

THE FCC WANTS TO FREE UP MORE MIDBAND SPECTRUM FOR TERRESTRIAL 5G – COMPREHENSIVE ENGINEERING AND ECONOMIC STUDIES INDICATE THE 12 GHz BAND IS THE BEST OPTION.



IT'S TIME FOR THE FCC TO UNLEASH THE 12 GHz BAND.

Spectrum is a crucial, but finite, resource. As the Federal Communications Commission (FCC) works to free up more spectrum resources to accelerate 5G deployment and help connect all Americans, it must seize the opportunity that the 12 GHz spectrum band offers for U.S. leadership over competitors like China. The 12 GHz band – often called the “goldilocks” of spectrum – is 500 MHz of ideal spectrum with zero federal encumbrances that can be put to use immediately, without an auction, at no cost to consumers, catapulting mobile 5G deployment across urban and rural America.

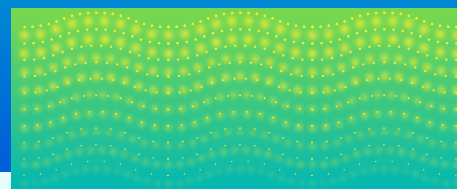
As three technical reports clearly demonstrate, the 12 GHz band is the answer to meeting burgeoning U.S. 5G spectrum needs. With its unique propagation characteristics and its promise to allow for coexistence among existing users, this large swath of mid-band spectrum could bring trillions in societal economic benefits and boost competition. The FCC must act on the data to modernize its rules, expanding the 12 GHz spectrum band for two-way terrestrial use.

12 GHz is **5x bigger** than any other midband spectrum and has **0 federal encumbrances.**



3.45 GHz

100 MHz of spectrum



C-band

280 MHz of spectrum



12 GHz

500 MHz of spectrum

The data is clear: the 12 GHz band is the answer for U.S. 5G.



So, what makes 12 GHz so great for 5G?

According to an analysis by Roberson and Associates, a leading spectrum technology consulting firm, the propagation characteristics of the 12 GHz band are superior to other bands, making it ideal for 5G.



Greater Industry Competition



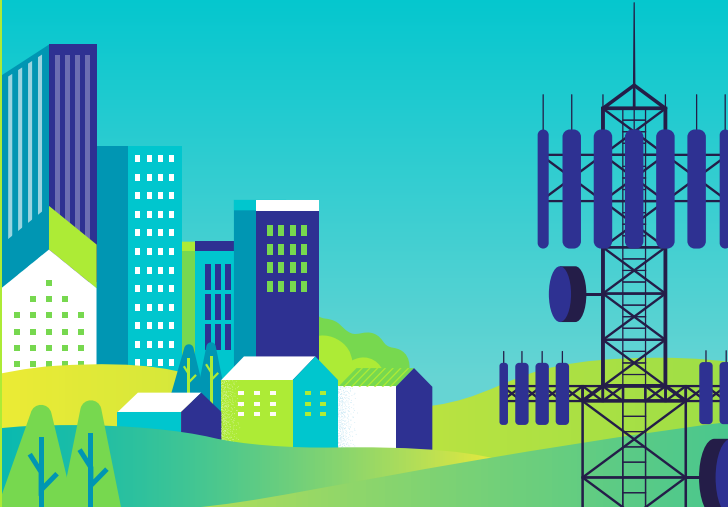
Faster & More Efficient Deployment



Better Signal Propagation



Fewer Base Stations Needed



A tangible impact.

12 GHz-powered 5G networks will require 15x fewer base stations, **saving consumers money and connecting them faster.**



The 12 GHz band will create over \$1 trillion in total societal benefit.

According to an economic study from The Brattle Group, a highly respected global economics firm, unlocking the 12 GHz band for deployment of 5G will generate more than **\$50 billion** in value created by mobile services and more than **\$1 trillion** in total societal benefit.



The 12 GHz band would create more than one trillion in societal benefits, at no cost to taxpayers.



The 12 GHz band would create over \$1 trillion in societal benefits — **2x more than the U.S. national defense budget.**



The 12 GHz band would create over \$1 trillion in societal benefits — **1.5x more than the U.S. spends on public elementary and secondary education combined.**



The 12 GHz band would create over \$1 trillion in societal benefits — **1.25x more than Congress allocated for the American Recovery and Investment Act of 2009.**

Coexistence is eminently feasible.

RKF Engineering, the preeminent firm with decades of experience in modeling radio frequency environments in collaboration with telecommunications companies and global regulators, conducted a comprehensive engineering study of coexistence between mobile 5G and NGSO satellite services. **This analysis demonstrates that 5G services can operate in the 12 GHz band bringing enormous benefits to hundreds of millions of Americans with zero impact on more than 99% of future NGSO users.**



The 5Gfor12GHz Coalition is a group of more than 30 diverse organizations representing academia, public interest groups, service providers, and industry who have joined forces to call on the FCC to open the 12 GHz band for mobile 5G services, securing America's global leadership, protecting national and economic security interests, and bolstering competition and choices for the American public and businesses.