

# Using White Spaces to Connect America.

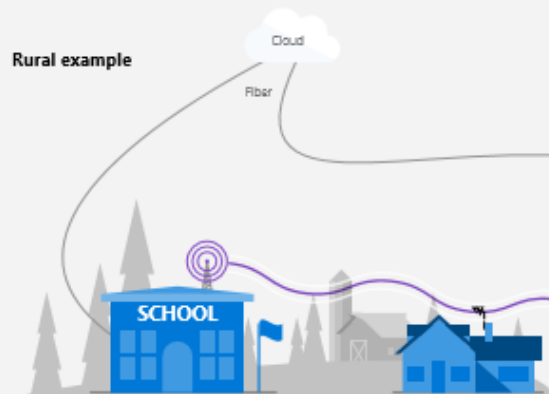
## What are White Spaces Spectrum?

White spaces are unused spectrum. One form of white space spectrum is in the traditional UHF and VHF broadcast spectrum. Regulators allow wireless devices to transmit on these unoccupied channels as long as they do not interfere with TV broadcasters and other licensed users. Allowing access to white space spectrum leads to more efficient utilization of spectrum, a finite, but infinitely renewable natural resource.



## How does it work?

By leveraging white spaces spectrum, network operators can cost-effectively deploy wireless networks that deliver fast, reliable, and affordable Internet access in rural and underserved communities.

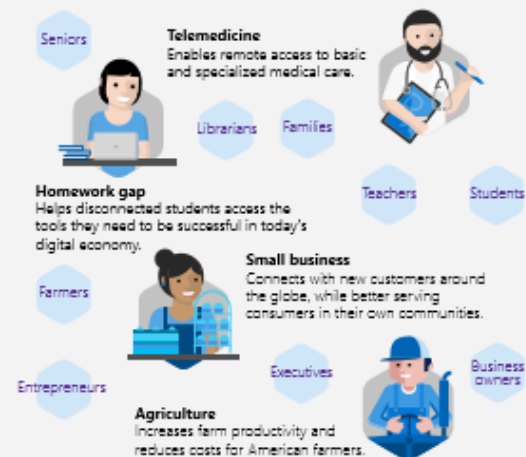


Can leverage schools, libraries, or other anchor institutions with high-capacity connections to provide broadband solutions.

In rural America white spaces signals can travel over long distances, penetrate natural and man-made obstacles, and cover communities.

## Who does it benefit?

Broadband Internet access is a fundamental necessity for rural and urban Americans to participate and compete in the digital economy. That includes small business owners, students, healthcare providers, entrepreneurs, executives, librarians, farmers, seniors, teachers, and more.



## Urban example



A TV white spaces signal can penetrate through more walls and obstacles, enabling whole home media distribution.

## Why does it matter?

21.3M people in the United States lack access to fixed broadband.



That's 16.8M people in rural America, and 4.5M people in urban areas across the United States. That means that 26% of people living in rural America lack access to fixed broadband



## Did you know?

US companies have led the way in developing white spaces spectrum technologies. The FCC was the first regulator in the world to allow unlicensed access to white spaces spectrum, and has adopted regulations that provide interference protection to broadcasters.

## What are we asking?

To unleash the benefits of TV white spaces spectrum, urge the FCC to maximize access to usable TV white spaces spectrum channels as quickly as possible.



That will mean a baseline amount of TV white space spectrum in large urban markets and more usable TV white spaces spectrum in smaller urban areas, towns and rural areas.

\*FCC (2019) Broadband Deployment Report