



As the preeminent providers of telecom project and asset management, we have unique insight into the industry. In 2018, we saw over 192.4 million updates across major carriers and their supply chain in the Sitetracker Platform.

150K New Sitetracker PLATFORM PROJECTS

192.4M Updates in 2018

2018

Establishing the foundation for 5G

Over this past year, we've seen an increase in the number of small cell deployments and an increase in projects that can be categorized as base layer infrastructure for 5G, including 4G, small cells, and fiber.

PROJECTS COMPLETED IN THE SITETRACKER PLATFORM THIS YEAR

DAS PROJECTS **3,606**

MACRO/TOWER PROJECTS **6,031**

SMALL CELL PROJECTS **6,305**

FIBER PROJECTS **12,023**

2019

and the future: Making 5G a reality

5G is projected to scale more quickly than 3G, LTE, and previous generations of wireless standards. To make 5G a reality, wireless carriers and their service providers will need to deploy small cells as quickly and strategically as possible, as well as make strides towards standalone networks.

BY 2024, THERE WILL BE AN ESTIMATED **1.5B 5G subscribers¹**



40% OF THE GLOBAL WIRELESS POPULATION



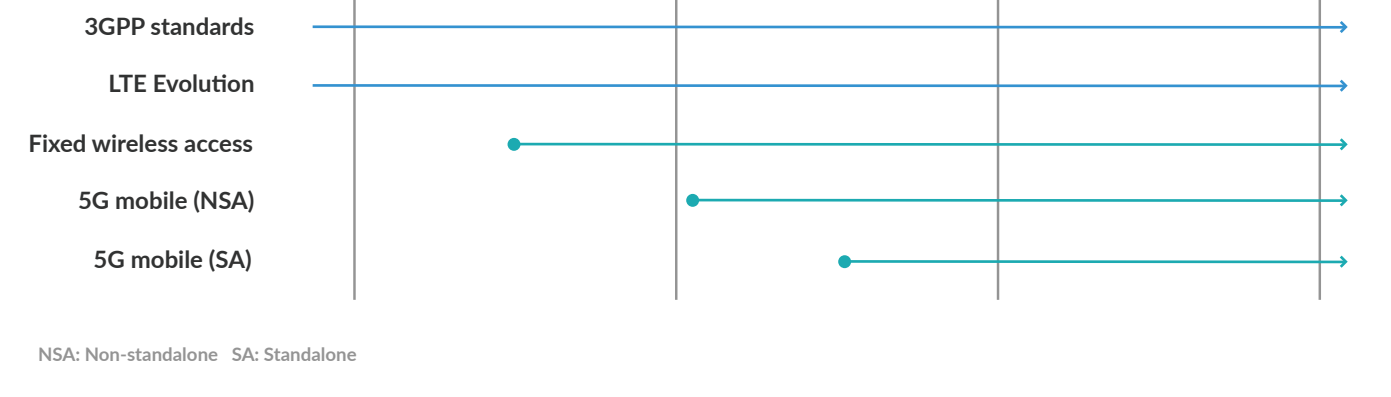
The landscape of 5G

5G will deliver dramatic improvements in wireless connectivity:²



Achieving 5G standalone coverage

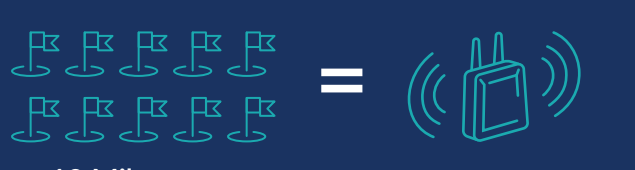
Standalone 5G will not be based on existing infrastructure. Instead, it will require all new infrastructure deployment, including new telecom infrastructure deployment, including hardware, chips, modems, and antennas. The 5G standards set out by 3GPP require that new infrastructure is built to support a new kind of connectivity.³



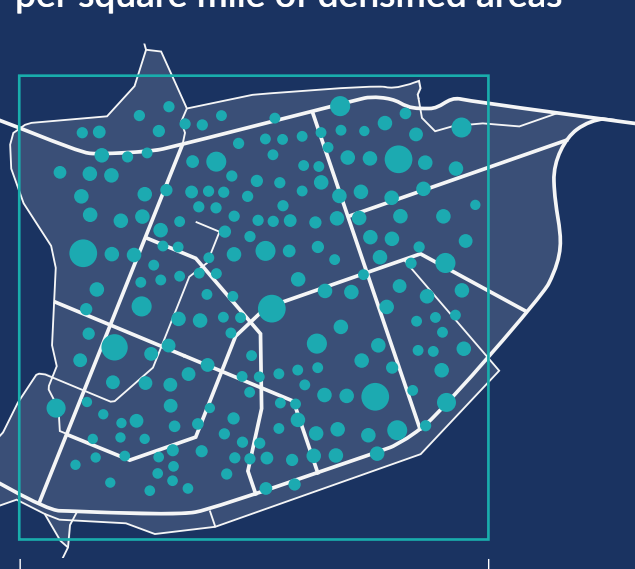
Small cells will make 5g a reality

To make 5G a reality, wireless carriers and their service providers will need to deploy small cells as quickly and strategically as possible, as well as make strides towards standalone networks. This means that the volume, variety, and velocity of projects is and will be increasing exponentially, whether that's modifying existing infrastructure or building out new sites. Carriers with existing 5G spectrum are undoubtedly at an advantage, but there's a wide range of spectrum that can be used for 5G, so there are a wide variety of hardware deployments needed.

WHAT GOES INTO BUILDING A NEW SMALL CELL SITE?

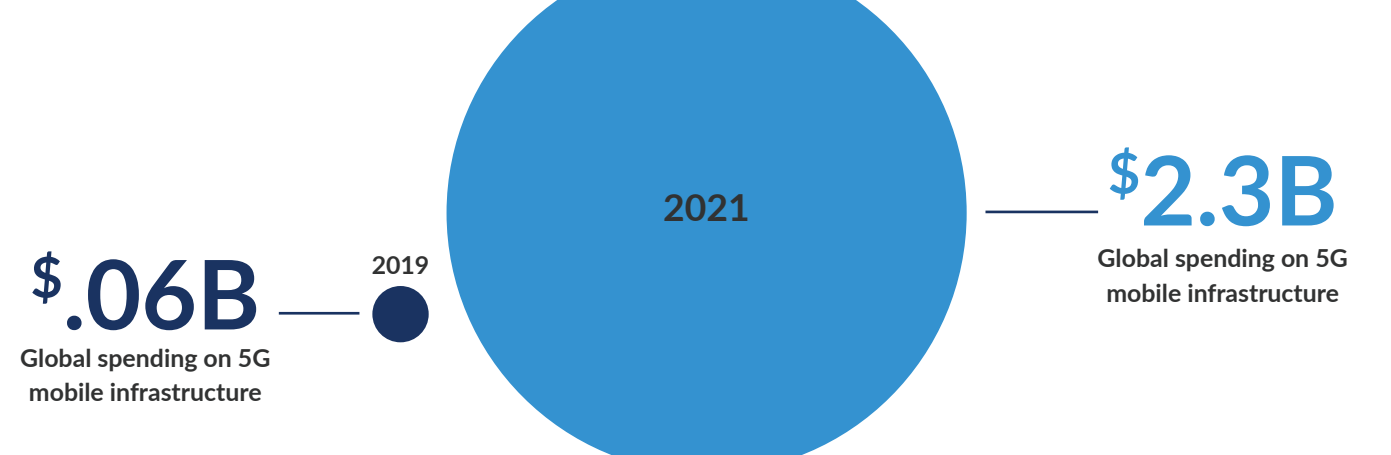


BY 2020, THERE WILL BE AN ESTIMATED **500 Site deployments⁴** per square mile of densified areas



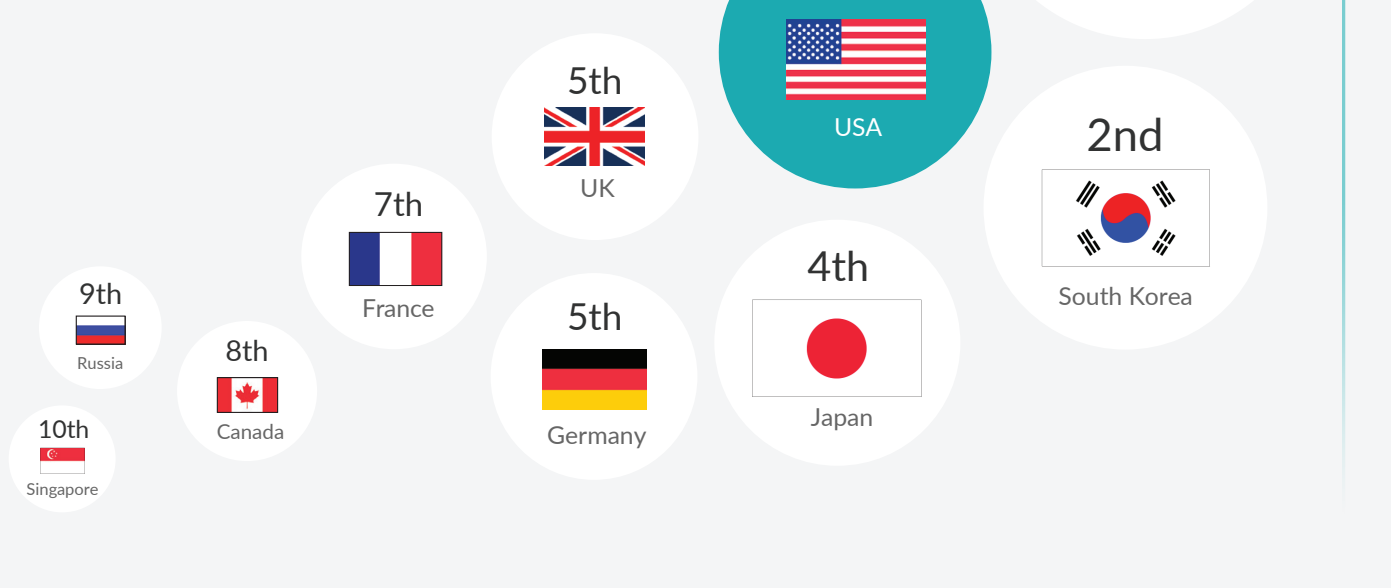
Fiber is integral to 5G and small cell success

Most of the data we demand from our wireless devices is actually traveling on wired fiber networks. The wired infrastructure that will support future connectivity is fiber optic cable. Wireless networks depend on fiber backhaul connections to cell sites. Nearly all wireless traffic is traveling over a backbone of fixed fiber networks. 5G services won't be successful without an expansive fiber network to handle the traffic generated through 5G connections.⁵



The global race to 5G

Some countries are pulling ahead because they're already investing in the infrastructure necessary for 5G. China, South Korea, the US, and Japan are frontrunners in terms of infrastructure readiness, with European countries trailing.⁶



Global adoption to 5G

Project and technology complexity is increasing, which means more moving parts and variables to turn even the best plans on their heads. With the stakes getting ever higher, the difference between winners and losers in the coming years will be how well they embrace and adapt to change.⁷

