

## Nebraska Digital Inclusion

 Planning Guide \& WorkbookJuly 2021


Nebraska Information
Technology Commission
Community Council

Cover photos courtesy of the Gothenburg Community Development Office

The Community Council advisory committee of the Nebraska Information Technology Commission. Its members are composed of representatives from rural and community IT development, local governments and libraries, resource providers, and other focus areas as deemed appropriate by the Community Council and the NITC. The mission of the Council is to foster the collaborative, innovative, and effective use of technology through partnerships between public and private sectors to support community and economic development for Nebraska citizens. More information on the NITC and the Community Council is available at https://nitc.nebraska.gov

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## Contents

Introduction ..... 4
Reasons that individuals may not be digitally connected and strategies that may address these issues ..... 6
Who doesn't have a home broadband connection? ..... 7
Getting started ..... 8
Step 1: Develop a broad goal statement ..... 9
Step 2: Form a digital inclusion committee ..... 10
Check out the County Broadband Fact Sheets ..... 11
Step 3: Determine what are the digital inclusion needs in my community, county or region ..... 12
What percent of residents of my county have a broadband subscription at home? ..... 12
How many households in my community, county or region have only a smart phone or no computer? ..... 16
Is broadband of at least 25 Mbps down and 3 Mbps up and preferably at least 100 Mbps down and 20 Mbpsup available to all areas of my community, county or region?
If broadband isn't available to all areas of my county or region, where isn't broadband available? ..... 20
Is broadband affordable? ..... 23
Why aren't individuals digitally connected? What are their needs, interests and challenges? ..... 24
Step 4: Catalog your community's digital inclusion assets and identify gaps ..... 25
Public library asset identification questions ..... 25
K-12 schools asset identification questions ..... 28
Local agencies on aging or senior center asset identification questions ..... 29
Older Nebraskans Lag U.S. in Broadband Subscription ..... 30
Other programs asset identification questions ..... 31
Local community colleges, colleges and/or universities (if applicable) asset identification questions ..... 31
Step 5: Identify strategies to address the barriers to digital inclusion ..... 33
Appendix: Table 1 Nebraska Broadband Subscription Data (ACS 2019 5-year) ..... 35
Appendix: Table 2 Percent Population with Broadband Subscription Nebraska Counties ..... 36
Appendix: Table 3 Households with Broadband, Mobile Only and Satellite Subscriptions Nebraska Counties ..... 40
Appendix: Table 4 Population \& \% Population with Computing Devices, Smartphone only, or No Computer ..... 43
Nebraska Counties
Appendix: Table 5 Percent population with broadband available ( $25 / 3 \mathrm{Mbps}$ ) Nebraska Counties ..... 47
Appendix: Table 6 Percent population with broadband available (100/10 Mbps) Nebraska Counties ..... 50
Appendix: Table 7 Nebraska County Population Estimates ..... 53
Appendix: American Community Survey Internet Subscription Data Cheat Sheet ..... 56
Appendix: FCC Broadband Availability Data Cheat Sheet ..... 58
Resources ..... 59


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## Introduction

Digital inclusion is a term to describe the goal of having all members of a community able to access and use online information, resources, and services. The COVID-19 pandemic has highlighted the importance of being able to learn, work and access health care online. Basic digital inclusion efforts focus on helping individuals get access to broadband connectivity, a device and any needed training and technical support.

Some communities may want to broaden their efforts and also address issues such as:

- Growing a workforce with the technical skills needed by area businesses, health care providers, schools and colleges, governments, non-profits and agricultural producers;
- Helping local businesses and agricultural producers utilize technology to compete in the digital, global economy;
- Helping local entrepreneurs utilize technology to start and grow their businesses;
- Providing co-working facilities for remote workers;
- Helping local governments and non-profits to better use technology to serve the community.

This guide will focus on developing a basic digital inclusion plan which addresses broadband connectivity, access to devices, the knowledge and skills needed to perform common online tasks, and technical support.

A digital inclusion plan should generally address the following questions:

- What are the digital inclusion needs in my community, county or region?
- What percent of residents of my community, county or region have a broadband connection at home?
- Do most or all residents of my community have access to devices (i.e., computers, tablets or smart phones) which enable them to complete homework and participate in
online learning, access telehealth services, work at home, apply for jobs, or access other services?
- Is broadband of at least 25 Mbps down and 3 Mbps up and preferably at least 100 Mbps down and 20 Mbps up available to all areas of my community, county or region?
- What percent of my county's population has broadband available?
- If broadband isn't available to all areas of my county or region, where isn't broadband available?
- Is broadband in my county or region affordable?
- Do most or all residents have the skills and access to technical support to access telehealth services, apply for jobs and access services?
- What resources and existing programs are in my community, county or region?
- What are the gaps?
- What strategies and programs do we need to implement to improve digital inclusion?

Digital inclusion plans will likely vary based on the needs, resources and population size of the community, county, or region.


[^0]
## Reasons that individuals may not be digitally connected <br> and strategies that may address these issues

1. Broadband service is not affordable or available where they live.

Examples of Digital Inclusion Strategies and Programs:

- Hot spot lending programs
- Low-income broadband assistance programs
- Locations such as libraries which offer access to WiFi and computers
- Locations which offer small conference rooms equipped with a computer capable of videoconferencing for job interviews or telemedicine consultations
- Communities and regions can form committees to meet with telecommunications providers, develop strategies, and identify funding o improve broadband availability.

2. They do not have a computer, tablet or smartphone.

Examples of Digital Inclusion Strategies and Programs:

- Programs which refurbish and distribute computers or other devices
- Programs which provide subsidies for devices for low-income individuals and families
- School districts which provide devices for all students.
- Locations such as libraries which have computers or other devices available for use by the public

3. They lack the skills, knowledge, and confidence to comfortably use online resources and services. Examples of Digital Inclusion Strategies and Programs:

- Free or low-cost classes on using the internet and common applications such as e-mail or social media
- Individual support through digital navigators or mentors
- Tech support services through a virtual help desk or weekly sessions

4. For many individuals, more than one of the reasons listed above may apply.

A digital inclusion plan should include strategies that address all of these issues.

## Who doesn't have a home broadband connection?

Approximately $12 \%$ of Nebraskans or 215,000 individuals do not have a broadband subscription at home. This includes:

- 32,000 individuals under 18 years old
- 102,000 individuals between 18 and 64 years old
- 81,000 individuals 65 years old or older

While the plight of $\mathrm{K}-12$ students struggling to participate in online learning received media attention during the pandemic, those under 18 are the most likely to have a home broadband connection. $93 \%$ of Nebraskans under 18 have a broadband connection at home compared to $70 \%$ of Nebraskans 65 years and older.

Those with lower incomes and lower levels of education as well as minority populations are also less likely to have an internet subscription. (See Table 1 in the appendix for more information.)

The percent of residents with a broadband subscription varies by county from a high of $94.2 \%$ in Sarpy County to a low of $67.6 \%$ in Garfield County. Here are the 10 Nebraska counties with the highest broadband subscription rates:

| County | \% Population with Broadband Subscription | Margin of Error |
| :--- | :---: | :---: |
| Sarpy County | 94.2 | 0.4 |
| Thomas County | 92.9 | 3.2 |
| Lancaster County | 91.5 | 0.6 |
| Polk County | 90.3 | 2.1 |
| Wayne County | 90.1 | 2.3 |
| Washington County | 89.8 | 1.6 |
| Cass County | 89.6 | 1.5 |
| Hamilton County | 89.6 | 2.3 |
| Seward County | 89.1 | 1.4 |
| Douglas County | 88.9 | 0.4 |

Here are the ten Nebraska counties with the lowest broadband subscription rates.

| County | \% Population with Broadband Subscription | Margin of Error |
| :--- | :---: | :---: |
| Deuel County | 78.1 | 5.0 |
| Hitchcock County | 76.1 | 4.1 |
| Loup County | 75.4 | 9.2 |
| Cuming County | 75.3 | 3.3 |
| Pawnee County | 74.0 | 4.8 |
| Sioux County | 73.9 | 6.8 |
| McPherson County | 72.2 | 9.4 |
| Thurston County | 70.2 | 2.5 |
| Hooker County | 68.7 | 9.9 |
| Garfield County | 67.6 | 7.7 |

## Getting Started

Most digital inclusion planning efforts go through the following steps:
Step 1: Develop a broad goal statement
Step 2: Form a digital inclusion committee
Step 3: Determine what are the digital inclusion needs in my community, county or region
Step 4: Catalog your community's digital inclusion assets and identify gaps
Step 5: Identify strategies to address the barriers to digital inclusion
The order of the steps could vary somewhat. For instance, the organizer could do research on who isn't online (step 3) before forming the digital inclusion committee (step 2).

The companion Digital Inclusion Plan Template and Spreadsheet help take information from this workbook to develop a basic digital inclusion plan. Blue text is used to indicate suggested material to include in your community, county or region's digital inclusion plan.

There is no wrong or right way to develop a digital inclusion plan. Feel free to modify this process to better suit the needs of your community, county or region.

## Nebraska Broadband Bridge Program includes

digital inclusion plan requirement for underserved areas

Underserved areas with a digital inclusion plan are eligible to apply for funding to deploy broadband scalable to 100 Mbps up and down or greater through the Nebraska Broadband Bridge Program. In its order opening the docket on the program, the Commission proposed the following requirements:

Digital Inclusion Plan. In accordance with LB 388, the Commission requires applications that serve "underserved" areas to include a digital inclusion plan. For the purposes of the application, the Commission proposes to require that a digital inclusion plan provides information about how information and communication technologies provided as a result of the grant will be made available to all individuals and communities within the coverage area, and specifically how the project will include methods for access by those that are disadvantaged within the community. Specifically, the Commission proposes to look at how carriers are going to make broadband service plans affordable to consumers and advertise those services regularly in a way to reach low income consumers. The Commission also seeks to disqualify any digital inclusion plans where the carrier would impose data caps on consumer usage.

While this guide doesn't match exactly with the digital inclusion plan requirements proposed by the Nebraska Public Service Commission for the Nebraska Broadband Bridge Program, this guide can still be a resource for applicants.


Photo credit: Verdigre hills by Anne Byers

## Step 1

## Develop a broad goal statement

As you begin to recruit committee members and to develop a digital inclusion plan, it may be helpful to develop a broad goal statement describing why you are undertaking this effort.

Examples include:

- To make sure that all individuals in the community who need access to online services can access and use them
- To improve internet access and digital literacy in my community
- To enable all residents to fully participate in the digital economy and society
- To enable all residents to learn online, work from home, access health care via telemedicine, and participate fully in the digital economy and society

You can include your initial goal statement or a revised goal developed by the committee in your plan.

## What is broadband? How much do households need?

## What is Broadband?

The FCC currently defines broadband as high-speed internet access at 25 Mbps down and 3 Mbps up or greater. As broadband speeds have increased over time, the FCC has periodically revised its definition.

## How Much Broadband Do Households Need?

Broadband of 25 Mbps down and 3 Mbps up is generally considered adequate for small families who use the internet for e-mail, web browsing, internet shopping, social media, and webstreaming from a limited number of devices. As more Americans are working, learning and accessing health care from home, many families are finding that they need greater broadband speeds-especially greater upload speeds. Many families are subscribing to plans of 100 Mbps down and 10 Mbps up or greater. The median download speed for fixed broadband in Nebraska was 92.63 Mbps and the median upload speed was 12.72 Mbps in the first quarter of 2021 according to Ookla's global index.


Photo Credits: Geneva Public Library and Wymore Public Library Sparks Grant meeting by Anne Byers

## Step 2

## Form a digital inclusion committee

Form a committee including representatives of the key organizations and groups in your community, including the local library, K-12 schools, higher education, health care providers, social service agencies, non-profits, community groups, groups representing the aging community, and groups representing the disabilities community, local government, University of Nebraska Extension, economic development, businesses, and other interested stakeholders.

## Committee Members:

Local Library Representative(s):
Local K-12 Representatives:
Health Care Provider Representatives(s):
Social Services Agencies Representative(s):
Local Agencies on Aging/Senior Centers Representatives(s):
Representatives of Community Groups (including groups representing the aging disabilities communities):

University of Nebraska Extension Representative:
Community or Economic Development Representative:
Community College, College or University Representatives:
Local Government Representative:
Business Representatives:
Economic Development Representative:
Other Interested Stakeholders:
You can include a list of committee members in your digital inclusion plan.

## Check out the County Broadband Fact Sheets

The Nebraska Library Commission in partnership with the NITC Community Council has put together broadband fact sheets for Nebraska Counties. The fact sheets include information on the percent population with broadband available to their household and the percent population which subscribes to broadband. The fact sheets also include information on library broadband. The fact sheets are available at: http://nlc.nebraska.gov/stats/broadband/

Here is the information from the fact sheet for Adams County:


Source: FCC Broadband Map (https://broadbandmap.fcc. gov) using
June 2020 Form 477 data. These figures do not include broadband availability via mobile broadband or satellite.


Source: U.S. Census Bureau 2019 American Community Survey 5Year Data, available at https://factfinder census gov/ These figures include those who subscribe to cable, fiber optic, or DSL, satellite, fixed wireless subscription, or mobile broadband plans

## Do libraries in Adams County have adequate broadband?

| Library | Service Area <br> Population | Maximum Download <br> Speed | Persons Per <br> Megabit Index | Does the Library <br> Apply for E-Rate? |
| :--- | :--- | :--- | :--- | :--- |
| Hastings Public Library | 31,363 | 100.1 Mbps-1 Gbps | 31 | Yes |

Source: Nebraska Library Commission. Public Library Survey 2019-2020 FY.
Note: Not all Nebraska libraries provided data to the Nebraska Library Commission.
Available at: http://nlc.nebraska.gov/stats/statlist.aspx


Photo credits: Atkinson eReader Workshop and Sump Memorial Library QR Code by Michael Sauers Creative Commons License AttributionNonCommerical 2.0 Generic (CC BY-NC 2.0)

## Step 3

## Determine what are the digital inclusion needs in my community, county or region

## What percent of residents of my county have a broadband subscription at home?

Use Table 2 in the appendix to find the percent population with a broadband subscription at home for your county and Nebraska by age groups. Here is a sample table for Adams County:

| Percent Population with Broadband Subscription by Age Group |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Area | \% Population | \% Population <br> Under 18 | \% Population <br> 18-64 Years | \% Population <br> 65 Years and Over |
| Adams County | $86.0 \%$ | $93.4 \%$ | $89.2 \%$ | $65.8 \%$ |
| Nebraska | $88.1 \%$ | $93.1 \%$ | $90.5 \%$ | $70.1 \%$ |

You can use the Digital Inclusion Workbook Spreadsheet for your figures and calculations or do them in the planning guide.

| Percent Population with Broadband Subscription by Age Group |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Area | \% Population | \% Population <br> Under 18 | \% Population <br> $18-64$ Years | \% Population <br> 65 Years and Over |
| County Name |  |  |  |  |
| Nebraska |  |  |  |  |

Please note the margins of error for the measures for your county listed in table 2. The margins of error for counties with smaller populations can be quite large.

You can enter the numbers into the Digital Inclusion Workbook Spreadsheet to generate a chart. Here is a sample for Adams County.

You can include the table and chart showing percent population with a broadband subscription by age group for your county in your digital inclusion plan.


Is the percent population with a broadband subscription in your county higher, lower or about the same as the figures for Nebraska?

Do you agree with these estimates? If not, why do you think these estimates are inaccurate?
If the figures for your county are significantly different than the figures for Nebraska, what factors are contributing to the differences?

You can include a summary of these points in your digital inclusion plan.

Calculate the number of people in your county without a broadband subscription by age groups. You can get information on the county population and percentage of population by age groups for your county by going to census.gov/quickfacts. Enter in your county and select population estimates, July 1, 2019 or the most recent estimate.

Here is a view of the quick facts for Adams County.

Persons under 18 years are $23.4 \%$ of the population of Adams County and
 persons 65 years and older are $18.9 \%$ of the population of Adams County. Together they comprise $42.3 \%$ of the population. You will have to calculate the percent of population for persons $18-64$ by subtracting $42.3 \%$ from $100 \%$. See the table below for the calculations for Adams County. You can use the Digital Inclusion Workbook Spreadsheet for your calculations.

| County Population by Age Groups | census.gov/quickfacts |  |
| :--- | :--- | :--- |
| Adams County Population | 31,363 <br> $(\mathrm{~A})$ |  |
|  | Percent Population | Population |
| Persons under 18 years | 23.4 | 7,339 |
|  | $(\mathrm{~B})$ | $\left(\mathrm{B} / 100^{*} \mathrm{~A}\right)$ |
| Persons 18-64 | 57.7 | 18,096 |
|  | $(100-\mathrm{B}-\mathrm{C})=\mathrm{D}$ | $\left(\mathrm{D} / 100^{*} \mathrm{~A}\right)$ |
| Persons 65 years and over | 18.9 | 5,928 |
|  | $(\mathrm{C})$ | $\left(\mathrm{C} / 100^{*} \mathrm{~A}\right)$ |
| TOTAL | $\mathbf{1 0 0}$ | $\mathbf{3 1 , 3 6 3}$ |

You can use the Digital Inclusion Workbook Spreadsheet for your calculations or do them in the following table:

| County Population by Age Groups | census.gov/quickfacts |  |
| :--- | :--- | :--- |
| County Population | (A) |  |
|  | Percent Population | Population |
| Persons under 18 years | (B) | (B/100*A) |
| Persons 18-64 | $(100-\mathrm{B}-\mathrm{C})=\mathrm{D}$ | (D/100*A) |
| Persons 65 years and over | (C) | (C/100*A) |
| TOTAL | $\mathbf{1 0 0}$ | $\mathbf{3 1 , 3 6 3}$ |

Now that you know the population of your county by age groups, you can calculate the population without a broadband subscription by age groups. Below is a sample for Adams County.

Population without a Broadband Subscription
By Age Group

| Age Group | Population | \% Population with <br> Broadband <br> Subscription | \% Population <br> without Broadband <br> Subscription | Population without <br> Broadband <br> Subscription |
| :--- | :---: | :---: | :---: | :---: |
| Total Population | 31,363 | $86.0 \%$ | $14.0 \%$ | 4,391 |
| Under 18 | 7,339 | $93.4 \%$ | $6.6 \%$ | 484 |
| $18-64$ | 18,096 | $89.2 \%$ | $10.8 \%$ | 1,954 |
| 65 and over | 5,928 | $65.8 \%$ | $34.2 \%$ | 2,027 |

[^1]You can use the Digital Inclusion Workbook Spreadsheet for your calculations or do them in the table below:

Population without a Broadband Subscription By Age Group

| Age Group | Population | \% Population with <br> Broadband <br> Subscription | \% Population <br> without Broadband <br> Subscription | Population without <br> Broadband <br> Subscription |
| :--- | :--- | :---: | :---: | :---: |
| Total Population |  |  |  |  |
| Under 18 |  |  |  |  |
| $18-64$ |  |  |  |  |
| 65 and over |  |  |  |  |

Date of ACS 5-Year Data: 2019
You can include this table in your plan.

You can include a chart of the population and a brief discussion including which age group has the largest population without a broadband subscription in your plan.


## Understanding Broadband Subscription Data

The American Community Survey considers any internet connection faster than dial up to be broadband. Mobile cellular subscriptions are also considered to be broadband subscriptions at home.

In contrast, the FCC only considers internet service at 25 Mbps down and 3 Mbps up or greater to be broadband. The FCC Form 477 broadband availability figures from the FCC's broadband map (https://broadbandmap.fcc.gov) do not include mobile broadband.

More information including the questions on computer use and internet access asked in the American Community Survey can be found in the American Community Survey Internet Subscription Data Cheat Sheet in the appendix.

## How many households in my community, county or region have only a smartphone or no computer?

Ten percent of Nebraska households do not have a computer, tablet or smartphone and 6.2\% of Nebraska households have only a smartphone according to data from the Census Bureau's 2019-5 Year American Community Survey. See the table below.

Households and \% Households in Nebraska with Devices, Smartphone Only or No Computer 2019 ACS 5-Year

|  | \# of Households | \% Households |
| :--- | :---: | :---: |
| With one or more computing <br> devices | 683,587 | $90.0 \%$ |
| With smartphone only | 46,747 | $6.2 \%$ |
| With no computing device | 75,589 | $10.0 \%$ |

Use Table 4 in the appendix to fill out the table below with data for your county.
Households and \% Households in County with Devices, Smartphone Only or No Computer 2019 ACS 5-Year

|  | \# of Households | \% Households |
| :--- | :--- | :--- |
| With one or more computing <br> devices |  |  |
| With smartphone only |  |  |
| With no computing device |  |  |

## Include this table in your digital inclusion plan.

To make it easier to compare the figures for your county and for Nebraska, fill out the table below in the Digital Inclusion Workbook Spreadsheet.

| Area | \% Households with <br> One or More <br> Computing Devices | \% Households <br> with Smartphone <br> Only | \% Households <br> with No <br> Computer |
| :--- | :--- | :--- | :--- |
| Your County |  |  |  |
| Nebraska | $90.0 \%$ | $6.2 \%$ | $10.0 \%$ |

You can make a chart to include in your digital inclusion plan.

Here is a sample chart for Adams County.

## Discussion

 QuestionsDo the figures for your county mirror the figures for Nebraska or are they significantly different? If they differ from the statewide average significantly, what factors are contributing to the difference?


You can include a short summary of this discussion question in your digital inclusion plan.

## As services move online, having a device becomes more important

Imagine trying to complete an online homework assignment or fill out a job application using a smartphone or without access to any computing device. Approximately $6 \%$ of households in Nebraska have only a smartphone and $10 \%$ have no computing device. While a smartphone works well for many uses, a desktop computer, laptop or tablet makes some tasks much easier. Having sites such as a library with computers available for public use, schools which distribute devices to all students, and programs which repair and distribute used computers can help address the need for computers or tablets.

## Is broadband of at least 25 Mbps down and 3 Mbps up and preferably at least 100 Mbps down and 20 Mbps up available to all areas of my community, county or region?

Use Tables 5 and 6 in the appendix to find the percent population and percent rural population with $25 / 3$ Mbps and 100/20 Mbps broadband available for your county. Below is a sample for Adams County from June 2020 FCC Form 477 data.

| Area | \% Population <br> with 25/3 Mbps | \% Population <br> with 100/10 Mbps |
| :--- | :---: | :---: |
| Adams County | $96.7 \%$ | $94.5 \%$ |
| Rural Adams County | $86.3 \%$ | $76.8 \%$ |
| Nebraska | $98.3 \%$ | $90.2 \%$ |
| Rural Nebraska | $93.9 \%$ | $68.2 \%$ |

You can use the Digital Inclusion Workbook Spreadsheet for your data or fill in the data in the table below:

| Area | \% Population <br> with 25/3 Mbps | \% Population <br> with 100/10 Mbps |
| :--- | :---: | :---: |
| Your County |  |  |
| Rural Your County |  |  |
| Nebraska | $98.3 \%$ | $90.2 \%$ |
| Rural Nebraska | $93.9 \%$ | $68.2 \%$ |

You can generate a chart from the data using Excel. Here is a sample for Adams County.

You can include the table and chart with information on percent population with broadband availability in your plan.


Calculate the number of people in your county without 25/3 Mbps and 100/10 Mbps broadband available. Below is a sample for Adams County.

| Speed Tier | Population | \% Population <br> with Broadband <br> Available | \% without Broadband <br> Available | Population without <br> broadband available |
| :--- | :--- | :--- | :--- | :--- |
| $25 / 3 \mathrm{Mbps}$ | 31,363 | $96.7 \%$ | $100 \%-96.7 \%=3.3 \%$ | $31,363 \times .033=1,035$ |
| $100 / 10$ <br> Mbps | 31,363 | $94.5 \%$ | $100 \%-94.5 \%=5.5 \%$ | $31,363 \times .055=1,725$ |

You can use the Digital Inclusion Workbook Spreadsheet for your data or fill in the data in the table below:

| Speed Tier | Population | \% Population <br> with Broadband <br> Available | \% without Broadband <br> Available | Population without <br> broadband available |
| :--- | :--- | :--- | :--- | :--- |
| $25 / 3 \mathrm{Mbps}$ |  |  |  |  |
| $100 / 10$ <br> Mbps |  |  |  |  |

You can include information on the estimated population without broadband in your plan:

## Adams County, Nebraska <br> Estimated Population without Broadband Available

| Speed Tier | Population without Broadband Available |
| :--- | :---: |
| $25 / 3 \mathrm{Mbps}$ | 1,035 |
| $100 / 10 \mathrm{Mbps}$ | 1,725 |

## Discussion Questions

Is the percent population and percent rural population with broadband available in your county higher, lower or about the same as the figures for Nebraska?

Do you agree with these estimates? If the figures for your county are significantly different than the figures for Nebraska, what factors are contributing to the differences?

You can include a brief summary of these discussion points in your plan.

## If broadband isn't available to all areas of my county or region, where isn't broadband available?

## Nebraska Broadband Map

Go to the Nebraska Broadband Map at https://broadbandmap.nebraska.gov

To see where broadband is available in your area, click on the layers icon.

To see where broadband is available by speed tier, select the speed tiers you would like displayed.


You can zoom in to see where broadband is available in your county or community. To change the transparency of the layers, you can click on the three dots by Speed Tiers in the layers list and select transparency.

You can include a screen shot of the map showing broadband availability in your plan.


You can also view broadband availability by type of technology.

If you click on the "near me" icon and then a
 point on the map, it will bring up a list of providers and their reported maximum advertised download and upload speeds.


## Discussion Questions

Do telecommunications providers report providing broadband to all areas of your community or county? Does the information reported by telecommunications providers seem accurate?

Are there areas where broadband availability is overstated?
Which companies provide broadband in your area?
You can include a summary of these points in your digital inclusion plan.

## Understanding Broadband Availability Data

The data on broadband availability comes from information that telecommunications providers report to the FCC twice a year. If a broadband provider provides or can easily provide service to one customer in a census block, the entire census block is reported as having broadband available. This can lead to overstating coverage in large, rural census blocks. Fixed wireless service seems especially prone to over-reporting. BroadbandNow estimated the following error rates by technology:

| Technology | \% Over-reported |
| :--- | :---: |
| DSL | $18 \%$ |
| Cable | $17 \%$ |
| Fiber | $23 \%$ |
| Fixed Wireless | $35 \%$ |

Source: Busby, J.; Tanberk, J.; and Cooper, T. (June 8, 2021) BroadbandNow estimates availability for all 50 states; confirms that more than 42 million Americans do not have access to broadband. Available at
https://broadbandnow.com/research/fcc-broadband-overreporting-by-state

## Nebraska Speed Test Map

The Nebraska Regional Officials Council and local economic development districts received a grant from the Economic Development Administration to map speed test data and to develop broadband plans. Speed tests show the speeds that consumers are actually experiencing and can be used to verify the information from the Nebraska broadband map. The WiFi router in the home as well as the age and number of devices connected can impact speed test results. The speed test map is at https://www.nebraskaspeedtest.org/.

Here is a screen shot of the map taken on April 25, 2021.


You can include a screen shot of the speed test map of your community, county or region in your plan.
If you are concerned that broadband availability is not accurately reported, you can encourage members of the community to conduct speed tests at https://www.nebraskaspeedtest.org/. The FCC also has a speed test app that can be downloaded from the Google Play or Apple App stores. More information on the FCC speed test app is available at https://www.fcc.gov/BroadbandData/consumers\#speed-test

## Discussion Questions

Compare how the Nebraska Broadband Map and the Nebraska Speed Test map visualize broadband availability. Which one do you think more accurately shows broadband availability in your county or community?

What areas of your community, county or region do not have broadband available?
A summary of these points can be included in your plan.

## Is broadband affordable?

Broadband affordability is relative. What is affordable for one family may not be affordable for another. Broadbandnow.com defines low-priced broadband plans as costing $\$ 60$ a month or less.

A new FCC program is helping eligible households afford broadband subscriptions. The Emergency Broadband Benefit will provide a discount of up to $\$ 50$ per month towards broadband service for eligible households and up to $\$ 75$ per month for households on qualifying Tribal lands. Eligible households can also receive a one-time discount of up to $\$ 100$ to purchase a laptop, desktop computer, or tablet from participating providers if they contribute more than $\$ 10$ and less than $\$ 50$ toward the purchase price. Information on the program is available at https://www.fcc.gov/broadbandbenefit.

## Discussion Questions

How affordable is broadband service?
Do providers offer lower cost service to low-income consumers?
Is information on federal and state programs which provide assistance to low-income consumers easily available to individuals and families that may qualify?

A summary of these points can be included in your plan.

## Lack of interest and affordability are top reasons

## for not having internet at home

Over $50 \%$ of Nebraska households without a home internet connection said that the main reason they do not have an internet subscription is because they don't need it or are not interested according to a 2019 Census Bureau survey. Other reasons included affordability ( $16.7 \%$ ) and availability ( $7.8 \%$ ). See the table below.

The lack of interest in being connected at home has been a difficult barrier to address. The COVID-19 pandemic has demonstrated the value of broadband to many formerly unconnected households and has led to an increase in broadband subscriptions.

Main Reason for Nebraska Households Not Online at Home

| Reason | Percent |
| :--- | :---: |
| Don't Need It or Not Interested | $52.8 \%$ |
| Too Expensive | $16.7 \%$ |
| Not Available in Area | $7.8 \%$ |
| No/Inadequate Computer | $4.6 \%$ |
| Privacy or Security Concerns | $4.1 \%$ |
| Can Use Elsewhere | $3.2 \%$ |

Source: November 2019 Census Computer and Internet Use Survey
https://www.ntia.doc.gov/data/digital-nation-data-explorer\#sel=unavailableMainReason\&disp=map

## Why aren't individuals digitally connected? What are their needs, interests and challenges?

Data, statistics and technical requirements are only half of the equation. Including those who are not digitally connected in community conversations can lead to a better understanding of their needs, interests and challenges.

User Experience (UX) research helps community leaders understand people, focus on technology that complements everyday life, and pinpoint how technology education can flow better in people's lives.

You can use the Teaching Technology in the Library Guidebook to focus on the whole person in your community.

## Discussion Questions

What are the main reasons that individuals in my community are not digitally connected? What are their needs, interests, and challenges?

How does technology fit into everyday life? Why learn?
What are the social, emotional and human needs of people who are getting up to speed with broadband, technology and digital skills?

Is technology a threat to identity? How can we maintain community values?
What is the best way to connect people with tools and resources to learn what matters?

A summary of these points can be included in your plan.


Photo credits: Technology and Computers photo 1, photo 2, and photo 3 by Austin Public Library Creative Commons License AttributionNonCommerical 2.0 Generic (CC BY-NC 2.0


Photo credits: Governor Ricketts at Sparks Grant open house at Verdigre Public Library and Genoa Public Library Spark s Grant meeting by Anne Byers

## Step 4

Catalog your community's digital inclusion assets and identify gaps
Use the tables below to help identify digital literacy assets in your community and to identify possible action items for your plan. The digital inclusion committee could go through the list together at a meeting or can assign sections to committee members to complete and share with the committee later.

## Public Library Digital Inclusion Assets and Gaps

## Does the local public library have adequate broadband?

Libraries are often the center of digital inclusion efforts. Libraries can provide access to computers, WiFi, hot spot lending programs, training and technical support. However, just under half of the libraries in Nebraska have internet service at speeds below 25 Mbps down, and $86 \%$ of Nebraska libraries have broadband service below 100 Mbps down. This puts most Nebraska libraries far under the FCC's bandwidth target of at least 100 Mbps down for libraries serving fewer than 50,000 people at least 1 Gbps down for all libraries serving 50,000 or more people. ${ }^{1}$

The FCC's E-Rate program provides discounts for telecommunications, internet access, and internal connections to eligible schools and libraries with funding from the federal Universal Service Fund. Sixty Nebraska libraries—approximately $27 \%$ of Nebraska libraries - were awarded $\$ 188,115$ in discounts on their Internet Access and Internal Connections costs during Funding Year 2020 (July 1, 2020-June 30, 2021). Discounts ranged from $50 \%$ to $90 \%$ with an average discount of $73 \%$. The Nebraska Public Service Commission also provides matching funds for fiber construction to the library for libraries participating in the E-Rate Special Construction Matching Program.

You can find information on the broadband available at public libraries in your county from the County Broadband Fact sheets available at http://nlc.nebraska.gov/stats/broadband/ . The local library director

[^2]can verify or provide updated information. The Nebraska Library Commission has a list of libraries which have received E-rate funding at http://nlc.nebraska.gov/erate/\#recipients.

| Public Library <br> Broadband Asset Identification Questions | Response |
| :--- | :--- |
| Download and upload speed of the public library's internet service |  |
| Does the library have a fiber connection for broadband? |  |
| Does the library apply for E-Rate funding? |  |
| If the library does not have a fiber connection, has the library <br> considered applying for the E-Rate Special Construction program and <br> matching funds from the Nebraska Public Service Commission? |  |

You can include this table in your digital inclusion plan.

## Discussion Questions

Is the public library's broadband adequate?
If not, how can it be improved?
Include a brief summary of this discussion point in your plan.

## How is the local library supporting digital inclusion?

| Public Library <br> Other Asset Identification Questions | Yes | No | N/A <br> Possible <br> Action <br> Item <br> Does the public library provide Wi-Fi access to the internet? <br> Is the library open during times convenient for students to do <br> homework and for the public to use the internet? <br> Does the library have up to date computers that can be used by the <br> public? <br> Does the library budget for periodic replacements of public access <br> computers? <br> Does the library have a hot spot lending program? <br> Does the library offer classes on using technology? |  |
| :--- | :--- | :--- | :--- | :--- |

## Discussion Questions

Does the local public library have adequate digital inclusion resources and programs?
How could these resources and programs be improved?

Include a description of the public library's digital inclusion assets and gaps in your plan

## Survey gauges impact of homework gap on students, teachers

In order to better gauge the impact of the homework gap on teachers and students in Nebraska, a survey was disseminated via e-mail to 21,443 Nebraska teachers during July 2019. ${ }^{32}$ Nearly 7,000 $(6,919)$ teachers responded for a response rate of $32 \%$.
The survey found:

- Over three-fourths (77\%) of teachers agreed that if all students had broadband internet access at home, it would positively impact student learning/achievement.
- Nearly half of teachers (48\%) agreed that the absence of home internet access for some students affects the level or amount of homework assigned.
- Most teachers report using digital resources for a minority of their homework assignments, with $64 \%$ of respondents indicating that less than $25 \%$ of their homework assignments are dependent on digital or internet-based resources.
- Overall, $37 \%$ of teachers estimated that $21 \%$ to greater than $40 \%$ of students do not have home internet access.
- Teacher estimates of the proportion of students not having home internet access varied by ESU and community size. The percent of teachers estimating that the percent of students lacking home internet access was $21 \%$ or greater increased with the size of the community, with $45 \%$ of those teaching in communities of 25,000 or larger estimating that at least $21 \%$ of students lacked home internet access (See Figure 1). The percent of teachers estimating
 that at least $21 \%$ of students lacked home internet access by ESU ranged from a low of $23 \%$ in ESU 11 (Holdrege) to a high of $65 \%$ in ESU 19 (Omaha Public Schools).

Most teachers ( $90 \%$ ) reported that accommodations are made to address students' lack of home internet access. The accommodations most often cited included:

- Providing more class time to complete homework assignments (55\%);
- Providing some students with printed materials that otherwise would be internet-based (41\%); and
- Providing before-school and after-school time to complete homework assignments (33\%).

See Appendix 10 Nebraska Homework Gap Survey Results of the Rural Broadband Task Force 2019 report for complete survey results

## K-12 Schools Digital Inclusion Assets and Gaps

How is K-12 education supporting digital inclusion and addressing the homework gap?

| K-12 Schools <br> Asset Identification Questions | Yes | No | N/A | Possible <br> Action <br> Item |
| :--- | :--- | :--- | :--- | :--- |
| Do area schools provide laptops, chrome books or tablets for <br> students to use at home? |  |  |  |  |
| Do area schools have a hot spot lending program for students? |  |  |  |  |
| Do area schools have other programs for ensuring that students <br> can access the internet in order to do homework or participate in <br> online learning? |  |  |  |  |
| Have area schools maximized all the state and federal technology <br> and connectivity funding for which they are eligible? |  |  |  |  |
| Do area schools engage social service agencies in helping reach <br> student households where language and/or poverty may be a <br> challenge? |  |  |  |  |
| Do area schools make other accommodations (e.g. before and after <br> school study time, paper packets, parking lot Wi-Fi, etc...) for <br> students who may not have consistent access to adequate internet <br> while away from school? |  |  |  |  |
| Have area schools deployed mobile cellular Wi-Fi on transit and <br> activity buses? |  |  |  |  |
| Do area schools regularly update their digital equity data (e.g. <br> devices \& internet) with the Nebraska Department of Education? |  |  |  |  |
| Do area schools follow up with non-responding families so that the <br> digital equity data includes 100\% of all student and staff <br> households? |  |  |  |  |
| Other |  |  |  |  |

## Discussion Questions

Do all students have access to adequate broadband and to computers or tablets to complete their homework and to learn remotely if needed?

If not, what could be done to improve student access to broadband and devices?

Do local K-12 schools have adequate digital inclusion resources and programs?

How could these resources and programs be improved?

Include a description of $K$-12 education's digital inclusion assets and gaps in your plan.

## Local Agencies on Aging or Senior Centers

Digital Inclusion Assets and Gaps
How are local agencies on aging or senior centers supporting digital inclusion?

| Local Agencies on Aging or Senior Centers <br> Asset Identification Questions | Yes | No | N/A | Possible <br> Action <br> Item |
| :--- | :--- | :--- | :--- | :--- |
| Do local agencies on aging or senior centers have programs to help <br> senior citizens use technology? |  |  |  |  |
| Do local agencies on aging or senior centers have computers and/or <br> wi-fi for senior citizens? |  |  |  |  |
| Do local agencies on aging or senior centers provide technical <br> assistance for senior citizens? |  |  |  |  |
| Are there locations available for seniors to use for telehealth <br> consultations? |  |  |  |  |
| Are there other organizations that can provide assistance? |  |  |  |  |
| Other |  |  |  |  |

## Discussion Question

Do individuals 65 and over have adequate broadband and access to devices in order to access health care via telehealth and other services online?

How could access to broadband, devices, training, and technical support for older adults be improved?
Include a description of assets and gaps for programs and resources for senior citizens in your plan.

## Older Nebraskans Lag U.S in Broadband Subscription

Nebraska's broadband subscription rate exceeds the U. S average subscription rate for those under 18 years and those 18-64 years. The percent population 65 years and over subscribing to broadband in Nebraska is lower, however, than the U.S. average. See the chart to the right.

Nebraska has the $4^{\text {th }}$ largest gap in subscription rates between those 18 to 64 years old and those over 65 years old with only North Dakota, West Virginia, and Pennsylvania having a larger gap. See the table below.


| State | \% Broadband Subscription <br> 18 to 64 years | \% Broadband Subscription <br> 65 years and over | Broadband Gap |
| :--- | :---: | :---: | :---: |
| North Dakota | $87.4 \%$ | $66.2 \%$ | $21.2 \%$ |
| West Virginia | $84.5 \%$ | $63.3 \%$ | $21.2 \%$ |
| Pennsylvania | $89.3 \%$ | $68.7 \%$ | $20.6 \%$ |
| Nebraska | $90.5 \%$ | $70.1 \%$ | $20.4 \%$ |
| lowa | $88.3 \%$ | $68.3 \%$ | $20.0 \%$ |

Source: 2019 ACS \%-Year estimates
Subscription rates for older adults also vary by Nebraska County with a high of $88.6 \%$ in Blaine County and a low of $43.8 \%$ in Hooker County. See the map below and Table 2 in the appendix.


## Other Programs Digital Inclusion Assets and Gaps

How are other programs supporting digital inclusion?

| Other Programs <br> Asset Identification Questions | Yes | No | N/APossible <br> Action <br> Item |  |
| :--- | :--- | :--- | :--- | :--- |
| Are there other locations in the community with Wi-Fi access? <br> If so, please list them: |  |  |  |  |
| Are there programs to refurbish and distribute devices? |  |  |  |  |
| Do local broadband providers offer a low-cost option for low- <br> income individuals or families? <br> If so, please list them: |  |  |  |  |

Include a description of assets and gaps for other programs and resources in your plan if applicable.

## Local Community Colleges, Colleges, and/or Universities Digital Inclusion Assets and Gaps <br> How are local community colleges, colleges and/or universities supporting digital inclusion?

| Local Community Colleges, Colleges and/or Universities <br> (if applicable) | Yes | No | N/A | Possible <br> Action <br> Item |
| :--- | :--- | :--- | :--- | :--- |
| Does the local community college, college or university offer non- <br> credit courses on using technology? |  |  |  |  |
| Does the local community college, college, or university have maker <br> space facilities? |  |  |  |  |
| Does the local community college, college or university offer <br> degrees in technology-related fields? |  |  |  |  |

Include a description of assets and gaps for community colleges, colleges and universities if applicable in your plan.

## Discussion Questions-All Digital Inclusion Assets, Gaps and Possible Strategies and Actions

What resources are currently available in our community?

How can we build on or leverage our existing resources to improve digital inclusion efforts?

What resources are missing in our community? How can we provide these resources?

Include a summary of this discussion in your digital inclusion plan.


Photo credits: Electric circuit card from Makerspace workshop at University of Nebraska Innovation Campus, tour of Hartington Public Library, 3D printer at University of Nebraska Innovation Campus by Anne Byers

## Step 5

## Identify strategies to address the barriers to digital inclusion

Strategies and Programs that help those who don't have broadband at home Existing Programs and Resources that Can Be Leveraged
1.
2.
3.

New Actions, Strategies and Programs to help those who don't have broadband at home
1.
2.
3.

Strategies and Programs that help those who don't have a computer, tablet or smart phone

Existing Programs and Resources that Can Be Leveraged
1.
2.
3.

New Actions, Strategies and Programs
1.
2.
3.

## Strategies and Programs to help those who lack skills knowledge, confidence and technical support

## Existing Programs and Resources that Can Be Leveraged

1. 
2. 
3. 

## New Actions, Strategies and Programs

1. 
2. 
3. 

Many plans also include goals for each action or strategy.


Photo credits: Verdigre Public Library Sparks Grant open house and fiber in Lincoln by Anne Byers

Table 1
Nebraska Broadband Subscription Data
2019 American Community Survey 5 Year Estimate

| Label <br> (A) | Nebraska population estimate (b) | Nebraska population with a computing device and a broadband subscription | \% Nebraska population with a computing device and a broadband subscription | Nebraska population estimate with computing device but without a broadband subscription | \% Nebraska population with a computing device but without a broadband subscription | Nebraska population estimate without a computing device | \% Nebraska population without a computing device | Total Neb pop. Estimate with a computer and without internet subscription and pop without a computing device (e+g) | Total \% Neb pop estimate with a computing device and without internet subscription and pop without a computing device (100\%-d) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total population in households | 1,862,842 | 1,640,691 | 88.10\% | 102,751 | 5.50\% | 112,138 | 6.00\% | 214,889 | 11.90\% |
| AGE |  |  |  |  |  |  |  |  |  |
| Under 18 years | 472,032 | 439,229 | 93.10\% | 21,604 | 4.60\% | 10,407 | 2.20\% | 32,011 | 6.90\% |
| 18 to 64 years | 1,109,541 | 1,004,347 | 90.50\% | 59,909 | 5.40\% | 41,803 | 3.80\% | 101,712 | 9.50\% |
| 65 years and over | 281,269 | 197,115 | 70.10\% | 21,238 | 7.60\% | 59,928 | 21.30\% | 81,166 | 29.90\% |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |  |  |  |
| White alone | 1,625,108 | 1,438,067 | 88.50\% | 84,028 | 5.20\% | 96,359 | 5.90\% | 180,387 | 11.50\% |
| Black or African American alone | 87,490 | 70,893 | 81.00\% | 7,440 | 8.50\% | 9,005 | 10.30\% | 16,445 | 19.00\% |
| American Indian and Alaska Native alone | 16,897 | 13,108 | 77.60\% | 2,142 | 12.70\% | 1,588 | 9.40\% | 3,730 | 22.40\% |
| Asian alone | 44,160 | 39,952 | 90.50\% | 2,402 | 5.40\% | 1,516 | 3.40\% | 3,918 | 9.50\% |
| Native Hawaiian and Other Pacific Islander alone | 1,238 | 1,051 | 84.90\% | 84 | 6.80\% | 103 | 8.30\% | 187 | 15.10\% |
| Some other race alone | 39,104 | 33,005 | 84.40\% | 4,132 | 10.60\% | 1,890 | 4.80\% | 6,022 | 15.60\% |
| Two or more races | 48,845 | 44,615 | 91.30\% | 2,523 | 5.20\% | 1,677 | 3.40\% | 4,200 | 8.70\% |
| Hispanic or Latino origin (of any race) | 204,003 | 170,868 | 83.80\% | 16,336 | 8.00\% | 15,981 | 7.80\% | 32,317 | 16.20\% |
| White alone, not Hispanic or Latino | 1,473,099 | 1,311,545 | 89.00\% | 72,972 | 5.00\% | 82,640 | 5.60\% | 155,612 | 11.00\% |
| EDUCATIONAL ATTAINMENT |  |  |  |  |  |  |  |  |  |
| Household population 25 years and over | 1,225,790 | 1,049,698 | 85.60\% | 71,866 | 5.90\% | 98,275 | 8.00\% | 170,141 | 14.40\% |
| Less than high school graduate or equivalency | 101,443 | 68,743 | 67.80\% | 10,436 | 10.30\% | 21,605 | 21.30\% | 32,041 | 32.20\% |
| High school graduate (includes equivalency), some college or associate's degree | 727,807 | 606,654 | 83.40\% | 49,067 | 6.70\% | 67,826 | 9.30\% | 116,893 | 16.60\% |
| Bachelor's degree or higher | 396,540 | 374,301 | 94.40\% | 12,363 | 3.10\% | 8,844 | 2.20\% | 21,207 | 5.60\% |
| EMPLOYMENT STATUS |  |  |  |  |  |  |  |  |  |
| Civilian population 16 years and over | 1,435,454 | 1,243,135 | 86.60\% | 83,008 | 5.80\% | 102,709 | 7.20\% | 185,717 | 13.40\% |
| In labor force | 1,019,858 | 929,352 | 91.10\% | 52,086 | 5.10\% | 35,056 | 3.40\% | 87,142 | 8.90\% |
| Employed | 987,296 | 901,392 | 91.30\% | 49,232 | 5.00\% | 33,384 | 3.40\% | 82,616 | 8.70\% |
| Unemployed | 32,562 | 27,960 | 85.90\% | 2,854 | 8.80\% | 1,672 | 5.10\% | 4,526 | 14.10\% |
| Not in labor force | 415,596 | 313,783 | 75.50\% | 30,922 | 7.40\% | 67,653 | 16.30\% | 98,575 | 24.50\% |

Table 2

## Percent Population with Broadband Subscription By Age Groups

## Nebraska Counties

2019 ACS 5 year

|  | \% Population with Broadband <br> Subscription |  | \% Population with Broadband Subscription Under 18 Years |  | \% Population with Broadband Subscription 18 to 64 Years |  | \% Population with <br> Broadband <br> Subscription <br> 65 Years and Over |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area | Estimate | Margin of Error | Estimate | Margin of Error | Estimate | Margin of Error | Estimate | Margin of Error |
| Adams County | 86 | 1.8 | 93.4 | 3.2 | 89.2 | 1.9 | 65.8 | 3.9 |
| Antelope County | 83.8 | 2.3 | 95.9 | 3.1 | 88.8 | 2.7 | 59.2 | 5.6 |
| Arthur County | 84.3 | 4.5 | 99.2 | 1.7 | 90.5 | 3.8 | 56.1 | 12.4 |
| Banner County | 81.9 | 5.8 | 91.4 | 5.9 | 84.2 | 7.4 | 65.8 | 14 |
| Blaine County | 88.3 | 7 | 90.4 | 13.4 | 87.1 | 8 | 88.6 | 6 |
| Boone County | 86.3 | 1.6 | 96.4 | 2.2 | 92.9 | 2 | 57.5 | 5.4 |
| Box Butte County | 85.5 | 4 | 89.1 | 6.6 | 88.4 | 4.2 | 69.5 | 6.7 |
| Boyd County | 82.6 | 3.1 | 97 | 3.7 | 86.9 | 3 | 65.1 | 6.4 |
| Brown County | 84.5 | 3.2 | 97.5 | 2.5 | 91.9 | 3.8 | 59.3 | 9.3 |
| Buffalo County | 88.5 | 1.5 | 96 | 1.4 | 90.5 | 1.8 | 66.4 | 4.1 |
| Burt County | 79.9 | 2.8 | 89 | 4.3 | 83.7 | 3.5 | 61.7 | 4.2 |
| Butler County | 85.6 | 1.9 | 94.1 | 2.4 | 91.5 | 1.9 | 57.7 | 6.8 |
| Cass County | 89.6 | 1.5 | 94.3 | 1.7 | 92.2 | 1.5 | 73.6 | 4 |
| Cedar County | 88.2 | 1.6 | 96.7 | 2.1 | 93 | 1.6 | 64.4 | 4.2 |
| Chase County | 87.8 | 4.7 | 97.4 | 4.1 | 91.2 | 5.6 | 67.7 | 8.7 |
| Cherry County | 85.7 | 2.8 | 94.6 | 3.6 | 89.9 | 2.9 | 64.1 | 7.3 |
| Cheyenne County | 85.9 | 2.6 | 93.8 | 3.8 | 88.4 | 2.7 | 67.1 | 6.6 |
| Clay County | 84.1 | 2 | 92.6 | 3.1 | 86.9 | 2.4 | 64.7 | 5.1 |
| Colfax County | 81.9 | 8.3 | 86.8 | 15 | 84.5 | 6.8 | 57 | 7.9 |
| Cuming County | 75.3 | 3.3 | 78.4 | 6.6 | 82.3 | 3.3 | 52.8 | 5.1 |
| Custer County | 81.1 | 2.6 | 89.2 | 4.5 | 84.6 | 2.8 | 63.2 | 4 |
| Dakota County | 81.3 | 4.1 | 84.2 | 7.4 | 84.9 | 4.2 | 58.3 | 8 |
| Dawes County | 88.4 | 2.8 | 96.5 | 3.1 | 92.8 | 3.2 | 66.9 | 7.7 |
| Dawson County | 86.3 | 2 | 93.6 | 3 | 88.7 | 2.2 | 63.7 | 4.8 |


|  | \% Population with <br> Broadband <br> Subscription |  | \% Population with Broadband Subscription Under 18 Years |  | \% Population with Broadband Subscription 18 to 64 Years |  | \% Population with <br> Broadband <br> Subscription <br> 65 Years and Over |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area | Estimate | Margin of Error | Estimate | Margin of Error | Estimate | Margin of Error | Estimate | Margin of Error |
| Deuel County | 78.1 | 5 | 89.7 | 5.8 | 84.7 | 5.7 | 51.4 | 8.5 |
| Dixon County | 79 | 3.4 | 81.9 | 7.2 | 82.2 | 3.5 | 66 | 5.4 |
| Dodge County | 84.1 | 1.7 | 89.6 | 3.3 | 87.2 | 1.8 | 66.9 | 3.5 |
| Douglas County | 88.9 | 0.4 | 91.7 | 0.8 | 90.6 | 0.5 | 74.6 | 1.2 |
| Dundy County | 80.2 | 4.3 | 94.3 | 4.7 | 82.7 | 5 | 57 | 8.2 |
| Fillmore County | 83 | 2.1 | 94.6 | 3.1 | 87.9 | 2.4 | 59.4 | 5.7 |
| Franklin County | 79.8 | 3.2 | 86.8 | 6.1 | 86.3 | 3.3 | 60.7 | 6.4 |
| Frontier County | 81.4 | 3.1 | 92.5 | 5 | 88.8 | 3.6 | 57.9 | 6.4 |
| Furnas County | 82.2 | 2.6 | 89.7 | 5.6 | 88.4 | 2.4 | 60.7 | 5.5 |
| Gage County | 86.8 | 1.2 | 96.8 | 1.5 | 90.7 | 1.5 | 63 | 3.6 |
| Garden County | 80.1 | 6.2 | 90.1 | 9.5 | 76.7 | 8.4 | 79 | 6.7 |
| Garfield County | 67.6 | 7.7 | 75.8 | 13.9 | 71.8 | 9.3 | 53.2 | 13.1 |
| Gosper County | 88.3 | 2.9 | 98.3 | 2.3 | 89.2 | 4 | 78.9 | 6.2 |
| Grant County | 83.8 | 5.5 | 100 | 12.8 | 87.3 | 7.4 | 57.9 | 11.1 |
| Greeley County | 80.1 | 3.7 | 91.3 | 6.4 | 87.2 | 3.6 | 54.6 | 6.9 |
| Hall County | 86.8 | 1.7 | 91 | 2.6 | 89.1 | 1.7 | 68.4 | 3.2 |
| Hamilton County | 89.6 | 2.3 | 95 | 2.7 | 91.4 | 2.6 | 77 | 5.9 |
| Harlan County | 83.4 | 2.9 | 94.1 | 4 | 85.6 | 3.6 | 67.8 | 6.6 |
| Hayes County | 80.7 | 5.9 | 84.7 | 12.8 | 84.9 | 5.8 | 62.7 | 12.5 |
| Hitchcock County | 76.1 | 4.1 | 84.5 | 9.3 | 80.2 | 4.1 | 59.3 | 8.3 |
| Holt County | 81.6 | 2.3 | 90.1 | 3.2 | 86.4 | 2.6 | 58.3 | 5.7 |
| Hooker County | 68.7 | 9.9 | 73 | 23.1 | 83.3 | 8.5 | 43.8 | 17.5 |
| Howard County | 81.9 | 2.2 | 94.1 | 3 | 86.6 | 2.9 | 55.8 | 6.1 |
| Jefferson County | 80.1 | 3.1 | 93.2 | 4.4 | 85.4 | 3.3 | 54.2 | 7.1 |
| Johnson County | 80.2 | 3.4 | 92.8 | 4.7 | 85 | 4.3 | 53.5 | 7.7 |
| Kearney County | 88.6 | 2.2 | 97.9 | 1.6 | 92.4 | 2.6 | 64.1 | 7.5 |
| Keith County | 86.6 | 2.2 | 93.5 | 3.8 | 91.3 | 2.5 | 71.9 | 4.3 |


|  | \% Population with Broadband Subscription |  | \% Population with Broadband Subscription Under 18 Years |  | \% Population with Broadband Subscription 18 to 64 Years |  | \% Population with <br> Broadband <br> Subscription <br> 65 Years and Over |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area | Estimate | Margin of Error | Estimate | Margin of Error | Estimate | Margin of Error | Estimate | Margin of Error |
| Keya Paha County | 85 | 5.2 | 98.5 | 3.1 | 90.7 | 5.9 | 58.5 | 13.6 |
| Kimball County | 78.8 | 5.4 | 79.6 | 12.6 | 83.5 | 5 | 67.1 | 7.9 |
| Knox County | 79.4 | 2.5 | 85.2 | 5.7 | 84.9 | 2.1 | 60.6 | 4.9 |
| Lancaster County | 91.5 | 0.6 | 95.6 | 0.8 | 92.7 | 0.6 | 78.7 | 1.4 |
| Lincoln County | 88.2 | 1.3 | 96.4 | 1.3 | 91.4 | 1.6 | 67.4 | 3.9 |
| Logan County | 85 | 3.6 | 97.7 | 2.5 | 89.7 | 4 | 55.4 | 12.4 |
| Loup County | 75.4 | 9.2 | 76.3 | 21.7 | 80.2 | 9 | 62.8 | 14.7 |
| McPherson County | 72.2 | 9.4 | 88.5 | 11.1 | 73.1 | 12 | 61.9 | 14.6 |
| Madison County | 83.7 | 1.7 | 91.6 | 3.1 | 87 | 1.6 | 56.1 | 4.5 |
| Merrick County | 80.8 | 3.2 | 91.9 | 4.5 | 83.7 | 3.7 | 60 | 6.7 |
| Morrill County | 80.6 | 4.3 | 83.7 | 9.9 | 84.4 | 4.2 | 65 | 7 |
| Nance County | 83.5 | 3.3 | 97.1 | 2.8 | 85.6 | 4.3 | 60.6 | 7.6 |
| Nemaha County | 82.4 | 3.2 | 93.2 | 3.9 | 84.7 | 4 | 63.7 | 7.2 |
| Nuckolls County | 80.1 | 3.7 | 93.3 | 3.4 | 87 | 5.1 | 55.1 | 7.5 |
| Otoe County | 87 | 1.9 | 94.7 | 3.3 | 90.9 | 2 | 64.9 | 4.5 |
| Pawnee County | 74 | 4.8 | 81.6 | 10.3 | 76.6 | 6.2 | 63.1 | 6.5 |
| Perkins County | 88.2 | 3.1 | 97.9 | 2.3 | 93.1 | 3.1 | 65.3 | 7.8 |
| Phelps County | 85.4 | 2.5 | 93.4 | 3.8 | 88.5 | 3.1 | 65.5 | 5.9 |
| Pierce County | 87.6 | 1.8 | 95.2 | 3.4 | 93.6 | 1.7 | 58.1 | 5.6 |
| Platte County | 84.8 | 1.9 | 91.3 | 2.9 | 88.3 | 1.9 | 63.2 | 4.5 |
| Polk County | 90.3 | 2.1 | 97.7 | 2.3 | 93 | 2.4 | 74.5 | 4.8 |
| Red Willow County | 85.5 | 3.2 | 91.9 | 6.1 | 89.4 | 2.8 | 66.7 | 6.3 |
| Richardson County | 84.6 | 2.8 | 97.8 | 1.7 | 90.1 | 3 | 59.4 | 8 |
| Rock County | 78.3 | 5.3 | 93.5 | 6 | 79.6 | 6.8 | 62.5 | 8.9 |
| Saline County | 83.2 | 3.4 | 87.3 | 4.8 | 86.5 | 3.5 | 62.4 | 5.8 |
| Sarpy County | 94.2 | 0.4 | 97.4 | 0.5 | 95.4 | 0.5 | 79.1 | 1.7 |


|  | \% Population with <br> Broadband <br> Subscription |  | \% Population with Broadband Subscription Under 18 Years |  | \% Population with Broadband Subscription 18 to 64 Years |  | \% Population with <br> Broadband <br> Subscription <br> 65 Years and Over |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area | Estimate | Margin of Error | Estimate | Margin of Error | Estimate | Margin of Error | Estimate | Margin of Error |
| Saunders <br> County | 87.3 | 1.5 | 95.2 | 1.7 | 90.9 | 1.6 | 64.9 | 4.4 |
| Scotts Bluff County | 84 | 1.8 | 90.8 | 2.6 | 87.1 | 1.9 | 65 | 3.8 |
| Seward County | 89.1 | 1.4 | 96.8 | 1.7 | 91.9 | 1.8 | 68.7 | 4.5 |
| Sheridan County | 78.4 | 3.7 | 81.5 | 7.5 | 86.6 | 3.4 | 57.4 | 6.3 |
| Sherman County | 83 | 2.5 | 99 | 1.2 | 89.7 | 2.9 | 55.5 | 6.6 |
| Sioux County | 73.9 | 6.8 | 76.4 | 12.4 | 78.4 | 7.2 | 60 | 10 |
| Stanton County | 87.6 | 2.7 | 96.9 | 2.7 | 90.6 | 2.7 | 62.7 | 8.5 |
| Thayer County | 82.2 | 2 | 92.5 | 3.5 | 84.5 | 2.8 | 66.8 | 4.6 |
| Thomas County | 92.9 | 3.2 | 100 | 16.2 | 98.4 | 2.3 | 70.8 | 11.7 |
| Thurston County | 70.2 | 2.5 | 70.3 | 3.8 | 72.3 | 2.4 | 60.6 | 4.2 |
| Valley County | 83.1 | 2.5 | 97.9 | 2 | 89.6 | 2.6 | 56.1 | 7 |
| Washington County | 89.8 | 1.6 | 94.7 | 2 | 91.6 | 1.8 | 76.8 | 3.7 |
| Wayne County | 90.1 | 2.3 | 96.8 | 1.8 | 93.4 | 2.6 | 69.8 | 7.2 |
| Webster County | 80 | 3.5 | 85.9 | 7.6 | 84.9 | 4.2 | 60.8 | 5.3 |
| Wheeler County | 83 | 5 | 94.9 | 6.6 | 83.1 | 6.6 | 72.7 | 9.4 |
| York County | 87.2 | 2.1 | 92.8 | 4 | 88.9 | 2.5 | 75.6 | 4.5 |
| Nebraska | 88.1 | 0.2 | 93.1 | 0.4 | 90.5 | 0.3 | 70.1 | 0.5 |

Table 3
Households with Broadband, Mobile Only and Satellite Subscriptions
Nebraska Counties
2019 5-Year American Community Survey

| Geographic Area | Households | Households with Broadband | \% <br> Households with Broadband | Households with Mobile Only | \% <br> Households with <br> Mobile Only | Households with Satellite | \% <br> Households with Satellite |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams County | 12,712 | 10,001 | 78.7\% | 1,167 | 9.2\% | 895 | 7.0\% |
| Antelope County | 2,714 | 2,064 | 76.1\% | 371 | 13.7\% | 359 | 13.2\% |
| Arthur County | 197 | 146 | 74.1\% | 10 | 5.1\% | 10 | 5.1\% |
| Banner County | 283 | 220 | 77.7\% | 68 | 24.0\% | 88 | 31.1\% |
| Blaine County | 213 | 184 | 86.4\% | 9 | 4.2\% | 47 | 22.1\% |
| Boone County | 2,311 | 1,837 | 79.5\% | 402 | 17.4\% | 239 | 10.3\% |
| Box Butte County | 4,743 | 3,863 | 81.4\% | 409 | 8.6\% | 358 | 7.5\% |
| Boyd County | 904 | 656 | 72.6\% | 89 | 9.8\% | 31 | 3.4\% |
| Brown County | 1,387 | 1,092 | 78.7\% | 164 | 11.8\% | 111 | 8.0\% |
| Buffalo County | 19,062 | 16,014 | 84.0\% | 1,802 | 9.5\% | 1,694 | 8.9\% |
| Burt County | 2,856 | 2,069 | 72.4\% | 293 | 10.3\% | 377 | 13.2\% |
| Butler County | 3,363 | 2,656 | 79.0\% | 452 | 13.4\% | 405 | 12.0\% |
| Cass County | 9,945 | 8,382 | 84.3\% | 808 | 8.1\% | 1,360 | 13.7\% |
| Cedar County | 3,506 | 2,841 | 81.0\% | 516 | 14.7\% | 329 | 9.4\% |
| Chase County | 1,679 | 1,387 | 82.6\% | 361 | 21.5\% | 137 | 8.2\% |
| Cherry County | 2,537 | 2,010 | 79.2\% | 550 | 21.7\% | 210 | 8.3\% |
| Cheyenne County | 4,395 | 3,467 | 78.9\% | 554 | 12.6\% | 379 | 8.6\% |
| Clay County | 2,539 | 1,975 | 77.8\% | 435 | 17.1\% | 317 | 12.5\% |
| Colfax County | 3,731 | 2,868 | 76.9\% | 695 | 18.6\% | 612 | 16.4\% |
| Cuming County | 3,727 | 2,520 | 67.6\% | 387 | 10.4\% | 509 | 13.7\% |
| Custer County | 4,862 | 3,643 | 74.9\% | 684 | 14.1\% | 571 | 11.7\% |
| Dakota County | 7,404 | 5,681 | 76.7\% | 670 | 9.0\% | 436 | 5.9\% |
| Dawes County | 3,525 | 2,923 | 82.9\% | 314 | 8.9\% | 345 | 9.8\% |
| Dawson County | 8,965 | 7,082 | 79.0\% | 1,548 | 17.3\% | 744 | 8.3\% |
| Deuel County | 830 | 601 | 72.4\% | 120 | 14.5\% | 104 | 12.5\% |
| Dixon County | 2,352 | 1,729 | 73.5\% | 242 | 10.3\% | 176 | 7.5\% |
| Dodge County | 15,261 | 12,029 | 78.8\% | 1,724 | 11.3\% | 1,242 | 8.1\% |
| Douglas County | 218,061 | 186,192 | 85.4\% | 19,539 | 9.0\% | 7,353 | 3.4\% |
| Dundy County | 872 | 619 | 71.0\% | 151 | 17.3\% | 30 | 3.4\% |
| Fillmore County | 2,510 | 1,907 | 76.0\% | 303 | 12.1\% | 294 | 11.7\% |
| Franklin County | 1,377 | 1,013 | 73.6\% | 192 | 13.9\% | 169 | 12.3\% |
| Frontier County | 1,135 | 834 | 73.5\% | 164 | 14.4\% | 146 | 12.9\% |
| Furnas County | 2,128 | 1,601 | 75.2\% | 349 | 16.4\% | 192 | 9.0\% |


| Geographic Area | Households | Households with Broadband | \% <br> Households with Broadband | Households with Mobile Only | \% <br> Households with <br> Mobile <br> Only | Households with Satellite | \% <br> Households <br> with <br> Satellite |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gage County | 8,979 | 7,132 | 79.4\% | 957 | 10.7\% | 1,060 | 11.8\% |
| Garden County | 868 | 636 | 73.3\% | 128 | 14.7\% | 146 | 16.8\% |
| Garfield County | 884 | 558 | 63.1\% | 110 | 12.4\% | 49 | 5.5\% |
| Gosper County | 942 | 775 | 82.3\% | 160 | 17.0\% | 132 | 14.0\% |
| Grant County | 288 | 216 | 75.0\% | 35 | 12.2\% | 15 | 5.2\% |
| Greeley Count | 1,019 | 745 | 73.1\% | 161 | 15.8\% | 79 | 7.8\% |
| Hall County | 23,096 | 18,815 | 81.5\% | 2,948 | 12.8\% | 1,535 | 6.6\% |
| Hamilton County | 3,713 | 3,213 | 86.5\% | 452 | 12.2\% | 365 | 9.8\% |
| Harlan County | 1,521 | 1,164 | 76.5\% | 274 | 18.0\% | 233 | 15.3\% |
| Hayes County | 403 | 324 | 80.4\% | 61 | 15.1\% | 85 | 21.1\% |
| Hitchcock County | 1,243 | 861 | 69.3\% | 199 | 16.0\% | 136 | 10.9\% |
| Holt County | 4,487 | 3,357 | 74.8\% | 600 | 13.4\% | 540 | 12.0\% |
| Hooker County | 318 | 205 | 64.5\% | 41 | 12.9\% | 23 | 7.2\% |
| Howard County | 2,720 | 2,000 | 73.5\% | 477 | 17.5\% | 352 | 12.9\% |
| Jefferson County | 3,302 | 2,428 | 73.5\% | 274 | 8.3\% | 383 | 11.6\% |
| Johnson County | 1,809 | 1,332 | 73.6\% | 297 | 16.4\% | 171 | 9.5\% |
| Kearney County | 2,666 | 2,161 | 81.1\% | 388 | 14.6\% | 264 | 9.9\% |
| Keith County | 3,882 | 3,172 | 81.7\% | 548 | 14.1\% | 317 | 8.2\% |
| Keya Paha County | 304 | 236 | 77.6\% | 23 | 7.6\% | 20 | 6.6\% |
| Kimball County | 1,577 | 1,180 | 74.8\% | 206 | 13.1\% | 110 | 7.0\% |
| Knox County | 3,586 | 2,681 | 74.8\% | 523 | 14.6\% | 287 | 8.0\% |
| Lancaster County | 124,324 | 109,037 | 87.7\% | 9,743 | 7.8\% | 6,250 | 5.0\% |
| Lincoln County | 14,856 | 12,256 | 82.5\% | 2,283 | 15.4\% | 907 | 6.1\% |
| Logan County | 347 | 257 | 74.1\% | 78 | 22.5\% | 48 | 13.8\% |
| Loup County | 294 | 203 | 69.0\% | 21 | 7.1\% | 44 | 15.0\% |
| McPherson County | 191 | 120 | 62.8\% | 36 | 18.8\% | 17 | 8.9\% |
| Madison County | 14,205 | 11,027 | 77.6\% | 1,800 | 12.7\% | 1,500 | 10.6\% |
| Merrick County | 3,373 | 2,488 | 73.8\% | 484 | 14.3\% | 399 | 11.8\% |
| Morrill County | 1,954 | 1,479 | 75.7\% | 237 | 12.1\% | 236 | 12.1\% |
| Nance County | 1,546 | 1,183 | 76.5\% | 233 | 15.1\% | 158 | 10.2\% |
| Nemaha County | 2,977 | 2,270 | 76.3\% | 356 | 12.0\% | 259 | 8.7\% |
| Nuckolls County | 1,867 | 1,349 | 72.3\% | 213 | 11.4\% | 237 | 12.7\% |
| Otoe County | 6,510 | 5,230 | 80.3\% | 683 | 10.5\% | 773 | 11.9\% |
| Pawnee County | 1,222 | 865 | 70.8\% | 124 | 10.1\% | 150 | 12.3\% |
| Perkins County | 1,228 | 1,006 | 81.9\% | 212 | 17.3\% | 73 | 5.9\% |
| Phelps County | 3,905 | 3,103 | 79.5\% | 477 | 12.2\% | 319 | 8.2\% |
| Pierce County | 3,022 | 2,453 | 81.2\% | 338 | 11.2\% | 259 | 8.6\% |
| Platte County | 12,947 | 10,236 | 79.1\% | 1,240 | 9.6\% | 931 | 7.2\% |


| Geographic Area | Households | Households <br> with <br> Broadband | \% <br> Households <br> with <br> Broadband | Households <br> with <br> Mobile <br> Only | \% <br> Households <br> with <br> Mobile <br> Only | Households <br> with <br> Satellite | \% <br> Households <br> with <br> Satellite |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Polk County | 2,052 | 1,740 | $84.8 \%$ | 243 | $11.8 \%$ | 363 | $17.7 \%$ |
| Red Willow <br> County | 4,519 | 3,568 | $79.0 \%$ | 702 | $15.5 \%$ | 457 | $10.1 \%$ |
| Richardson <br> County, | 3,704 | 2,887 | $77.9 \%$ | 214 | $5.8 \%$ | 260 | $7.0 \%$ |
| Rock County | 623 | 444 | $71.3 \%$ | 60 | $9.6 \%$ | 73 | $11.7 \%$ |
| Saline County | 5,157 | 4,123 | $79.9 \%$ | 697 | $13.5 \%$ | 534 | $10.4 \%$ |
| Sarpy County | 66,260 | 60,235 | $90.9 \%$ | 4,297 | $6.5 \%$ | 2,852 | $4.3 \%$ |
| Saunders County | 8,501 | 6,915 | $81.3 \%$ | 858 | $10.1 \%$ | 940 | $11.1 \%$ |
| Scotts Bluff <br> County | 14,732 | 11,451 | $77.7 \%$ | 1,751 | $11.9 \%$ | 1,171 | $7.9 \%$ |
| Seward County | 6,600 | 5,496 | $83.3 \%$ | 816 | $12.4 \%$ | 699 | $10.6 \%$ |
| Sheridan County | 2,273 | 1,666 | $73.3 \%$ | 348 | $15.3 \%$ | 276 | $12.1 \%$ |
| Sherman County | 1,368 | 1,031 | $75.4 \%$ | 274 | $20.0 \%$ | 132 | $9.6 \%$ |
| Sioux County | 544 | 390 | $71.7 \%$ | 92 | $16.9 \%$ | 101 | $18.6 \%$ |
| Stanton County | 2,418 | 1,983 | $82.0 \%$ | 399 | $16.5 \%$ | 334 | $13.8 \%$ |
| Thayer County | 2,244 | 1,722 | $76.7 \%$ | 263 | $11.7 \%$ | 274 | $12.2 \%$ |
| Thomas County | 277 | 243 | $87.7 \%$ | 32 | $11.6 \%$ | 19 | $6.9 \%$ |
| Thurston County | 2,176 | 1,459 | $67.0 \%$ | 226 | $10.4 \%$ | 166 | $7.6 \%$ |
| Valley County | 1,865 | 1,374 | $73.7 \%$ | 251 | $13.5 \%$ | 179 | $9.6 \%$ |
| Washington <br> County | 8,185 | 6,924 | $84.6 \%$ | 761 | $9.3 \%$ | 528 | $6.5 \%$ |
| Wayne County | 3,708 | 3,195 | $86.2 \%$ | 462 | $12.5 \%$ | 310 | $8.4 \%$ |
| Webster County | 1,507 | 1,125 | $74.7 \%$ | 175 | $11.6 \%$ | 84 | $5.6 \%$ |
| Wheeler County | 346 | 261 | $75.4 \%$ | 34 | $9.8 \%$ | 24 | $6.9 \%$ |
| York County | 5,656 | 4,771 | $84.4 \%$ | 672 | $11.9 \%$ | 447 | $7.9 \%$ |
| Nebraska | 759,176 | 632,862 | $83.4 \%$ | 76,589 | $10.1 \%$ | 49,354 | $6.5 \%$ |
|  |  |  |  |  |  |  |  |

Table 4

## Population and \% Population with

Computing Devices, Smartphone only, or No Computer
Nebraska Counties
2019 ACS 5-Year

| Geographic Area Name | Households with one or more types of computing device | Households <br> with <br> smartphone <br> only | Households with no computer | \% Households with one or more types of computing devices | \% Households with Smartphone only | \% households with no computer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adams County | 11,128 | 920 | 1,584 | 87.5 | 7.2 | 12.5 |
| Antelope County | 2,271 | 146 | 443 | 83.7 | 5.4 | 16.3 |
| Arthur County | 168 | 11 | 29 | 85.3 | 5.6 | 14.7 |
| Banner County | 248 | 13 | 35 | 87.6 | 4.6 | 12.4 |
| Blaine County | 195 | 4 | 18 | 91.5 | 1.9 | 8.5 |
| Boone County | 1,962 | 135 | 349 | 84.9 | 5.8 | 15.1 |
| Box Butte County | 4,171 | 312 | 572 | 87.9 | 6.6 | 12.1 |
| Boyd County | 723 | 58 | 181 | 80 | 6.4 | 20 |
| Brown County | 1,205 | 88 | 182 | 86.9 | 6.3 | 13.1 |
| Buffalo County | 17,378 | 1,333 | 1,684 | 91.2 | 7 | 8.8 |
| Burt County | 2,403 | 202 | 453 | 84.1 | 7.1 | 15.9 |
| Butler County | 2,874 | 209 | 489 | 85.5 | 6.2 | 14.5 |
| Cass County | 9,174 | 518 | 771 | 92.2 | 5.2 | 7.8 |
| Cedar County | 3,017 | 191 | 489 | 86.1 | 5.4 | 13.9 |
| Chase County | 1,486 | 135 | 193 | 88.5 | 8 | 11.5 |
| Cherry County | 2,138 | 178 | 399 | 84.3 | 7 | 15.7 |
| Cheyenne County | 3,852 | 313 | 543 | 87.6 | 7.1 | 12.4 |
| Clay County | 2,236 | 191 | 303 | 88.1 | 7.5 | 11.9 |
| Colfax County | 3,167 | 402 | 564 | 84.9 | 10.8 | 15.1 |
| Cuming County | 3,099 | 278 | 628 | 83.1 | 7.5 | 16.9 |
| Custer County | 4,121 | 380 | 741 | 84.8 | 7.8 | 15.2 |
| Dakota County | 6,594 | 870 | 810 | 89.1 | 11.8 | 10.9 |
| Dawes County | 3,160 | 174 | 365 | 89.6 | 4.9 | 10.4 |
| Dawson County | 7,846 | 1,049 | 1,119 | 87.5 | 11.7 | 12.5 |
| Deuel County | 712 | 70 | 118 | 85.8 | 8.4 | 14.2 |


| Geographic Area Name | Households with one or more types of computing device | Households with smartphone only | Households with no computer | \% Households with one or more types of computing devices | \% Households with <br> Smartphone only | \% households with no computer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dixon County | 2,019 | 188 | 333 | 85.8 | 8 | 14.2 |
| Dodge County | 13,464 | 1,180 | 1,797 | 88.2 | 7.7 | 11.8 |
| Douglas County | 197,892 | 11,958 | 20,169 | 90.8 | 5.5 | 9.2 |
| Dundy County | 725 | 63 | 147 | 83.1 | 7.2 | 16.9 |
| Fillmore County | 2,094 | 146 | 416 | 83.4 | 5.8 | 16.6 |
| Franklin County | 1,160 | 120 | 217 | 84.2 | 8.7 | 15.8 |
| Frontier County | 944 | 67 | 191 | 83.2 | 5.9 | 16.8 |
| Furnas County | 1,756 | 150 | 372 | 82.5 | 7 | 17.5 |
| Gage County | 7,688 | 535 | 1,291 | 85.6 | 6 | 14.4 |
| Garden County | 776 | 64 | 92 | 89.4 | 7.4 | 10.6 |
| Garfield County | 698 | 43 | 186 | 79 | 4.9 | 21 |
| Gosper County | 844 | 62 | 98 | 89.6 | 6.6 | 10.4 |
| Grant County | 246 | 10 | 42 | 85.4 | 3.5 | 14.6 |
| Greeley County | 873 | 60 | 146 | 85.7 | 5.9 | 14.3 |
| Hall County | 20,416 | 2,400 | 2,680 | 88.4 | 10.4 | 11.6 |
| Hamilton County | 3,402 | 270 | 311 | 91.6 | 7.3 | 8.4 |
| Harlan County | 1,332 | 125 | 189 | 87.6 | 8.2 | 12.4 |
| Hayes County | 353 | 48 | 50 | 87.6 | 11.9 | 12.4 |
| Hitchcock County | 1,014 | 128 | 229 | 81.6 | 10.3 | 18.4 |
| Holt County | 3,897 | 380 | 590 | 86.9 | 8.5 | 13.1 |
| Hooker County | 243 | 26 | 75 | 76.4 | 8.2 | 23.6 |
| Howard County | 2,347 | 205 | 373 | 86.3 | 7.5 | 13.7 |
| Jefferson County | 2,691 | 178 | 611 | 81.5 | 5.4 | 18.5 |
| Johnson County | 1,501 | 166 | 308 | 83 | 9.2 | 17 |
| Kearney County | 2,328 | 196 | 338 | 87.3 | 7.4 | 12.7 |
| Keith County | 3,346 | 206 | 536 | 86.2 | 5.3 | 13.8 |
| Keya Paha County | 254 | 13 | 50 | 83.6 | 4.3 | 16.4 |
| Kimball County | 1,372 | 134 | 205 | 87 | 8.5 | 13 |
| Knox County | 3,049 | 266 | 537 | 85 | 7.4 | 15 |
| Lancaster County | 116,290 | 5,651 | 8,034 | 93.5 | 4.5 | 6.5 |


| Geographic Area Name | Households with one or more types of computing device | Households with smartphone only | Households with no computer | \% Households with one or more types of computing devices | \% Households with <br> Smartphone only | \% households with no computer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lincoln County | 13,223 | 1,557 | 1,633 | 89 | 10.5 | 11 |
| Logan County | 298 | 48 | 49 | 85.9 | 13.8 | 14.1 |
| Loup County | 258 | 33 | 36 | 87.8 | 11.2 | 12.2 |
| McPherson County | 157 | 12 | 34 | 82.2 | 6.3 | 17.8 |
| Madison County | 12,368 | 904 | 1,837 | 87.1 | 6.4 | 12.9 |
| Merrick County | 2,798 | 226 | 575 | 83 | 6.7 | 17 |
| Morrill County | 1,704 | 210 | 250 | 87.2 | 10.7 | 12.8 |
| Nance County | 1,298 | 134 | 248 | 84 | 8.7 | 16 |
| Nemaha County | 2,601 | 128 | 376 | 87.4 | 4.3 | 12.6 |
| Nuckolls County | 1,545 | 188 | 322 | 82.8 | 10.1 | 17.2 |
| Otoe County | 5,753 | 447 | 757 | 88.4 | 6.9 | 11.6 |
| Pawnee County | 948 | 42 | 274 | 77.6 | 3.4 | 22.4 |
| Perkins County | 1,087 | 144 | 141 | 88.5 | 11.7 | 11.5 |
| Phelps County | 3,518 | 181 | 387 | 90.1 | 4.6 | 9.9 |
| Pierce County | 2,630 | 178 | 392 | 87 | 5.9 | 13 |
| Platte County | 11,239 | 1,121 | 1,708 | 86.8 | 8.7 | 13.2 |
| Polk County | 1,851 | 162 | 201 | 90.2 | 7.9 | 9.8 |
| Red Willow County | 3,975 | 400 | 544 | 88 | 8.9 | 12 |
| Richardson County | 3,083 | 191 | 621 | 83.2 | 5.2 | 16.8 |
| Rock County | 519 | 40 | 104 | 83.3 | 6.4 | 16.7 |
| Saline County | 4,427 | 402 | 730 | 85.8 | 7.8 | 14.2 |
| Sarpy County | 63,126 | 2,532 | 3,134 | 95.3 | 3.8 | 4.7 |
| Saunders County | 7,464 | 537 | 1,037 | 87.8 | 6.3 | 12.2 |
| Scotts Bluff County | 12,837 | 1,251 | 1,895 | 87.1 | 8.5 | 12.9 |
| Seward County | 5,898 | 293 | 702 | 89.4 | 4.4 | 10.6 |
| Sheridan County | 1,902 | 205 | 371 | 83.7 | 9 | 16.3 |
| Sherman County | 1,132 | 103 | 236 | 82.7 | 7.5 | 17.3 |
| Sioux County | 448 | 49 | 96 | 82.4 | 9 | 17.6 |
| Stanton County | 2,142 | 146 | 276 | 88.6 | 6 | 11.4 |
| Thayer County | 1,848 | 169 | 396 | 82.4 | 7.5 | 17.6 |


| Geographic Area Name | Households with one or more types of computing device | Households with smartphone only | Households with no computer | \% Households with one or more types of computing devices | \% Households with <br> Smartphone only | \% households with no computer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Thomas County | 252 | 0 | 25 | 91 | 0 | 9 |
| Thurston County | 1,818 | 273 | 358 | 83.5 | 12.5 | 16.5 |
| Valley County | 1,530 | 146 | 335 | 82 | 7.8 | 18 |
| Washington County | 7,629 | 504 | 556 | 93.2 | 6.2 | 6.8 |
| Wayne County | 3,385 | 91 | 323 | 91.3 | 2.5 | 8.7 |
| Webster County | 1,275 | 124 | 232 | 84.6 | 8.2 | 15.4 |
| Wheeler County | 310 | 41 | 36 | 89.6 | 11.8 | 10.4 |
| York County | 4,969 | 317 | 687 | 87.9 | 5.6 | 12.1 |
| Nebraska | 683,587 | 46,747 | 75,589 | 90 | 6.2 | 10 |

Table 5
Percent Population with Broadband Available at 25/3 Mbps
ADSL, Cable Modem, Fiber, and Fixed Wireless
June 2020 FCC Form 477 Data
Nebraska Counties

| Area | All | Rural |
| :--- | :---: | :---: |
| Adams County, NE | 96.7 | 86.3 |
| Antelope County, NE | 99.9 | 99.9 |
| Arthur County, NE | 96.1 | 96.1 |
| Banner County, NE | 100.0 | 100.0 |
| Blaine County, NE | 77.2 | 77.2 |
| Boone County, NE | 90.1 | 90.1 |
| Box Butte County, NE | 98.5 | 94.1 |
| Boyd County, NE | 100.0 | 100.0 |
| Brown County, NE | 28.2 | 28.2 |
| Buffalo County, NE | 99.1 | 97.4 |
| Burt County, NE | 100.0 | 100.0 |
| Butler County, NE | 100.0 | 100.0 |
| Cass County, NE | 100.0 | 100.0 |
| Cedar County, NE | 77.1 | 77.1 |
| Chase County, NE | 100.0 | 100.0 |
| Cherry County, NE | 62.6 | 47.4 |
| Cheyenne County, NE | 98.8 | 97.0 |
| Clay County, NE | 95.6 | 95.6 |
| Colfax County, NE | 100.0 | 100.0 |
| Cuming County, NE | 99.9 | 99.9 |
| Custer County, NE | 75.3 | 64.7 |
| Dakota County, NE | 91.6 | 78.9 |
| Dawes County, NE | 80.7 | 71.5 |
| Dawson County, NE | 98.5 | 94.5 |
| Deuel County, NE | 94.1 | 94.1 |
| Dixon County, NE | 99.0 | 99.0 |
| Dodge County, NE | 100.0 | 100.0 |
| Douglas County, NE | 100.0 | 100.0 |
| Dundy County, NE | 96.1 | 96.1 |
| Fillmore County, NE | 95.3 | 95.3 |
| Franklin County, NE | 88.5 | 76.5 |
| Frontier County, NE | 88.4 |  |
|  |  |  |
|  |  |  |


| Area | All | Rural |
| :---: | :---: | :---: |
| Furnas County, NE | 95.6 | 95.6 |
| Gage County, NE | 99.4 | 98.8 |
| Garden County, NE | 93.5 | 93.5 |
| Garfield County, NE | 91.1 | 91.1 |
| Gosper County, NE | 90.8 | 90.8 |
| Grant County, NE | 69.3 | 69.3 |
| Greeley County, NE | 56.4 | 56.4 |
| Hall County, NE | 100.0 | 99.8 |
| Hamilton County, NE | 100.0 | 99.9 |
| Harlan County, NE | 93.1 | 93.1 |
| Hayes County, NE | 87.7 | 87.7 |
| Hitchcock County, NE | 97.4 | 97.4 |
| Holt County, NE | 90.4 | 85.5 |
| Hooker County, NE | 94.1 | 94.1 |
| Howard County, NE | 98.0 | 98.0 |
| Jefferson County, NE | 79.4 | 68.8 |
| Johnson County, NE | 100.0 | 100.0 |
| Kearney County, NE | 98.2 | 96.8 |
| Keith County, NE | 96.3 | 92.1 |
| Keya Paha County, NE | 96.5 | 96.5 |
| Kimball County, NE | 97.1 | 97.1 |
| Knox County, NE | 81.4 | 81.4 |
| Lancaster County, NE | 100.0 | 100.0 |
| Lincoln County, NE | 97.6 | 92.1 |
| Logan County, NE | 27.8 | 27.8 |
| Loup County, NE | 85.1 | 85.1 |
| McPherson County, NE | 51.8 | 51.8 |
| Madison County, NE | 100.0 | 100.0 |
| Merrick County, NE | 100.0 | 100.0 |
| Morrill County, NE | 98.2 | 98.2 |
| Nance County, NE | 100.0 | 100.0 |
| Nemaha County, NE | 100.0 | 100.0 |
| Nuckolls County, NE | 79.5 | 79.5 |
| Otoe County, NE | 100.0 | 100.0 |
| Pawnee County, NE | 91.4 | 91.4 |
| Perkins County, NE | 95.9 | 95.9 |
| Phelps County, NE | 99.4 | 98.6 |
| Pierce County, NE | 100.0 | 100.0 |


| Area | All | Rural |
| :--- | :---: | :---: |
| Platte County, NE | 100.0 | 100.0 |
| Polk County, NE | 100.0 | 100.0 |
| Red Willow County, NE | 99.3 | 97.9 |
| Richardson County, NE | 99.6 | 99.3 |
| Rock County, NE | 93.0 | 93.0 |
| Saline County, NE | 99.7 | 99.4 |
| Sarpy County, NE | 100.0 | 100.0 |
| Saunders County, NE | 100.0 | 100.0 |
| Scotts Bluff County, NE | 100.0 | 100.0 |
| Seward County, NE | 100.0 | 100.0 |
| Sheridan County, NE | 52.1 | 52.1 |
| Sherman County, NE | 80.9 | 80.9 |
| Sioux County, NE | 100.0 | 100.0 |
| Stanton County, NE | 99.9 | 99.8 |
| Thayer County, NE | 71.6 | 71.6 |
| Thomas County, NE | 80.2 | 80.2 |
| Thurston County, NE | 97.6 | 97.6 |
| Valley County, NE | 99.6 | 99.6 |
| Washington County, NE | 100.0 | 100.0 |
| Wayne County, NE | 100.0 | 100.0 |
| Webster County, NE | 58.3 | 58.3 |
| Wheeler County, NE | 78.3 | 78.3 |
| York County, NE | 100.0 | 99.9 |
| Nebraska | 98.3 | 93.9 |

Table 6 Percent Population with Broadband Available at 100/10 Mbps

ADSL, Cable Modem, Fiber, and Fixed Wireless
June 2020 FCC Form 477 Data
Nebraska Counties

| Area | All | Rural |
| :--- | :---: | :---: |
| Adams County, NE | 94.5 | 76.81 |
| Antelope County, NE | 54.67 | 54.67 |
| Arthur County, NE | 75.59 | 75.59 |
| Banner County, NE | 98.79 | 98.79 |
| Blaine County, NE | 41.72 | 41.72 |
| Boone County, NE | 55.32 | 55.32 |
| Box Butte County, NE | 98.49 | 94.14 |
| Boyd County, NE | 68.84 | 68.84 |
| Brown County, NE | 16.82 | 16.82 |
| Buffalo County, NE | 86.24 | 67.06 |
| Burt County, NE | 86.62 | 86.62 |
| Butler County, NE | 91.92 | 88.09 |
| Cass County, NE | 93.37 | 90.99 |
| Cedar County, NE | 64.5 | 64.5 |
| Chase County, NE | 93.83 | 93.83 |
| Cherry County, NE | 20.39 | 13.1 |
| Cheyenne County, NE | 94.23 | 85.99 |
| Clay County, NE | 81.93 | 81.93 |
| Colfax County, NE | 74.08 | 46.98 |
| Cuming County, NE | 89.55 | 84.76 |
| Custer County, NE | 35.6 | 8.42 |
| Dakota County, NE | 90.61 | 78.85 |
| Dawes County, NE | 73 | 52.33 |
| Dawson County, NE | 83.62 | 39.86 |
| Deuel County, NE | 69.29 | 69.29 |
| Dixon County, NE | 94.48 | 94.48 |
| Dodge County, NE | 95.15 | 81.69 |
| Douglas County, NE | 98.2 | 85.82 |
| Dundy County, NE | 0 | 0 |
| Fillmore County, NE | 92.26 | 92.26 |
| Franklin County, NE | 45.15 | 45.15 |
| Frontier County, NE | 13.13 | 13.13 |
|  |  |  |


| Area | All | Rural |
| :---: | :---: | :---: |
| Furnas County, NE | 57.78 | 57.78 |
| Gage County, NE | 81.87 | 62.21 |
| Garden County, NE | 92.49 | 92.49 |
| Garfield County, NE | 1.07 | 1.07 |
| Gosper County, NE | 12.31 | 12.31 |
| Grant County, NE | 23.6 | 23.6 |
| Greeley County, NE | 21.65 | 21.65 |
| Hall County, NE | 96.94 | 84.68 |
| Hamilton County, NE | 92.18 | 85.09 |
| Harlan County, NE | 6.72 | 6.72 |
| Hayes County, NE | 2.4 | 2.4 |
| Hitchcock County, NE | 0.29 | 0.29 |
| Holt County, NE | 11.11 | 16.76 |
| Hooker County, NE | 22.43 | 22.43 |
| Howard County, NE | 55 | 55 |
| Jefferson County, NE | 68.25 | 52.08 |
| Johnson County, NE | 55.08 | 55.08 |
| Kearney County, NE | 76.58 | 57.85 |
| Keith County, NE | 88.05 | 74.6 |
| Keya Paha County, NE | 7.2 | 7.2 |
| Kimball County, NE | 95.57 | 95.57 |
| Knox County, NE | 11.81 | 11.81 |
| Lancaster County, NE | 99.11 | 92.9 |
| Lincoln County, NE | 81.86 | 41.22 |
| Logan County, NE | 26.87 | 26.87 |
| Loup County, NE | 3.02 | 3.02 |
| Madison County, NE | 88.55 | 63.6 |
| McPherson County, NE | 13.97 | 13.97 |
| Merrick County, NE | 91.53 | 86.87 |
| Morrill County, NE | 97.78 | 97.78 |
| Nance County, NE | 79.65 | 79.65 |
| Nemaha County, NE | 75.26 | 53.34 |
| Nuckolls County, NE | 78.13 | 78.13 |
| Otoe County, NE | 85.59 | 74.24 |
| Pawnee County, NE | 57.25 | 57.25 |
| Perkins County, NE | 92.11 | 92.11 |
| Phelps County, NE | 82.07 | 62.84 |
| Pierce County, NE | 69.39 | 69.39 |


| Area | All | Rural |
| :--- | :---: | :---: |
| Platte County, NE | 93.75 | 80.96 |
| Polk County, NE | 84.88 | 84.88 |
| Red Willow County, NE | 75.92 | 27.15 |
| Richardson County, NE | 92 | 84.57 |
| Rock County, NE | 11.79 | 11.79 |
| Saline County, NE | 95.77 | 92.01 |
| Sarpy County, NE | 96.31 | 93.42 |
| Saunders County, NE | 91.75 | 87.76 |
| Scotts Bluff County, NE | 99.99 | 99.97 |
| Seward County, NE | 97.7 | 96.29 |
| Sheridan County, NE | 3.16 | 3.16 |
| Sherman County, NE | 46.88 | 46.88 |
| Sioux County, NE | 80.79 | 80.79 |
| Stanton County, NE | 81.84 | 79.48 |
| Thayer County, NE | 60.4 | 60.4 |
| Thomas County, NE | 31.16 | 31.16 |
| Thurston County, NE | 44.52 | 44.52 |
| Valley County, NE | 51.32 | 51.32 |
| Washington County, NE | 58.98 | 34.64 |
| Wayne County, NE | 77.84 | 56.03 |
| Webster County, NE | 56.12 | 56.12 |
| Wheeler County, NE | 53.64 | 53.64 |
| York County, NE | 97.51 | 94.6 |
| Nebraska | $\mathbf{9 0 . 2}$ | 68.2 |
|  |  |  |

## Table 7

Nebraska County Population Estimates

## July 1, 2019

| Geographic Area |  |
| :--- | ---: |
|  | Population |
| Nebraska | $\mathbf{1 , 9 3 4 , 4 0 8}$ |
| Adams County, Nebraska | 31,363 |
| Antelope County, Nebraska | 6,298 |
| Arthur County, Nebraska | 463 |
| Banner County, Nebraska | 745 |
| Blaine County, Nebraska | 465 |
| Boone County, Nebraska | 5,192 |
| Box Butte County, Nebraska | 10,783 |
| Boyd County, Nebraska | 1,919 |
| Brown County, Nebraska | 2,955 |
| Buffalo County, Nebraska | 49,659 |
| Burt County, Nebraska | 6,459 |
| Butler County, Nebraska | 8,016 |
| Cass County, Nebraska | 26,248 |
| Cedar County, Nebraska | 8,402 |
| Chase County, Nebraska | 3,924 |
| Cherry County, Nebraska | 5,689 |
| Cheyenne County, Nebraska | 8,910 |
| Clay County, Nebraska | 6,203 |
| Colfax County, Nebraska | 10,709 |
| Cuming County, Nebraska | 8,846 |
| Custer County, Nebraska | 10,777 |
| Dakota County, Nebraska | 2,026 |
| Dawes County, Nebraska | 8,589 |
| Dawson County, Nebraska | 23,595 |
| Deuel County, Nebraska | 1,794 |
| Dixon County, Nebraska | 5,636 |
| Dodge County, Nebraska | 36,565 |
| Douglas County, Nebraska | 571,327 |
| Dundy County, Nebraska | 1,693 |
| Fillmore County, Nebraska | 5,462 |
| Franklin County, Nebraska | 2,979 |
| Frontier County, Nebraska | 2,627 |
| Furnas County, Nebraska | 4,676 |
| Gage County, Nebraska | 21,513 |
|  |  |


| Geographic Area | Population |
| :---: | :---: |
| Garden County, Nebraska | 1,837 |
| Garfield County, Nebraska | 1,969 |
| Gosper County, Nebraska | 1,990 |
| Grant County, Nebraska | 623 |
| Greeley County, Nebraska | 2,356 |
| Hall County, Nebraska | 61,353 |
| Hamilton County, Nebraska | 9,324 |
| Harlan County, Nebraska | 3,380 |
| Hayes County, Nebraska | 922 |
| Hitchcock County, Nebraska | 2,762 |
| Holt County, Nebraska | 10,067 |
| Hooker County, Nebraska | 682 |
| Howard County, Nebraska | 6,445 |
| Jefferson County, Nebraska | 7,046 |
| Johnson County, Nebraska | 5,071 |
| Kearney County, Nebraska | 6,495 |
| Keith County, Nebraska | 8,034 |
| Keya Paha County, Nebraska | 806 |
| Kimball County, Nebraska | 3,632 |
| Knox County, Nebraska | 8,332 |
| Lancaster County, Nebraska | 319,090 |
| Lincoln County, Nebraska | 34,914 |
| Logan County, Nebraska | 748 |
| Loup County, Nebraska | 664 |
| McPherson County, Nebraska | 494 |
| Madison County, Nebraska | 35,099 |
| Merrick County, Nebraska | 7,755 |
| Morrill County, Nebraska | 4,642 |
| Nance County, Nebraska | 3,519 |
| Nemaha County, Nebraska | 6,972 |
| Nuckolls County, Nebraska | 4,148 |
| Otoe County, Nebraska | 16,012 |
| Pawnee County, Nebraska | 2,613 |
| Perkins County, Nebraska | 2,891 |
| Phelps County, Nebraska | 9,034 |
| Pierce County, Nebraska | 7,148 |
| Platte County, Nebraska | 33,470 |
| Polk County, Nebraska | 5,213 |
| Red Willow County, Nebraska | 10,724 |
| Richardson County, Nebraska | 7,865 |
| Rock County, Nebraska | 1,357 |


| Geographic Area | Population |
| :--- | ---: |
| Saline County, Nebraska | 14,224 |
| Sarpy County, Nebraska | 187,196 |
| Saunders County, Nebraska | 21,578 |
| Scotts Bluff County, Nebraska | 35,618 |
| Seward County, Nebraska | 17,284 |
| Sheridan County, Nebraska | 5,246 |
| Sherman County, Nebraska | 3,001 |
| Sioux County, Nebraska | 1,166 |
| Stanton County, Nebraska | 5,920 |
| Thayer County, Nebraska | 5,003 |
| Thomas County, Nebraska | $\mathbf{7 2 2}$ |
| Thurston County, Nebraska | $\mathbf{7 , 2 2 4}$ |
| Valley County, Nebraska | 4,158 |
| Washington County, Nebraska | 20,729 |
| Wayne County, Nebraska | 9,385 |
| Webster County, Nebraska | 3,487 |
| Wheeler County, Nebraska | 783 |
| York County, Nebraska | 13,679 |
| Suggested Citation:  <br> Annual Estimates of the Resident Population for Counties in Nebraska: April 1, 2010 to July 1, 2019 (Co-  <br> EST2019-ANNRES-31)  <br> Source: U.S. Census Bureau, Population Division  <br> Release Date: March 2020  |  |

# American Community Survey Internet Subscription Data Cheat Sheet 

Website: data.census.gov
Product: 2019 (or most recent year) ACS 5-Year Estimates Subject Table Only the 5 -year estimates include county level data.

TableID: S2802 for Types of Internet Subscription by Selected Characteristics
If you download S 802 data, these columns have data for total population and age groups:

| S2802_C03_001M | Margin of Error!!Percent Broadband Internet Subscription!!With a <br> computer!!Total population in households |
| :--- | :--- |
| S2802_C03_002E | Estimate!!Percent Broadband Internet Subscription!!With a computer!!Total <br> population in households!!AGE!!Under 18 years |
| S2802_C03_002M | Margin of Error!!Percent Broadband Internet Subscription!!With a <br> computer!!Total population in households!!AGE!!Under 18 years |
| S2802_C03_003E | Estimate!!Percent Broadband Internet Subscription!!With a computer!!Total <br> population in households!!AGE!!18 to 64 years |
| S2802_C03_003M | Margin of Error!!Percent Broadband Internet Subscription!!With a <br> computer!!Total population in households!!AGE!!18 to 64 years |
| S2802_C03_004E | Estimate!!Percent Broadband Internet Subscription!!With a computer!!Total <br> population in households!!AGE!!65 years and over |
| S2802_C03_004M | Margin of Error!!Percent Broadband Internet Subscription!!With a <br> computer!!Total population in households!!AGE!!65 years and over |

These columns have data for those with no computer or smart phone in the household:

| S2802_C07_001E | Estimate!!Percent no computer in household!!Total population in households |
| :--- | :--- |
| S2802_C07_001M | Margin of Error!!Percent no computer in household!!Total population in households |
| S2802_C07_002E | Estimate!!Percent no computer in household!!Total population in households!!AGE!!Under 18 <br> years |
| S2802_C07_002M | Margin of Error!!Percent no computer in household!!Total population in households!!AGE!!Under <br> 18 years |
| S2802_C07_003E | Estimate!!Percent no computer in household!!Total population in households!!AGE!!18 to 64 <br> years |
| S2802_C07_003M | Margin of Error!!Percent no computer in household!!Total population in households!!AGE!!18 to <br> 64 years |
| S2802_C07_004E | Estimate!!Percent no computer in household!!Total population in households!!AGE!!65 years and <br> over |
| S2802_C07_004M | Margin of Error!!Percent no computer in household!!Total population in households!!AGE!!65 <br> years and over |

If you want to explore other tables, here are the codes and titles:

| Code | Title |
| :--- | :--- |
| B28001 | Types of Computers in Household |
| $\underline{\text { B28002 }}$ | Presence and Types of Internet Subscriptions in Household |
| $\underline{\text { B28003 }}$ | Presence of a Computer and Type of Internet Subscription in Household |


| $\underline{\text { B28004 }}$ | Household Income in the Last 12 Months by Presence and Type of Internet Subscription in Household |
| :--- | :--- |
| $\underline{\text { B28005 }}$ | Age by Presence of a Computer and Types of Internet Subscription in Household |
| $\underline{\text { B28006 }}$ | Educational Attainment by Presence of a Computer and Types of Internet Subscription in Household |
| $\underline{\text { B28007 }}$ | Labor Force Status by Presence of a Computer and Types of Internet Subscription in Household |
| $\underline{\text { B28008 }^{\text {B28009A }}}{ }^{+}$ | Presence of a Computer and Type of Internet Subscription in Household |
| $\underline{\text { B28010 }}$ | Presence of a Computer and Type of Internet Subscription in Household (White Alone) <br> +Also available <br> in racial iterations |
| $\underline{\text { B28011 }}$ | Computers in Household |

The table above is from Census Reporter (https://censusreporter.org/topics/computer-internet/). Censusreporter.org is a great source of information.

The Census Bureau asks the three questions on computer use and internet access shown on the right:

For more information, go to:
https://www.census.gov/acs/www/about/why-we-ask-each-question/computer/

9 At this house, apartment, or mobile home do you or any member of this household own or use any of the following types of computers?
a. Desktop or laptop
b. Smartphone
c. Tablet or other portable wireless computer
d. Some other type of computer Specify z

10 At this house, apartment, or mobile home do you or any member of this household have access to the Internet?
$\square$ Yes, by paying a cell phone company or Internet service provider
$\square$ Yes, without paying a cell phone company or Internet service provider $\rightarrow$ SKIP to question 12
$\square$ No access to the Internet at this house, apartment, or mobile home $\rightarrow$ SKIP to question 12

Do you or any member of this household have access to the Internet using a -
a. cellular data plan for a Yes No smartphone or other mobile device?
b. broadband (high speed) Internet service such as cable, fiber optic, or DSL service installed in this household?
c. satellite Internet service installed in this household?
d. dial-up Internet service installed in this household?
e. some other service? Specify service $\downarrow$

# FCC Broadband Availability Data Cheat Sheet 

Website: https://broadbandmap.fcc.gov
Select Comparison. $\quad$ Comparison

Click on Enter a State. Enter in Nebraska. Under Select Area, select County.
Click on the settings button
o
Select ADSL,Cable, Fiber, and Fixed Wireless technologies. Select 100/20 for the speed.
Application Settings
Data version
June 2020 (latest)

Broadband
Technologies Speed (Mbps)
$\square$ ADSL $\quad \bigcirc \geq 0.2 / 0.2$
$\square$ Cable $\quad \bigcirc \geq 4 / 1$
$\nabla$ Fiber $\quad \bigcirc \geq 10 / 1$
$\square$ Fixed Wireless $\bigcirc \geq 25 / 3$
$\square$ Satellite $O \geq 100 / 10$
$\square$ Other $\bigcirc \geq 250 / 25$
$\geq 1000 / 100$

Close the settings box.
Click Compare Compare

## Digital Inclusion Resources

## Digital Inclusion Data

| Nebraska Broadband County Fact Sheets | $\underline{\text { http://nlc.nebraska.gov/stats/broadband/ }}$ |
| :--- | :--- |
| U.S. Census American Community Survey | $\underline{\text { data.census.gov }}$ |
| U.S. Census Quick Facts | $\underline{\text { census.gov/quickfacts }}$ |
| Nebraska Broadband Map | $\underline{\text { https://broadbandmap.nebraska.gov }}$ |
| Nebraska Broadband Speed Test Map | $\underline{\text { https://www.nebraskaspeedtest.org/ }}$ |
| FCC Broadband Map | $\underline{\text { https://broadbandmap.fcc.gov }}$ |
| Pew Internet \& Technology: Internet \& Technology | $\underline{\text { https://www.pewresearch.org/topic/internet-technology/ }}$ |
| NTIA Indicators of Broadband Need Map |  |
| https://broadbandusa.maps.arcgis.com/apps/webappviewer/index.html?id=ba2dcd585f5e43cba41b7c1ebf2a43d0 |  |

NTIA Digital Nation Data Explorer
https://www.ntia.doc.gov/data/digital-nation-data-explorer\#sel=internetUser\&disp=map

## Sample Plans

Rush County, Indiana Digital Inclusion Plan
http://rushcounty.in.gov/wp-content/uploads/2020/02/Rush-County-Digital-Inclusion-Plan-2020-2025-1-8-20.pdf

## Other Planning Resources

North Carolina Digital Inclusion Template and Guide
https://www.ncbroadband.gov/assistance/digital-inclusion-template-guide
Leveraging Broadband in Your Community: A Workbook to Help Communities Stimulate Broadband Development http://broadband.nebraska.gov/workbook/html5/index.html

Six Steps to Better Broadband
https://ruralbroadband.nebraska.gov/resources/Sixsteps.pdf

## Resources for Low-Income Consumers

FCC Emergency Broadband Benefit Program https://www.fcc.gov/broadbandbenefit
EveryoneOn: Find low-cost internet and affordable computers in your area
https://www.everyoneon.org/programs
Google Fiber: Gigabit Internet for Public Housing https://fiber.google.com/community/

## E-Rate Information (Mainly Focused on Libraries)

Nebraska Library Commission E-Rate Page
http://nlc.nebraska.gov/erate/
Nebraska E-Rate Special Construction Matching Fund Program (NUSF-117)
https://psc.nebraska.gov/telecommunications/nebraska-e-rate-special-construction-matching-fund-program-nusf-117

## Library Broadband

Toward Gigabit Libraries Toolkit and Broadband Improvement Plan
https://internet2.edu/community/community-anchor-program/cap-library-resources/toward-gigabit-libraries/

## Resources for Digital Literacy and Inclusion Programming

Digital Navigator Model https://www.digitalinclusion.org/digital-navigator-model/

Digital Skill Clusters: Curated resources by category/ need
https://docs.google.com/document/d/1geiiKmLQ1UloRvI2rdwd5bvlPyzwf4p0LOMCCT1rC68/edit

Digital Skill Infographics: Used for brainstorming what communities need
https://www.canva.com/design/DAERJ3vEmH4/kqSiDTXr21ILeC7m7IRIqg/

Digital Literacy Guidebook for Librarians: First version **** http://nlc.nebraska.gov/tech/literacy/

High Tech: Information resources, activity ideas, learning communities, and more to learn the tech of the future http://nlc.nebraska.gov/tech/kits/learn.aspx

Lead for Nebraska https://ruralimpacthub.com/Ifne/

Teaching Technology in the Library Guidebook (full version available by Sept. 2021)
http://nlc.nebraska.gov/Tech/Teaching/overview.aspx

## Funding

NTIA Broadband USA Federal Funding Guide
https://broadbandusa.ntia.doc.gov/resources/federal/federal-funding

FCC Emergency Connectivity Fund (ECF)
https://www.fcc.gov/emergency-connectivity-fund

## Resources for Reaching Aging/Older Nebraskans

Older Adults Technology Services (OATS) www.oats.org

## Resources for Addressing the Homework Gap

Northeast Nebraska Tribal Education Broadband Service (NNTEBS)
https://tech.ed.gov/wireless-brief/network-models/\#Nebraska
Education SuperHighway K-12 Bridge to Broadband
https://www.educationsuperhighway.org/bridge-to-broadband/
Nebraska Dept of Education Launch Nebraska website \& Internet Service Provider Directory https://www.launchne.com/internet-service-provider/

Nebraska Center for Rural Affairs Homework Gap Factsheet
https://www.cfra.org/sites/default/files/publications/the-homework-gap.pdf
Future Ready Schools Homework Gap Resources https://futureready.org/homework-gap/
Budget Calculator: Calculate the Cost of Connecting Students in Your State (DigitalBridgeK-12) https://digitalbridgek12.org/states/budget-calculator/

State Action to Close the Homework Gap: Blueprint for State Education Leaders (DigitalBridgeK-12) https://digitalbridgek12.org/states/

Fact Sheet: The Homework Gap (Center for Rural Affairs)
https://www.cfra.org/sites/default/files/publications/the-homework-gap.pdf


[^0]:    Photo credit: United Soybean Board Creative Commons License CC BY 2.0

[^1]:    Date of ACS 5-Year Data: 2019

[^2]:    ${ }^{1}$ Federal Communications Commission. July 11, 2014. Summary of the E-Rate Modernization Order. Available at https://www.fcc.gov/general/summary-e-rate-modernization-order

