



FCC E-RATE MODERNIZATION
IMPACT ON ALASKA K-12 SCHOOLS

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In 2014, the Federal Communications Commission (FCC) undertook the most significant changes to the Universal Service Fund (USF) Schools and Libraries program (commonly known as “E-rate”) since its inception. The E-rate program subsidizes telecommunications and Internet services for K-12 schools and public libraries and is the single largest federal educational technology program. For Alaska, E-rate funds are critically important in helping districts manage the high cost of broadband connectivity.

The FCC’s changes include structural reforms designed to modernize the E-rate program, additions designed to accommodate the goals of President Barack Obama’s “[ConnectED](#)” initiative, and an overall substantial increase to the amount of E-rate funding that will flow to schools and libraries for broadband and Internet connectivity. Combined, orders adopted by the Commission in July and December 2014 mark a key milestone in the FCC’s efforts to revamp and reorient all four of its Universal Service subsidy programs away from legacy services, such as pagers and voice telephony, and toward broadband services that meet twenty-first century connectivity needs.

There are many sources of information that summarize the full range of the FCC’s E-rate changes in 2014, including a list of previous Connected Nation Policy Briefs found at the end of this document. This Policy paper focuses on a number of the changes that are of particular importance to Alaska schools, with an emphasis on the broadband gaps that are being explored in the Alaska School Broadband Audit.

Definition of “Urban” and “Rural”

When the FCC first started its modernization effort, there was a significant risk that many schools and districts in Alaska would no longer be regarded as “rural” based on the FCC’s modified rules. E-rate is essentially a discount program, with the amount of the discount based on the percentage of students eligible for the National School Lunch Program and the rural nature of the school district. Until 2014, eligibility for particular discount tiers (which range from 20% to 90%) had been calculated by reference to a particular school or library. Under the rules, discount rates are based on a district-wide analysis for all schools and libraries within that district. As a result, schools in districts with some schools in relatively urbanized areas and others in remote areas – a situation not uncommon in Alaska -- stood to lose their rural eligibility.

Indeed, the FCC’s July 2014 Order included “urban clusters” (defined by the U.S. Census Bureau) to be “urban” areas for purposes of the E-rate program. That change had the unintended and negative effect of classifying many schools and libraries, particularly those in Alaska, as “urban” even if those communities did not have road access, as is the case in several Alaska communities such as: Barrow (pop. 4,434), Bethel (pop. 3,835), Kodiak (pop. 9,335), Kotzebue (pop. 3,200), Nome (pop. 3,222), and Sitka (pop. 7,027).

Many stakeholders, including the State of Alaska, filed requests for reconsideration of this change. The State of Alaska noted in particular that “[i]n Alaska, areas which have been designated as ‘urban clusters’ largely

represent locations that are in fact far from any road system and require plane and/or boat travel to reach.”¹ Alaska was joined by stakeholders from other rural constituencies in the Lower 48 similarly impacted to argue for the FCC to undo this change.

The FCC listened to these requests and modified the rule in its December 2014 Order. The FCC will still calculate E-rate discount eligibility by reference to district-wide calculations (and not individual schools or libraries). Under the new rules, a school district will be considered “rural” if more than half (50% + 1) of the schools within the district are classified as “rural.” In those circumstances, all schools within that school district will be eligible for the E-rate rural discount. However, under the modified rules, the FCC excluded from classifying as “urban,” “urban clusters” that have a population of less than 25,000. Only “urbanized areas” or “urban clusters” with a population equal to or greater than 25,000 will be regarded as “urban” for the purposes of the E-rate program. As a result, in Alaska, only the Anchorage, Fairbanks, and Matanuska, Alaska school districts retain an “urban” designation under the new rules of the E-rate program.

July 2014 Order: Robust Broadband Targets, On-Campus Connectivity, and Phase Out of Legacy Services

The centerpiece of the FCC modernization initiative in 2014 was to establish robust broadband connectivity targets and to increase funding for on-campus connectivity, such as Wi-Fi networks in classrooms. Since the E-rate program has a fixed funding cap, the other side of this transition, though, is the phase out of support for legacy services like dial tone voice service.

On July 11, 2014, the FCC [approved](#) Chairman Tom Wheeler’s proposal to modernize the \$2.4 billion per year E-rate program. [Commissioner statements](#) regarding this reform and a [Fact Sheet summarizing the changes](#) are available for review on the FCC website.

These changes marked the most significant reform to the E-rate program since its inception in 1998.

The FCC action includes:

- **Dedicate Funding to On-Campus Connectivity.** The centerpiece of the FCC’s action was to inject \$2 billion in additional funds to support on-campus wireless connectivity to enable 1:1 device and digital learning platforms and enhance public wireless Internet access at libraries. The new dedicated funding for on-campus connectivity will have a different discount rate for the lowest income and rural districts, with a maximum discount rate of 85%. The plan will allocate these funds on a per-pupil basis to schools and a per-square foot basis to public libraries, and the FCC estimates the move will reach 10 million students annually over the next two years.

¹ State of Alaska filing in WC Docket No. 13-184, 10/29/2014, <http://apps.fcc.gov/ecfs/comment/view?id=60000975068>.

- **Propose Increasing the E-rate cap.** In the July 2014 Order, the FCC did not increase the annual E-rate cap (at that time \$2.4 billion per year), but the FCC did propose to increase the cap. As discussed below, in December 2014 the FCC subsequently increased the cap by over 60%, to \$3.9 billion per year;
- **Establish Robust Broadband Connectivity Goals for Schools.** The FCC officially adopted broadband goals for the program, including 100 Mbps per 1000 students in the short run, and 1 Gbps per 1000 students in the longer term. Based on Alaska School Broadband Audit data processed as of February 2015, most Alaska schools do not meet these goals. Indeed, **less than half of responding schools (43.8%) currently meet the FCC’s short run benchmark, and less than ten percent (7.2%) meet the FCC’s long term benchmark;**
- **Phase Out of Legacy Services.** The FCC will start to transition **all** E-rate program funds to broadband technology, meaning that it will start to phase out E-rate discounts for legacy services such as basic dial tone service and paging immediately;
- **Administrative reforms**, including incentives for consortia and bulk buying, streamlining the process for multi-year applications, and expediting the processing of small applications, allowing applicants to purchase goods and services from federally-negotiated General Services Administration prices without having to go through a competitive bidding process.

December 2014 Order: Increase E-rate Funding and Closing the “Rural Fiber Gap”

In December 2014 the FCC built on its July 2014 Order by making two significant changes, including raising the annual spending cap on the program by \$1.5 billion per year, to \$3.9 billion annually, and making a host of rule changes, including reform of the “rural” definition described in detail above, designed to incent high-capacity connectivity deployment in rural areas.

Many of the December 2014 rule changes are intended to spur an immediate increase in broadband capacity to schools and libraries by lowering the upfront costs of those connections to meet the aggressive broadband speed targets set by the FCC in the July 2014 Order.

Increasing the Funding Cap

The E-rate funding cap, despite rapid change in broadband and education technology, has been in place for well over a decade. E-rate is an application-driven system – funding is provided to schools and libraries for qualifying services as requested, and the amount reimbursed to each school is based upon the income of the neighborhood and its urban or rural nature. The E-rate cap operates as a “hard” cap, meaning that if applications for reimbursement exceed available funding, schools and libraries lower in priority (generally,

those in more affluent and urban areas) will not be funded. In recent years, demand for E-rate funds has exceeded the cap substantially, to the point that, reportedly, many schools and libraries have not even applied.

It is important to note that the increase in the funding cap is **in addition** to the \$1 billion per year the FCC adopted in July 2014 to incentivize upgrades to on-campus wireless networks (Wi-Fi). The \$1 billion per year available to fund Wi-Fi networks is allocated across schools and libraries on a formula basis (per student for schools; per square foot for libraries, subject to a per-applicant cap) over the next five years. From this fund, the FCC also increased the per-square foot allotment for larger, urban libraries in this Order.

As a result of these changes, for the next five years, funding for E-rate projects will more than double – to \$4.9 billion per year. The doubling of E-rate funding presents a substantial opportunity for the school and library community to upgrade infrastructure. In particular, school and library administrators that might have shied away from E-rate funding in the past out of concern that funding might not have been available should reexamine the program in light of these changes.

Additional Subsidies when State Provides Matching Funds for Broadband

The December 2014 Order increases the discount of “special construction charges” for high-speed broadband funding requests from schools and libraries if the state provides “matching” funds for those builds. This program will begin in the 2016 E-rate funding year in time for the 2016/2017 school year. The special construction state matching charge program could considerably lower the out-of-pocket costs of a broadband network purchase for a school and library if the state government provides matching funds that qualify for the increased federal E-rate discount.

As discussed above, E-rate is a discount program, with schools and libraries qualifying for a certain range of discounts from purchase price, ranging from 20% off for relatively affluent, urban schools (less than 1% of the student body population qualifying for the National School Lunch Program) to 90% off for low-income schools (greater than 75% qualifying for the National School Lunch Program, which covers **10.7% of Alaska schools**).

Based on evidence that even with these discounts, large upfront “special construction” charges to bring fiber or similar high-capacity platforms to a school or library premise may be a barrier for high-speed broadband purchases, the FCC will now provide an additional discount that “matches” any additional funding that a state provides for certain broadband purchases. This funding will operate on a “dollar-for-dollar” basis, up to 10 percentage points above and beyond the discount rate applicable to the relevant entity.

For example, before this program, a school in the 60% discount category facing a \$50,000 special construction charge for high-speed broadband installation would ordinarily need to find \$20,000 to pay for its portion of the project (with E-rate paying \$30,000, or 60%). If the state, however, implements a program that would pay \$5,000 of that special construction cost, the E-rate program now will match that amount with an additional \$5,000. As a result, the school would only need to find \$10,000 to fund that project. Collectively, the state and school authority would save 10% of the project cost over the standard E-rate program.

To qualify, the state program must provide funding for “special construction” charges for high-speed broadband service to a school or library that would be capable of meeting the “long-term connectivity” targets of the schools and libraries (1 Mbps for each student or staff member; 100 Mbps or 1 Gbps for public libraries, based on service area). For larger schools, special construction charges for fiber connections would tend to qualify; for smaller, more rural schools, wireless technology that is scalable to the long run goal could qualify. For Tribal schools and libraries, federal agency funding can qualify. This additional benefit only applies to “special construction costs of a high-speed broadband project and not to other services supported by E-rate.

Increased Flexibility in Building and Operating Networks

The December 2014 Order implemented many important changes to the program, including expanding options for network construction, applying additional discounts when states match funds for high-speed broadband construction, and obligating certain providers to respond to E-rate related Requests for Proposal (RFP).

In particular,

- The FCC suspended for four years its requirement that applicants amortize their contribution to any large non-recurring infrastructure charge over the length of the contract. This essentially provides applicants more of the E-rate discount earlier for large construction projects.
- Beginning in the 2016 funding year, applicants will also be allowed to pay the “non-discounted portion” of non-recurring construction costs over multiple years. Under current rules, schools and libraries must pay their full share of these charges within 90 days of service delivery.
- Beginning in the 2016 funding year, applicants will be able to seek E-rate discounts on special construction charges for dark fiber that is leased from another entity and on equipment necessary to light that dark fiber. An applicant will only be able to receive these E-rate discounts for equipment in the year it lights the fiber, and the applicant must light the fiber the same year it receives the discount for dark fiber special construction charges.
- Beginning in the 2016 funding year, applicants will be able to seek E-rate reimbursement directly for self-construction of broadband networks, provided that the applicant first shows that it has placed bids out for broadband service and not received offers from private providers that are “cost-effective.”

Ensuring Service Bids in Rural, High-Cost Areas

In another effort to drive down costs of connectivity, the FCC is also requiring that all recipients of its high-cost USF program, the Connect America Fund (CAF), respond to E-rate applicants' requests for high-speed broadband services and in those responses offer service at rates, terms, and conditions that are "reasonably comparable to comparable offerings to community anchor institutions in urban areas."

Currently, schools and libraries seeking E-rate funding must put their broadband purchases out for bid through the FCC Form 470 process. This rule change requires that, in areas in which a broadband provider is receiving CAF subsidies to upgrade broadband networks to residential and small businesses, that provider must respond to E-rate RFPs in those areas. This obligation will commence for funding year 2016 (July 1, 2016). To help implement this requirement, FCC staff will study and release a series of rate benchmarks.

Enhanced Oversight of E-rate Funds

Finally, the FCC's December 2014 Order establishes a new performance management system for administering the E-rate fund. The Universal Service Administrative Company (USAC) administers the program under contract with the FCC. The Order requires a litany of USAC process changes that are designed to simplify the application and reimbursement processes.

These improvements include:

- Support discount calculations of applicants;
- Explore the possibility of allowing applicants to post request for bids for E-rate supported services through USAC;
- Provide neutral technical assistance to applicants; and
- Track and release data on E-rate spending and progress towards goals.

Next Steps

In summary, the FCC's actions in 2014 to modernize the E-rate program offer many opportunities for Alaska schools to close broadband gaps. The FCC's decisions make available substantially more funding for both connections to school buildings as well as connectivity on school campus. The nearly doubling of E-rate funds over the next few years, as well as the new FCC special construction matching fund program provides a unique opportunity for schools that seek to aggressively upgrade their broadband capacity by lowering out-of-pocket and upfront costs.

FCC E-rate Modernization: Impact on Alaska K-12 Schools

ALASKA School Broadband Audit

Previous Connected Nation Policy Briefs on E-rate:

December 22, 2014: [FCC Releases Details on Expanded E-rate Program](#)

December 11, 2014: [FCC Increases E-rate Cap to \\$3.9 Billion; Further Reforms the Program to Support Connectivity Goals](#)

November 17, 2014: [FCC Chairman Proposes Permanent \\$1.5 Billion Increase in Annual E-rate Funding](#)

October 6, 2014: [FCC Chairman Outlines Priority to Close School and Library “Rural Fiber Gap,” as USAC Starts to Implement Modernization](#)

August 4, 2014: [E-rate Modernization Order](#)

July 11, 2014: [FCC Votes for E-rate Modernization](#)

June 23, 2014: [FCC Chairman Proposes Changes to E-rate Program, Places Focus on Wi-Fi Connections Within Schools and Libraries](#)

March 7, 2014: [FCC Reinvigorates Debate Over Reform of the E-rate Program](#)

For more information about E-rate modernization, please contact Connected Nation at policy@connectednation.org.