

Understanding E-rate

How to get the most out of your E-rate dollars



Pressing forward

“The advent of new technologies and increased access to robust connectivity is reshaping the K-12 landscape for teaching and learning. School districts nationwide are leveraging digital instructional materials and resources to deliver transformative and impactful personalized learning opportunities for students and to enhance the administrative coordination of school business.”

-SETDA ([Broadband Imperative](#))

Preparing America’s students with the skills they need to compete in a global economy depends on the availability of interactive, personalized learning experiences driven by new technology. In 2016, State Educational Technology Directors Association (SETDA) recommended that districts target broadband speeds of 1.0 gigabits per second (Gbps) per 1,000 students and upward of 3.0 Gbps per 1,000 students by the 2020-21 school year.

In 2023, the Connect K-12 2023 Report on School Connectivity reported “74% of all districts are now meeting or exceeding the FCC’s recommended bandwidth goal of 1 Mbps per student – an increase of 57.4% since 2020” (page 3).

The proliferation of student devices, Online pedagogy, student testing, and other technologies are top drivers of the need for bandwidth and technology infrastructure. Reports over the past decade have stated only 37 percent of high schools and 29 percent of elementary schools have the capacity to meet the demands of multiple devices per student. Though, improvement is shown through the Connect K-12 report above, demands for higher bandwidth is evident with every new technological breakthrough.

Clearly, in spite of advances made thanks in part to E-rate, much work remains to be done. High costs, inadequate funding, and lack of capacity continue to



be key challenges for schools and districts working to transform their learning environment.

3 key E-rate goals

To help schools and libraries maximize their investment in broadband, the Federal Communications Commission (FCC) adopted three goals for the E-rate program.

- **Affordable access:** Ensuring affordable access to highspeed broadband sufficient to support digital learning in schools and robust connectivity for all libraries by increasing Internet access and speeds, targeting WAN connectivity, and improving internal connections.
- **Maximum return on investment:** Maximizing the cost effectiveness of spending for E-rate supported purchases.
- **Simplified process:** Making the E-rate application process and other E-rate processes fast, simple, and efficient. To reach these goals, the E-rate program focuses on the largest and most urgent need—closing the Wi-Fi gap on school premises.



How E-rate works

E-rate funds are allotted in two categories to align to a “whole network” approach.

- **Category One** is broadband connectivity to schools. Eligible Category One services include data transmission and Internet access services.
- **Category Two** is broadband or network services within schools and libraries. Eligible Category Two services include internal connections, managed internal broadband services, and basic maintenance of internal connections.

The E-rate program establishes an annual funding cap and designates a specific amount each year for Category Two. E-rate relies on budget caps to ensure that all applicants—regardless of their discount rate—will have the opportunity to apply for and receive Category Two support. If Category Two demands exceed available funds, requests are prioritized based on discount rate, though this has yet to happen since the program was modernized.

Category Two budgets are designed to provide broader and more equitable support for Category Two services.

- **Schools:** Individual school discounts up to total pre-discount budget amount of \$167.00 per student.
- **Libraries:** The individual library discounts is \$4.50 per square foot for all libraries. (Read more about the [Category Two Budget](#).)
- **Minimum:** Minimum pre-discount budget, or floor, for schools or libraries is \$25,000.00 if C2 budget falls below this minimum. Tribal Libraries have a \$55,000.00 pre-discount floor.

The maximum Category Two discount is 85 percent (except for tribal libraries with 90%), and the rate is calculated based on the percentage of enrolled students that are eligible for the National School Lunch Program, aligned to the E-rate discount matrix.

How to develop a winning network strategy

A winning strategy starts with the right plan. Be sure to spend time early on in the process considering your school's or library's top priorities.



According to [CoSN's Annual E-rate and Infrastructure Survey](#), most school districts seek increased Internet bandwidth to accommodate online assessments and digital content and to provide for the increase in students with devices. Will your school's or library's priorities be the same? And if so, what infrastructure will be needed to address them? These and other questions will begin to shape your network strategy.

While each school or library has specific and unique needs, we suggest considering the following issues.

High-density network

The network needs to support significant density of devices on a per-classroom basis. Today, with 1:1 and "bring your own device" (BYOD) initiatives, most classrooms have 20 to 30 devices plus as many devices as students per school. Your wireless and/or wired network should be capable of supporting a significant density of devices.

Device management

Mobile devices have become the primary way to access the Internet in school districts, and districts across the country are rolling out thousands of mobile devices at every school. Mobile learning encourages students to use many types of devices, and a robust digital learning environment demands multiple devices per student.

Systems management

Make sure your technology plan clearly articulates how devices are procured, provisioned, and maintained.

Video

Mobile devices in classrooms enable blended, flipped, and distance learning through video technology. But the video technology you deploy must be reliable and fast to ensure that students and teachers can connect without interruption.

WAN caching

Curriculum providers are racing to digitize most of the content consumed in our classrooms. This content is high bandwidth yet common across many classrooms. Caching such content can assist schools in managing and reducing the increasing amount of bandwidth usage between schools inside the district.

Reliability for supporting your learning outcomes

With the advent of online assessments and testing, the expectation in class is for an always-on network. Ensure that your digital learning strategy considers a highly reliable and redundant network design to support the mission-critical needs of assessments.

Anytime, anywhere access

Digital learning requires students to have access to the network in the classroom, on school grounds, and at home. Your technology plan should account for a common access strategy.

Next steps on your E-rate journey

Applying for E-rate funding requires several steps, beginning with requesting bids for the services you need by submitting FCC Form 470. You'll select a service provider through a competitive bidding process and then apply for funding using FCC Form 471. (Please note: It is critically important that you allow a minimum of 28 days for vendors to submit their bids.) [Find specific information](#) about the application process.

As Cisco has worked with schools and libraries across the nation, we have learned they must have technologies that:

- Deliver media-rich, robust digital learning experiences for students.
- Prepare students for a global environment.
- Level the playing field for rural and underserved students.

- Improve professional development to increase teachers' skills.
- Enable online learning.
- Support collaboration with teachers across districts, states, and nations.

The solution to these needs is simple: connectivity. Thanks to the E-rate program, your school district or library can now benefit from the implementation of your own broadband solution. By using the latest technology, you can better prepare your students to compete in the global economy of the 21st century.



Why Cisco for K-12 Education

Cisco's true value is not in what we make—it's in what we make possible. Cisco offers a broad portfolio of network-centric options to enable digital transformation, including switching, mobility and services, rich and pervasive video, immersive collaboration, and unified and guaranteed data center/virtualization/cloud.

These technologies can enable your district or library to improve teaching and learning, connect and engage users, increase administration and management efficiency, and enhance safety and security.

At Cisco we have a history of and commitment to education. Combined with the breadth and depth of our solutions focused on improving teaching and learning,

this is what allows Cisco to meet our customers' most pressing education imperatives: improving student outcomes and providing students with the skills and knowledge needed to succeed in the global economy.

To learn more about E-rate, visit the Universal Service Administrative Company website at www.usac.org and check out our additional resources below.

How Cisco adds value

Cisco E-rate Knowledge Hub