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#### Wireless Innovation Forum Contribution

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Committee: CBRS Title: CBRS by the Numbers Short Title: CBSR by the Numbers Source:

Andrew Clegg Baylor University & WInnForum aclegg@baylor.edu

Date: May 21<sup>st</sup>, 2025 Distribution: Public





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## Wireless Innovation Forum Contribution

Document Summary: Statistics on CBRS use as of March 7, 2025

Notes of Importance:

Impacts/Effects:

Action Desired: For information Action Required for Closure: Desired Disposition Date:





# **CBRS by the Numbers**

**Andrew Clegg** 

**Document WINNF-25-I-00021** Version V1.0 **May 21<sup>st</sup>, 2025** 



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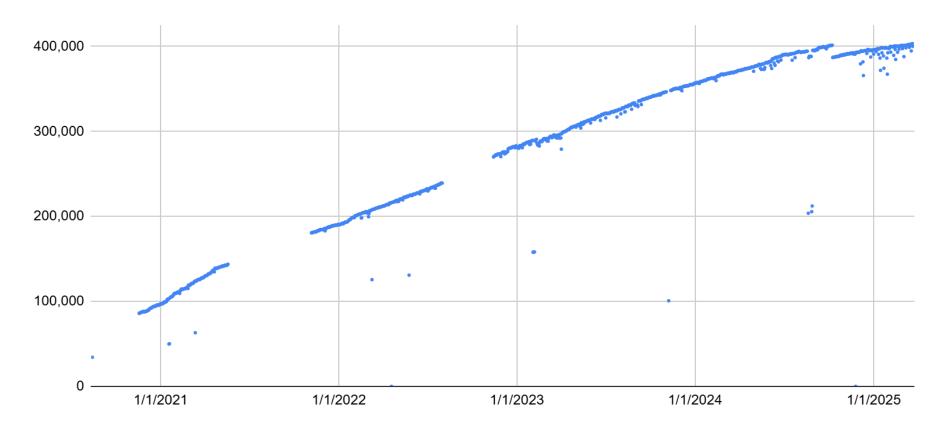


- This presentation documents various statistics related to CBRS deployments
- It is based on FAD data of March 7<sup>th</sup>, 2025, and includes data from all active SASs as of that date



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### Number of CBSDs over Time

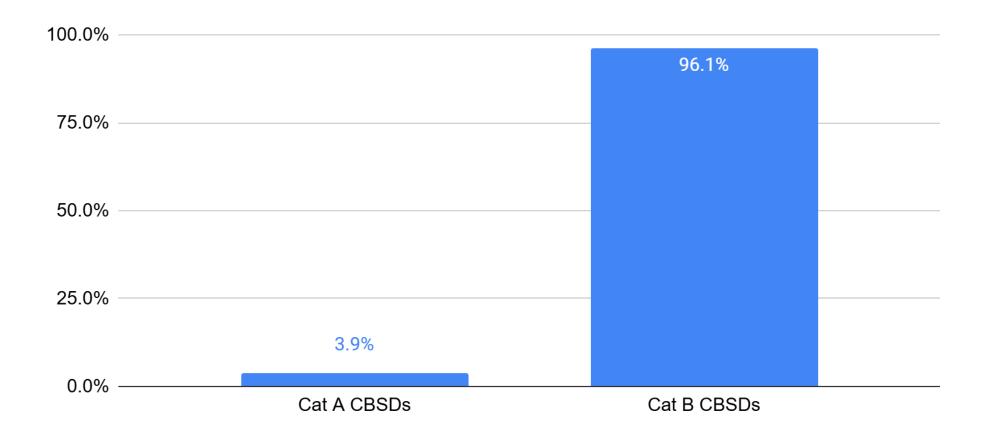


- Number of CBSDs with one or more unexpired grants
- Count as of March 7, 2025: 401,257
- Manually-retrieved data archive has occasional periods of missing data, but trend is clear
- Drop-outs are due to occasional issues with nightly FAD exchange



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# CBSDs by Category

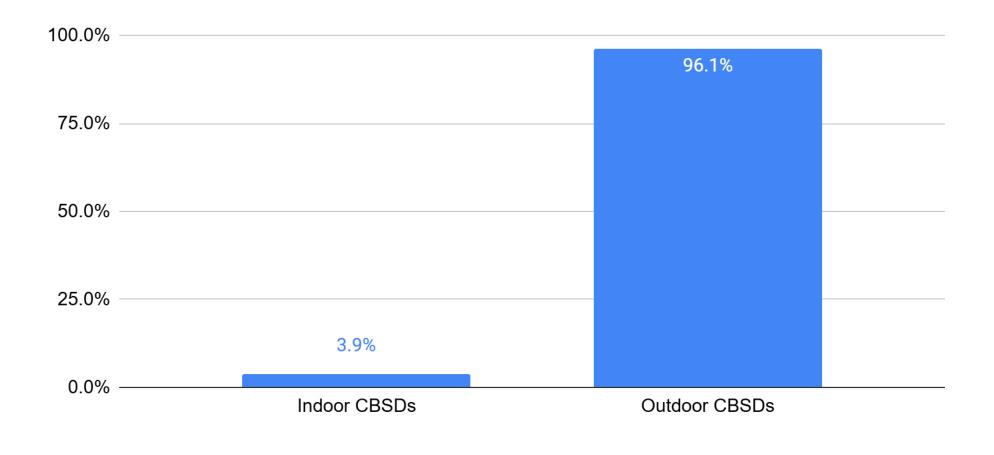






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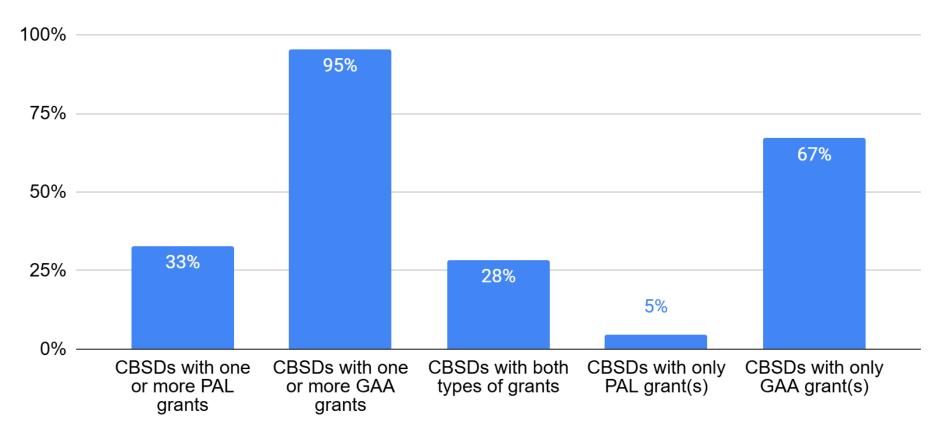
# CBSDs by Indoor/Outdoor





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## PAL and GAA Frequency Grants

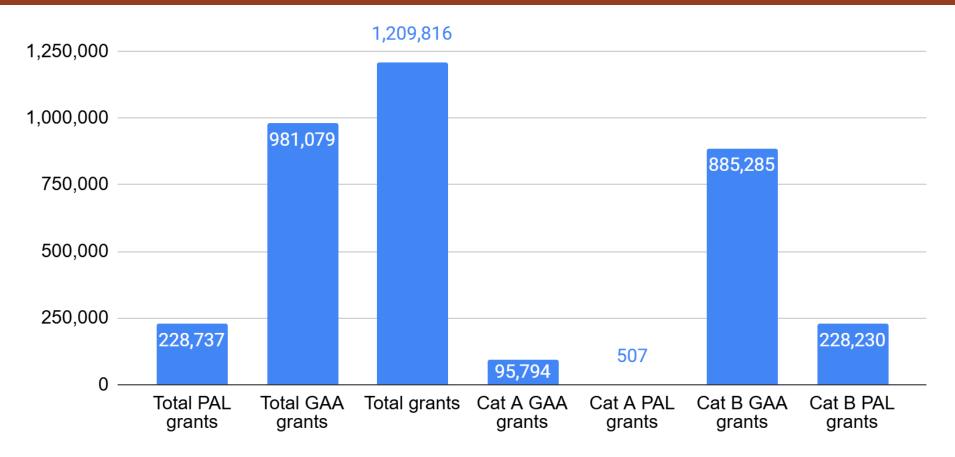


- "PAL" or "GAA" is determined by the frequency grant, not by the CBSD
- A CBSD can have more than one frequency grant
- A CBSD can have PAL grant(s), GAA grant(s), or a combination of the two



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## Number of Total Grants

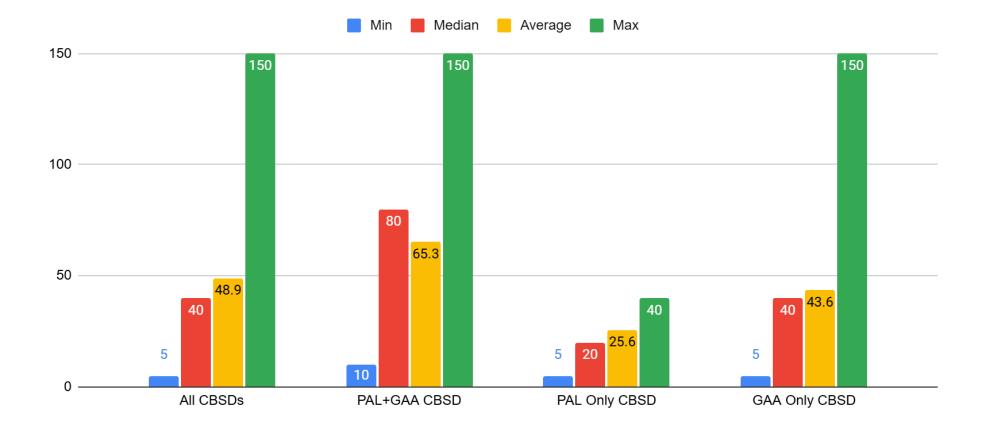


- Average number of grants per CBSD: 3.0
- Median number of grants per CBSD: 2.0



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# Total Granted Bandwidth per CBSD (MHz)

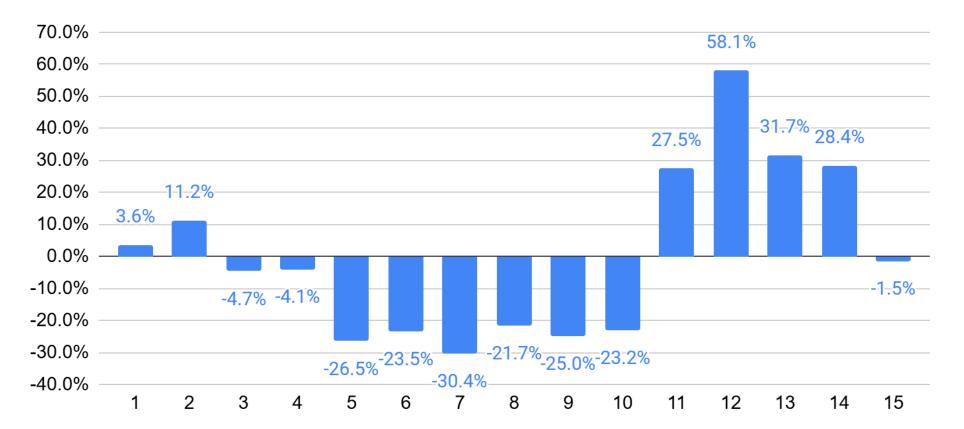






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## GAA Grants per Channel



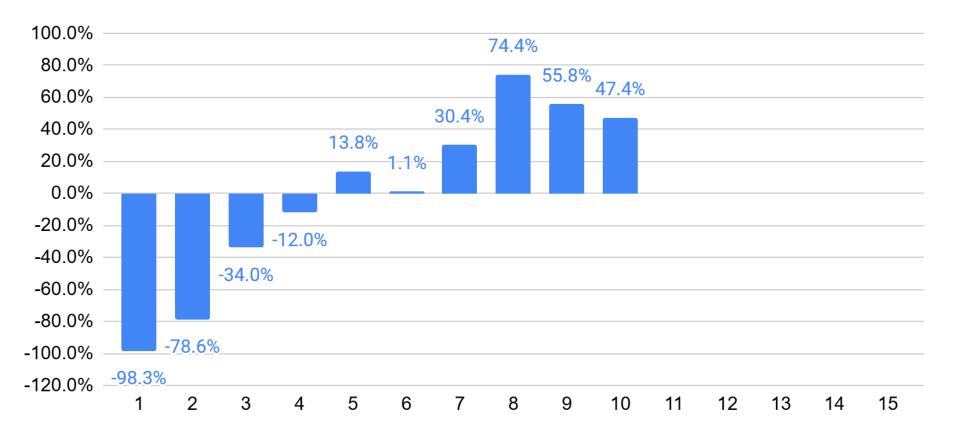
• Displaying GAA grants per channel compared to the overall average number of GAA grants per channel (65,405)

• Note: PAL grants not allowed on channel 11-15



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# PAL Grants per Channel



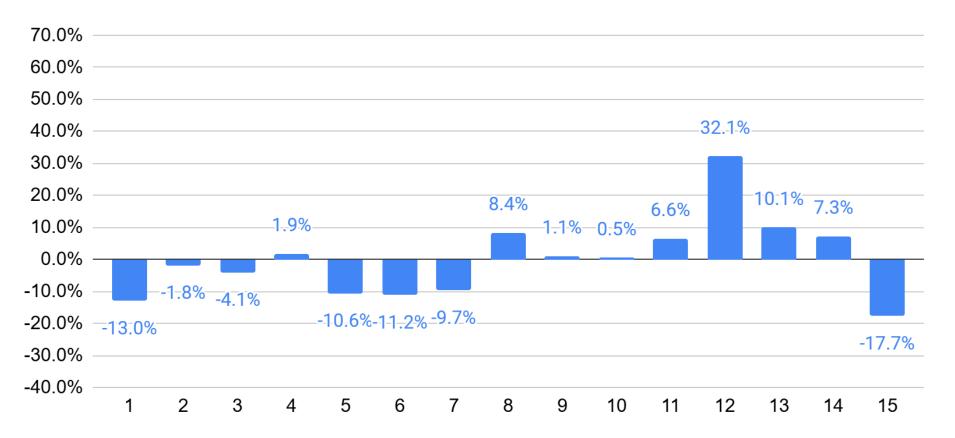
• Displaying PAL grants per channel compared to the overall average number of PAL grants per channel (22,874)

• PAL grants are not allowed on channels 11-15



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#### All Grants per Channel



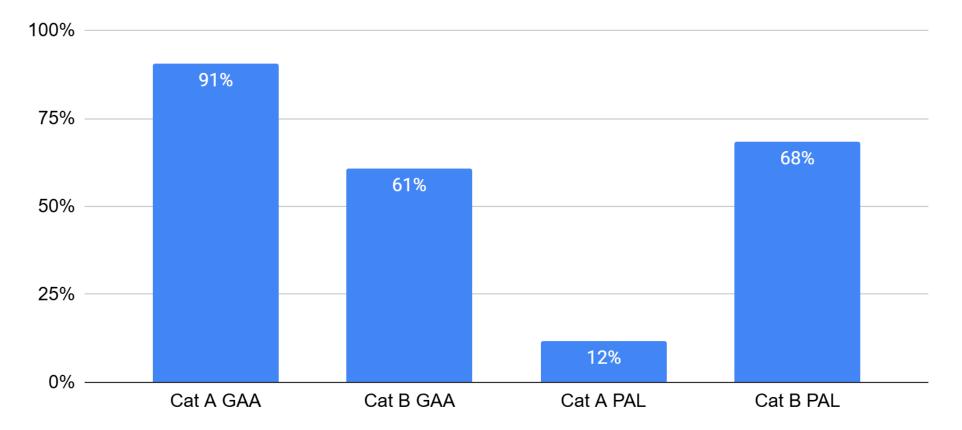
• Displaying grants per channel compared to overall average number of grants per channel (80,654)

• GAA only in channels 11-15



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### Fraction of Grants Authorized within 1 dB of Max Allowed Power



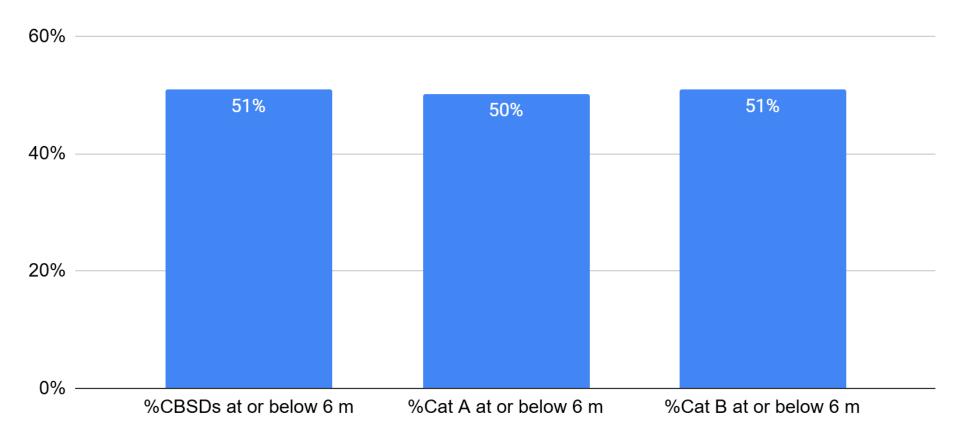
- Cat A full power: 30 dBm per 10 MHz (0.1 W/MHz)
- Cat B full power: 47 dBm per 10 MHz (5 W/MHz)





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### Fraction of CBSDs Installed at or below 6 m AGL



• Maximum "CBRS 2.0" advantages kick in for CBSDs at or below 6 m Above Ground Level (AGL)



### **Additional Statistics**

- Total number of unique CBSD FCC IDs: 151
- Average antenna beamwidth: 71 deg
- Median antenna beamwidth: 65
- Average antenna gain: 14.8 dBi
- Median antenna gain: 13 dBi



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