Connecticut Commission for Educational Technology



E-rate in Connecticut

Survey Results and Opportunities for Schools and Libraries

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Contents

| Introduction | 2 |
|---|----|
| Approach | 3 |
| Survey Responses | 3 |
| Executive Summary | 4 |
| \$chools | 5 |
| Institution Type | 5 |
| YOUR EXPERIENCE WITH E-RATE | 6 |
| Your Institution's Use of E-rate | 12 |
| E-rate Program Costs | |
| E-rate Consulting Services | |
| DIGITAL EQUITY — CLOSING THE HOMEWORK GAP | |
| LIBRARIES | |
| YOUR EXPERIENCE WITH E-RATE | 24 |
| Your Institution's Use of E-rate | 29 |
| E-rate Program Costs | |
| E-rate Consulting Services | |
| DIGITAL EQUITY — CLOSING THE HOMEWORK GAP | |
| Advice from Schools and Libraries | |
| Opportunities | |
| Resources | 45 |
| Data Sources | 45 |
| Support for Schools and Libraries | |
| ACKNOWLEDGEMENTS | _ |
| ABOUT THE CONNECTICUT COMMISSION FOR EDUCATIONAL TECHNOLOGY | 47 |

E-rate in Connecticut

Survey Results and Opportunities for Schools and Libraries

Introduction

Demand for Digital Learning in Connecticut

The state of Connecticut's schools and libraries have embraced digital learning. In the 2014 and 2015 school years, districts received more than \$30M in funding from the State of Connecticut to connect to the Internet, build wireless networks, and purchase computers to support online learning and assessments. Work is underway to connect all public libraries via high-speed fiber to the Internet, with more than 70 percent of central libraries connected to the state's research and education network, CEN. The ability to connect learners of all ages for college and career readiness as well as lifelong learning remains a key asset to Connecticut's educational system.

To help offset the costs of connecting to the Internet and providing robust internal networks, our state's schools and libraries have leveraged the Universal Service Schools and Libraries Program, commonly known as "E-rate." This federal program, now in its twentieth year, collects fees on telecommunications services and in turn provides financial offsets through the Universal Service Fund that result in discounts of up to 90 percent to help connect eligible schools and libraries. The program exists to help ensure that all schools and libraries have access to affordable telecommunications and information services, especially those in disadvantaged communities.

Despite the opportunity that E-rate affords, Connecticut has significantly underutilized the program. For example, since 2015, Connecticut schools have left a total of \$22M in available matching funds untapped for Category 2 (internal network) services, with \$8M set to expire this year. What can explain this shortfall, given the increasing dependence on high-speed connections to support digital learning in the context of financially challenged schools and libraries?

This report seeks to answer those questions by providing insights shared from leaders of educational institutions across the state.

Approach

During the spring of 2018, members of the Connecticut Commission for Educational Technology's Infrastructure Advisory Committee identified the need for a statewide survey to determine the underlying causes behind the apparent underutilization of the E-rate program. Discussions about the survey design identified likely deterrents, such as difficulty in using the program and a lack of local matching funds to pay for data circuits and network equipment. The survey design group included representatives of the K – 12 and library community, most of whom had managed E-rate for their own institutions or provided support to other schools and libraries. Their expertise led to the design of a survey intended to reveal challenges in the filing process, the costs of managing E-rate, challenges with technology design and procurement, and resources that the educational community and State might leverage to assist schools and libraries. The following sections include an overview of findings, aggregated responses, and open-ended feedback.

Survey Responses

Through a concerted campaign to reach district and library E-rate managers, the Committee shared the survey link in person and through statewide e-mail lists. Partner groups that helped to spread the word include the Connecticut Association of Boards of Education (CABE), the Connecticut Association of Public School Superintendents (CAPSS), the Connecticut Association of Schools (CAS), the Connecticut Association of School Business Officers (CASBO), the Connecticut State Library, and Libraries Online (LION). A total of 37 libraries and 79 public, charter, and parochial school systems responded (116 unique responses).







68 of 169 (40%) Public Schools

In addition to survey responses, this report reflects data from other sources in order to provide additional insights into each institution. This includes the Connecticut State Department of Education's 2017 school district enrollment and 2016 demographic reference group (DRG) tables; Internet usage and patron totals from the Connecticut State Library; and E-rate filing and award data from the Universal Service Administrative Company (USAC), which manages E-rate.

Executive Summary

With responses from more than 100 institutions to questions on a variety of topics — expertise in using the program, direct and indirect costs, and equity of access — this report reflects a broad diversity of voices, experiences, and perspectives. That said, a number of common themes emerge:



Barriers: Predominant challenges to leveraging E-rate are a lack of matching funds (schools) and reluctance to filter content (libraries)



Common Support Providers: Nearly all schools use the same thirdparty E-rate consulting firm; most libraries leverage one State of Connecticut employee as their consultant



Value: Both schools and libraries find strong value in the assistance provided by individuals with deep knowledge of the program



Complexity and Inefficiency: The technical and administrative complexities of fully leveraging E-rate drive dependence on support services, leading to inefficiencies in the form of direct and indirect costs as institutions engage such providers independently



Return on Investment: Schools using consultants find a high (2X) return on investment, even when accounting for consulting fees



Equity: Schools and libraries offer programs and resources to help students learn outside these institutions, and E-rate funding could help provide universal access anywhere learning takes place

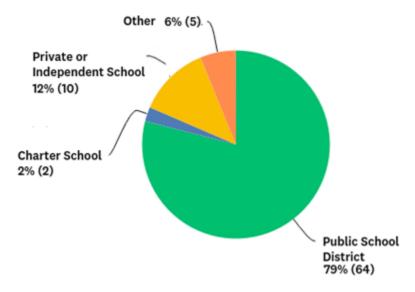
The following sections provide the quantitative and qualitative responses captured in the survey, informed by filing data provided through the USAC portal and other state data sources. Because the responses differed — in some cases significantly — between schools and libraries, survey responses and analysis appear in separate sections, by institution type.

Schools

Institution Type



Representatives from 105 institutions responded to the survey, representing 20% of libraries and 40% of public schools.



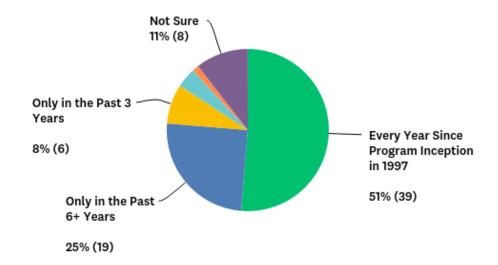
| Type of Institution (Schools) | Percent | Count |
|-------------------------------|---------|-------|
| Public School District | 79% | 64 |
| Private or Independent School | 12% | 10 |
| Charter School | 2% | 2 |
| Other | 6% | 5 |
| Total | 100.00% | 81 |

Your Experience with E-rate

How long have you applied for and used E-rate funding?



More than three-quarters have leveraged E-rate for the past 6+ years; only 6% no longer or have never taken advantage of the funds.



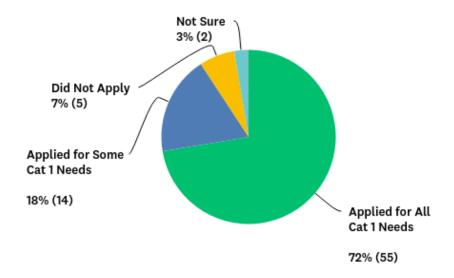
| How Long Have You Filed for E-rate? | Percent | Count |
|--|---------|-------|
| Every year since program inception in 1997 | 51% | 39 |
| Only in the past 6+ years | 25% | 19 |
| Not sure | 11% | 8 |
| Only in the past 3 years | 8% | 6 |
| We used to apply but don't anymore | 4% | 3 |
| Never | 1% | 1 |
| Total | 100.00% | 76 |

During the last E-rate funding cycle, to what degree did you apply for Category 1 (e.g., data circuits and Internet access) and Category 2 funds?

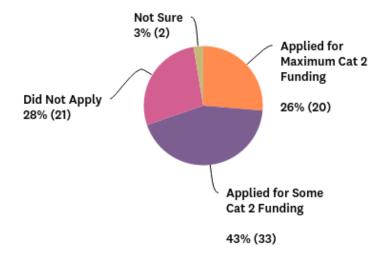


Nearly 90% applied for Cat 1 funding, but only 70% for some or all Cat 2 funding.

Category 1 Usage



Category 2 Usage



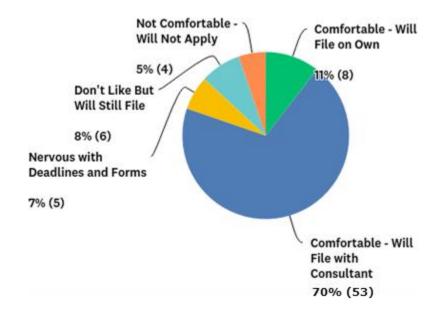
| Category 1 Usage | Percent | Total |
|---|---------|-------|
| Applied for all Cat 1 needs | 72% | 55 |
| Applied for funding from some Cat 1 needs | 18% | 14 |
| Did not apply | 7% | 5 |
| Not sure | 3% | 2 |
| Total | 100.00% | 76 |

| Category 2 Usage | Percent | Total |
|-----------------------------------|---------|-------|
| Applied for some Cat 2 Funding | 43% | 33 |
| Did not apply | 28% | 21 |
| Applied for maximum Cat 2 funding | 26% | 20 |
| Not sure | 3% | 2 |
| Total | 100.00% | 76 |

As the person responsible for managing and filing for E-rate, what is your comfort level with the program and process?



Most are comfortable with the program, but only with the assistance of a consultant.

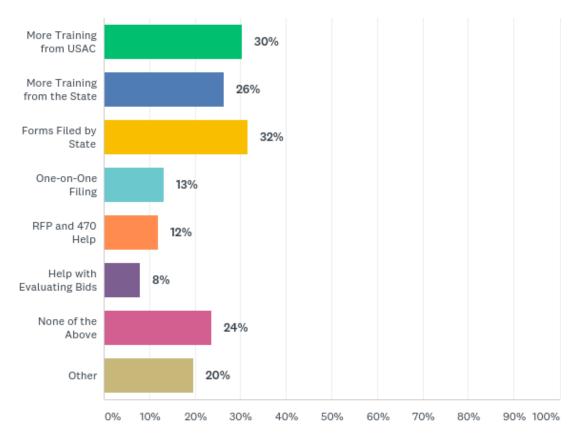


| Comfort Level | Percent | Count |
|--|---------|-------|
| I feel completely comfortable with E-rate and plan to continue to file with the assistance of a consultant | 70% | 53 |
| I feel completely comfortable with E-rate and plan to continue filing on my own | 11% | 8 |
| I don't like E-rate but I can't stop applying because we need the | 8% | 6 |
| I'm nervous about the deadlines and the forms | 7% | 5 |
| I'm not at all comfortable with E-rate and don't apply | 5% | 4 |
| Total | 100.00% | 76 |

As the person responsible for managing and filing for E-rate, what would help to increase your comfort level?



A variety of factors might increase the comfort level of E-rate filers, especially training.



| Factors That Would Increase E-rate Comfort Level | Percent | Count |
|--|---------|-------|
| Forms completed by state consultant | 32% | 24 |
| More USAC Training | 30% | 23 |
| State training | 26% | 20 |
| None | 24% | 18 |
| One-on-one filing | 13% | 10 |
| Writing and posting an RFP and Form 470 | 12% | 9 |
| Evaluating bids | 8% | 6 |
| Total | 100.00% | 110 |

Open-Ended Responses

- A more complete understanding of what we need to do, and what strings are attached (to evaluate if we should do it at all).
- A more streamlined process, I couldn't handle the application without the help of a consultant. I don't know what makes it so difficult but even with the help of a consultant it takes a lot of my time.
- Group discussions about how other districts are using E-Rate funds.
- I am happy with our consultant but a State funded consultant would be great to save money.
- I am not the person who files for e-rate, nor do I know who does. I was sent this survey by my superintendent and asked to reply.
- I don't have a technology or procedural comfort issue, but it's a government process so it's horrible and they threaten to put me in jail for fraud if I do it wrong...
- I feel comfortable with current filings.
- I have the application process down but sometimes the technical questions that are asked require that I seek advice or information from our sub-contracted technology provider.
- I'm comfortable with the program but am expending funds for a consultant to work it with us
- I'm not completely comfortable with the process, but I like the idea behind it and we
 need the funding. The information needed is out of the realm of experience of a
 school principal. I never know if I'm doing what's right and if it will work out best for
 my school.
- It seems as though the process has become much more complicated and cumbersome without additional benefits
- Just better information in a clear format; summative
- More clarification on the funding years and deadlines
- our consultant is great
- Our consultant E-Rate on line has meet all our needs as well as being proactive on our behalf.
- Qualified and trained in-house expert

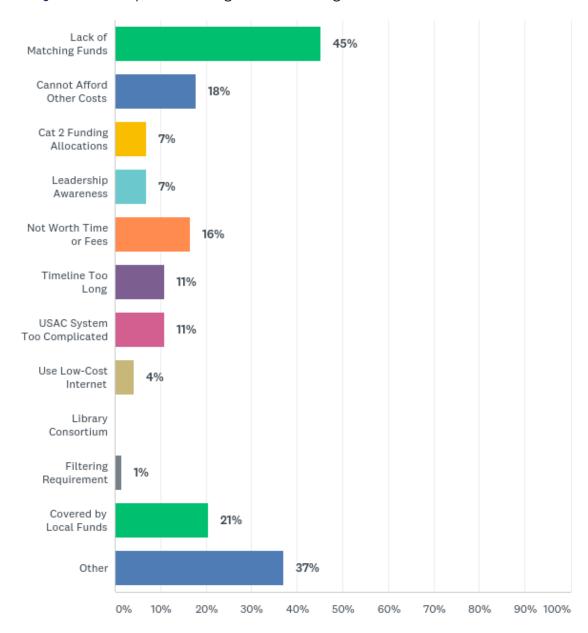
- Requirements and criteria have become so overwhelming that the application process seems prohibitive at best
- Some of the wording of questions is misleading. I always have to call support.
- There must be a better way to encourage the use of technology without the burden of having to fill out more paperwork!
- We been using a consultant for last 7 years and works out well for the district
- We currently use a consultant
- We have used a consulting firm in the past to file E-rate, I have not been in this district long but the process was not smooth and mistakes were made that we are still trying to rectify. It is expensive to use a consulting firm and state training would be appreciated so we can be comfortable to do it on our own.

Your Institution's Use of E-rate

What hinders your district or library from applying for and using E-rate funds?



While a host of factors present challenges to fully utilizing E-rate, the availability of matching funds ranks highest.



| Hindrances to E-rate Use | Percent | Count |
|--|---------|-------|
| Lack of matching funds | 45% | 33 |
| Other (See Open-Ended Responses) | 37% | 27 |
| Already have infrastructure and services | 21% | 15 |
| Cannot afford other costs | 18% | 13 |
| Not worth the investment of time or consulting fees | 16% | 12 |
| Application timeline too long | 11% | 8 |
| USAC System Too Complicated | 11% | 8 |
| Category 2 funds not allocated to the most needy schools | 7% | 5 |
| Lack of appreciation and awareness | 7% | 5 |
| Already use free or low-cost Internet | 4% | 3 |
| CIPA compliance | 1% | 1 |
| Total | 100.00% | 130 |

Open-Ended Reponses

- Cannot always purchase everything we need in the same year. Need to spread out purchases among multiple years.
- E-Rate contributed to the infrastructure upgrades as well as local funds
- It would be great if you honored wireless equipment and smart boards/TVs
- list of applicable equipment types for Cat 2 is too limited
- Manage and respond to vendors who are basically sending us a generic email requesting additional information
- not applicable as we have applied and continue to apply annually
- Nothing hinders us from applying, have been denied in past though
- Overall difficulty of the process and systems. Although they have gotten better.
- The bidding process exposes me to vendors that call about unrelated content
- We applied for Cat 2 funding for some big projects 2 years ago and will look forward to when we can again to refresh those projects.
- We don't really have anything the hinders us
- We have used what we can
- We max out what is available through E-rate, but it is limited
- We use E-rate and if we didn't for anything particular, it is because the funds were not available (our part).
- We've taken advantage of all funds available since the inception of E-rate. The only barrier now is we are near the end of our five year per student per school allowance.

- with diminishing returns, we may abandon the program as we to pay consultant as I don't have the time/experience to do it myself
- Would like to see increase in covered service. Gets complicated with what would be covered and not.

With regard to E-rate filing and fulfillment, where are your greatest needs in terms of in-house resources? Please rank the following from greatest need (1) to least (5).

Q

Schools express a mix of needs, from managing the technology that E-rate helps provide to purchasing and design expertise.

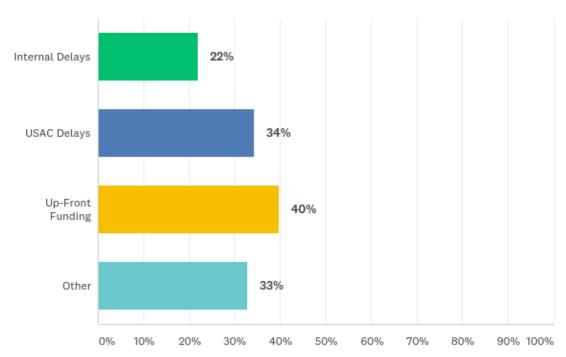


| Greatest In-House Needs | Score | Need Rank |
|---|-------|-----------|
| Technology Management | 2.41 | 1 |
| Installation and Configuration | 2.77 | 2 |
| Administrative (e.g., financial management) | 3.08 | 3 |
| Technical Design | 3.16 | 4 |
| Procurement (e.g., creating and responding to RFPs) | 3.58 | 5 |

Which of the following timing constraints have affected your district or library?



Districts express a variety of challenges with timing, most of alignment across USAC award calendars and district budget years, which do not align.



| Timing Constraints | Percent | Count |
|--------------------|---------|-------|
| Up-front funding | 40% | 29 |
| Other | 33% | 24 |
| USAC | 34% | 25 |
| Internal Delays | 22% | 16 |
| Total | 100.00% | 94 |

Open-Ended Responses

- Delay in award from USAC, same year
- E-rate is done so early that technical issue arise but it is too late to apply for E-rate.
- Have not participated for several years
- Insufficient technology planning capabilities and understanding of the program.
- It is a prolonged process. Sometimes over one year from the time need is identified until project completion.

- lack of ability to procure related funds within limited budgets
- Local funding to support
- None, we know what the schedule is. it's inconvenient
- Only apply for cat 1 does not apply.
- The timeline overall is too long and have to have a signed contract to submit to E-rate in different fiscal year.
- This is the first year that I have not yet received the approval for my Cat 1 request. Typically I would receive notification within the month of applying.
- Time frame not matching district budget cycle
- Timeline to get contracts signed is too short for vendors doing lots of e-rate funding, it took me weeks to get a signed contract in place

E-rate Program Costs

Approximately how many staff hours do you spend as a district or library in filing for E-rate each year?



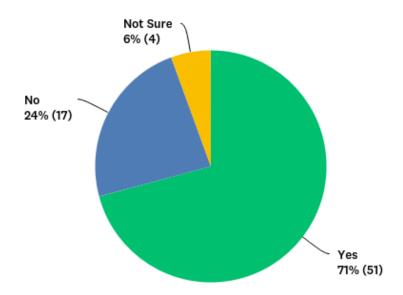
Schools report spending a bit more than three business days per year on E-rate activities, or less than a minute per student based on enrollment totals.

| Staff Time Dedicated to E-rate | Total |
|--------------------------------------|------------|
| Average Staff Time Spent | 27 Hours |
| Median Staff Time Spent | 20 Hours |
| Average Staff Time Spent per Student | 51 Seconds |
| Median Staff Time Spent per Student | 29 Seconds |

Do you use an external consultant to assist with E-rate?



Approximately three-quarters of respondents indicated they use an outside consultant. Actual USAC filing data puts this number at about 90 percent.



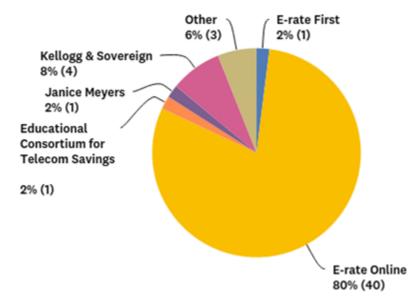
| E-rate Consultant Use | Percent | Count |
|-----------------------|---------|-------|
| Yes | 71% | 51 |
| No | 24% | 17 |
| Not Sure | 6% | 4 |
| Total | 100.00% | 72 |

E-rate Consulting Services

Which consulting firm do you use?



The consultancy E-rate Online, local to Connecticut, has the vast majority of K – 12 customers in our state.



| E-rate Consultant | Percent | Count |
|--|---------|-------|
| E-rate Online | 80% | 40 |
| Kellogg & Sovereign | 8% | 4 |
| Educational Consortium for Telecom Savings | 2% | 1 |
| E-rate First | 2% | 1 |
| Janice Meyers | 2% | 1 |
| Other | 6% | 3 |
| Total | 100.00% | 50 |

What are your annual consulting fees?



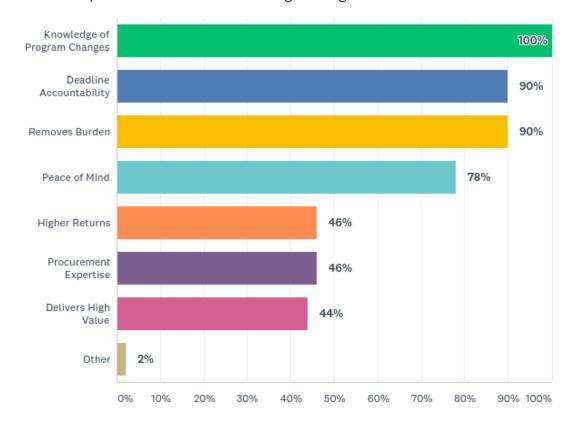
Costs and cost basis for E-rate consultants vary based on district size, demographic reference group, etc., despite the fact that the vast majority most schools use the same consultant. Most charge a flat fee plus a percentage of awarded funds. The following totals and averages provide a blended snapshot of costs across 39 local education agencies that used a consultant in the past year.

| Cost Type | Cost |
|--------------------------|------------|
| Average Consulting Fee | \$6,322.24 |
| Median Consulting Fee | \$5,000.00 |
| Average Cost per Student | \$2.70 |
| Median Cost per Student | \$1.77 |

Why do you use a consultant?



Schools express a variety of reasons why they depend on paid consultants for E-rate support, with nearly all highlighting the technical and procurement expertise that districts see as lightening their own administrative burden.



| Reasons Why You Use an E-rate | Percent | Count |
|--------------------------------------|---------|-------|
| Knowledge of E-rate program | 100% | 50 |
| Keeps us on task and schedule for | 95% | 45 |
| Takes burden off limited staff | 95% | 45 |
| Peace of mind | 78% | 39 |
| Ability to get more money than we | 46% | 23 |
| Delivers more value than what we pay | 44% | 22 |
| Procurement expertise | 46% | 23 |
| Other (See Open-Ended Response) | 2% | 1 |
| Total | 100% | 248 |

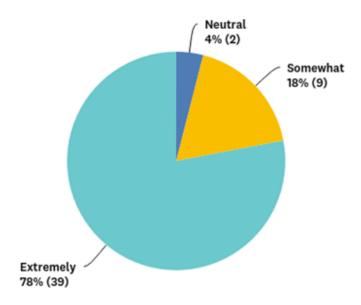
Open-Ended Response

 We don't have a professional IT staff, therefore he can assist with this important function.

Overall, how satisfied are you with your E-rate consultant?

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Of those districts that use outside consultants, virtually all express satisfaction — in three-quarters of the cases extreme satisfaction — with those services.



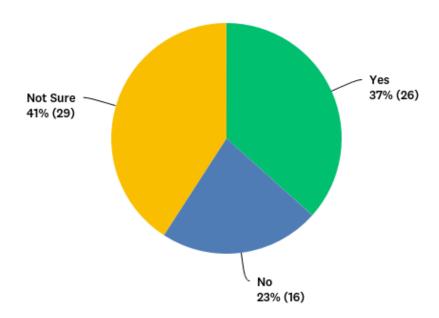
| Satisfaction with E-rate Consultant | Percent | Count |
|-------------------------------------|---------|-------|
| Extremely | 78% | 3 |
| Somewhat | 18% | 9 |
| Neutral | 4% | 2 |
| Total | 100.00% | 14 |

Digital Equity — Closing the Homework Gap

Should E-rate help pay for Internet access outside of schools and libraries?



While many districts provide a means to connect students to broadband outside of school, most remain uncertain as to whether E-rate should pay for such connections. Open-ended responses indicate that they may see offsets for such connections as a threat to funds to support school-based networks.



| E-rate for Off-Site Access | Percent | Count |
|----------------------------|---------|-------|
| Not Sure | 41% | 29 |
| Yes | 37% | 26 |
| No | 23% | 16 |
| Total | 100.00% | 71 |

Open-Ended Responses

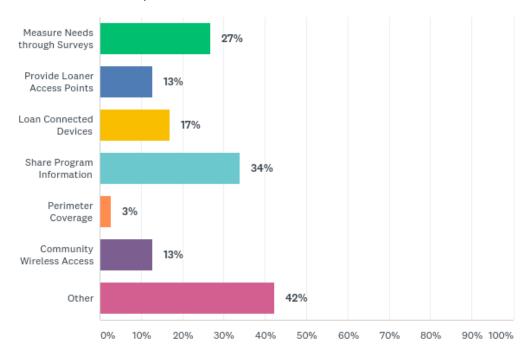
- Although I like the idea of help with providing access outside of schools/libraries, doing so may take existing limited funds from schools
- As in... low income families? non profits? what does outside mean?
- Every student should have the same opportunity to access to the internet at home as any other student.
- I feel that there are plenty of families in need, but specific rules need to be implemented.
- Low income students
- Municipal or public hotspots, perhaps?

- our residential children would benefit
- this would allow for one to one initiatives
- Unless I am missing something, there are limited funds available for schools and libraries, how would increasing the footprint help that?
- Very needy district may never get enough funding.

How does your district or library address the need of helping students of all ages get online at home?



About a quarter of responding schools measure broadband availability at home, a third provide information to families about affordable broadband programs, and roughly 40% offer a loan program where students can use mobile hotspots or Internet-enabled devices.



| Supports for Off-Site Access | Percent | Count |
|--|---------|-------|
| Other (See Open-Ended Responses) | 42% | 19 |
| Provide information about low-cost access programs | 34% | 24 |
| Measure needs through surveys | 27% | 19 |
| Provide 3G- or 4G-enabled loaner devices | 17% | 12 |
| Offer free community (e.g., downtown) wireless | 13% | 9 |
| Provide loaner access points | 13% | 9 |
| Install hotspots that reach perimeter areas | 3% | 2 |
| Total | 100.00% | 94 |

Open-Ended Responses

- 3G and 4G available in some cases, not all
- Based on Free and Reduced
- Has not presented an issue as district has low poverty levels.
- I don't think we do help students get access at home
- Internet access only provided on school grounds of District
- Offer loaner computers, family only pays for Internet access
- Provide outdoor wireless access points as some of our schools; guest networks at all gov't buildings
- We don't. Private school, most students have internet. It is rare that we have students with no Internet and generally those things get worked out.
- We keep all Chromebook laptops at the school. Students are not required to access curriculum applications from home.
- We offer free guest WiFi within/around all of our schools
- We purchased cell based AP's that students can check out
- working with CES for consortium access through Kajeet and Verizon

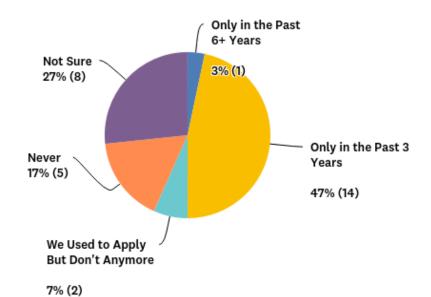
Libraries

Your Experience with E-rate

How long have you applied for and used E-rate funding?



Many Connecticut libraries are new to E-rate or not aware of how long they have been filing for benefits.



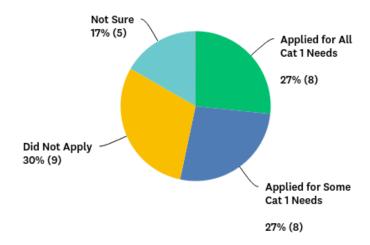
Count **How Long Have You Filed for E-rate?** Percent 47% 14 Only in the past 3 years 27% 8 Not sure 17% 5 Never 7% 2 We used to apply but don't anymore 3% 1 Only in the past 6+ years 100.00% 30 **Total**

During the last E-rate funding cycle, to what degree did you apply for Category 1 (e.g., data circuits and Internet access) and Category 2 funds?

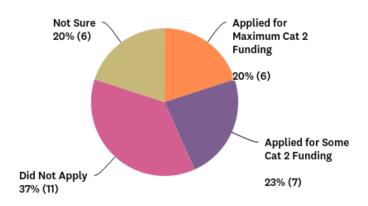


Nearly half of Connecticut libraries that responded to the survey indicated that either they do not use E-rate for Category 1 circuits or were not sure if they did so. Totals were similar for Category 2 filings.

Category 1 Usage



Category 2 Usage



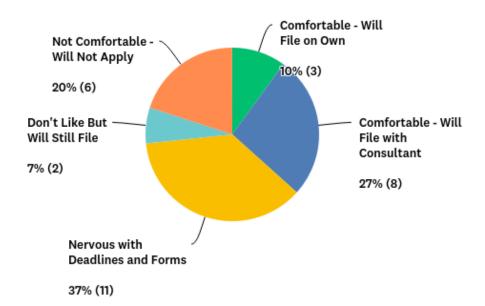
| Category 1 Usage | Percent | Total |
|---|---------|-------|
| Did not apply | 30% | 9 |
| Applied for all Cat 1 needs | 27% | 8 |
| Applied for funding from some Cat 1 needs | 27% | 8 |
| Not sure | 17% | 5 |
| Total | 100.00% | 30 |

| Category 2 Usage | Percent | Total |
|-----------------------------------|---------|-------|
| Did not apply | 37% | 11 |
| Applied for some Cat 2 Funding | 23% | 7 |
| Applied for maximum Cat 2 funding | 20% | 6 |
| Not sure | 20% | 6 |
| Total | 100.00% | 30 |

As the person responsible for managing and filing for E-rate, what is your comfort level with the program and process?



More than half of libraries indicate unease with E-rate's deadlines and forms, in some cases enough not to apply for funding through the program. Only 10 percent of libraries are comfortable filing on their own.

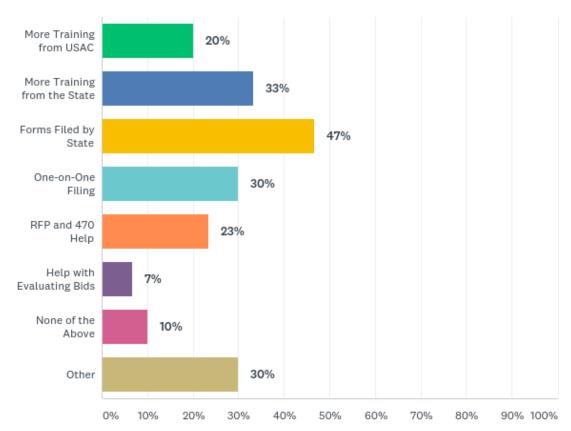


| Comfort Level | Percent | Count |
|--|---------|-------|
| I'm nervous about the deadlines and the forms | 37% | 11 |
| I feel completely comfortable with E-rate and plan to continue to file with the assistance of a consultant | 27% | 8 |
| I'm not at all comfortable with E-rate and don't apply | 20% | 6 |
| I feel completely comfortable with E-rate and plan to continue filing on my own | 10% | 3 |
| I don't like E-rate but I can't stop applying because we need the discounts | 7% | 2 |
| Total | 100.00% | 30 |

As the person responsible for managing and filing for E-rate, what would help to increase your comfort level?



Libraries indicate a desire for more assistance at the state level, whether through assistance with forms, training, or filing.



| Factors That Would Increase E-rate Comfort Level | Percent | Count |
|--|---------|-------|
| Forms completed by state consultant | 47% | 14 |
| State training | 33% | 10 |
| One-on-one filing | 30% | 9 |
| Writing and posting an RFP and Form 470 | 23% | 7 |
| More USAC Training | 20% | 6 |
| None | 10% | 3 |
| Evaluating bids | 7% | 2 |
| Other | 30% | 9 |
| Total | 100.00% | 60 |

Open-Ended Responses

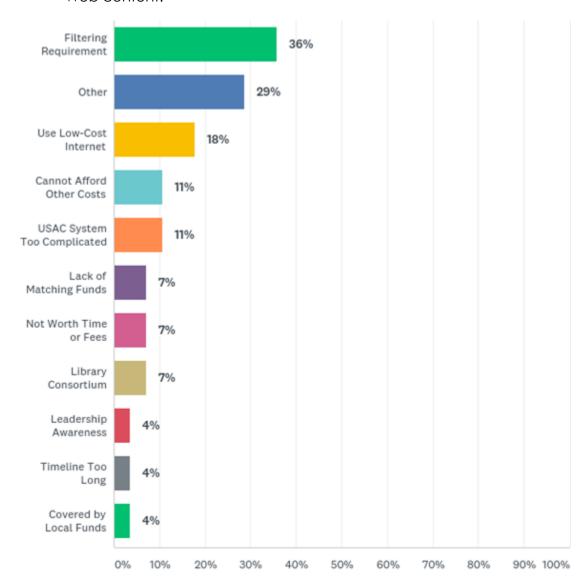
- Couldn't do it without Maria Bernier from CT State Library!
- General walk through is helpful. Maria is excellent with that!
- I appreciate the help and emails already provided by you.
- Only applied for E-rate funding for POTS, which E-rate no longer supports
- It's not that I'm not comfortable with it. Right now I have free internet from Comcast. It's not great but it's doing the job. Applying for e-rate is not high on the priority list for me.
- Many of these items, we already have available from Maria Bernier and they are much appreciated; email reminders of filing deadlines are extremely helpful
- Maria Bernier does a great job guiding us through forms. I would prefer not to do it
 myself, but if I have to, Maria's guidance makes it as easy as it could possibly be.
- Maria Bernier from CT State Library has gotten me through the bulk of the application process. Without her, I would not have pursued this avenue.
- Maria Bernier does send us guidelines to follow- without them and the phone call to her, I would be lost
- Not being required to become CIPA compliant
- We receive enormous amounts of advice and assistance from Maria Bernier. With her help, the process isn't difficult.

Your Institution's Use of E-rate

What hinders your district or library from applying for and using E-rate funds?



Libraries express many of the challenges that schools do in fully leveraging Erate, though the most prominent concern remains the requirement to filter Web content.



| Hindrances to E-rate Use | Percent | Count |
|---|---------|-------|
| CIPA compliance | 36% | 10 |
| Other | 29% | 8 |
| Already use free or low-cost Internet | 18% | 5 |
| Cannot afford other costs | 11% | 3 |
| USAC system (EPC) too complicated | 11% | 3 |
| Lack of matching funds | 7% | 2 |
| Not worth the investment of time or consulting fees | 7% | 2 |
| Belong to a Library consortium | 7% | 2 |
| Already have infrastructure and services | 4% | 1 |
| Application timeline too long | 4% | 1 |
| Lack of appreciation and awareness | 4% | 1 |
| Total | 100.00% | 38 |

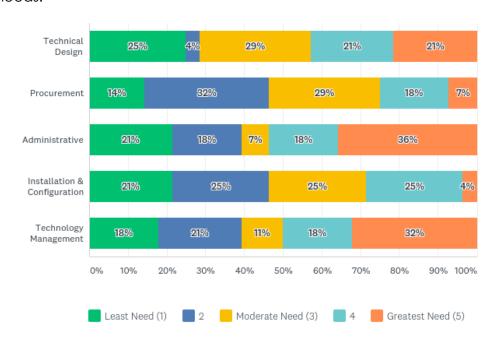
Open-Ended Response

• We applied for managed wireless funding for 2019 and have been approved for 60% of cost. The real challenge is getting funding for the remaining 40%.

With regard to E-rate filing and fulfillment, where are your greatest needs in terms of in-house resources? Please rank the following from greatest need (1) to least (5).



Libraries ranked administrative and technical support as the greatest in-house needs.

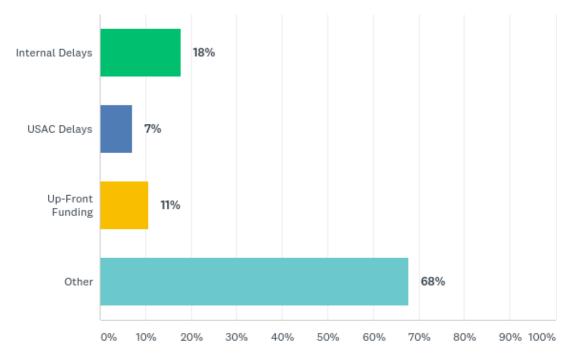


| Greatest In-House Needs | Score | Need Rank |
|---|-------|-----------|
| Administrative (e.g., financial management) | 2.71 | 1 |
| Technology Management | 2.75 | 2 |
| Technical Design | 2.89 | 3 |
| Procurement (e.g., creating and responding to RFPs) | 3.29 | 4 |
| Installation and Configuration | 3.36 | 5 |

Which of the following timing constraints have affected your district or library?



This question may have caused confusion among respondents, who expressed various concerns ("Other" category below) through open-ended responses covering topics from filtering to the types of services covered, rather than timing issues.



| Timing Constraints | Percent | Count |
|-----------------------------|---------|-------|
| Other | 68% | 19 |
| Internal | 18% | 5 |
| Up-front funding (cashflow) | 11% | 3 |
| USAC | 7% | 2 |
| Total | 100.00% | 29 |

Open-Ended Responses

- CIPA Compliance
- Currently using e-rate funds
- Low return on investment for the time required to file
- My time dealing with the forms
- POTS no longer supported by E-rate funding
- We have a very small budget, paying for monthly internet will be a hardship
- We have been lucky and got the Fiber funding
- We have very inexpensive internet

E-rate Program Costs

Approximately how many staff hours do you spend as a district or library in filing for E-rate each year?



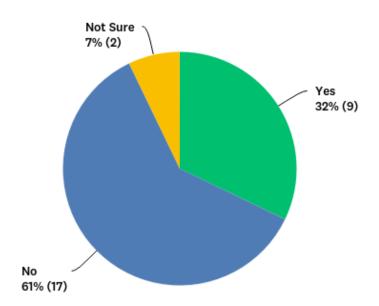
Filers of E-rate report a range of time to manage their submissions, averaging about 9 hours per year.

| Staff Hours Dedicated to E-rate | Total (Hours) |
|---------------------------------|---------------|
| Average | 9.3 |
| Median | 9.0 |
| Range (High – Low) | 17.0 |

Do you use an external consultant to assist with E-rate?



Many libraries responded "Yes" to this question but considered the State Library's E-rate coordinator, Maria Bernier, as an "external consultant." Of the libraries that responded to the survey, only one actually uses a paid, external consultant.



| E-rate Consultant Use | Percent | Count |
|-----------------------|---------|-------|
| No | 61% | 17 |
| Yes | 32% | 9 |
| Not Sure | 7% | 2 |
| Total | 100.00% | 28 |

E-rate Consulting Services



The survey posed the following questions to schools and libraries that indicated that they use an external E-rate consultant:

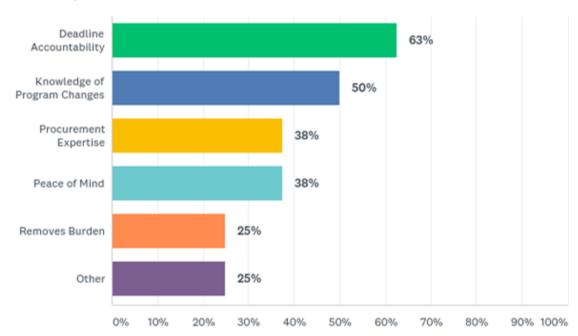
- Which consulting firm do you use?
- What are your annual consulting fees?
- What is the cost basis for your consulting fees?

However, as indicated above, only one library that indicated that it uses an external E-rate consultant used a paid provider, the intent of the question. According to USAC data from 2018, 5 of the 64 libraries (approximately 8%) that filed for Category 1 or Category 2 funds used a paid outside consultant. Therefore, this report does not include responses to the above questions, given the lack of accurate data collected through the survey concerning these issues.

Why do you use a consultant?



While intended to gather information about the value of external, paid consultants, the question below elicited valuable information about the benefits delivered to libraries through the services provided by the State Library E-rate consultant.



| Reasons Why You Use an E-rate Consultant | Percent | Count |
|--|---------|-------|
| Keeps us on task and schedule for filing | 63% | 5 |
| Knowledge of E-rate program changes | 50% | 4 |
| Peace of mind | 38% | 3 |
| Takes burden off limited staff | 25% | 2 |
| Other | 25% | 2 |
| Total | 100.00% | 16 |

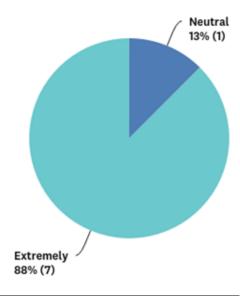
Open-Ended Responses

- Only use help from Maria Bernier
- Use state coordinator

Overall, how satisfied are you with your E-rate consultant?

Q

Libraries indicate an extremely high level of satisfaction with the support they receive from the State Library E-rate consultant.



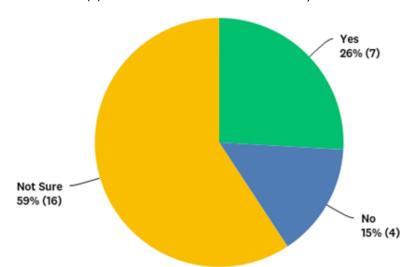
| Satisfaction with E-rate Consultant | Percent | Count |
|-------------------------------------|---------|-------|
| Extremely | 88% | 7 |
| Neutral | 13% | 1 |
| Total | 100.00% | 8 |

Digital Equity — Closing the Homework Gap

Should E-rate help pay for Internet access outside of schools and libraries?



Respondents from libraries did not show strong support for E-rate funding to support connections outside of traditional institutions (only a quarter felt the program should support such off-site connections).



| E-rate for Off-Site Access | Percent | Count |
|----------------------------|---------|-------|
| Not Sure | 59% | 16 |
| Yes | 26% | 7 |
| No | 15% | 4 |
| Total | 100.00% | 27 |

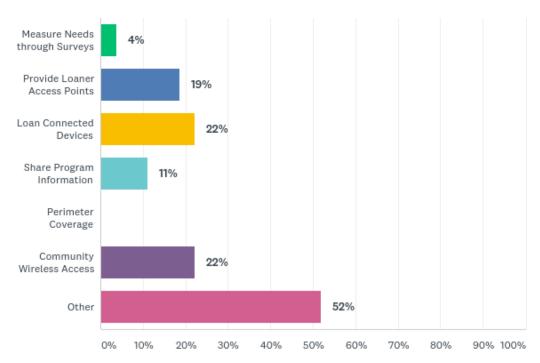
Open-Ended Responses

- For poor urban areas
- Low income qualifiers should be eligible as well.
- Maybe other public spaces like shelters, non-profits, etc.
- We combine with our town service, do not pay directly.

How does your district or library address the need of helping students of all ages get online at home?



Some libraries loan wireless hotspots and 3G- or 4G-enabled computing devices to allow patrons to connect to the Internet outside of their institutions.



| Supports for Off-Site Access | Percent | Count |
|--|---------|-------|
| Other | 52% | 14 |
| Provide 3G- or 4G-enabled loaner devices | 22% | 6 |
| Offer free community (e.g., downtown) wireless | 22% | 6 |
| Provide loaner access points | 19% | 5 |
| Provide information about low-cost access programs | 11% | 3 |
| Measure needs through surveys | 4% | 1 |
| Install hotspots that reach perimeter areas | 0% | 0 |
| Total | 100.00% | 35 |

Open-Ended Responses

- Library funding limits the capacity to provide community support outside our doors.
- Loan hotspots
- Not much for school kids. Wireless in parking lot but they need a device
- The library does not help students get online at home
- The library does nothing.
- The library offers free internet in the library, but nothing beyond that

Advice from Schools and Libraries

The survey included two open-ended questions, prompting schools and libraries to offer their advice (A) to other institutions and (B) to the State regarding E-rate. Reponses appear alphabetically based on the first word in the response.

What advice would you recommend to other districts and libraries regarding E-rate?



Aside from a few outliers, most respondents encourage continued use of the program. They point to the complexity of E-rate (timing, filing, EPC interface) as a barrier to use and so underscore the value of consultants (paid or State).

Schools

- Apply for as much as you can. It is also OK to ask for more than you need in the end. You can always purchase less than you apply for if budgets are tight, but it is not possible to purchase more once the form 470 is complete. If it is a lot of work, look to a consultant, they keep you on track and take a lot of the heavy lifting in both filing and working with vendors. If you are not sure what is funded, ask, the worst you will be told is no.
- Apply, free money
- Avoid it if you can. It's a hassle and limits your flexibility. But it is free money...
- Be planful for more than 1 year so you can afford to use e-rate
- Be realistic about what you are applying for plan you projects to span over multiple years project for one, plan for 2
- Both the IT and finance department need to be involved in planning an applying for the e-rate funding.
- Budget planning and not current year funds make this a difficult and lengthy process
- Considerable time investment will be required to make it through the process.
- Depends on size and reimbursement rate. There are many different situations.
- Funds drying up. May not be worth the consultant fees in the future
- Get a good consultant and give them what they need when they ask for it.
- Hire a consultant
- Hire a consultant a year in advance and have the consultant help identify needs for Cat 1 and Cat 2 and then settle in to the long process.
- I would strongly encourage districts to use funds as a multiplied to maintain and enhance their infrastructure and not as a pay down of the district budget for services (Budgeting net)
- If you aren't already, take advantage of it.
- If you do not have a person that can be dedicated to E-Rate full time, use a consultant

- In my opinion, there are a lot of people not applying for e-rate because the categories aren't matching the needs of the district. For example, I have 100 smartboards that the teachers use on a daily basis. They are old and need to be replaced. I'm concerned that there is coming a time where I will not be able to replace them due to the high cost. Also, wireless used to be covered but no longer. Chromebooks are popular in school districts and rely heavily on wireless. We need to increase our wireless coverage in the schools, but that comes at a high cost as well.
- It has helped us achieve our goals but we are concerned about what will come next once we use all our Category 2 allotment
- It is a great program in terms of helping provide financial support for school budgets that are already maxed out and for that reason I would recommend taking the time and effort to apply for the funding.
- It's a good source of funds to leverage your costs as long as you stay on top of the paperwork.
- Make it so it is understandable. We have no idea what we are entitled to or how to get it. That is why we pay a consultant
- Make sure you file for all that you can do with the matching funds available
- Plan ahead. use the training resources available for the EPC. Use their support whenever you are in doubt. Help identify new possible sources of ERate support
- Secure local funding to ensure E-rate fund availability
- Take advantage of as much as you can.
- Take advantage of the opportunity
- Take advantage of the program.
- The biggest challenge we have is getting funding for major purchases. Some districts use capital funds ours requires that we dip into our general budget, which is already cut to the bone.
- Use a consultant
- Use a consultant
- Use a consultant process is convoluted and difficult
- Use a consultant if you don't already
- Use a consultant
- Use an E-Rate consultant.
- Use it to its full extent!
- Yes use it if you can
- You need a dedicated tech person and you need lots of time for the application process which has multiple steps.

Libraries

- As a public library, I hate the idea of filtering, but when we get 80% of our costs back, it makes sense. We do the lowest possible level of filtering CIPA allows, and have had very few issues with patrons being blocked from necessary information.
- Don't bother. Program should be terminated
- If you have an opportunity to utilize e-rate funding to connect to fiber optics, you should seriously consider it. It is cost-prohibitive without the funding.
- It is very much worth the money and time. Although originally, as a librarian, I was concerned about filtering, the financial advantage overcame my reservations. And

filtering was approved by the library board that runs the library and represents the community.

- It is worth filling out the forms for the funding.
- It's a discount but complicated.
- Learn everything you can about e-rate and then decide what Cat 1 or 2 products and services might be on your organization's near-term radar. We have a 2-step strategy to complete our managed wireless project with FY2019 E-rate funding and then go on to apply for funding for a network architecture upgrade.
- No advice. We had CEN, which we stopped using after we got free Internet. I went to a workshop to hear about fiber connection, but it was about how to fill out the paperwork, which was incredibly complicated to me.
- See if it is worth the effort of filing. Decide on filtering.

What suggestions do you have for the State to make E-rate easier and more efficient for Connecticut schools and libraries?



Recurring recommendations include the need for state consultants, the value of the program and to communicate its worth to decision makers, having the State advocate for improvements in the USAC portal and its alignment of funding cycles, and resistance to use E-rate among libraries because of the program's requirement to filter content.

Schools

- Assign state consultants to assist districts
- At CEN conference provide sessions.
- Award and share in the cost of a state subsidized E-Rate Consultant
- Be mindful of the possible lack of technical expertise when applying for funding
- Break it down, make it simple
- Category 1 internet, we all use CEN, if that could be filed once for everyone. Cat 2 is
 a district decision based on matching funds and timing. It's difficult enough to
 schedule and bid projects without worrying about E-rate compliance and all of their
 rules, but the 40% off is enough of a discount to make us take advantage of it. This
 summer is our first ever project using Cat 2 funds to upgrade our WiFi.
- Creating a system where the vendor is responsible for collecting the reimbursement directly vs the school would make the process easier.
- Educate Boards and towns about the availability of E-rate funds to help offset budgetary concerns
- Fewer steps
- Have more training sessions, single online step-by-step portal/timeline planner
- Have the State file form 470's on behalf of all schools and libraries using the state's already vetted state contract list.
- I am not sure that the state has a role other than lobbying the SLD on behalf of districts. Perhaps CEN can bundle additional services such as hosted firewall in a way that is E-rate eligible.
- I do not know what the State's involvement is currently.

- I really liked it when the state could submit a state level application for the CEN.
- It was great when the state applied for Internet as a whole
- Less cumbersome, simple process, additional funding
- Less paperwork and the ability to order more items via e-rate. It's become less and less useful if you don't need infrastructure items.
- Less threatening language on the forms.
- Make Appian / USAC portal easier to understand for newcomers. It is obvious that
 Appian was the lowest bidder because the portal is a "generic" process software
 that has not been customized enough for the needs of the e-rate process. Yes,
 every year it gets better, but it is not intuitive and menu items are hidden in reports
 and work arounds. You need to force them to customize the navigation to be more
 user friendly.
- Make the filing simpler and easier to do ourselves. More districts would save the
 funds and have their Business Offices complete the process if they understood the
 process better.
- Make the program less cumbersome
- Maybe get school districts to be on the same cycle. For example, 2018-19 open up discounts for wireless device purchasing. Then 2019-20 open up discounts for purchasing smartboards. Then 2020-2021 open up discounts for buying switches and routers. This way each district has an opportunity to get equip themselves with the same equipment.
- My highest priority: get the IP communications back into the allowable category for reimbursement. I spent lots of money getting this campus switched over to VOIP telephony (from legacy copper wire) only to have the FCC discontinue support of VOIP. It doesn't make sense as voice and data network traffic are one and the same now.
- My biggest issue is limited availability of Cat 2
- Our biggest challenge with e-rate, and it's not anything the State can do, is the 50% matching funding and a process that begins in the fall for purchases the following summer. If we could simply use all the allocated e-rate funds without a 50% match we would be able to do so much more.
- Perhaps a FAQ or introductory document to hype E-rate (this may exist; I haven't gone looking for one). Highlight any support that's available, or short success stories from other districts (private school examples would be helpful for us).
- Provide sufficient staff to support this needed effort
- Provide technical expertise or trainers available to support initiatives. Having supported my district for two decades of E-rate filing, I am concerned when I retire, there will be gaps. Advocate through our congressional representatives for better funding, and higher levels of funding for districts that may appear wealthy.
- Quite simply, application process needs to simplified and streamlined...!
- Reduce the red tape, labeling, and paper trail requirements and/or time limits on how long devices have to live in the building they were procured for. It is extremely time consuming and prohibitive as building occupancy and needs change.
- See if it is possible for the state to work with E-rate on behalf of CT districts for services that the majority/all districts use such as the CEN. If the funding can be awarded on the state level, reduced costs can be passed to the district and eliminate the ongoing process with e-rate for these types of services.
- Seems to be a federal funding issue. Talk to them to restore funding.

- Stay out of it more or less. The State makes things much worse with unfunded mandates. Kids get less. I am finishing my 25th year in public education today. I am very frustrated with the State in general.
- Streamline the application process.
- Training for in-house professionals.
- Use state influence to pressure USAC to streamline the process.
- We stopped applying because the consultant fee and amount we qualified for became so low.

Libraries

- Again, the type of service and expertise that Maria Bernier offers is ideal. I imagine
 that she can't be everywhere at once so perhaps a team of experts makes sense —
 they can handle marketing of E-rate benefits and can be teamed up with
 organizations as they pursue more complex Category 2 level projects.
- Continue to have the state consultant available. Without that I do not know how we could use the service.
- Easier interface and instructions
- Eliminate the need to filter
- Get rid of it
- Go back to paying for CEN
- I am assuming you are talking about fiber connection. If so, to have a team that will help you find the best internet costs and help filing would be motivating.
- It would be great if someone could file on behalf of all CT schools and libraries.
- Make it easier to apply. Guide us in what we can get, other than Internet. For example, my library needs a new phone system. Can E-rate funds be used for that? Thanks
- Our library disagrees with CIPA and internet filtering and the restriction on our citizens civil liberties. Please reconsider this restriction.
- Simplify process
- The e-rate qualification for libraries should be less stringent in regards to the filtering. The filtering piece is what hinders most libraries from applying in the first place.
- The filtering requirement is a deal breaker for us and many other public libraries.

Opportunities

Members of the Commission and its Infrastructure Advisory Council see a number of opportunities following their thorough review and discussion of the E-rate survey results. Other E-rate experts (see Acknowledgements section below) have considered the responses and provided input from a national perspective. The following sections reflect these recommendations and provide possible next steps to help schools and libraries appreciate greater benefits from the E-rate program.

- Request for Proposal (RFP) for Consulting Services: Given that four out of five schools use the same E-rate consultant, exploring efficiencies in procuring these services affords opportunities for cost savings and transparency. Firms responding to the open bid would appear on a state list, backed by the same tools and team at the Department of Administrative Services (DAS) that support other competitively bid products and services. An RFP would not mandate schools or libraries use any particular vendor. Doing so would simply provide transparency of pricing and, in some cases, streamline the purchasing process.
- Hardware and Circuit Bid List: Similar to the approach taken for E-rate consulting services, a common bid list of frequently purchased hardware and data circuits might prove helpful to districts and libraries. A master contract (E-rate Form 470) would help streamline purchasing for districts and libraries as purchasers as well as providers of these products and services.
- Consortium Pricing: Libraries already benefit from the Connecticut Libraries Fiber Consortium by collectively bidding on data circuits and other E-rate services.
 Doing so for schools might also provide cost savings and transparency in pricing.
- State-Level Matching Funds: Other states (for example, California, Rhode Island, and Texas) have a universal fee assessed through telecommunications providers to help offset school and library matching costs. Connecticut could consider the same approach to provide an efficient means of covering the full cost of E-rate services and ensuring that schools and libraries do not walk away from available federal dollars.
- Training and Information Resources: Given the highly complex nature of the Erate program, schools and libraries would benefit from the availability of training sessions and educational materials.

• Outreach and Awareness: Various stakeholders at the state and local level would appreciate the insights shared in this report. Sharing it with the Connecticut Congressional delegation as well as the Federal Communications Commission (FCC), which oversees E-rate, might raise awareness of the program's complexity and point to opportunities to improve the program. The report might also spur a closer analysis and discussion of E-rate among members of professional groups in the state, such as the Connecticut Association of Boards of Education, the Connecticut Association of School Business Officers, the Connecticut Association of Public School Superintendents, the Connecticut Association of Schools, and the Connecticut Council of Municipalities.

Resources

Data Sources

This report includes data from sources that inform the responses gathered through the state E-rate survey, as follows:

- EdSight (https://edsight.ct.gov), the Connecticut State Department of Education's data portal, which provided district enrollment totals.
- USAC Resources and Tools site (https://www.usac.org/sl/tools/default.aspx):
 Provides publicly available data on E-rate applications, awards, connections, consultants, and other elements pertinent to state and national program use.
- Connecticut State Library Division of Library Development's Statistical Profile site (https://libguides.ctstatelibrary.org/dld/stats/overview), which offers summary and detailed data on library services.

Support for Schools and Libraries

The <u>Universal Service Administrative Company</u> (USAC) provides a host of reference and training resources for districts and libraries. The USAC Web site offers <u>background on the program</u>, an explanation of the filing process and timelines, and <u>training resources</u>. To help local decision-makers and community members gain insights into their own school and library use of E-rate, the <u>Data Retrieval Tool and FRN Status Tool</u> provide longitudinal reporting on filings, awards, and contracts by location.

To learn more, visit the USAC Schools and Libraries site:

www.usac.org/sl/

In addition to these national resources, many of the E-rate consultants mentioned in this report provide free administrative resources and training tools for schools and libraries.

Acknowledgements

The Connecticut Commission for Educational Technology thanks the following individuals and groups for their time and insights that helped make this report possible:

Commission Advisory Councils

Members of the Commission's Infrastructure Advisory Council and Data and Privacy Advisory Council provided subject-matter expertise from their perspectives as school, library, and university technology leaders.

- Maria Bernier Library Services and Technology Act (LSTA) and E-rate Coordinator, Connecticut State Library
- Tom Dillon Founder, Flagship Networks and Chair, Infrastructure Advisory Council
- Ryan Kocsondy Director, Connecticut Education Network
- Bethany Silver Assistant Superintendent, Bloomfield Public Schools
- Tony Tomah Director of Information Technology, Killingly Public Schools
- Rick Widlansky Systems Manager, Libraries Online (LION)

Reviewers

The Commission thanks the following valued advisors for their expert review of this report:

- Gary Rawson Federal Programs Coordinator, Mississippi Department of Information Technology Services
- Dan Runcie State Engagement Manager, Education Superhighway

About the Commission

The Connecticut Commission for Educational Technology was established in 2000 by Public Act 00-187 to serve as the State's principal educational technology policy advisor. This report supports efforts defined in Connecticut's five-year Educational Technology Goals and Plan, which specifically looks at ways of maximizing use of and efficiencies in the E-rate program. Appointed members of the Commission reflect a broad range of stakeholders who inform the State's technology plan and priorities.

For more information about the Commission, the State Technology Goals and Plan, and other publications, visit:

www.CT.gov/CTEdTech

Membership

| Name/Position | Representing/Appointed By |
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| John Vittner, Director of IT Policy | Office of Policy and Management (OPM) |
| Scott Zak, Senior Director of Learning Technologies | CT Board of Regents for Higher Education |
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| Colleen Bailie, Director, West Haven Public Library | CT Library Association |
| Bart Stanco, Vice President, Gartner | Governor's Office |
| Russell Feinmark, CT General Assembly | Speaker of the House |
| Rich Mavrogeanes, President, Discovery Video | President Pro Tem of the Senate |
| Carl Fortuna, First Selectman, Town of Old Saybrook | Minority Leader of the Senate |
| Charles Dumais, Executive Director, Cooperative Educational Services (C.E.S.) | Governor's Office |
| Tom Dillon, Founder, Flagship Networks | Minority Leader of the House |