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## **Fact Sheet: Fundamental Arguments in the FCC Proceeding “Transforming the 2.5 GHz Band”**

The Federal Communications Commission (FCC) issued a Notice of Proposed Rulemaking on May 10, 2018, “Transforming the 2.5 GHz Band” (FCC Docket 18-120). In its notice, the FCC seeks comment on ways to issue new EBS white space licenses as well as ideas to reform EBS, facilitate 5G wireless deployment and help close the digital divide.

Currently, over 250 comments<sup>1</sup> have been filed in this proceeding from a wide range of entities, including current EBS licensees, NEBSA (the EBS trade association), educational stakeholders, public policy advocates, community anchor institutions, commercial entities, commercial trade associations, tribal stakeholders and the general public. From the educational, tribal and public interest groups, there is near universal agreement that EBS should continue to support education.

On the other hand, commercial providers and others have argued for complete commercialization of EBS. These commenters claim that EBS licensees should be able to sell their licenses to commercial providers and that EBS white spaces should be auctioned, without providing an opportunity for educational entities to use the spectrum for educational purposes.

**Below is a summary of some of the erroneous claims about EBS and facts to set the record straight.**

*Myth: EBS has failed to fulfill its educational mission.<sup>2</sup>*

**Fact: EBS is being used *today* to connect students, families and communities that would otherwise lack internet access. Public-private partnerships facilitated by the current rules provide significant educational benefits that would otherwise not exist.**

The record shows that EBS licensees are using EBS to provide educational connectivity crucial to modern-day success. This is true of EBS licensees like Northern Michigan University<sup>3</sup> and Kings County<sup>4</sup> that have built their own networks, and it is true for EBS licensees that have entered into excess capacity leases that enable them to provide broadband services and devices to support learning both in and out of the classroom.<sup>5</sup> Tens of thousands of users at schools, libraries, nonprofits and anchor institutions across the country are benefiting from EBS today.

*Myth: Requiring that EBS licensees be held by educational entities has hindered commercial deployment.<sup>6</sup>*

**Fact: Where EBS has been licensed, existing rules have produced extensive deployment by commercial entities and EBS licensees, as well as significant educational benefits. What's hindered deployment is the over-20-year freeze on granting new EBS licenses.**

The record demonstrates that where the FCC has issued EBS licenses, licensees themselves or commercial lessees have provided a full range of wireless services, with technologies and speeds that have remained on the cutting edge of the wireless industry. Commercial providers, big and small, operate successful and essential networks on their leased EBS spectrum.<sup>7</sup> The lack of EBS deployment stems from the fact that 2.5 GHz licenses have not been made available in vast areas of the country. Indeed, there is a substantial overlap between those areas where EBS has yet to be licensed and where residents and businesses remain unserved or underserved.<sup>8</sup>

*Myth: EBS is no longer needed because EBS services ride over the top of commercial networks.<sup>9</sup>*

**Fact: EBS services, however they are delivered, remain essential to filling gaps not met by the commercial marketplace. EBS is — and can continue to be — a critical tool for closing the homework gap and digital divide.**

The record demonstrates that EBS is being used today to reach students, both inside and outside the classroom, who are otherwise unserved by the market. EBS licensees that self-deploy and those that lease their spectrum provide educational network access and services that the commercial market is either not supplying or is offering at prices that many community members cannot afford. Whether connecting schools and the surrounding communities,<sup>10</sup> deploying hotspots on buses<sup>11</sup> or pioneering library hotspot lending programs,<sup>12</sup> EBS licensees are helping to close the digital divide.

The reason commercial providers have failed to build out rural America is because they lack the financial incentive — not because of a shortage of available commercial spectrum. Absent educational eligibility and use rules, commercial providers will continue to lack incentives to use 2.5 GHz spectrum to help students, teachers and families access the educational connectivity so critical to success in today's online world. On the other hand, educational institutions not only have the incentive to build, but also this long-awaited proceeding is happening at a time when “the level of sophistication of school technology leaders has grown tremendously,” there's been “a trend in the last three years of school districts and County Offices building their own private LTE network providing internet service to students,” and “the pace of these deployments is growing due to enhanced market conditions and a ripe ecosystem of equipment and devices on the 2.5 GHz band.”<sup>13</sup>

*Myth: Commercializing EBS is the best way to close the digital divide because it will promote the widest deployment of 2.5 GHz broadband at the lowest possible cost to consumers.*<sup>14</sup>

**Fact: Keeping EBS educational will continue to drive deployment to unserved areas. Today, numerous rural areas are covered *only* by EBS or due to EBS-enabled partnerships.**

The persistent, pervasive digital divide in both urban and rural America — despite the existence of numerous government-led subsidies to address this market failure — is direct evidence that commercial providers, on their own, have not and will not address this problem. In contrast, the record shows that by licensing EBS to educational entities, the Commission can drive deployment to these hard-to-reach areas of the country. Because of the FCC’s educational rules, major commercial providers have deployed LTE broadband to underserved schools. EBS licensees have partnered with fixed-wireless providers to offer high-speed, affordable broadband to communities otherwise left unconnected.<sup>15</sup>

*Myth: The commercial sector offers “the same if not better” broadband than EBS licensees to address the homework gap and the digital divide.*<sup>16</sup>

**Fact: Low- or no-cost commercial wireless offerings typically provide a far inferior level of service than that which the EBS community provides through self-deployments and excess-capacity leases.**

Some commenters claim that commercial programs like Sprint’s 1Million project are providing “the same if not better” broadband service compared to EBS licensees. But publicly-available information shows the exact opposite. EBS licensees that lease their excess capacity to Sprint typically receive 15 GB plans, which they use to support students in and out of the classroom. The 3 GB plan offered by Sprint’s 1Million project is not only **80 percent less** than what the general EBS community offers, it’s also **70 percent less** than the *lowest level retail plan* Sprint currently offers for a mobile hotspot. While the educational community appreciates that commercial entities offer low-cost options, the record is clear that EBS benefits would not be replaced by the commercial sector. It is only through the Commission’s existing eligibility rules — requiring commercial entities to partner with educators — that schools around the country are able to get free or low-cost broadband service through EBS licensees that is not a *lower tier of service* like these commercial-led low-cost internet offers.

*Myth: Auctions are the best way to transform the 2.5 GHz band.*<sup>17</sup>

**Fact: Auctions would not only eliminate education from the band, but also fail because of encumbered spectrum.**

Auctions would, of course, freeze education out of the band, putting at risk the educational benefits provided today and throwing away one of the few tools the Commission has to help

address the homework gap.<sup>18</sup> Beyond that, however, the auction process would introduce significant delays and inequities. In addition, because many EBS licensees hold long-term leases, incentive and overlay auctions will not achieve their goals of determining the optimum allocation of 2.5 GHz spectrum.<sup>19</sup> At best, they will allow existing EBS lessees to acquire licenses at auction at bargain prices.

*Myth: While the Commission's 1963 decision to set aside spectrum for ITFS, the predecessor of EBS, made sense at the time, fifty-five years later there is no longer any compelling case for the reservation of any portion of the band for licensing exclusively to educational institutions.*<sup>20</sup>

**Fact: The record in this proceeding shows educational entities from across the country have not only demonstrated their need, but also provided specific plans for how they would deploy EBS to address these otherwise unmet needs by the commercial sector.**

Model EBS cases such as Northern Michigan University,<sup>21</sup> Albemarle County (VA),<sup>22</sup> Kings County Office of Education (CA),<sup>23</sup> and Imperial County Office of Education (CA)<sup>24</sup> demonstrate this spectrum's potential to make a meaningful difference for students and communities. These projects include excellent examples of education-focused public private partnerships, innovative multi-agency community collaboration and a relentless commitment to boosting rural student broadband connectivity.<sup>25</sup> Additionally, comments from California K12HSN, Utah Educational and Telehealth Network, North Carolina Department of Information Technology, Broadband Infrastructure Office, Nebraska Department of Education and Nebraska Educational Television, and many others directly contradict WCA's assertion about "how little the educational community actually values the ability to construct and operate its own facilities."<sup>26</sup>

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<sup>1</sup> Comments filed as of 9/24/18.

<sup>2</sup> Comments of the Wireless Communications Association International at 4, 26, WT Docket No. 18-120 (filed Aug. 8, 2018).

<sup>3</sup> Comments of Northern Michigan University at 3, 5–6, WT Docket No. 18-120 (filed Aug. 8, 2018).

<sup>4</sup> Comments of the Kings County Superintendent of Schools at 3–5, WT Docket No. 18-120 (filed Aug. 8, 2018).

<sup>5</sup> See, e.g., Comments of North American Catholic Educational Programming Foundation and Mobile Beacon at 16, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of PCs for People at 1, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of TechSoup Global at 2, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of Digital Wish at 2–3, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of National EBS Association and Catholic Technology Network at 4, WT Docket No. 18-120 (filed Aug. 8, 2018); Joint Comments of South Florida EBS Licensees at 3 n.3., WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of the Bad River Band of the Lake Superior Tribe of Chippewa Indians at 3, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of the Havasupai Tribal Council at 1, WT Docket No. 18-120 (filed July 19, 2018); Comments of Mural Net at 3, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of North Carolina Department of Information

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- Technology, Broadband Infrastructure Office at 4, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of the Consortium for School Networking at 8, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of Voqal at 10–13, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of Northern Arizona University Foundation, Inc. at 2–3, WT Docket No. 18-120 (filed Aug. 8, 2018).
- <sup>6</sup> Comments of the Wireless Communications Association International at 26, WT Docket No. 18-120 (filed Aug. 8, 2018) (“Banning the lease or sale of licenses for any period of time harkens back to command and control policies that were responsible for underutilization of the band in the first place.”).
- <sup>7</sup> Comments of Sprint Corporation at 3, WT Docket No. 18-120 (filed Aug. 8, 2018) (“Sprint’s 2.5 GHz spectrum is the source of most of the 4G LTE capacity in Sprint’s existing commercial wireless network); Comments of the Wireless Communications Association International at 4, WT Docket No. 18-120 (filed Aug. 8, 2018) (“[I]n those areas of the country where EBS spectrum has been made available (which encompass far in excess of 50 percent of the US population), commercial lessees in the 2.5 GHz band have provided a full range of wireless services.”); Joint Comments of National EBS Association and Catholic Technology Network at 3–8, WT Docket No. 18-120 (filed Aug. 8, 2018).
- <sup>8</sup> Joint Comments of National EBS Association and Catholic Technology Network at 8, WT Docket No. 18-120 (filed Aug. 8, 2018).
- <sup>9</sup> Comments of the Wireless Communications Association International at i, WT Docket No. 18-120 (filed Aug. 8, 2018).
- <sup>10</sup> See, e.g., Comments of the Bad River Band of the Lake Superior Tribe of Chippewa Indians at 3, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of the Havasupai Tribal Council at 1, WT Docket No. 18-120 (filed July 19, 2018); Comments of Mural Net at 3, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of North American Catholic Educational Programming Foundation and Mobile Beacon at 22, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of the Consortium for School Networking at 8, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of Voqal at 10–13, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of Northern Arizona University Foundation, Inc. at 2–3, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of Northern Michigan University at 3, 5–6, WT Docket No. 18-120 (filed Aug. 8, 2018).
- <sup>11</sup> See, e.g., Comments of North American Catholic Educational Programming Foundation and Mobile Beacon at 16, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of North Carolina Department of Information Technology, Broadband Infrastructure Office at 4, WT Docket No. 18-120 (filed Aug. 8, 2018).
- <sup>12</sup> See, e.g., Comments of TechSoup Global at 2, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of Digital Wish at 2–3, WT Docket No. 18-120 (filed Aug. 8, 2018); Joint Comments of National EBS Association and Catholic Technology Network at 4, WT Docket No. 18-120 (filed Aug. 8, 2018); Joint Comments of South Florida EBS Licensees at 3 n.3, WT Docket No. 18-120 (filed Aug. 8, 2018).
- <sup>13</sup> Comments of the Imperial County Office of Education and California K-12 High Speed Network at 21, WT Docket No. 18-120 (filed Aug. 8, 2018).
- <sup>14</sup> Comments of the Wireless Communications Association International at 16–17, WT Docket No. 18-120 (filed Aug. 8, 2018).
- <sup>15</sup> Comments of Educators and Broadband Providers for American Rural Communities at 2, WT Docket No. 18-120 (filed Aug. 8, 2018).

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- <sup>16</sup> Comments of the Wireless Communications Association International at 16 n.37, WT Docket No. 18-120 (filed Aug. 8, 2018).
- <sup>17</sup> Comments of the Wireless Communications Association International at 18–20, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of Sprint Corporation at 10–12, WT Docket No. 18-120 (filed Aug. 8, 2018).
- <sup>18</sup> See, e.g., Comments of Northern Arizona University Foundation, Inc. at 8, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of Voqal at 24, WT Docket No. 18-120; Comments of the Schools, Health & Libraries Broadband (SHLB) Coalition at 3, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of Nebraska Department of Education (NDE), Nebraska Educational Television (NET), and the State of Nebraska Office of the Chief Information Officer at 11, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of North American Catholic Educational Programming Foundation and Mobile Beacon at 49–53, WT Docket No. 18-120 (filed Aug. 8, 2018); Joint Comments of National EBS Association and Catholic Technology Network at 12, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of AASA, the School Superintendents Association and the Association of Educational Service Agencies at 15, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of the Imperial County Office of Education and California K-12 High Speed Network at 21, WT Docket No. 18-120 (filed Aug. 8, 2018).
- <sup>19</sup> See, e.g., Comments of Sprint Corporation at 14–15, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of the Wireless Communications Association International at 32–35, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of the Imperial County Office of Education and California K-12 High Speed Network at 21, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of Voqal at 25–26, WT Docket No. 18-120 (filed Aug. 8, 2018).
- <sup>20</sup> Comments of the Wireless Communications Association International at 7, WT Docket No. 18-120 (filed Aug. 8, 2018).
- <sup>21</sup> Comments of Northern Michigan University at 9, WT Docket No. 18-120 (filed Aug. 8, 2018).
- <sup>22</sup> Comments of the Consortium for School Networking at 8, WT Docket No. 18-120 (filed Aug. 8, 2018).
- <sup>23</sup> Comments of the Kings County Superintendent of Schools at 4, WT Docket No. 18-120 (filed Aug. 8, 2018).
- <sup>24</sup> Comments of the Imperial County Office of Education and California K-12 High Speed Network at 10–11, 18–19, WT Docket No. 18-120 (filed Aug. 8, 2018).
- <sup>25</sup> Comments of State Educational Technology Directors Association at 4, WT Docket No. 18-120 (filed Aug. 8, 2018).
- <sup>26</sup> Comments of the Wireless Communications Association International at 8, WT Docket No. 18-120 (filed Aug. 8, 2018).