



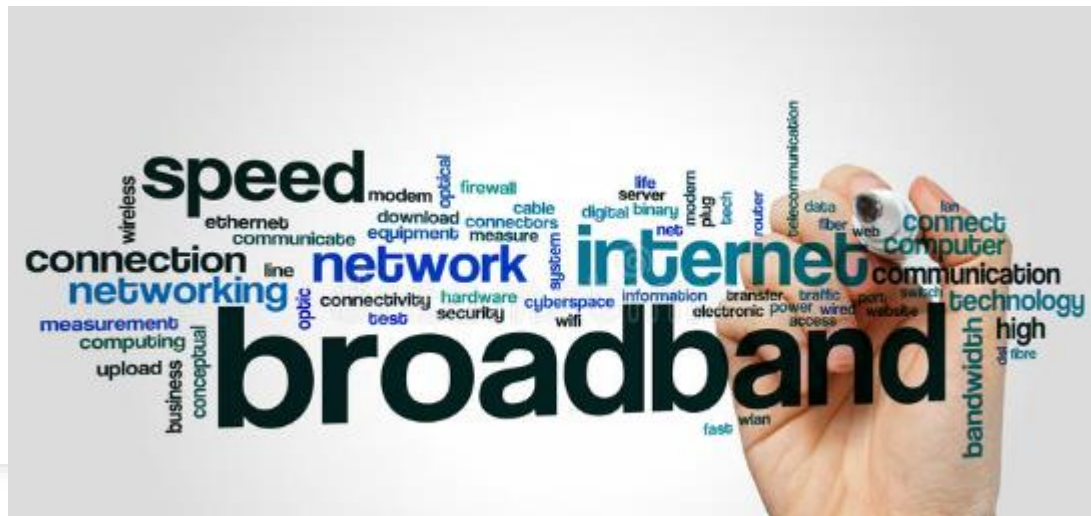
Rural Broadband: What Comes After \$42B??

Dr. Brian Whitacre

Department of Agricultural Economics

Oklahoma State University

Agenda



- Broadband update
 - \$42B for broadband on the way (at least)!
 - New definition of “broadband”
 - End of Affordable Connectivity Program (ACP)

- What are the next steps for communities and regions?
 - Digital Equity Act (DEA) funding
 - Telehealth / telework efforts

Every state is about to dole out federal funding for broadband internet – not every state is ready for the task

Published: November 20, 2023 8:16am EST

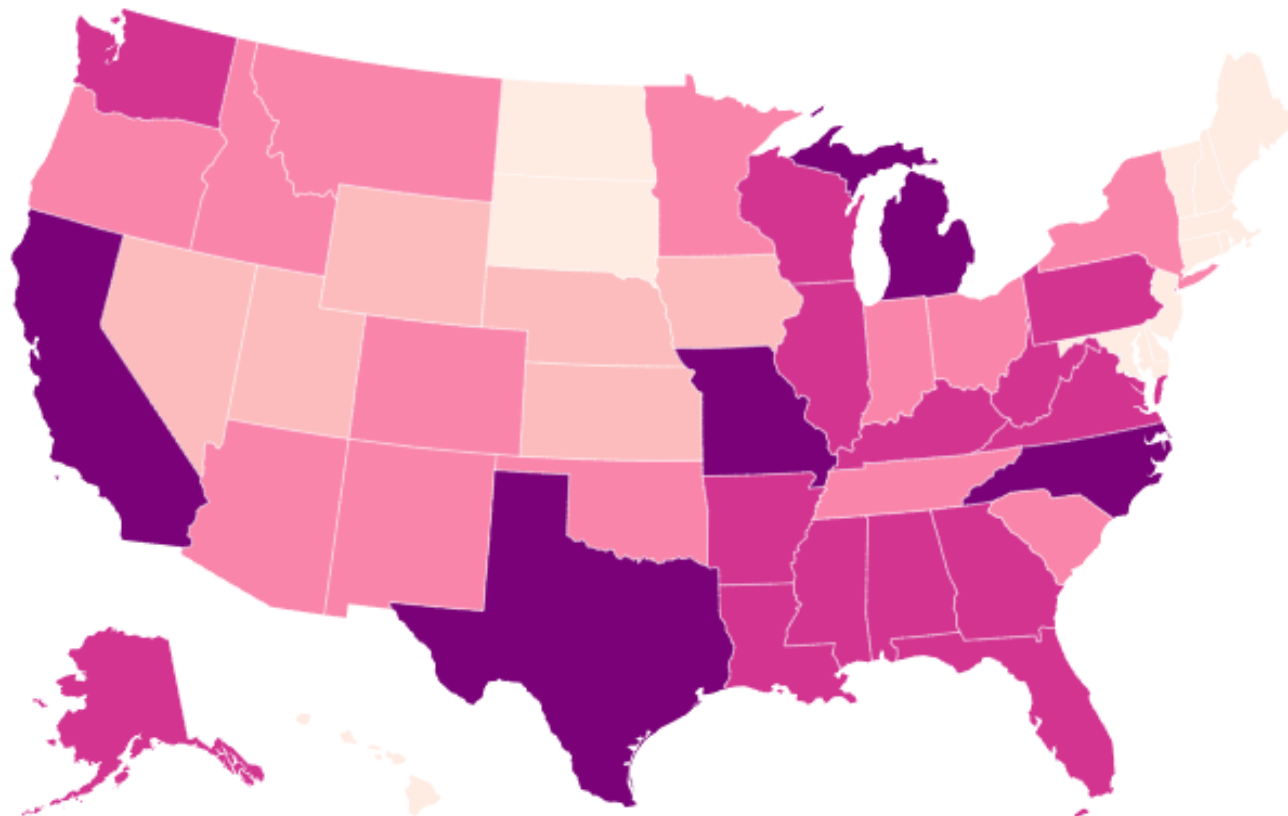
Broadband Funding in the 2021 Infrastructure Act:

- \$42.5B: infrastructure grants
- \$14.2B: ACP (consumer subsidy)
- \$2.7B: Digital Equity

\$42.5B in Infrastructure Funding On the Way

BEAD Broadband Funding (\$M)

■ < 300
 ■ 300-500
 ■ 500-1,000
 ■ 1,000-1,500
 ■ ≥ 1,500



EACH STATE SHOULD NOW:

- Have their own broadband office
- Have a working version of their broadband map (showing actual households where service is and isn't available)
- Have submitted documentation to receive their share of the funding

<https://www.internetforall.gov/bead-initial-proposal-progress-dashboard>

Some states will have additional broadband funding from ARPA / Capital Projects Funds

<https://statescoop.com/heres-how-much-every-state-is-getting-from-bead-grant-program/>

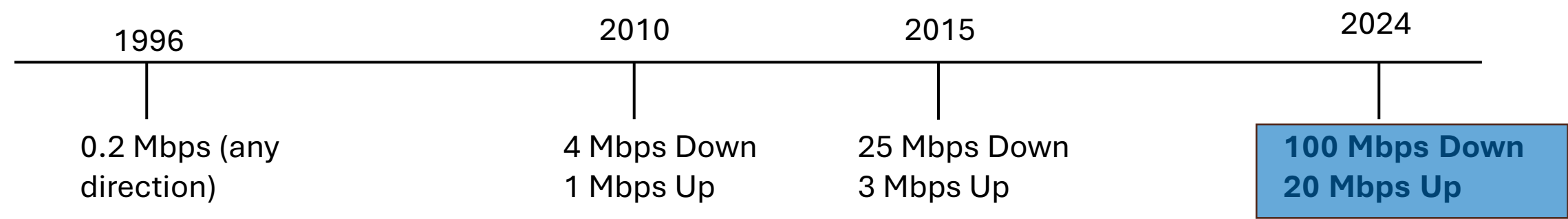


Broadband Update

The FCC just quadrupled minimum broadband Internet speeds

A new definition of broadband raises the standard to 100Mbps down, 20Mbps up.

Definition of “Broadband” Over the Years:



Mbps = Megabits per second

FCC cranks fixed broadband standard up a notch
By Julia King · Mar 14, 2024 5:07pm



The Short-lived Affordable Connectivity Program

\$30 / month internet subsidy for low-income households

2021: Began life as the Emergency Broadband Benefit (EBB)

2022: Transitioned to the ACP (\$14.2B from Infrastructure Act)

Jan 2024: Over 20 million households signed up

April 2024: Last month of program

Affordable Connectivity Program (ACP) Wind-Down Fact Sheet

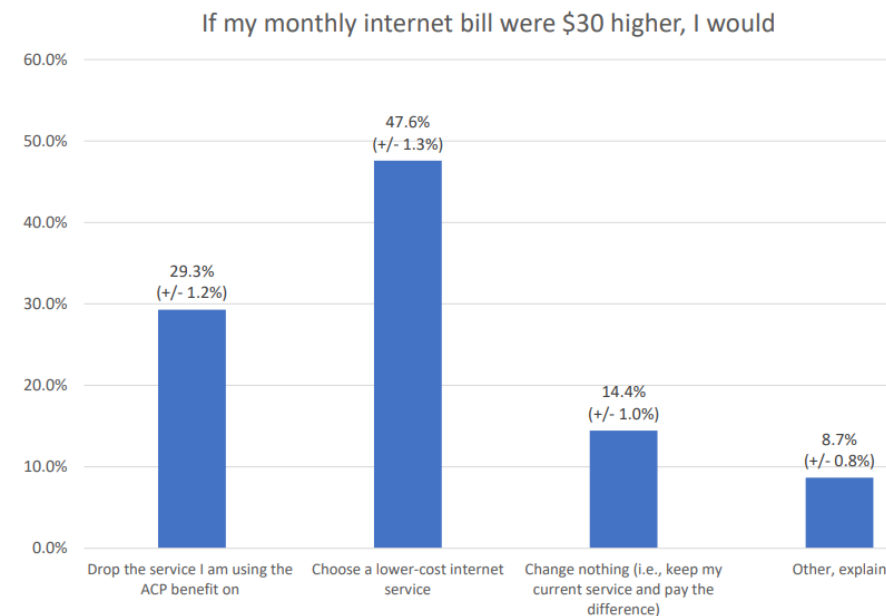
<https://www.fcc.gov/affordable-connectivity-program-consumer-faq>

State / county / ZIP code data on ACP enrollment:

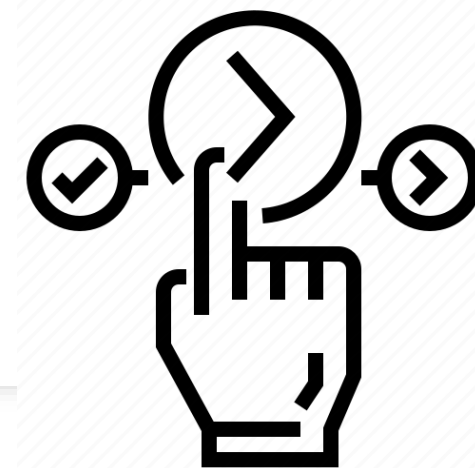
<https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/>

The end of the Affordable Connectivity Program is almost here, threatening to widen the digital divide

Survey of Current ACP Recipients



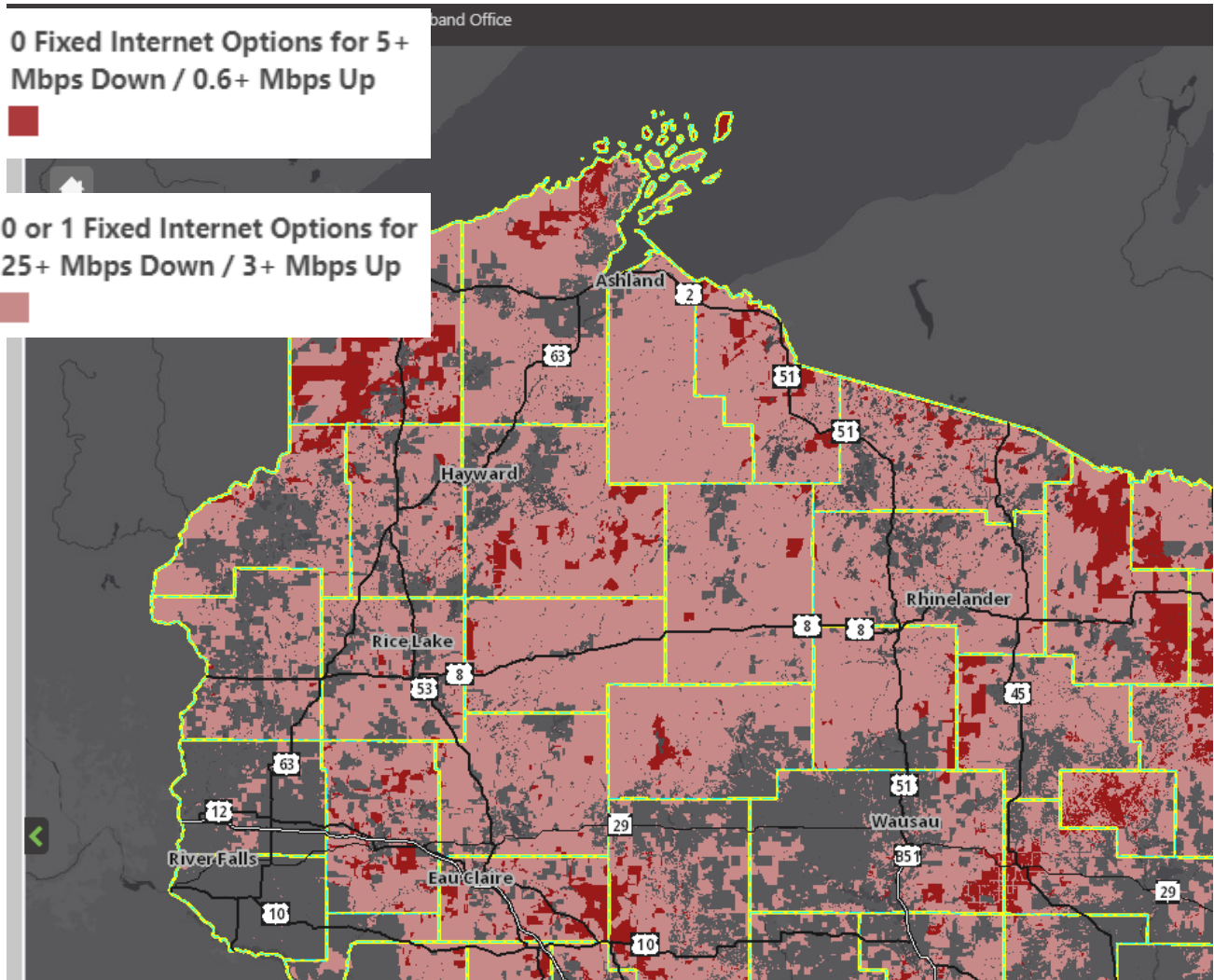
Next Steps for Communities



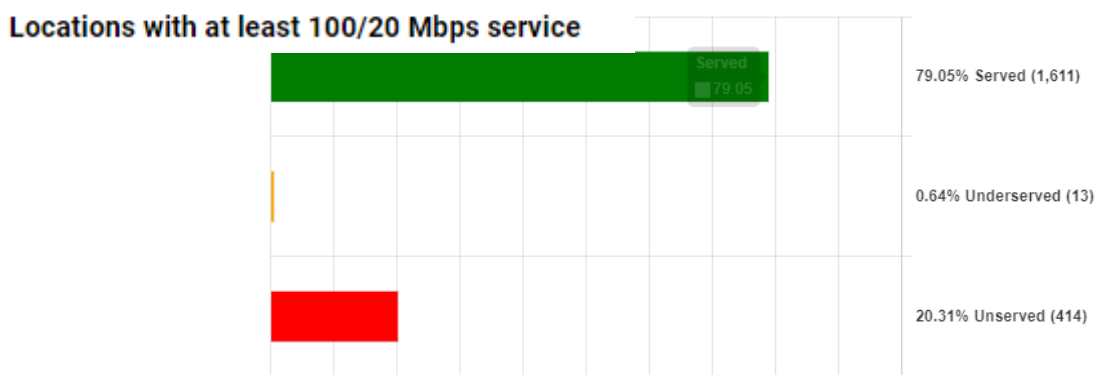
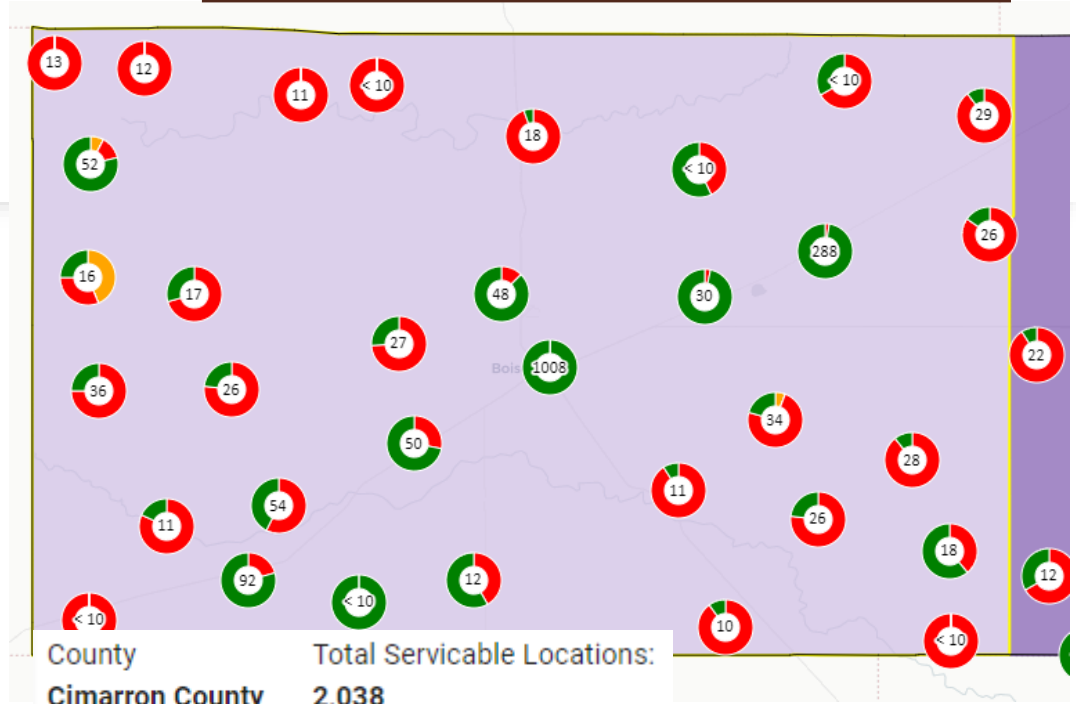
1. Check out your state's broadband map / BEAD plan
 - Should give you an idea of where the infrastructure funds will be going!
2. Be aware of Digital Equity Act (DEA) funding on the horizon (\$2.7B)
 - 2 distinct programs to distribute these funds
 - Census data can help document places with low adoption / use
3. Resources to help with digital skills / training
 - Extension / non-profits have developed useful programs and tools
4. Look into ongoing efforts in rural-focused telehealth & telework

State Broadband Maps

WISCONSIN



OKLAHOMA



State BEAD Proposals / DEA Plans



Home

Public Notice Posting of State and Territory BEAD and Digital Equity Plan, Initial Proposals, and Challenge Process Portals

A - B - C - D - E - F - G - H - I - J - K - L - M - N - O - P - Q - R - S - T - U - V - W - X - Y - Z

Alabama

Alaska

American Samoa

Arizona

Arkansas

BEAD Five-Year Action Plan

Digital Skills and Opportunity Plan
Public Comment Period End Date: January 25, 2024

BEAD Initial Proposal, Volume 1
Public Comment Period Close Date: November 18, 2023

BEAD Initial Proposal, Volume 2
Public Comment Period End Date: December 14, 2023

Volume 1: ~20 pp.

Volume 2: ~100 pp.

Important components:

- Low-cost service option
- Middle-class affordability plans
- Workforce readiness

<https://broadbandusa.ntia.doc.gov/public-notice-posting-state-and-territory-bead-digital-equity>



Census data on broadband adoption

<https://data.census.gov/cedsci/advanced>

Data available for different geographies: counties, ZIPs, cities, states

Only 5-year averages (2018-2022) for smaller geographies

Helpful to compare local numbers to state averages

Label	WI	OK
▼ TYPE OF INTERNET SUBSCRIPTIONS		
▼ With an Internet subscription:	90.9%	88.7%
Dial-up with no other type of Internet subscription	0.3%	0.1%
▼ Broadband of any type	90.6%	88.6%
▼ Cellular data plan	84.0%	82.6%
Cellular data plan with no other type of Internet subscription	11.2%	14.9%
Broadband such as cable, fiber optic or DSL	74.4%	68.0%
Satellite Internet service	6.9%	8.2%
Without an Internet subscription	9.1%	11.3%

Source: U.S. Census ACS 2022 1-yr estimates **Table S2801**

Also has data on adoption rates among HH earning <\$20,000

Table S2802: % without internet by age / race / education levels

BROWSE FILTERS

- Topics
- Geography
- Years
- Surveys
- Codes

TOPICS

- Business and Economy
- Education
- Employment
- Families and Living Arrangements
- Government
- Health
- Housing**
- Income and Poverty
- Populations and People
- Race and Ethnicity

HOUSING

- Housing
- Absorption Rate
- Financial Characteristics
- Health and Safety Characteristics
- Homeownership Rate
- Housing Units
- New and Existing Units
- Occupancy Characteristics
- Owner/Renter (Householder) Characteristics
- Physical Characteristics**

PHYSICAL CHARACTERISTICS

- Physical Characteristics
- Building Materials and Structural Features
- Heating and Air Conditioning (HVAC)
- Lot Size
- Neighborhood Features
- Outdoor Features
- Parking/Garage
- Telephone, Computer, and Internet Access
- Types of Rooms



Resources to Help with Digital Skills

SRDC: Digital Skill Building / Digital Volunteer Initiative

Digital Skill-Building for Everyday Life: A Guide to Online Resources (2023)

<https://srdc.msstate.edu/digital-literacy>

Toolbox of Digital Skills	Free Online Resources ¹						
	Digital Skills Library	Goodwill Community Foundation	Google	Digital Learn	Denver Library	Good Things Fdn.	Tech Boomers
All About Computers							
Computer Basics and Skills	X	X		X	X	X	
Hardware (mouse, wires, connections, Wifi)	X	X		X	X	X	
Operating Systems (OS) (PC, Mac)	X	X		X			X
Saving and Recovering Data	X	X		X	X		
Tech Tips, Tricks, and Troubleshooting	X	X		X	X		
Software							
Basics of Windows and Mac OS	X	X		X	X	X	
Office for Windows and Mac (e.g. Word, Excel, PPT)	X	X		X	X	X	
Security Software	X	X		X	X	X	
The Internet							
Using Search Engines	X	X	X		X	X	X
Internet Basics and Tips	X	X	X		X	X	X
Using Information Correctly	X	X	X		X	X	X
Digital Media Literacy	X	X			X	X	X
Internet Safety and Safety for Kids	X	X	X		X	X	X
Using the Cloud							
Cloud storage strategies (e.g. Dropbox, Etsy)		X					X
Using Google Resources (e.g. Docs, Drive, Maps)	X	X	X		X		
Using Microsoft OneDrive and Office Online	X	X					
Email							
Using Email and Gmail – the basics and advanced uses	X	X	X		X	X	X
Social Media							
Blog Basics	X	X	X		X		X
Facebook (and Facebook for iPhone)	X	X			X	X	X
Instant Messaging (Twitter, Instagram, Snapchat)	X	X			X	X	X
Pinterest	X	X					X
WordPress Basics, Canva	X	X			X	X	X
Video-Conferencing (YouTube, Zoom, podcasts)	X	X				X	X

Digital Skills Lessons

Expand All

Digital Volunteer Initiative Lessons

4-H Tech Changemakers Lessons

Cornell Cooperative Extension of Orleans County Lessons

Digital Literacy Toolkit

Digital Literacy Survey Findings



Other Broadband-related Economic Development Topics

Remote Work: Utah State's Rural Online Initiative

UtahStateUniversity

Rural Online Initiative
Extension

Get Qualified for Remote Work

- Work from anywhere
- Reduce or eliminate your commute
- Enjoy greater flexibility

LEARN MORE

Get Qualified to lead a Remote Team

- Cast a broader net to find the best team members
- Offer remote work as a perk to reliable workers
- Ease issues like parking, office space, and air pollution

LEARN MORE

Courses ^

Events

Newsletter & Podcasts v

Certified Remote Work Professional

Certified Remote Work Leader

Certified Sales Professional

Remote Job Search: Skills for Success

E-Commerce Accelerator

Negotiation for Remote Work

Why become an affiliate?

- Access to the only personalized, research-based remote work training program
- Empower rural communities through remote work
- Bring economic diversification to rural areas
- Ongoing training and support to coach and mentor rural residents
- Connect remote workers within your community
- Expand skills in community organizing through the ROI Affiliate's Toolkit and hands-on experience
- Join a national community of ROI program affiliates and share remote work training resources

Telehealth

Library-based telehealth programs:

- Soundproof booths
- Telemedicine equipment
- Digital navigators



HIGH-TECH WELLNESS

GRANT BRINGS TELEHEALTH BOOTHS TO RURAL OKLAHOMA

To serve people in Oklahoma communities who do not have access to adequate health care, Oklahoma State University is bringing telehealth booths to nearby libraries.

"The idea of this program came from collaborating with librarians, educators and people in rural communities who have trouble seeking health care when they need it," said Brian Whitacre, OSU Extension specialist for rural economic development.

Whitacre led the effort to seek funding for the telehealth booths.

The project's funding came from \$120,000 in grants from the American Rescue Plan Act, the Oklahoma State Department of Health and the Oklahoma Department of Libraries.

The grant budgets half toward the booths, and the rest toward equipment needed inside the booths and the library employees who can help people use it, Whitacre said.

"It can be difficult for rural residents to connect with health care services they need," Whitacre said.

The program's first telehealth booth opened Aug. 3, 2023, in the Benson Family Media Center within the 112-year-old Okemah Public Library in Okemah, Oklahoma.

Cliff Peters, the library's media center and telehealth technician, said in the two months since the telehealth program began, the booth has had 15 medical appointments.

"Word is spreading though," he said, "and I expect an uptick in appointments very soon due to more people knowing about the booths."

Each booth is stocked with equipment to measure patients' vital signs as well as a digital otoscope with a camera to check for ear infections and a digital hand dynamometer, which measures grip strength, he said.

It can be difficult for rural residents to connect with health care services they need.

BRIAN WHITACRE



Cliff Peters (left) assists Gerald Wilson in the telehealth booth in Okemah, Oklahoma.

Think Outside the Box!



Tulsa offered remote workers \$10,000 to move there. The results show how the program shook up the local economy — and what the future of smaller cities could look like.

Report: The rise of remote work in rural America

Remote Work Is Not Going Away: How Can Rural Communities Take Advantage of this Opportunity?

- Each state will likely be getting \$30-50M for Digital Equity work...what is YOUR organization's value-added in this space?
- Libraries / non-profits will likely be focused on providing basic digital skills to people. So how can extension / economic developers / regional orgs / workforce boards compete for funds?
- “Covered Populations” that must be addressed (as directed by DEA):
 - Households under 150% of poverty line
 - 60+ year-olds
 - Incarcerated individuals
 - Veterans
 - Individuals with disabilities
 - Individuals with language barriers / low literacy
 - Racial / ethnic minority groups
 - Rural households

- Business website development?
- Civic engagement?
- Focus on farmers?
- App development?
- Community recruiting?

