

**Before the  
Federal Communications Commission  
Washington, DC 20554**

In the Matter of )  
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Promoting Telehealth for Low-Income      )   WC Docket. No. 18-213  
Consumers                 )

**COMMENTS OF THE SCHOOLS, HEALTH & LIBRARIES BROADBAND  
(SHLB) COALITION**

The Schools, Health & Libraries Broadband (SHLB) Coalition appreciates the opportunity to comment in support of the Connected Care program proposed by the Federal Communications Commission (FCC) in its Notice of Inquiry (NOI) adopted and released on August 3, 2018.<sup>1</sup>

**I. INTRODUCTION**

The SHLB Coalition is a broad-based coalition of organizations that share the goal of promoting open, affordable, high-quality broadband for anchor institutions and their communities.<sup>2</sup> High-capacity broadband is the key infrastructure that libraries, K-12 schools, community colleges, colleges and universities, hospitals and health clinics, public media and other anchor institutions need to serve their communities in the 21<sup>st</sup> century. Enhancing the broadband capabilities of these community anchor institutions is especially important to the most vulnerable segments of our population – those in rural areas, low-income consumers, disabled and elderly persons, students, minorities, and many other disadvantaged members of our society.

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<sup>1</sup> FCC 18-112. Available at <https://www.fcc.gov/document/fcc-seeks-comment-launching-connected-care-pilot-program>.

<sup>2</sup> Our members include representatives of schools, libraries, telehealth networks, state broadband offices, private sector companies, state and national research and education networks, consultants, and public interest organizations. See [www.shlb.org](http://www.shlb.org) for a complete list of SHLB Coalition members.

## **II. DISCUSSION**

### **A. SHLB Generally Supports the Proposal to Establish a Pilot Project to Fund Rural Telemedicine Trial Projects**

SHLB commends the Commission for its efforts to increase digital opportunity for all Americans and to support the delivery of telehealth services to low-income Americans. SHLB believes that the Connected Care Pilot Program is squarely in line with the SHLB Coalition’s goal to promote broadband “to and through” the anchor institutions to the surrounding community.<sup>3</sup>

SHLB notes that the success of the Connected Care Pilot Program is dependent on patients having access to high-speed, high-quality broadband services. However, many Americans, especially those in rural areas, still do not currently have access to high-speed broadband services. Of the 24 million Americans that do not have access to adequate broadband, 19 million live in rural areas.<sup>4</sup> The need for greater broadband is particularly important given the increasing closure of rural hospitals. For instance, HRSA recently reported that “Hospitals located in rural areas have been closing their doors more frequently and at higher rates than urban facilities in recent years — and a pattern of increasing financial distress suggests that more are likely to falter . . .”<sup>5</sup> For this reason, additional measures to improve telemedicine, especially for rural consumers, is very much needed.

The NOI seeks comment on using the Connected Care Pilot Program to promote broadband deployment to unserved and underserved areas.<sup>6</sup> SHLB strongly urges the Commission to use this pilot program as an additional means to promote ubiquitous access to broadband services across America. Not only is this necessary to the success of the program but is consistent with the goals of the Universal Service Fund, under which the Connected Care Pilot Program would fall.

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<sup>3</sup> See the SHLB Coalition’s 2018 Policy Roadmap, available at <http://www.shlb.org/uploads/Policy/2018PolicyRoadMap.pdf>.

<sup>4</sup> FCC Broadband Deployment Report 2018, available at <https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2018-broadband-deployment-report>.

<sup>5</sup> <https://www.hrsa.gov/eneews/past-issues/2017/october-19/hospitals-closing-increase.html>.

<sup>6</sup> NOI at para 25.

SHLB notes, however, that the Commission should also take into account the populations that are “medically underserved”, not just those that are underserved from a broadband perspective. For instance, low income, homeless and disabled communities may also suffer from the lack of high-quality medical care, no matter where they are located. While we appreciate and support the emphasis on providing telehealth services to veterans, there are many other populations that also deserve to be included in this program.

**B. The Commission Should Launch the Connected Care Pilot Program by Promoting Shared Infrastructure and Eliminating the Silos that Separate USF Programs.**

Construction of network infrastructure necessary to support high-speed connections to rural anchor institutions often comes with a hefty price tag. Even to build one dedicated connection to a school, library, healthcare facility, etc. in a community (versus numerous residential connections throughout that community) can be prohibitively expensive and generally do not present a return-on-investment sufficient enough for a network operator to undertake the cost on its own. As such, these rural areas fall further and further behind urban and suburban communities and the digital divide widens.

Programs that plan to support infrastructure dedicated for just one purpose – in this case telemedicine – will be difficult to sustain over the long-run. The National Broadband Plan recommended the use of shared infrastructure as a more efficient way to expand broadband to high-cost and hard-to-reach locations:

**Recommendation 8.20: Federal and state policies should facilitate demand aggregation and use of state, regional and local networks when that is the most cost-efficient solution for anchor institutions to meet their connectivity needs.**

Government policy often limits the ability of schools, hospitals and other community institutions to serve as community broadband anchors. FCC universal service policies and the policies of other grant-making agencies frequently drive institutions to use dedicated, single-purpose networks that are not available for broader community use, resulting in a situation in which “[c]ommunity residents working in healthcare or education often have unlimited access to the Internet while other rural residents are left with no access.” These restrictions make it difficult to expand and share broadband with other community institutions in the

most cost-effective way. This problem is especially acute in rural areas and Tribal lands where broadband may only be available and affordable to residents and small businesses in a community if the fiber optic infrastructure in that town is shared not only by commercial users but also by the local hospital, government office, and school system.<sup>7</sup>

SHLB recommends that the Commission promote shared broadband deployment that supports telemedicine and additional services in the Universal Service Fund. Specifically, SHLB suggests that the Commission encourage broadband telemedicine projects that will further telemedicine goals and provide additional broadband to unserved and underserved communities and other community anchor institutions as well as to medically underserved populations.<sup>8</sup>

The Commission has already taken a good step toward this objective by combining the goals of telemedicine (typically served by the Rural Health Care (RHC) program) and low-income consumers (typically served by the Lifeline program). Allowing the funding to be used to support connections to schools and libraries as well would even more firmly align with the purposes of USF. The USF has a long and successful history of funding broadband infrastructure projects that further the Commission's goals including, most significantly, the Connect America Fund, which was awarded billions of dollars for broadband infrastructure deployment to unserved and underserved areas of the country. Moreover, just as the E-Rate program and the Rural Health Care program allow for broadband infrastructure builds to eligible entities for the purposes of fulfilling the mandates of those programs, SHLB sees the Connected Care Pilot Program as an additional opportunity to promote ubiquitous broadband access in the context of promoting the availability of telehealth resources.<sup>9</sup>

While SHLB supports the existing USF programs and commends the Commission for its leadership for developing these programs, SHLB also sees benefit in looking at USF funding

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<sup>7</sup> National Broadband Plan, pp. 153-154 (footnotes omitted).

<sup>8</sup> SHLB suggests the Commission allocate an additional \$50-100 Million for broadband infrastructure expansion projects. SHLB believes this amount is warranted given the cost associated with building and maintaining broadband infrastructure in areas of the country that are currently unserved (e.g. extremely rural areas).

<sup>9</sup> The Commission recognizes high-speed Internet "as the 21st Century's essential communications technology." See <https://www.fcc.gov/general/universal-service>.

holistically and not at each program in a vacuum. Specifically, SHLB believes that another way in which the Commission may be able to use the Connected Care Pilot Program to support broadband availability is by developing methods to leverage efficiencies between existing USF programs in addition to the creation of the new pilot program. While created to fund different types of projects for different purposes, existing USF programs have numerous similarities and cross over opportunities that are currently not being taken advantage of. For the purposes of the proposed Connected Care Pilot Program, for example, the Commission looks to “support the delivery of [] telehealth services to low-income Americans, with a focus on the delivery of such services to patients beyond the doors of brick-and-mortar health care facilities.”<sup>10</sup> In this instance, it cannot be denied that other programs might assist in this goal.

For instance, the FCC should consider funding pilot programs that build off of infrastructure that has already been deployed through the existing RHC program. The most affordable way to reach low-income consumers could be to tap into the broadband capacity of networks funded previously or concurrently by the RHC program. Furthermore, expanding the use of these RHC networks could make them more economically viable and increase the incentives of telehealth networks to build out to rural markets.

In addition to promoting projects that share infrastructure, SHLB also urges the Commission to streamline the application and review processes for this program. In this manner, SHLB would recommend the FCC develop a joint-application process for proposed projects that can substantially further the goals and outcomes of the Connected Care Pilot Program while also meeting the goals of other USF programs (e.g. rural broadband infrastructure deployment, schools and libraries, and low-income). SHLB believes that this coordination of USF programs will help underserved and unserved rural communities and invite further economic investments into these areas. For example, rather than having existing USF-defined rules regarding eligible discounts for proposed services for a project to be considered, SHLB urges the Commission to include a common standard that could apply equally to the rural health care providers and E-rate eligible entities for eligible services under the Connected Care Pilot Program. The FCC could also invite comments from the public on how those standards and calculations could be derived for projects proposing to serve multiple stakeholders under a single application.

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<sup>10</sup> NOI, para. 2.

### **C. The FCC Has Authority to Establish the Program Under its General Mandate to Promote Communications (Section 1) and Section 254**

The NOI asks questions about the Commission’s legal authority to adopt this program.

The SHLB Coalition believes that the Commission has multiple sources of authority for this program, including its long-standing authority to promote the public interest, its general Title II authority, its authority under section 254, and the specific authority granted by Section 254(h)(1)(A).

The FCC established its universal service authority well before the passage of Section 254 in the Communications Act of 1996. For many years, the FCC administered subsidy mechanisms – such as access charges – to ensure that rates for telephone service in rural and high-cost areas remained affordable. Similarly, the FCC adopted a Lifeline program for low-income consumers in the 1980’s under its generic rulemaking authority.

The passage of the Telecommunications Act of 1996 made universal service more explicit but it did not pre-empt the Commission’s pre-existing authority to adopt and implement universal service programs. The notion that Congress intended to preserve the Commission’s authority over universal service policies is supported by Section 254(j), which states that “Nothing in this section shall affect the collection, distribution, or administration of the Lifeline Assistance Program provided for by the Commission under regulations set forth in section 69.117 of title 47, Code of Federal Regulations, and other related sections of such title.”

In addition, a connection from a health care provider to a patient falls within 254(h)(1)(A) (authorizing universal service support for “telecommunications services . . . necessary for the provision of health care services”) and 254(h)(2)(A) (directing the Commission to enhance access to advanced services by health care providers). The telehealth services envisioned by the Connected Care pilot program are a form of “advanced services” that Congress specifically directed the FCC to support.

The Commission’s authority to provide funding for telehealth services is also supported by the 10<sup>th</sup> Circuit Court of Appeals decision which upheld the FCC’s reform of the Intercarrier Compensation and Universal Service Fund regime. In that case, the court found that the use of the terms “facilities” and “service” in §254(e) gave the FCC flexibility to encourage the types of facilities that will best serve the §254(b) principles. Several of the principles in section 254(b) support funding for telehealth services, including the reference to “advanced services” in (b)(2),

“rural and high-cost areas” in (b)(3), access to advanced services for schools, health care and libraries in (b)(6), and additional principles in the public interest in (b)(7). The court also held that §706(b)’s timely broadband deployment inquiry and broadband deployment acceleration provision constituted an additional source of support for funding broadband.<sup>11</sup>

To be clear, the FCC should adopt this pilot program under its general authority to provide funding without tapping any of the other four USF programs. In other words, the Connected Care program should supplement – not replace or duplicate – the existing programs.

#### **D. There is No Reason to Restrict the Trials to Eligible Telecommunications Carriers.**

The NOI asks whether only Eligible Telecommunications Carriers (ETCs) should be eligible to participate in the pilot program. SHLB believes there is no reason to limit the pilot program to ETCs. The provision in section 254 that requires recipients of USF funding to be ETCs was intended to apply to the High Cost program and the Connect America Fund, not to other USF programs. The E-rate and RHC programs are not limited to ETCs. R&E networks, municipalities and non-profit providers and competitive providers should be eligible to receive funding from the pilot program as well as ETCs. The FCC should encourage a diversity of projects and providers to learn as much as possible from the Connected Care Pilot Program.

#### **E. The Commission Should Encourage the Provisions of Telehealth Services Along with Other USF Programs, Especially E-Rate and RHC.**

As noted above, SHLB urges the Commission to look at possible crossover between programs that fund broadband deployment when developing the Connected Care Pilot Program to assess where efforts could be combined. As a threshold matter, and as the Commission develops the rules for the pilot program, SHLB sees the most potential crossover between the E-Rate program and the RHC program.

For instance, school-based clinics should be able to apply for funding from the Connected Care program. They are receiving support for advanced services pursuant to 254(h)(2)(A), which authorizes programs for both schools and health care providers. The statutory language does not require school clinics – eligible entities in the RHC program – to file a separate application in the RHC program.

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<sup>11</sup> Available at <https://www.ca10.uscourts.gov/opinions/11/11-9900.pdf>.

Both E-Rate and RHC provide subsidy funding for broadband connectivity for schools/libraries and healthcare facilities, respectively. Under both programs, there is also opportunity to obtain funding to support broadband infrastructure builds if no existing high-speed connection is available. In many instances, a school/ library eligible to apply for E-Rate funding may be in close proximity to a health care facility eligible to apply for RHC funding. However, under the current program rules, any infrastructure build using USF program funding cannot be used for any other purpose (including to connect an entity that may be eligible under a different USF program). Assuming for example, that a rural school and rural healthcare provider both apply for broadband infrastructure funds from the respective USF funds, there is a risk of the USF funding duplicative network builds. Instead, by leveraging efficiencies between the programs and allowing for joint applications, or dual use of funded infrastructure, USF funds could have been saved for additional needs.

By way of example, SHLB provides the following case studies to demonstrate how coordination between these programs can provide benefits that exceed those available from one program alone.

### ***Kern River Valley, CA***

The Kern River Valley is comprised of unincorporated communities bordering the Lake Isabella Reservoir in the southern Sierra Nevada mountains in Kern County, California. It is a mountainous area situated roughly halfway between the cities of Ridgecrest and Bakersfield and includes the communities of Lake Isabella, Mountain Mesa, Squirrel Valley, Keyesville, Onyx, Weldon, South Lake, Kelso Valley, Kernville, Wofford Heights, and Alta Sierra. The valley is home to more than 16,000 residents.

High-speed broadband is all but non-existent in the valley. The incumbent telephone company is out of capacity in its central office, and no existing service provider in the Kern River Valley can claim to offer carrier-class broadband services that can meet the service-level agreement (SLA) guarantees expected by enterprise customers. These limitations drastically impact anchor institutions in the Kern River Valley, including several rural non-profit health clinics and one hospital, nearly a dozen educational institutions, and two public libraries. All of these organizations suffer from poor access to broadband services.

While some of these institutions may be eligible for E-Rate or RHC funding individually, the problem facing the entire community is a lack of backhaul that would allow for last mile service options. As currently administered, the E-Rate and RHC Funds may fund backhaul for one project under one fund, but that backhaul would then only be usable for that one purpose, requiring either

duplicative infrastructure for neighboring anchors or limiting any additional funding that may be available to the area.

### ***San Juan County, UT***

San Juan County is in the southern part of the Colorado Plateau region of Utah. San Juan County is the 24<sup>th</sup> largest county in the US and its geography spans 7,933 square miles across a great expanse of red sandstone rock, great vistas and vast desert landscapes with the total size of the county approximately the same size as the State of Massachusetts, with a total population of 15,836 (less than 2 persons per square mile) according to the 2017 U.S. Census estimates. The county was first home to the early Anasazi Basket Makers in 1300 A.D. and much later the DINE' (Navajo) people who still make up the majority of residents today.

The Utah Education and Telehealth Network has been working with the San Juan County School District, Utah State University Blanding and Moab Campuses, the Utah Navajo Health System, San Juan County Commission, the Utah Department of Transportation, The Utah Navajo Commission and Trust Fund, the Utah Seven-Rural County Infrastructure Coalition, and the San Juan County Library System for many years to provide broadband services to community anchor institutions through UETN supported microwave systems fed by UETN fiber-based backbone built into Blanding in the 2007-2010 timeframe. The UEN legacy analog microwave network was built in 1984, through a series of federal NTIA grants and was converted to a digital microwave system in 2003-2006 with assistance with state grant funding through the Utah Community Impact Board (CIB) and upgraded for the past several years to keep up with the educational and health care needs of the region. But the challenges and costs of supporting the UETN legacy microwave system continue to grow and residents and communities on the Navajo Reservation still lack basic broadband service to homes and community facilities. Schools outside Blanding, Utah, (the location of the San Juan County School District Office) rely on UETN point-to-point wireless microwave radios for cost-effective telecommunication services; however basic residential and business access to adequate broadband services do not exist today.

Utah Navajo Health Systems, Inc. (“UNHS”) operates four RHC eligible Community Health Centers near and in the Southeastern portion of the Utah strip of the Navajo Reservation in San Juan County: Montezuma Creek, Monument Valley, Navajo Mountain, and Blanding. Comprehensive services provided by the clinics include medical, dental, behavioral health and radiology. A variety of telehealth services, a medication dispensing system that reduces medication errors, an electronic medical record and other critical clinical and operational processes are utilized by using UTN’s microwave network on the Navajo Reservation. The costs and limitations faced by health care providers in this remote county are incomparable to affordable access available to their urban counterparts who have much greater resources to meet the needs of their patients.

The UNHS clinics are spread out over a large portion of the county and the nearest is more than 300 miles from Salt Lake City, a 6+ hour drive each way. Although the RHC program helps support the substantial monthly costs for point-to-point microwave connectivity to these locations, because these connections are point-to-point, there are fewer opportunities for other health care facilities to share connections and costs.

In exploring the possibility of bringing fiber to this area, UETN has separated out the project into two phases (Phase I and II). Last year, UETN was able to bid out and award a contract to Emery Telcom to construct the first phase of fiber into Bluff and Montezuma Creek to the San Juan County District public schools and library in the project area (Bluff Elementary, Montezuma Creek Elementary, White Mesa Library of the Ute Mountain Ute Tribe, and White Horse High School) and has filed for E-rate support for this project. These schools often are underserved with the lack of qualified teachers and rely heavily on UETN distance learning services, professional development, and on-line educational opportunities for students, educators, and administrators in the region. The White Mesa Library relies currently on an unlicensed radio and has many days of downtime during harsh weather and other conditions affecting the radio service. There is also a community clinic next store to the library which has no access to electronic medical records or telehealth services since the challenges of delivering broadband are so severe in the region. Additionally, the hope is one new infrastructure is established it can be extended to the health care providers in the region through partnership with UETN and Emery Telcom.

If the FCC were to introduce a pilot under the Connected Care program for UETN to apply for Phase II of the San Juan County project, both the schools in Phase II, Monument Valley High School and Navajo Mountain School and the medical clinics in these areas could be served by a single project without having two separate programs and USF programs for UETN to apply to and would eliminate unnecessary overlap, USF program rule obstacles, and program processes. UETN would seek to meet the goals of the Connected Care program with health care practitioners while meeting the more important goal of sustainable broadband access to these areas that lack basic access.

### ***Cordova, AK***

Cordova, AK is located near the mouth of the Copper River in the Valdez-Cordova Census Area at the head of Orca Inlet on the east side of Prince William Sound. The population was 2,239 at the 2010 census and population increase to over 4,000 during fishing season. No roads connect Cordova to other Alaskan towns, so a plane or ferry is required to travel there.

For day-to-day health needs of local residents and visitors alike, the Cordova Community Medical Center offers expert care by board certified family practice

physicians. Basic services are extended by offering clinic space to Anchorage-area board certified specialists. Cordova Community Medical Center offers a range of services, including acute, emergency, preventive and long-term care. Native Health Care facilities also exist in Cordova.

The Cordova School District operates the schools in the community. Mt. Eccles elementary school is the only public primary education facility in Cordova and had an enrollment of 206 students in 2008. Public secondary education is served by a single combined junior and senior high school.

The first library in Cordova began as a “reading room” and ran an informal lending library in the clubhouse. In June of 1925 the women’s guild of St. George’s Episcopal Church opened the book collection to the public creating Cordova’s first public library. Since that time the library has occupied the Adams building and the Windsor Hotel before moving to the Centennial Building in 1971. In November 2015 the library moved to The Cordova Center, a multi-purpose facility designed to meet the needs of Cordovans.

One of the current Internet providers can’t afford to provide services and did not even bid on renewal services to the Medical Center this past cycle. There is a limited capacity of Internet to and from Cordova and this is as big of a problem as local access. Technology needs to be embraced and made available. If Service Providers can’t provide the service due to bottlenecks the infrastructure needs to be improved... Telemedicine should be available to everyone. If communities and rural health clinics don’t have the affordable broadband services then patients must be treated on-site, or they’ll have to medevac patients out for treatment...USAC has been approached (primarily key personnel in RHC and Schools and Libraries Division (“SLD”) regarding coordinating a plan to better utilize funding for the School, Library and Hospital within the Cordova, Alaska community. While the concept was understood, current program rules make implementation difficult. It appears that several waivers may need to be sought. Consulting USAC was initiated to seek guidance and explain the intent of the applications to be filed. The technology plan identifies one network to be built instead of several, giving all involved, service provider, applicants, and community, the opportunity to take advantage of limited resources. This single network approach could also benefit local residents, government entities, and first responders, etc.

There are numerous communities across the rural United States that could obtain additional benefit if the USF programs worked in concert with one another. The same transport infrastructure that would generally be funded by (and have its use limited by) one program could benefit recipients under several programs depending on several factors like location, availability and redundancy. For example, a hospital’s redundant Internet connection could serve as a

nearby school's primary connection and if a connectivity problem presented itself with respect to long haul transport, the hospital's traffic could be rerouted accordingly.

Current program rules within E-rate and the RHC program, for example, do not encourage a combined architecture and sharing of costs and resources. A pilot program designed to allow for the sharing of infrastructure across the eligible USF applicants would be beneficial to community and residents alike.

SHLB believes that the current infrastructure limitations in the E-Rate and RHC are not in keeping with the spirit of the USF as a whole. As such, SHLB proposes that the FCC look to its current programs to determine where efficiencies could be created or where additional pilot programs could be created in order to test methods for sharing USF-funded infrastructure to areas that would benefit from multiple types of connections.

### III. CONCLUSION

SHLB commends the Commission for its efforts to increase digital opportunity for all Americans and to support the delivery of telehealth services to low-income Americans. SHLB supports the creation of the Connected Care Pilot Program urges the Commission to consider using this pilot program to eliminate silos that separate USF programs to promote shared infrastructure and expanded broadband deployment. Moreover, SHLB urges the Commission not to limit the Connected Care Pilot Program to ETCs and encourages the Commission to award pilot program funds to a variety of participants, including research and education networks, municipalities and innovative commercial providers in addition to ETCs in order to learn as much as possible about how to structure a long-term Connected Care program.

Respectfully Submitted,



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