Fixed Wireless: A Bridge to Better Rural Broadband

Fixed wireless has a long and rich history both in the US and abroad as a bridge to rural markets. With favorable network economics, especially compared to expensive wireline options, fixed wireless access (FWA) continues to draw interest and attention in the broadband world. So much so that it’s no longer just for consumers in rural areas. Improvements in FWA technology are leading to a host of new applications, opening opportunities for broadband providers in unique and powerful ways.

FWA technology is dramatically improving. Emerging fixed wireless tech is enabling higher speeds through LTE, 5G, the Citizens Band Radio Service (CBRS) band, TV White Space, and more.

The future looks bright for FWA, as both businesses and policymakers increasingly see this technology as part of the answer to address the digital divide.

Current U.S. Coverage

Annual WISP Subscriber Revenue

Data Consumed

Annual WISP Subscriber Revenue

WISP Data Usage

Sources:
- 2017 BWA Industry Report, Preseem Fixed Wireless Network Report – 1Q19, wispa.org,
- Microsoft Airband,
- Windstream CEO Eyes Gigabit Fixed Wireless – Sees Copper Becoming “Irrelevant”,
- Midco Completes Successful CBRS Spectrum Access System Trial Testing,
- Connecting the Unconnected: Closing the Fixed Wireless Access Gap,
- Verizon CFO Reiterates Plans to Pass 30 Million Homes with 5G

To learn more contact:
- Mark Mrla | M.mrla@FinleyUSA.com | 507-777-2000
- Andy Heins | A.heins@FinleyUSA.com | 417-262-0774

Turn to Finley Engineering for network assessment, planning, and engineering services that ensure you are ready for the future of fixed wireless.

The FWA Bridge Today

TV White Space Spectrum

CBRS
- Citizens Band Radio Service (CBRS)
- 3.5–3.7 GHz
- LTE today, 5G tomorrow

Utilities\n- Available to utilities, colleges, and non-profits
- \$30 per MHz per year

5G FWA
- Alternative to DSL, FTTH, and DOCSIS-based broadband
- Millimeter wave spectrum, including bands of 24 GHz and higher
- Verizon intends to pass 30 million homes with 5G FWA, focusing on urban and suburban markets

Uses vacant TV broadcast spectrum, which is good at penetrating walls and foliage.

Can operate in non-line-of-sight applications.

The Spectrum Alliance for FWA, as both businesses and policymakers recognize the critical role network economics play in the ability to achieve the digital divide.

In Part Two of our series, “Fixed Wireless: A Bridge to Better Rural Broadband,” we’ll explore how FWA is changing the way we think about deploying broadband to all corners of the world.