

**U.S. Mobile
Bandwidth by Floor
in Commercial
Buildings Forecast,
2019-2024**

Market Study
Fourth Quarter 2019





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Abstract

Mobile LTE networks do not generally cover the higher floors of tall buildings very well. Not only do the walls block LTE signals but the networks are generally designed to provide coverage and capacity at ground level. The amount of mobile data used inside commercial buildings has implications for in-building wireless (IBW) and especially for providers who are looking to build systems and then sell that capacity to mobile operators.

In this report, *iGR* presents a forecast for the amount of mobile data used in U.S. commercial buildings by floor. The forecast estimates both the total amount of mobile data used in commercial buildings, the usage per floor and the usage per vertical industry.

The worker estimate is based on CBECS and *iGR* estimates for the number of U.S. commercial buildings and the number of workers employed in those buildings. *iGR* also uses its own mobile data usage, connections and “time of day” usage forecasts. *iGR*’s model for worker usage assumes that U.S. workers are more likely to spend certain periods of their work day within buildings. More detailed assumptions underlying *iGR*’s worker mobile data usage are explained in this report.

Note that this forecast does not include any estimates for Wi-Fi usage or residential mobile data use.

Key questions addressed in this report include:

- How many people work in commercial buildings in the U.S.?
- How many people work on each floor of commercial buildings in the U.S.?
- How does this data split by vertical industry?
- How much mobile data do U.S. workers across all commercial building categories use?
- How much mobile LTE data do these employees use per floor and per vertical industry?
- How does this mobile LTE data usage change over the forecast period?

This market study is recommended for:



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- 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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