

## TABLE OF CONTENTS

- 03 OVERVIEW
- 06 INFRASTRUCTURE
- 13 SURVEY RESULTS
- 19 RECOMMENDATIONS
- 30 APPENDIX A



OVERVIEW

### **OVERVIEW**

oday, every aspect of life is impacted by access to fast, reliable, affordable high-speed internet service and the ability to use that service. Families go online for news, school, and work.

Businesses go online to stay in touch with customers and remain competitive. Local organizations and government agencies offer a growing list of services online. Just as electricity and telephones changed Americans' lives, broadband (high-speed internet) now serves as the infrastructure driving global change, particularly in rural communities.

To improve access, adoption, and usage of broadband, the Lincoln County Regional Development Authority (LCRDA) has partnered with Connected Nation (CN) to explore the availability of broadband infrastructure; how county residents are adopting and using broadband services; and what action steps would have the greatest impact toward improving broadband access, adoption, and usage.

Pursuant of this goal, LCRDA collaborated with Lincoln County and the city of Caliente to survey 256 households and businesses between May 2022 and June 2022. These surveys asked respondents about broadband technology access and adoption. This report outlines the results of those surveys, along with recommendations to help close the Digital Divide in the county.

### LINCOLN COUNTY, NEVADA AT A GLANCE

Population 4.499

Households 2,003

Median Household Income \$56,537

Poverty Rate 5.4%

Adults with a Bachelor's Degree or Higher 16.4%

Age 65 or Older 22.3%

Population with Disabilities 20.0%

Population with Access to Terrestrial Broadband (25 Mbps Down/3 Mbps Up) 1.45%

Sources:

United States Census Bureau

(https://data.census.gov/cedsci/profile/Lincoln County, Nevada?a=0500000US32017)

BroadbandUSA Community Report for Lincoln County, Nevada (data as of June 2021, the most current available) (https://sanbamdata.blob.core.windows.net/bbusa/BBUSAC ommReports/202106/Counties/32017.html)

### **OVERVIEW**

This study approached broadband holistically, focusing on the quality of life offered when residents and community leaders alike access, adopt, and use broadband in productive and meaningful ways. The purpose of the study was to identify opportunities where the county can take steps to make the greatest impact on expanding access and usage. This document provides a summary of that assessment, along with survey results and recommendations for improving broadband and technology access, adoption, and usage in the community.

This plan was adopted by the Lincoln County Board of Commissioners on November 21, 2022.

### Key Findings from the Study:

- > 85.2% of households and businesses that responded to the survey said they currently subscribe to some sort of internet service.
- Among those who do not subscribe to internet service, one-half (50%) cited the monthly cost of internet service as a barrier to subscribing.
- ➤ More than 2 out of 5 internet subscribers (40.7%) say they are somewhat or very dissatisfied with their current service. The top reasons for dissatisfaction among these households include slow internet speeds, service interruptions, and the monthly cost of service.
- More than two-thirds of respondents (67.6%) said they experience issues such as buffering, delays, or interruptions when trying to stream videos.
- ➤ Nearly one-half of responding businesses (47.6%) said they experience buffering, delays, or interruptions to their internet service several times per day.
- ➤ If they could get faster internet service, respondents say they would go online to enhance their education, shop online more frequently, and access more forms of online entertainment.



ccording to broadband <u>availability data</u> from the Federal Communications Commission (FCC), only 1% of Lincoln County households have access to terrestrial broadband. Here, broadband is defined as internet service at speeds of at least 25/3 Mbps, the current definition of broadband set forth by the FCC. Most households have either access to satellite service or no broadband service option at all.

Below is the list of terrestrial internet service providers (ISPs) that serve Lincoln County, according to FCC <u>reports</u>. Terrestrial internet includes DSL, cable, fiber, and fixed wireless service: it does not include satellite or mobile wireless services.

PROVIDER	TECHNOLOGY	MAXIMUM DOWNLOAD SPEED (Mbps)	MAXIMUM UPLOAD SPEED (Mbps)
ATN International	Fixed Wireless	9	2
InfoWest	Fixed Wireless	100	100
Lincoln Telephone	DSL	25	3
	Fiber	25	3
	Fixed Wireless	25	3
Whittrio	Fixed Wireless	1,000	1,000

These FCC data were compiled from information gathered from ISPs through their responses to the FCC's Form 477. ISPs are required to provide this information to the FCC twice annually, including the census blocks the ISP serves and the speeds offered in each census block. Some critics argue that this methodology tends to overstate internet coverage, particularly in rural areas, as a census block may be considered "served" by an ISP if it can provide a connection to one household within that census block. In rural areas where census blocks can be measured in square miles, this can potentially lead to overstated coverage of broadband service. As a result, the FCC is in the process of modifying the way it tracks broadband availability.<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> On November 18, 2022, the Federal Communications Commission (FCC) released the first iteration of its National Broadband Map for public review and challenge. This map relies on more recent data from internet service providers and uses a different methodology to calculate home internet availability. More information about this initial version of the FCC's National Broadband Map can be found in Appendix A of this document.

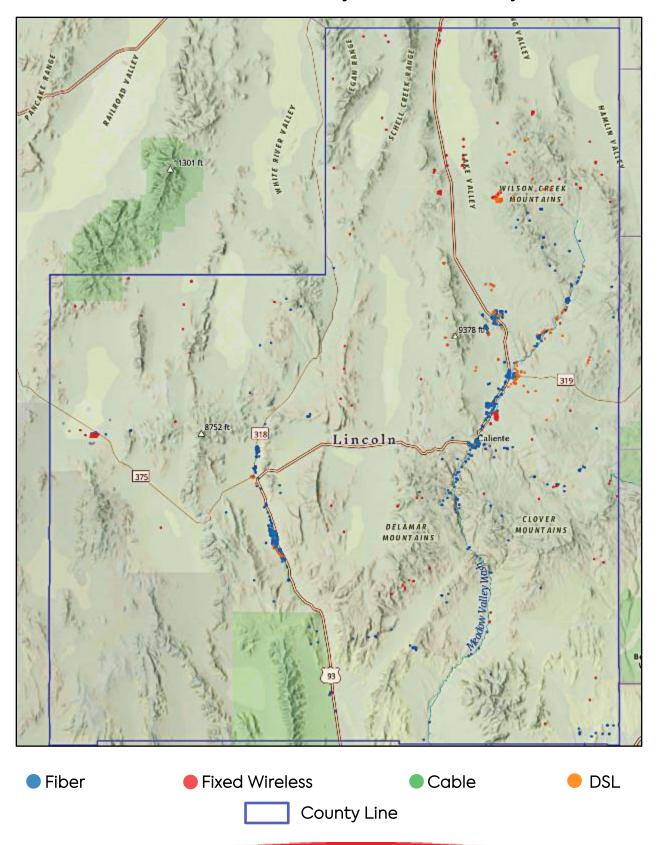
The initial draft of this new map was released to the public in November 2022 for review and feedback. This national broadband map is the first-ever national data set displaying individual locations like homes and businesses with fixed broadband service available to them. This information is still collected from ISPs, and some critics have expressed concerns about potential coverage overstatement in these maps, but the FCC promises that this new methodology will provide a far more accurate picture of broadband availability than their previous maps provided. One aspect of this new paradigm will be the ability to challenge the information shown on the maps, allowing residents and organizations to theoretically inform the FCC about inaccuracies. More information about the FCC's form 477 methodology and ongoing changes can be found here.

The maps on the following pages are compiled from the Nevada Governor's Office of Science, Innovation, and Technology (OSIT). Data on these maps are derived from research by CostQuest Associates for the State of Nevada and show the predicted broadband infrastructure types available to locations throughout Lincoln County. The points on these maps indicate buildings where a terrestrial fixed broadband connection. Terrestrial fixed broadband is fixed internet service such as DSL through phone lines, fiber to the home, cable, or fixed wireless service (using radio signals broadcast from towers to receivers located on a subscriber's home or business) is available at speeds of at least 25 Mbps downstream and 3 Mbps upstream.

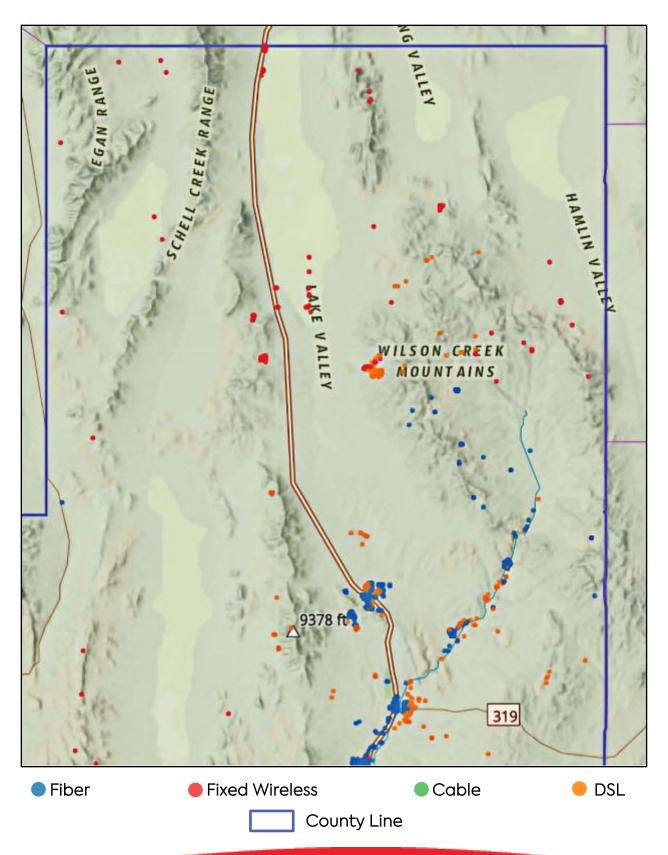
The map on the next page shows the entirety of Lincoln County, while the maps on the subsequent pages provide close-up images of portions of the county. An interactive version of these maps can be found <u>here</u>.



## Broadband Availability in Lincoln County



## Northeast Lincoln County

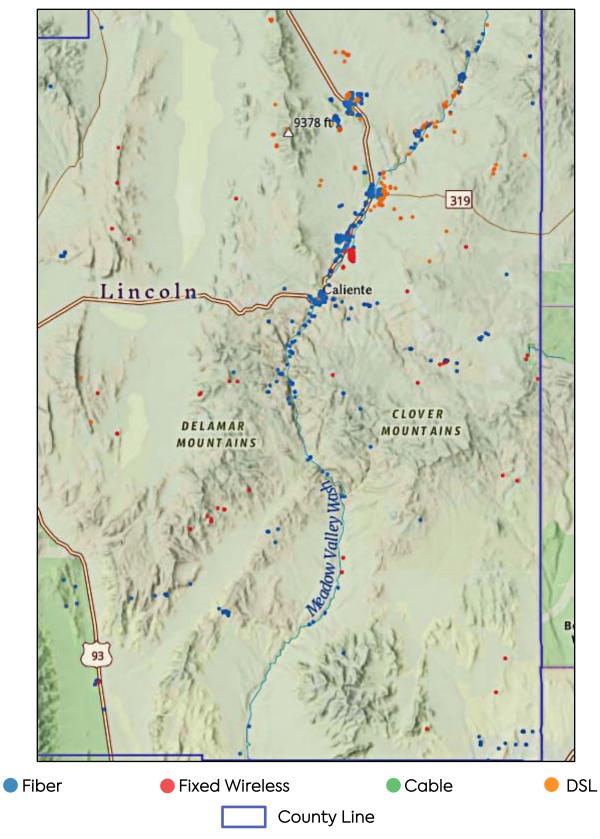


Fiber

## Southwest Lincoln County



### Southeast Lincoln County





he following section provides an overview of results from a broadband survey conducted by the Lincoln County Regional Development Authority between May and June 2022. Altogether, 256 households and businesses across the county responded to the survey. This represents more than 1 in 10 households in the county, with respondents answering from across the county. This is more than sufficient to provide a representative sample of Lincoln County homes and businesses.

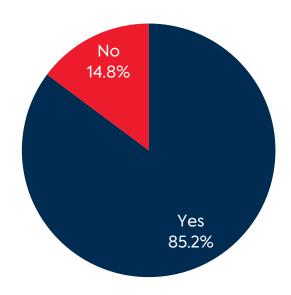
Respondents provided insights into their internet connectivity or lack thereof.

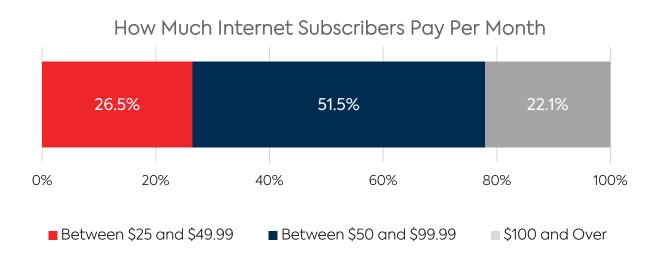
Across the county, approximately 85% of survey respondents reported that they subscribe to internet service.

This includes those subscribing to internet service via all technology platforms.

More than one-half of respondents who subscribe to internet service at their home or business (51.5%) report that they pay between \$50.00 and \$99.99 per month for their internet connection.

Internet Adoption in Lincoln County

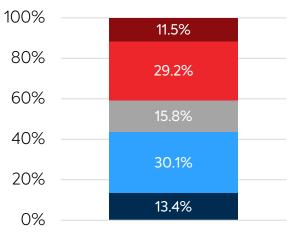




Among those who subscribe to internet service, more than 2 out of 5 (43.5%) say they are either very satisfied or satisfied with their current service. With 15.8% of respondents giving a neutral answer to this question, that leaves 40.7% of internet-connected businesses and homes that reported being very dissatisfied or somewhat dissatisfied with their internet service.

Respondents who said they were very dissatisfied or somewhat dissatisfied were asked why they felt this way. More than two-thirds of these dissatisfied individuals (68.5%) said it was because their current internet service is too slow. Respondents could give multiple reasons for their dissatisfaction.

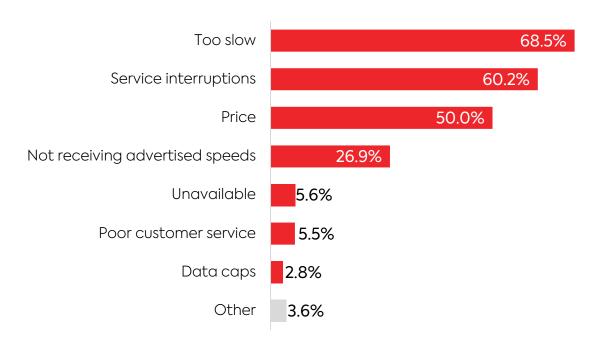
#### Satisfaction with Internet Service



Lincoln County, Nevada

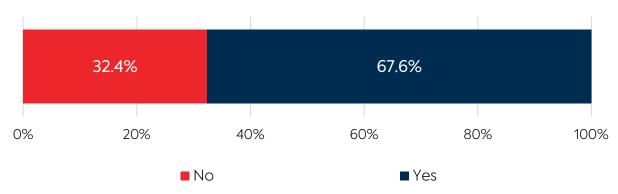
- Very Dissatisfied
- Somewhat Dissatisfied
- Neither Satisfied nor Dissatisfied
- Satisfied
- Very Satisfied

#### Reasons for Dissatisfaction with Internet Service



Businesses voiced unique issues they face with their internet connections. More than 2 out of 3 businesses that responded to the survey (67.6%) said they frequently experience buffering, delays, or interruptions with their connectivity.

Businesses Experiencing Frequent Buffering, Delays, or Interruptions with Their Internet Service

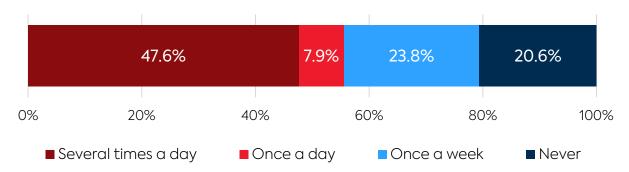


These disruptions can adversely affect business' ability to find and keep online customers, diminishing their potential revenues from online sales.

When asked how frequently Lincoln County businesses experienced these disruptions, nearly one-half (47.6%) said they occur several times a day, while another 7.9% reported experiencing them once a day.

Altogether, nearly 4 out of 5 businesses (79.4%) said they experience some of these issues with their internet service once a week or more.

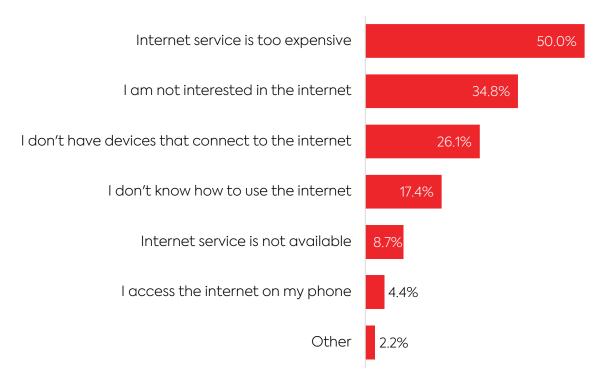
Frequency of Internet Disruptions Such As Buffering, Delays, or Interruptions



Among households and businesses that do not subscribe to internet service, the monthly cost of internet service was the top reason given for not subscribing, cited by one-half (50%) of respondents.

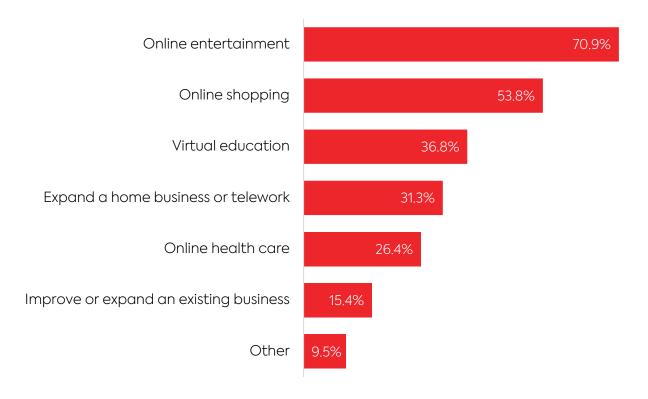
Despite FCC reports that broadband availability is lower than state and national averages, only 8.7% of respondents who do not subscribe to any internet service (fixed or mobile, at any speed) cite a lack of availability as a barrier. Respondents could give more than one answer to this question.





This inability to access, or decision not to subscribe to, high-speed internet service is preventing many Lincoln County residents from doing what they want online. More than 7 out of 10 respondents said that they would go online for entertainment purposes if they could get faster internet speeds. More than one-half would go online for shopping, while more than 3 out of 10 said they would pursue virtual education, work from home, or expand a home business.

How Lincoln County Residents Would Use Faster Internet



These findings indicate that the lack of reliable, affordable high-speed internet service is holding many Lincoln County residents back.





he following recommendations are presented to help Lincoln County expand broadband access, adoption, and usage throughout the county.

Lincoln County faces several unique challenges. Broadband data from the FCC illustrate a community where only 1.45% of residents have access to fixed terrestrial broadband service, defined as internet service via cable, fiber to the home, DSL over phone lines, or fixed wireless connections at download speeds of at least 25 Mbps and upload speeds of at least 3 Mbps. Vast portions of the county are wilderness areas that are part of the National Wilderness Preservation System and managed by the Bureau of Land Management (BLM); between the BLM, the Department of Defense, and the Fish and Wildlife Service, the Federal Government manages approximately 98% of the 10,633 square miles of land area that make up Lincoln County. The average population density in the county is 0.4 people per square mile (compared to the national average of 93.8 people per square mile). Of the respondents surveyed, 85.2% subscribe to an internet service, yet 40.7% of internet-connected businesses and homes reported being very dissatisfied or somewhat dissatisfied with that internet service. These factors combine to create unique challenges to closing the Digital Divide in the county.

While the county has several broadband providers, Lincoln County Telephone System is the only fixed terrestrial internet provider that currently offers fiber connectivity to homes. Expanding internet service to all Lincoln County homes is important for economic growth, community development, and improved quality of life options such as telehealth services and the ability to work from home. That is why Lincoln County is striving to connect every household in the county to broadband service. To achieve this goal, Lincoln County has the opportunity to tap into state and federal funding opportunities, public-private partnerships, and local leadership to bring quality programs to residents, businesses, and community institutions.

#### Goal 1: Support existing broadband leadership in Lincoln County

It is critical that Lincoln County continues to support a dedicated long-term broadband team to ensure that work continues to progress, and the community stays up to date on state, local, and federal broadband happenings. Right now, the LCRDA is working with a team representing a variety of organizations in the community, all dedicated to connecting Lincoln County households with broadband service.

The ad hoc team currently consists of the following members:

- Bevan Lister, Lincoln County Commissioner
- John Christian, Lincoln County Telephone System
- Tracy Lee, Lincoln County IT
- Ben Rowley, Nevada Central Media, LLC
- George Rowe, Grover C. Dills Medical Center
- Dr. Don Deever, University of Nevada Cooperative Extension
- Linda Larsen-Butler, City of Caliente Deputy Clerk
- Jeff Fontaine, Lincoln County Regional Development Authority

Keeping a broadband team like this one informed and involved in broadband decisions will help keep broadband at the forefront of decision making and technological progress to be efficient.

#### Objective:

Support a local broadband team as a point of contact for questions, meetings, and projects.

#### Actions:

Action 1 – Support a broadband team to advance broadband information, deployment, and communication with ISPs and the community. This work has already begun under Jeff Fontaine, Executive Director of the Lincoln County Regional Development Authority (LCRDA). Relying on a local broadband team's leadership and expertise will be important as more opportunities for broadband expansion become available.

Community sectors currently represented on the team include:

- **Health Care** (George Rowe, Grover C. Dills Medical Center)
- Government (Bevan Lister, Lincoln County Commissioner; Tracy Lee, Lincoln County IT; Linda Larsen-Butler, City of Caliente Deputy Clerk)
- **Higher Education** (Dr. Don Deever, University of Nevada Cooperative Extension)
- Community Organizations (Jeff Fontaine, Lincoln County Regional Development Authority)
- Internet Service Providers (John Christian, Lincoln County Telephone System)
- Businesses (Ben Rowley, Nevada Central Media, LLC)

A broadband team can continue to seek ways to expand membership to ensure representation of all the sectors that will benefit from expanded broadband access and usage. This could include individuals representing public safety agencies, libraries, the agriculture sector, education, and others.

**Action 1A –** Define the long-term responsibilities of a broadband team. Tasking a team with specific duties will help ensure long-term success. Duties can include:

- Providing insights into designing and implementing requests for quotes (RFQs)
  for services needed in Lincoln County related to broadband deployment and
  maintenance of owned broadband assets.
- Providing regular updates to local officials such as the county commissioners and county judge.
- Establishing relationships with the current ISPs, such as Lincoln County Telephone Service, and open communication with potential ISPs.
- Monitoring federal and state funding opportunities by attending workshops, webinars, meetings, and general trainings that discuss broadband specifically and telecommunications generally. This will ensure Lincoln County is prepared to take advantage of funding sources as they become available.
- Providing digital literacy and digital skills assistance to the community's at-risk populations.
- Ensuring digital engagement in Lincoln County across all community sectors (telehealth, telework, online learning, Wi-Fi in businesses, etc.).

Action 1B – Identify a grant writer to support the process who can ensure opportunities are not missed. Grant application windows are short and review processes competitive, making it essential for communities to have smart, well-written applications with supporting data ready to go. Should a grant opportunity be identified, Lincoln County should work with a reliable and trusted grant writer who can accurately capture the needs of Lincoln County residents, businesses, and community leaders.

Action 2 – Monitor state and national broadband policy. A broadband team should remain informed and up to date on any publications, events, and policy briefs, particularly those published by the Governor's Office of Science, Innovation & Technology (OSIT) which manages the broadband initiative called High Speed NV. OSIT's goal is to have the state connected by 2029 and make workforce training and digital learning courses available for all. Information can be found at <a href="https://osit.nv.gov/">https://osit.nv.gov/</a>. Lincoln County's broadband team should consider the objectives

laid out by <u>High Speed NV</u> efforts, which can help align local priorities in a way that is complementary to those of the state.

Action 3 – Stay current on funding opportunities. The federal government continues to release new opportunities for funding at a rapid pace. Lincoln County can benefit from these funding programs. Having leaders be prepared to apply for state or federal funds is key to the build-out and digital equity of broadband for all.

#### Funding sources include:

- The Infrastructure Investment and Jobs Act
  - o A minimum of \$100 million will be allocated to the state of Nevada. The state is responsible for developing and distributing these funds.
- Coronavirus State and Local Fiscal Recovery Funds
  - o The U.S. Treasury Department issued its Final Rule on January 6, 2022, expanding the use of funds for broadband.
- Coronavirus Capital Projects Fund (CPF)
  - Under the American Rescue Plan Act of 2021, the CPF provides \$10 billion to eligible governments to carry out critical capital projects that directly enable work, education, and health monitoring.
- Economic Adjustment Assistance
  - The Economic Adjustment Assistance Program, through the EDA, makes \$500 million in grants available to American communities. A wide range of technical, planning, workforce development, entrepreneurship, public works, and infrastructure projects are eligible for funding.

Action 4 – Create a technology portal or website to promote local broadband resources. The website should serve as a one-stop resource for broadband providers, residents, and local leaders. The website should include resources related to digital literacy, digital skills, reduced-cost broadband offerings in the county, public computing centers, and other relevant information for residents and ISPs. Resources could be added to an existing county or city website.

#### Responsible Parties:

Community anchor institutions: libraries, schools, businesses, nonprofits, etc.; internet service providers; local units of government; community residents

#### Timeline:

The ad hoc broadband team has already formed and begun meeting; the expertise of an experienced broadband team will be essential as more opportunities arise to expand broadband in the county.

#### Resources:

- Municipal Boards: Best Practices for Adopting Technology
- Smart Cities Readiness Guide
- Becoming Broadband Ready
- The push to expand rural broadband expands across state government
- How states are expanding broadband access: New research identifies tactics for connecting unserved communities
- Connected Nation: What we do for you
- <u>BroadbandUSA: Federal Funding Guide</u>
- Current broadband funding
- Coronavirus State and Local Fiscal Recovery Funds
- Coronavirus State and Local Fiscal Recovery Funds, County Allocation
- Guide to federal broadband funding opportunities in the U.S.

#### Goal 2: Expand broadband access in Lincoln County

Lincoln County has four fixed terrestrial and three satellite ISPs. Having choices expands offerings and is important to provide consumers with options, which then helps to lower costs, improve services, and encourage ISPs to upgrade their networks. Conversations with ISP representatives suggest that efforts are underway to expand faster broadband service to households, and the primary broadband provider in the county (Lincoln County Telephone) is working closely with the current broadband team to make home internet service accessible to more households. Connected Nation expects to see increased access in the next iteration of the FCC broadband availability map. Exploring opportunities for homes and businesses to get connected, either by expanding the reach of current providers or through competition, will benefit Lincoln County in the long run.

#### Objective:

Leverage the demand for broadband across community institutions to promote investment in broadband services

One of the most important tools that a community can use to improve broadband access is the ability to harness the demand for broadband capacity across community

institutions to leverage their purchasing power. This purchasing power should help increase investment in backhaul and last mile broadband capacity.

#### **Actions:**

Action 1 – Keep ISPs informed about demand for broadband service, as well as the challenges that residents and businesses face. When meeting with ISPs, it is important to share the results of the survey and provide any other information about broadband access, adoption, and usage you have. Among surveyed households and businesses that subscribe to the internet, 40.7% said they were somewhat or very dissatisfied with their current service. Lincoln County Telephone has been actively participating with the Lincoln County broadband team to better serve the community and has been expanding their offered services, which should improve satisfaction rates amongst their customers. The granular local data paints a unique picture that should be used to enrich the quality, type, and location of services offered throughout the community.

Action 2 – Consider public-private partnerships. Public-private partnerships (P3s) take many forms, depending on the needs and resources of each community. The strength in these partnerships is that each party brings something important to the table that the other lacks or cannot easily acquire. For example, Lincoln County can offer infrastructure (e.g., publicly owned buildings, light poles, towers, other vertical assets for mounting fixed wireless or wireline infrastructure) for the deployment of a network, guarantee committed anchor tenants, and provide possible funding sources. Since so much of Lincoln County is maintained by the Federal government, extraordinary steps will be needed to create a sustainable business model to support long-term broadband growth.

- Model 1: Private Investment, Public Facilitation Make available public assets, share geographic information and systems data, and streamline permitting and inspection processes. Offer economic development incentives to attract private broadband investment.
- 2. Model 2: Private Execution, Public Funding Identify revenue streams that can be directed to a private partner. Funding may include appropriated payments from the Coronavirus State and Local Fiscal Recovery Funds established by the American Rescue Plan Act of 2021, the Coronavirus Capital Projects Fund, ReConnect Loan and Grant Program, and several others listed on Connected Nation's website. New revenue streams are likely to become available from the FCC and/or state government.

 Model 3: Shared Investment and Risk — Evaluate how to best use assets to attract private investment, evaluate funding new assets to attract private investment, evaluate building new broadband assets to businesses and/or homes for leasing to private ISPs.

Action 3 – Strategize to develop profitable partnerships and maximize grant opportunities. When working with ISPs, look for opportunities for long-term sustainable partnerships. The landmark Infrastructure Investment and Jobs Act, signed into law in November 2021, promises \$65 billion for broadband. These funds will be used in a variety of ways, but the largest share of money is designated for the Broadband Equity, Access, and Deployment Program (BEAD). BEAD funding will be allocated to states, which will then be responsible for doling it out according to a set plan. As Lincoln County plans for the use of these funds, it is important to consider reliable partners, matching funds, and long-term technology choices.

Action 4 – Provide mapping and field validation of Lincoln County to efficiently direct ISPs to areas of greatest need and increase chances of grant awards. Currently, the most recent broadband information about Lincoln County internet availability comes from the Federal Communications Commission (FCC), and this information is considered by many as problematic in the way it is collected and used. Although the FCC promises to provide better maps soon, it is generally believed there will be many challenges to the information gathered and challenges will take time to sort. More up to date granular availability data can provide better insights into the current state of available broadband service. Having mapping and field validation performed in Lincoln County provides the granularity of internet availability needed to secure funding opportunities. Connected Nation is qualified and available to provide this service.

#### Responsible Parties:

Local units of government, including telecommunication commissions/boards and IT professionals, ISPs, community anchor institutions, and local businesses

#### Timeline:

The ad hoc Lincoln County broadband team has already begun identifying priority areas in the community.

#### Resources:

- Connected Nation: What we do for you
- Promoting transparency and competition in broadband markets

- Broadband expansion will require cooperation
- The BEAD grant dilemma
- The era of the broadband public-private partnership: New trends and opportunities in the wake of COVID-19
- Competition in the broadband markets

# Goal 3: Increase broadband adoption and usage among Lincoln County residents

#### Objective:

While a lack of available broadband service is a barrier for some Lincoln County households, other barriers such as the monthly cost of service, the cost of obtaining internet-ready devices like computers or smartphones, and a lack of digital literacy skills are barriers preventing other households from subscribing. To achieve the county's goal of getting every household connected to broadband, it will be necessary to close these gaps as well.

#### **Actions:**

**Action 1 –** Promote information about programs that help residents overcome the affordability barrier to broadband adoption, including Lifeline and the Affordable Connectivity Program.

- <u>Lifeline</u>: Lifeline is a program the FCC designed to lower the cost of monthly phone and internet service. If eligible, a household can receive a discount of \$9.25 on phone, internet, or bundled services. On qualifying tribal lands, a discount of up to \$34.25 is available.
- Affordable Connectivity Program (ACP): Once known as the Emergency Broadband Benefit, the ACP was made permanent with the passage of the Infrastructure Investment and Jobs Act. The ACP helps qualifying low-income households pay for internet services as well as devices such as a laptop or tablet. The program offers a \$30 monthly subsidy to eligible participants and a onetime \$100 credit for a device. Currently, <u>Lincoln County Telephone</u> is a participating ACP broadband provider.
- <u>Human IT</u>: This nonprofit is dedicated to closing the Digital Divide by providing refurbished devices, internet access, digital skills training, and tech support.

**Action 2** – The Lincoln County broadband team should identify local and regional partners who can assist by offering digital literacy and inclusion training. Digital literacy

is an individual's ability to interact and exchange information via digital platforms. As the name suggests, digital literacy necessitates a level of competency and skill. Curricula can either be designed by local organizations or they can share training designed by organizations such as AARP or the Public Library Association. By providing training focused on digital readiness and inclusion, Lincoln County can equip its citizens for digital immersion and advancement now and in the future.

#### Training topics can include:

- Navigating social media
- Tutorials for websites used by local businesses, government offices, and other organizations
- Online safety tips and tricks
- How to teleconference, take classes online, use telehealth services, or other practical ways of using the internet
- How businesses can create and use websites to promote themselves

#### Community partners can include:

- Institutions and businesses who would directly benefit from greater digital adoption (banks, online business owners, online marketers)
- Economic development organizations such as the LCRDA
- County and school IT directors
- Public safety agencies to teach cybersecurity
- Local ISPs

Action 3 – Develop a strategy for building the digital presence of community anchor institutions (CAIs) in the county. Work with community partners to spread the word about the online resources available from local schools, libraries, and other CAIs. This information should include the various ways residents can digitally interact with CAIs in the county, as well as ways that these institutions can help people access the internet such as through public computing centers or free public Wi-Fi. In cases where CAIs have a limited online presence, seek out assistance and funding to expand their online services. Partner with local media to develop outreach materials that reach critical groups in the community, such as families with children, senior citizens, low-income residents, Hispanic and Latino populations, remote households, and others. Houses of worship are important outreach partners, as well as Chambers of Commerce and other philanthropic partners.

#### Responsible Parties:

Community anchor institutions: schools; ISPs; government agencies; media outlets

#### Timeline:

Promotion of existing opportunities can start immediately while agencies begin preparing to offer training for applications that interest the community.

#### Resources:

- <u>Lifeline</u>
- Affordable Connectivity Program
- Human IT
- NTIA: <u>Celebrating National Digital Inclusion Week and Efforts to Close the Digital Divide</u>
- AARP: <u>AARP Joins with Nonprofit to Teach Tech to Older Adults</u>
- Public Library Association: <u>Digital Learn Curriculum</u>
- Website Setup: How to Make a Website
- Drive Your Learning
- Grow with Google



APPENDIX A

## APPENDIX A

#### Updated FCC Broadband Availability Data

On November 18, 2022, the Federal Communications Commission (FCC) publicly released the first iteration of its newest <u>National Broadband Map</u>. This map represents a change in how the FCC collects and reports broadband availability data. The FCC characterizes this map as a "pre-production draft" that will continue to be a work in progress. This is, however, the first opportunity for the public to review the new broadband availability information and challenge its accuracy.

The map shows broadband serviceable locations as reported by internet service providers (ISPs) through the FCC's Broadband Data Collection (BDC) filings. The initial BDC filings were due from providers to the FCC by September 1, 2022 and represent broadband availability as of June 30, 2022.

This new map shows information about fixed broadband service by service platform (e.g., fiber, cable, DSL, or fixed wireless), and the maximum advertised speed purportedly offered at a given location. Mobile wireless service is shown by technology type (i.e., 3G, 4G LTE, 5G) and is based on <u>standardized propagation modeling</u> <u>parameters</u> used by mobile providers to generate their coverage areas. Whereas previous FCC maps showed broadband availability aggregated to the census block level, this map attempts to show broadband availability to individual buildings.

According to the newest <u>broadband availability data</u>, the following ISPs offer fixed broadband service (cable, DSL, fiber to the home, or licensed fixed wireless) to Lincoln County households at speeds of at least 25 Mbps downstream and 3 Mbps upstream:

PROVIDER	TECHNOLOGY	MAXIMUM DOWNLOAD SPEED (Mbps)	MAXIMUM UPLOAD SPEED (Mbps)
T-Mobile	Licensed Fixed Wireless	25	3
Lincoln Telephone	DSL	25	3
	Fiber	100	20

According to these new data, 78.1% of households in the county can subscribe to home broadband service through Lincoln Telephone, while T-Mobile offers service to 3.8% of

### APPENDIX A

county households. This information is likely to change, though, as households and organizations review the data and challenge the accuracy of the information currently displayed on the map. This challenge process will be ongoing, meaning that this "preproduction draft" of the map will change as users submit challenges.

To challenge the information shown on the map, a user can go to the map's <u>main page</u> and enter in an address. From there, the user will see a list of ISPs who proport to offer service at that location. If the user feels like the fabric information shown on the map is incorrect, they can click on the "Location Challenge" link, provide their information, and submit a challenge. Similarly, if the user believes that the provider information is inaccurate (e.g., an ISP does not, in reality, offer the service or the speeds listed), the user can click on the "Availability Challenge" link and select the provider whose service listing they believe to be naccurate.

The FCC provides guidance on the map and challenges for consumers here: https://help.bdc.fcc.gov/hc/en-us/sections/10467243210651-Consumers-Individuals.

In addition, entities such as state, county, and local governments, tribal governments, and ISPs can submit bulk challenges to the map, challenging multiple addresses simultaneously. These entities can also submit bulk crowdsourced data, which the FCC can use to verify and supplement the information presented on the maps.

The FCC provides guidance and a number of resources for bulk challengers here: <a href="https://help.bdc.fcc.gov/hc/en-us/categories/8772052687003-Challenge-Processes">https://help.bdc.fcc.gov/hc/en-us/categories/8772052687003-Challenge-Processes</a>.

The FCC also released two video tutorials related to this bulk challenge process:

- This video provides an overview of the fixed bulk availability challenge process
- <u>This video</u> walks filers through the process of submitting bulk fixed availability challenge data