

**U.S. Private LTE
Forecast, 2019-
2024: *CBRS, LTE
and then 5G***

Market Study
First Quarter 2020





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Abstract

Most today are familiar with the commercial LTE networks available from U.S. mobile operators. These networks serve a broad range of devices and consumers, and interconnect with other carriers' networks.

A private LTE network is exactly what the name implies – it involves the operation of an LTE network in licensed or unlicensed spectrum as a private network. The private LTE (PLTE) either does not interconnect with any other network or does so under very limited conditions. The PLTE network can serve the same range of devices and subscribers as a public LTE network, potentially even on the same device.

This report focuses on in-building/campus PLTE nodes deployed in: commercial buildings, manufacturing buildings and energy buildings. The forecast shows these nodes broken out by type of commercial buildings, manufacturing sub-sector and type of energy building/campus.

From a spectrum/technology perspective, the in-building PLTE forecast covers:

- LTE and then 5G NR deployed in Sub 6 GHz spectrum
- LTE and then 5G NR deployed in the CBRS band. C-band is not included because there are still too many variables regarding when it might be available
- 5G NR in the mmWave bands. LTE is unlikely to be deployed in this spectrum.

Key questions addressed in this study:

- What is Private LTE?
- What spectrum can be used for Private LTE?
- What is required to deploy Private LTE?
- What are the business and/or use cases for Private LTE? How do these vary by building type and/or sector?
- How many Private LTE nodes are forecasted to be deployed by building type and sector over the forecast period?



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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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