U.S. Education Buildings & Campuses: *Cellular In-building Wireless Spending, 2020-2025*

Market Study Second Quarter 2021



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*iG*R 12400 W. Hwy 71 Suite 350 PMB 341 Austin TX 78738

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Abstract

Education buildings in K-12 schools and university campuses are good candidates for private networks. And now these networks are becoming a reality due to the federal money that has been made available to address the digital divide made apparent by virtual learning amidst a pandemic.

The primary purpose of cellular in-building (IBW) systems and private networks in education buildings and campuses is to provide fast, secure broadband for students and teachers in their buildings, campuses and even homes.

This market study provides a forecast of the cellular in-building wireless (IBW) market for education buildings. *iG*R found that due to the pandemic, the IBW market for 2020 and beyond is significantly different than it was previously. The 2021 revised forecast was modeled with:

- New data and assumptions regarding the (ongoing) COVID-19 pandemic
- Newly available data (November 2020) from the Commercial Buildings Energy Consumption Survey (CBECS)
- Information gathered from conversations with multiple solution providers in the IBW market.

Included in the market study is a five-year forecast for both network build spending and operational spending for the deployment of cellular IBW in U.S. education buildings in the sub 6 GHz, CBRS, and mmWave bands.

Key questions addressed in this study:

- What is the primary purpose of a connected education building or campus?
- What use cases are enabled in a connected education building or campus?
- How has COVID-19 impacted the IBW market for education buildings and campuses?
- How much will be spent to build and operate sub 6 GHz, CBRS and mmWave IBW systems in U.S. education buildings from 2020 to 2025?
- What technologies are required for a connected education building or campus?



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 What are 5G, CBRS, and MmWave, some of the technologies and spectrums that will support cellular IBW?

This market study is recommended for:

- Mobile operators, particularly those servicing the U.S. market
- Mobile backhaul providers, including telcos and cable MSOs
- Wired and wireless backhaul vendors and solution providers
- Mobile OEMs, particularly those servicing the U.S. market
- Wired and wireless infrastructure vendors, particularly those servicing the U.S. market
- Financial and investment analysts.



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