

5G & Licensed Spectrum Create Platform for Innovation

5G networks built on licensed spectrum are already sparking innovation in communities and industries across the country. More licensed spectrum is needed to expand this platform, secure network performance in the face of ever-increasing data demand, support the development of new 5G-powered devices, and enable the speeds and capacity necessary to fuel future 5G innovation.

Licensed Spectrum Encourages First Wave of 5G Innovation

Entrepreneurs across the country are creating 5G's first wave of innovative products and services, thanks to the security, reliability, and capabilities of 5G networks and licensed spectrum. In verticals such as agriculture, healthcare, manufacturing, public safety, transportation, and education, the benefits of 5G's tremendous speeds, high capacity, and low latency are changing the status quo.

Transportation. Through the use of sensors and real-time data, 5G is powering smart infrastructure and autonomous vehicles, improving safety, and enhancing the mobility options available in our communities.

Education. 5G is helping America's teachers and students stay ahead of the curve, increasing engagement and sparking imaginations with AR- and VR-enabled solutions that bring lessons to life.

Manufacturing. 5G helps factories springboard into the future with connected offerings that improve safety, enhance sustainability, and encourage innovation.

Licensed Spectrum Produces Innovative 5G for Home Service

One of the first 5G innovations to hit the market is 5G home broadband. It's an exciting new option for home connectivity that uses wireless links between fixed points—a nearby tower and an antenna localized for the consumer—to provide broadband connections wirelessly via spectrum instead of through a wired cable connection. 5G home services offer fast speeds that can meet consumers' needs, and provide broadband competition and choice to more communities.

To Further U.S. Innovation, More Licensed Spectrum is Needed

5G is powering innovation and economic growth—BCG estimates the 5G economy will contribute \$1.5T and 4.5M jobs by 2030—and exclusive-use, licensed spectrum is the proven platform for ongoing and future investment. More mid-band spectrum in particular will make 5G networks more robust, so they can offer faster speeds to more capacity-intensive applications in more places.

To secure the future of innovation in this country, policymakers should make more licensed spectrum available, particularly in the Lower 3 GHz, 4 GHz, and 7/8 GHz bands. These key mid-bands are ideal for enhancing 5G's speeds, capacity, and quick response time to support the growing 5G economy.

5G-ENABLED INNOVATION ACROSS SECTORS



Halo.Car is using 5G to bring all-electric, driverless cars to people, wherever they need them.



Kai XR uses 5G and AR, VR, and extended reality technologies to enable students to learn and explore beyond classroom walls.



Taqtile is leveraging 5G's advanced capabilities in its Manifest software—a cutting-edge AR and mixed reality work-instruction platform designed to transform frontline and desk-less work.

