



December 13, 2024

SUBMITTED ELECTRONICALLY VIA ECFS

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
45 L Street NE
Washington, DC 20554

Re: In the Matter of Promoting Investment in the 3550-3700 MHz band, GN Docket No. 17-258 (“Written Ex Parte Presentation”)

Dear Madam Secretary:

The Schools, Health & Libraries Broadband Coalition (SHLB) and the undersigned organizations submit this letter in response to the Federal Communications Commission’s (Commission) Notice of Proposed Rulemaking and Declaratory Ruling in the above-captioned proceeding.¹ SHLB, as part of the Public Interest Spectrum Coalition, submitted comments asking the Commission to refrain from adopting and modifying existing CBRS rules that would negatively impact the availability and use of the current CBRS band.² Notably, we are concerned that the proposals seeking to raise power levels and out of band emissions would actually undermine the careful balance established to facilitate spectrum sharing in the band – decreasing access to the band and reducing the innovative use cases we’ve seen band users (such as community anchor institutions) deploy to solve diverse community needs. The CBRS band implementation has been very successful, and its uses and innovation are growing every day. The Commission should be reluctant to make technical changes that will jeopardize this success.

Community anchor institutions (CAIs) have increasingly taken on the task of ensuring their community members have access to broadband. For example, some CAIs pursue anchor-

¹ *Promoting Investment in the 3550-3700 MHz band*, Notice of Proposed Rulemaking and Declaratory Ruling, GN Docket NO. 17-258 (rel. Aug. 16, 2024) (“NPRM”).

² *See Comments of Public Interest Spectrum Coalition, Promoting Investment in the 3550-3700 MHz band*, Notice of Proposed Rulemaking and Declaratory Ruling, GN Docket NO. 17-258 (Nov. 6, 2024) (“PISC Comments”).

enabled network solutions³ that offer low-cost (typically free) broadband service to the surrounding community. To set up these networks, CAIs might work with private sector companies and/or partner with internet service providers (ISPs) or the local municipality to find the best solution for their geographic area, budget, and user needs. Notably, many CAIs often leverage shared spectrum through the CBRS band to make these networks operational. Given its emphasis on the use of low-power to facilitate a wide range of different users and uses of spectrum, the CBRS band is well-positioned for use by CAIs.

The following examples are representative of how CAIs are using CBRS spectrum today and are looking to do so in the future:

- The Boulder Valley School District’s (BVSD) “ConnectME” program is an example of a CAI that deployed a private LTE network by using shared CBRS spectrum. In 2016, BVSD (a school district in Boulder Valler, Colorado) partnered with a local wireless ISP (WISP), LiveWire Networks, Inc., to create a pilot program that would bring connectivity to a particular area within the district. BVSD provided space to LiveWire on a few school building roofs to construct towers with fixed wireless access points that transmit wireless internet using the CBRS spectrum band. LiveWire then provided no-cost Internet service to students in that area based on their eligibility to receive free and reduced lunch. BVSD expanded the program in 2020 and provided LiveWire with roof space on nearly all of its school buildings. LiveWire operates and manages the network and performs installation directly at the home of those that subscribe. The network is a point-to-point fixed wireless system, whereby the access points on each tower connect to subscriber modules – small receivers that are placed on the student’s dwelling.
- The Castleberry Independent School District (CISD), located in River Oaks, Texas also set up a private LTE solution that utilized free spectrum in the GAA portion of the CBRS band. In 2017, CISD worked with M&A Technology, a private firm providing end-to-end network services, and a wireless network equipment manufacturer to construct and operate three towers that would ensure coverage for CISD student households. The schools then distribute indoor customer premises equipment (CPEs) to connect student homes to the network.

These case studies, along with ten others, are more fully captured (including information related to capital costs, student population and take-rate) in a publication that SHLB and the Open Technology Institute at New America (OTI) released in August of 2022 describing

³ SHLB generally uses the term “anchor-enabled network” to describe how broadband is first deployed “to” a CAI and then “through” it to reach residential consumers.

variations of anchor-enabled broadband networks across multiple states.⁴ In tandem with this publication, SHLB and OTI released a study by Dr. Raul Katz demonstrating the economic feasibility of such anchor-enabled networks, generally finding that deploying new wireless connections “to and through” a CAI “can often be the most low-cost and financially-sustainable option to connect households in unserved and underserved areas.”⁵

Access to shared (along with unlicensed and licensed) spectrum has indeed played a significant role in enabling CAIs to champion innovative and alternative broadband solutions, especially for rural or low-income communities that face challenges in accessing reliable and affordable broadband. Technical modifications to the CBRS rules that allow for higher power operations or change out-of-band emissions in the band present a harmful risk to these solutions by increasing risks of interference and diminishing the number of users in the band. Allowing users like CAIs to utilize spectrum access can foster local innovation to fill gaps left by broadband providers and create deployment models that others can use to address the digital divide on a larger scale. Even if a CAI cannot or chooses not to deploy an anchor-enabled network, flexible access to shared spectrum increases competition and lowers marketplace costs for those who buy spectrum services.

Respectfully,



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⁴ Matthew Marcus and Michael Calabrese, *The “To and Through” Opportunity: Case Studies of School and Community Networks Able to Close the Homework Gap for Good*, THE SCHOOLS, HEALTH & LIBRARIES BROADBAND COALITION & THE WIRELESS FUTURE PROJECT AT THE OPEN TECHNOLOGY INSTITUTE AT NEW AMERICA (Aug. 2022), available at https://assets.noviams.com/novi-file-uploads/shlbc/PDFs_and_Documents/SHLB_Research_and_Publications/OTI_Case_Studies-72d84d35.pdf.

⁵ Dr. Raul Katz, *The “To and Through” Opportunity: An Economic Analysis of Options to Extend Affordable Broadband to Students and Households via Anchor Institutions*, THE SCHOOLS, HEALTH & LIBRARIES BROADBAND COALITION & THE WIRELESS FUTURE PROJECT AT THE OPEN TECHNOLOGY INSTITUTE AT NEW AMERICA at 3 (Aug. 2022), available at https://assets.noviams.com/novi-file-uploads/shlbc/PDFs_and_Documents/SHLB_Research_and_Publications/Raul_Katz_Economic_Study1-281a0448.pdf

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