





U.S. Stadiums & Arenas Private CBRS Network Forecast, 2021 – 2026: CBRS Network Build, Integration and App Spending in Stadiums & Arenas

A Market Study

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Abstract

There are thousands of stadiums/arenas in the U.S. across professional, college and high school sports teams. These venues are typically used for other events besides sports such as car shows, concerts, and political and community gatherings. Many of these buildings already have distributed antenna systems (DAS) and Wi-Fi systems deployed to handle attendee data traffic. In some cases, mobile network operators (MNOs) use "cell-sites on wheels" (COWs) to provide ad hoc capacity.

Beyond these solutions, private cellular networks, especially those using CBRS, can be used to provide additional coverage/capacity while creating a platform for the "smart stadium."

CBRS allows the building owner or tenant (a CBRS network may be installed by either) to provide private LTE/5G service to the occupants of the building and the building itself, supporting point of sale, smart signage and advertising, HVAC, environmental systems, security systems and access systems alike. The immediate environs of the stadium itself (the parking lot) could also be covered by the private cellular network.

For this report, iGR defines an in-building private cellular system as one that uses the U.S. CBRS band for 4G/5G-based services and is funded by a third party distinct from a Mobile Network Operator (MNO). Note that iGR includes campus-wide cellular networks, such as the parking area around a stadium, within the "in-building" umbrella.

This market study provides a five-year forecast for spending for three types of spending on in-building private cellular systems using CBRS in U.S. stadium and arena buildings. The three types of spending include:

- Network build and operational spending: the costs associated with installing and operating the private CBRS network
- Network/systems integration spending: the costs associated with designing, sourcing equipment, integrating the network and applications, etc.
- Applications: the costs associated with purchasing and licensing the applications that run on the private CBRS network.

Key questions addressed in this market study include:

- What is a private cellular network?
- How can a private cellular network be used to create a connected stadium building and surrounding area?
- What is the primary purpose of a connected stadium building and surrounding area?

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- What technologies are required for a connected stadium building?
- What use cases are enabled in a connected stadium building?
- How much will be spent to build and operate a private CBRS network in U.S. stadium and arena buildings from 2021 to 2026?
- What is the forecasted network/systems integration spending associated with the private CBRS network opportunity in U.S. stadium and arena buildings from 2021 to 2026?
- What is the forecasted applications spending for private CBRS networks in U.S. stadium and arena buildings from 2021 to 2026?

Who should read this report?

- Systems integrators and wireless network integrators
- CBRS solutions vendors
- Mobile operators
- Infrastructure OEMs
- Financial analysts and investors.