



Airband Initiative

Connecting the unconnected

Presentation to Utah Broadband Advisory Council
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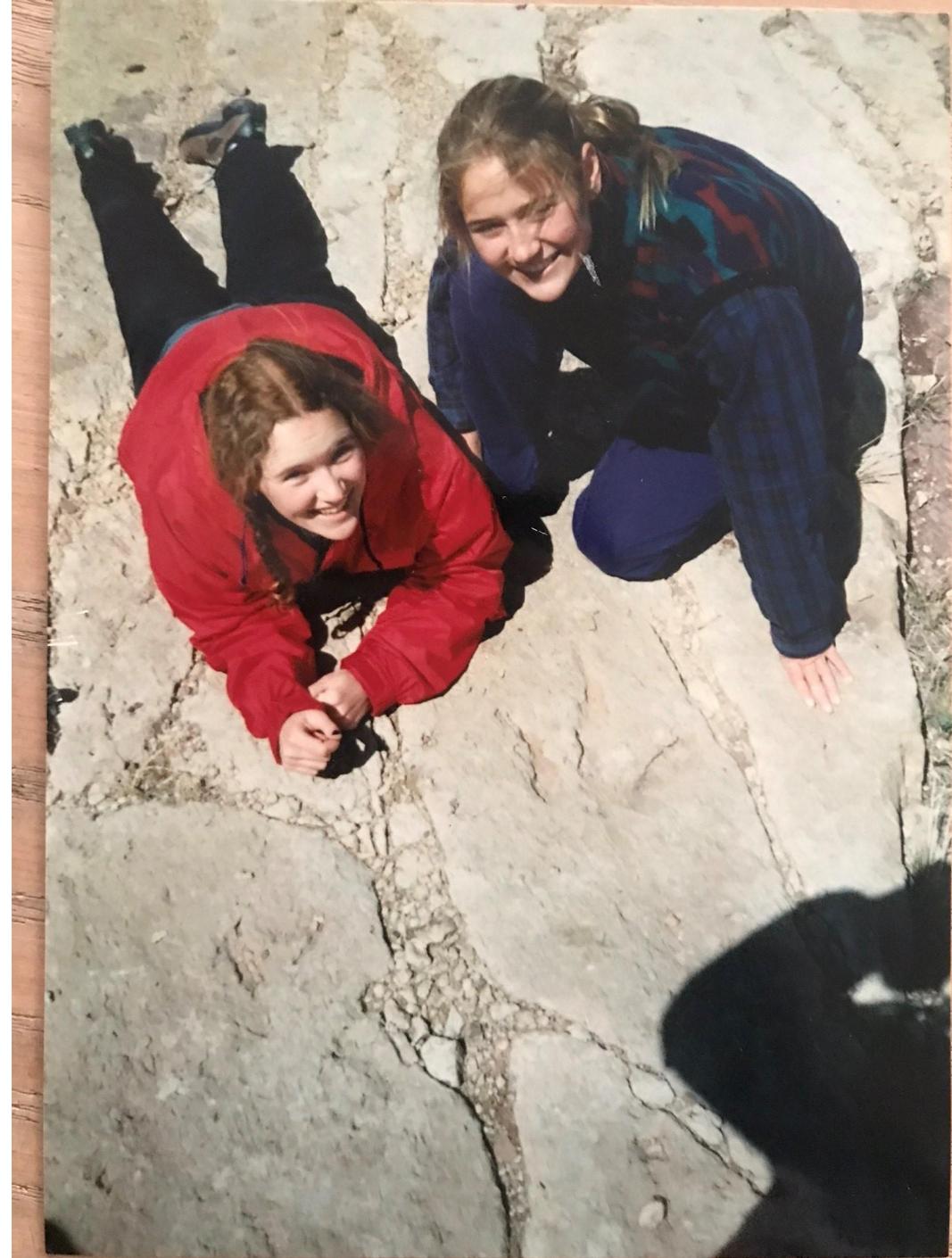
Hello from Microsoft Airband

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Microsoft mission

"Empower every person and every organization on the planet to achieve more." - Satya Nadella



The challenge across the world

Internet Access

Nearly 49% of the world is not using the internet¹

Energy Access

1.1 billion people worldwide lack access to electricity²



"With no internet access, there is no cloud access." - Satya Nadella

1. Source: ITU, 2018; 2. USAID, 2019



The connectivity gap in the United States

At least

21.3 million people

lack access to broadband¹

At least

16.8 million people

reside in rural communities¹



Airband Initiative mission - connect the unconnected

We partner with equipment makers, internet and energy access providers, and local entrepreneurs to make affordable broadband access a reality for unserved communities around the world.

3 Million

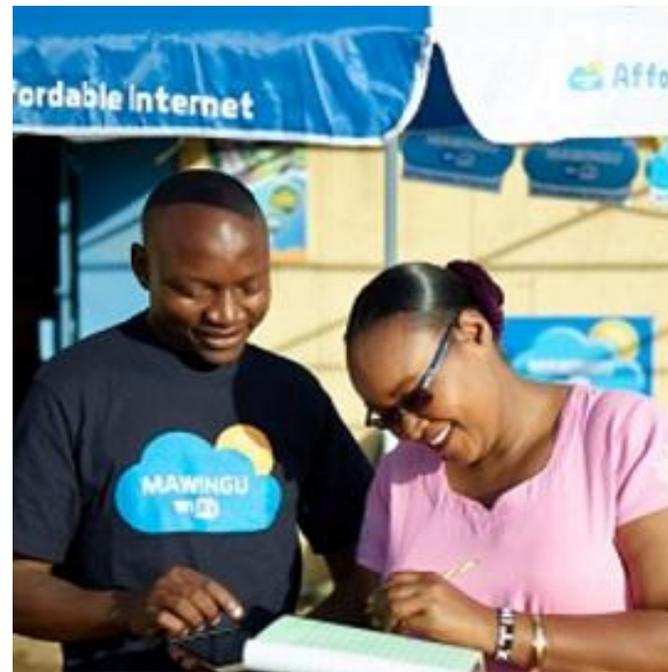
People projected to be covered in rural **U.S.** by July 2022

40 Million

People projected to be covered **globally** by July 2022

Our approach

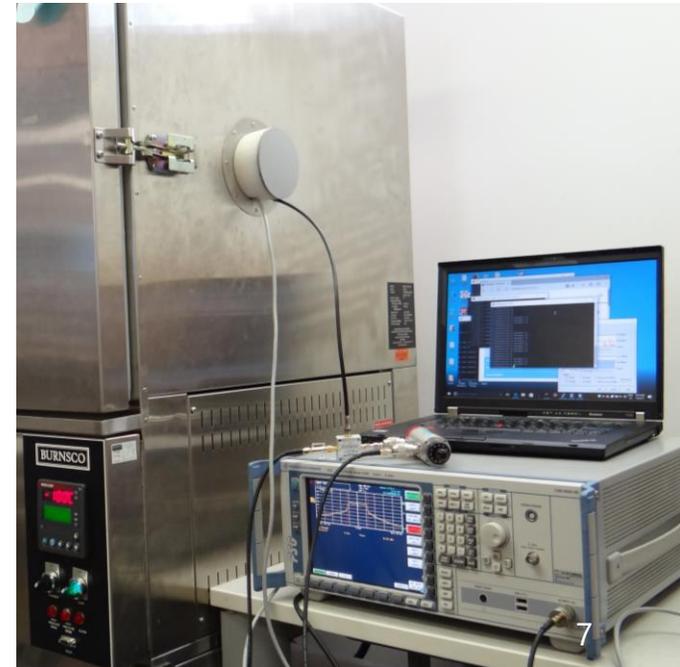
Incubate seed stage partnerships
and projects



Develop enabling technology
ecosystems



Commercialize scalable
technologies and deployments



Airband partnerships and programs

Commercial Partnerships

- Rural America ISPs
- International ISPs
- International energy access providers
- Hardware and component manufacturers
- Independent software vendors

Strategic Partnerships

- Tower, fiber, and other infrastructure providers
- Government agencies
- Corporate partners
- Industry groups

Airband ISP Program *(No barrier to sign-up)*

- Hardware and component manufacturers
- Telco and ISP infrastructure providers
- Independent software vendors



Focus areas



Healthcare

Telehealth services such as remote monitoring and videoconferencing can improve health outcomes while reducing costs



Agriculture

Farmers can boost income by improving agricultural productivity, finding new customers, and reducing costs through technology



Education

Schools can expand learning options, offer virtual courses, and enable remote collaboration



Small business

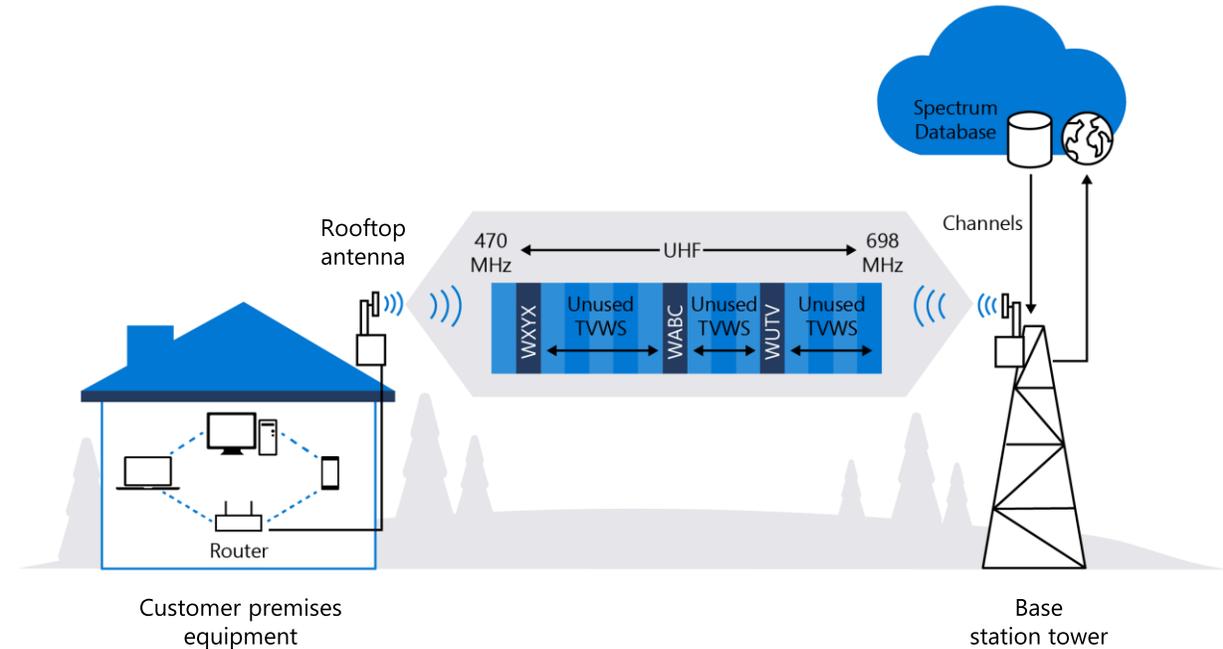
Small businesses can use broadband to work remotely, provide more services, and reach more customers around the world

TV White Space

TV White Space (TVWS) enables network operators to deploy cost-effective, affordable internet in underserved rural communities.

TVWS leverages unused spectrum in the traditional UHF and VHF television broadcast band. White space radios operate dynamically across this spectrum referencing a database to identify unused frequencies.

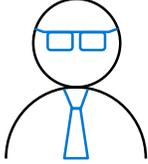
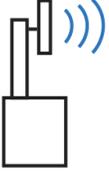
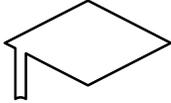
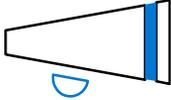
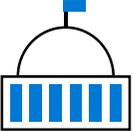
TVWS signal can travel over long distances and penetrate buildings and foliage better than other wireless communications technologies, making it an ideal technology for rural communities.



Multiple use cases:

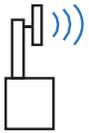
- High speed internet
- WiFi access points
- Telemetry and internet of things (IoT)

Airband offering for commercial partners

<p>Expertise</p> 	<p>Low cost TVWS equipment, towers and fiber infrastructure</p> 	<p>Azure</p> 	<p>Microsoft Reseller Programs</p> 
<p>Funds</p> 	<p>Digital skills & educational content</p> 	<p>PR & marketing</p> 	<p>Advocacy & industry outreach</p> 

Airband ISP Program

After a simple online sign-up at aka.ms/airbandisp, ISPs gain access to:



Special TV White Spaces Pricing

Receive preferential pricing for TV White Space equipment



Microsoft Reseller Programs

Join cloud service and device reseller programs



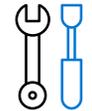
ISP Business Applications

Qualify for preferential pricing on cloud-based billing and operations software



Tower Access Pricing

American Tower offers access to over 40,000 prime tower sites in the U.S. to help you accelerate your network build



Digital Skills Content

Get access to skills training and content for your customers



Cal.net

After obtaining an experimental license through the FCC and conducting testing with the first commercially feasible hardware, Cal.net Inc. leverages the latest TV white space technology to **provide broadband access to over 41,000 unserved rural customers** across the western region of the Sierra Nevada Mountains.

Cal.net



To learn more, visit microsoft.com/airband or email maile.martinez@microsoft.com

