

U.S. Agriculture Sector Small Cells Forecast, 2019 - 2024: Cultivating IoT

Market Study
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A Market Study

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Abstract

This report provides a total addressable market (TAM) forecast for Sub 6 GHz outdoor small cell nodes in the U.S. agriculture sector (excluding forestry, fishing and hunting) with specific focus on the CBRS opportunity. This is *iGR*'s first report on the market for outdoor small cells in the Agriculture sector of the U.S. economy. This forecast does not include estimates for the adoption of technologies such as: LoRa, SigFox, Z-Wave, ZigBee, Bluetooth, Wi-Fi, etc.

According to the USDA, the agriculture census (AgCensus) is a complete count of U.S. farms and ranches and the people who operate them. In addition to large farm operations (farms), the AgCensus also includes small plots of land (rural or urban) that grow fruit, vegetables and/or some food animals if \$1,000 or more of such products were raised and sold, or normally would have been sold, during the Census year. The Census also looks at land use and ownership, operator characteristics, production practices, income and expenditures.

In this market study, *iGR* provides a:

- Total addressable market (TAM) forecast for outdoor small cells in the sub 6 GHz bands for U.S. farms
- Installed outdoor Sub 6 GHz small cell nodes forecast for U.S. farms
- Total Cost of Ownership model for CBRS private LTE networks deployed on U.S. farms over five years, including both network build spend and operational spend.

Key questions addressed in this market study include:

- How many farms are in the U.S.?
- How many acres do those farms operate?
- What are the various U.S. farm sub-sectors?
- What types of products do those farms produce? How many farms and acres are worked per farm sub-sector?
- What are outdoor small cells?
- Where do small cells fit in the network?
- What are edge computing and CBRS?
- What are some of the other network technologies used in Agriculture today?
- What are some of the major trends in Agriculture?
- What are some of the key use cases in Agriculture?

- What are some of the perceived benefits related to IoT and outdoor small cells in Agriculture?
- What are some of the perceived negatives and issues related to IoT and outdoor small cells in Agriculture?
- How large is the total addressable market for Sub 6 GHz outdoor small cells in Agriculture?
- How many outdoor Sub 6 GHz small cells does *iGR* forecast will be deployed?
- What is the Total Cost of Ownership for CBRS private LTE networks deployed on U.S. farms over five years, including both network build spend and operational spend?

Who should read this report?

- Mobile operators
- Infrastructure OEMs
- Small cell product and solution vendors
- Backhaul service providers and equipment OEMs
- Financial analysts and investors.