

Infrastructure Advisory Council
Meeting Minutes
August 6, 2018

Attendees

- Colleen Bailie — West Haven Public Library
- Maria Bernier — CT State Library
- Joe Campbell — CT Technical High School System
- Doug Casey — Commission for Educational Technology
- George Claffey — Western Connecticut State University
- Tom Dillon — Independent
- Fred Kass — Trinity College
- Michael Mundrane — University of Connecticut
- Bethany Silver — Bloomfield Public Schools
- Sabina Sitaru — Independent
- Bill Vallee — Office of Consumer Counsel
- Rick Widlansky — Libraries Online (LION)

Agenda

- Digital Equity Updates
- Education Broadband Spectrum (EBS) Changes
- E-rate Survey Results

Meeting Notes

The points below represent an assimilation of ideas rather than a strict verbatim or chronological record of points shared.

Welcome

The meeting convened at 1:00 PM with a welcome by Tom Dillon, Infrastructure Advisory Council Chair, and Doug Casey of the Commission. Tom provided the group with an overview of the agenda items, and the group took a few minutes to introduce themselves.

Digital Equity Updates

Doug offered some updates on work to ensure that students have access to digital learning resources outside of traditional institutions (e.g., schools, libraries, and universities). He highlighted a panel discussion on digital equity at the May 2018 CEN

Conference, in which several school districts and libraries shared their successes and challenges in connecting students to broadband. A revised version of the Commission's Digital Equity Toolkit (www.bit.ly/CT_Digital_Equity) will include details on these and other exemplary programs, serving as a departure point for communities looking to partner with other local leaders to connect students outside of schools and libraries. Doug also noted the recent release of the Consortium for School Networking (CoSN) white paper on equity (<https://cosn.org/digitalequity>), a national landscape of current initiatives and programs. The report's lead author, Susan Bearden, interviewed Bill Vallee and Doug to discuss the Commission's Toolkit and advocacy on behalf of the Office of Consumer Council in support of equity initiatives in the state.

Michael Mundrane mentioned that the Commission addressed digital equity at the June 4 meeting, during which he raised the vital role that libraries play in providing the connectivity that students need outside of school. While not an "end state" in getting learners online anytime, anywhere, libraries represent a rational path to addressing the needs of students without broadband and a computing device. He has enlisted the help of other Commission members as well as the UCONN library and English department and Hartford Public Library, which works closely with UCONN's Hartford campus, to address the topic. He also underscored the importance of addressing all aspects of digital equity. That is, for students to appreciate the benefits of digital learning resources, they need devices, software, broadband, digital literacy skills, and technical support.

Rick Widlansky and Colleen Bailie mentioned discussions among libraries that emerged through a recent survey that Deb Barbieri of Russell Library in Middletown conducted.

Action Items

- Updates to Digital Equity Toolkit
- Advocacy for Libraries as Champions of Digital Equity

Education Broadband Spectrum (EBS) Changes

Tom transitioned the meeting to address the upcoming deadline for public comments on the Federal Communications Commission (FCC) Notice of Proposed Rule Making (NPRM) regarding the use of Education Broadband Spectrum (EBS). Doug raised this issue prior to today's meeting, given that the potential use of EBS to connect students wirelessly to the Internet falls under the Commission's commitment to support digital equity initiatives.

Tom began by summarizing the EBS program, designed as a set-aside of spectrum for educational purposes, originally used to support educational television programming. The use of EBS has had mixed success, and Michael pointed to its use as a source of revenue to spectrum leaseholders to re-sell to other organizations, including private businesses. The current FCC NPRM generally serves as a call to make better and more consistent use of EBS. The FCC seems most concerned about how it will organize, administer, and auction EBS, especially as it pertains to the rights of current leaseholders. Tom underscored the emphasis on EBS as a public asset, especially given

its design to support education rather than “customers,” as is referenced several times in the NPRM.

The group concurred that the general tone and message of the NPRM point to the FCC's intent to auction off EBS as it would with any other spectrum, rather than looking at it as a unique asset designed for educational use. That said, members of the Advisory Council questioned the impact of EBS since its inception more than 50 years ago. Few examples of large-scale EBS applications exist, and none in Connecticut. Part of the challenge may have been that educational leaders do not have an understanding of how they could use EBS. Several members raised the point that the current value of EBS resides primarily in the ability of licensees to benefit from leasing it to other entities as a source of revenue.

Doug asked the members for their opinion on next steps. It would be unreasonable to expect the group to craft a statement that the Commission would have to review, modify, and submit in the 48 hours remaining before the close of public comment. Bill suggested that a reply to public comment, due September 7, might be more reasonable. Several groups that support public use of broadband, including the Schools, Health, and Libraries Broadband Coalition (SHLB) and the State Educational Technology Directors Association (SETDA) plan to file comments by the August 8 deadline, representing the interests of their stakeholders. Doug shared some of the key points in the forthcoming [SETDA statement](#), including recommendations that state educational agencies and anchor institutions manage EBS licenses and that licensees could not assign or transfer control of their licenses to commercial entities.

Several members cited the importance of sustainability in the actual implementation of any technology initiative, with EBS being no different. As a parallel example, Sabina Sitaru highlighted Hartford's investment years ago of more than \$650,000 to support a public wireless network in the North End, but the project is now defunct because of a lack of operating funds.

Bill reiterated his suggestion that the group review the submitted comments and that the Commission consider a reply, due September 7. Tom and the other members agreed with this recommendation and moved on to a discussion of the results of the recent E-rate survey.

Action Items

- Review of Public Comments to NPRM
- Possible Reply to Public Comments

NOTE: Since the convening of this meeting, the FCC has posted responses to the NPRM:

[https://www.fcc.gov/ecfs/search/filings?limit=100&q=\(proceedings.name:\(\(18%5C-120*\)\)%20OR%20proceedings.description:\(\(18%5C-120*\)\)\)&sort=date_disseminated,DESC](https://www.fcc.gov/ecfs/search/filings?limit=100&q=(proceedings.name:((18%5C-120*))%20OR%20proceedings.description:((18%5C-120*)))&sort=date_disseminated,DESC)

E-rate Survey Results

Doug introduced the topic by sharing some of the data that spurred the E-rate survey in the first place. Millions of dollars in awards to Connecticut schools and libraries (e.g., \$6M in 2014) from the Universal Service Administration Corporation (USAC) — which manages the E-rate program — led the group to ask why institutions receiving these offsets would not use them. The group also wanted to identify other costs and barriers to participation, and a small subset of the Infrastructure Advisory Council met several times to design the survey instrument. Responses came from schools and libraries June 13 – 22, 2018. The group designed the survey with the hope of collecting feedback that would support the following objectives:

- Improve the USAC filing process
- Reduce institutional costs (direct and indirect)
- Reduce procurement costs
- Increase filing rates
- Increase institutional supports
- Identify school and library needs

Prior to the meeting, members of the Infrastructure Advisory Council had received a consolidated report of the survey responses (124 in all) as well as two sub-reports, one each for schools and for libraries.

Fred Kass asked for clarification on some of the terminology, such as “committed” and “unclaimed” funds. Doug explained that filing entities (schools and libraries) would apply to receive offsets to circuits and hardware, receive “committed” funds (awards), and sometimes not use these funds (“unclaimed” awards). Fred noted the decrease in unclaimed funds between FY14 and FY16, which Joe Campbell addressed by noting the revisions to the E-rate program in 2014, with the phasing out of offsets for telecommunications services. He and Sabina felt there was a significant amount of confusion around eligible versus ineligible services, which may have led to a decreased level of applications.

Michael pointed to four numbers that matter, from (1) actual costs to build and support networks, (2) those services that are eligible for E-rate reimbursement, (3) applications to receive those funds, and (4) awards against those applications. Doug added at least one other category of concern, awarded funds that schools and libraries do not claim, often because of a lack of local matching funds to cover the entire circuit or hardware costs. Michael also noted that procurement issues (e.g., poorly written RFPs) can lead to lack of awards.

Tom offered his initial thoughts on the survey results, remarking that most respondents seemed happy with the consulting services they receive. The fact that districts spend funds annually to cover the costs of consultants means that collective funding may be available to cover the costs of statewide consulting services. The group discussed the types of services provided by consultants, mostly in the form of project management and keeping districts and libraries accountable for program deadlines. Tom pointed to

the need to help institutions that have not filed regularly and have not hired consultants for assistance, those who may well see the E-rate program as too complex to engage. He noted the advice of one survey respondent, recommending that other districts and libraries pursue funding with the help of consultants and be patient with the learning curve associated with using the E-rate program.

Michael pointed to two objectives of conducting the survey: (1) uncover insights that we were not aware of and (2) validate or refute assumptions going into the survey. On the second point, clearly the survey responses reinforce prior assumptions that the E-rate program is complex and that districts and libraries often see using it as a daunting activity. Survey response data lends fidelity to the prior assumption that consultants provide value in offsetting those complexities. To that point, Doug asked whether the results brought up questions that the group wish had been included in the survey. No one felt that there were missing questions, and those in attendance felt that the survey addressed the most pertinent topics.

Michael and Colleen hypothesized that perhaps better-resourced (financially and with staff) libraries and districts might be more inclined to leverage the E-rate program than those without such resources. Michael explained that the presence of more specialists (e.g., technology or procurement) in an institution would help address the complexities of managing the E-rate program. Doug offered that adding each institution's demographic reference group (DRG) value into the response data might reveal whether more affluent and resourced districts and libraries show a propensity to use the program to full effect. Sabina raised the important issue of free- and reduced-lunch student eligibility, which generally correlates against DRG, as the coefficient that drives E-rate reimbursement rates. In other words, schools and libraries in poorer communities generally have higher reimbursement rates to offset the cost of network services and hardware through E-rate. The group agreed that looking into correlations among the size and wealth of a district or library as well as its DRG and free- and reduced-lunch percentages all merit investigation.

Tom noted the enthusiastic comments of survey respondents for the support they have received from Maria Bernier, the State Library's E-rate coordinator. He asked her to provide some background on the State Library's fiber expansion initiative. She explained that the State Library had received bond funding to connect individual libraries to fiber (broadband), an upgrade from the digital subscriber line (DSL) connections that many still have. With the help of a consultant, the State Library developed a request for proposal (RFP) for these fiber upgrades, and the State Library awarded the work to the Connecticut Education Network (CEN) with support from Lighttower (now Crown Castle). Maria's support to the 54 libraries receiving upgrades came in the form of providing step-by-step filing instructions and troubleshooting. Maria developed a consolidated RFP (USAC Form 470) on behalf of the libraries, but each library still needs to execute its own agreements with CEN, a task that local libraries manage with Maria's assistance.

Joe Campbell discussed some of his work as the state's K – 12 E-rate coordinator, much of which involves helping to resolve conflicts in filing. His responsibilities also include site visits to validate for USAC the location of new schools.

Fred noted that the consultant E-rate Online, which serves approximately 80 percent of the districts that responded to the survey, appears to have different charge models among its customers. Regardless of these differences, Joe noted that, as a customer, he would continue to pay for these services. Pointing again to the complexity of the program and the risk of not receiving funds because of minor filing technicalities, he and many other districts see a huge benefit in the ability of consultants to guide districts through the E-rate process. Doug agreed and noted that conducting an RFP for statewide consulting services might help make the market more competitive and perhaps lead to greater efficiencies across customers by geography (e.g., coordinating buildout efforts across customers in close proximity to each other, analyzing state or regional trends, etc.). Maria's outstanding service to the library community supports the benefit of having a centralized state resource.

Michael raised the point that the high level of customer satisfaction with consultants stems directly from the complexity of the E-rate program. That is, consultants provide a high value to their customers because the E-rate program is so difficult to manage. Fred offered that the State should look at aggregating this obvious demand into a cooperative purchasing agreement for consulting services. Tom felt that the Commission might focus more on districts and libraries that are not using the E-rate program at all, given that consultants do not appear to be making a significant profit off of Connecticut customers. In other words, the greatest benefit might not come through cost savings where there does not appear to be a large margin but in engaging those who do not benefit at all from the program. Joe also suggested that a kickoff meeting each year to define eligible services would benefit districts and libraries.

Joe noted that in past years, the Connecticut Technical High School System (CT THS) has had its E-rate refunds swept into the General Fund because CT THS resides under a state agency, the State Department of Education. Michael remarked that the State should rectify this inequity of having the CT THS incur the direct and indirect costs of using the E-rate program — consultants, staff time, etc. — while not appreciating the benefits of doing so (i.e., USAC awards). He also felt that the State should issue feedback, perhaps out of the Governor's office, to the FCC regarding the factors (costs, complexity, etc.) that deter participation in the program. He would also recommend that filtering be optional, based on a particular institution's mission and audience. For example, schools would filter while libraries would see filtering as optional.

Bill pointed to the need for greater transparency in the use of the E-rate program, in terms of trends and participation levels, intelligence that the State does not receive without the assistance of enlisting outside consultants. Michael underscored the benefit of the CEN in supporting broadband to educational institutions and specifically in reducing the complexity of E-rate. For example, having a single individual on CEN staff managing invoicing to libraries and districts provides a value to its customers. The

cooperative nature of the Network means that larger customers (i.e., those with many high-speed connections) that individually pay more into CEN than those procuring fewer and slower connections subsidize the needs of those smaller customers. While the State has eliminated operational funding to CEN, Michael noted that the Network could not operate without appropriations that support its capital expenditures.

The group concluded the discussion by addressing the key E-rate stakeholders. Doug stated that matching funds for school networks comes from district and school budgets, which boards of education and school leaders manage. The Commission appreciates the support and advocacy of partners in the education space, such as the Connecticut Association of Boards of Education (CABE), to underscore the value of E-rate and importance of allocating resources (e.g., staff, consultants, and matching funds) to derive benefits from it.

Doug promised to continue his analysis of the individual survey data, in addition to the aggregate responses he provided to this group, in the context of today's discussion. He will be developing a draft report with recommendations for the group to review. That report will then go to the full Commission membership.

Action Items

- Review of Survey Results
- Overlay of DRG and Other Data
- Draft Summary and Recommendations
- Possible Recommendations to FCC and USAC on E-rate

Tom thanked the group for their time and input and concluded the meeting at approximately 2:45 PM.