increase calculation.* To measure increases in the rate of inflation for the purposes of this paragraph (a), the Commission shall use the Gross Domestic Product Chain-type Price Index (GDP-CPI). To compute the annual increase as required by this paragraph (a), the percentage increase in the GDP-CPI from the previous year will be used. For instance, the annual increase in the GDP-CPI from 2008 to 2009 would be used for the 2010 funding year. The increase shall be rounded to the nearest 0.1 percent by rounding 0.05 percent and above to the next higher 0.1 percent and otherwise rounding to the next lower 0.1 percent. This percentage increase shall be added to the amount of the annual funding cap from the previous funding year. If the yearly average GDP-CPI decreases or stays the same, the annual funding cap shall remain the same as the previous year.

(3) *Public notice.* When the calculation of the yearly average GDP-CPI is determined, the Wireline Competition Bureau shall publish a public notice in the **Federal Register** within 60 days announcing any increase of the annual funding cap based on the rate of inflation.

(4) *Filing window requests.* At the close of the filing window, if requests for category one services are greater than the available funding, the Administrator shall shift category two funds to provide support for category one services. If available funds are sufficient to meet demand for category one services, the Administrator, at the direction of the Wireline Competition Bureau, shall direct the remaining additional funds to provide support for category two requests.

(5) *Amount of unused funds.* All funds collected that are unused shall be carried forward into subsequent funding years for use in the schools and libraries support mechanism in accordance with the public interest and notwithstanding the annual cap. The Chief, Wireline Competition Bureau, is delegated authority to determine the proportion of unused funds, if any, needed to meet category one demand, and to direct the Administrator to use any remaining funds to provide support for category two requests. The Administrator shall report to the Commission, on a quarterly basis, funding that is unused from prior

years of the schools and libraries support mechanism.

(6) *Application of unused funds.* On an annual basis, in the second quarter of each calendar year, all funds that are collected and that are unused from prior years shall be available for use in the next full funding year of the schools and libraries mechanism in accordance with the public interest and notwithstanding the annual cap as described in this paragraph (a).

(b) *Funding year.* A funding year for purposes of the schools and libraries cap shall be the period July 1 through June 30.

(c) *Requests.* Funds shall be available to fund discounts for eligible schools and libraries and consortia of such eligible entities on a first-come-first-served basis, with requests accepted beginning on the first of July prior to each funding year. The Administrator shall maintain on the Administrator's Web site a running tally of the funds already committed for the existing funding year. The Administrator shall implement an initial filing period that treats all schools and libraries filing within that period as if their applications were simultaneously received. The initial filing period shall begin on the date that the Administrator begins to receive applications for support, and shall conclude on a date to be determined by the Administrator. The Administrator may implement such additional filing periods as it deems necessary.

(d) *Annual filing requirement.* Schools and libraries, and consortia of such eligible entities shall file new funding requests for each funding year no sooner than the July 1 prior to the start of that funding year. Schools, libraries, and eligible consortia must use recurring services for which discounts have been committed by the Administrator within the funding year for which the discounts were sought. Implementation of non-recurring services may begin on April 1 prior to the July 1 start of the funding year. The deadline for implementation of non-recurring services will be September 30 following the close of the funding year. An applicant may request and receive from the Administrator an extension of the implementation deadline for non-recurring services if it satisfies one of the following criteria:

(1) The applicant's funding commitment decision letter is issued by the Administrator on or after March 1 of the funding year for which discounts are authorized;

(2) The applicant receives a service provider change authorization or service substitution authorization from the

Administrator on or after March 1 of the funding year for which discounts are authorized;

(3) The applicant's service provider is unable to complete implementation for reasons beyond the service provider's control; or

(4) The applicant's service provider is unwilling to complete installation because funding disbursements are delayed while the Administrator investigates their application for program compliance.

(e) *Long term contracts.* If schools and libraries enter into long term contracts for eligible services, the Administrator shall only commit funds to cover the pro rata portion of such a long term contract scheduled to be delivered during the funding year for which universal service support is sought.

(f) *Rules of distribution.* When the filing period described in paragraph (c) of this section closes, the Administrator shall calculate the total demand for both category one and category two support submitted by applicants during the filing period. If total demand for the funding year exceeds the total support available for category one or both categories, the Administrator shall take the following steps:

(1) *Category one.* The Administrator shall first calculate the demand for category one services for all discount levels. The Administrator shall allocate the category one funds to these requests for support, beginning with the most economically disadvantaged schools and libraries, as determined by the schools and libraries discount matrix in § 54.505(c). Schools and libraries eligible for a 90 percent discount shall receive first priority for the category one funds. The Administrator shall next allocate funds toward the requests submitted by schools and libraries eligible for an 80 percent discount, then for a 70 percent discount, and shall continue committing funds for category one services in the same manner to the applicants at each descending discount level until there are no funds remaining.

(2) *Category two.* The Administrator shall next calculate the demand for category two services for all discount categories as determined by the schools and libraries discount matrix in § 54.505(c). If that demand exceeds the category two budget for that funding year, the Administrator shall allocate the category two funds beginning with the most economically disadvantaged schools and libraries, as determined by the schools and libraries discount matrix in § 54.505(c). The Administrator shall allocate funds toward the category two requests submitted by schools and libraries eligible for an 85 percent

discount first, then for a 80 percent discount, and shall continue committing funds in the same manner to the applicants at each descending discount level until there are no category two funds remaining.

(3) To the extent that there are single discount percentage levels associated with “shared services” under § 54.505(b)(4), the Administrator shall allocate funds to the applicants at each descending discount level (e.g., 90 percent, 89 percent, then 88 percent) until there are no funds remaining.

(4) For both paragraphs (f)(1) and (2) of this section, if the remaining funds are not sufficient to support all of the funding requests within a particular discount level, the Administrator shall allocate funds at that discount level using the percentage of students eligible for the National School Lunch Program. Thus, if there is not enough support to fund all requests at the 40 percent discount level, the Administrator shall allocate funds beginning with those applicants with the highest percentage of NSLP eligibility for that discount level by funding those applicants with 19 percent NSLP eligibility, then 18 percent NSLP eligibility, and shall continue committing funds in the same manner to applicants at each descending percentage of NSLP until there are no funds remaining.

§ 54.508 [Removed and Reserved]

■ 10. Remove and reserve § 54.508.

■ 11. Revise § 54.511 to read as follows:

§ 54.511 Ordering services.

(a) *Selecting a provider of eligible services.* Except as exempted in § 54.503(e), in selecting a provider of eligible services, schools, libraries, library consortia, and consortia including any of those entities shall carefully consider all bids submitted and must select the most cost-effective service offering. In determining which service offering is the most cost-effective, entities may consider relevant factors other than the pre-discount prices submitted by providers, but price should be the primary factor considered.

(b) *Lowest corresponding price.* Providers of eligible services shall not submit bids for or charge schools, school districts, libraries, library consortia, or consortia including any of these entities a price above the lowest corresponding price for supported services, unless the Commission, with respect to interstate services or the state commission with respect to intrastate services, finds that the lowest corresponding price is not compensatory. Promotional rates offered by a service provider for a period of

more than 90 days must be included among the comparable rates upon which the lowest corresponding price is determined.

■ 12. Revise § 54.514 to read as follows:

§ 54.514 Payment for discounted services.

(a) *Invoice filing deadline.* Invoices must be submitted to the Administrator:

(1) 120 days after the last day to receive service, or

(2) 120 days after the date of the FCC Form 486 Notification Letter, whichever is later.

(b) *Invoice deadline extension.* In advance of the deadline calculated pursuant to paragraph (a) of this section, service providers or billed entities may request a one-time extension of the invoicing deadline. The Administrator shall grant a 120 day extension of the invoice filing deadline, if it is timely requested.

(c) *Choice of payment method.* Service providers providing discounted services under this subpart in any funding year shall, prior to the submission of the FCC Form 471, permit the billed entity to choose the method of payment for the discounted services from those methods approved by the Administrator, including by making a full, undiscounted payment and receiving subsequent reimbursement of the discount amount from the Administrator.

■ 13. Revise § 54.516 to read as follows:

§ 54.516 Auditing and inspections.

(a) *Recordkeeping requirements—(1) Schools, libraries, and consortia.*

Schools, libraries, and any consortium that includes schools or libraries shall retain all documents related to the application for, receipt, and delivery of supported services for at least 10 years after the latter of the last day of the applicable funding year or the service delivery deadline for the funding request. Any other document that demonstrates compliance with the statutory or regulatory requirements for the schools and libraries mechanism shall be retained as well. Schools, libraries, and consortia shall maintain asset and inventory records of equipment purchased as components of supported category two services sufficient to verify the actual location of such equipment for a period of 10 years after purchase.

(2) *Service providers.* Service providers shall retain documents related to the delivery of supported services for at least 10 years after the latter of the last day of the applicable funding year or the service delivery deadline for the funding request. Any other document that demonstrates compliance with the

statutory or regulatory requirements for the schools and libraries mechanism shall be retained as well.

(b) *Production of records.* Schools, libraries, consortia, and service providers shall produce such records at the request of any representative (including any auditor) appointed by a state education department, the Administrator, the FCC, or any local, state or federal agency with jurisdiction over the entity.

(c) *Audits.* Schools, libraries, consortia, and service providers shall be subject to audits and other investigations to evaluate their compliance with the statutory and regulatory requirements for the schools and libraries universal service support mechanism, including those requirements pertaining to what services and products are purchased, what services and products are delivered, and how services and products are being used. Schools, libraries, and consortia receiving discounted services must provide consent before a service provider releases confidential information to the auditor, reviewer, or other representative.

(d) *Inspections.* Schools, libraries, consortia and service providers shall permit any representative (including any auditor) appointed by a state education department, the Administrator, the Commission or any local, state or federal agency with jurisdiction over the entity to enter their premises to conduct E-rate compliance inspections.

Subpart G—Universal Service Support for Health Care Providers

■ 14. Amend § 54.642 by revising paragraph (h)(5) to read as follows:

§ 54.642 Competitive bidding requirements and exemptions.

* * * * *

(h) * * *

(5) *Schools and libraries program master contracts.* Subject to the provisions in §§ 54.500, 54.501(c)(1), and 54.503, an eligible health care provider in a consortium with participants in the schools and libraries universal service support program and a party to the consortium’s existing contract is exempt from the Healthcare Connect Fund competitive bidding requirements if the contract was approved in the schools and libraries universal service support program as a master contract. The health care provider must comply with all Healthcare Connect Fund rules and procedures except for those applicable to competitive bidding.

Subpart H—Administration

§ 54.705 [Amended]

■ 15. Amend § 54.705 by removing and reserving paragraphs (a)(1)(vi) through (viii).

Subpart I—Review of Decisions Issued by the Administrator

■ 16. Revise § 54.719 to read as follows:

§ 54.719 Parties permitted to seek review of Administrator decision.

(a) Any party aggrieved by an action taken by the Administrator, as defined in § 54.701, § 54.703, or § 54.705, must

first seek review from the Administrator.

(b) Any party aggrieved by an action taken by the Administrator, after seeking review from the Administrator, may then seek review from the Federal Communications Commission, as set forth in § 54.722.

(c) Parties seeking waivers of the Commission's rules shall seek relief directly from the Commission.

■ 17. Revise § 54.720 to read as follows:

§ 54.720 Filing deadlines.

(a) An affected party requesting review of an Administrator decision by the Commission pursuant to § 54.719,

shall file such a request within sixty (60) days from the date the Administrator issues a decision.

(b) In all cases of requests for review filed under § 54.719(a) through (c) the request for review shall be deemed filed on the postmark date. If the postmark date cannot be determined, the applicant must file a sworn affidavit stating the date that the request for review was mailed.

(c) Parties shall adhere to the time periods for filing oppositions and replies set forth in 47 CFR 1.45.

[FR Doc. 2014-18937 Filed 8-18-14; 8:45 am]

BILLING CODE 6712-01-P