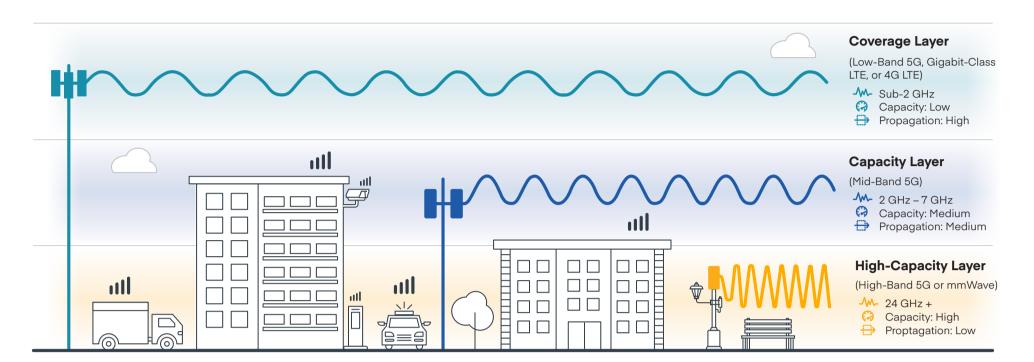
# **How 5G Improves Cellular Networking**

The value of 5G for business isn't just about use cases. It's also not solely about types of spectrum or coverage availability. The value of 5G for business hinges on understanding how use cases vary depending on types of spectrum and network availability — and how that knowledge can expand your organization's presence, usher in new technologies, and improve operations along with customer service.

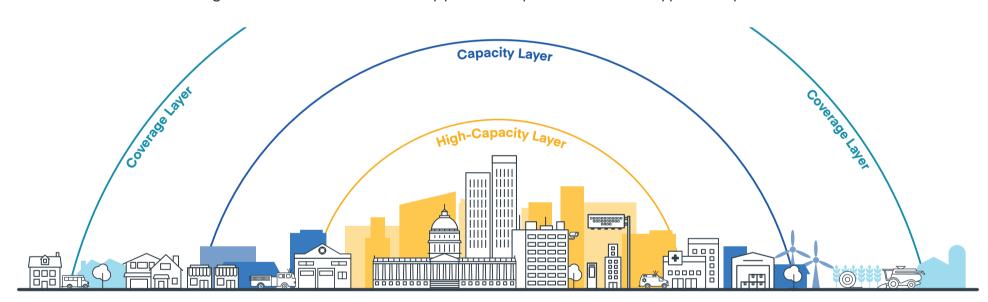
## Three 5G layers ready for their closeup



5G's capacity layer and high-capacity layer have more bandwidth and capacity than the coverage layer, which has been in use for decades. However, there are tradeoffs. The capacity layers have lower propagation characteristics; the radio waves don't travel far or penetrate obstacles. Each layer is in a different stage of build-out for each country in the world.

### How the spectrum layers work together

Because each spectrum layer has unique characteristics, viable use cases will differ from one layer to the next. Locations, vehicles, and IoT applications of all shapes and sizes will co-exist harmoniously — and the best 5G edge solutions will need to support multiple carriers and types of spectrum.



## What's the use? More than you think

Yes, 5G will significantly expand how wireless broadband can be used to connect fixed locations. However, don't forget connected vehicles and IoT. The next generation of cellular technology will bolster the extent to which enterprises use Wireless WAN, as it moves from niche to ubiquity.



#### **Fixed locations**

Failover beyond critical traffic Primary wireless for larger sites

replacement Industrial 4.0 with private 5G

Cellular SD-WAN Fiber

AR-enabled marketing



#### **Temporary sites**

High-performance pop-up sites

Store-in-store connectivity

Proximity marketing

AR applications for temporary sites

Large event broadcasting Mobile VR-enabled training



#### **Vehicles**

Multiple in-vehicle applications

HD video streaming

Video offload

High-bandwidth command and control

Autonomous driving for agriculture

In-transit healthcare diagnostics



#### IoT

Robust smart city applications

Immersive and interactive kiosks

HD video surveillance

Proximity marketing or public safety

Al-enabled video for public safety and marketing



