

# **Baseline Assessment**

# **Broadband Assets of the Central Nebraska Region**

May 2023



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# BROADBAND ASSETS OF THE CENTRAL NEBRASKA REGION May 2023

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# IV. Executive Summary

The Central Nebraska Economic Development District ("CNEDD") is participating in the State Digital Equity Planning Grant Program (Program) offered through the National Telecommunications and Information Administration (NTIA), U.S. Department of Commerce's Notice of Funding Opportunity (NOFO), Funding Opportunity Number NTIA-DE-PLAN-2022, issued for the State Digital Equity Planning Grant Program, authorized by Section 60304(c) of the Infrastructure Investment and Jobs Act of 2021, Public Law 117-58, 135 Stat. 429 (November 15, 2021) (Infrastructure Act), also commonly known as the Bipartisan Infrastructure Law. This Program is one of three new broadband programs established by the Infrastructure Investment and Jobs Act (IIJA) to promote digital inclusion and equity.

The intent of the Program is to ensure that all individuals and communities have the skills, technology, and capacity needed to reap the full benefits of our digital economy. The Program provides federal funding for states to develop their own State Digital Equity Plan to, among other things, identify barriers to digital equity and outline specific measures aimed at addressing those barriers. The vision for the Nebraska Digital Equity Plan is to ensure that Nebraskans have access to affordable, quality broadband and the skills to utilize digital technologies.

There are eight economic districts within the State of Nebraska. Each district will address and identify that individual region's digital technology needs and goals for the development of their regional digital equity plan. Each regional plan will then be incorporated into the Nebraska State Digital Equity Plan. CNEDD is developing the regional plan for the Central Nebraska Region (Region). Thereafter, CNEDD will be able to participate in the State Digital Equity Capacity Grant Program to implement the State Digital Equity Plan as it pertains to the Region.

In order to prepare its regional digital equity plan, to ascertain what barriers and needs there may be in achieving digital equity, CNEDD conducted a regional asset inventory to address the following aspects:

- 1. Internet. Having access to internet that is affordable, sufficient, and reliable enough to obtain necessary resources and both download and contribute content online.
- 2. Digital Skills & Tech Support. The knowledge and skills required to use the equipment, applications, and internet effectively with training and support provided in a culturally appropriate manner.
- 3. Devices. The computers and accessories necessary to be productive, create content, and participate (homework, job application, reading, etc.).
- 4. Applications & Services. Including diverse users in the design and rollout of services while considering placement, outreach, training, user controls, privacy, universal design, and language.

CNEDD conducted a further asset inventory specific to the "Covered Populations" within its Region. Pursuant to the NOFO, Covered Populations are defined as:

1. Individuals who live in covered households. The term "covered household" means a household, the income of which for the most recently completed year is not more than 150 percent of an amount equal to the poverty level, as determine by using criteria of poverty establish by the Bureau of the Census;

- 2. Aging individuals;
- 3. Incarcerated individuals, other than individuals who are incarcerated in a Federal correctional facility;
- 4. Veterans;
- 5. Individuals with disabilities;
- 6. Individuals with a language barrier, including individuals who:
  - a. Are English learners; and
  - b. Have low levels of literacy;
- 7. Individuals who are members of a racial or ethnic minority group; and
- 8. Individuals who primarily reside in a rural area.

The purpose of this Baseline Assessment is to quantify, qualify, analyze, and interpret the data gathered from the asset inventory to assess and make apparent, truly what the technological barriers and needs are specific to the Region. This assessment will assist in setting a road map to identify and set strategic objective measurable goals for the regional digital equity plan to ensure that all individuals and communities within the Region, including the most disadvantaged, have the capacity and opportunity for achieving digital equity.

The Baseline Assessment herein clearly indicates not only are there numerous digital gaps for Covered Populations within the Region, rather, there are significant foundational digital divides.

# 1. Internet.

Actual, locational broadband speed tests were conducted throughout the Region which Identified the average broadband speeds were 22.9 Mbps/10.0 Mbps

The Central Nebraska Region has the greatest deficient percentage in the State of Nebraska of households without internet access, without cellular data plans, and without home or mobile broadband service.

Broadband speeds, especially mobile cellular data, are not adequate enough to efficiently support Precision Agriculture within the Region.

There are 25 libraries within the Region's 61 communities that offer internet access to the public.

There are 6 senior centers within the Region's 61 communities that offer internet access to the senior citizens.

There are 20 community centers within the Region's 61 communities that offer internet access to meeting and event patrons.

An average of four percent (4%) of the Region's households are enrolled in the Affordable Connectivity Program

# 2. Digital Skills & Tech Support.

There are four campuses within the Region that offer digital skills and tech tutoring. Three of which offer those classes occasionally.

General Tech support is found within seven (7) of the Region's sixty-one (61) communities.

Significant lack of opportunities for acquiring digital skills and tech support with the Region.

### 3. Devices.

There are only 5 vendors within the Region that sell new digital devices and only one that offers a variety digital devices to include laptops, desktops, monitors.

There are 26 libraries within the Region's 61 communities that offer public access to a device, 12 of which have notably old, outdated and some nonfunctioning devices. One of the 12 libraires offers use of a computer though there is no broadband service.

There are 2 senior centers within the Region's 61 communities that offer seniors access to a desktop computer, which are notably old.

There are 2 community centers within the Region's 61 communities that offer use of Smart TV/Flatscreens to meeting and event patrons. There is no community center within the Region that offers public access to computers.

There is there no affordability program available that could be identified for digital devices specifically for the disabled adults within the Region. The developmentally disabled adults may receive as little as \$914 per month from Social Security which does not sustain the necessities let along a subscription to digital technology.

# 4. Applications & Services.

Representative organizations for ethnic and racial minorities, as well as adults with language barriers, could not be found within this Region.

Services for other Covered Populations are logistically inefficient.

There is no public transportation within the entirety of the Region in which to access significant support services.

This Baseline Assessment identifying the technological assets, barriers and needs of the Central Nebraska Region is based upon the best information available from the resources identified in the Appendices referenced herein.

# V. Regional Demographics

# A. Introduction of Overall Regional Demographics

The Central Nebraska Region (Region) encompasses fourteen (14) counties, to include the counties of Blaine, Boyd, Brown, Cherry, Custer, Garfield, Greeley, Holt, Keya Paha, Loup, Rock, Sherman, Valley, and Wheeler. This Region of Nebraska covers twenty-two per cent (22%) of the state, 18,613 square miles, and is a unique Region in its topography, rural character, and simplicity.

The greatest portion of the Region supports an ecosystem called the Sandhills, often written Sand Hills, a Region of mixed-grass prairie on grass-stabilized sand dunes which was designated a National Natural Landmark in 1984. You'll find that the topography of the area is anything but flat. With dunes that are as high as four hundred (400) feet, as long as twenty (20) miles, and slopes as steep as twenty-five percent (25%), the Sandhills are the largest sand dune formations in the Western Hemisphere and one of the largest grass-stabilized dune regions in the world.

The economic sustainability of this Region is dependent upon its agricultural landscape. Farms and ranches cover this Region's territory and produce 23% of the state's cattle and 13% of its corn. Seasons can often be turbulent with snowstorms, significant ice, floods, tornadoes, hailstorms, wild winds, and droughts. Agricultural operators here are well aware of the challenges and effects of mother nature.

The Region has a population of 45,546 individuals within 19,093 households. There are sixty-one (61) communities, to include fifty (50) villages and eleven (11) cities. Residents of the villages range from one (1) resident in Monowi to six hundred (600) residents in the largest village. The smallest city has three hundred and five (305) residents. There are two (2) cities with over three thousand (3,000) residents, with the largest city having 3,537 residents. The entirety of the Region supports a rural populous.

You will find two-lane highways and no public transportation opportunities here. No big box stores even in the cities and limited eateries and social venues in the communities, if any. What you will find are hardy, industrious, family-oriented people, who wear many hats, proud of their independence and self-sustainability.



Map 1: Central Nebraska Region

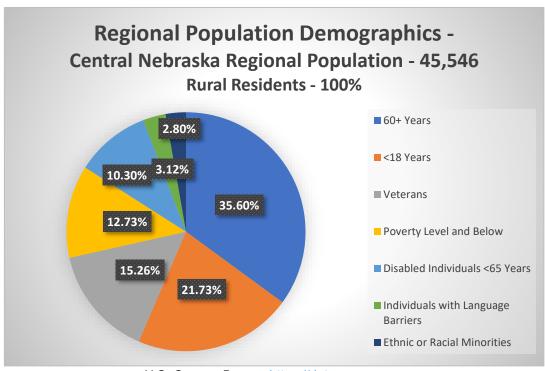
# B. Regional Demographics of the Covered Populations

The Region has a population of 45,546 individuals within 19,093 households. The Regional demographics of the Covered Populations are:

Rural Residents	100%
Individuals 60 years old (+)	35.60%
Individuals at Poverty Level or below	12.72%
Individuals with a Disability under the Age of 65	10.3%
Veterans	15.26%
Members of Ethnic and Racial Minorities	2.8%
Individuals with Language Barriers	3.2%

Figure 1: Regional Demographics of the Covered Populations

The median household income is \$53,864 (2021 Dollars) and the per capita income is \$30,950 (2021 Dollars).



U.S. Census Bureau https://data.census.gov

Figure 2. Central Nebraska Regional Demographics

# VI. Asset Inventory

# A. Internet

# 1. Availability & Affordability of Fixed and Wireless Broadband

There are twenty-six (26) Internet Service Providers (ISPs) within the Region. A few ISPs provide more than one broadband service type in different areas. We have twelve (12) ISPs that provide fiber optic broadband; Four (4) ISPs that provide broadband through fixed wireless devices; Nine (9) ISPs that provide broadband service through the copper phone lines, Digital Service Line (DSL); Five (5) ISPs provide service through cable lines; and Two (2) ISPs offer broadband through satellites.

**Broadband Services Offered** 

# Fiber Optic DSL Cable Fixed Wireless Satellite

Figure 3: Regional Broadband Services Offered

The ISPs advertise broadband speeds that range from 6Mbps/1Mbps to 2.3G with Fiber in Valentine. There are six (6) ISPs within the Region more specifically offering mobile cellular service with advertised broadband speeds ranging from 15Mpbs to 5G. Please see *Appendix: A Central Nebraska Region's Asset Inventory Workbook, Tab A.2* 

Nebraska Regional Official's Council conducted actual, locational broadband speed tests throughout the Region which identified overall average broadband speeds were 22.9Mbps/10.0 Mbps. Please see *Appendix B: Nebraska Broadband Speed Test Results (2021) for the Central Nebraska Region, Nebraska Regional Official's Council.* 

The Nebraska Power Service Commission (PSC) developed a broadband map database identifying speed tiers for projects that have been funded. A significant amount of this Region is within the speed tier of 25Mbps/3Mbps and the speed tier of 100Mbps/20Mbps is limited. The locations of speed tiers of 25Mbps/3Mbps and 100Mbps/20Mbps for the entire Region are identified in *Appendix C: Nebraska PSC Broadband Regional 25Mbps/3Mbps Speed Tier Maps and Appendix D: Nebraska PSC Broadband Regional 100/Mbps/20Mbps Speed Tier Maps*.

The price of residential broadband service ranges from \$19.95 per month for a base subscription plus usage to \$199.00 per month. Some of the ISPs offer bundle packages of services, to include mobile cellular service. Mobile cellular service averages \$45 per month.

There are approximately 19,093 households within the Region, 17% percent of those households have No internet subscription; 31.9% of those households have No cellular data plan; 47.7% of all households within the Region are without home or mobile broadband service.

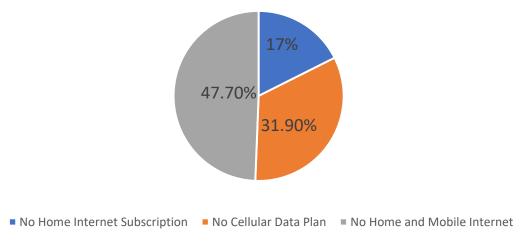


Figure 4: Regional Households without Home and Mobile Broadband Service

The Central Nebraska Region has the greatest deficient percentage in the State of Nebraska of households without internet access, without cellular data plans, and without home or mobile broadband service.

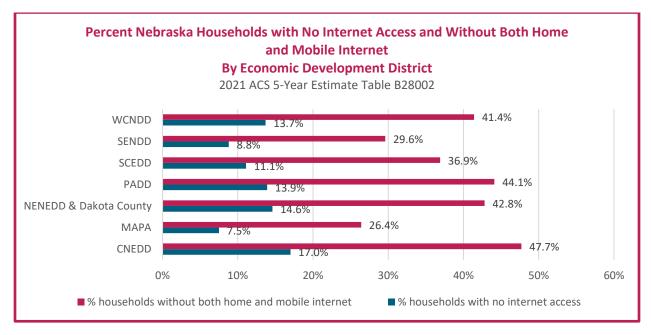


Figure 5: Nebraska Digital Equity Benchmark Data, January 17,2023 Percent of Households by Modes of Internet Access, 2021 ACS 5-Year (Table B28002)

# 2. Affordability Programs & Opportunities

There are two affordability programs for subscriptions to broadband service, the Affordable Connectivity Program (ACP) and Lifeline, both of which are sponsored by the Federal Communications Commission (FCC).

ACP offers, to eligible applicants, a \$30 discount for internet service. The criteria for an individual's eligibility is if the household income is at or below 200% of the Federal Poverty Guidelines or if a member of the household meets at least one of the criteria: Supplemental Nutrition Assistance Program (SNAP), or Medicaid, Federal Public Housing Assistance (FPHA), Veterans Pension and Survivors Benefit, Supplement Security Income (SSI), WIC, or Lifeline, any Trial TANF, or Head Start program, participates in Free and reduced price School Lunch or Breakfast Programs, Received a Federal Pell Gant during the current award year or meets the eligibility criteria for a participating broadband providers' existing low-income internet program.

Lifeline offers, to eligible applicants, \$9.25 off mobile broadband or residential broadband service. The criteria for an individual's eligibility are if one participates in any one of the following: Supplemental Nutrition Assistance Program (SNAP), or Medicaid, Federal Public Housing Assistance (FPHA), Veterans Pension and Survivors Benefit, Supplement Security Income (SSI) or if an individual's income is at or below 135% of the federal poverty guidelines.

Eligible individuals may participate in both programs.

Within the Region, there are fourteen (14) ISPs who offer ACP, nine (9) of which offer Lifeline. A little over one-half (1/2) of the ISPs offer these affordability programs. Please see Appendix A: Central Nebraska Region's Asset Inventory Workbook, Tab A.1.

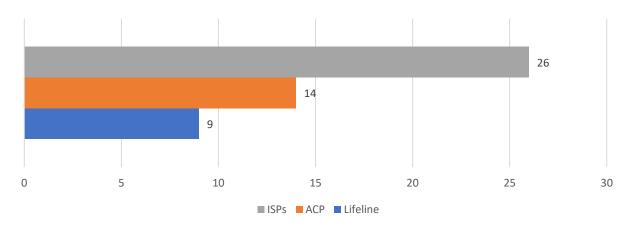


Figure 6: Affordability Programs Offered by ISPs

An average of four percent (4%) of the Region's households are enrolled in the Affordable Connectivity Program.

# Affordable Connectivity Program Enrollment Percent of Eligible Households Jan. 2023

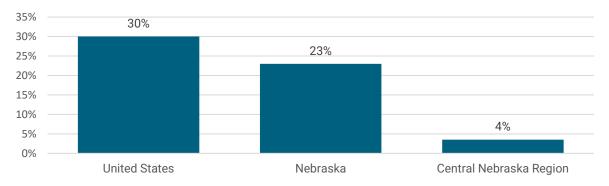


Figure 7: Education SuperHighway ACP Enrollment Dashboard, County ACP Enrollment Estimates – Oliver Borchers-Williams, SENDD, American Community Survey 2021 5-Year Estimate Tables B28002, B28001, S 2802 and B 28004.

# 3. Public Access to Internet

Within the region, there are a few, very few, cafes, gas stations or courthouse parking lots where the public can access internet. The main public venues within this Region where an individual may have the opportunity of accessing the internet would be community libraries, senior centers and perhaps community centers.

# a. Libraries

Out of the sixty (61) communities within the Region, a little over one-half (1/2) of the communities have a library. There are thirty-one (31) libraries. The services of the Region's libraries range from offering a couple of shelves of books received from donations that may be shared with community residents to libraries who are embracing Makerspaces provided through grant funds. There is at least one (1) library offering an ADA desktop computer station. Two (2) counties, Blaine County and Wheeler County have no libraries. Six counties, Brown, Cherry, Garfield, Keya Paha, Loup, Rock, have only one library within the entire county. Cherry County offers a book mobile for outreach for community residents.

Twenty-five (25) of the Region's libraries offer internet access to the public for free, except for one which charges five (5) cents per minute. Ten (10) of the libraries are certified by the Nebraska Library Commission, Ainsworth, Atkinson, Bassett, Broken Bow, Burwell, Loup City, O'Neill, Ord, Scotia and Valentine. The majority of the libraries are operated through the generosity of volunteers and open on variable days at variables times.



Map 2: Regional Libraries Certified by Nebraska Library Commission

One (1) library, Litchfield Public Library, accesses broadband from a hotspot on a water tower; nine (9) of the libraries have broadband service through cable, Arnold, Ansley, Sargent, Burwell, Greeley, Scotia, Ewing, Arcadia and Ord; two (2) of the libraries, access broadband through DSL, Taylor and North Loup; and thirteen (13) libraries access broadband service through fiber optic lines, Butte, Lynch, Spencer, Ainsworth, Valentine, Broken Bow, Callaway, Merna, Atkinson, O'Neill, Stuart, Springview, Loup City. Broadband speeds range from 5mg/1Mbps, several having 25mbps/5-10mbps to one library having 1GB, Spencer.

Eleven (11) of the twenty-five (25) libraries are receiving discounts for their broadband service through the E-Rate Universal Service Program sponsored by the FCC. The cost of broadband service to those libraries ranges from \$5 per month with an E-Rate discount to \$150 per month with an E-Rate discount. The libraries who are not participating in the E-Rate Program incur monthly costs that range between \$28 per month up to \$150 per month. There are six (6) libraries within the Region that do not pay for internet service. Five (5) of them are supported by the community funds and/or part of a collaborative agreement with an ISP. One library serves as both a school and public library facility and is funded through the Public School District's budget. Please see *Appendix A: Central Nebraska Region's Asset Inventory Workbook, Tab A.6.a.* 

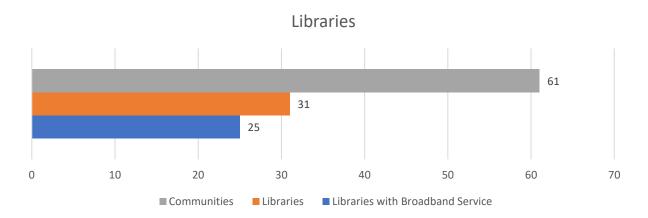
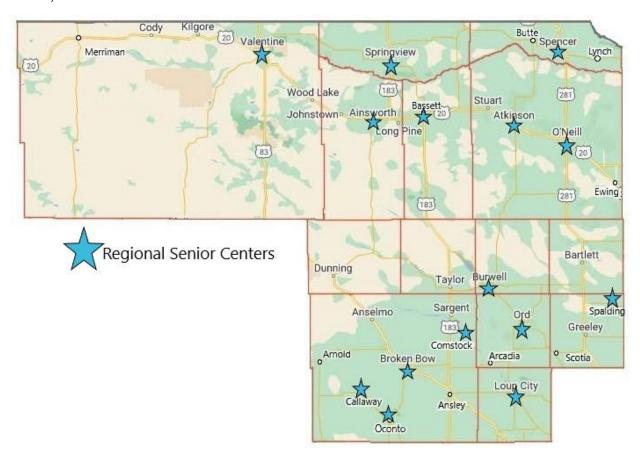


Figure 8: Regional Libraries with Broadband Service

# b. Senior Centers

Out of the sixty (61) communities within the Region, one-quarter (1/4) of the communities have a senior center. There are fifteen (15) senior centers. Out of the fifteen (15), ten (10) of the senior centers have subscribed to broadband service and six (6) out of those ten senior centers offer internet access to the seniors. Two (2) of the Region's counties have no senior center, Blaine and Wheeler.



Map 3: Regional Senior Centers

Five (5) of the ten (10) senior centers receive broadband service through fiber optic lines, Comstock, Loup City, Spencer, Springview, and Valentine; one (1) senior center has fixed wireless broadband service, Atkinson; and the other four (4) senior centers have cable service, Ainsworth, Broken Bow, O'Neill, and Bassett. Broadband speeds range from 10Mbps/1Mbps to almost 100 Mbps/100Mbps.

The cost of broadband service to the senior centers ranges from \$41.55 per month to \$128.00 per month, both are bundled price packages. Please see *Appendix A: Central Nebraska Region's Asset Inventory Workbook, Tab A.6.b.* 

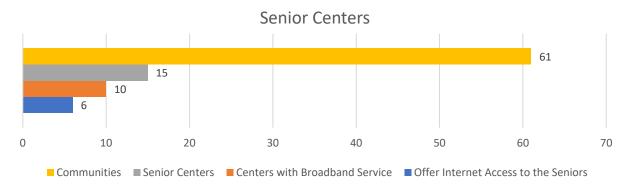


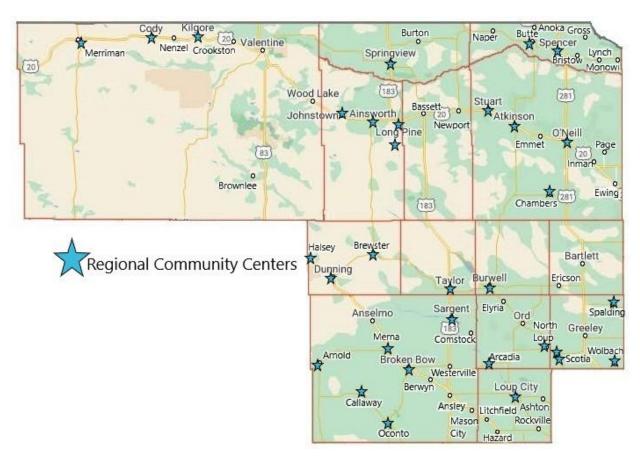
Figure 9: Regional Senior Centers with Broadband Service

# c. Community Centers

The community centers within the Region all serve mainly as event venues for rental rather than activity centers. Though some of the community centers are located in old, shut down schools and have an auditorium that may be used for recreational activities, namely for school children.

Out of the sixty (61) communities within the Region, just less than one-half (1/2) of the communities have a community center. There are thirty-two (32) community centers. Two (2) of the communities have two (2) community centers, Long Pine and Scotia. Out of the thirty-two (32) community centers, twenty (20) offer internet access to event patrons. We have one (1) community center that offers internet access to the public, if need be. The community center in Cody has a hotspot on the village water tower and would like to offer internet access to meeting and event patrons and the public, though the reception is so unreliable and spotty, you can't open a web page.

Nine (9) of the community centers receive broadband service through fiber optic lines, Butte, Spencer, Ainsworth, Broken Bow, Callaway, Oconto, Atkinson, Springview, Loup City; two (2) community centers have fixed wireless broadband, O'Neill and Stuart; six (6) community centers have DSL service, Dunning, Halsey, Merriman, Merna, Scotia and North Loup; three (3) community centers have cable service, Sargent, Johnstown and Arnold. Broadband speeds range from 10Mbps/1Mbps to almost 100 Mbps/100Mbps.



Map 4: Regional Community Centers

The cost of broadband service to the community centers ranges from \$40 per month to \$273.00 per month reported in Loup City. There are five (5) community centers that have no cost for broadband service, as those centers are either financially supported through the community's budget and/or part of a collaborative agreement between the community and an ISP. Appendix A: Central Nebraska Region's Asset Inventory Workbook, Tab A.6.c.

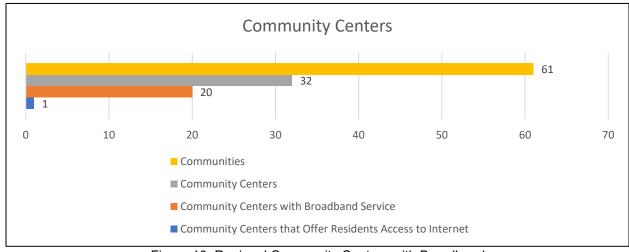


Figure 10: Regional Community Centers with Broadband

# B. Digital Skills & Technological Support

# 1. Availability & Access to Digital Skills and Literacy Training

There are three (3) community colleges within the Region that offer digital skills and literacy training classes located at four (4) campuses to include, Central Community College in Ord, Mid Plains Community College with two campuses, one located in Broken Bow and the other in Valentine, and Northeast Community College located in O'Neill. Northeast Community College offers classes each semester and accommodates students speaking Spanish who are learning English. Classes are available both in person and online. Extended learning classes range in cost from \$30 to \$70. The cost of credited classes can be \$120 per credit hour.



Map 5: Regional Community Colleges

Regional residents often use YouTube tutorials or Google for assistance and guidance for digital skills and technological support. Some residents seek assistance from staff members at community libraries, senior centers, and public schools.

A few of the community libraries within the Region, ever so often, offer a digital skills class which is moreover geared towards seniors.

To date, senior centers within the Region have not offered any digital skills classes, though there appears to be a desire. Seniors may also take online courses through AARP's Senior Planet program which offers online digital skills classes at no cost. One of the Region's communities started a Seniors Helping Seniors program. In a collaborative effort between the Rock County senior center and local high school, the program provides the opportunity for high school seniors to assist and socially interact with senior citizens by teaching digital skills while also providing social interaction and an educational opportunity for the senior citizens. *Appendix A: Central Nebraska Region's Asset Inventory Workbook, Tab A.4.* 

# 2. Availability & Affordability of Technological Support

There are nine (9) companies who offer technological support and device repair at a physical location within the Region. General Tech support is found within seven (7) of the Region's sixty-one (61) communities.



Map6: Regional Tech Support Companies

One (1) of the companies has four (4) franchises within the Region that specifically support mobile phone devices. There is one (1) company that specifically provides businesses with IT support and one (1) company that specifically supports precision agricultural.

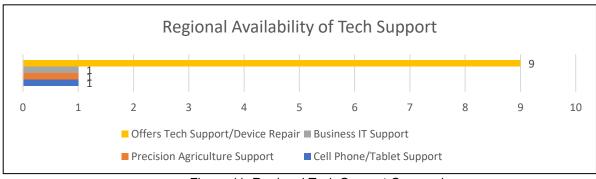


Figure 11: Regional Tech Support Companies

Five (5) of the technological support companies offer support online and four (4) of which also offer support by phone.

The cost for technological support averages around \$70 per hour. Tech support for businesses can be up to \$130 per hour or more. Individuals within the Region may travel an average of 60 to 100 miles or more to access support services and device repair.

As with acquiring digital skills, regional residents often use YouTube tutorials or Google for assistance and guidance on Tech challenges and support. Also, some individuals within the Region seek assistance from members of the staff at community libraries, senior centers, and public schools. *Appendix A: Central Nebraska Region's Asset Inventory Workbook, Tab A.4.* 

# C. Devices

# 1. Availability & Affordability of Devices

Within the Central Nebraska Region, there are five (5) vendors who sell new digital devices. Three (3) of those vendors specifically sell mobile phone devices offered at franchises within eight (8) of the Region's communities. One (1) vendor sells mobile phone devices and tablets at four (4) of the eight (8) locations. Subject to availability, two (2) of the above vendors offer refurbished mobile phone devices for sale. When upgrading and purchasing new equipment, at least one (1) of the school districts within the region offer their used and older digital devices that are being replaced for sale to the public.

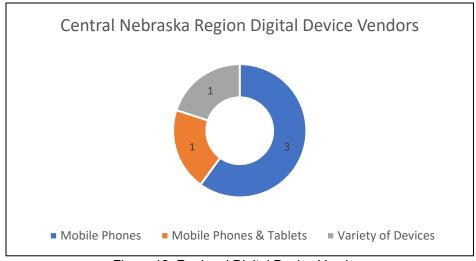


Figure 12: Regional Digital Device Vendors

There is only one retail vendor within the Region, located in O'Neill, where an individual can purchase a variety of digital devices to include cell phones, desktop computers, monitors, laptops, tablets, flat screen televisions, etc.

# **Digital Device Purchase Storefront Locations**

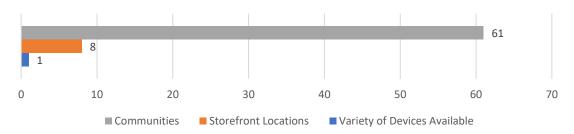
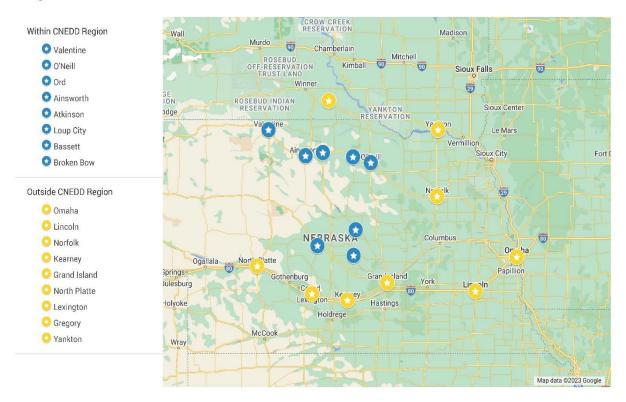


Figure 13: Regional Digital Device Stores

# **Digital Device Store Locations**



Map 7: Digital Device Store Locations

A few of the technological support companies within the Region assist residents with purchasing devices and will order those devices for them. Other options residents have for purchasing digital devices are online purchasing or traveling outside the Region averaging 60 to 100 miles, though some residents travel as far as Omaha or out of state to South Dakota.

The cost to purchase mobile phone devices ranges from \$4.99 for a TracFone to \$1,800 for a Smartphone. The cost and affordability of purchasing digital devices varies greatly as there are so many different devices, especially given the consideration of new versus refurbished devices, limited storefront purchasing options, logistic constraints and expenses, online purchasing options, and bundling options with ISPs.

Eligible applicants may apply for the Affordable Connectivity Program (ACP) which offers a \$100 discount for the purchase of either a laptop, desktop computer or tablet. There's an affordability program for Veteran's called Heroes with Hearing Loss sponsored by Hamilton CapTel which offers captioned telephones for Veterans at no cost. *Appendix A: Central Nebraska Region's Asset Inventory Workbook, Tab A.3.* 

Within the Region's 19,093 households, 12.7% of those households have no digital device whatsoever and 29.1% percent of the Region's households have only one device or no device. The Central Nebraska Region has the greatest deficient percentage of households in the State of Nebraska having either no digital device or having only one digital device.

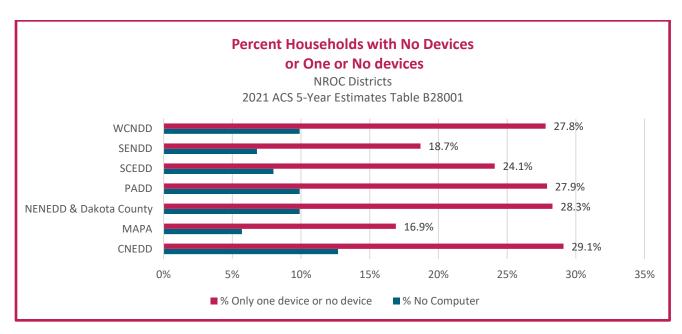


Figure 14: Nebraska Digital Equity Benchmark Data, January 17,2023 Percent of Households by With One or No Devices, 2021 ACS 5-Year (Table B28002).

### 2. Public Access to Devices

The public venues within this Region where an individual may have the opportunity of accessing a digital device would be community libraries, senior centers and perhaps community centers.

### a. Libraries.

There are thirty (31) libraries within the Region. A little over half (1/2) of the sixty-one (61) communities have a library. Out of the thirty-one (31) libraries, twenty-six (26) of those

libraries offer public access to devices. Twelve (12) of those libraries have notably old, outdated and some nonfunctioning devices. One (1) of the twelve (12) libraries offers use of a computer with a word processing application and a printer though has no broadband service. *Appendix A: Central Nebraska Region's Asset Inventory Workbook, Tab A.6.a.* 

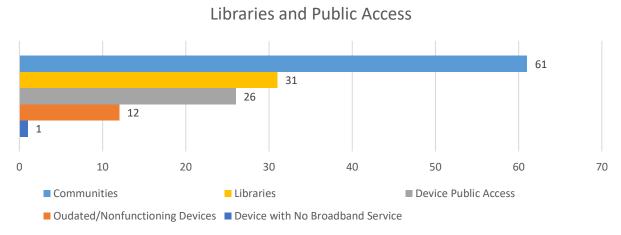


Figure 15: Regional Libraries offering Public Access to Devices

# b. Senior Centers.

There are fifteen (15) senior centers within the Region. One quarter (1/4) of the sixty-one (61) communities have a senior center. Out of the fifteen (15) senior centers two (2) of them offer use of notably old desktops, one (1) senior center offers the seniors use of a printer/scanner/copier, and two (2) senior centers occasionally, if need be, offer use of the senior center's office devices. *Appendix A: Central Nebraska Region's Asset Inventory Workbook*, *Tab A.6.b.* 

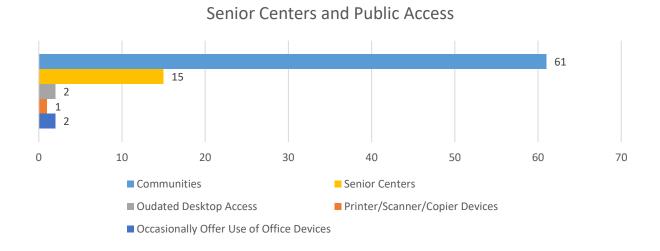


Figure 16: Regional Senior Centers Offering Public Access to Devices

# c. Community Centers

There are thirty-two (32) community centers within the Region. Just less than one-half (1/2) of the sixty-one (61) communities have a community center. Two (2) of the communities have two (2) community centers, Long Pine and Scotia. Out of the thirty-two (32) community centers, (2) of the community centers have Smart TV/Flatscreens available for use by meeting and event patrons, Atkinson and O'Neill. There is no community center within the Region that offers public access to computers or other such digital devices. *Appendix A: Central Nebraska Region's Asset Inventory Workbook, TabA.6.c.* 

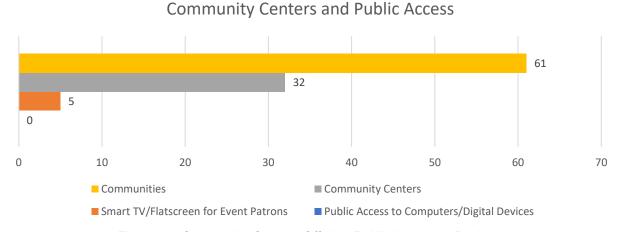


Figure 17: Community Centers Offering Public Access to Devices

### D. Applications & Services

### 1. Precision Agriculture for Farmers and Ranchers

There is a need and desire for the capability and expansion of Precision Agriculture in the Region. Farmers are given insights they have never seen before by collecting and analyzing data. The advantage of Precision Agriculture has increased yields 10 to 15% within the Region. Equating to an increase of 23 bushels per acre. Twenty percent (20%) of the farmers embracing Precision Agriculture tools and methods are utilizing it to full capacity.

There are many digital devices that support precision agriculture. For Farmers there are combines which may have 25 to 30 computers built in, planters with GPS equipment, guidance systems for center pivot irrigation, moisture monitors, cameras, and measurement devices in grain bins. For Ranchers, there are cameras to monitor the herds, virtual fencing, feedlots with auto feeders and Fitbits for cattle.

There are two key elements requisite for the success of Precision Agriculture which are quality broadband service and training.

Unfortunately, the cellular quality of broadband services within this Region is not enough for Precision Agriculture to be fully functionable. The ability for farmers and ranchers to upload their data on limited broadband can take hours. To upload one file of data with 10Mbps takes a good hour or more to upload. Even with 100Mbps it can take one file of data ten minutes to upload. The GPS units farmers use aren't accurate enough because mobile cellular service is so poor

within the Region. If the broadband was better there would be an opportunity for remote access capability for technological support. Many of the devices offer remote capability for access to technological assistance and support.

Training on how to use the equipment, upload the data, and analyze the same, is limited. The dealerships that sell the equipment provide some training opportunities. There is one tech support company within the Region specializing in Precision Agriculture support.

Applications and portals for data uploads present security challenges and the need for cyber-security.

# 2. Technological Assistance for Individuals 60 years old (+)

The Nebraska Area Agencies on Aging(AAA) and the Aging & Disability Resource Centers (ADRC) are organizations available through the Nebraska Department of Health and Human Services. There are two (2) regional offices that oversee the Region, which are in Kearney and Norfolk, outside of the Region. The AAA and the ADRC serve Nebraskans aged 60 years or older, people with disabilities of all ages, family members, caregivers, and advocates. The AAA refers individuals in need of further assistance to the ADRC. Local ADRCs provide information, referral, and assistance for accessing community services and long-term care options. ADRC conducts assessments of needs on an individual basis, to include access to devices, broadband, and visual/hearing needs. Some of the applications and devices that are recommended for safe and independent living of the elderly are:

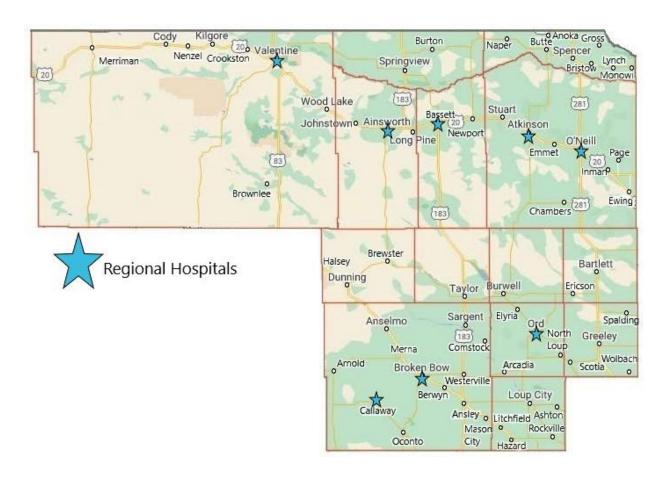
Fall Devices such as MedScope, which provides fall technology and emergency alerts/responses, offered as a watch or necklace, and works through a cell phone application. There is Medicaid eligibility for elderly fall devices; and

Text to Talk, a/k/a/ Read Aloud, Read & Write applications and devices; and

Smart Home/Echo Devices for assistance in the home.

There is no affordability program available that could be identified for digital devices specifically for individuals 60 years old (+).

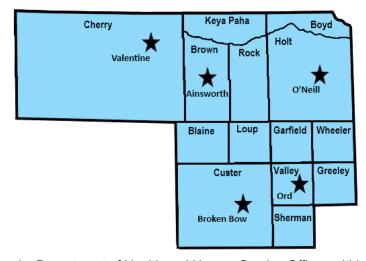
There are eight (8) hospitals in the Region that assist with Telehealth appointments for individuals, though most especially for the elderly. The Hospitals offer to schedule appointments and assist patients who may not have access to internet, or a device or lack digital skills. Hospitals also assist those who do have access to technology and just need assistance navigating the application portal for the telehealth appointment. *Appendix A: Central Nebraska Region's Asset Inventory Workbook, Tab B.1.* 



Map 8: Regional Hospitals

# 3. Device Access for Individuals in Low-Income Households for Financial Assistance

The Nebraska Department of Health & Human Services has five (5) offices within the Region located in Ainsworth, Broken Bow, O'Neill, Ord and Valentine.



Map 9: Nebraska Department of Health and Human Service Offices within the Region

Each regional office offers use of a computer to low-income individuals who are seeking financial assistance and who need to apply for public assistance programs. Use of the computer is restricted and only available for applying for those specific public assistance programs. The staff offers assistance in navigating through the online application process. *Appendix A: Central Nebraska Region's Asset Inventory Workbook, Tab B.2.* 

# 4. Specialized Technological Programs for Individuals with a Disability

The Nebraska Education Service Units in collaboration with the Public School Systems provide and support a Special Education Program for children with disabilities attending public schools. A special needs assessment of a child's skill level and needs is conducted. Education, to include digital skills and literacy training, is tailored to the child's special needs. Children and youth with disabilities are provided educational services and specialized technological devices through the age of 21.

The Aging & Disability Resource Center (ADRC), through the Nebraska Department of Health & Human Services provides additional oversight for children and adults with disabilities. The ADRC provides information, referral, and assistance for accessing community services and also conducts assessments of needs on an individual basis, to include access to devices, broadband, and visual/hearing needs. There are two (2) regional offices that oversee the Region, which are in Kearney and Norfolk, outside of the Region.

The League of Human Dignity Waiver Office (League) also provides support for disabled adults. There are four regional offices that provide oversight to the Region which are located outside the Region in Norfolk, Kearney, North Platte, and Scottsbluff. The League provides independent living advocacy, education, awareness, living design, barrier assessments to include digital device needs assessments. Disabilities, being individual, have different needs for different specialized devices. Some of the digital devices that assist the disabled are:

Voice/text applications for an iPad; and

Text to Talk, a/k/a/ Read Aloud, Read & Write applications and devices; and

Wands, for those with limited mobility to hit keys on device keyboards.

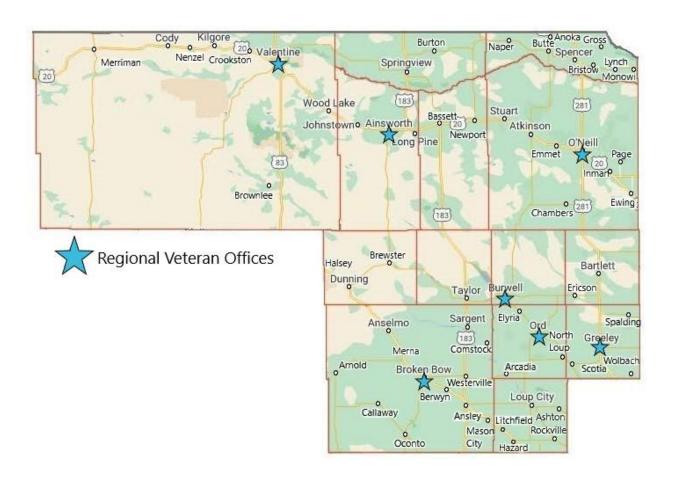
Fall Devices such as MedScope, which provides fall technology and emergency alerts/responses, offered as a watch or necklace, and works through a cell phone application. There is Medicaid eligibility for elderly fall devices; and

Smart Home/Echo Devices for assistance in the home.

There is no affordability program available that could be identified for digital devices for disabled adults. Though, occasionally there's a grant opportunity to fund an iPad that the League pursues. *Please see Appendix A: Central Nebraska Region's Asset Inventory Workbook, Tab B.3.* 

# 5. Technological Assistance for Veterans

There are eight (8) Veteran Service Offices that serve the Region's Veterans which are located in Ainsworth, Broken Bow, Burwell, Greeley, O'Neill, Ord and Valentine. The Veteran Service Office that serves Sherman County is located outside the Region in Grand Island. The Veteran Services Officers provide support and advocacy services for veterans. That support includes providing assistance with applying for online Veterans Administration benefits and other programs, to include the Heroes with Hearing Loss and the Affordability Connectivity Program. Please see Appendix A: Central Nebraska Region's Asset Inventory Workbook, Tab B.4.



Map 10: Veteran Service Offices Serving the Region

# 6. Regional Migrant Program for School Aged Children with a Language Barrier

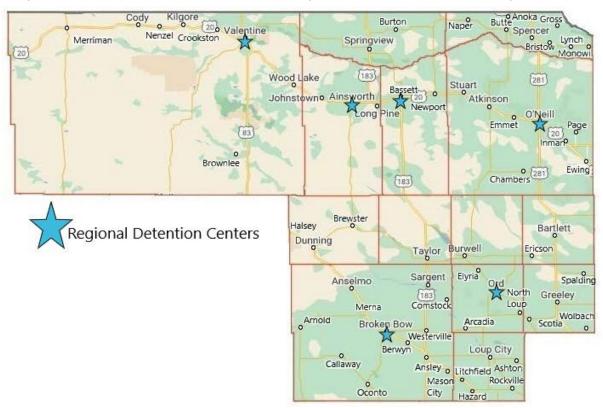
There is a Regional Migrant Program that provides a special education program, to include digital skills and literacy training for the Region's children and youth with a language barrier. This program is run through two (2) Education Service Units (ESU) located in Columbus, ESU 7 and in Scottsbluff, ESU 13, located outside the Region. *Please see Appendix A: Central Nebraska Region's Asset Inventory Workbook, Tab B.6.* 



Map 11: ESU Overseeing Regional Migrant Program for Children

# 7. Communication Systems for the Incarcerated

Within the Region there are no Federal or State penitentiaries though there are six (6) county detention centers located in Brown, Cherry, Custer, Holt, Rock, and Valley Counties.



Map 12: Regional Detention Centers

Four (4) of the detention centers offer their inmates use of a Cidnet Communication System, Brown, Cherry, Holt and Valley. The basic system gives the inmates the ability to communicate not only with the detention department but also attorneys and family members, as well as video chats. Family members fund usage for communication with the inmate. Three (3) of the four detention centers provide a shared access wall mounted Cidnet tablet in the common area/pod, Brown, Holt and Valley. The other detention centers offer individual Cidnet tablets for inmates, Cherry County.

The Cidnet system and any additional attributes, such as online access to the Nebraska Law Library, You Tube, and movies are funded through the County Sheriff Department's budget.

One (1) of the detention centers provides iPhones to the inmates, Custer County. The iPhones provide an opportunity for inmates to communicate with their families and attorneys through texts and video chats. There is one (1) iPhone in each common area/pod for shared access. Inmates schedule usage time. Again, the family provides funds for communication with the inmate through an online portal. Costs for usage varies though some are .33 cents per minute. iPhones are funded through the County Sheriff's Department' budget.

There is only one (1) detention center that does not provide access to a digital device, Rock County, who housed twenty (20) inmates last year.

All seven (7) of the detention centers offer Cable TV access funded through the County Sheriff Department's budget. *Please see Appendix A: Central Nebraska Region's Asset Inventory Workbook, Tab B.7.* 

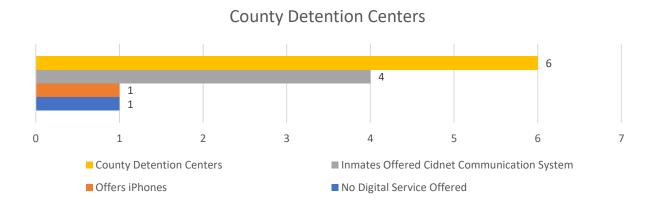


Figure 18: Regional County Detention Centers – Digital Devices

# VII. Regional Barriers & Gaps

# A. Internet

# 1. Availability & Affordability of Broadband

The Region has unique topographic characteristics and there are challenges accessing and/or having reliable, robust broadband service.

Being a rural region with such vast territory, fiber optic broadband infrastructure and mobile cellular coverage is limited in the Region.

Broadband speeds are not adequate enough to ensure emergency services.

Broadband speeds are not adequate enough to efficiently support Precision Agriculture in this Region, let alone the capability of remote access for technological support.

Affordability is a major issue for rural residents on restricted incomes. The Region has a poverty level of 12.72%. The majority of individuals 60 years old (+) have restricted incomes. The developmentally disabled individuals receive as little as \$914 per month from social security which does not sustain the necessities let along a subscription to broadband service.

The tax base is limited for small rural communities. The senior center in Callaway has a cable to the building but can't afford to subscribe to broadband service. The community center in Brewster is hoping to rent the facility enough times this summer to cover the winter heating bill. The community center in Cody has a hotspot on the village water tower and would like to offer internet access to meeting and event patrons and the public, though the reception is so unreliable and spotty, you can't open a web page. Some community libraries have no budget to work with at all and are operating on donations and the kindness of volunteers.

The emergency pandemic funds that assisted families during the pandemic for children's remote educational needs are no longer available. Currently, the majority of children's homework is accomplished online. Low-income families are struggling with affording broadband service and devices to accommodate their children's educational needs.

Broadband speeds that are advertised are not always consistent with actual, on the ground, locational speeds.

There appears to be no overall oversight, accountability, or enforcement mechanism of ISP information standards

# 2. Affordability Programs & Opportunities

Affordability programs are limited, not well marketed, lack simplicity of enrollment, application portals are not easy to navigate and especially complicated when having to bundle services for further affordability. Also, marketing is not always advertised in Spanish.

Affordability Programs don't provide enough of a discount and broadband service may still be cost prohibitive to those on a fixed incomes.

# 3. Public Access to Internet

There are not enough venues in the Region that offer public access to the internet.

The venues that do offer public access to the internet are not logistically convenient or sufficient enough to overall serve the Region's residents. Not everyone has a mode of transportation and there is no public transportation system within the Region.

# B. Digital Skills & Technological Support

# 1. Availability & Access to Digital Skills and Literacy Training

There are not enough venues offered for learning digital skills and literacy training within the Region.

The locations are not logistically convenient or sufficient enough to overall serve the Region's residents. Not everyone has a mode of transportation and there is no public transportation within the Region.

For individuals with a language barrier, there are limited translators and class advertisements are not always in Spanish.

Affordability of classes, devices and broadband service limits the ability of individuals to acquire digital skills and literacy training.

Individuals who can afford broadband service may not have reliable and robust enough service to acquire digital skills and literacy training online.

Other community venues that offer public access to the internet and a device for online learning are incredibly limited within the Region.

The desire for technology and level of digital skills and literacy is generational with individuals 60 years old (+). There are different generations of seniors. There are seniors in their 60's, 70's, and 80's and older. Seniors in their 60's and 70's have had to acclimate to digital technology to some degree. Some are still working and having to negotiate the digital world. Those that aren't working any longer may have an interest in social media, shopping and need to interface digitally, and then there are those who absolutely don't want to be bothered with it all. There are seniors who wish to have access to the internet and devices at their senior centers, though the director has no interest.

Frustration and fear of technology in general.

There's a lack of comprehension of the importance of acquiring digital skills and literacy training in order to function in today's world.

# 2. Availability & Affordability of Technical Support

There are not enough companies in the Region that offer technical support.

The companies that do offer technical support are not logistically convenient or sufficient enough to overall serve the Region's residents. Not everyone has a mode of transportation and there is no public transportation system within the Region

Affordability of technological support can be prohibitive to Regional residents.

# C. Devices

# 1. Availability & Affordability of Devices

There are not enough retail vendors in the Region where residents may purchase new and used devices. There may not be enough residents in the Region to make it financially feasible to sustain additional retail vendors.

The locations of vendors are not logistically convenient or sufficient enough to overall serve the Region's residents. Not everyone has a mode of transportation and there is no public transportation within the Region.

Affordability is a major issue for rural residents on restricted incomes. The Region has a poverty level of 12.72%. The majority of individuals 60 years old (+) have restricted incomes.

Absolute limitation of affordability programs for purchasing a device. The ACP offers only offers a discount of \$100 towards purchasing a device. It is not enough of a discount for many. Further, the program is not well marketed, lacks simplicity of enrollment, application portals are not easy to navigate and especially complicated when having to bundle services for further affordability. Also, marketing is not always advertised in Spanish.

Not only is there no affordability program available that could be identified for digital devices specifically for disabled adults within the Region, there is also no affordability programs that could be found for the digital devices of necessity to assist the challenges of their individual disabilities so that they may thrive not just survive. Developmentally disabled adults may receive as little as \$914 per month from Social Security which does not sustain the necessities let along a subscription to digital technology.

General technological designs do not address or accommodate those with special needs and limitations.

Some individuals don't have access to a device to order a device.

# 2. Public Access to Devices

There are not enough venues in the Region that offer public access to a device.

The locations are not logistically convenient or sufficient enough to overall serve the Region's residents. Not everyone has a mode of transportation and there is no public transportation within the Region.

There's a lack of comprehension of the importance of having accessibility to digital devices in order to function in today's world.

Most of the digital devices available for public access do not address or accommodate those with special needs and limitations.

There are only 5 regional offices of the Department of Health and Human Services which offer low-income individuals the opportunity to access a device to apply for online economic assistance

# VIII. Regional Needs Assessment

# A. Assessment of Regional Covered Populations Relative to Digital Equity

Scale: - Satisfactory - Needs     Improvement - Unsatisfactory - Not Present	Availability & Affordability of Fixed and Wireless Broadband	Availability & Affordability of Consumer Devices & Technical Support	Digital Literacy	Awareness and Use of Online Privacy & Security	Accessibility and Inclusivity of Public Resources
Central Nebraska Region	Unsatisfactory	Unsatisfactory	Needs Improvement	Needs Improvement	Unsatisfactory
Rural Residents	Unsatisfactory	Unsatisfactory	Needs Improvement	Needs Improvement	Unsatisfactory
Older Adults 60 (+) Years Old	Unsatisfactory	Unsatisfactory	Unsatisfactory	Unsatisfactory	Unsatisfactory
Low-Income Individuals	Unsatisfactory	Unsatisfactory	Unsatisfactory	Unsatisfactory	Unsatisfactory
Veterans	Unsatisfactory	Unsatisfactory	Needs Improvement	Needs Improvement	Needs Improvement
Individuals with a Disability	Not Present	Not Present	Not Present for Adults	Not Present	Unsatisfactory
Members of Ethnic and Racial Minorities	Unsatisfactory	Unsatisfactory	Needs Improvement	Needs Improvement	Unsatisfactory
Individuals with Language Barriers	Unsatisfactory	Not Present	Not Present	Not Present	Not Present
Incarcerated	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory

# B. Regional Needs to Achieve Digital Equity

# 1. Availability & Affordability of Fixed and Wireless broadband

Increase the availability and affordability of accessing robust, high-speed, reliable broadband service throughout the Region through fixed and wireless broadband service.

Expand Fiber-optic broadband infrastructure in the Region.

Find innovative solutions for overcoming topographical challenges of accessibility to broadband service.

Increase the availability and quality of mobile cellular data to support the success of the Precision Agriculture in this Region, given that agriculture is its economic base.

Expand affordability programs for residential and mobile broadband service that are efficient and sufficient enough to bridge the digital gap of all covered populations within the Region, most especially those with the greatest digital divide and provide further marketing and streamline and simplify the enrollment process.

#### 2. Availability & Affordability of Consumer Devices & Technical Support

Expand the opportunities and number of venues in which the public can purchase digital devices.

Increase affordability opportunities for devices that are efficient and sufficient enough to bridge the digital gap of all covered populations within the Region, most especially those with the greatest digital divide

Provide appropriate, human-centric, technological designs that will accommodate special needs, especially those with the greatest digital divide so that they may have the ability to access and utilize digital devices and affordability programs for the same.

Expand opportunities and provide affordable options for accessing technological support.

#### 3. Digital Literacy - Having the Skills to Use Internet Technologies

Increase affordable opportunities and expand educational venues to enable all covered populations within the Region, most especially those with the greatest digital divide, to acquire digital skills and literacy training.

Outreach and education to provide awareness of the importance of digital technology and the need for digital skills and literacy to function effectively in today's world and understanding the needs of future generations.

#### 4. Accessibility and Inclusivity of Public Resources

Increase community venues, find affordable funding opportunities, and expand the availability for public access of the internet and of digital devices.

Provide affordability opportunities for broadband service and devices that are efficient and sufficient enough to bridge the digital gap of all covered populations within the Region, most especially those with the greatest digital divide. Those who are most vulnerable and need additional assistance through digital devices cannot afford connectivity to broadband or specialized devices.

Provide representation for those with the greatest digital divide to assist them with bridging their digital gaps. Representatives for ethnic and racial minorities as well as adults with language barriers could not be found within this Region.

#### 5. Knowledge of Privacy and Security Practices

Outreach and education for further awareness, understanding and importance of applications and digital tools necessary to best maintain privacy and cyber security and provide accessibility for this outreach and education for all covered populations within the Region, most especially those with the greatest digital divide.

Provide affordable applications that are accessible for all covered populations within the Region, most especially those with the greatest digital divide.

#### IX. Conclusion

Upon assessment of the assets, barriers and needs relative to achieving digital equity for the Region's Covered Populations, it clearly indicates that not only are there multiple digital gaps, rather, there are significant foundational digital divides as identified in the Regional Needs Assessment set forth above and the entirety of this Baseline Assessment herein.

#### **Nebraska Broadband Speed Test Results**

County

Urban/Rural





(1) 🕶

NROC: CNEDD

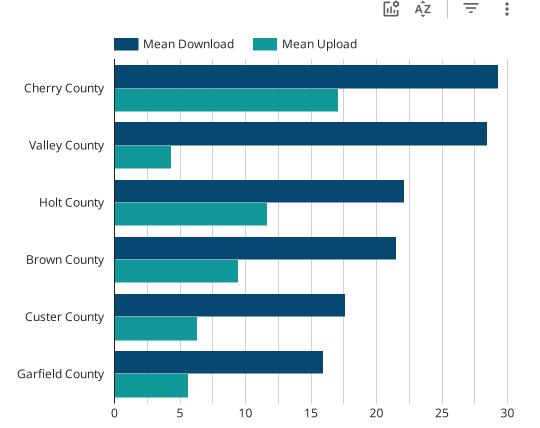
Avg. Download, Mbps Avg. Upload, Mbps 10.0 22.9 Tests in View

ISP Classification: ...(2) ▼

The Nebraska Broadband Speed Test is a project of the Nebraska Regional Officials Council, the statewide organization of Nebraska's eight Economic Development Districts. This statewide initiative launched in February 2021 and aimed to use crowdsourced broadband speed tests to quantify Nebraska's digital divide. Residents were able to submit parcel-level speed tests from anywhere in the state by visiting <u>nebraskaspeedtest.org</u>. Click on different map and chart elements or use the dropdown menus to filter speed test

Quarter

2,155 [O] GE ROSEBUD INDIAN YANKTON RESERVATION RESERVATION raska al Forest NEBRA\$KA + Keyboard shortcuts Map data ©2023 Google Terms of Use Report a map error

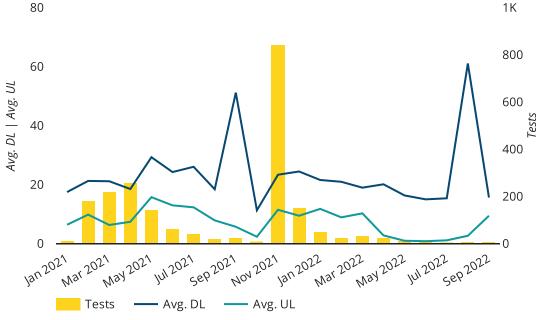


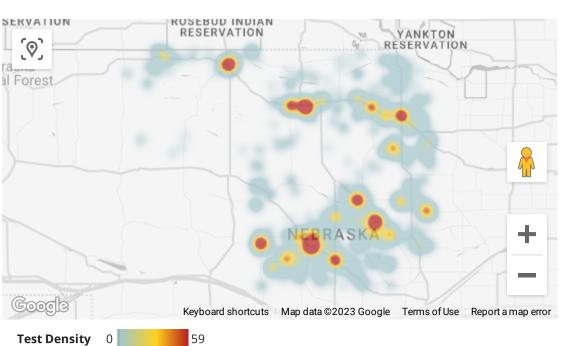
# **Urban/Rural Breakdown** Villages Rural Towns/Cities

Tests 10

This graph shows the proportion of tests taken in rural and urban areas classified according to the 2010 Census definitions found at: **US Census** - Urban and Rural. Rural: unincorporated Villages: > 2,500 residents Towns/Cities: 2,500-50,000

Urban Areas: 50,000+





		王士	<del>-</del> :
Internet Service Provider	Tests •	DL	UL
Great Plains Communications	360	24.62	8.53
Nebraska Central Telephone Company	342	18.68	8.69
Three River Telco	215	27.34	8.9
CenturyLink	195	13.3	3.97
Verizon	171	13.56	5.61
Viaero	122	11.86	10.44
no service	97	0	0
Charter Communications	95	70.7	11.43
Consolidated Telephone Company	79	13.66	9.07
HughesNet	73	10.43	2.53
US Cellular	64	15.2	4.49
Northeast Nebraska Telephone Company	51	109.8	92.63
Rise Broadband	51	17.35	3.33
K&M Telephone Company	46	5.58	1.49
Frontier Communications	32	8.43	1.02
HunTel	30	8.24	2.31
ViaSat	28	12.55	2.07
Eagle Communications	27	25.87	5.68
Sandhills Wireless	19	8.15	7.04
Nedelco	17	9.59	4.15
Allo Communications	13	230.04	192.48
Prairie Hills Wireless	8	9.21	24.96
SpaceX Starlink	5	69.5	8.97
Nextlink Broadband	4	4	4.59
Windstream Communications	3	61.21	13.47
AT&T	3	33.95	5.86
Sparklight	1	2.8	1.92
T-Mobile	1	1.5	14.53
Fairpoint Communications	1	13.18	4.89
Cox Communications	1	16.11	14.49

This table contains aggregated (mean) speed test results by Internet Service Provider. ISP names here may not necessarily be identical to the brand/company that offers service. To facilitate comparison between ISPs, use the filter function in the top right corner to show entries with 20 or more tests.

							<u> </u>
County	Tests •	Geom. DL	Geom. UL	Avg. DL	Avg. UL	Median DL	Median UL
Custer	683	9.71	2.67	17.62	6.36	5.96	1.48
Holt	385	9.68	3.25	22.13	11.70	5.72	1.52
Valley	252	11.56	2.55	28.50	4.38	5.85	1.65
Brown	229	14.46	1.85	21.54	9.45	7.06	0.83
Cherry	191	10.92	3.10	29.30	17.13	5.01	1.52
Garfield	95	10.51	3.32	15.94	5.67	12.36	5.36
Greeley	89	7.36	1.64	15.88	3.12	8.69	1.55
Wheeler	59	10.33	3.23	38.20	26.61	5.06	0.88
Sherman	52	11.35	3.99	31.65	23.59	5.18	2.81
Rock	42	5.76	1.82	8.93	3.41	8.21	2.93
Boyd	28	62.27	40.40	109.14	77.16	36.53	41.59
Blaine	25	6.75	1.55	8.69	1.85	3.98	0.58
Loup	15	12.28	2.72	21.18	5.08	8.57	3.39
Keya Paha	10	14.79	10.88	33.71	15.80	22.59	10.17

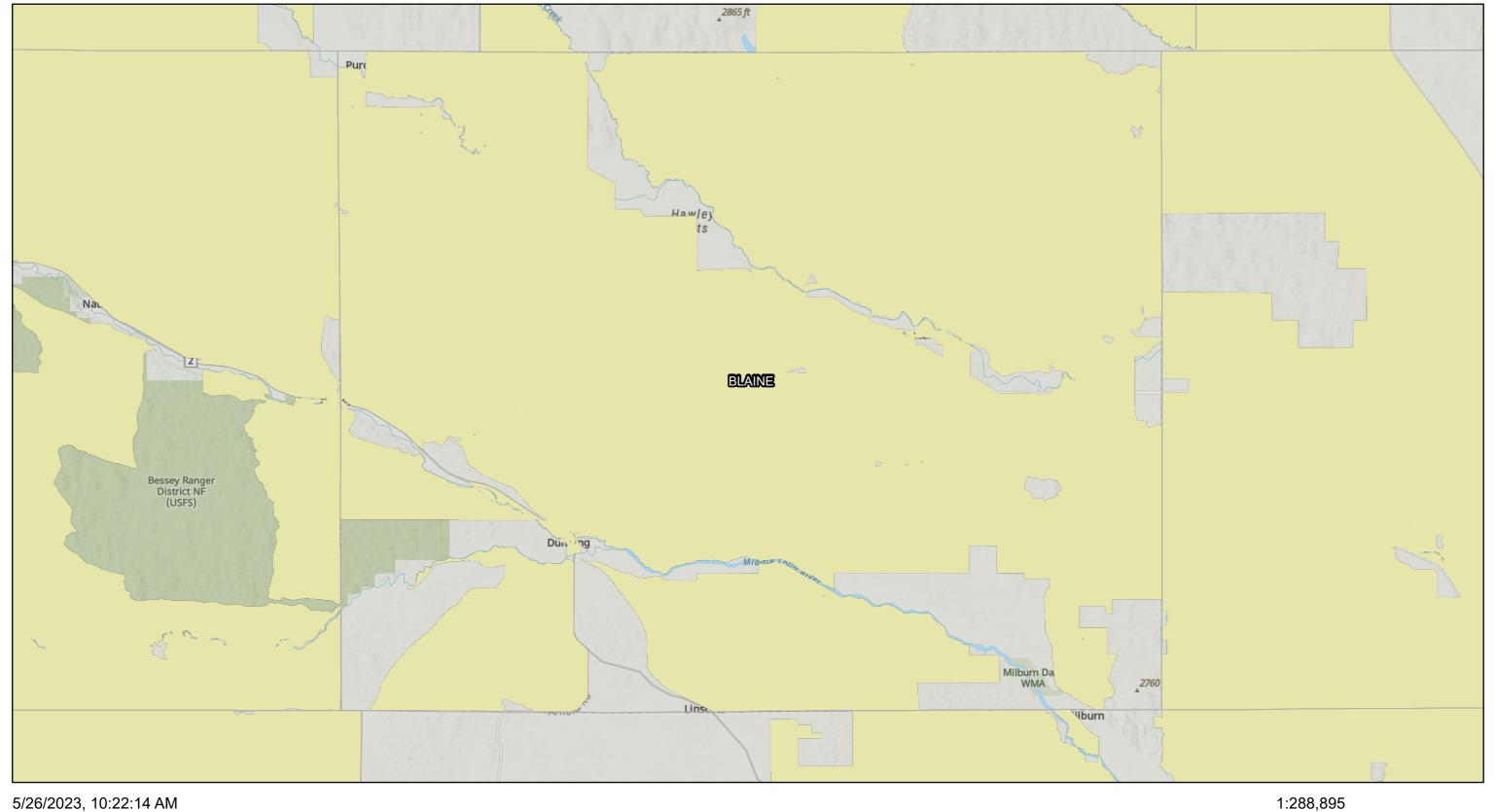
\*Geometric (Geom.) Data: A Spatial Data type that is mapped on a two-dimensional flat surface.

User-generated speed tests provide a valuable but imperfect account of actual broadband quality. Speeds reflected in these tests may be affected by a variety of client-side factors, including time of day, hardware equipment including computers and modems/routers, and type of connection. Aggregating data, as done in this report, may help mitigate potential outliers. ISP classifications are based on a best-efforts assessment of ARIN ASN registrations and FCC 477 filings.

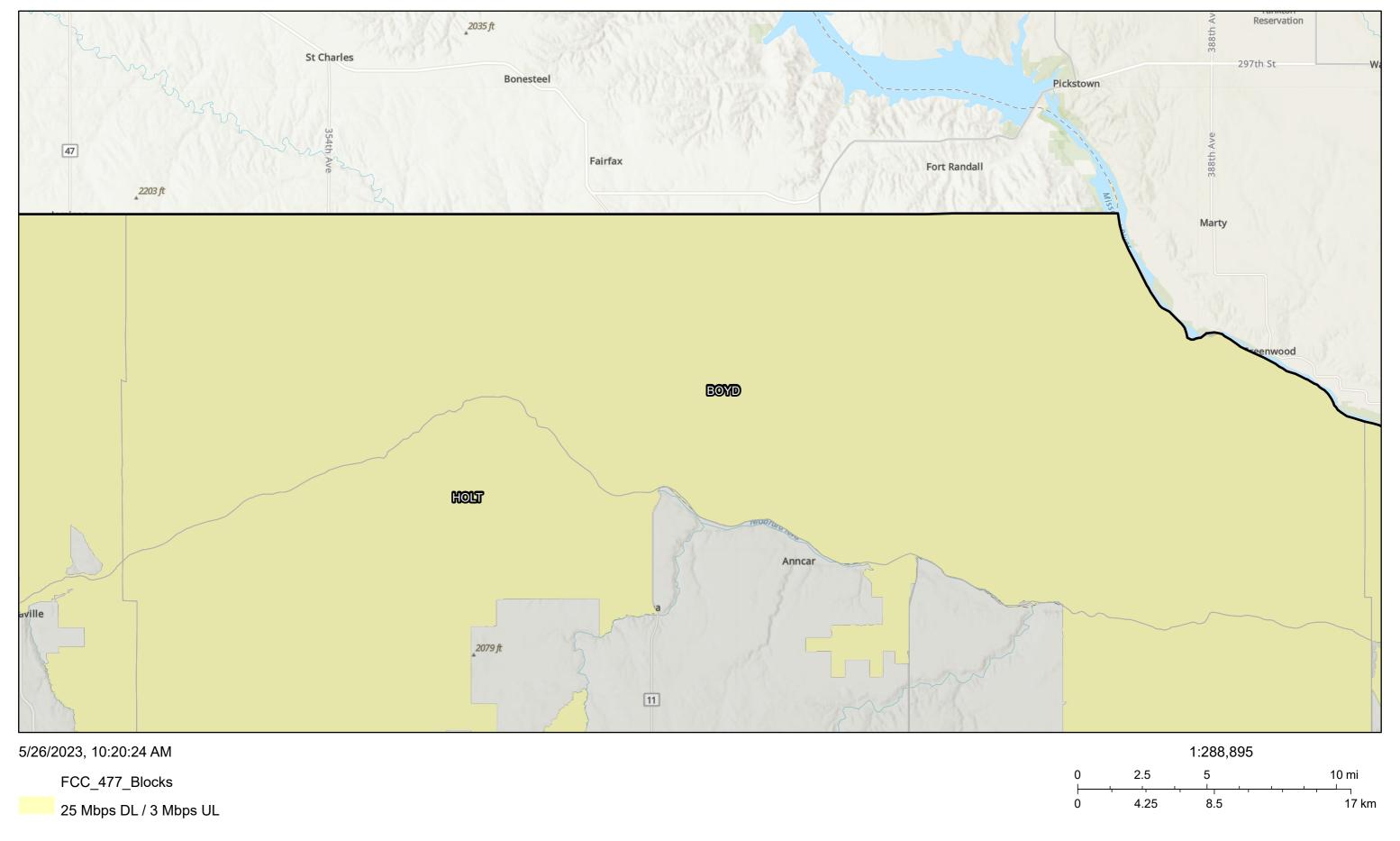
The Nebraska Broadband Speed Test is hosted and operated by Breaking Point Solutions LLC (GEO Partners LLC) and utilizes the M-Lab Network Diagnostic Test (NDT). Additional sources used in this report include the US Census Bureau, Google Earth, and M-Lab.



#### Speed Tier: 25/3 | Blaine County

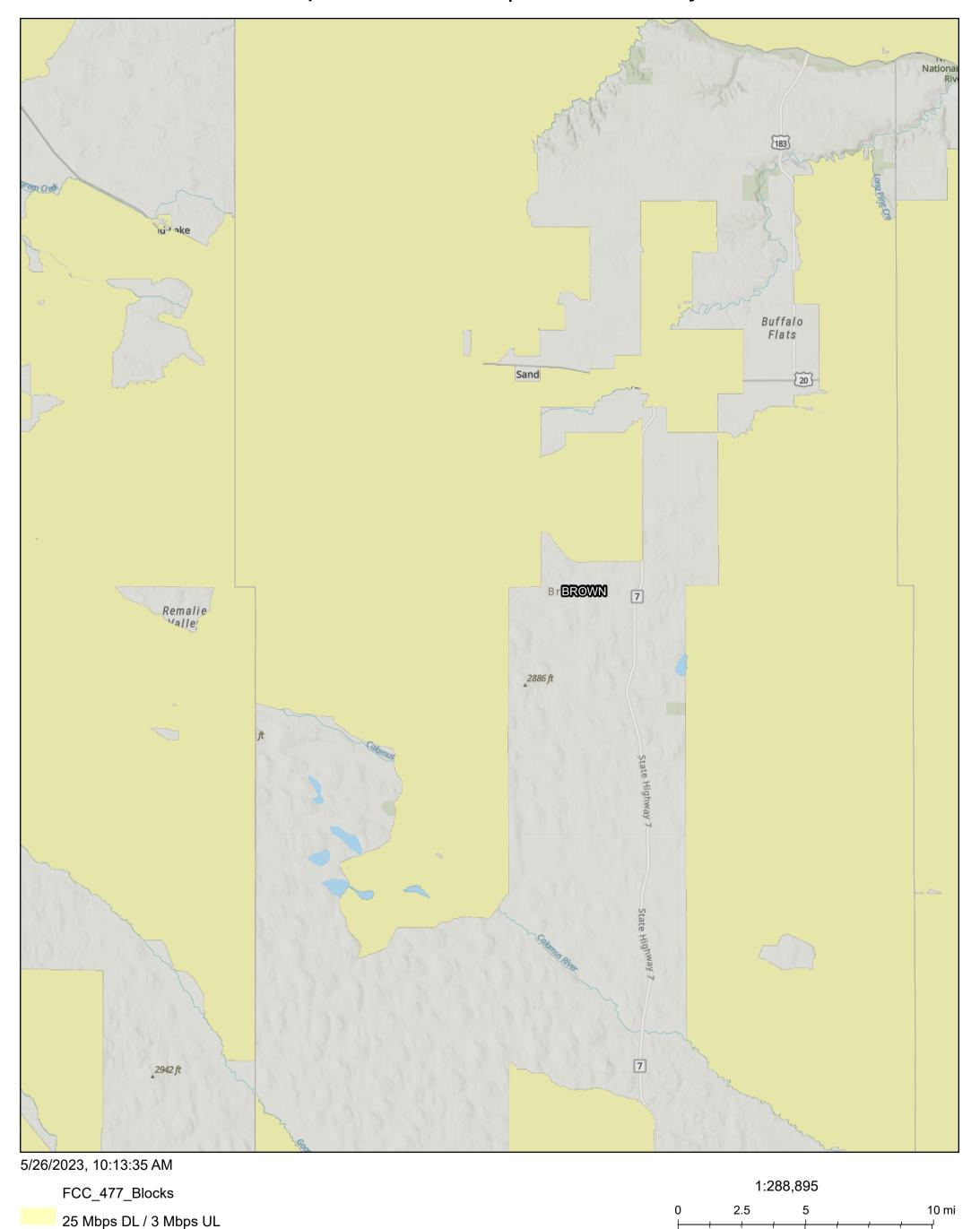


#### Speed Tier: 25/3 | Boyd County



Esri, NASA, NGA, USGS, Nebraska Game & Parks Commission, South Dakota Game Fish and Parks, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA

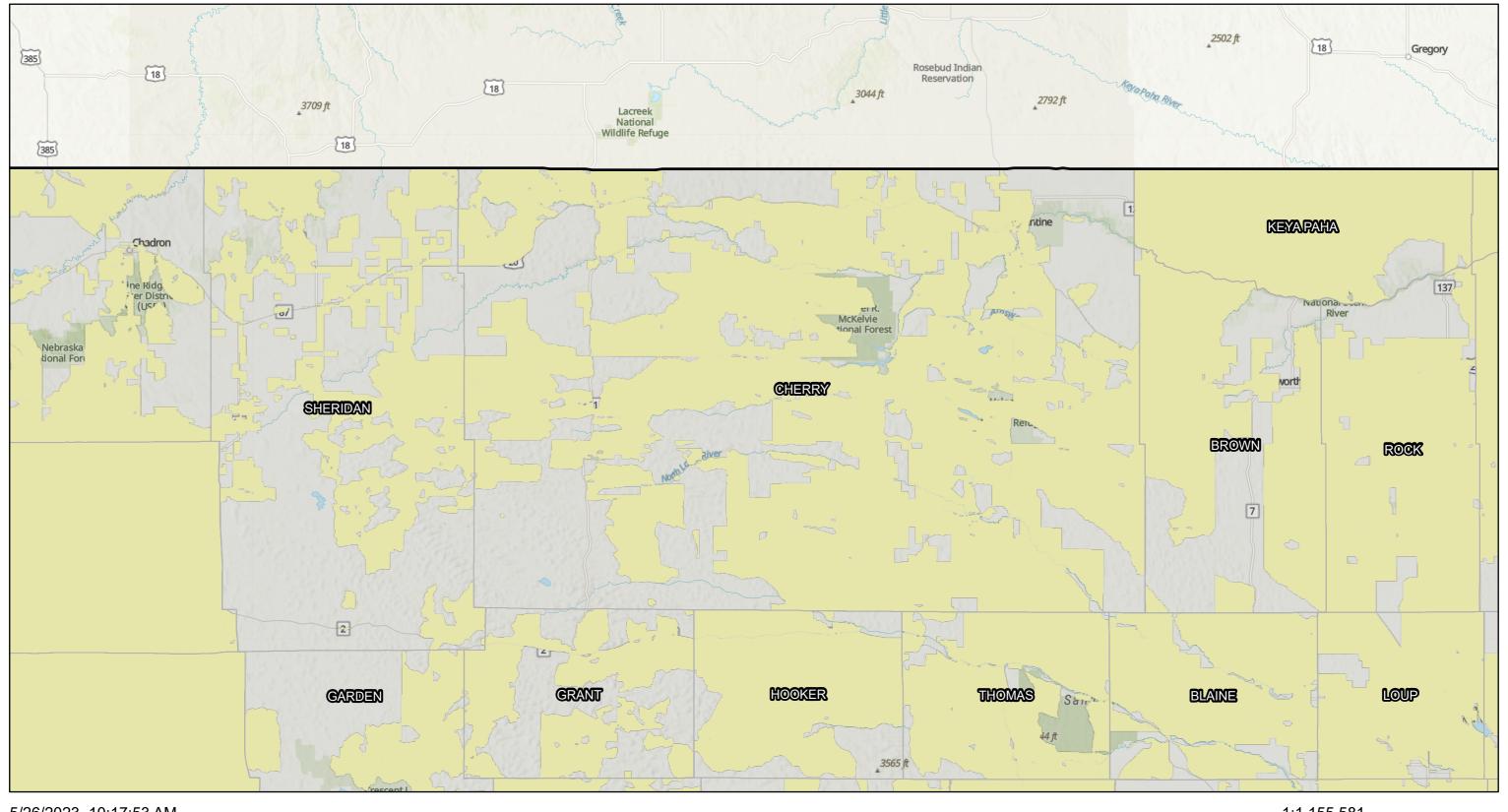
### Speed Tier: 25/3 | Brown County



Esri, NASA, NGA, USGS, Nebraska Game & Parks Commission, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA

16 km

#### Speed Tier: 25/3 | Cherry County



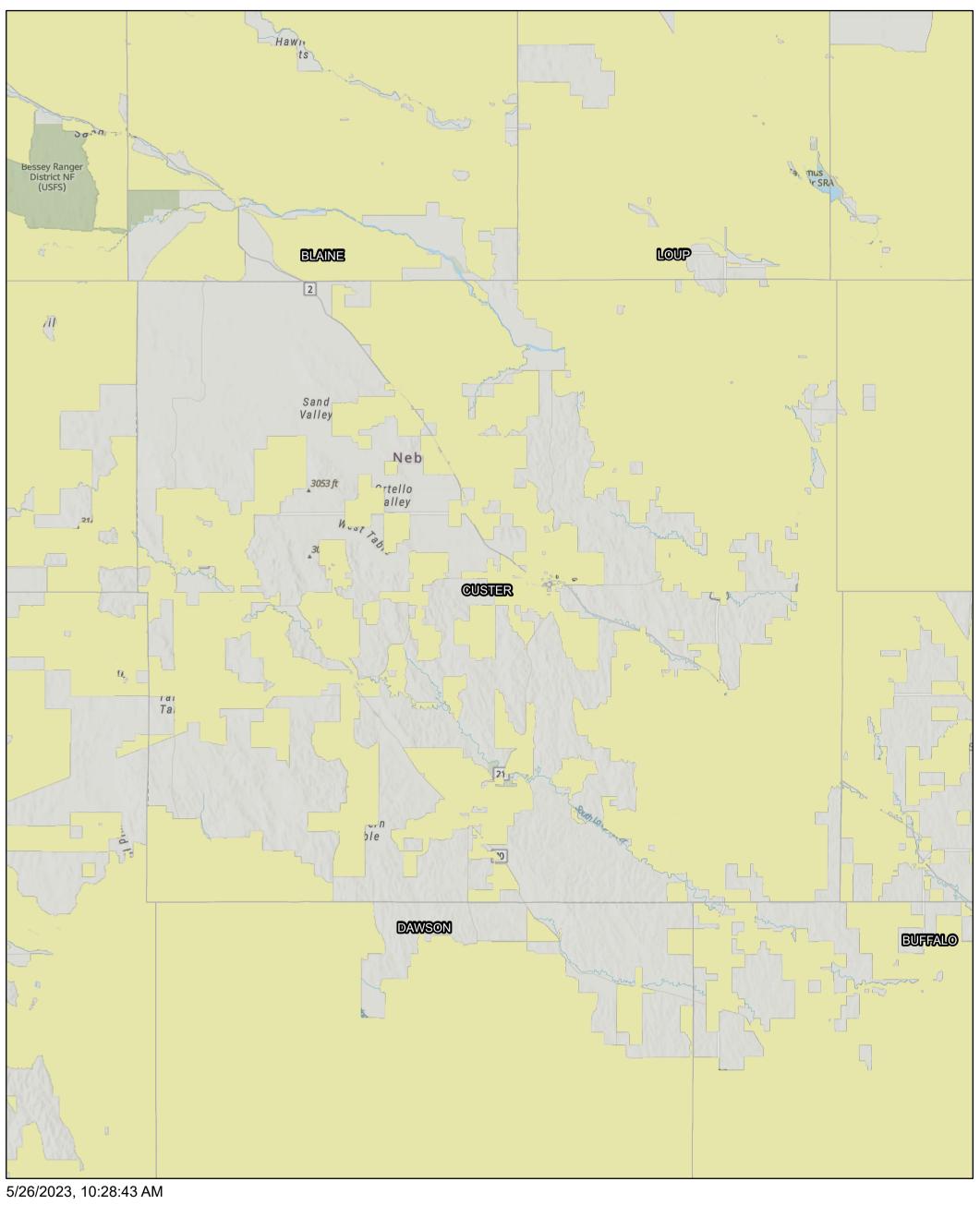
5/26/2023, 10:17:53 AM

25 Mbps DL / 3 Mbps UL

0 10 20 40 mi
0 15 30 60 km

Nebraska Game & Parks Commission, South Dakota Game Fish and Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, Esri, CGIAR, USGS

### Speed Tier: 25/3 | Custer County



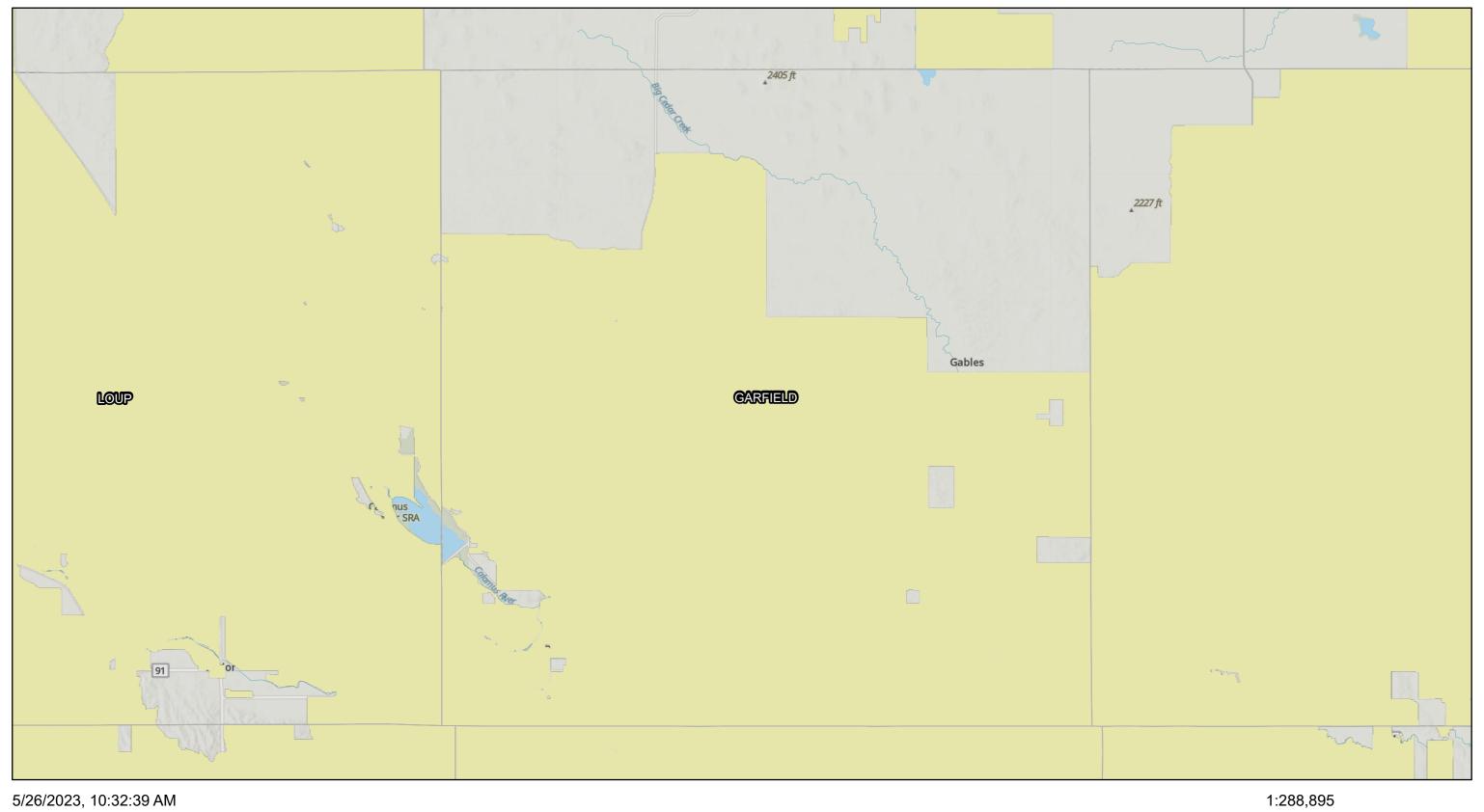
25 Mbps DL / 3 Mbps UL

1:577,791

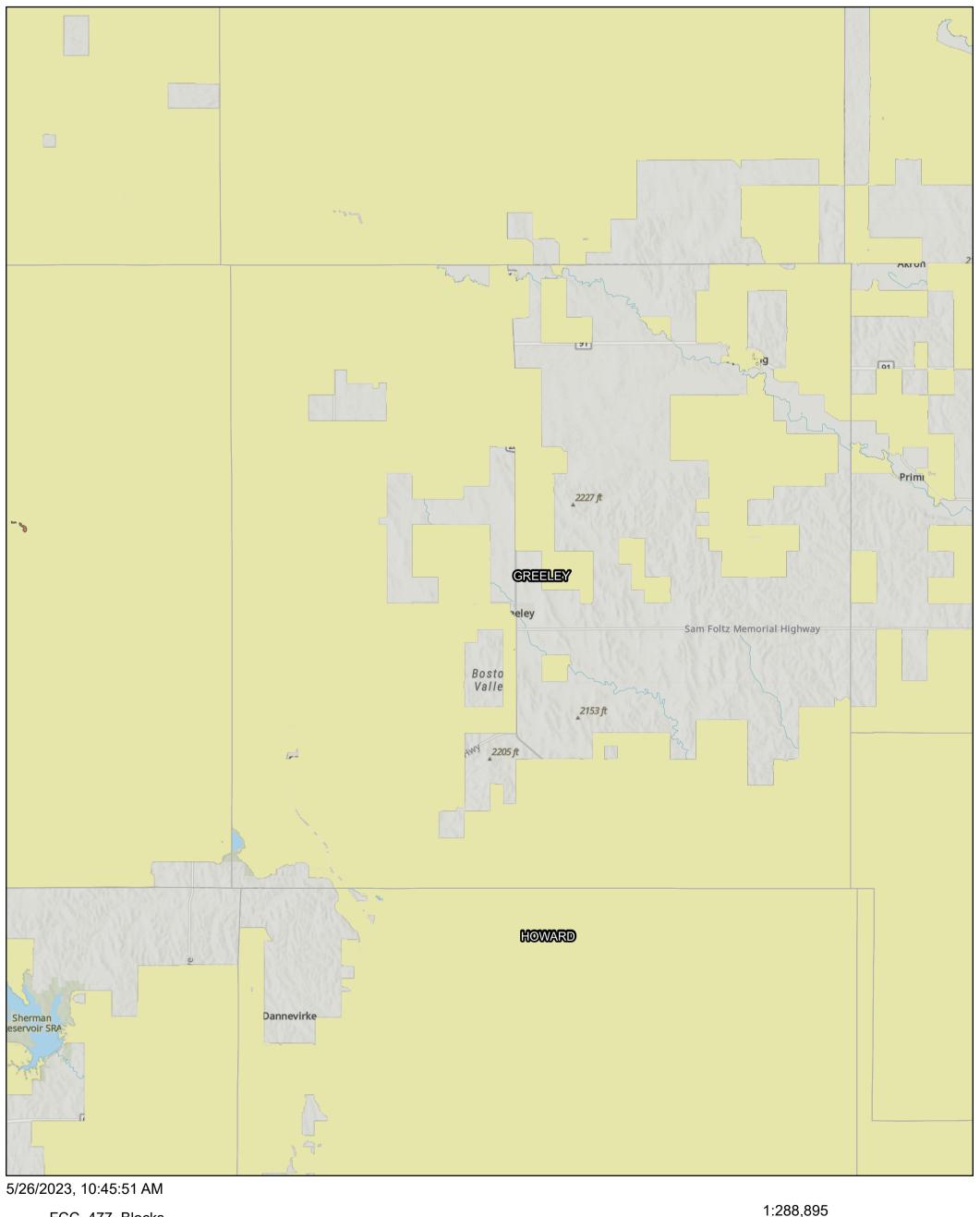
0 5 10 20 mi

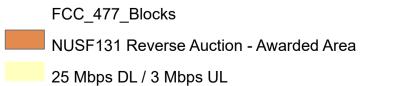
Nebraska Game & Parks Commission, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, Esri, CGIAR, USGS

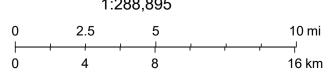
#### Speed Tier: 25/3 | Garfield County



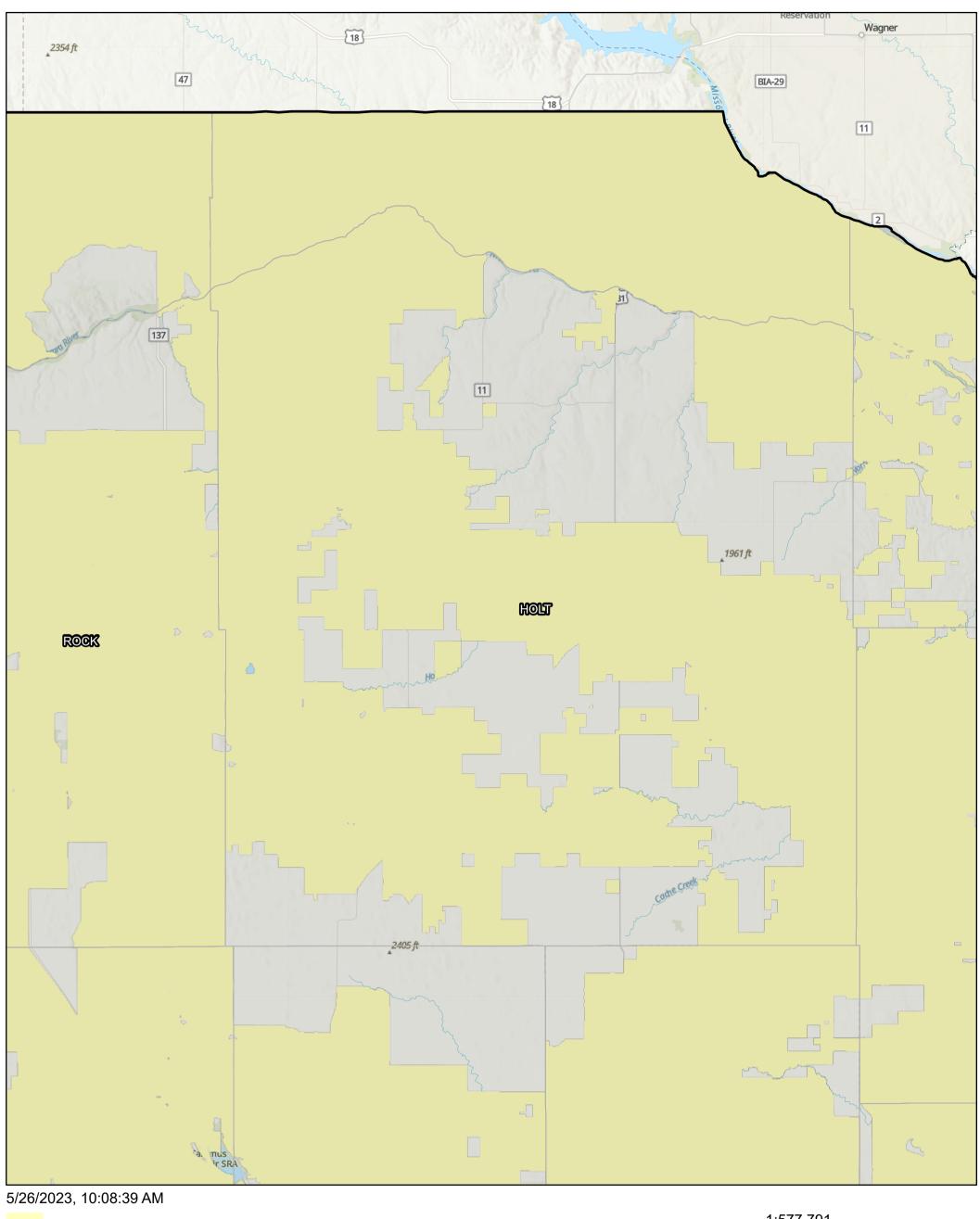
### Speed Tier: 25-3 | Greeley County



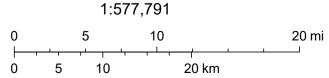




### Speed Tier: 25/3 | Holt County

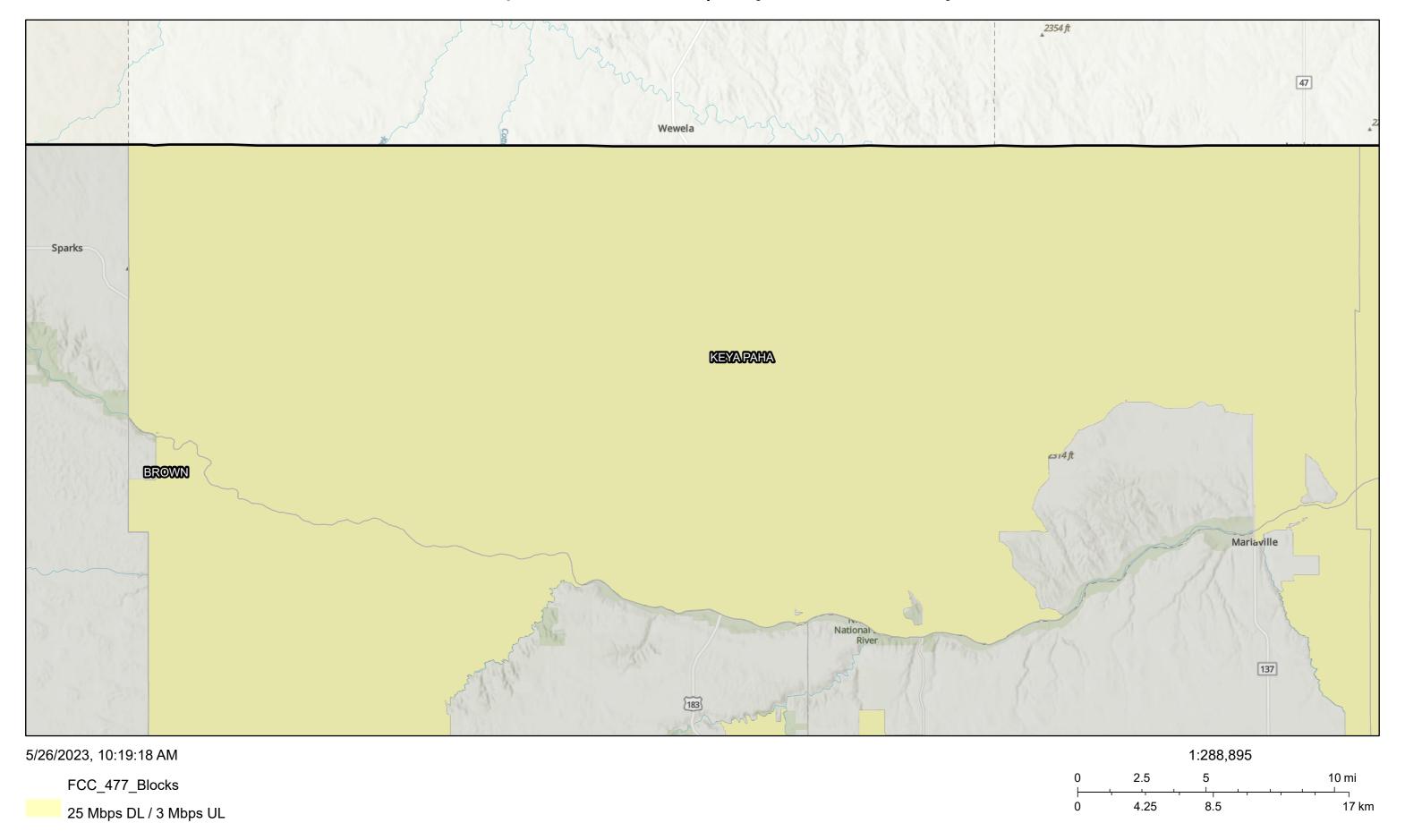


25 Mbps DL / 3 Mbps UL



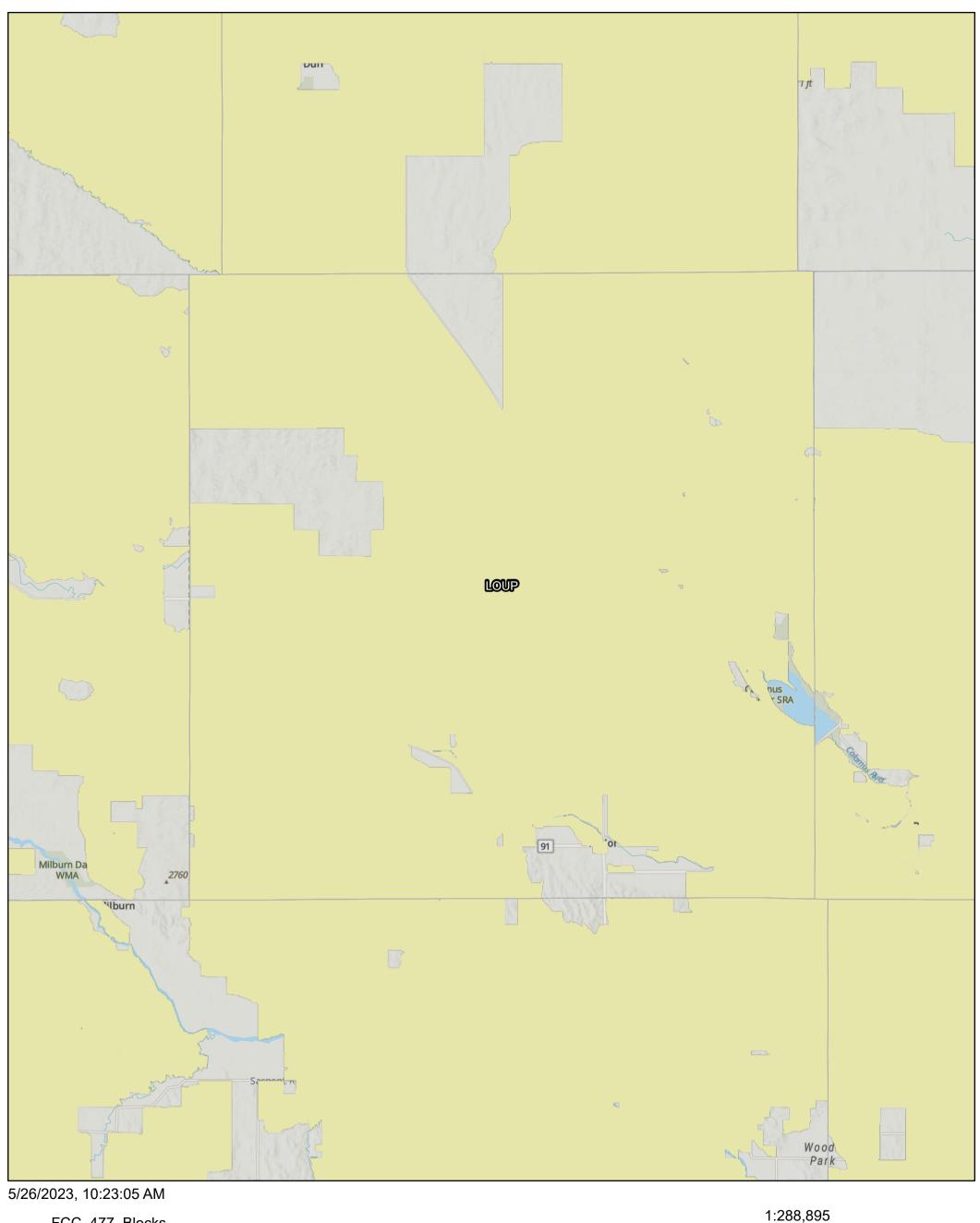
Nebraska Game & Parks Commission, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, Esri, CGIAR, USGS

#### Speed Tier: 25/3 | Keya Paha County

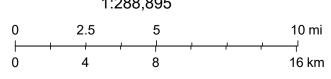


Esri, NASA, NGA, USGS, Nebraska Game & Parks Commission, South Dakota Game Fish and Parks, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA

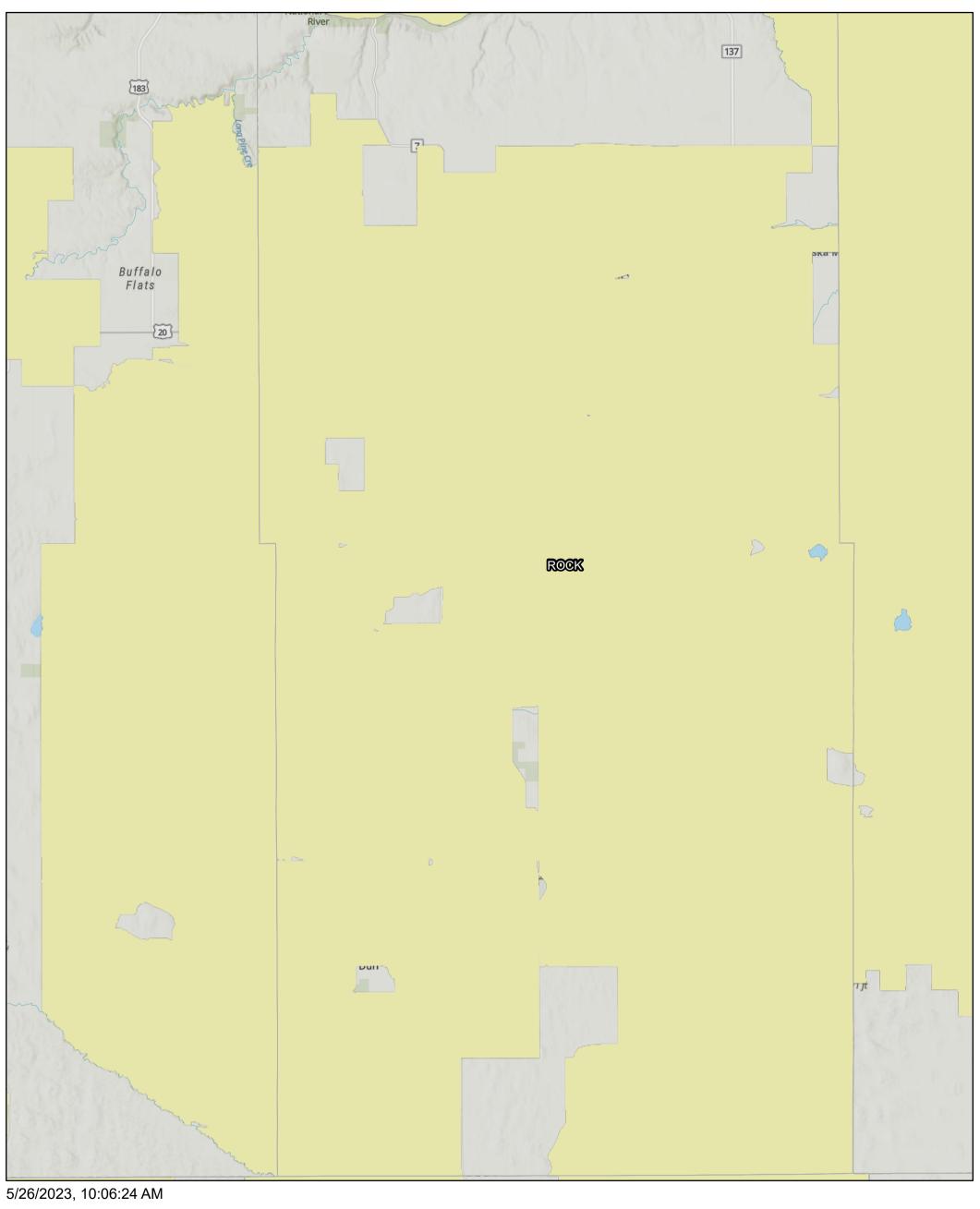
## Speed Tier: 25/3 | Loup County



FCC\_477\_Blocks
25 Mbps DL / 3 Mbps UL



### Speed Tier: 25/3 | Rock County



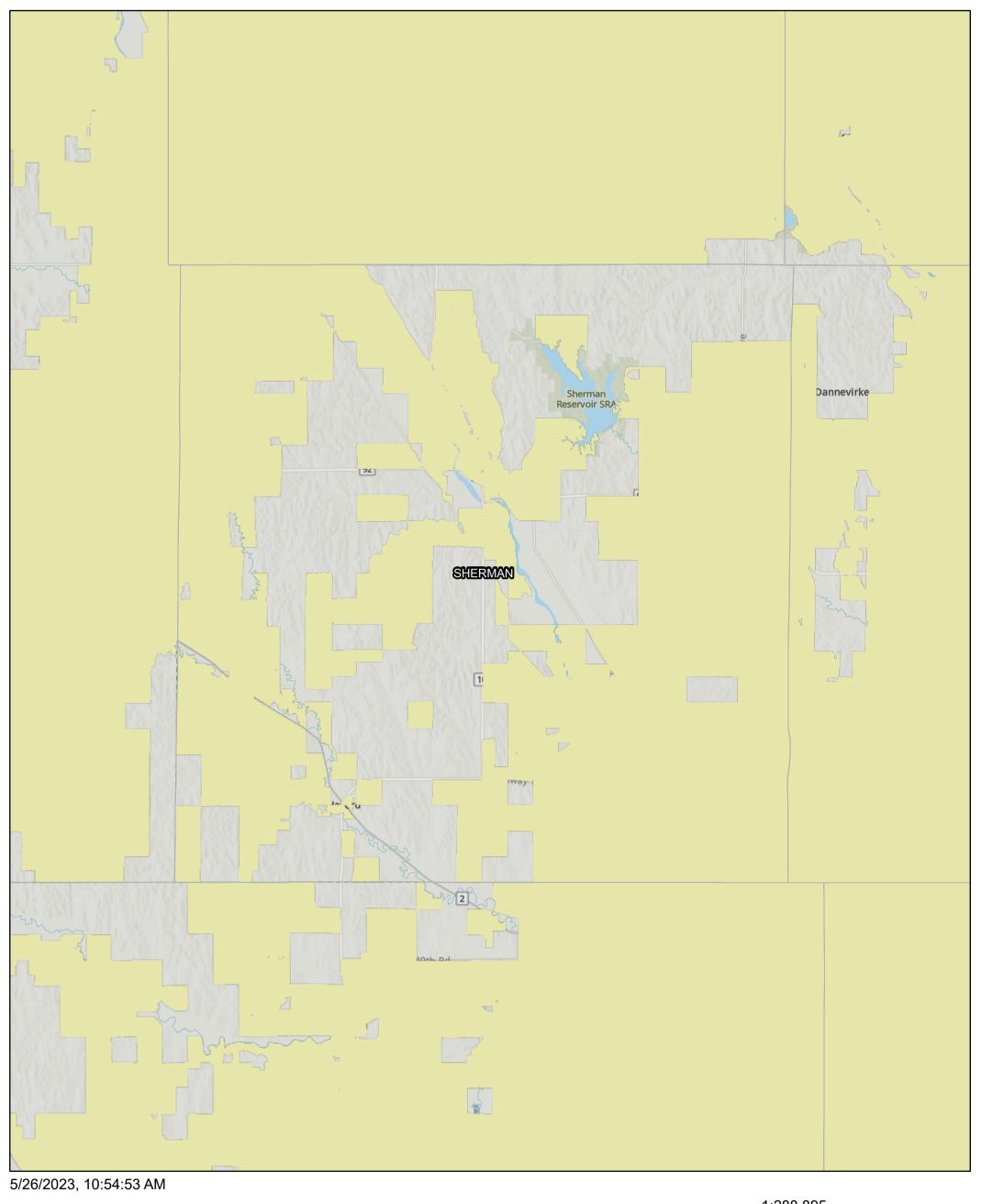
FCC\_477\_Blocks

25 Mbps DL / 3 Mbps UL

1:288,895

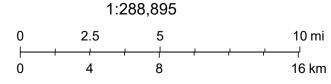
0 2.5 5 10 mi
0 4 8 16 km

### Speed Tier: 25/3 | Sherman County

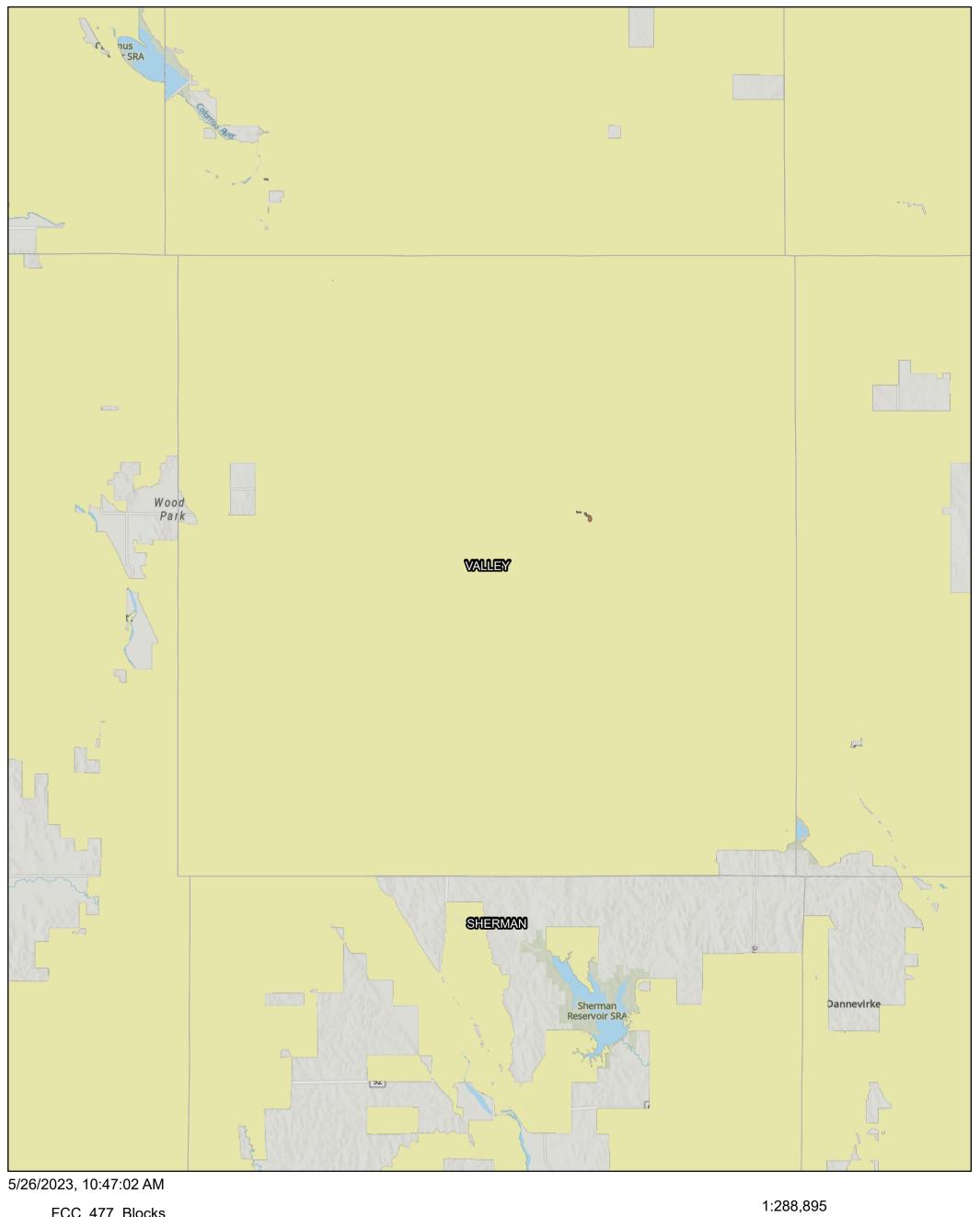


FCC\_477\_Blocks

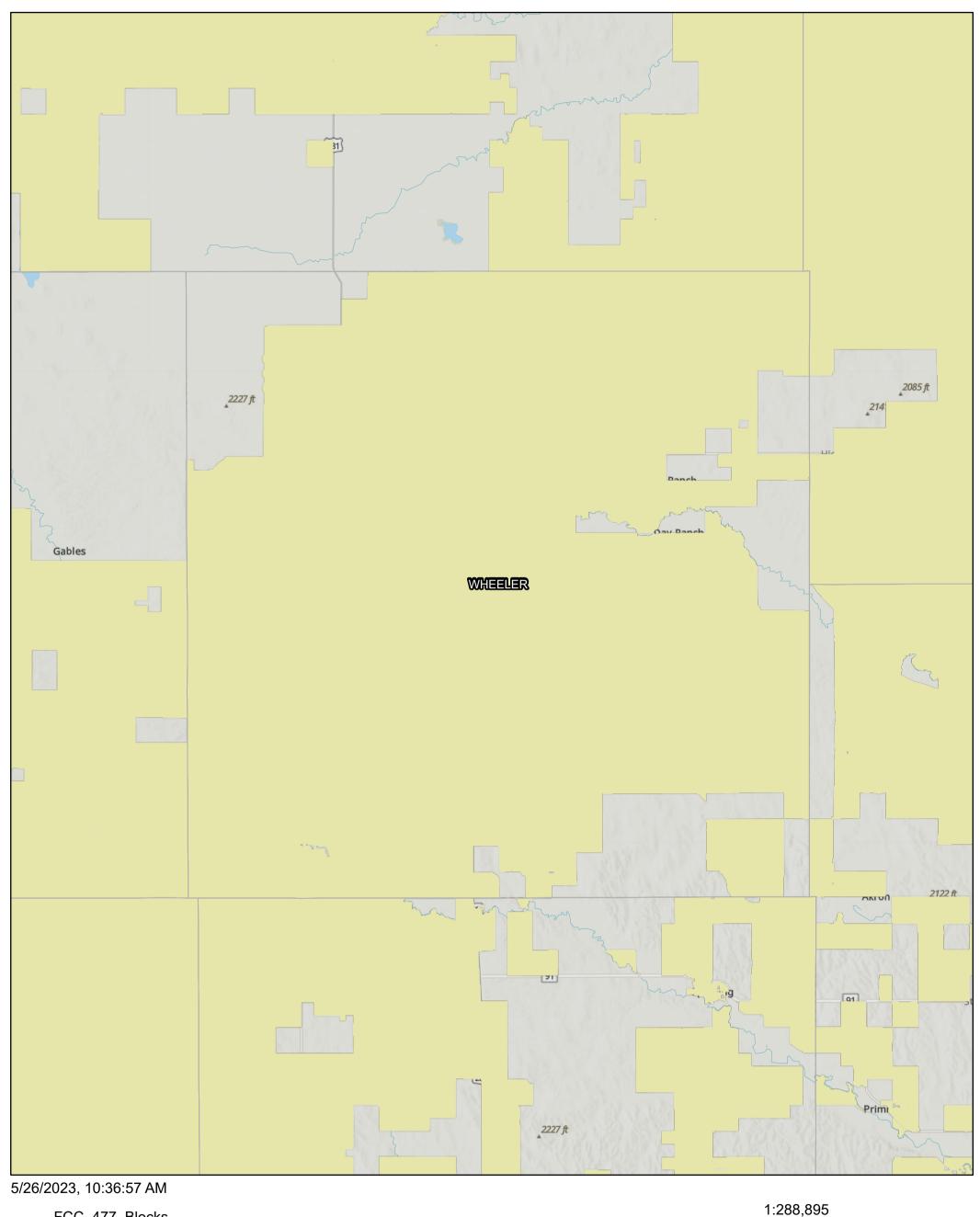
25 Mbps DL / 3 Mbps UL



### Speed Tier: 25-3 | Valley County



### Speed Tier: 25/3 | Wheeler County



FCC\_477\_Blocks

 $25~\mathrm{Mbps}~\mathrm{DL}\,/\,3~\mathrm{Mbps}~\mathrm{UL}$ 

