Window of Opportunity: How EBS Spectrum Can Close the Digital Divide



OVERVIEW

At a time when broadband for education has never been more important to how we learn and communicate, the costs of being disconnected have never been higher. Spectrum policy matters—particularly for rural Americans and those who fall on the wrong side of the digital divide.

Educational Broadband Service (EBS) is the *only* licensed spectrum available to educational institutions to connect their communities. In areas where EBS has been licensed, EBS is connecting tens of thousands of schools, libraries, and other anchor institutions, and through them, millions of students and families that were not otherwise reached by commercial broadband offers. For over 20 years, however, the FCC has not made EBS spectrum available in roughly 50% of the U.S., covering 15% of the U.S. population, mostly in rural areas.

In May 2018, the FCC issued a Notice of Proposed Rulemaking, Transforming the 2.5 GHz Band, which would finally make this unlicensed EBS spectrum available. Chairman Pai has proposed priority windows for educators and Tribal Nations to apply for EBS licenses, finally giving them the chance to connect their communities. Unfortunately, others at the Commission are instead proposing auctioning EBS to commercial entities who already have access to more than 600 MHz of spectrum below 3 GHz that they are not using to serve these same mostly rural areas. The Commission is also considering removing educational eligibility and use requirements that are critical to delivering educational benefits.

Much is at stake. Putting EBS spectrum to its highest and best use must include ensuring that existing levels of EBS service are not diminished and this valuable public asset can be used by those who will connect rural and tribal entities that lack internet access today.

EBS by the Numbers

EBS is Critical to Close the Homework Gap and Serve Students of All Ages

A License Will Always Get Used > 1,300 EBS Licensees > 2,190 EBS Licenses



EBS Connects Low-Income Households

A recent study showed 73% of low-income families had no home internet access before an EBS program reached them.¹



EBS Drives Rural Deployment

Six educational institutions obtained new EBS licenses and all resulted in new networks providing affordable broadband in rural areas.²



EBS Provides Homework Gap Solutions

EBS licensees are loaning mobile hotspots to students, connecting anchor institutions, and providing WiFi on school buses.



EBS Provides Tribal Connectivity

EBS spectrum has ideal characteristics for tribal broadband and has been rapidly and cost-effectively deployed.

The FCC Has Issued Almost NO NEW EBS LICENSES in 23 YEARS.

The Rural U.S. Is Being Left Behind.

At least 66% of federally-recognized Tribal Lands have unlicensed EBS spectrum that is crucial for self-deployments.

4K+ EBS Licenses were never assigned by the FCC.

50 Million U.S. (mostly rural) residents have no access to EBS spectrum or services.

of rural Americans lack access to 25/3 broadband speeds.³

¹ Samantha Shartman-Cycyk & Katherine Messier, Bridging the Gap: What Affordable, Uncapped Internet Means for Digital Inclusion 4 (2017), https://www.mobilebeacon.org/wp-content/uploads/2018/05/MBRe searchPaperFINALWEB.pdf ("Bridging the Gap").

² See, e.g., Application of The Board of Trustees of Northern Michigan University For a New Educational Broadband Service Station, Memorandum Opinion and Order, 23 FCC Rcd. 11832 (WTB 2008); Application of The Nisqually Indian Tribe, Memorandum Opinion and Order, 28 FCC Rcd. 15569 (WTB BD 2013); Applications of Kings County Superintendent of Schools for New Educational Broadband Service Stations, Memorandum Opinion and Order, 31 FCC Rcd. 13281 (WTB BD 2016); Application of the Monterey County Superintendent of Schools for a New Educational Broadband Service Station, Memorandum Opinion and Order, 31 FCC Rcd. 13274 (WTB BD 2016); Application of Louisa County Public Schools for Special Temporary Authority, ULS File No. 0008014101 (granted Feb. 27, 2018); Application of the Havasupai Tribe for Special Temporary Authority. ULS File No. 0007981254 (granted Mar. 1, 2018).

³ Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, 2018 Broadband Deployment Report, 33 FCC Rcd. 1660, 1681 (2018).

EBS is the Only Spectrum That Delivers Robust Commercial Benefits <u>and</u> Educational Benefits

As the FCC considers how to ensure EBS spectrum is put to its highest and best use, the key is that educational eligibility is compatible with intensive commercial use, but the reverse is not true. Today, leased EBS spectrum (as well as the commercial portion of the 2.5 GHz band) is *already* deployed, *already* providing most of the capacity of Sprint's current 4G LTE network, and *already* set to bring America's *first* 5G service to nine cities in May 2019. However, absent educational eligibility, the incentives that drove successful public-private partnerships with educational entities will disappear, and new opportunities for rural educators and tribal groups to obtain 2.5 GHz spectrum and serve unprofitable areas will be lost forever.

Educational Eligibility Provides the Right Incentives for Rural Deployment

While the commercial sector already has 600 MHz of spectrum below 3 GHz, rural deployment is lacking. Giving more spectrum to the same commercial entities that are not building out rural areas with the spectrum they already have, is policy doomed to fail. On the other hand, every time an educational entity has received a waiver to obtain EBS white space or partnered with a rural WISP, rural deployment has followed—with more homes reached, more affordable service, and a more robust data plan than even what our nation's two largest telecommunications providers offer in the same areas. This is the power of policy that gives properly incentivized entities a chance to obtain spectrum.

Auctions Threaten the Broadband Service That Anchor Institutions and Low-Income Families Rely On Today

Although the FCC has suggested auctions will give existing EBS licensees more choice, this ignores market realities. Without educational eligibility, commercial entities have no incentive to offer favorable lease terms to educational entities. Rather, they will offer "buy out" terms in an attempt to drive EBS licensees to sell, leaving committed EBS licensees with fewer options to create long-term, public-private partnerships. Additionally, nearly 200 commenters in this docket told the FCC that without the broadband service they currently rely on through an EBS licensee, they would have no connectivity or insufficient data to accomplish their educational missions because commercial service is either too cost-prohibitive or simply not available in their area. Additionally, for rural educators who have never had an opportunity to obtain EBS licenses, the FCC's auction proposals will mean they never get a choice—or a chance—to put this valuable spectrum to use in their underserved communities.

A Diverse Spectrum Allocation Policy is Crucial to Closing the Digital Divide

When it comes to closing the digital divide or homework gap, there is no silver bullet. E-rate funding stops short of providing connectivity for secondary educational institutions and to students at home. Lifeline isn't reaching its potential as most facilities-based providers are opting not to participate. And commercial programs like Internet Essentials are helpful, but will not reach everyone. The persistent, pervasive digital divide in both urban and rural America is direct evidence that commercial providers, on their own, have not and will not solve the digital divide. Americans on the wrong side of the digital divide need our policymakers to ensure diverse spectrum policies that bring multiple stakeholders together and drive multiple approaches and solutions to reach the unserved.

Maintaining Educational Eligibility in the EBS Band Achieves All of the FCC's Goals

- Currently supports 5G deployment
- Promotes long-term public-private partnerships among anchor institutions and commercial entities
- Provides affordable broadband service for low-income families without a government subsidy

- Drives rural deployment
- Provides homework gap solutions like mobile hotspots and WiFi on school buses without a government subsidy
- Connects long-underserved
 Tribal Nations

That's Why These Organizations Are Urging Congress to Contact the FCC to Keep EBS Educational

America's Public Television Stations

California Imperial County Office of

Education

California K-12 High Speed Network

Digital Wish

Educators and Broadband Providers for American Rural Communities

(EBPARC)

Mobile Beacon

Mobile Citizen

National Digital Inclusion Alliance

National EBS Association (NEBSA)

National Tribal Telecommunications Association (NTTA)

Nebraska Department of Education

Nebraska Educational Television

Nebraska Office of the CIO

NACEPF

Public Knowledge

Schools, Health & Libraries

Broadband Coalition (SHLB)

TechSoup Global

Views on Learning

Voqal

NOTABLE NEWS, REPORTS, AND COMMENTS FILED IN WT 18-120 ON EBS RULEMAKING

News

- Let's Give Schools a Tool to Solve the Homework Gap, Benton, 2/20/2019
- Let Local Educators Close the Broadband "Homework Gap", Public Knowledge, 2/15/2019
- Providing Broadband to Rural America: How Educators with EBS Can Make the Difference Benton, 1/28/2019
- The Educational Broadband Service and Why it Matters for Schoolchildren and Unserved Communities, Benton, 12/3/2018
- FCC's proposed update to EBS rules prompts comments from public media, *Current*, 8/13/2018
- Rural Americans Stand to Lose in Proposed T-Mobile/ Sprint Merger, Morning Consult, 2/14/19
- FCC Auction Might Sink 2.5 GHz, Broadband Group Warns, Law360, 1/22/19
- Debating the Future of the 2.5 GHz EBS spectrum, RCR Wireless, 1/23/19

Reports

- Bridging the Gap, 06/17
- Creating Opportunity Through Connectivity, 06/17

FCC Comments

With near uniformity, educational entities, tribal entities, public interest groups all filed comments in WT 18-120 urging the Commission to keep EBS educational.

Comments of Existing EBS Licensees

- Comments of NEBSA/CTN filed 8/8/18; reply comments filed 9/7/18
- Comments of NACEPF/Mobile Beacon filed 8/8/18; reply comments filed 9/7/18
- Comments of Northern Michigan University filed 8/8/18
- Comments of Voqal filed 8/8/18; reply comments filed 9/7/18
- Comments of HITN filed 8/8/18; reply comments filed 9/7/18
- Comments of Views on Learning filed 9/7/18
- Comments of Source for Learning filed 9/7/18

Comments of Nonprofits & Public Interest Groups

- Comments of SHLB filed 8/8/18
- Comments of National Digital Inclusion Alliance filed 8/8/18
- Comments of TechSoup filed 8/8/18
- Comments of Digital Wish filed 8/8/18
- Comments of PCs for People filed 8/8/18

Comments of Educational Entities

- Comments of Nebraska filed 8/8/18
- Comments of Utah filed 8/7/18
- Comments of Imperial County and California K12HSN filed 8/7/18
- Comments of SETDA filed 8/8/18
- Comments of CoSN filed 8/8/18

Comments of WISPs/Rural Providers

- EBPARC filed 8/7/18; reply comments filed 9/7/18
- Select Spectrum filed 8/8/18; reply comments filed 9/7/18

Comments of Tribal Entities

- Comments of Mural Net filed 8/8/18
- Comments of Chemehuevi Indian Tribe filed 7/6/18
- Native Public Media filed 7/26/18
- Nez Perce Tribe filed 7/30/18
- The National Congress of American Indians filed 8/8/18
- The Chickasaw Nation filed 8/8/18
- American Indian Higher Education Consortium filed 8/8/2018