

U.S. Outdoor Small Cells Forecast, 2022 – 2027

*When will 5G densification
start?*





U.S. Outdoor Small Cells, 2022 – 2027: *When will 5G densification start?*

A Market Study

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Abstract

New outdoor small cells will absolutely be deployed. While COVID played havoc on the outdoor small cell deployments in 2020 and 2021, 2022 saw a slight recovery. Looking forward, the question now is when 5G densification will start? After all, once the bulk of the macrocell 5G network has been built, attention will quickly turn to 5G small cells. The question is when.

5G will follow the same path as 4G LTE – build coverage on the macrocells, add capacity where needed and then start densification with small cells to fill in coverage and capacity holes. The difference with 5G is that the 4G LTE small cells will eventually be upgraded, as well as adding new 5G small cell sites, but when 4G LTE small cells were deployed, very few 3G small cells were in the networks.

In this market study, iGR presents a total addressable market forecast split by spectrum band (Sub 6 GHz and mmWave), as well as an “actuals” forecast for U.S. outdoor small cell nodes installed. The actuals forecast is presented by spectrum band (Sub 6 GHz, CBRS and mmWave), as well as generation (4G and 5G).

This forecast only includes outdoor small cells used for mobile voice/data by the public networks; it excludes any deployments of fixed wireless access (FWA).

Key questions addressed:

- Why do the mobile networks need outdoor small cells to meet bandwidth demand?
- How do outdoor small cells fit into operators’ evolving networks?
- What are the issues with deploying outdoor small cells in the U.S.? How do these issues impact the number of small cells in the market?
- When will 5G networks need densification and hence, outdoor small cells?
- What is the regulatory environment for deploying small cells?
- Where are outdoor small cells most likely to be located? What’s their role?
- How important is location to the effectiveness of an outdoor small cell? How does spectrum band relate to location?
- What is the total addressable market in the U.S. for outdoor small cells?
- What are the market forecasts for installed sub-6 GHz, CBRS and mmWave small cells?

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