Infrastructure Advisory Council
Meeting Minutes
February 1, 2022

Attendees

- Colleen Bailie — West Haven Public Library
- Doug Casey — Connecticut Commission for Educational Technology
- George Claffey — Central Connecticut State University
- Tom Dillon — Independent
- Ryan Kocsondy — Connecticut Education Network (CEN)
- Michael Mundrane — University of Connecticut
- Sabina Sitaru — Independent
- Rob Wilson — Somers Public Schools
- Rick Widlansky — Libraries Online (LiOn)

Agenda

- Collection of Digital Divide Data
- Community Wireless Expansion: Program Design and Feedback

Welcome
Infrastructure Advisory Council Chair Tom Dillon called the meeting to order at 3:00 PM and welcomed members of the Advisory Council.

Collection of Digital Divide Data
Tom opened discussion around ways to measure student access to technology, which the Advisory Council members discussed during the November 3 meeting. Following that discussion, on December 6 the full Commission addressed possible next steps but with no specific recommendations. Tom expressed a desire for the Advisory Council to define action items that would help identify and address gaps in technology access.

Advisory Council members agreed not to pursue mandatory reporting by schools on home broadband access. Doing so would depend on a high response rate from parents, who are not likely to provide this information. Instead, they agreed with Doug to recommend the development of a set of resources and best practices that districts could use if they wanted to measure and address the digital divide.

Components of such guidance, perhaps an extension of the Commission's Digital Equity Toolkit, would include the survey provided by the Council of Chief State School Officers (CCSSO). Members encouraged the use of a wide variety of data sources. Colleen

Bailie suggested pointing local communities to leverage Census data that estimates the number of households in specific towns without broadband. Doug recommended the inclusion of guidance on the use of log files to help identify students who rarely access learning management or other systems outside of school hours. Enlisting teachers in this work makes sense, given that they have the closest ties to families and might be best equipped to identify households where broadband is not available for learning outside of school.

Guidance could also reference complementary efforts at the state and regional level. Ryan mentioned discussions at the Connecticut Conference of Municipalities (CCM) to survey residents regarding broadband access, affordability, and connections. Doug noted work in the Office of Policy and Management (OPM) around mapping broadband in the state, part of the Governor's broadband bill (Public Act 21-159). David Lukens began service with OPM in January as the State's Broadband Mapping Coordinator and will be looking for availability, connectivity, and affordability data sets to inform that work.

Tom welcomed the suggestions and promised to share a synopsis of the discussion with the full Commission during the March 7 meeting of that group.

Community Wireless Expansion
Tom, Ryan, and Doug opened the next topic, an open discussion around the next phase of the Everybody Learns Community Wireless initiative. Governor Lamont provided funding for the first wave of the project, resulting in more than 170 high-capacity wireless access points installed at anchor institutions in the least-connected communities in the state (details at CTEdunet.net/everybodylearnswifiinitiative). As Ryan shared, those access points have provided more than 250,000 connections in 2021. The State has committed $10M to expanding this work in 2022 through American Rescue Plan funds.

Ryan solicited input from Advisory Council members on the next phase of the initiative, providing first a program design overview. Rather than CEN directly managing access point installations and configuration, as in Phase 1, the second wave of funding will support a grant program. Targeted outreach to under-connected communities would solicit applications for locally managed or regional access point deployments. This approach should help to scale and speed installations, encouraging efficiencies through partnerships across entities and communities.

Grant Application
The form used to solicit funding will include standard elements including contact information, a proposal summary, constituent beneficiaries, budget, timeline, and commitments around the use of Eduroam, impact measurement, and sustainability.

Advisory Council members had the following suggestions and feedback regarding different aspects of the application:

- In-Kind Contribution and Limits: George Claffey expressed a concern that resellers could mark up hardware costs or their indirect service rates. He suggested putting in place limits around these costs as percentages.
- Scope: Ryan and Doug confirmed that the project targets community wireless buildouts rather than internal network upgrades. However, the project would allow applicants to use awards to connect their institutions to CEN to provide Internet service.
- Partnerships: Colleen Bailie suggested that the program encourage and favor proposals with multiple entities working together, such as schools, libraries, and senior centers. Sabina Sitaru echoed this recommendation, pointing to the Eduroam deployment in New Haven. That initiative resulted in strong collaboration among New Haven Public Schools, Southern Connecticut State University, the Yale Foundation, and Yale University.
- Sustainability: The program and application should require assurances that applicants will fund the wireless service after the funding period ends.

The group endorsed the plan to have members of the Commission's Infrastructure Advisory Council and CEN's Services Management & Technical Advisory Council review applications. These individuals would develop a common scoring rubric, weighting the above and other considerations.

Outreach Partners
Members of the Advisory Council endorsed or added to the list of likely partner organizations to support outreach and awareness of the grant among their constituents:

- CEN Member List
- Connecticut Association of Boards of Education (CABE)
- Connecticut Association of Public School Superintendents (CAPSS)
- Connecticut Association of School Business Officers (CASBO)
- Connecticut Conference of Independent Colleges (CCIC)
- Connecticut Education Technology Leaders (CTETL)
- Connecticut Educators Computer Association (CECA)
- Connecticut Library Association (CLA)
- Connecticut State Library (CSL)
- Councils of Government (COGs)
- Government Management Information Systems (GMIS)
- Hartford Foundation for Public Giving
- Institutions of Higher Education
- K – 12 Technology Listserv (Commission)

Members discussed the potential role of colleges and universities, with George suggesting that these institutions could provide pro bono consultative services to their local communities to assist with wireless installations and configuration. Michael Mundrane pointed out that colleges and universities generally already have robust public networks offering Eduroam-enabled access and could help other organizations with their rollouts.

With regard to Eduroam, the application could require recipients to broadcast the Eduroam SSID and offer them the opportunity to learn more about the system. This call to action for districts, for example, might lead to matchmaking between nearby colleges or to CEN in assisting schools with an Eduroam deployment, including RADIUS server hosting. Tom encouraged this type of activity and was heartened by the substantial use of Eduroam through existing Community Wireless access points (36 percent of all connections, 91,369 total for 2021).

Equipment Specifications
The group discussed possible approaches to defining and purchasing technical equipment. One option would be to assess all applications and pursue a volume purchase of common access points. While in theory this would introduce cost and procurement efficiencies, members generally preferred an approach where applicants manage procurement directly. George pointed to supply-chain challenges that would likely impede fulfillment of large-scale hardware orders. He did suggest that providing recommended specifications and referring to state bid lists may help speed purchasing and control costs.

Measurement and Impact
Members concluded discussion around the Community Wireless expansion by exploring measurement requirements. Ryan and Doug emphasized the importance of capturing usage data across locations, total end user connections, and type of connection (open or Eduroam). These totals will provide transparency to the Office of the Governor, the General Assembly, and the public about the State's investment in the project and encourage future appropriations.

Ryan's team is exploring platforms to collect anonymous connection data across all locations. The central administrative budget will cover the cost of providing this service and ensure uniform data collection and reporting.

Adjournment
Tom thanked the Advisory Council members for their time and insights and adjourned the meeting at 4:20 PM.