

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)	WC Docket No. 21-93
WIRELINE COMPETITION BUREAU SEEKS)	FCC DA 21-317
COMMENT ON EMERGENCY CONNECTIVITY FUND)	
FOR EDUCATIONAL CONNECTIONS AND DEVICES)	
TO ADDRESS THE HOMEWORK GAP DURING THE)	
PANDEMIC)	

Comments of:

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In regards to WC Docket No. 21-93 "WIRELINE COMPETITION BUREAU SEEKS COMMENT ON EMERGENCY CONNECTIVITY FUND FOR EDUCATIONAL CONNECTIONS AND DEVICES TO ADDRESS THE HOMEWORK GAP DURING THE PANDEMIC", we collectively offer the following comments.

In March 2020, as counties in the San Francisco Bay Area simultaneously implemented a shelter-in-place order that included closure of schools, the Civic Technologies Initiative at Joint Venture Silicon Valley began receiving calls and emails from schools, school districts, and elected officials seeking advice and solutions to allow students without home broadband connections to complete the 2020-2021 school year from their homes. In response, we published a concept paper detailing options for augmenting existing networks and creating new ones if needed.¹

Almost all school districts issued devices (primarily Chromebooks) and either 4G hotspots or hotspot-enabled smartphones to students. In some cases the districts paid for the service plans on these hotspots and phones, in others they benefited from the generosity of wireless carriers that agreed to provide no-cost service plans for the remainder of the school year. This bought us some time to come up with longer-term strategies and solutions.

Our strategies were informed by a desire to build permanent networks that would persist after the pandemic's end. Our region's "Homework Gap" wasn't created by the pandemic, and we recognized that - left unaddressed - it would surely persist afterwards. After analyzing several options, we decided that the Citizens Broadband Radio Service (CBRS) using the General Access tier would be the best approach.

Currently, we have pilot systems deployed that are designed to ultimately serve approximately 200 students per site, and we're working to deploy more. We note that our CBRS-focused strategy tracks with distance learning projects in the cities of Las Vegas NV, Tucson AZ, and Salt Lake City UT among others - all cities that initially leveraged 4G hotspots but are transitioning to CBRS in an effort to reduce costs.

¹ Witkowski,D. Shakouri,M., "Concept Paper: Wireless Networks for Rural Distance Learning, Telemedicine, and Digital Inclusion", Joint Venture Silicon Valley, <https://bit.ly/DistLearnConcept>

We view the funding model potentially enabled by the \$7.171B "Emergency Connectivity Fund" (the Fund) in the American Rescue Plan Act of 2021 (the Act) as closely aligned with, and potentially supportive of, our work, but we have some questions and comments informed by our practical experiences.

The following questions and comments were compiled by the Campbell Union School District in consultation with, and assistance from, Joint Venture Silicon Valley and the Santa Clara County Office of Education.

FCC: "Consistent with this definition, we first propose that schools, libraries and consortia of schools and libraries eligible for support under the E-Rate program be eligible to receive funding from the Emergency Connectivity Fund."
(DA 21-317, Page 4)

Campbell USD: We agree that E-Rate eligible organizations should be eligible to receive Emergency Connectivity Funds to close the homework gap and digital divide.

FCC: "We propose that the Commission provide funding only for equipment and services that are needed to provide the connectivity required to enable and support remote learning for students, school staff, and library patrons. We seek comment on that approach as well as comment on the specific equipment and services commenters consider necessary to support and facilitate the connectivity required for remote learning during the defined emergency period."
(DA 21-317, Page 5)

Campbell USD: We agree that the Commission should provide funding only for equipment and services that are needed to provide connectivity required for remote learning. In pursuit of supporting the remote learning of students, supporting the shift to distance learning created by shelter-in-place orders and shutdown of school campuses during the SARS-CoV-2 pandemic, we have deployed equipment and services that utilize CBRS spectrum. We consider CBRS equipment and services to be necessary to support and facilitate distance learning connectivity, primarily due to the high cost and sometimes poor throughput of commercial cellular networks serving district-provided hotspots to students in neighborhoods surrounding our campuses.

FCC: "We propose to use the same definitions for eligible equipment in the Commission's rules implementing section 7401 of the American Rescue Plan and seek comment on doing so. Is more specificity required?" (DA 21-317, Page 5)

Campbell USD: We believe more specificity is indeed required. We believe that CBRS equipment should be explicitly defined as eligible in the criteria listed. The CBSD (aka "base stations") that broadcast the CBRS signal functions as a router, making it eligible under section 7402(d)(6). The client devices (CPEs or hotspots) interconnect with both the CBSD and user devices such as laptops, the latter connection typically established Wi-Fi, making it eligible under section 7402(d)(6). We would appreciate some specificity around whether CBRS CBSDs qualify for funding under section 7401 to ensure CBRS CBSDs are eligible for funding through the American Rescue Plan's Emergency Connectivity Fund.

FCC: "We propose that a connected device supported through the Emergency Connectivity Fund be able to support video conferencing platforms and other software necessary to ensure full participation in remote learning activities." (DA 21-317, Page 5)

Campbell USD: We affirm that connected devices supported through the Emergency Connectivity fund should be able to support full participation in remote learning activities, including the support of video conferencing platforms.

FCC: "We seek comment on these proposals and the underlying assumption that the construction of new networks is not supported by the statutory text enumerating eligible equipment in section 7402 of the American Rescue Plan." (DA 21-317, Page 7)

Campbell USD. We would like to receive clarification on the definition of "the construction of new networks." We believe that the installation of CBRS equipment does not create a new network, but rather extends the boundaries of our existing E-Rate eligible network, fulfilling the American Rescue Plan's requirement that the funds be spent for use by "students... at locations that include locations other than the school." We would appreciate clarification confirming this interpretation.

FCC: "Should the Commission interpret 'advanced telecommunication and information services' to include the equipment necessary to deliver these services to connected devices as eligible? Should installation costs, taxes, and feeds be included as an allowable cost?" (DA 21-317, Page 7)

Campbell USD: We believe that the Commission should interpret 'advanced telecommunication and information services' to include all costs necessary to deliver these services to eligible connected devices. We believe that the Commission should treat these in the same manner as they treat E-Rate eligible equipment and services.

FCC: "We also seek comment on whether the Commission should impose minimum service standards and data thresholds with respect to those services in order to consider them to be eligible advanced telecommunications and information services. If so, what should they be?" (DA 21-317, Page 7)

Campbell USD: We affirm that a 25 Mbps downstream and 3 Mbps upstream is sufficient to adequately support remote learning needs. While we always strive to provide the fastest connection possible to our students, setting a higher minimum rate will disproportionately impact schools and neighborhoods that already suffer from poor broadband infrastructure. In practice, the "last yard" in wireless networks is always done with best effort, and the interplay of physics, engineering, and cost conspire to make achieving minimum standards challenging. The reality is that, while faster is always better, many of our students are able to successfully use connections that do not achieve the 25/3 Mbps standard. Setting an excessively-high minimum rate will limit the number of providers that can competitively bid, driving costs up for both the school and USAC. In neighborhoods where no service provider can achieve a higher minimum speed, the school would be entitled to no additional funds. If minimum service standards are imposed, they should be done on a going-forward basis only.

FCC: "Should the Commission limit one connection per location for fixed broadband services? Should the Commission impose any per-location limitation on Wi-Fi hotspots?" (DA 21-317, Page 8)

Campbell USD: We do not believe that the Commission should impose any per-location limitation on CPEs or hotspots. This limitation disproportionately affects families that have multiple school-aged children, and cases where several families with children are sharing a single domicile. How would the Commission propose to handle, for example, a group home or foster home? We do not believe that the number of children in a single household should negatively impact their ability to access remote learning.

FCC: "As an initial matter, we seek comment on whether the Commission should reimburse for purchases of eligible equipment and services made by eligible schools and libraries since January 27, 2020." (DA 21-317, Page 10)

Campbell USD: Yes, we affirm the Commission should reimburse purchases of eligible equipment and services made by eligible schools and libraries since January 27, 2020. School districts across the country have incurred costs to create networks that serve students impacted by the SARS-CoV-2 pandemic, often diverting funds from other purposes, and those districts should not be punished for their forward-thinking efforts and actions.

FCC: "Can the Commission reasonably assume that schools and libraries complied with applicable state, local, and Tribal procurement requirements purchase eligible equipment and services at reasonable prices?" (DA 21-317, Page 10)

Campbell USD: Yes, we affirm that the Commission can reasonably assume schools and libraries complied with applicable requirements. All purchases follow applicable procurement guidelines under penalty of law.

FCC: "We also seek comment on whether more than one filing window(s) a year should be open during the emergency period." (DA 21-317, Page 12)

Campbell USD: Yes, we affirm that more than one filing window(s) a year should be open during the emergency period. The typical E-Rate procurement process is methodical but slow. A single filing window per year will delay the installation of equipment and deployment of services by up to a year. More filing windows per year will allow schools and libraries to install the essential equipment and services in a timelier manner. This will help ensure all students are successfully engaging in remote learning.

FCC: "Should the Commission instead prioritize funding requests to target the needs of those students... without adequate broadband access at home and/or lack of a connected device? How would eligible schools and libraries identify this population in advance of a filing window?" (DA 21-317, Page 13)

Campbell USD: We believe that the Commission should look not only at projects targeting those who report a lack of broadband access at home, but also should prioritize funding requests to schools and libraries with the highest population of students with Access and Functional Needs (AFNs). A 2016 study by

Koutroumpis and Leiponen in the journal "Telecommunications Policy"² shows that AFN neighborhoods have relatively poor cellular data coverage as compared to higher-income neighborhoods in the same city. Families in AFN neighborhoods are paying a significantly higher percentage of their income for broadband connectivity, yet the service they receive is statistically inferior to that of their more affluent neighbors.³

FCC: "Should the Commission prioritize funding for future purchases rather than reimbursements for already purchased equipment and services?" (DA 21-317, Page 13)

Campbell USD: "No, we believe the Commission should prioritize reimbursements for equipment and services that have already been purchased. If an educational organization can prove that their purchase has demonstrably made progress towards closing the "Homework Gap" and is making progress towards closing the digital divide, the reimbursement funding should be prioritized over a future project that has the possibility do the same thing. The adage holds true; a bird in the hand is worth two in the bush. A school district that quickly acted and prioritized the purchase of equipment and services that expanded student broadband connectivity should not be financially penalized.

FCC: "Should, for example, schools and libraries be permitted to use eligible equipment for any purpose that the school or library considered appropriate after the emergency period?" (DA 21-317, Page 14)

Campbell USD: Yes, we believe that schools and libraries should be permitted to use eligible equipment for any purpose that the school or library considers appropriate after the emergency period. The Homework Gap existed before the SAR-CoV-2 pandemic, and will remain an issue after the pandemic is over. We should be building not just for the emergency, but for the future.

FCC: "Should schools and libraries have flexibility about how to dispose of equipment after the emergency period?" (DA 21-317, Page 14)

Campbell USD: Yes, schools and libraries should have more flexibility about how to dispose of equipment after the emergency period. When compared against the enterprise networking equipment USAC normally funds through its Category 2 program, many of these newly eligible devices do not have the same expected lifespan. It would negatively impact a school or library to keep devices in circulation past their expected or supported life.

² Koutroumpis,P. Leiponen,A., "Crowdsourcing mobile coverage", Telecommunications Policy, <http://dx.doi.org/10.1016/j.telpol.2016.02.005>)

³ Steele,B., "Poor cell phone coverage creates a 'mobile divide', Cornell University, <https://news.cornell.edu/stories/2016/05/poor-cell-phone-coverage-creates-mobile-divide>

Thank you for your time and consideration of these comments, and for your leadership in making innovative technologies like CBRS available to our country's businesses and citizens. If needed, we will make ourselves available for consultation via email or phone - please contact David Witkowski (davidw@jointventure.org) to schedule time.

/s/

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