

# Licensed, Mid-band Spectrum Needed to Keep Pace with China

The United States is the current world leader in deploying 5G, creating a 5G platform to support innovation in AI, machine learning, the Internet of Things (IoT), and more. But mid-band spectrum is sorely needed to secure our competitiveness into the future.



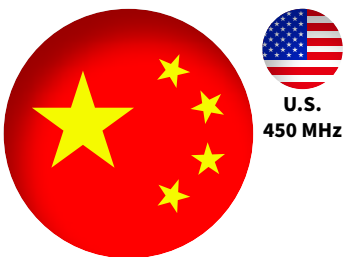
“It is in the United States’ immediate national interest to get its approach to telecommunications regulations right..., particularly as the PRC focuses its efforts on licensing more mid-band spectrum.”

— Center for Strategic International Studies

# 4x

**MORE SPECTRUM**

By 2027 China may have nearly 4x the amount of mid-band spectrum as the U.S.



**CHINA**  
UP TO 1660 MHz

**U.S.**  
450 MHz

## U.S. Has Early Lead in Building a 5G Innovation Platform

The United States leads the world in 5G availability according to Ookla—a remarkable feat given our size and suburban population. Early 5G innovations are thriving—5G is the fastest growing home broadband solution in America. In 2022, 90% of new home broadband subscribers chose 5G fixed wireless.

## But China Is Surging

China is accelerating its 5G-led digital transformation, in part by eyeing additional mid-band spectrum. China has already allocated 2.5x more mid-band for 5G than we have in the U.S., including part of key lower 3 GHz, 4 GHz, and 6 GHz bands (unlike the U.S. which allocated 6 GHz to unlicensed). China is considering adding to this lead, potentially providing up to 1660 megahertz for 5G, which would be nearly 4x the mid-band available to U.S. operators.

China’s communist party is leveraging its mid-band lead to develop industries of the future. China is prioritizing smart manufacturing, having published a three year plan last September. China is the first country to report more IoT connections than mobile subscriptions—it’s Ministry of Industry and Information Technology cites 1.85 billion IoT connections and 1.68 billion mobile connections at the end of 2022.

## More Licensed Spectrum Needed to Maintain our 5G Leadership

The early success of 5G in the United States indicates our market-oriented system, rewarding innovation and entrepreneurship, can lead in 5G. In the face of China’s coordinated support for 5G, it’s critical that U.S. networks scale to meet projected demand—and that means more mid-band spectrum.

Mid-band spectrum offers an ideal balance of coverage and capacity, but unfortunately the U.S. wireless industry has access to only 8% of lower mid-band spectrum. Unlicensed spectrum users have access to over 300% more and government users have access to over 600% more mid-band spectrum than licensed users. Recent analysis indicates the United States lags peer nations Japan, the UK, France, China, and South Korea by an average of 198 megahertz of mid-band spectrum allocated for 5G.

To keep the U.S. ahead of China in the innovations of the future, policymakers should free up mid-band spectrum for licensed use, starting with the key lower 3 GHz, 4 GHz, and 7/8 GHz bands. These three bands offer the best opportunity to meet the needs of 5G, according to Accenture, while also putting U.S. wireless operators on even footing with Chinese counterparts.