



OPERATIONAL PLAN

National Community Youth Broadband Technician

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Background and Concept

This Operational Plan details the steps required for the creation of a new nationwide program, the Community Youth Broadband Technician (CYBT) program, that will help close the digital divide for America's K–12 students. More specifically, this Operational Plan lays out how the US Department of Education (ED) and Federal Communications Commission (FCC) could work together to create the CYBT program, which will hire youth technicians to service broadband equipment in their neighborhoods. CYBTs will be pivotal in raising awareness of available discounted broadband services under the FCC's E-Rate program and ensuring household connectivity via direct tech support. Technicians will be trained at the offices/facilities of the internet service providers (ISPs) closest to their high schools in their respective school districts.

This plan assumes that ED will be responsible for:

- ▶ Funding the salaries of CYBT technicians;
- ▶ Creating the application portals that will allow states and school districts to request CYBT funding;
- ▶ Reviewing school applications for CYBT funding; and
- ▶ Subsidizing the cost of the ISPs managing these CYBT technicians.

It also assumes that the FCC will be responsible for:

- ▶ Extending the subsidy for the discounted E-Rate program to cover residences of K–12 students in eligible schools; and
- ▶ Mandating that the ISPs provide the same discounted broadband service to residents that have children in the K–12 system.

The Operational Plan below describes seven steps that ED and the FCC can follow to spearhead the CYBT program.

STEP 1

The FCC should extend the same E-Rate discounts that have been established for schools and libraries to all households in those school districts with school-aged children. To accomplish this step, the FCC will need to:

- ▶ 1A: Mandate that current participating E-Rate ISPs and telecommunications companies make their current E-Rate client discount rates public.
- ▶ 1B: Set the standards for determining which residences would qualify for the E-Rate expansion. Some examples of standards that would qualify residences for discounted broadband services would be all households that have at least one child in custody who is 18 years or younger under a certain income threshold, or houses with at least one child who is engaged in any form of K–12 learning who attends an E-Rate school. Depending on the success of this initial E-Rate expansion, the FCC might in the future consider providing universal E-Rate coverage for K–12 households regardless of income.
- ▶ 1C: Mandate that the participating E-Rate ISPs and telecommunications companies provide qualifying residents the same E-Rate discounts as their school clients.
- ▶ 1D: Enable the Universal Service Administrative Company (USAC), an FCC-designated nonprofit that delivers funding for the current E-Rate program, to set up residential accounts for billing. To date, all of USAC's accounts have been schools and libraries; thus, USAC will need to reformat their billing system to accommodate residential accounts.

More information on how and why the FCC can extend the E-Rate program to schools can be found in our [E-Rate Policy Brief](#).

STEP 2

The FCC should require local ISPs to train and supervise CYBTs. The FCC is in the best position to hold the ISPs accountable to participate in this program because the FCC established a cooperative relationship when they negotiated with ISPs for E-Rate discounts on school services. To accomplish this step, the FCC will need to:

- ▶ 2A: Mandate that ISPs make the standard CYBT training programs available for FCC review.
- ▶ 2B: Sign off on the training program and send training program details to ED for official program approval.
- ▶ 2C: Mandate that the ISPs dedicate a managerial unit to train CYBTs.

STEP 3

Via the Educational Stabilization Fund (ESF), ED should create an application that allows schools to request funding for CYBTs and match schools with allocated funding. To do so, ED will need to:

- ▶ 3A: Work with Department leadership to make sure that funding from the Discretionary Grant program of the ESF can be used to fund CYBTs. As mentioned in the CYBT [Policy Brief](#), ED can use surplus funding from the ESF to fund this initiative.
- ▶ 3B: Create a web portal that provides further information about the CYBT program; an application system that states, local education agencies (LEAs), and state education agencies (SEAs) can use to apply for CYBT funding; and a sample job description that schools can use to recruit for CYBTs. A sample job description for CYBTs can be found in the Appendix.
- ▶ 3C: Establish an application review system and timeline for ED to determine how many technicians each applicant should be funded for. The number of technicians funded per LEA, SEA, or state should be commensurate with the student population being served. Ideally, ED's timeline to review applications would allow CYBTs across the country to have similar start times.

STEP 4

ED should set up a funding and budget request system that allows ISPs and schools to request funding to train CYBTs. ED should allow for ISPs to directly request funding for CYBT training programs.

STEP 5

Once they are notified of their CYBT funding status, schools should post the CYBT job description and recruit CYBTs. School principals and administrators should play a big role in identifying and recruiting for CYBTs. Schools will be able to advertise the job description within their schools, identify strong candidates, and then pair the techs with the ISPs for training and management.

STEP 6

Schools should connect with their local ISPs to determine how much money would be required to train the CYBTs they have been allocated, and submit that budget request to ED. The budget request that schools submit to ED should detail the number of job positions required for the school, and should be close to a standardized service area ratio set by FCC — e.g., one CYBT for every 100 households.

To implement this step, the FCC will need to make ISPs' contact information available so that schools can contact them directly. The schools will coordinate the names and applications of the students to be trained in the ISP's program.

STEP 7

The CYBTs should advertise the new expanded E-Rate program at the school level when meeting with clients. This way, families will be informed of the services that are available to them.

STEP 8

The FCC should transform its current [Helping Applications to Success \(HATS\)](#) phone hotline into an E-Rate billing support-only hotline. Currently, the HATS hotline serves multiple functions, including providing application support. The FCC should instead streamline the HATS system and focus on the most important operations – e.g., turning it into a billing support service for residential E-Rate clients.

To do this, the FCC, via the HATS hotline, will need to:

- ▶ 8A: Develop a training program for residential billing support staff. This training should support the knowledge development of ISPs' fees, billing structure, and billing systems so that FCC staff can answer potential billing questions from new E-Rate residential clients.
- ▶ 8B: Hire support staff for the residential billing support function.

STEP 9

ED should provide schools participating in the CYBT program with an E-Rate @Residence mobile app and website, which would allow families to request specific tech support from CYBTs. This E-Rate @Residence app will also be connected to the billing support hotline described in Step 8, so as to provide families with a one-stop shop for all technical support.

STEP 10

The FCC should establish key performance indicators of this broadband program, and track the number of households that achieve universal broadband service (as defined by the FCC) as a result of this program. In prior legislation, the FCC has used the term “universal service” to refer to the goal of ensuring that all Americans have access to high-quality telecommunications services.¹ The FCC should further specify what is meant by “universal service” and track the success of the CYBT program based on this goal. In order to accomplish this step, the FCC will need to:

- ▶ 10A: Establish clear metrics that define “universal service.”
- ▶ 10B: Establish key performance indicators for this CYBT program pursuant to the metrics established in Step 10A.

OPTIONAL STEP

A Potential Pilot Program

ED and the FCC might consider developing a small school district pilot for the CYBT program prior to expanding it. The ideal school district would have high needs and would serve a student population that has disproportionately low access to quality broadband services.

The pilot would include the following steps:

- ▶ Step A: The FCC would identify a pilot school district, along with the relevant ISPs.
- ▶ Step B: The FCC would mandate that the district's ISPs train the youth technicians on basic broadband installation and servicing.
- ▶ Step C: ED would provide funding for the ISPs to train the youth technicians.
- ▶ Step D: ED would provide funding for the pilot school youth technicians through Discretionary Grants.
- ▶ Step E: ED would make the Community Youth Broadband Technician position application available.
- ▶ Step F: School administrators would identify and select the initial youth technicians.
- ▶ Step G: Schools would coordinate youth technician training with their respective ISPs.
- ▶ Step H: During training, the Youth Technicians would advertise their services and set up appointments within their schools.
- ▶ Step I: The E-Rate @Residence App would be made available for the school district to disseminate to schools and families.
- ▶ Step J: Selected youth technicians would be trained, and then dispatched to serve the residential locations of their fellow classmates and school district colleagues.

Appendix

THE COMMUNITY YOUTH BROADBAND TECHNICIAN POSITION JOB DESCRIPTION

Summary: Technicians will be responsible for the installation, configuration, and testing of broadband Consumer Premise Equipment (CPE), such as modems, routers, and switches, to ultimately provide consumers with broadband access. They will also establish connectivity between CPEs and end-user devices (such as laptops, tablets, Smart TVs, etc.) at customer premises. Technicians will also carry out troubleshooting for identifying, localizing, and rectifying cable, connectivity, and equipment faults.

Who will be a great fit: Any high school student who is 16 years or older is a potential fit for this position. Ideal candidates include high schoolers who are interested in: engineering, programming, workmanship, technology, computers, information technology (IT), and/or home economics. High school students who may have limited job opportunities will be given priority.

Baseline skills experience: As this position requires specialized training in installing and troubleshooting broadband services, the only prerequisite is for candidates to be in good standing at their school and with their respective communities. Because technicians will be trusted by families, character reputation will be strongly considered. It is also preferred that the student have some desire to learn technical broadband skills.

Responsibilities: The Community Youth Broadband Technician has the essential duties of establishing and supporting the functional digital connectivity of homes in their school district. The Community Youth Broadband Technician will be responsible for:

1. Installing cables/systems wiring and equipment at customer premises;
2. Configuring broadband equipment;
3. Establishing broadband connectivity;
4. Troubleshooting to localize and rectify faults; and
5. Raising awareness of broadband subsidy programs to families.

Starting wage: Technicians will be paid hourly. Wages will be set to 25% above the state minimum wage where the student works and resides.

Non-monetary benefits: Technicians play an important role within the community by helping to establish broadband services.

Skills Trajectory: Technicians will be trained by an internet service provider (ISP) within their community. Upon successful completion of the job, technicians will be in a good position to be hired at the host ISP company or to begin a career in IT. With the US's emphasis on building out capacity for new 5G networks, this position will become an effective funnel of young talent into the broadband service industry.

Why this position exists: Our country is in dire need of a 22nd-century focus on readiness and digital infrastructure. Though we've been able to get most American schools and libraries connected online, we've failed at connecting households. The COVID-19 pandemic illustrated the stark divide in broadband access among American students. It's time to build the capacity for households to keep their children online and allow them to participate in hybrid learning activities. The Community Youth Broadband Technician will enable the US to achieve these goals.

Endnotes

1 "Universal Service," Federal Communications Commission, accessed February 26, 2022, <https://www.fcc.gov/general/universal-service>.



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