Connected
A CONNECTED NATION Initiative

Addressing Your Community's Unique Needs

Jefferson County, Oklahoma

Technology Action Report

January 2025

CONNECTED NATION

connectednation.org

Jefferson County Overview

Today, technology plays a pivotal role in how businesses operate, how institutions provide services, and where consumers choose to live, work, and play. A community's success has become dependent on how broadly and deeply it adopts technology resources, which include access to reliable, high-speed networks, the digital literacy of residents, and the use of online resources for local business, government, and leisure. Understanding the connectivity needs of a community is necessary to build a holistic plan that addresses connectivity gaps and build upon community resources to support residents' online usage.

As such, Connected Nation (CN) implemented the Connected Community Engagement Program to conduct a study designed to determine the availability of broadband infrastructure, how county residents are adopting and using broadband services, and what action steps would have the most significant impact toward improving broadband access, adoption, and usage across every local sector in Jefferson County.

Pursuant to this goal, between April and July 2024, CN conducted a comprehensive survey of broadband technology access and adoption across the community, collecting responses from local households. CN did not receive enough survey responses to conduct a quantitative analysis. Therefore, CN utilized publicly available data, broadband maps, and desktop research to conduct a landscape analysis and build a community connectivity profile.

This study approached broadband holistically – focusing on the quality of life offered when residents and community leaders alike access, adopt, and use broadband in a productive and meaningful capacity. With this approach, the assessment identified issues and action opportunities necessary to close the local Digital Divide.

Data analyzed as part of the engagement played an integral role in developing a unique, locally informed action plan for Jefferson County. This document provides a summary of that assessment,

JEFFERSON COUNTY, OKLAHOMA QUICK FACTS
Population
5,337
Households
2,160
Median Household Income
$48,750
Poverty Rate
22.8%
Adults with a Bachelor's Degree or Higher
15.7%
Hispanic or Latino
10.9%
Households with Broadband Access[1]
70.8%

Source: Jefferson County U.S. Census Profile

[1] The current FCC definition of broadband is a minimum of 100 Mbps download and 20 Mbps upload. These data are derived from the FCC National Broadband Map – with numbers as of June 2024.

as well as recommendations for improving broadband and technology access, adoption, and usage. Additionally, CN created [an interactive map](#).

*Only **56.3%** of households making less than $20,000 a year have an internet subscription in Jefferson County, compared with **72.1%** of all households in the county.*

*__70.8%__ of households in Jefferson County have access to internet service at speeds needed to run many modern applications (100 Mbps downstream and 20 Mbps upstream). Statewide, **90%** of households have internet access at these speeds.*

__91.5%__ of households in Jefferson County have a computer in the home.

Infrastructure
Results

A ccording to Federal Communications Commission (FCC) broadband data updated in June 2024, 70.79% of Jefferson County households have access to wired or licensed fixed wireless broadband of at least 100/20 Mbps – the current definition of broadband set forth by the FCC. Broadband service in Jefferson County is distributed throughout the county.

Below is the list of internet service providers (ISPs) in Jefferson County. Please contact your ISP for the most up-to-date information on speeds, prices, and service areas.

BROADBAND INFRASTRUCTURE QUICK FACTS

Unserved Households (100/20 Mbps)	
630	
Households Served (10/1 Mbps)	
89.59%	
Households Served (25/3 Mbps)	
85.84%	
Households Served (100/20 Mbps)	
70.79%	

PROVIDER	TECHNOLOGY	MAXIMUM DOWNLOAD SPEED (Mbps)	MAXIMUM UPLOAD SPEED (Mbps)
360 Communications	Fixed Wireless	25	3
Arbuckle Communications	Fixed Wireless	50	5
AT&T Inc.	Fixed Wireless	25	3
AT&T Inc.	Copper	10	1
Dobson Fiber	Fiber	1000	1000
Nextlink	Fixed Wireless	500	20
Oklahoma Fiber Network	Fiber	1000	100
Pioneer Telephone Cooperative	Copper	46	7
Pioneer Telephone Cooperative	Fiber	1000	1000
Terral Telephone	Fiber	200	100
T-Mobile	Fixed Wireless	25	3
United States Cellular Corp.	Fixed Wireless	25	3

Below is Jefferson County's (100/20 Mbps) map. To access the full map, go to https://connectednation.org/oklahoma/jefferson/interactivemap and select Jefferson County from the list. Portions of the county are served by ISPs offering slower advertised speeds and those areas are not shown on this map.

The first step in understanding the status of broadband infrastructure in Jefferson County and statewide is having accurate maps. Accordingly, CN works with ISPs to develop a variety of broadband maps at the state and county level. Data shown on this map are derived from a combination of direct ISP outreach and data collection, FCC Form 477 broadband deployment filings, and independent research conducted by CN. If an ISP was unable or unwilling to supply granular data and a detailed service area could not be developed, the ISP's service is represented by Form 477 data alone – a format that tends to overstate the service territory.
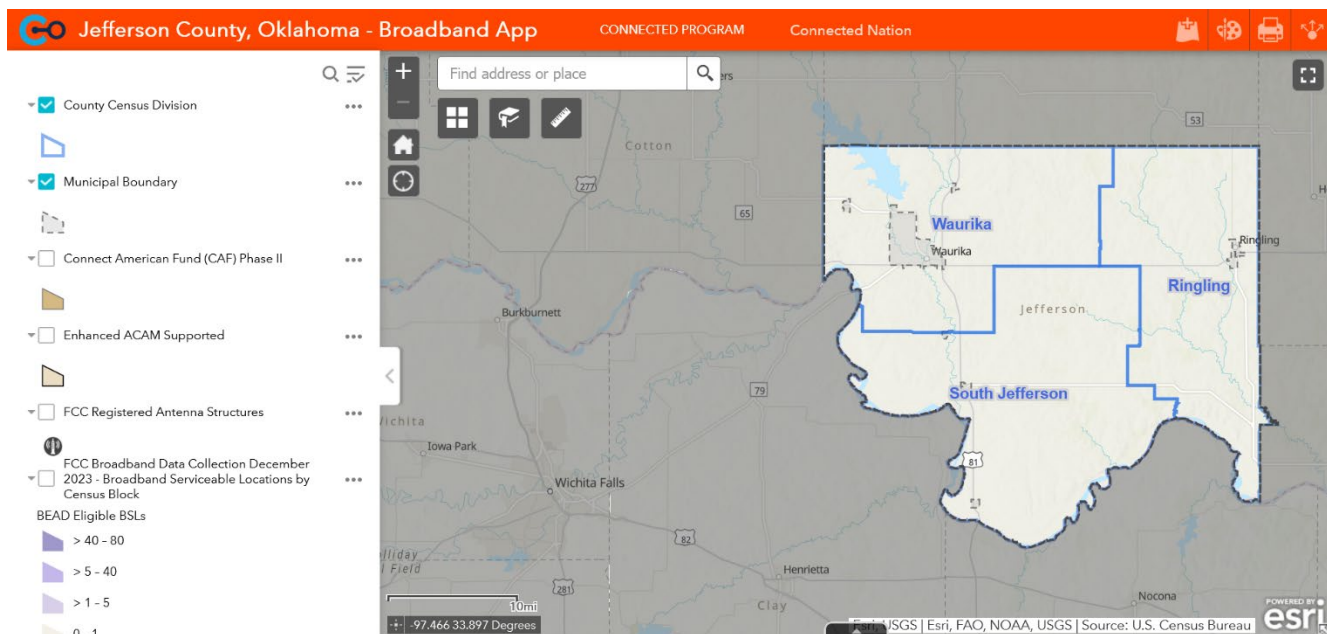
Landscape Analysis

I nternet access impacts all parts of a community, and increasing access and use of broadband can positively impact the economic, educational, and health outcomes for counties. Understanding key sectors and how internet access interacts with them is critical to understanding local challenges and opportunities.

CN conducted a landscape analysis, analyzing publicly available data from the American Communities Study about technology and researching key institutions and sectors within Jefferson County. Connectivity affects every sector within a community, and a holistic understanding of the county helps inform the recommendations of this Technology Action Plan.
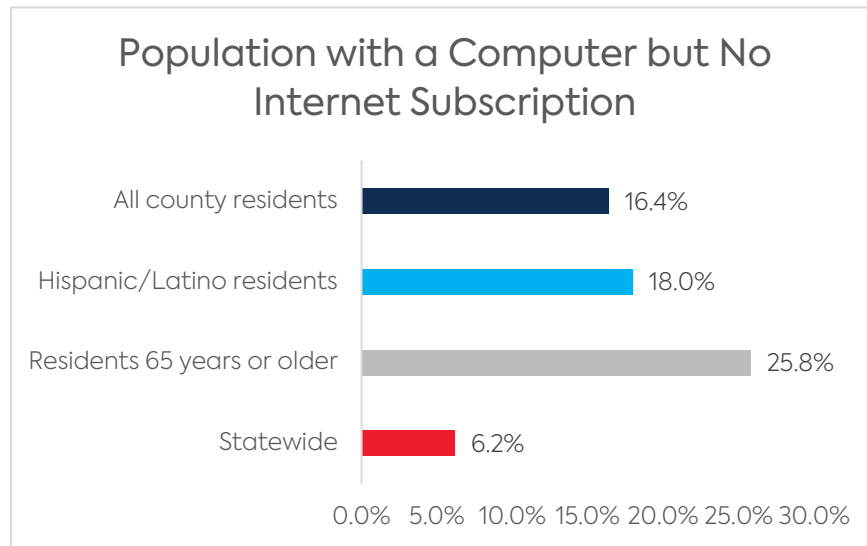
Internet Usage in Jefferson County

CN analyzed data about connectivity from the U.S. Census Bureau's American Community Survey[1] to build an understanding of the Digital Divide in the county.

In Jefferson County, 27.9% of households do not have an internet subscription, compared with 12.6% of households statewide. In terms of device access, 8.5% of households do not have a computer, compared with 5.9% of households statewide.
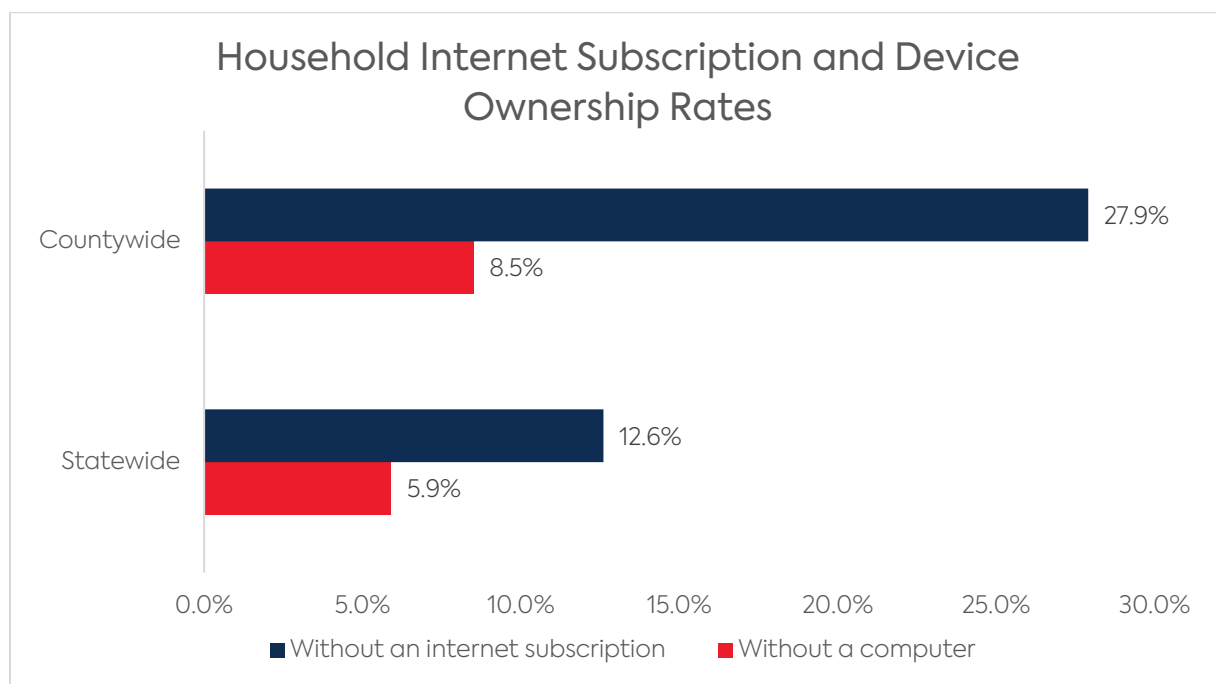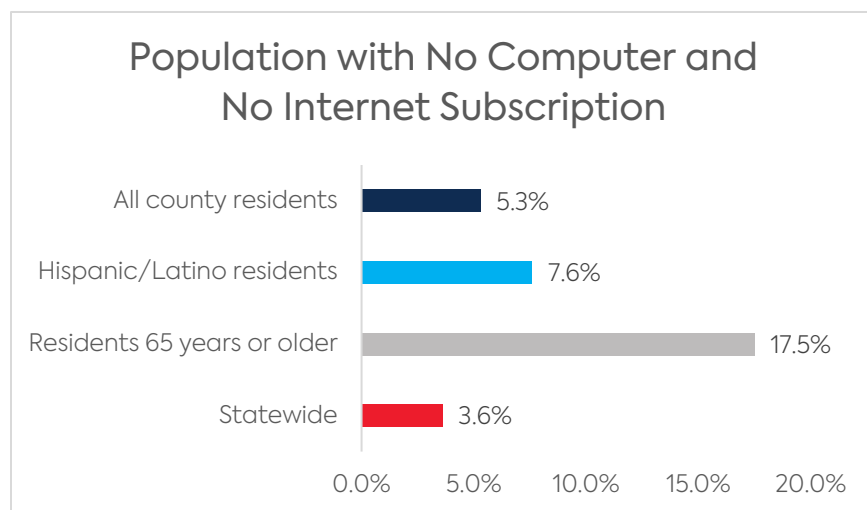

When looking at households in Jefferson County, 16.4% have a computer but no internet subscription, more than the statewide average of 6.2%. The percentage rises for Hispanic/Latino residents and seniors, as shown in the chart below.

Population with a Computer but No Internet Subscription

All county residents	16.4%
Hispanic/Latino residents	18.0%
Residents 65 years or older	25.8%
Statewide	6.2%

0.0% 5.0% 10.0% 15.0% 20.0% 25.0% 30.0%

Around 5.3% of county residents have no computer or internet subscription in the household, higher than the statewide average of 3.6%. This number increases significantly for seniors, as shown in the chart below.

Population with No Computer and No Internet Subscription

All county residents	5.3%
Hispanic/Latino residents	7.6%
Residents 65 years or older	17.5%
Statewide	3.6%

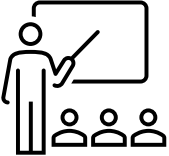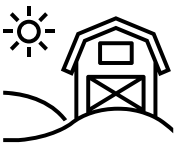0.0% 5.0% 10.0% 15.0% 20.0%

At the household level, 91.5% of households have a computer in the home. Almost 30% (27.9%) of households do not have an internet subscription, with that number increasing to 43.7% of households making less than $20,000 a year lacking an internet subscription.

The Affordable Connectivity Program, which ran from 2021–2024, provided a subsidy to households meeting specific criteria. Only 16.8% of households enrolled in the program in Jefferson County, less than the state average of around 50%. This lack of access is a combination of service affordability concerns and lack of physical infrastructure.

Key Sectors and Institutions

Education	Jefferson County is primarily served by two school districts – Ringling Public Schools, serving 381 students, and Waurika Public Schools, serving 456 students.[2]
	In the community, 15.7% of residents have a bachelor's degree or higher. There are no higher education institutions within the county.
Health	Located in Waurika, Jefferson County Hospital is operated by Duncan Regional Hospital, located in neighboring Stephens County. The Oklahoma State Department of Health ranks Jefferson County as high need on its Health Equity Index, Food Insecurity Index, and Mental Health Index.[3]
Agriculture	Jefferson County is served by the Jefferson County Extension Office through Oklahoma State University Extension. Programs include Jefferson County 4-H, Master Cattleman program, and Family and Consumer Sciences.
	Jefferson County has 356 farms, spanning 484,918 acres. 94% of these farms are family farms. Top crops in terms of acres are hay, wheat for grain, and pecans. 78% of farms have internet access.[4]
Community Anchor Institutions	The Waurika Public Library and the Gleason Memorial Library (in Ringling) serve the community. At the Waurika Public Library, computers are available for public use. Library staff assist with general information about computer usage but do not train patrons in the use of specific applications or technologies. Internet is available for public use within the library.[5] The Gleason Memorial Library has six computers available for public access. Wi-Fi is also available within the library.[6] Both library websites provide online links to resources, including employment, health care, and government resources. They also include links to Brainfuse as part of statewide access through the Oklahoma Department of Libraries.
	All residents of Jefferson County have free access to the library and can obtain a library card.

---

[2] 2023 School Profiles, Office of Educational Quality and Accountability.
[3] Oklahoma State Department of Health 2024 Wellness County Profiles.
[4] 2022 U.S. Census of Agriculture County Profile.
[5] Waurika Public Library Polices.
[6] Ringling Public Library.

Recommendations

B roadband access and adoption throughout the community. These recommendations are based on landscape analysis of Jefferson County, through which CN developed a community profile focused on the data and sectors described in the Executive Summary. These recommendations are also grounded in an analysis of publicly available data about broadband availability, adoption, and use in the county.

Goal 1: Build strategic partnerships and broadband leadership to coordinate efforts to expand broadband access, adoption, and use in Jefferson County.

Objective: Coordinate and collaborate across sectors within the county to ensure all residents have the ability to access and use the internet for education, health, economic, and other needs.

The state of Oklahoma was allocated $797 million under the Infrastructure Investment and Jobs Act (IIJA) via the Broadband, Equity, Access, and Deployment (BEAD) program and the Digital Equity Act (DEA). These programs will fund projects that help expand high-speed internet access and ensure Oklahoma communities have the information technology capacity they need for full participation in our society, democracy, and economy by promoting diverse digital advancement projects. This federal funding opportunity is a once-in-a-generation infusion of money that will be administered by the Oklahoma Broadband Office (OBO) and provided to eligible entities via a competitive grant program. As this is a generational funding opportunity, Jefferson County must track broadband developments at the state and federal levels to ensure community needs are promptly met.

Action 1 – Identify and appoint a broadband champion for Jefferson County.

To ensure the success of the community action plan and to equip Jefferson County with the necessary tools for broadband growth, the community should centralize broadband expansion and improvement efforts in a single entity: a broadband liaison. In this role, the liaison can:

- Promote broadband and technology access, adoption, and use;
- Serve as the go-to resource for broadband and technology needs for internet service providers and community partners;
- Seek ways to educate and empower the community regarding broadband and related technology;
- Take priority action on recommendations from the community action plan and implement other programs that are necessary and beneficial to the growth of the community; and
- Monitor broadband funding programs and seek beneficial partnerships for the community.

The liaison does not have to hold a formal role within the county, local government, or leadership. They can be residents at large who are passionate about making sure everyone in their community has access to broadband and can use it in ways that improve their lives.

Action 2 – Identify community organizations and county stakeholders who can support local broadband planning efforts.

Much of the work in the broadband space is driven by partnerships. Having a group of trusted community leaders and organizations augments the work of the broadband liaison will be valuable to promoting the community's connectivity goals. The county should look to leaders within the sectors described in the landscape analysis, including education, health care, business, public safety, and agriculture, to engage in dialogue about connectivity challenges and opportunities.

Action 3 – Stay connected to the work of the Oklahoma Broadband Office.

The Oklahoma Broadband Office (OBO) is running several grant programs designed to bring connectivity to everyone in the state and increase broadband adoption and use. This includes implementing the Broadband Equity, Access, and Deployment (BEAD) grant program in 2025, where entities can apply to bring infrastructure to any home in Jefferson County that lacks 100/20 Mbps connectivity. The office will also be receiving $11.2 million for digital opportunity activities, including a program to refurbish and distribute devices, and research and programs to expand telehealth access. By coordinating across sectors and ensuring leaders are staying apprised of broadband updates, Jefferson County can assess future funding programs as opportunities to bring infrastructure, programs, and funding to the community.

Timeline
A broadband liaison should be appointed as soon as possible to ensure the county can begin organizing efforts for broadband programs and funding.

Responsible parties
Local and county governments, business leaders, community, and regional organizations.

Resources
Broadband readiness
- Smart Cities Readiness Guide
- Next Century Cities Becoming Broadband Ready Toolkit
- Municipal Boards: Best Practices for Adoption Technology

Broadband leadership
- Ector County TX forms taskforce to set up broadband office
- City of Memphis: Broadband Project Manager, Senior
- Letter: Do your part on broadband
- The Anatomy of a Community Broadband Manager
- TARA Leadership: Rondella Hawkins

Goal 2: Build and maintain relationships with internet service providers to increase broadband availability and speeds in Jefferson County.

Objective: Ensure all residents have access to the internet and speeds that meet their needs for work, education, telehealth, and quality-of-life purposes.

Action 1 – Establish and maintain open communication and positive relations with internet service providers (ISPs) working or scheduled to work in the county, as well as ISPs interested in expanding in the county.

ISPs are key partners for communities looking to expand broadband access. Checking in regularly with ISPs allows community leaders to stay abreast of construction and expansion progress or plan changes, identify challenges they face, and communicate community goals and objectives. This open communication allows ISPs to better understand community needs and for communities to better understand the obstacles and barriers ISPs face. This understanding can encourage creative problem-solving, which can lead to finding solutions through public-private partnerships. Public-private partnerships are arrangements between public entities, such as local governments, and private entities, such as ISPs, to achieve a common goal. They are often, but not always, funding arrangements.

Additionally, the county should strive to be an environment amenable to business. This means having easy-to-use websites that allow ISPs and vendors quick access to relevant information, as well as fostering a business environment that rewards open communication and timely resolution of concerns. Fostering open communication with ISPs is critical for broadband development. As part of BEAD applications, ISPs must demonstrate local support; therefore, having relationships with local leaders will be crucial to ensuring successful grants and deployment according to county needs.

Action 2 – Pursue state and federal funding for broadband advancement.

As mentioned previously, the infusion of federal funds via BEAD and DEA to the state is an opportunity for Oklahoma communities to support ISPs and other entities that are looking to expand infrastructure, and programs that support robust broadband delivery. Jefferson County should explore the best ways to support ISPs that are considering buildouts in the community. This may include engaging with and supporting ISPs looking to secure BEAD and other federal and state funding resources.

In addition, other funding sources, such as the U.S. Economic Development Association or the U.S. Department of Agriculture, promise opportunities for broadband. Funding guides have been linked in the resource section. Capitalizing on these once-in-a-generation funding opportunities will ensure Jefferson County residents have faster, more reliable broadband for years to come.

Action 3 – Partner with local ISPs to promote low-cost broadband programs.

Data from the American Communities Survey indicates that many people who likely have physical access to internet are not subscribing to the service. This number rises for the lowest

income households in the county, indicating that cost may be a barrier to subscribing. Addressing the affordability of internet service can be a way to get more residents online. The county should work with community leaders and institutions to publicly promote programs and opportunities designed to reduce the cost of broadband service.

Below are some programs and resources that are available to residents.

- **Resources to locate affordable internet service or computers:** Using online resources, Jefferson County residents can identify local and national ISPs that offer special low-cost services for vulnerable populations, older adults, and low-income families with children. Resources include EveryoneOn (https://www.everyoneon.org/), which helps residents locate low-cost internet services and affordable computers by ZIP Code and need based on their participation in assistance programs.
- **State and federal low-cost programs:** Two critical programs offer discounts for broadband to eligible households:
  - Lifeline is a federal program administered through the Federal Communication Commission (FCC) Universal Service Administrative Co. that lowers the monthly cost of phone or internet services for eligible consumers. Consumers can get up to $9.25 off the cost of phone, internet, or bundled services each month. Households can qualify based on income or participation in federal or Tribal assistance programs.

Additionally, ISPs often offer their own low-cost options or subsidized programs to consumers at a greatly reduced cost. The Infrastructure Investment and Jobs Act (IIJA) of 2021 requires ISPs that receive federal grant money to offer low-cost service to eligible low-income households. Local advocacy for internet affordability, using Jefferson County-specific data, will be essential to ensuring residents can continue accessing online information and virtual resources.

Timeline
The sooner Jefferson County can begin build relationships and pursue opportunities, the better. Many grant programs have approaching deadlines. Residents and businesses benefit when there is good broadband and open communication between ISPs and end users.

Responsible parties
Local and county governments, business leaders, broadband liaison.

Resources
- The FCC High-Cost program: CAF A-CAM
- The Rural Digital Opportunity Fund (RDOF)
- BroadbandUSA: Federal Funding Guide
- Guide to Federal Broadband Funding Opportunities in the U.S.
- Lifeline Program
- Oklahoma Broadband Office
- Oklahoma Broadband Governing Board
- The Oklahoma Broadband Expansion Council
- Oklahoma State Broadband Map

- [HB 3363 Oklahoma State Broadband Expansion Act](#)

Goal 3: Increase the digital literacy skills of Jefferson County residents and businesses to improve digital engagement and improve outcomes in business, public safety, workforce readiness, and quality of life.

Objective: Partner with libraries and community organizations to provide digital literacy training.

Broadband connects people to the world and opens the door to opportunity. Where there is broadband, there is development, achievement, and innovation. In rural Oklahoma, broadband looks like economic development, greater scholastic achievement, advancement in agriculture and farming, connection to telehealth services, infrastructure improvement, and general technological advancements.

In Jefferson County, it is important to embrace broadband for how it can both contribute to and improve the current way of life. Residents need the skills necessary to interact with online platforms. Local and national organizations provide training and resources to educate people about basic digital skills and how to use common technology applications and platforms. This is especially important for senior older adults, which in Jefferson County accounts for 20.4% of the population. Providing training opportunities to seniors can help them remain connected to family and friends, manage their health, and access government programs and resources.

Action 1 – Explore device access opportunities.

Residents need access to internet-enabled devices to take advantage of increased internet connectivity and all the opportunities available online. The county can explore ways to increase access to devices. This may include considering refurbishment programs, where donated devices are updated and redistributed. Additionally, community anchor institutions, including schools and libraries, can acquire and make available computers for public use, allowing residents without a device in the home to come to their location to use the computer and receive support.

Action 2 – Develop curriculum for free community workshops.

Community leaders should partner with local and regional organizations to facilitate free digital literacy and digital skills workshops designed to increase digital engagement across the county. Workshop curriculum should be curated using material created by the county and publicly available programs, such as AARP and Digital Learn (resources linked below). Classes could be offered at local facilities, such as the school gym, library, or community center, and be advertised through the local media. The intention is for residents and community leaders to understand the importance of digital engagement and to feel comfortable using online platforms. The more the community engages online, the more residents will reap the benefits of a digital lifestyle.

These efforts would mirror statewide efforts of organizations and nonprofits working to close the Digital Divide. As evidenced by a 2023 digital asset inventory from the OBO, many organizations currently offer digital literacy classes and programs. The state's Digital Equity Plan highlights the ongoing trend and need for digital inclusion. Visit the OBO's [website](#) for the latest version of the plan.

Workshop topics can include:

- How to teleconference
- Cybersecurity 101
- Microsoft Office skills
- Intro to social media and website building
- Telehealth basics

Connected Nation provides digital literacy training classes to Connected communities free of charge. To learn more, reach out to us.

Action 3 – Partner with community stakeholders for workshop execution.

Finding broadband champions who can share the impact of technology from their perspective can help class participants understand the broad impacts of connectivity. There are community members with technical expertise and/or the ability to communicate new information effectively who can support these efforts. Banks, health care institutions, schools, and local governments use online platforms and applications and are invested in helping their communities learn the skills to use these platforms. When you know your audience, you can invite guest speakers, select specific curriculum, and pick class times/locations that are most convenient for the end user that will promote greater engagement.

Connected Nation offers the Teens Teach Tech, powered by AT&T program, which empowers teens to offer digital skills training to their communities, providing them support and incentives as they teach classes. To learn more about bringing this program to your community, reach out to Connect Nation.

Timeline
Digital literacy and digital skills workshops for residents and businesses should be available throughout Jefferson County by fall 2025. The community should routinely assess the curriculum to determine if updates are needed.

Responsible parties
Community institutions such as businesses, schools, libraries, organizations, local government leaders and elected officials, ISPs, and community residents,

Resources
Digital literacy
- [Connected Nation Digital Literacy Workshops](#)
- [Digital Learn – Free courses to learn anything about computers](#)

- [Digital Literacy Curriculum for K-12](#)
- [Free Applied Digital Skills – Google for Education](#)
- [Live, Virtual Classes for Seniors](#)
- [AARP Joins Nonprofit to teach tech to older adults](#)
- [The complete guide to digital skills](#)
- [Grow with Google](#)

Cybersecurity
- [Cybersecurity courses](#)
- [Cybersecurity & Infrastructure Security Agency](#) – [Cyber Resource Hub](#)
- [Connected Nation Cybersecurity Workshops](#)

Goal 4: Identify opportunities for economic advancement in Jefferson County using broadband and related technologies.

Action 1 – Pursue grants to advance local community development using broadband technologies (e.g., workforce development, telehealth, digital literacy, etc.).

In conjunction with the countywide Connected Community Engagement program, Jefferson County has been allocated grant-writing funds to continue closing the Digital Divide. Broadband has far-reaching impacts on community development, including health care, education, business, public safety, and overall economic development. These grant-writing funds are specific to each county and can be used to further the community's connectivity and infrastructure goals.

Jefferson County is well-positioned to pursue opportunities, especially as funds flow from state and federal programs. Through countywide partnerships and collaborative efforts, the community can advocate and provide equitable, affordable, and reliable broadband access for all residents, businesses, and community anchor institutions.

Every community anchor institution has a role to play in closing the Digital Divide, and funding opportunities are available to make that happen. For example, local schools may consider opportunities through the U.S. Department of Education, libraries may consider grants through the Institute of Museum and Library Services, while the Chamber of Commerce may consider opportunities through the U.S. Economic Development Administration (EDA). For specifics and further information about the grant-writing funds, please contact Connected Nation.