

BCG Study Recommends Additional Spectrum to Fulfill 5G's Promise



BCG EXPECTS THE 5G ECONOMY TO ADD:

\$1.5T
to America's economy, and
4.5M
jobs by 2030

BUT MORE MUST BE DONE TO REALIZE THIS POTENTIAL:

- 1 Increase the availability** of full-power, licensed mid-band spectrum for wireless use.
- 2 Create a future pipeline** for licensed spectrum auctions.
- 3 Provide further incentives** for 5G innovation.
- 4 Develop a 5G partnership** function in governments.
- 5 Promote and support the development** of large-scale IoT deployments.

Boston Consulting Group recently evaluated America's progress on the five factors needed to unlock 5G-driven innovations across the 5G economy. Their report, "Accelerating the 5G Economy in the US," finds that while the United States has performed well with early deployments, more needs to be done to secure the future benefits of 5G and new, transformative use case across industries. In particular, BCG identifies the need for additional full-power, licensed mid-band spectrum for wireless use.

The stakes are high: BCG expects the 5G economy to add \$1.5T to America's economy, and 4.5M jobs by 2030. The 5G economy is at an inflection point, turning from deployment to development of the applications that can leverage 5G capabilities.

According to BCG, early deployments have succeeded in creating a strong platform for new wireless technologies, thanks to industry investment combined with America's strong innovation and business environment. The wireless industry has invested hundreds of billions of dollars in infrastructure--\$190 billion since 2018, the year 5G launched.

Lack of 5G Spectrum Identified as a Major Risk for America's 5G Leadership

Two of BCG's five recommendations focus on spectrum, underscoring the outsized role spectrum policy will have on future 5G development. Specifically, the report highlights a growing risk to America's 5G and innovation leadership—our lack of a pipeline of 5G-ready spectrum.

BCG finds that "[a]dditional spectrum, particularly licensed mid-band spectrum... is needed for the United States to continue to lead and grow the 5G economy." BCG also warns that a shortage of 5G-ready spectrum "may also lead to congestion issues for existing mobile services, impeding companies' ability to scale FWA or other data-intensive applications, and discouraging innovators from taking full advantage of 5G's potential."

Today the United States has no plan to allocate future full-power, licensed spectrum to commercial 5G networks, and Congress allowed the FCC's auction authority to lapse for the first time in thirty years. According to BCG, more full-power, licensed mid-band spectrum is key for the United States to continue to lead and grow the 5G economy or risk ceding leadership to other countries such as Japan, Korea, or China.