

**Before the
DEPARTMENT OF COMMERCE
National Telecommunications and Information Administration**

An Analysis of Aggregate CBRS SAS Data from April 2021 to January 2023
NTIA Report 23-567
May 2023

COMMENTS OF WISPA – *BROADBAND WITHOUT BOUNDARIES*

WISPA – *Broadband Without Boundaries* is pleased to comment on the recently released Technical Report, “An Analysis of Aggregate CBRS SAS Data from April 2021 to January 2023” (“Report”), developed by the Institute for Telecommunications Sciences, National Telecommunications and Information Administration (“NTIA”) regarding deployment in the Citizens Broadband Radio Service (“CBRS”).¹

The Report’s “key findings” demonstrate that the three-tiered spectrum sharing structure the Federal Communications Commission (“FCC”) adopted for the CBRS band has led to significant consumer benefits.² Addressing “speculation that CBRS may play a role in increasing broadband access in rural communities,”³ the Report “shows a substantial number of deployments in rural areas,”⁴ with more than 70% of all active CBSDs deployed in rural census blocks⁵ and rural deployment outpacing urban deployments by nearly two to one. Although

¹ See Technical Report, *An Analysis of Aggregate CBRS SAS Data from April 2021 to January 2023*, NTIA Report 23-567 (May 2023), available at <https://its.ntia.gov/umbraco/surface/download/publication?reportNumber=TR-23-567.pdf>.

² *Id.* at xi.

³ *Id.* at 10.

⁴ *Id.*

⁵ *Id.* at xi.

urban deployments are increasing at a more rapid pace, the number of CBSDs deployed in rural areas also continues to increase.⁶

WISPA's members have been at the forefront of these deployments and are using CBRS to create and expand networks into rural areas and increase throughput as well as offering competition in the fixed broadband marketplace. Of the estimated 335,000 Category CBSDs now registered and in use with a Spectrum Access System, the vast majority are being used for fixed wireless access in rural areas.

The Report also notes the significant deployments in the General Authorized Access ("GAA") tier, which have "dominated" deployments.⁷ As of January 1, 2023, 85% of active grants were GAA, and "GAA-only CBSDs make up more than 80% of all CBSDs every quarter," even after the grant of Priority Access Licenses ("PALs") following Auction 105 in 2020.⁸ Moreover, the Report observes that "the GAA tier has been a popular supplement to PALs, with approximately two-thirds of active CBSDs with a PAL grant using at least one GAA grant."⁹ The three-tier structure is enabling shared spectrum use, proving the capabilities of the SAS and benefitting consumers with additional spectrum where, before, it would simply lay fallow.

In a recent survey of WISPA's operator members, approximately 65% of respondents that have deployed CBRS indicated that they were using both PALs and GAA to serve customers. More than half of the respondents reported that they have deployed more than 100 access points, and about 10% reported that they had deployed more than 1,000 access points.

⁶ *Id.* at 11, Fig. 8(a).

⁷ *Id.* at xi.

⁸ *Id.* at 9.

⁹ *Id.*

The vast majority noted that deploying CBRS enabled them to extend service to new areas, improve capacity on their networks, increase broadband speed, and relieve congestion in other bands. Many respondents also emphasized that they are achieving better near line-of-sight performance with CBRS spectrum given its ability to penetrate some trees and foliage.

From the equipment sector, a leading manufacturer of CBRS equipment reported that it has shipped close to 50,000 Category B outdoor radios. In some cases, the CBRS equipment has enabled fixed broadband speeds of 400/100 Mbps. The manufacturer noted that its equipment is being used throughout rural America in Connect America Fund deployments.

In addition to rural broadband deployments, a number of fixed wireless providers have partnered with school districts and other community anchor institutions to use GAA spectrum to provide reliable broadband service. In a recent white paper, the Schools, Health & Libraries Broadband Coalition and the Wireless Future Project of the Open Technology Institute at New America discuss a case study in which the Boulder Valley School District partnered with LiveWire, a local fixed wireless provider, to use GAA spectrum to provide reliable broadband download speeds of 100 Mbps.¹⁰ According to the report, “LiveWire monitors network performance and provides regular analytics to ensure all segments of the wireless network are operating at proper capacity. During peak hours and periods of intensive usage for remote learning, the network has remained stable, without any major interruptions to date.”¹¹

Consistent with the Biden Administration’s “policy . . . to make evidence-based decisions guided by the best available science and data,”¹² NTIA’s Report should inform future spectrum

¹⁰ See [Anchor-Nets-Case-Studies-final.pdf \(shlb.org\)](#).

¹¹ *Id.* at 46.

¹² Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking (Jan. 27, 2021), at 1, available at <https://www.whitehouse.gov/briefing-room/presidential->

allocation and spectrum policy decisions. NTIA in making federal spectrum available for commercial purposes and the FCC in establishing allocation and service rules should not be misled by those mobile wireless interests alleging that “real-world studies show low utilization, low market demand, and a dearth of innovative use cases.”¹³ Decoded, such criticisms really mean that the CBRS band was not handed over to the mobile wireless industry, and instead has been useful for a wide-variety of other use cases, including extensive fixed wireless broadband access in rural areas.

Conclusion

WISPA applauds NTIA for its detailed empirical analyses of CBRS use and appreciates the opportunity to provide its Comments. This type of reporting, with increased granularity, should continue with a regular cadence to track CBRS deployment and performance over time so that the best aspects can be replicated into other bands for effective spectrum sharing. Further, consumer benefits discussed in the Report and the record should be considered as NTIA develops its National Spectrum Strategy, both for the benefit of unserved and underserved consumers and businesses and for spectrum sharing models that promote innovation in spectrum sharing and management.

Respectfully submitted,

**WISPA –
BROADBAND WITHOUT BOUNDARIES**

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[actions/2021/01/27/memorandum-on-restoring-trust-in-government-through-scientific-integrity-and-evidence-based-policymaking/](https://www.ctia.org/news/cbrs-sharing-falls-short-of-expectations).

¹³ Press Release, *CBRS Sharing Falls Short of Expectations, Carriers High Opportunity Costs, New Study Shows* (Nov. 14, 2022), available at <https://www.ctia.org/news/cbrs-sharing-falls-short-of-expectations>.