

Unlicensed & Shared Spectrum Benefits

Unlicensed spectrum adds billions of dollars to the U.S. economy and is critical for digital resilience.

Because of unlicensed spectrum policy charted by the FCC nearly two decades ago, Wi-Fi has become a critical wireless technology for consumers and businesses. Multiple studies have found that unlicensed technologies contribute hundreds of billions of dollars annually to the U.S. economy. Wi-Fi, which runs over unlicensed spectrum, has done the job of keeping our economy running during COVID-19.

\$995 billion to U.S. economy in 2021

Source: Wi-Fi Alliance, 2021

\$1.58 trillion to U.S. economy by 2025

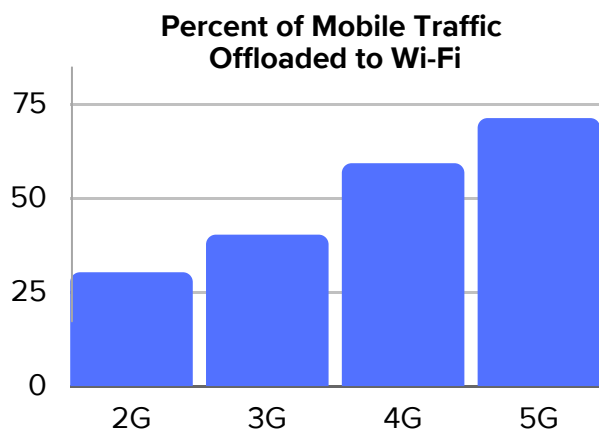
Source: Wi-Fi Alliance, 2021

80% increase in Wi-Fi traffic due to COVID-19

Source: Katz, 2021

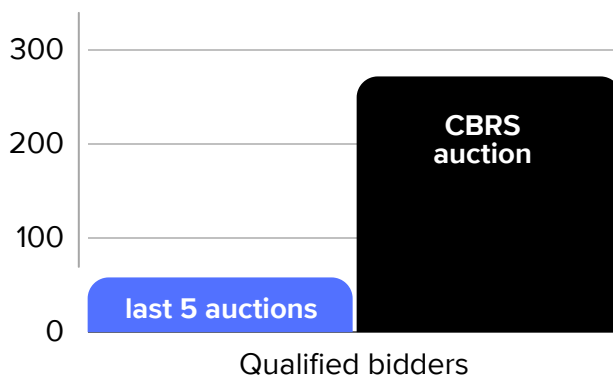
Beyond direct economic benefits, unlicensed and shared spectrum boost broadband competition and support 5G networks to the benefit of U.S. consumers.

With every successive generation, Wi-Fi carries increased offload from cellular networks — 71% of traffic over 5G networks was expected to be offloaded to Wi-Fi in 2020, anticipated to grow to 74% by 2022.



Source: Cisco VNI, 2019

Shared spectrum — which includes flexible licensing and access rules like those in the 3.5 GHz Citizens Broadband Radio Service (CBRS) band — increases how many entities can provide broadband services. For instance, the FCC's shared spectrum CBRS auction generated significantly more participants than previous exclusive-use auctions.



A Shared Spectrum Success: the 5.9 GHz Band

In 2020, more than 100 rural and suburban broadband providers received temporary approval to use the 5.9 GHz band for wireless broadband to deal with increased traffic needs due to COVID-19.

Amplex of Luckey, Ohio reported that the additional spectrum was a "great help" to meet a 30% jump in bandwidth demand as a result of the pandemic.

Unlicensed spectrum is open to all and promotes interoperability and U.S.-led innovation.

Unlicensed spectrum is key to the U.S. strategy of supporting a diverse, open and interoperable next-generation wireless ecosystem. Because unlicensed spectrum can be used by anyone who follows the rules, it decreases barriers to entry, encourages innovation and supports a wider variety of business models. This enables smaller vendors and operators to introduce their own products and services, creating a more competitive and vibrant supplier ecosystem.

Wi-Fi and other unlicensed tech are critical to closing the digital divide.

Wi-Fi is the most ubiquitous and widely available way to access broadband — from schools and libraries to community networks. The low cost of producing a Wi-Fi chip and deploying off-the-shelf Wi-Fi access points means lower prices for consumers and more equitable distribution of networks. This will enable consumers to experience the high-speed, low latency promises of next-generation networks first through Wi-Fi operating in the newly opened 6 GHz band. Those revolutionary applications enabled by Wi-Fi will include:



Education



Healthcare



**Connected
Communities**



Transportation



Production

Let's continue to prioritize shared and unlicensed spectrum.