

Just the Facts:

Debunking Spectrum Myths of the 'Big Three'



MYTH #1:

The U.S. is falling behind on spectrum and faces a shortage of licensed mid-band spectrum compared to other countries.

MYTH #2:

Major wireless providers are investing quickly to expand 5G availability, but governmental inaction is stalling progress.

MYTH #3:

To expand home broadband service, the 'Big Three' need more spectrum.

MYTH #4:

Data traffic on U.S. wireless networks will triple by the end of the decade.

FACT:

The Big Three cellular carriers tell a tale of spectrum desperation in D.C., but when they talk to Wall Street, they tell a very different story.

- ▶ For example, Verizon's CEO just recently told investors that they've already locked up "multi, multi, multi-years" worth of surplus spectrum.
- ▶ T-Mobile's CEO admitted that "we've got tons of capacity that we have not yet rolled out..."
- ▶ Verizon's CEO said "we have quite a lot left of spectrum... We bought spectrum for decades..." and their Consumer Group CEO stated, "Do we have the best spectrum position in the market? We do... we have almost unlimited spectrum."
- ▶ Any shortage of cellular coverage can be blamed on the Big Three companies' unwillingness to make the investments in equipment – and labor – needed to use the spectrum they already have. And the Big Three's **push for more exclusive spectrum has nothing to do with "getting up to speed with other countries" or helping consumers – it's just an effort to consolidate control and stifle competition.**

FACT:

Despite holding a surplus of 5G spectrum, major carriers have been slow to deploy or upgrade necessary infrastructure and have failed to deliver on promises to rural America

- ▶ According to a recent Opensignal report, the big cell phone companies have been slow to deliver on their 5G hype. Customers of two of the biggest national carriers have 5G service available less than 15% of the time.
- ▶ The issue isn't government inaction or a need for more spectrum, of which the Big Three say they have "almost unlimited" amounts. The blame for gaps in coverage is simply the carriers' unwillingness to invest in the labor and equipment needed to deploy the 5G resources they already control.

FACT:

Providers perpetuating this myth are the same Big Three providers that have failed to deliver all the hyperbolic promises of 5G. Such claims should be met with a skeptical eye. Ultimately, the big carriers won't deliver FWA wireless broadband service to more homes with more spectrum – especially in rural areas that need it most – because the economics just don't work.

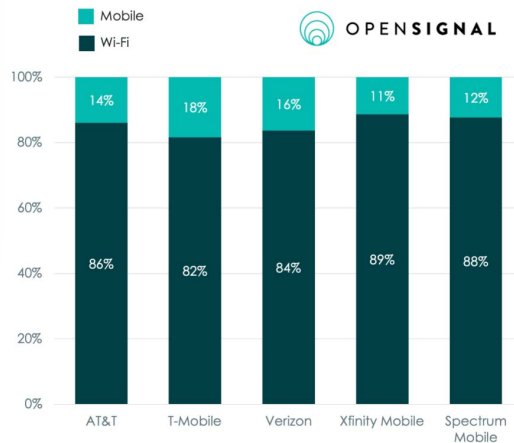
- ▶ The CEO of Verizon recently bragged to investors at a UBS conference that expanding 5G to unserved & rural families is "not the main driver and the priority right now." In reality, their appetite for more exclusive spectrum is all about "quicker revenue, return on investment."

FACT:

Data traffic WILL increase, but it is Wi-Fi (powered by unlicensed spectrum) that carries the vast majority of data on mobile devices – NOT exclusive-licensed cellular networks. Wi-Fi is and will remain the workhorse of wireless connectivity, including for customers of the big 3 cellular providers. In fact, Wi-Fi carries 10 times more data traffic than all licensed spectrum bands combined.

- ▶ According to a recent Opensignal report, Wi-Fi already carries up to 90% of all mobile traffic across the five largest carriers, supporting hundreds of millions of devices – a role that will only expand as demand grows. And, to meet the growing needs of the future, the Wi-Fi we rely on daily will need additional *unlicensed* spectrum moving forward.

Percentage of Data Usage on Mobile vs. Wi-Fi Connections



MYTH #5:

The U.S. does not have a competitive global vision for spectrum policy.

FACT:

Shared, locally-licensed spectrum is a successful, proven path forward that bolsters U.S. innovation and enhances our global influence – playing to America’s strengths rather than into the hands of adversaries who want to undermine U.S. leadership and global security.

- ▶ The People’s Republic of China (PRC) has pressed other nations to adopt exclusive, high-power licensing in priority bands to fuel its global economic agenda and give regime-aligned companies like Huawei a leg up in the global equipment market.
- ▶ The big cellular carriers agree with the PRC’s approach because it gives them exclusive access to finite spectrum resources, boxing out other commercial service providers who would drive innovation and competition.
- ▶ In contrast, a shared approach is fueling innovation at home across a host of industries – including manufacturing, education, healthcare, entertainment, agriculture, supply chain, smart factories, and among our armed forces.

MYTH #6:

The U.S. must identify and auction more exclusive spectrum to protect economic and national security interests.

FACT:

More exclusively licensed spectrum will not move the needle on protecting economic and national security interests – in fact, it would do the opposite. It is a shared spectrum approach that allows commercial and federal operators to use the same frequencies, prioritizing and protecting federal operations and critical national security users.

- ▶ Relocating critical national security systems and other federal uses currently housed in the 3.1 GHz and 7/8 GHz bands – which the Big Three are seeking for exclusive, high-power use – would disrupt vital national security operations and cost taxpayers billions of dollars.
- ▶ When speaking about the 3.1 GHz band, Pentagon CIO John Sherman argued it would be “*absolutely untenable*” for the Department of Defense to vacate the band.
- ▶ An exclusive licensing approach could produce a net loss to taxpayer of over \$41 billion. Vacating the mid-band for exclusive use would cost the Department of Defense at least \$120 billion and take 20 years, according to the Pentagon. That’s almost 50% more than any prior FCC spectrum auction has ever generated in winning bids.
- ▶ In contrast, historical auction data suggests a shared approach could generate almost \$19 billion in net revenue for the American people to pay down the deficit or fund new priorities.