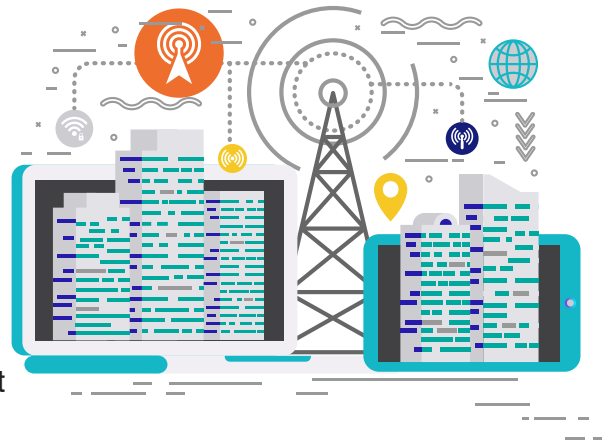


Closing the Digital Divide with Unlicensed Spectrum



Americans depend on the internet to access healthcare services, education opportunities, and participate in the global economy. Unfortunately, more than 20 million Americans currently lack access to broadband connections, leaving them on the wrong side of the digital divide. Fortunately, there are some pieces of spectrum available, including frequencies in and around the broadcast television band (television white spaces or TVWS) and the 6 GHz band, that can provide internet to millions of Americans. The federal government ultimately makes spectrum allocation decisions in the public interest, so policymakers should recognize that these otherwise vacant resources can be leveraged to close the digital divide and finalize rules governing their use for broadband.



A major reason for the lack of adequate internet connectivity is the high cost of infrastructure deployment. The “last mile” connections—reaching subscribers at their homes—are particularly expensive, especially where there are fewer subscribers to pay for a given stretch of infrastructure. Meanwhile, about half of the airwaves set aside for broadcast television in rural areas are essentially unused. TVWS help broadband providers solve the broadband deployment cost problem because amplifying a wireline broadband connection over the airwaves is less expensive than using infrastructure to extend the connection to the entire “last mile.” Fortunately, the FCC is proceeding with rules to enable the use of otherwise underutilized airwaves in the television band for unlicensed broadband and we want to ensure that the FCC finishes its work this year on the TVWS proceeding. Similarly, the FCC is working to advance new sharing allowances in the 6 GHz band that will enable Wi-Fi and other unlicensed uses.

It is critically important for Americans to access the internet at home, especially now. COVID-19 devastated communities across the globe and resulted in school, work, and other closures forcing much of the nation’s population to stay home for extended periods and even seek healthcare services from home or wherever they happen to be. The sudden shift to conducting our lives on the internet intensifies the spotlight on the digital divide, as those who lack access to broadband are at an even greater disadvantage than prior to the pandemic.

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Unused spectrum in over-the-air television bands is ideal for mobile:

- Television white spaces are like high-powered Wi-Fi signals and are a key ingredient to bridging the digital divide affordably.
- Just as TV broadcast channels cover several square miles from a single point, use of TVWS enables data to be transmitted at high speeds over long distances and through obstacles, including buildings, hills, and trees.
- White spaces support high upload and download speeds, like a 4G connection, and will complement future 5G networks.

The 6 GHz Band is Ideal for Unlicensed Connectivity:

- 5G deployment should be a robust combination of licensed and unlicensed—the 6 GHz band is especially well-positioned for unlicensed use:
 - The proposed uses are low-power (LP) emitting devices and very low-power (VLP) devices, which present minimal interference threats to incumbent operations, much of which are line-of-sight operations that transmit above population-level operations such as LP and VLP; and
 - Device makers could begin to make use of the spectrum quickly if allowed to do so on an unlicensed basis, but clearing the band for auction could take longer at a time when progress on 5G is critical.
- The enhanced Wi-Fi and internet of things (IoT) VLP capabilities unlicensed 6 GHz would enable are critical inputs to the next wave of innovation from the app economy—from virtual reality capabilities to better virtual health experiences.

To Support the Growth and Potential of the Dynamic American Economy, We Urge Congress To:

- Ensure that the FCC finalizes rules to support the use of TVWS across the nation and finalizes technical rules to safeguard their use from interference with other services.