

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

In the Matter of	)	
	)	
Amendment of Parts 1, 21, 73, 74 and 101 of the Commission’s Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500- 2690 MHz Bands	)	WT Docket No. 03-66 (Terminated)
	)	
Transforming the 2.5 GHz Band	)	WT Docket No. 18-120

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

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## **I. INTRODUCTION**

The Schools, Health & Libraries Broadband (SHLB) Coalition appreciates the opportunity to file the following comments in response to the Federal Communications Commission’s (FCC’s) Notice of Proposed Rulemaking (NPRM) in the above-captioned proceeding.<sup>1</sup> The SHLB Coalition applauds the FCC for launching this proceeding to explore how to award Educational Broadband Service (EBS) licenses in the remaining “white spaces” areas not currently served by an EBS licensee.

The SHLB Coalition is a broad-based coalition of organizations that promote 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, public housing 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 those in rural areas, low-income consumers, disabled and elderly persons, students, people of color, and other vulnerable segments of our society.

## **II. The EBS Spectrum Has Unique Public Interest Attributes, and the FCC Should Adopt Policies that Directly Address the Digital Divide and the Homework Gap.**

This EBS proceeding provides a unique opportunity for the FCC to address the Digital Divide and the Homework Gap. According to the FCC’s most recent broadband status report,

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<sup>1</sup> *Transforming the 2.5 GHz Band*, Notice of Proposed Rulemaking, FCC 18-59, WT Docket No. 18-120 (rel. May 10, 2018) (“*EBS NPRM*”).

<sup>2</sup> SHLB Coalition members include representatives of schools, libraries, telehealth networks, state broadband mapping organizations, 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.

more than 15 million Americans still lack access to sufficient mobile LTE broadband.<sup>3</sup> This disparity between broadband “haves” and “havenots” is likely to grow larger with the deployment of 5G which will occur largely in urban markets. Chairman Pai has said that closing the Digital Divide for rural Americans is his top priority, and this EBS proceeding is a perfect opportunity to make progress toward this goal.<sup>4</sup>

Because of its unique history, the EBS spectrum band is well-suited to serve the public interest. It has been used for wireless broadband for about 20 years, so the equipment has been developed and is available off-the-shelf. The band also has a history of use by educational institutions (K-12 schools and colleges and universities) and commercial lessees, so both the educational community and the industry are familiar with the opportunities presented by the band. Since EBS licenses have already been issued to organizations covering about ½ the geographic area of the U.S. with certain educational requirements (more on these below), there is an expectation in the community that such licenses will be awarded with public interest obligations. Thus, the FCC can condition the award of these new licenses with public interest rights and responsibilities without as much opposition from potential licensees as might occur if the FCC tried to condition licenses in other spectrum bands.

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<sup>3</sup> See, 2018 Broadband Deployment Report, released February 2, 2018, available at <https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2018-broadband-deployment-report>. (“Rural and Tribal areas continue to lag behind urban areas in mobile broadband deployment. Although evaluated urban areas saw an increase of 10 Mbps/3 Mbps mobile LTE from 81.9% in 2014 to 90.5 % in 2016, such deployment in evaluated rural and Tribal areas remained flat at about 70% and 64%, respectively. Approximately 14 million rural Americans and 1.2 million Americans living on Tribal lands still lack mobile LTE broadband at speeds of 10 Mbps/3 Mbps.”)

<sup>4</sup> “Since my first day as Chairman of the FCC, my number one priority has been closing the digital divide and bringing the benefits of the Internet age to all Americans.” – FCC Chairman Ajit Pai. See, <https://www.fcc.gov/about-fcc/fcc-initiatives/bridging-digital-divide-all-americans>.

### **III. Since Auctions Will Be Used to Award Licenses in other Markets, the FCC Can Adopt an Alternative, Non-Auction Approach for New EBS Licenses that Directly Addresses the Digital Divide.**

There is no statutory requirement, and no policy reason, for the FCC to auction the remaining EBS licenses. The FCC has already identified a number of other spectrum bands for auction. Chairman Pai testified before the House Commerce Committee that the FCC is poised to auction licenses to the commercial sector in five different commercial bands in the next year to promote investment in 5G.<sup>5</sup>

Rural and Tribal areas are unlikely to benefit from the award of licenses in these other frequency bands or from the deployment of 5G.<sup>6</sup> (The deployment of 5G requires the deployment of small cells and an extensive array of fiber that may not be economically feasible in rural markets.) Auctioning EBS licenses in rural markets would simply raise the cost of providing service and would make it even more difficult for the private sector to serve these rural markets. Furthermore, roughly one-half of the U.S. is already served by EBS licensees who did not acquire their licenses through auction. Rural schools and other anchors should not be disadvantaged compared to their urban and suburban counterparts by requiring rural licensees to pay for their licenses when urban and suburban licensees did not.

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<sup>5</sup> “[T]he FCC is moving forward aggressively to hold auctions and move a substantial amount of spectrum into the commercial marketplace. On November 14, we plan on beginning our 28 GHz band auction, which will be quickly followed by our 24 GHz band auction. Then, in the second half of 2019, I intend to hold a single auction of spectrum in the 37 GHz, 39 GHz, and 47 GHz bands. Combined, these auctions will make 4.95 GHz of spectrum available to the private sector and advance America’s global leadership in the deployment of the next generation of wireless connectivity, or 5G.” See, testimony of Chairman Ajit Pai, Before the Subcommittee on Communications and Technology, House Committee on Energy and Commerce, July 25, 2018, available at <https://www.fcc.gov/document/chairman-pai-testimony-house-oversight-hearing-1>.

<sup>6</sup> See, “5G Is Not the Answer for Rural Broadband,” Broadband Communities magazine, March/April 2017, available at [http://www.bbcmag.com/2017mags/Mar\\_Apr/BBC\\_Mar17\\_5GNotAnswer.pdf](http://www.bbcmag.com/2017mags/Mar_Apr/BBC_Mar17_5GNotAnswer.pdf). (“In rural America, where the digital divide is most common today and requires the most effort to overcome, 5G wireless will not be widely viable except possibly in densely populated towns.”)

Rather than adopt an “auctions-fits-all” strategy, the FCC should adopt an approach for EBS that complements its auction of licenses in other spectrum bands. Adopting a multi-pronged approach – auctioning licenses of other spectrum bands and awarding new EBS with explicit license conditions – is more likely to lead to success in promoting rural broadband. As discussed in the next section, we recommend that the FCC issue new EBS licenses to anchor institutions and other eligible non-profits on the condition that the licensee agrees to provide consumers in rural and Tribal areas with affordable, wireless broadband. Addressing the rural broadband gap head-on by requiring new EBS licensees to provide low-cost service could directly address the Digital Divide and the Homework Gap and supplement the services that will be offered by the commercial sector through the auction of other spectrum bands. Furthermore, conditioning the award of EBS licenses with obligations to serve rural markets could go a long way toward addressing the rural broadband gap without the FCC having to provide funding for these networks (such as through the Mobility Fund).

#### **IV. The Educational Use Requirements Should be Modernized to Require EBS Licensees to Offer an Affordable Mobile Broadband Service.**

As the FCC notes in the NPRM, the existing educational use (5% of capacity) and educational purpose (20 hours per week) requirements are clearly out of date.<sup>7</sup> While it is possible to measure the capacity of an individual connection, it is difficult, if not impossible, to measure the capacity of a network as a whole. Requiring a licensee to devote a certain amount of capacity of its network to a particular service is virtually impossible to enforce. Furthermore, requiring a licensee to cordon off a certain amount of its network capacity for a certain service would be inefficient and would not allow the licensee

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<sup>7</sup> EBS NPRM, para. 4 (“Since 1983 the Commission has allowed EBS licensees to lease their excess capacity to commercial providers, but it has required EBS licensees to retain five percent of their capacity for educational use, and it further has required that they use each channel at least 20 hours per week for educational purposes.”)[footnotes omitted]

to engage in flexible use of its network to accommodate shifting demand (especially since flexible use is one of the Commission’s objectives and is one of the benefits of a modern communications technology).<sup>8</sup> Similarly, trying to measure the educational “purpose” of a broadband service would raise privacy concerns if the FCC or the licensee were to monitor how consumers are using the service.

Given that the Chairman’s top priority is to address the Digital Divide, the FCC should replace the educational use and purpose requirements with a condition that new EBS licenses must offer an uncapped broadband service at an affordable price to consumers. This model has already been proven successful in the EBS band, as both Mobile Beacon and Mobile Citizen currently offer an uncapped service at a price of \$10 per month. They currently provide service to thousands of customers across the U.S. through the anchor institutions in each local market. Since the price of service is often the most significant factor in a consumer’s ability to subscribe to service,<sup>9</sup> Mobile Beacon and Mobile Citizen’s pricing at \$10 (for uncapped data) is especially attractive to low-income consumers. The FCC should build upon the success of these services by incorporating similar service requirements into its rules for new EBS licenses.<sup>10</sup>

To ensure that the service is available to more than just a handful of customers, the FCC could require that at least 20% of a licensee’s customers subscribe to an affordable plan.<sup>11</sup> By basing the obligation on a percentage of customers, the number of customers using the affordable plan would be required to grow

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<sup>8</sup> EBS NPRM, para. 10 (“The Commission traditionally has recognized that a spectrum policy based on flexible use in regular geographic areas has several advantages. Such flexible use licensing can promote broadband deployment, ensure the spectrum is put to its most beneficial use, allow licensees to respond to consumer demand for new services, and maximize the probability of success for new services.”) [footnotes excluded]

<sup>9</sup> Income remains an important factor in determining broadband use at home. According to Pew, only 45% of homes with an income below \$30,000 per year are home broadband users, compared to 87% of homes with an income above \$75,000. See, <http://www.pewinternet.org/fact-sheet/internet-broadband/>.

<sup>10</sup> This recommendation is forward-looking and is meant to apply only to new EBS licensees. Because existing lease arrangements are quite pervasive and the EBS spectrum is being actively used where it has been licensed, there is no reason at this time to impose a requirement to provide affordable broadband access on existing licensees.

<sup>11</sup> The enforcement of this idea would not have to be burdensome. The FCC could simply require EBS licensees to submit an affidavit that at least 20% of its customers subscribe to an affordable plan. The policy could be enforced with a periodic audit of a portion of EBS licensees each year.

as the number of customers of the more expensive plans grow.<sup>12</sup> And, as discussed below, awarding licenses to anchor institutions that have a local presence in the rural market and who have incentives to provide service to their communities could reduce the need for additional subsidies to commercial providers to support network build-out costs.

**V. The FCC Should Make EBS Licenses Available to Anchor Institutions and Non-Profit Providers Who Have the Best Incentive and Experience to Meet the Public Interest Goals.**

The FCC asks who should be eligible to receive EBS licenses and whether licensees should be permitted to transfer or assign licenses. Currently, EBS licenses can only be held by 1) accredited or governmental educational institutions and 2) nonprofits that provide educational services to such entities.<sup>13</sup> The FCC proposes both to constrict and to expand the list of eligible entities for new EBS licenses. For instance, the Commission proposes to add a third filing window only for

- brand new licensees (not current licensees),
- who are educational institutions (but not to non-profits that serve those educational institutions),
- and who have a local mailing address in the license area (even if they have no other presence),

And then it proposes auctioning spectrum licenses to any commercial entity whether or not they have a local presence at all.

This confusing set of eligibility proposals does not hold together. Existing licensees and non-profits who serve educational entities (who would be excluded under the FCC's proposal) may have expertise and experience that could benefit the deployment of service. A mailing address does not guarantee that the entity has a local presence and could be gamed. Finally, (as explained earlier) auctioning these

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<sup>12</sup> This license condition is similar to state or municipal requirements on housing developers to provide a certain percentage of their new housing units at below market rates. See, <http://www.latimes.com/local/lanow/la-me-ln-affordable-housing-20150615-story.html>.

<sup>13</sup> 47 C.F.R. § 27.1201(a), (d).

licenses to any commercial licensee would be inconsistent with the public interest nature of this spectrum band.

We suggest instead that the eligibility criteria should be adjusted to focus on those entities who would best promote the Chairman's broadband goals:

- a. The SHLB Coalition supports the rights of Tribal Nations to obtain EBS licenses in their local markets. We leave to others to comment on the specifics of how to identify the specific entities on Tribal lands that should be eligible and the contours of their service territories.
- b. The list of eligible entities in non-Tribal markets should be expanded to include all anchor institutions who have a significant local presence in the license area. For instance, public libraries have often taken a leadership role in promoting broadband access in their communities.<sup>14</sup> Rural hospitals and health care clinics are expanding their provision of remote home telemonitoring and others home telemedicine services. Public media centers, public housing, and community centers all recognize the value of broadband connectivity to low-income consumers and have deep roots in their communities. Publicly-owned anchor institutions whose mission is to serve the general public have the most incentives to serve their communities and should be eligible to obtain EBS licenses.
- c. Eligibility should also include other governmental agencies and non-profit broadband providers that have a significant presence in the market, such as state and local government departments and non-profit research and education (R&E) networks. For instance, state, regional or R&E networks could apply for new EBS licenses to implement statewide or regional broadband solutions using existing infrastructure. Several common assets possessed by these regional or statewide consortia networks would make LTE network implementation more feasible: A) access to state public safety and/or public television tower space; B) fiber backhaul to towers; C) large

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<sup>14</sup> See, "America's Libraries: Powering Broadband Adoption, Access and Use," available at [http://www.ala.org/news/sites/ala.org.news/files/content/Broadband\\_11-08-16\\_0.pdf](http://www.ala.org/news/sites/ala.org.news/files/content/Broadband_11-08-16_0.pdf).



purchases of commodity Internet that go under-utilized during non-school hours; D) 24/7 help desks; E) network engineering expertise; F) accounts payable and receivable staff; and G) experience with cross-boundary collaboration and partnerships.

- d. Eligibility should also be provided to those non-profit organizations (such as Mobile Beacon and Mobile Citizen) that have experience in providing wireless broadband access to local communities using the EBS spectrum in neighboring markets, even if they do not have a local presence in that particular community. Non-profit organizations that have a history of serving low-income customers have the expertise and experience and are most likely able to be able to get service up and running quickly. If those non-profits are actively engaged in providing service to consumers in communities or license areas that are adjacent to the new license area, they are likely to be able to expand their offerings of affordable access to low-income consumers to the residents nearby.

The struggle for anchor institutions to obtain affordable broadband is not limited to schools or libraries. In fact, unlike schools and libraries that typically receive a level of government funding, most community-based nonprofit organizations are funded almost entirely through grants and community donations, which can be highly variable from year to year. They have the greatest need for broadband (because they provide essential services for their communities) but also have the fewest resources (and thus may not be able to afford the high cost of a commercial offering). We often hear about the difficulties that anchor institutions have had obtaining affordable broadband to support their work. Below are a couple of examples developed by Mobile Beacon for a research study completed in 2017:

“We’re a free medical clinic running on \$35,000/year. If we had to pay for internet at going rates, it would be a minimum of \$1,500/year or 5% of our budget. Without Mobile Beacon, we would have to cut some medical supplies to get internet.” —Jefferson Rural Clinic, Jefferson City, TN.<sup>15</sup>

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<sup>15</sup> Samantha Schartman-Cyck & Katherine Messier, *Creating Opportunity Through Connectivity: How Mobile Broadband for Anchor Institutions Impacts Communities* 4, Mobile Beacon (2017), available at

“Internet access is the key to everything now. Having affordable access is hugely important, especially for nonprofits. Without Mobile Beacon, we couldn’t shoulder the cost of internet.” —The Academy of Medical & Public Health Services, Brooklyn, NY.<sup>16</sup>

**VI. The FCC Should Not Allow Eligible Entities to Transfer or Assign Their Licenses to Commercial Providers, but Should Continue to Foster Public-Private Partnerships by Allowing Licensees to Enter Leases with Commercial Providers.**

Allowing the licenses to be sold to commercial parties, as the FCC proposes, would conflict with the public interest nature and goals of this spectrum band. If the FCC allows licensees to sell the licenses, it would essentially result in an auction in the private marketplace. The “winning” commercial provider would face increasing costs of providing service (from paying the licensee) and will focus on the most profitable consumers (potentially ignoring the low-income customers and hard-to-reach customers in the service territory).

Instead, SHLB endorses public-private partnerships and encourages licensees to enter lease agreements with commercial parties. This will facilitate the build-out of the network by parties who are experienced at deploying wireless networks. Such leases would not remove the licensee’s obligation to provide affordable, uncapped wireless broadband service to at least 20% of all the customers served by that license. To ensure that this requirement is met by both parties, the FCC should require that the 20% license condition is written into the lease contract so that the parties are able to hold each other accountable for fulfilling this obligation.

**VII. The FCC Should Encourage Eligible Parties to Form Consortia for the Purpose of Submitting a Single Application for the License.**

An open question is how to determine the licensee if there are several anchor institutions (and neighboring non-profits) that may be eligible and interested in submitting applications for EBS licenses in

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[https://www.mobilebeacon.org/wp-content/uploads/2018/01/CreatingOpportunitiesResearchPaper\\_2018-1.pdf](https://www.mobilebeacon.org/wp-content/uploads/2018/01/CreatingOpportunitiesResearchPaper_2018-1.pdf) (“*Creating Opportunity Through Connectivity*”). at 18.

<sup>16</sup> *Id.* at 17.

a particular market. The FCC asks about whether to adopt a “settlement window” to allow filers to resolve mutual exclusivity before the Commission “accepts” any application for a new license. This is a good idea, as we explain below.

NEBSA has, in the past, suggested a “first-come, first-served” approach – eligible entities would file at the same moment in time and the license would be issued randomly to one of the parties that files at that same moment. This method has the virtue of not subjecting applicants to an auction. But the randomness of the selection introduces some uncertainty and it is not clear that the winning entity will have the incentive and expertise to carry out the license obligations.

Instead of a “first-come, first-served” approach, the FCC could give eligible entities a window of time to form a consortium and submit a single application before applications are “accepted” for filing by the FCC. (If no “mutually exclusive applications” are “accepted”, there is no legal requirement to hold an auction.<sup>17</sup>) The FCC could allow parties to file “expressions of interest” (as the FCC did with the Rural Broadband Experiments in the Connect America Fund) and the FCC could then review the minimum eligibility qualifications of each party before they are declared eligible. Once the eligible parties in each market have been certified by the FCC, the eligible entities in each license area would have a certain amount of time to negotiate an agreement. Eligible parties could, for instance, agree to divide up the license geographically, or divide up the channels that each entity shall obtain, or they could form a jointly owned consortium and share the operational obligations.

The FCC could give a certain amount of time for parties to negotiate a joint application – perhaps six months, with a single waiver for another six months. If the parties do not reach agreement after one year,

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<sup>17</sup> According to section 309 (j): “If, consistent with the obligations described in paragraph (6)(E), mutually exclusive applications are **accepted** for any initial license or construction permit, then, except as provided in paragraph (2), the Commission shall grant the license or permit to a qualified applicant through a system of competitive bidding that meets the requirements of this subsection.” [emphasis added]. Note that section 309(j) exempts several public services from auctions, such as public safety and emergency road services, that are analogous to the public anchor institutions and non-commercial providers that we recommend should be solely eligible for these EBS licenses.

then the FCC could implement the “first-come, first-served” approach recommended by NEBSA. The potential that a single eligible entity could randomly “win” the license in a market – leaving the other eligible entities stranded – would provide an incentive for all eligible entities to come to agreement in a consortium.

### **VIII. Conclusion**

The EBS spectrum is unique. From its inception it has been imbued with public interest responsibilities and opportunities. Given the importance of addressing the Digital Divide and the Homework Gap, the FCC should use this opportunity to issue new EBS licenses with specific public interest obligations to provide affordable wireless broadband service to rural consumers.

Respectfully Submitted,

A handwritten signature in black ink that reads "John Windhausen, Jr." The signature is written in a cursive style with a large initial 'J' and a distinct 'W'.

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