Community Council

Monday, August 25, 2014

9:30 a.m. to 12:00 noon CT (8:30 a.m. to 11:00 a.m. MT)

Nebraska Educational Telecommunications, 1800 North 33rd Street, Lincoln, NE

Video Site: UNL Extension in Cheyenne County, 920 Jackson Street, Sidney, NE

Tentative Agenda

Meeting Materials, Workbook, and Appendix

9:30	Roll Call Notice of Posting of Agenda Notice of Nebraska Open Meetings Act Posting Review of minutes Public Comment
9:40	FirstNet—Bob Wilhelm, State and Local Implementation Grant Program Manager, State of Nebraska Office of the CIO
10:10	Next Generation 911—Commissioner Jerry Vap
10:20	Broadband Plan Draft and Timeline and Targets
10:50	Broadband Conference
11:00	Possible Action Items Youth Coding--Examples Youth Coding Resources • Khan Academy • Scratch • Sew Electric/Lily Pad Arduino • Made with Code • AIM Coder Dojo Community Broadband Planning • Draft Workbook and Appendix
11:50	Meeting schedule and membership
12:00	Adjourn

Meeting announcement posted on Nebraska Public Meeting and NITC websites on Aug. 15, 2014.
Agenda posted on August 18, 2014.

COMMUNITY COUNCIL

Tuesday, May 20, 2014, 1:30 to 4:00 p.m. CT (12:30 to 3 p.m. MT)
NET Boardroom
1800 North 33rd Street, Lincoln, Nebraska
Video Sites:
Grand Island Public Library, 211 North Washington, Grand Island, NE
Voc Rehab Scottsbluff, 505A Broadway, Suite 500, Scottsbluff, NE
Vocational Rehab Norfolk, 1212 West Benjamin, Norfolk, NE
Vocational Rehab Kearney, 215 West 60th, Suite 400, Kearney, NE
UNL Extension in Cheyenne County, 920 Jackson Street, P.O. Box 356, Sidney, NE 69162-0356

MINUTES

MEMBERS PRESENT:
Rod Armstrong, Aim Institute (Lincoln site)
Randy Bretz, TEDxLincoln Curator (Lincoln site)
Jessica Chamberlain, Norfolk Public Library (Norfolk site)
Steve Fosselman, Grand Island Public Library (Grand Island site)
Phil Green, City of Blair (Lincoln site)
Gene Hand, Public Service Commission (Lincoln site)
Kim Kuhle, US Bank (Lincoln site)
Megan McGown, City of Sidney (Conference call)
Holly Woldt, Nebraska Library Commission (Lincoln site)

ROLL CALL NOTICE OF POSTING OF AGENDA, NOTICE OF NEBRASKA OPEN MEETINGS ACT & POSTING REVIEW OF MINUTES

In the absence of the chair, Ms. Byers presided over the meeting. Roll call was taken. There were six members present. A quorum was not present.

The council has not met since March 2012. Due to the extended time between the last meeting and several new members being on the council, the OCIO Legal Counsel advised Ms. Byers, to work with the Community Council to amend the charter so that the chair could approve minutes.

PUBLIC COMMENT

There was no public comment.

MAKER SPACES AND FAB LABS
Shane Farritor, University of Nebraska-Lincoln and Michael Sauers, Nebraska Library Commission

Ms. Byers first learned about maker spaces and fab labs about a month ago and wanted to involve the Council in a discussion about the role of maker spaces and fab labs in Nebraska's broadband plan. Nebraska's economic development strategy emphasizes entrepreneurship, but currently does not provide much assistance in product development. Maker spaces can help entrepreneurs develop products and support a culture of innovation and creativity.

Dr. Farritor stated that maker spaces are simply places where people make things. Most importantly, maker spaces build community and a culture of collaboration. Dr. Farritor gave an example of how the collaborative culture of a maker space works by showing a photo of a coffee table built by a student. The student who built the table wondered if the table could also serve as a remote control device. The student began working with others to develop a system of sensors to act as a remote control.

Over 200 attended the first meeting of UNL's Maker Club in February 2014. The club currently has over 500 registered members and offers classes on topics of interest to members including patent law, introduction to drawing, soft robotics, plein air painting, pinhole cameras. The club also sponsors meet

ups. A joint maker space and business accelerator is planned for the Nebraska Innovation Campus' 4-H Building. The maker space may include specialized areas for laser and/or water jet cutters, a machine shop, wood working, metal working, textiles, electronics, plastics and welding. Dr. Farritor invited members to join the Makers Club at make.unl.edu.

Ms. Kuhle arrived to the meeting. Ms. McGown joined the meeting via telephone conference.

Mr. Sauers informed the Council that libraries are also part of the maker space movement. Several libraries in Nebraska already have or are in the process of purchasing 3D printers. The cost can be a burden to libraries which are currently going through financial challenges. There are a number of resources for 3D printing. 3D print files can be downloaded from www.thingiverse.com. Mr. Fosselman would like to see a statewide "technology" strategy for libraries to enhance and enrich preschool and career path education. Maker spaces would be great to provide options and opportunities to explore the career path. Ms. Chamberlain commented that she would want to make sure that a maker space meets the needs of the community. Dr. Farritor commented that he would not start with a 3-D printer when developing a maker space. Ms. Byers commented that there is probably still value in having a 3-D printer to expose people to this new technology and to help them understand how it is currently being used and how it may be used in the future.

ELECTION OF CHAIR*

Currently, the Council does not have a chair or co-chairs. Rod Armstrong has volunteered to serve as Chair.

Mr. Bretz moved to approve Rod Armstrong as the Chair of the Community Council. Ms. Kuhle seconded. Of the members present the vote was as follows: Armstrong-Abstained, Bretz-Yes, Kuhle-Yes, McGown-Yes, Green-Yes, Chamberlain-Yes, Fosselman-Yes, Woldt-Yes, Hand-Yes. Results: Yes-8, No-0, Abstained-1. Because there was no quorum, no action was taken.

Discussion occurred regarding the benefits of having co-chairs. Phil Green volunteered to be co-chair.

Mr. Hand moved to approve Phil Green's offer to serve as the Co-Chair of the Community Council. Mr. Bretz seconded. Of the members present the vote was as follows: Armstrong-Yes, Bretz-Yes, Kuhle-Yes, McGown-Yes, Green-Abstained, Chamberlain-Yes, Fosselman-Yes, Woldt-Yes, Hand-Yes. Results: Yes-8, No-0, Abstained-1. Because there was no quorum, no action was taken.

CHARTER AMENDMENT*

Revisions to the Community Council Charter were in the following sections:

- 7.4 Meeting Frequency

  The Council shall meet ~~not fewer than four times per year (quarterly)~~as needed, generally two or three times a year.

- 7.7.4 Minutes and Voting

  The following sentence was added.
  Minutes shall be approved by the chair or co-chairs and will be available for review at the next Council meeting.

Mr. Hand moved to approve the charter revisions. Ms. Kuhle seconded. The vote was as follows: Armstrong-Yes, Bretz-Yes, Kuhle-Yes, McGown-Yes, Green-Abstained, Chamberlain-Yes, Fosselman-Yes, Woldt-Yes, Hand-Yes. Results: Yes-8, No-0, Abstained-1. Because there was no quorum, no action was taken.

There was discussion regarding the meeting frequency. Kim Kuhle suggested meeting more often. Ms. Byers suggested forming a subcommittee to recommend a meeting schedule. She suggested including the co-chairs and Ms. Kuhle on the subcommittee. Members supported this suggestion.

HOUSEHOLD BROADBAND SURVEY
Rebecca Vogt

In early 2014, our partners at the University of Nebraska-Lincoln conducted a survey of Nebraska households on their use of broadband. Ms. Vogt reviewed some of the results. Households were sampled from eight regions across the state. South Omaha, North Omaha and part of the North Central region were oversampled. There was a 35% response rate (2798 responses out of 8024 deliverable surveys) with a margin of error of 1.85%.

Study highlights included:

- Nebraska households with Internet access at home increased from 81% in 2010 to 86% this year.
- Households with broadband Internet service increased from 76% to 82%.

The complete report is available at broadband.nebraska.gov.

BUSINESS BROADBAND SURVEY AND COACHING
Charlotte Narjes

Charlotte Narjes presented highlights of the survey of Nebraska businesses on their use of broadband. The study found that Nebraska businesses are creating jobs and increasing revenue through the use of broadband applications.

- Broadband use is having a positive impact on jobs, with 364 respondents reporting a net increase of 654 jobs due to using the Internet. Over 50% of net jobs reported by respondents were attributed to use of the Internet.
- Broadband use is also having a positive impact on business revenue with typical respondents reporting 25 to 45 percent of revenue from the Internet.
- Cost savings of 4 percent were reported by respondents.

The Council discussed the “last mile” barrier that is still an issue for some communities and businesses. The broadband map provides useful information about broadband service in an area. Forming a community technology committee can be a first step to addressing last mile issues. It can also be helpful to contact elected officials, including Public Service Commissioners. For many communities the primary strategy may be to stimulate demand for broadband through technology fairs, brown bag lunch and learn sessions, classes in the local library, and other types of educational programs.

BROADBAND MAP AND MOBILE PULSE
Gene Hand and Cullen Robbins

The Public Service Commission (PSC) received a grant to collect data from the service providers regarding their coverage and availability across the state. Due to agreements with service providers, the broadband map is an aggregate map. In October, the PSC began using Mobile Pulse to collect data on mobile broadband speeds. Mobile Pulse is a free smart phone application which can be downloaded and used by individuals in the state. Members were given the URL to access and download the free application. Several members volunteered to share the link with their sector to assist the PSC.

Mr. Cullen’s provided the following statistics.

55,000 individual tests statewide:
Verizon – 71%
Sprint – 10%
US Cellular – 9%

Viaero – 6%
AT&T – 4%

Download speeds:
Verizon – 6.7 MB/sec
AT&T – 3.5 MB/sec
Viaero – 2.8 MB/sec
US Cellular – 2 MB/sec

Download speeds for LTE Only devices:
Verizon – 7.5 MB/sec
AT&T – 3.6 MB/sec
Viaero – 3.2 MB/sec
US Cellular – 2.1 MB/sec
Sprint – 1.2 MB/sec

Ms. Woldt suggested that the PSC develop an informational flyer about Mobile Pulse.

Mr. Hand informed Council members that the FCC is taking steps to reform the eRate process.

UPDATES, PRELIMINARY FINDINGS AND RECOMMENDATIONS FROM PRIORITY AREAS and NEXT STEPS

Several work groups met to provide input into the development of state broadband plan. Ms. Byers shared a preliminary draft of findings. Members were invited to provide feedback and recommendations. Sections included the following:

- Broadband Availability and Affordability
- Economic Development
- Agriculture
- Digital Literacy

One of the action items proposed exploring connectivity models for libraries. Connecting to Network Nebraska is possible model. Mr. Fosselman gave kudos to Tom Rolfes, Office of the CIO, and Network Nebraska. The Grand Island Library is a participant of Network Nebraska but they haven't done much with video. Mr. Fosselman would like to see other libraries join Network Nebraska. He also stated that he would like to see a high level of IT support for entities.

ADJOURN

Mr. Green moved to adjourn. Mr. Hand seconded. All were in favor. Motion carried.

The meeting was adjourned at 4:15 p.m.

Meeting minutes were taken by Lori Lopez Urdiales and reviewed by Anne Byers of the Office of the CIO/NITC.

Broadband Plan/Landscape and Recommendations Timeline

Week of Aug. 4--Send draft plan to Broadband team and Community Council chairs for initial review

Week of Aug. 4--Send info on strategies to NITC Commissioners prior to Aug. 14 meeting

Aug. 14--Give an update to NITC Commissioners at NITC meeting

Week of Aug. 18--Send draft plan to Community Council members prior to Aug. 25 meeting

Aug. 25--Community Council will review the draft plan and set targets

Early Sept. --E-mail draft to NITC Commissioners, Share with PSC Commissioners

Sept. 19 Open up 30 day comment period

Oct. 1-2-- Present broadband plan/landscape and recommendations and open 30 day comment period

Early Nov. –NITC approves plan

Broadband in Nebraska

Current Landscape and Recommendations

Draft--August 18, 2014

2014

Nebraska Information Technology Commission

Nebraska Broadband Initiative

Nebraska Public Service Commission

University of Nebraska-Lincoln

NITC Community Council

Nebraska Department of Economic Development

AIM

The Nebraska Broadband Initiative (broadband.nebraska.gov) promotes the adoption and utilization of broadband in Nebraska. Project partners include the Nebraska Public Service Commission, University of Nebraska-Lincoln, Nebraska Information Technology Commission, Nebraska Department of Economic Development, and AIM. Activities include the development of a state broadband map (broadbandmap.nebraska.gov), state broadband conferences, videos highlighting how broadband is being used in Nebraska communities, surveys of households and businesses, regional broadband plans, community planning materials, and these recommendations.

The project is funded through a grant to the Nebraska Public Service Commission by the U.S. Department of Commerce's National Telecommunications and Information Administration through the American Recovery and Reinvestment Act.

Table of Contents

Foreward (from Lt. Governor Heidemann)

Executive Summary

Vision and Goals

Nebraska's broadband vision is that residents, businesses, government entities, community partners, and visitors have access to affordable broadband service and have the necessary skills to effectively utilize broadband technologies.

Goal 1: To increase economic development opportunities, create good-paying jobs, attract and retain population, overcome the barriers of distance, and enhance quality of life in Nebraska by facilitating the continuing deployment of broadband technologies which meet the need for increasing connection speeds.

Goal 2: To facilitate digital literacy and the widespread adoption of broadband technologies in business, agriculture, health care, education, government and by individual Nebraskans.

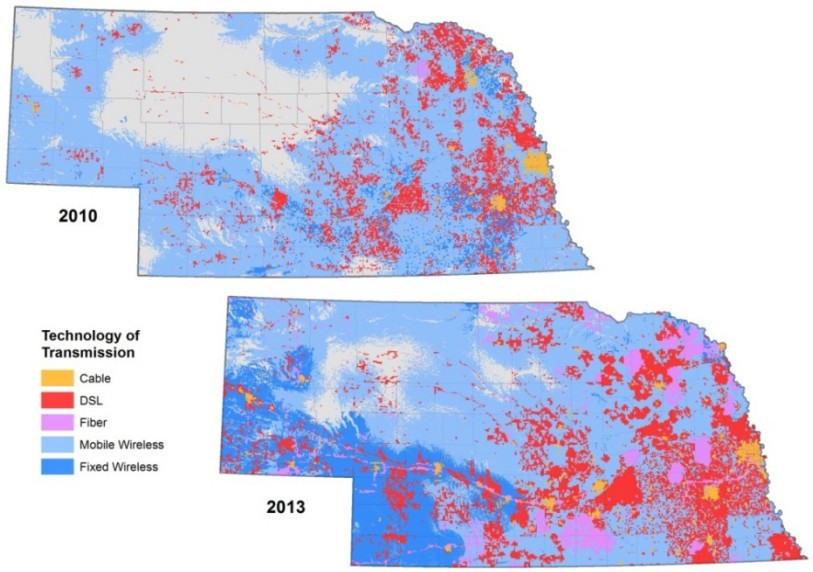
Targets

(Will discuss setting targets at the Community Council meeting)

Broadband Landscape

Broadband provides high-speed access to applications such as the Internet. Broadband service is available to nearly all Nebraskans, with 99.5% of Nebraskans having access to service with download speeds of greater than 10 Mbps.[1] Nebraska ties for 12th on this measure.

Broadband availability in Nebraska continues to improve. The map below shows improvements in broadband coverage from 2010 to 2013. Some areas of the state remain unserved, however.[2]



Mobile connections are becoming increasingly important to residents and businesses with over 80% of Nebraska businesses currently using smart phones.[3] Although mobile broadband data coverage is improving in Nebraska, mobile coverage in some areas of rural Nebraska is still a challenge. Mobile coverage limitations in rural areas of Nebraska may impact the adoption and utilization of some precision agriculture technologies which rely on mobile broadband services.

Most households in Nebraska (82%) have broadband service. However, there are significant-rural-urban differences with subscription rates of 90% in Lincoln and 87% in Omaha, compared to 72% to 77% in other regions of the state.[4]

Nebraska businesses are utilizing broadband access to the Internet to expand their markets and reduce costs. More importantly, these businesses are creating jobs and increasing revenue through the use of broadband. A 2013 survey of Nebraska businesses found that broadband is having a

[1] National Broadband Map (www.broadbandmap.gov) accessed August 1, 2014. Data from Dec. 31, 2013.
[2] Map created by Cullen Robbins, Nebraska Public Service Commission.
[3] Strategic Networks Group. (Jan. 31, 2014). Nebraska broadband eSolutions benchmarking report. Retrieved from http://broadband.nebraska.gov
[4] Vogt, R., Byers, A., Hancock, C., Narjes, C., & Terry, R. (April 2014). Internet connectivity and use in Nebraska: A follow up study. Retrieved from http://broadband.nebraska.gov

positive impact on jobs, with 364 respondents reporting a net increase of 654 jobs due to using broadband.[5]

Internet applications relying on broadband networks are becoming increasingly important for agricultural producers. Most livestock producers use the Internet for market information, auctions, government and regulatory agency reporting report, and farm business planning. Most grain producers use the Internet for market information, crop management, government and regulatory agency reporting, ROI calculators, farm business planning, and GPS information. [6]

Recommendations

The following recommendations emerged from discussions with stakeholders:

- Leverage resources to encourage investment in Nebraska's telecommunications infrastructure.
- Enhance the capacity of local communities to address broadband development.
- Encourage the development of a skilled IT workforce.
- Support innovation and entrepreneurship.
- Support the use of broadband technologies in agriculture and businesses.
- Support the use of broadband technologies in health care, local government, libraries, and education.
- Support efforts to attract new residents and retain youth.
- Increase digital literacy and broadband access to the Internet.

[5] Strategic Networks Group. (Jan. 31, 2014). Nebraska broadband eSolutions benchmarking report. Retrieved from http://broadband.nebraska.gov

[6] Vogt, R., Narjes, C., Byers, A. & Hancock, C. (July 16, 2014). Technology use in agriculture. Cornhusker Economics. Retrieved from http://agecon.unl.edu/cornhuskereconomics

Vision, Goals and Targets

Nebraska's broadband vision is that residents, businesses, government entities, community partners, and visitors have access to affordable broadband service and have the necessary skills to effectively utilize broadband technologies.

Goal 1: To increase economic development opportunities, create good-paying jobs, attract and retain population, overcome the barriers of distance, and enhance quality of life in Nebraska by facilitating the continuing deployment of broadband technologies which meet the need for increasing connection speeds.

Goal 2: To facilitate digital literacy and the widespread adoption of broadband technologies in business, agriculture, health care, education, government and by individual Nebraskans.

Targets

(Will discuss setting targets at the Community Council meeting.)

What is Broadband?

"Broadband" refers to a high-speed data service that supports multiple applications including access to the Internet. There is no single universally-agreed up on definition regarding how fast a connection should be to be considered “broadband.” To most users, anything faster than dial-up is considered “broadband.” The National Broadband Plan released by the FCC in 2010 has defined broadband as 4 Mbps down and 1 Mbps up. In August 2014, the FCC launched an inquiry into changing the definition to 10 Mbps down and 1 Mbps up. The proposed change reflects the demand for increasing broadband speeds.

Bandwidth, streaming video and download times

Video downloads or video streaming can demand broadband speeds of 5 Mbps or greater depending upon the size of the file or quality of the video being streamed. Standard definition video can be streamed at speeds from 1 Mbps to 2 Mbps. High quality video demands faster speeds, with full HD (1080p) demanding 5 Mbps or more for a single stream. Having multiple members of a household simultaneously streaming video on separate devices will require even greater connection speeds

Connection Speed	Single song (5 MB)	Album 100 MB	TV Show 450 MB
4 Mbps	10 seconds	3 minutes 20 seconds	15 minutes
8 Mbps	5 seconds	1 minute 40 seconds	7 minutes 30 seconds
16 Mbps	2.5 seconds	50 seconds	3 minutes 45 seconds
32 Mbps	1.25 seconds	25 seconds	1 minute 52 seconds
50 Mbps	.8 seconds	16 seconds	1 minute 12 seconds
100 Mbps	.4 seconds	18 seconds	36 seconds

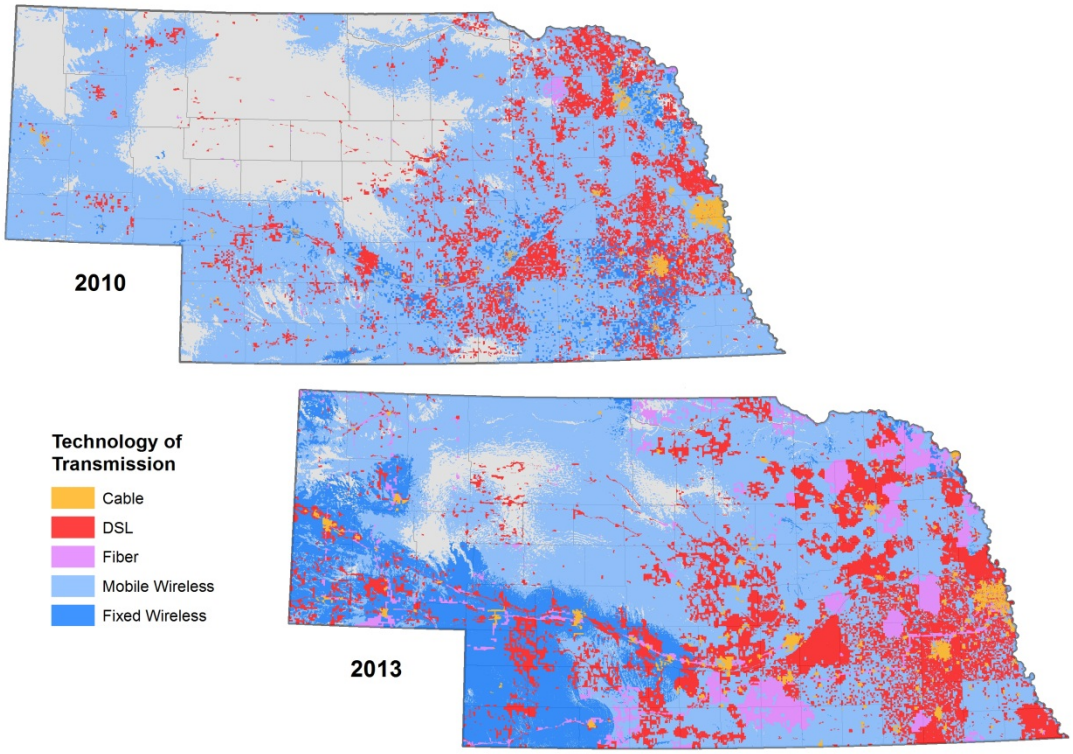
Broadband Landscape

Economic Value of Broadband

(Will add information here)

Broadband Availability in Nebraska

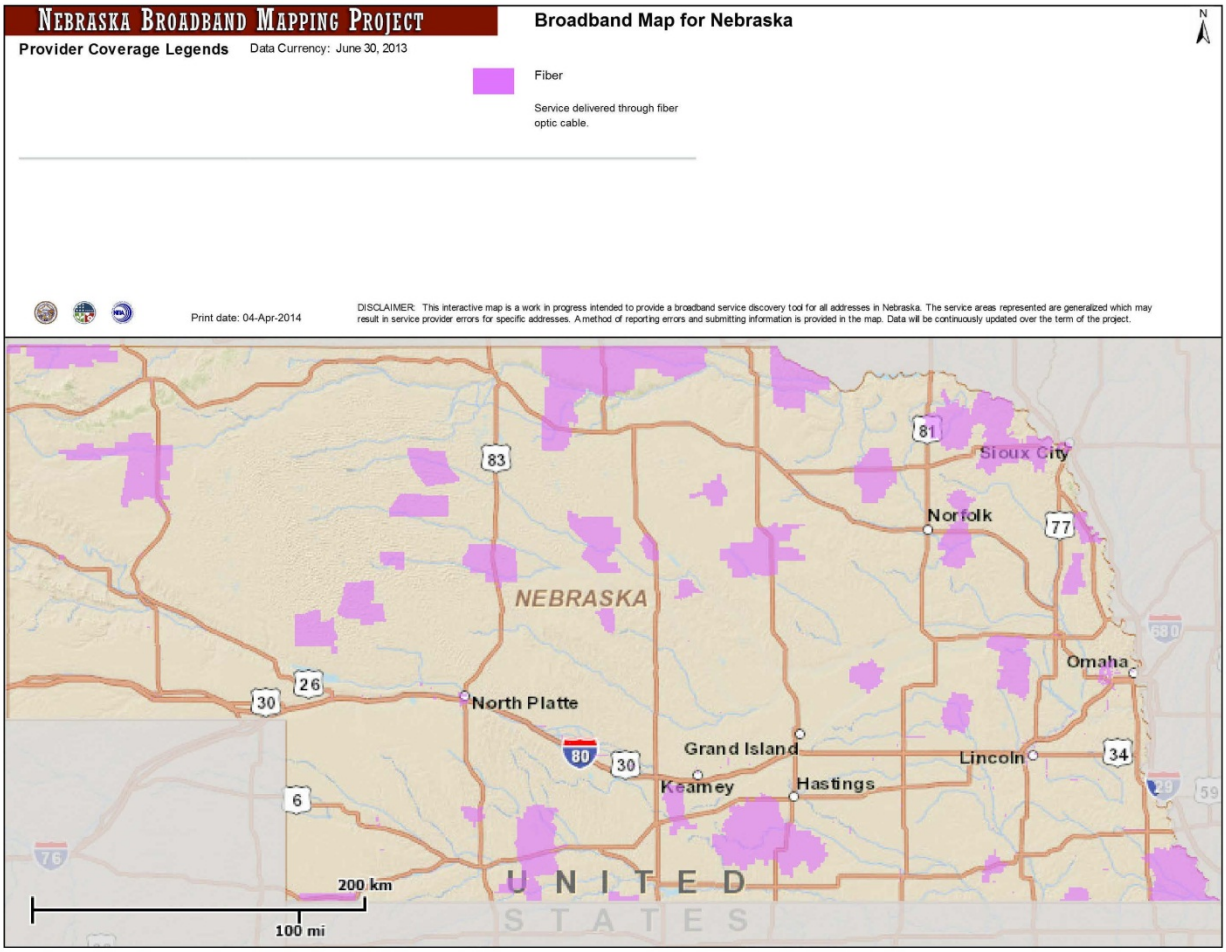
Broadband service is available to nearly all Nebraskans, with 99.5% of Nebraskans having access to service with download speeds of greater than 10 Mbps. Nebraska ties for 12th on this measure.[7] Broadband availability in Nebraska continues to improve. The map below shows improvements in broadband coverage between 2010. Some areas of the state remain unserved, however.



Fiber deployment in Nebraska is increasing. The map on the following page reflects locations where fiber is the technology used to provide broadband access based on data provided in December 2013.

[7] National Broadband Map (www.broadbandmap.gov) accessed August 1, 2014. Data from Dec. 31, 2013.

Going to the broadband map (http://broadbandmap.nebraska.gov) and zooming in shows additional areas in which broadband service is delivered using fiber optic cable.



Mobile connections are becoming increasingly important to residents and businesses. Over 88 percent of Nebraska businesses use some form of web-enabled mobile device, with 84% using a web-enabled laptop computer, closely followed by web-enabled mobile phones (81.3%).[8] Although mobile broadband data coverage is improving in Nebraska, mobile coverage in some areas of rural Nebraska is still a challenge. These coverage limitations may impact the adoption and utilization of some precision agriculture technologies which rely on mobile broadband services.

[8] Strategic Networks Group. (Jan. 31, 2014). Nebraska broadband eSolutions benchmarking report. Retrieved from http://broadband.nebraska.gov

Broadband Adoption in Nebraska

Households. Most households in Nebraska (82%) access the Internet using their broadband service. However, there are significant-rural-urban differences in broadband adoption. Ninety percent of households in the Lincoln area and 87% of households in the Omaha have broadband access to the Internet. In comparison, the percentage of households with broadband access to the Internet in other regions of the state ranges from 72% to 77%. [9]

Broadband Service at Home	2010	2014
Nebraska Households with Broadband Service at Home	76%	82%
By Region		
Lincoln Area	81%	90%
Omaha Area	83%	87%
Southeast	72%	77%
South Central	69%	76%
West Central	70%	74%
Panhandle	74%	73%
Central	56%	73%
Northeast	72%	72%

*For the survey, broadband was defined as anything faster than dial-up.

Older adults, those with lower incomes and those with lower levels of income are also less likely to have broadband access to the Internet at home.

Businesses. Nebraska businesses are utilizing broadband to expand their markets and reduce costs. More importantly, these businesses are creating jobs and increasing revenue through the use of broadband. A 2013 survey of Nebraska businesses found that broadband access to the Internet is having a positive impact on jobs, with 364 respondents reporting a net increase of 654 jobs due to using the Internet. Over 50% of net jobs reported by respondents were attributed to use of the Internet. Broadband access to the Internet is also having a positive impact on business revenue with typical respondents reporting 25 to 45 percent of revenue from the Internet.[10]

Agriculture. Broadband applications are becoming increasingly important for agricultural producers with over 60% of livestock producers using the Internet for commodity prices/market information (69%), government/regulatory agency reporting (63%), and auctions (63%).

At least 60% of grain producers report using broadband for commodity prices/market information (77%), crop management (65%), and government or regulatory agency reporting (60%). [11]

[9] Vogt, R., Byers, A., Hancock, C., Narjes, C., & Terry, R. (April 2014). Internet connectivity and use in Nebraska: A follow up study. Retrieved from http://broadband.nebraska.gov

[10] Strategic Networks Group. (Jan. 31, 2014). Nebraska broadband eSolutions benchmarking report. Retrieved from http://broadband.nebraska.gov

[11] Vogt, R., Narjes, C., Byers, A. & Hancock, C. (July 16, 2014). Technology use in agriculture. Cornhusker Economics. Retrieved from http://agecon.unl.edu/cornhuskereconomics

Priority Areas and Recommendations

Four priority areas for the state broadband framework were identified by nine regional groups in Nebraska working to develop regional broadband plans. These priority areas are:

- Economic Development
- Agriculture
- Digital Literacy and Public Access
- Broadband Availability and Affordability

The regional groups also recognized that the use of broadband in health care, education, local government and libraries were important, but were issues that were better addressed at the state level.

These priority areas were presented to members of the Nebraska Information Technology Commission Community Council and other stakeholders on November 1, 2013. Community Council members and other stakeholders were invited to participate in work groups to further discuss these priority areas and make initial recommendations.

The following recommendations emerged from discussions with work group members and the Community Council:

- Leverage resources to encourage investment in Nebraska's telecommunications infrastructure.
- Enhance the capacity of local communities to address broadband development.
- Encourage the development of a skilled IT workforce.
- Support innovation and entrepreneurship.
- Support the use of broadband technologies in agriculture and businesses.
- Support the use of broadband technologies in health care, local government, libraries, and education.
- Increase digital literacy and broadband access to the Internet.

Encourage Investment in Nebraska's Telecommunications Infrastructure

The State of Nebraska encourages investment in Nebraska's telecommunications infrastructure through two primary mechanisms:

1) By providing support through the Nebraska Universal Service Fund; and
2) By aggregating its demand for telecommunications services and acting as an anchor tenant.

Provide Support through the Nebraska Universal Service Fund

In 1997, the Legislature passed LB 686, authorizing the Nebraska Public Service Commission to create the Nebraska Universal Service Fund (NUSF). The goal of the NUSF is, in conjunction with federal universal service funds, to ensure that all Nebraskans have comparable access to telecommunications services at affordable prices. The Commission created the following five programs within the NUSF:

Broadband Pilot Program provides targeted support for unserved and underserved areas to close the broadband availability gap. Nebraska Broadband Pilot grants are available to regulated wireline, wireless, and unregulated communications providers wishing to participate. Nebraska is one of only four states in the nation with a universal service program to fund broadband deployment, and it provides the second greatest amount of total funding among the states with such programs.

Dedicated Wireless Fund Program supports the provision of wireless telecommunications infrastructure in rural unserved and underserved areas of the state. In 2013 the Commission moved toward combining the Dedicated Wireless Fund Program and the Nebraska Broadband Pilot Program.

Rural Tele-Health Program provides support for the Nebraska Statewide Telehealth Network. The Nebraska Statewide Telehealth Network connects 68 rural and critical access hospitals across the state to hub hospitals in Grand Island, Kearney, Lincoln, Norfolk, North Platte, Omaha, and Scottsbluff.

Nebraska Telephone Assistance Program assists eligible low-income individuals with obtaining and keeping telephone services by lowering monthly telephone service rates. In February of 2012, the FCC significantly reformed the low-income program supported by the federal and state universal service funds and began taking steps toward expanding the program to include broadband service. The Commission continues to monitor the Pilot Programs closely with an eye toward possible future expansions of Nebraska Telephone Assistance Program to include broadband support.

High Cost Program seeks to make telecommunications and information rates generally affordable and comparable across Nebraska by providing support to the highest-cost areas.

The Commission has maintained the NUSF surcharge at 6.95% of in-state retail telecommunications revenue since 2007. Twenty-one states have state funds specifically dedicated to providing high-cost support and 8 states have funds dedicated to funding intrastate access rate reductions and reform. The percentage assessed by each state varies widely along with the method of assessment. Nebraska's assessment percentage falls near the middle.

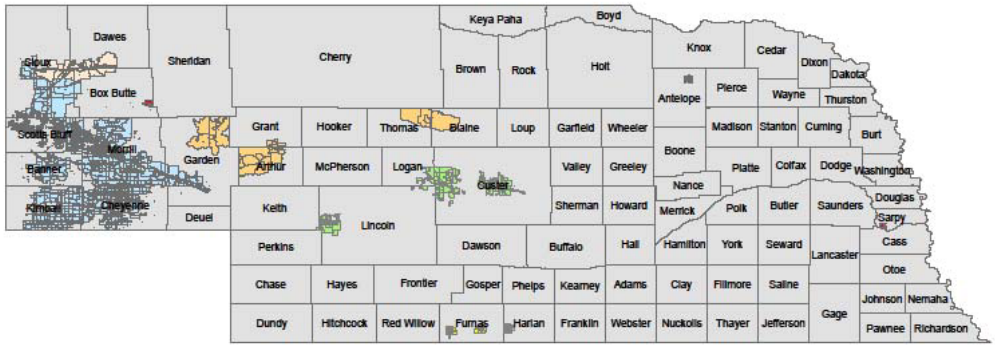
The maps below show the areas receiving support from the Nebraska Broadband Pilot Program and the Dedicated Wireless Program.

Nebraska Universal Service Fund

Broadband Grant Locations

Nebraska Broadband Pilot Program

(2012)



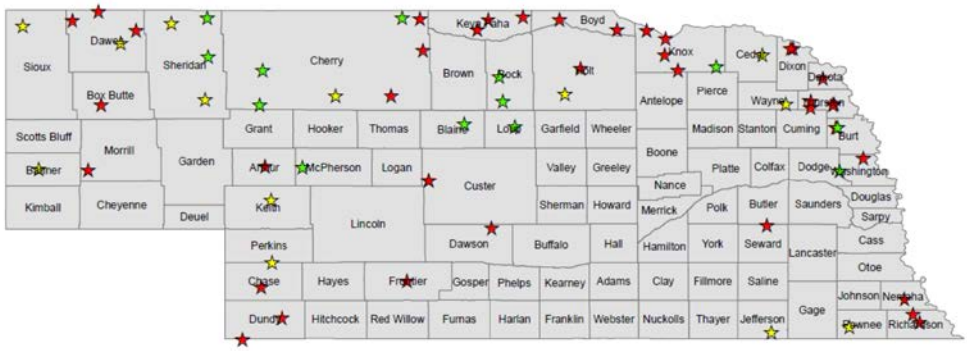
Plainview
GreatPlains
Citizens
Viaero
Mobius
Consolidated
CenturyLink

Nebraska Universal Service Fund

Supported Tower Locations

Dedicated Wireless Program

(2008 - 2012)



NUSF Supported Towers

★ 2008 - 2010

★ 2011

☆ 2012

Aggregate Demand and Act as an Anchor Tenant

The Nebraska Information Technology Commission facilitated the aggregation of the backbone network services of the State of Nebraska and the University of Nebraska into a core network backbone segment in 2003 in order to develop a broadband, scalable telecommunications infrastructure that optimizes quality of service to public entities. In 2006, the network expanded to include the state's educational entities with the passage of LB 1208.

Network Nebraska is comprised of three major sub-networks: The University of Nebraska Computing Services Network, State and County Government Network, and Network Nebraska-Education. Each network has its own management staff and backbones, but takes advantage of co-location facilities, Internet and telecommunications contracts, and shared infrastructure wherever possible.

Network Nebraska-Education has enabled the exchange of video distance learning classes and decreased the cost of commodity Internet for participating K-12 entities. Nebraska K-20 education now enjoys one of the lowest unit costs for commodity Internet in the entire country. Over 270 entities participate in Network Nebraska-Education. Network Nebraska-Education was recognized by the National Association of State CIOs (NASCIO) as an outstanding collaborative and partnership project in 2013.

Benefits of Network Nebraska also include flexible bandwidth utilization, Intranet routing, lower network costs, greater efficiency, interoperability of systems providing video courses and conferencing, increased collaboration among educational entities, new student learning opportunities, enterprise network management software, and better use of public investments.

Network Nebraska has stimulated investments in telecommunications infrastructure. As the State bid connectivity to large regional areas of schools and colleges, the telecommunications companies responded with new network technologies such as metropolitan optical Ethernet, multi-protocol label switching (MPLS), and Ethernet "clouds", which have provided benefits for other nonpublic entities. Network Nebraska is not a state-owned network. Facilities and circuits are leased from private telecommunications providers in the state, allowing the State of Nebraska to act as an anchor tenant.

The University of Nebraska Computing Services Network has also provided support and assistance to the Nebraska Statewide Telehealth Network which connects nearly all of Nebraska's hospitals and public health departments in one of the country's most extensive telehealth networks.

Network Nebraska has been made possible through a cooperative effort of the Collaborative Aggregation Partnership (CAP). CAP is composed of several operational entities: Office of the CIO, University of Nebraska, and Nebraska Educational Telecommunications with policy assistance from the Nebraska Department of Education, Public Service Commission, and the Nebraska Information Technology Commission.

Explore Ways to Leverage Next Generation 911 and FirstNet Investments

Note: Hold developing this section until Community Council discussion.

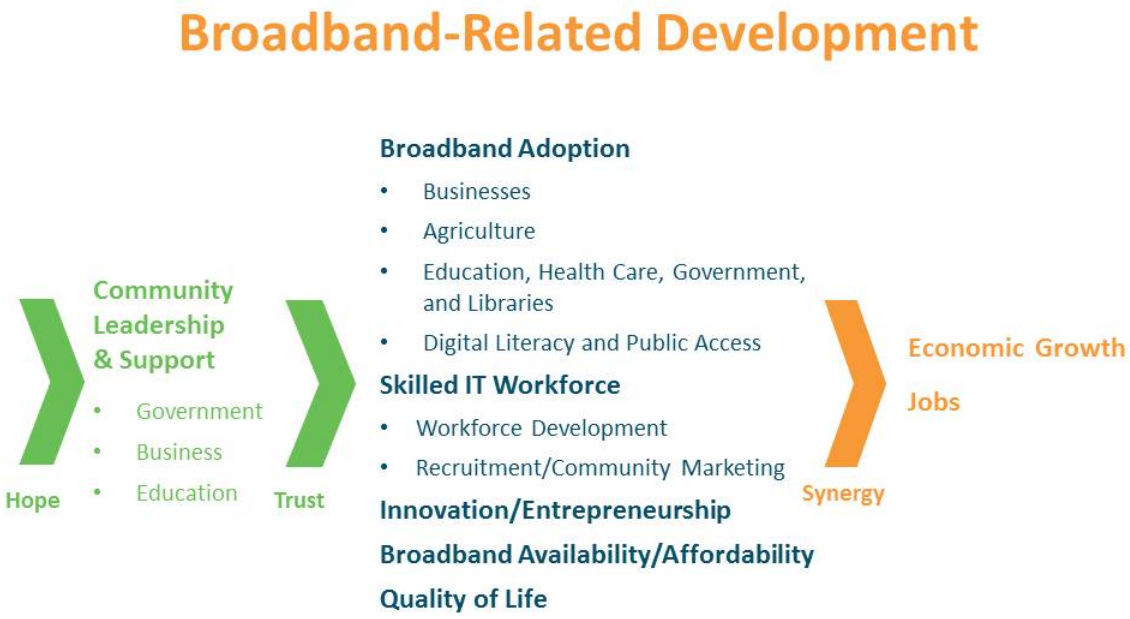
Enhance the Capacity of Local Communities to Address Broadband Development

Local broadband-related development usually starts with government, businesses, and educational entities coming together to address the challenges facing the community or region. Broadband-related development doesn't require community leaders who know all of the answers. It does, however, require community leaders who have the passion and commitment to find the answers. A sense of hope for a better future helps sustain initial efforts. Collaborating on small projects builds trust and social capital. Community partners then work together on bigger projects which address:

- Technology adoption,
- Developing a skilled IT workforce,
- Innovation and entrepreneurship,
- Broadband availability and affordability,
- And quality of life.

This can lead to economic growth and job creation.

The following model shows the key elements of broadband-related development.



The Nebraska Broadband Initiative is developing a community workbook which will help communities assess their broadband readiness and develop a broadband plan.

Encourage the Development of a Skilled IT Workforce

The availability and development of a skilled IT workforce is a key need in Nebraska. As a response, institutions of higher education in Nebraska are making efforts to increase the number of IT graduates. Code schools in Omaha and Lincoln are also addressing the need for a skilled IT workforce by providing intensive training to participants over a 12-week period. However, many employers still report a shortfall. Businesses outside of Omaha and Lincoln may find it even harder to recruit IT employees.

Efforts to engage young people to go into IT should start in grade school. Young people begin to form opinions of careers around third grade. However, many young people don't have a good idea of what IT workers do. There are several innovative programs, including both in school and after school programs, which are introducing students to coding. There are also a number of resources available including materials from the Khan Academy and MIT's Scratch program which can be used to teach coding to students.

Several programs target junior and high school students. Nebraskacareertours.com provides information on jobs in several industries including IT. Career academies and programs like First Job Lincoln can encourage students to choose a career in IT and help students develop the necessary skills to enter the IT workforce. Code Crush is a four-day five-night immersion experience for 8th and 9th grade girls to show them the world of IT. The event was hosted by the UNO College of Information Science and Technology in the spring of 2014 with support from Google and Women Investing in Nebraska.

Intern Nebraska connects full-time students at Nebraska postsecondary educational institutions and Nebraska residents attending postsecondary educational institutions in other states with businesses and non-profit organizations looking for interns. As of spring 2014, 415 students have been placed with approximately 40% of the interns placed outside of the Omaha and Lincoln metropolitan areas. Approximately 50% of the interns are offered full-time positions.

A skilled workforce also requires workers knowledgeable on software commonly used in businesses. The Nebraska Department of Education is partnering with Microsoft on a Microsoft Academy program to allow students to receive Microsoft Office Certification. The program includes training for teachers and site licenses for certifications. The program is expected to begin rolling out in the fall of 2014, beginning with the training of teachers. Students are expected to begin taking certification tests in the spring semester of 2015.

Support Innovation and Entrepreneurship

Over the past several years, Nebraska has made significant progress in supporting technology-related development, innovation and entrepreneurship—especially in the Omaha and Lincoln areas—through University programs, code schools, accelerators, contests, conferences, meet ups, maker spaces, coworking facilities, and venture capital firms.

Smaller communities are also leveraging innovation and entrepreneurship to create jobs and economic growth. Xpansion has pioneered a rural sourcing model, providing a complete range of software quality assurance services in rural locations including Kearney, Nebraska; Loup City, Nebraska; Ames, Iowa; and Manhattan, Kansas. Brent Comstock, chief innovator and owner of Bcom Solutions, has started a coworking facility in Auburn. Alliance was the pilot site for Bella Minds, a crowd-funded technology training program for digitally literate rural women who want to improve their technology skills.

Nebraska's Ranking on State Entrepreneurship Index Climbs

Year	Ranking
2012	16
2011	24

Source: University of Nebraska-Lincoln Bureau of Business Research

What is a Maker Space?

A maker space is a space with tools and equipment where individuals can come together to work on projects and interact with others. It can be associated with a university, community college, high school, library, or just a group of individuals interested in making things. Maker spaces often charge a fee for access.

Maker spaces can lower the barriers to entry for startups by offering low-cost access to equipment which can be used to develop prototypes. The synergy created in maker spaces may be the biggest benefit, however.

Shane Farritor, a professor of mechanical and materials engineering and member of the committee, is leading the Maker Space effort at UNL's Innovation Campus.

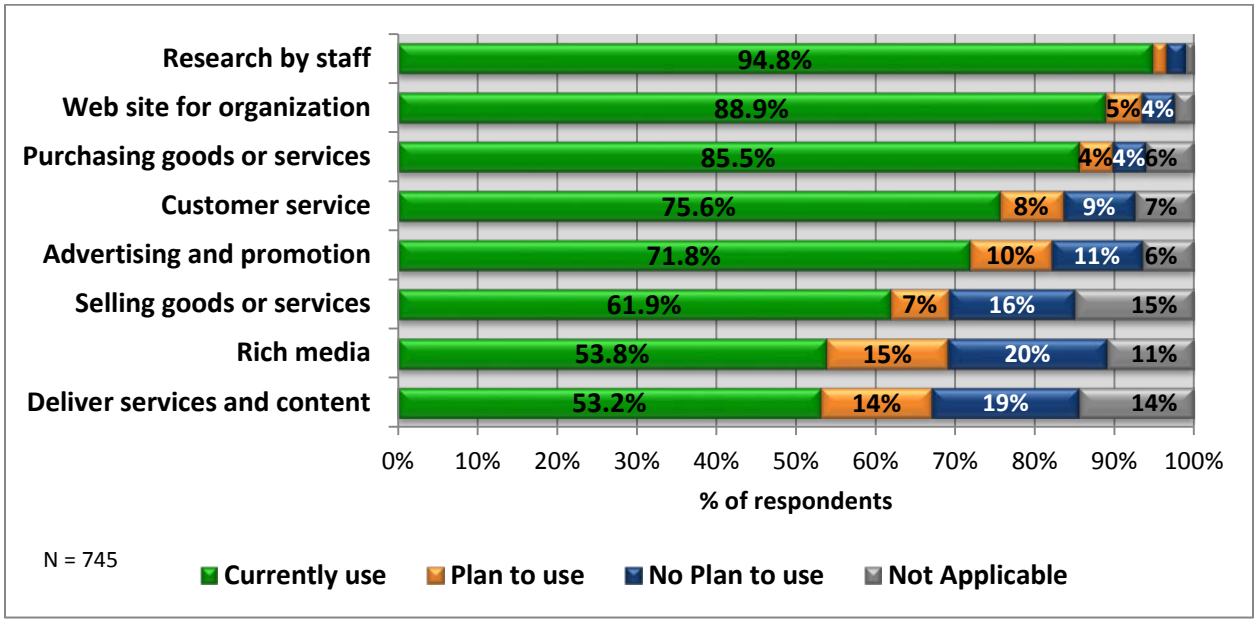
"Nebraska is full of makers," Farritor said. "There are so many talented kids who grow up in rural areas building and creating things. It's one of the things I respect most about the state. It is also the reason why I believe the Maker Space will be a success."

For more information on the UNL Maker Space and Club, visit make.unl.edu. Other maker spaces in Nebraska include the Omaha Maker Group and Metropolitan Community College Fab Lab.

Support the Use of Broadband in Businesses and Agriculture

Broadband Use in Nebraska Businesses. Nearly all Nebraska businesses are using broadband access to the Internet to expand their markets and reduce costs, according to a 2013 survey of Nebraska businesses.[12] The chart below shows high usage levels of many business applications. Businesses in rural areas of the state on average, however, used fewer e-commerce applications than businesses in the Omaha and Lincoln areas.

e-Commerce Uses of Broadband



Source: Nebraska Broadband eSolutions Benchmarking Report, 2013

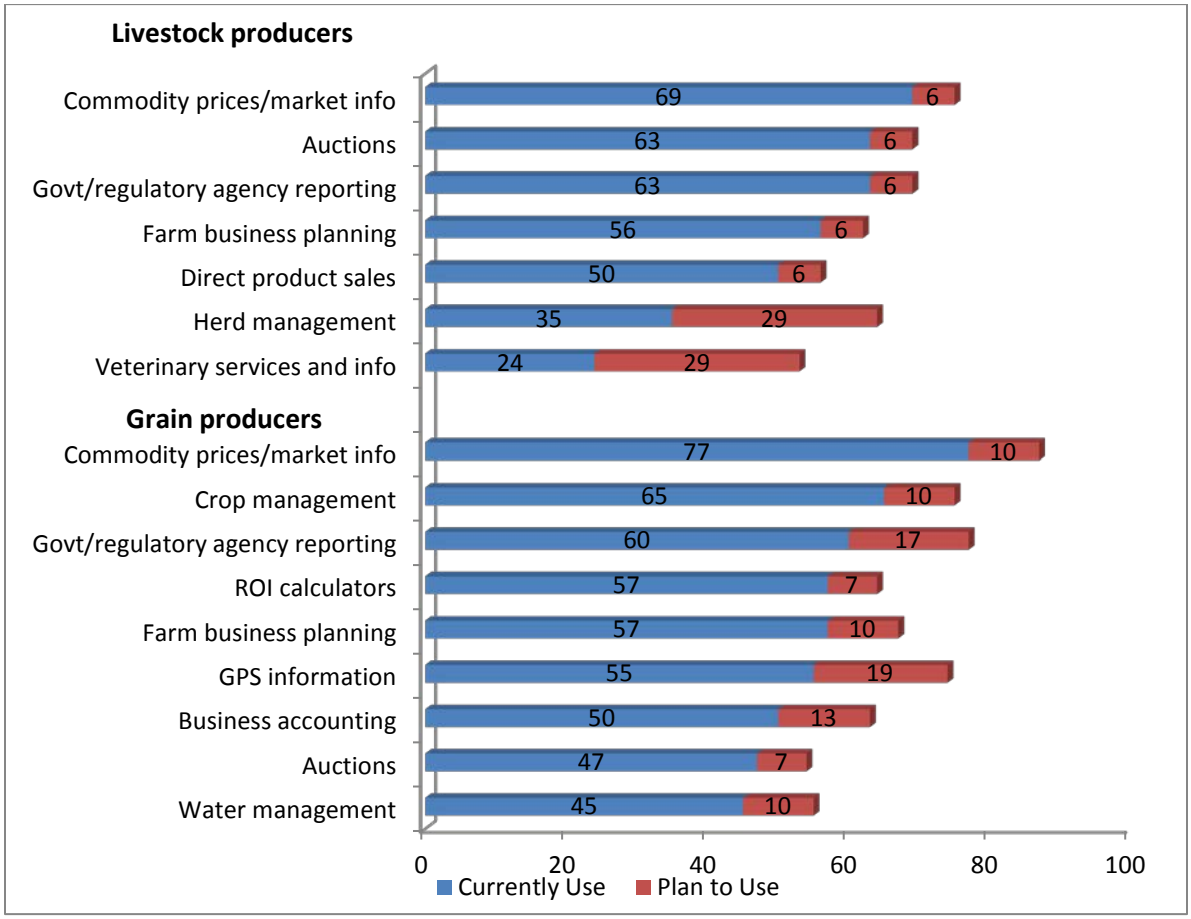
Broadband use is having a positive impact on jobs with 364 respondents reporting a net increase of 654 jobs due to using the Internet. Over 50% of net jobs reported by respondents were attributed to use of the Internet. Broadband use is also having a positive impact on business revenue with typical respondents reporting 25 to 45 percent of revenue from the Internet.

Conferences, workshops, lunch and learn sessions, and other educational opportunities can help businesses keep up with new technologies. AIM's InfoTec conference draws over 1,000 attendees interested in learning more about the latest business technologies. Many of Nebraska's community colleges also offer classes on business technologies. Opportunities for training are often more limited in rural communities. Businesses in rural areas of the state on average, however, used fewer e-commerce applications than businesses in the Omaha and Lincoln areas. The University of Nebraska-Lincoln Extension has helped to address this gap by offering workshops on e-commerce technologies in communities across the state.

[12] Strategic Networks Group. (Jan. 31, 2014). Nebraska broadband eSolutions benchmarking report. Retrieved from http://broadband.nebraska.gov

Broadband Use in Agriculture. Internet applications relying on broadband networks are becoming increasingly important for agricultural producers as shown in the chart below.[13]

Use of Broadband Applications by Nebraska Agricultural Producers



Many smart farming technologies, including those utilizing GPS, may require a cellular connection. For example, precision guidance for row crop production requires GPS accuracy of +/- 1 inch accuracy. GPS correction through RTK (Real Time Kinematic) is often done through cellular connections. In some areas of the state, cellular coverage may be a barrier to utilizing RTK or other technologies. Anecdotal evidence suggests that some agricultural producers subscribe to two different carriers to get the coverage needed locally. Precision agriculture and remote sensing technologies produce large amounts of data. Limited upload speeds in some areas of the state may also present a barrier.

Conferences and workshops can help agricultural producers keep up to date on the latest technologies. The Nebraska Agricultural Technology Association is helping to meet this need by organizing an annual conference. University of Nebraska-Lincoln Extension Educators may also offer local programming on agricultural technologies. Broadband providers may also benefit from learning more about how agricultural producers are using broadband.

[13] Vogt, R., Narjes, C., Byers, A. & Hancock, C. (July 16, 2014). Technology use in agriculture. Cornhusker Economics. Retrieved from http://agecon.unl.edu/cornhuskereconomics

Support the Use of Broadband in Health Care, Local Government, Libraries, and Education

Technology-related crosses all sectors in a community, including education, health care, libraries, and government. In many communities, schools and health systems may be among the largest users of telecommunications services.

Education. The state's education network, Network Nebraska-Education, has enabled the exchange of video distance learning classes and decreased the cost of commodity Internet for participating K-12 entities. Nebraska K-20 education now enjoys one of the lowest unit costs for commodity Internet in the entire country. The deployment of 1:1 computing devices in schools and the migration to digital content and online assessments are significantly increasing broadband utilization by schools. The federal E-Rate program provides discounts to assist most schools and libraries in the United States to obtain affordable telecommunications and broadband access.

Network Nebraska-Education acts as an anchor tenant by leasing facilities from telecommunications providers. As a result, investments made in the state's telecommunications infrastructure by the private sector to support Network Nebraska-Education benefit other customers as well.

Schools also play a role in providing opportunities for students to learn computer applications and coding. IT focus programs and career academies can encourage students to choose a career in IT and help students develop the necessary skills to enter the IT workforce.

Health Care. Health IT is impacting the way health care is delivered and managed. Electronic health records and health information exchange are making it easier for physicians and other health care providers to have more complete patient information at the point of care. Telehealth is making consultations with specialists more accessible to those living in rural Nebraska. Remote monitoring technologies are helping to reduce hospital readmissions. Patient portals, personal health records, and other applications are making it easier for patients to better manage their health care. Several of the emerging health applications will require patients and/or their care givers to have broadband access and the skills to use these applications.

The Nebraska Statewide Telehealth Network connects nearly all of the state's hospitals and all of the state's public health departments. The network is used for patient consultations via interactive video, teleradiology, administrative meetings and continuing medical education.

Nebraska is a leader in exchanging health information so health care providers have more complete patient information at the point of care. NeHII (the Nebraska Health Information Initiative) is one of the largest statewide health information exchanges in the country. By using NeHII, a doctor in an emergency room can view a patient's medication history, avoiding an adverse drug event. A patient's primary care physician and any specialists involved in his/her care can both have access to a patient's latest lab results and medications.

Local Government. From driver's licenses to marriage licenses to pet licenses to property taxes and parking tickets, citizens and residents interact with local governments on a regular basis. Citizens expect

to be able to find information online and to be able to complete transactions online. Local government websites also often serve as a source of more general community information for residents, visitors, and prospective residences.

Funding and the ability to accept payment by credit card are two of the major barriers to implementing e-government services by Nebraska municipalities and counties, according to 2012 surveys of members of the Nebraska Association of County Officials and Nebraska League of Municipalities.[14]

Libraries. Libraries are a key partner in efforts to provide public access to computers and the Internet and to provide access to training. Most Nebraska households (77%) have access to a local place, such as a library or school, in their neighborhood or community where they can use an Internet-accessible computer for free, according to a 2014 survey of Nebraska households.[15] Thirty-two percent of the households without Internet access use the computer resources at the public use facility.

Through a three-year Building Broadband Technologies Opportunity Program (BTOP) grant awarded to the Nebraska Library Commission in 2010, libraries in Nebraska significantly improved their capacity of libraries in Nebraska to provide public access to computers and the Internet. Nearly 150 library outlets serving high proportions of vulnerable and underserved populations participated in the project, receiving computers and other hardware as well as broadband upgrades.

Libraries will likely face increasing demands for broadband access to the Internet. Alternative connectivity models for public libraries should be explored to ensure libraries continue to have adequate access to broadband access to the Internet.

The Edge Initiative is helping libraries in Nebraska and across the United States to better assess how they are using technology and the technology needs of the community. The program also provides a list of resources to help libraries develop a plan to better meet the technology needs of the community.

[14] See http://broadband.nebraska.gov/economicsurveys.

[15] Vogt, R., Byers, A., Hancock, C., Narjes, C., & Terry, R. (April 2014). Internet connectivity and use in Nebraska: A follow up study. Retrieved from http://broadband.nebraska.gov

Support Efforts to Attract New Residents and Retain Youth

Broadband availability and technology-related development are seen by many—especially in Nebraska's rural areas—as key components for attracting new residents and retaining youth. Broadband-related economic development strategies include:

- Recruiting technology companies. Xpansion has rural sourcing locations in Kearney and Loup City and Phynd Technologies recently located in Kearney.
- Attracting lone eagles and telecommuters who can work anywhere remotely.
- Helping local businesses increase revenue and create jobs by utilizing broadband technologies.
- Facilitating recruitment by developing an effective web and social media presence which highlights available jobs and provides community information
- Supporting the development of new businesses.
- Making the community more welcoming and attractive to new residents and youth.

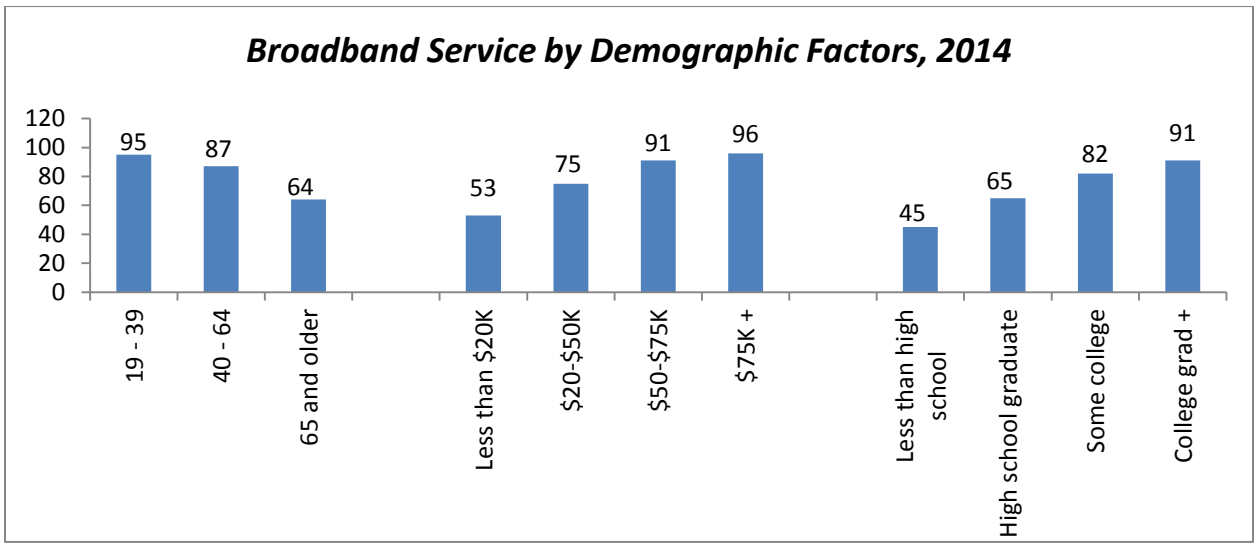
Increase Digital Literacy and Broadband Access to the Internet

Technology-related development requires widespread adoption of broadband technologies. Most households in Nebraska (82%) have broadband access to the Internet, according to a 2014 survey of Nebraska households.[16] However, there are significant-rural-urban differences in broadband adoption. Ninety percent of households in the Lincoln area and 87% of households in the Omaha have broadband access to the Internet. In comparison, the percentage of households with broadband access to the Internet in other regions of the state ranges from 72% to 77%.

Broadband Access to the Internet at Home	2014
Nebraska Households with Broadband Access to the Internet at Home	82%
By Region	
Lincoln Area	90%
Omaha Area	87%
Southeast	77%
South Central	76%
West Central	74%
Panhandle	73%
Central	73%
Northeast	72%

*For the survey, broadband was defined as anything faster than dial-up.

Older adults, those with lower incomes and those with lower levels of income are also less likely to have broadband access to the Internet at home.



[16] Vogt, R., Byers, A., Hancock, C., Narjes, C., & Terry, R. (April 2014). Internet connectivity and use in Nebraska: A follow up study. Retrieved from http://broadband.nebraska.gov

Public libraries and other organizations play a vital role in providing public access to computers and the Internet. Access to the Internet and a computer has now become necessary for a whole range of activities from applying for jobs to downloading tax forms. Public libraries also often provide much-needed training to those new to computers and those who want to update their skills. Innovative partnerships between libraries, community colleges, and other entities can also help small businesses whose employees need training on basic computer applications.

Data to Consider in Setting Targets for Broadband Plan

Households with Internet Access/Individual Lives in House with Internet Access

Data Source	2009	2010	2011	2012	2013	2014
U.S. Census	77%	76.9%	76.7%	76.1%		
UNL		81%				86%

Data Source	2009	2010	2011	2012	2013	2014
U.S. Census	73.5%	75.9%	76.5%	79.3%		

% population with availability to broadband with minimum advertised download speed

Advertised Speed Down	% Population Available	State Ranking
10 Mbps	99.5%	12th (tie)
25 Mbps	74.9%	37th
50 Mbps	72%	36th
100 Mbps	59.4%	32nd
1 gbps	11.5%	8th

Data from broadbandmap.gov. Data as of Dec. 31, 2013

Table 3. Reported Internet Usage for Individuals 3 Years and Older, by State: 2009
Current Population Survey (CPS) October 2009
(In thousands.)

State	Total	Individual accesses the Internet from some location [1]		Individual lives in household with Internet Access	
		Number	Percent	Number	Percent
United States	**289,309**	**197,871**	**68.4**	**212,719**	**73.5**
Alabama	4,442	2,693	60.6	2,742	61.7
Alaska	630	499	79.2	526	83.4
Arizona	6,245	4,311	69.0	4,638	74.3
Arkansas	2,728	1,664	61.0	1,729	63.4
California	34,894	23,582	67.6	26,388	75.6
Colorado	4,726	3,537	74.9	3,599	76.1
Connecticut	3,324	2,500	75.2	2,726	82.0
Delaware	834	583	69.9	638	76.5
District of Columbia	561	407	72.5	411	73.3
Florida	17,456	12,218	70.0	13,092	75.0
Georgia	9,226	6,328	68.6	6,737	73.0
Hawaii	1,215	819	67.4	959	78.9
Idaho	1,470	1,091	74.2	1,139	77.5
Illinois	12,243	8,824	72.1	9,083	74.2
Indiana	6,084	3,984	65.5	4,230	69.5
Iowa	2,852	2,024	71.0	2,088	73.2
Kansas	2,631	1,946	74.0	1,994	75.8
Kentucky	4,060	2,490	61.3	2,658	65.5
Louisiana	4,138	2,502	60.5	2,724	65.8
Maine	1,258	914	72.6	978	77.7
Maryland	5,339	3,921	73.4	4,201	78.7
Massachusetts	6,237	4,641	74.4	5,095	81.7
Michigan	9,487	6,776	71.4	7,005	73.8
Minnesota	4,982	3,790	76.1	3,875	77.8
Mississippi	2,774	1,526	55.0	1,569	56.6
Missouri	5,592	3,806	68.1	3,884	69.5
Montana	924	627	67.9	643	69.6
Nebraska	1,677	1,234	73.6	1,291	77.0
Nevada	2,495	1,692	67.8	1,895	76.0
New Hampshire	1,262	953	75.5	1,069	84.7
New Jersey	8,258	6,132	74.3	6,853	83.0
New Mexico	1,884	1,161	61.6	1,224	65.0
New York	18,555	12,261	66.1	14,269	76.9
North Carolina	8,744	5,673	64.9	6,038	69.1
North Dakota	600	429	71.5	440	73.2
Ohio	10,933	7,488	68.5	7,936	72.6
Oklahoma	3,444	2,216	64.3	2,244	65.2
Oregon	3,660	2,763	75.5	2,951	80.6
Pennsylvania	11,827	8,138	68.8	8,787	74.3
Rhode Island	992	700	70.6	764	77.0
South Carolina	4,315	2,660	61.6	2,737	63.4
South Dakota	759	503	66.3	531	70.0
Tennessee	5,954	3,812	64.0	4,113	69.1
Texas	23,243	14,029	60.4	15,231	65.5
Utah	2,630	2,049	77.9	2,186	83.1
Virginia	7,289	5,169	70.9	5,492	75.4
Vermont	596	453	76.1	455	76.4
Washington	6,268	4,938	78.8	5,119	81.7
West Virginia	1,720	1,037	60.3	1,150	66.9
Wisconsin	5,341	4,000	74.9	4,207	78.8
Wyoming	509	379	74.3	387	76.1

Source: U.S. Census Bureau, Current Population Survey, October 2009.
Internet Release date: February 2010

[1] "Some location" means Internet access that occurs either inside or outside the householder's home.

Table 3A. Reported Internet Usage for Individuals 3 Years and Older, by State: 2010
(In thousands.)

State	Total	Individual lives in household with Internet access		Individual accesses the Internet at home		Individual accesses the Internet from some location outside of home	
		Number	Percent	Number	Percent	Number	Percent
United States	**292,065**	**221,767**	**75.9**	**189,960**	**65.0**	**113,526**	**38.9**
Alabama	4,503	3,016	67.0	2,637	58.6	1,691	37.6
Alaska	660	542	82.1	475	72.0	299	45.4
Arizona	6,340	5,017	79.1	4,098	64.6	2,558	40.4
Arkansas	2,743	1,767	64.4	1,507	54.9	956	34.9
California	35,181	27,524	78.2	22,848	64.9	13,269	37.7
Colorado	4,836	3,769	77.9	3,338	69.0	2,087	43.1
Connecticut	3,364	2,792	83.0	2,492	74.1	1,484	44.1
Delaware	842	646	76.8	535	63.5	303	36.0
District of Columbia	581	446	76.9	396	68.2	308	53.1
Florida	17,688	13,552	76.6	11,714	66.2	6,258	35.4
Georgia	9,296	7,027	75.6	6,028	64.8	3,600	38.7
Hawaii	1,210	952	78.7	773	63.9	436	36.1
Idaho	1,468	1,174	80.0	1,015	69.1	527	35.9
Illinois	12,248	9,236	75.4	7,985	65.2	4,948	40.4
Indiana	6,139	4,101	66.8	3,634	59.2	2,248	36.6
Iowa	2,843	2,170	76.3	1,945	68.4	1,222	43.0
Kansas	2,649	2,156	81.4	1,874	70.7	1,236	46.7
Kentucky	4,067	2,727	67.0	2,347	57.7	1,331	32.7
Louisiana	4,272	2,940	68.8	2,507	58.7	1,634	38.2
Maine	1,254	1,005	80.2	884	70.5	525	41.8
Maryland	5,431	4,406	81.1	3,907	72.0	2,606	48.0
Massachusetts	6,389	5,331	83.4	4,704	73.6	2,741	42.9
Michigan	9,473	7,172	75.7	6,325	66.8	3,967	41.9
Minnesota	5,001	3,959	79.2	3,509	70.2	2,390	47.8
Mississippi	2,789	1,793	64.3	1,445	51.8	1,043	37.4
Missouri	5,625	4,161	74.0	3,472	61.7	2,258	40.1
Montana	920	688	74.8	576	62.6	318	34.6
Nebraska	1,695	1,304	76.9	1,130	66.7	753	44.4
Nevada	2,528	2,036	80.5	1,683	66.6	854	33.8
New Hampshire	1,270	1,094	86.2	965	76.0	530	41.8
New Jersey	8,269	6,661	80.6	5,744	69.5	3,376	40.8
New Mexico	1,899	1,218	64.1	1,013	53.3	752	39.6
New York	18,549	14,388	77.6	11,933	64.3	6,415	34.6
North Carolina	8,901	6,671	74.9	5,593	62.8	3,275	36.8
North Dakota	608	486	79.9	435	71.6	248	40.7
Ohio	11,000	7,969	72.4	6,989	63.5	4,173	37.9
Oklahoma	3,505	2,503	71.4	2,173	62.0	1,371	39.1
Oregon	3,695	3,005	81.3	2,605	70.5	1,593	43.1
Pennsylvania	11,981	9,296	77.6	8,042	67.1	4,314	36.0
Rhode Island	994	781	78.6	674	67.8	389	39.1
South Carolina	4,310	2,906	67.4	2,477	57.5	1,486	34.5
South Dakota	763	561	73.6	487	63.8	340	44.6
Tennessee	6,068	4,209	69.4	3,571	58.9	2,008	33.1
Texas	23,481	16,802	71.6	14,074	59.9	9,005	38.4
Utah	2,681	2,293	85.5	1,954	72.9	1,095	40.8
Virginia	7,418	5,691	76.7	5,047	68.0	2,902	39.1
Vermont	592	468	79.1	407	68.7	286	48.3
Washington	6,373	5,328	83.6	4,704	73.8	2,883	45.2
West Virginia	1,753	1,264	72.1	1,066	60.8	600	34.2
Wisconsin	5,401	4,349	80.5	3,858	71.4	2,418	44.8
Wyoming	521	413	79.3	364	69.8	218	41.8

Source: U.S. Census Bureau, Current Population Survey, October 2010.
Internet Release date: July 2012

Table 2. Reported Internet Usage for Individuals 3 Years and Older, by State: 2011
(In thousands.)

Selected characteristics	Total 3 years and older	Individual accesses the Internet from some location [1]		Individual lives in household with Internet use [2]	
		Number	Percent	Number	Percent
United States	**293,414**	**204,596**	**69.7**	**224,349**	**76.5**
Alaska	664	511	77.0	531	80.0
Alabama	4,449	2,957	66.5	3,091	69.5
Arizona	6,336	4,337	68.4	4,813	76.0
Arkansas	2,708	1,661	61.4	1,854	68.5
California	35,459	24,118	68.0	27,175	76.6
Colorado	4,852	3,788	78.1	4,018	82.8
Connecticut	3,344	2,559	76.5	2,824	84.4
Delaware	850	600	75.0	656	77.2
District of Columbia	588	422	71.8	424	72.1
Florida	17,777	12,778	71.9	14,005	78.8
Georgia	9,334	6,526	69.9	6,999	75.0
Hawaii	1,210	794	65.6	922	76.2
Idaho	1,475	1,079	73.1	1,180	80.0
Illinois	12,280	8,601	70.0	9,604	78.2
Indiana	6,121	4,184	68.4	4,496	73.5
Iowa	2,881	2,093	72.6	2,229	77.3
Kansas	2,653	1,992	75.1	2,128	80.2
Kentucky	4,133	2,720	65.8	2,979	72.1
Louisiana	4,282	2,839	66.3	3,039	71.0
Maine	1,252	919	73.4	1,017	81.2
Maryland	5,440	4,033	74.1	4,431	81.4
Massachusetts	6,341	4,722	74.5	5,295	83.5
Michigan	9,438	6,916	73.3	7,512	79.6
Minnesota	5,063	4,002	79.1	4,249	83.9
Mississippi	2,772	1,635	59.0	1,703	61.4
Missouri	5,686	3,886	68.3	4,120	72.4
Montana	933	631	67.7	669	71.7
Nebraska	1,694	1,255	74.1	1,299	76.7
Nevada	2,519	1,719	68.2	1,978	78.5
New Hampshire	1,273	1,015	79.7	1,110	87.1
New Jersey	8,261	6,076	73.5	6,796	82.3
New Mexico	1,942	1,173	60.4	1,278	65.8
New York	18,637	12,879	69.1	14,853	79.7
North Carolina	9,005	5,961	66.2	6,482	72.0
North Dakota	612	439	71.7	468	76.5
Ohio	10,967	7,622	69.5	8,228	75.0
Oklahoma	3,496	2,260	64.6	2,494	71.3
Oregon	3,713	2,838	76.4	3,027	81.5
Pennsylvania	12,004	8,347	69.5	9,051	75.4
Rhode Island	1,008	728	72.3	810	80.4
South Carolina	4,344	2,819	64.9	3,039	70.0
South Dakota	778	568	73.0	598	76.9
Tennessee	6,057	3,825	63.2	4,262	70.4
Texas	23,864	15,271	64.0	16,593	69.5
Utah	2,693	2,054	76.3	2,280	84.7
Virginia	7,506	5,266	70.1	5,705	76.0
Vermont	599	453	75.6	481	80.2
Washington	6,453	5,160	80.0	5,558	86.1
West Virginia	1,748	1,121	64.1	1,245	71.2
Wisconsin	5,402	4,062	75.2	4,339	80.3
Wyoming	517	384	74.2	414	80.0

Source: U.S. Census Bureau, Current Population Survey, July 2011.

Internet Release date:

Footnotes:

[1] "Some location" means Internet access that occurs either inside or outside the respondent's home.

[2] At least one member of the individual's household reported using the Internet from home.

Table 2. Reported Internet Usage for Individuals 3 Years and Older, by State: 2012
(In thousands.)

Selected characteristics	Total 3 years and older	Individual lives in household with Internet use [1]		Individual accesses the Internet from some location [2]		Individual accesses the Internet from home	
		Number	Percent	Number	Percent	Number	Percent
United States	297,229	235,721	79.3	222,038	74.7	205,500	69.1
Alaska	673	559	83.1	551	81.9	502	74.6
Alabama	4,552	3,278	72.0	3,025	66.5	2,746	60.3
Arizona	6,213	4,579	73.7	4,321	69.5	3,872	62.3
Arkansas	2,789	2,086	74.8	1,954	70.1	1,805	64.7
California	35,929	29,195	81.3	26,393	73.5	24,609	68.5
Colorado	4,885	4,185	85.7	3,967	81.2	3,725	76.3
Connecticut	3,433	2,885	84.0	2,728	79.5	2,594	75.6
Delaware	870	680	78.2	640	73.5	601	69.0
District of Columbia	603	468	77.5	475	78.8	420	69.6
Florida	18,403	15,003	81.5	14,025	76.2	13,190	71.7
Georgia	9,370	7,419	79.2	7,167	76.5	6,585	70.3
Hawaii	1,285	1,093	85.0	969	75.4	919	71.5
Idaho	1,519	1,319	86.8	1,233	81.2	1,162	76.5
Illinois	12,191	10,086	82.7	9,567	78.5	8,973	73.6
Indiana	6,247	4,852	77.7	4,776	76.4	4,317	69.1
Iowa	2,933	2,352	80.2	2,233	76.1	2,083	71.0
Kansas	2,714	2,190	80.7	2,137	78.8	1,940	71.5
Kentucky	4,112	3,060	74.4	2,955	71.9	2,680	65.2
Louisiana	4,323	2,926	67.7	2,860	66.2	2,530	58.5
Maine	1,274	1,073	84.2	1,025	80.5	959	75.3
Maryland	5,601	4,681	83.6	4,538	81.0	4,212	75.2
Massachusetts	6,331	5,446	86.0	5,020	79.3	4,809	76.0
Michigan	9,440	7,626	80.8	7,383	78.2	6,800	72.0
Minnesota	5,148	4,497	87.4	4,254	82.6	4,045	78.6
Mississippi	2,801	1,814	64.8	1,854	66.2	1,570	56.0
Missouri	5,709	4,302	75.4	4,257	74.6	3,806	66.7
Montana	962	753	78.3	744	77.4	663	69.0
Nebraska	1,735	1,320	76.1	1,317	75.9	1,170	67.4
Nevada	2,547	2,108	82.8	1,975	77.5	1,861	73.1
New Hampshire	1,264	1,109	87.7	1,056	83.5	1,006	79.5
New Jersey	8,428	7,057	83.7	6,588	78.2	6,206	73.6
New Mexico	1,989	1,470	73.9	1,351	67.9	1,217	61.2
New York	18,665	15,116	81.0	13,705	73.4	12,900	69.1
North Carolina	9,123	7,088	77.7	6,669	73.1	6,130	67.2
North Dakota	652	548	84.0	531	81.4	499	76.6
Ohio	10,942	8,277	75.6	7,864	71.9	7,223	66.0
Oklahoma	3,623	2,712	74.8	2,516	69.4	2,280	62.9
Oregon	3,723	3,274	87.9	3,056	82.1	2,892	77.7
Pennsylvania	12,200	9,860	80.8	9,296	76.2	8,760	71.8
Rhode Island	1,007	828	82.2	760	75.5	724	71.9
South Carolina	4,463	3,289	73.7	3,207	71.9	2,852	63.9
South Dakota	785	614	78.3	592	75.5	542	69.1
Tennessee	6,116	4,545	74.3	4,223	69.1	3,954	64.6
Texas	24,427	17,731	72.6	16,638	68.1	14,960	61.2
Utah	2,657	2,265	85.2	2,157	81.2	2,018	76.0
Virginia	7,668	5,923	77.2	5,784	75.4	5,303	69.2
Vermont	606	519	85.7	496	82.0	468	77.3
Washington	6,490	5,524	85.1	5,249	80.9	4,942	76.1
West Virginia	1,766	1,248	70.6	1,130	64.0	1,037	58.7
Wisconsin	5,500	4,437	80.7	4,388	79.8	4,036	73.4
Wyoming	542	450	82.9	436	80.5	403	74.4

Source: U.S. Census Bureau, Current Population Survey, October 2012.

Internet Release date: January 2014.

Footnotes:

[1] "Some location" means Internet access that occurs either inside or outside the respondent's home.

[2] At least one member of the individual's household reported using the Internet from home.

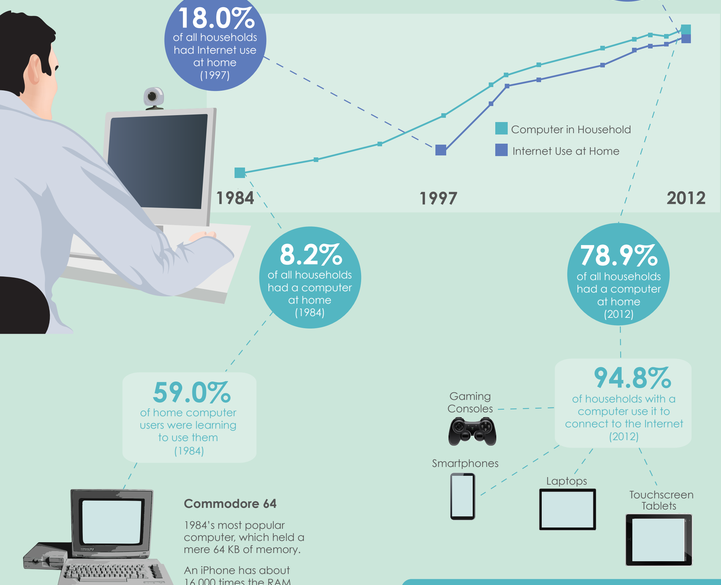
United States Census Bureau

MEASURING AMERICA

COMPUTER & INTERNET TRENDS IN AMERICA

Since the Census Bureau first started collecting information on computers nearly thirty-years ago, America's relationship with computers has radically changed. Data from the Current Population Survey (CPS) helps us to better understand this technological evolution.

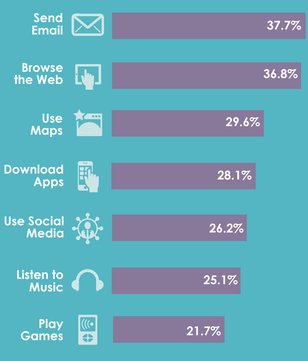
Computer and Internet Use 1984-2012



Breaking It Down by Demographics

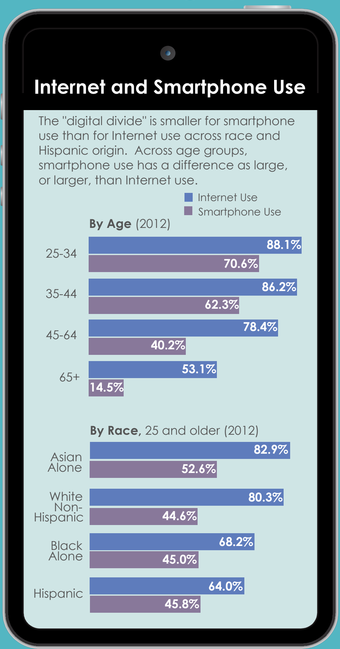
45.3% of individuals 25 and older were using Smartphones in 2012

Smartphones can be used to:



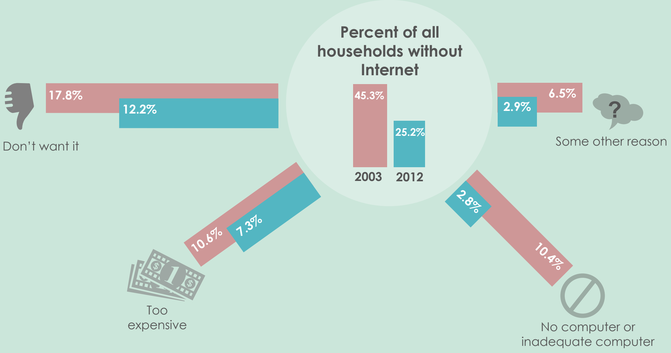
Internet and Smartphone Use

The "digital divide" is smaller for smartphone use than for Internet use across race and Hispanic origin. Across age groups, smartphone use has a difference as large, or larger, than Internet use.



*Note: The difference between age groups 45-64 and 65 and over in smartphone use is not statistically different from the difference in Internet use. The smartphone estimates for white non-Hispanics, Blacks, and Hispanics are not statistically different from one another.

Why No Internet at Home



Future Data Collection

For the first time ever, the 2013 American Community Survey collected data on:

* **Ownership or use of computers** (laptop vs. desktop vs. smartphone vs. other device)
* **Access to the Internet with or without a subscription**
* **Types of Internet subscriptions** (dial-up, DSL, cable, fiber-optic, mobile broadband, satellite, or some other service)

Beginning in the fall of 2014 the ACS will provide yearly data on Internet use not only for the nation and states, but smaller geographies as well, such as certain cities and counties.

United States Census Bureau

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU

#MeasuringAmerica

Statistics from surveys are subject to sampling error and nonsampling error. Current Population Survey technical documentation can be located at:
http://www.census.gov/cps/methodology/techdocs.html

Source: U.S. Census Bureau, Current Population Survey, Selected Years
Release Date: 02/03/14

National Broadband Map
How connected is my community?

Analyze » Rank

Rank » State » Within Nation
Metric» Speed Download Greater Than 10 Mbps

nbm.gov/cR4b

Tweet

Below are rankings for the requested broadband characteristics. The broadband data below is as of December 31, 2013 and represents data collected by SBDD grantees.

Rank	Name	Speed Download DL>10
1	District Of Columbia	100% ± 0.0
2	New Jersey	100% ± 0.0
3	Delaware	100% ± 0.0
4	Rhode Island	100% ± 0.0
5	Connecticut	100% ± 0.0
6	Maryland	99.9% ± 0.0
7	Florida	99.9% ± 0.0
8	Massachusetts	99.8% ± 0.0
9	Kansas	99.6% ± 0.0
10	Illinois	99.6% ± 0.0
11	Utah	99.6% ± 0.0
12	Nevada	99.5% ± 0.0
13	California	99.5% ± 0.0
14	Hawaii	99.5% ± 0.0
15	Nebraska	99.5% ± 0.0
16	Minnesota	99.4% ± 0.0
17	New York	99.3% ± 0.0
18	South Carolina	99.3% ± 0.0
19	Washington	99.3% ± 0.0
20	Iowa	99.2% ± 0.0
21	Indiana	99.2% ± 0.0
22	Colorado	99.2% ± 0.0
23	Georgia	99.1% ± 0.0
24	Ohio	99.1% ± 0.0
25	Texas	99.0% ± 0.0
26	Michigan	99.0% ± 0.0
27	Louisiana	99.0% ± 0.0
28	Guam	99.0% ± 0.0
29	Pennsylvania	99.0% ± 0.0
30	North Dakota	98.9% ± 0.0
31	North Carolina	98.8% ± 0.0
32	Oregon	98.7% ± 0.0
33	Tennessee	98.1% ± 0.0
34	Virginia	98.1% ± 0.0

Rank	Name	Speed Download DL>10
35	South Dakota	**98.1%** ±0.0
36	Arkansas	**98.0%** ±0.0
37	New Hampshire	**98.0%** ±0.0
38	Alabama	**97.9%** ±0.0
39	Maine	**97.7%** ±0.0
40	Mississippi	**97.7%** ±0.0
41	Arizona	**97.4%** ±0.0
42	Wisconsin	**97.4%** ±0.0
43	Oklahoma	**97.3%** ±0.0
44	Wyoming	**97.2%** ±0.0
45	Idaho	**97.1%** ±0.0
46	Missouri	**96.9%** ±0.0
47	New Mexico	**96.7%** ±0.0
48	Puerto Rico	**93.4%** ±0.0
49	West Virginia	**93.3%** ±0.0
50	Kentucky	**92.8%** ±0.0
51	Montana	**92.2%** ±0.0
52	Vermont	**89.2%** ±0.1
53	Alaska	**84.2%** ±0.0
54	American Samoa	**77.0%** ±0.1
55	Commonwealth Of The Northern Mariana Islands	**62.4%** ±0.0
56	United States Virgin Islands	**59.4%** ±0.0

The **National Broadband Map** is a tool to search, analyze and map broadband availability across the United States.
Created and maintained by the **NTIA**, in collaboration with the **FCC**, and in partnership with 50 states, five territories and the District of Columbia.

National Broadband Map
How connected is my community?

Analyze » Rank

Rank » State » Within Nation
Metric» Speed Download Greater Than 25 Mbps

nbm.gov/xdG0

Tweet

Below are rankings for the requested broadband characteristics. The broadband data below is as of December 31, 2013 and represents data collected by SBDD grantees.

Rank	Name	Speed Download DL>25
1	Rhode Island	99.4% ± 0.0
2	New Jersey	98.6% ± 0.0
3	Connecticut	98.6% ± 0.0
4	District Of Columbia	98.5% ± 0.0
5	North Carolina	98.5% ± 0.0
6	New York	97.4% ± 0.0
7	Delaware	96.8% ± 0.0
8	Massachusetts	96.4% ± 0.0
9	Washington	96.2% ± 0.0
10	Hawaii	95.9% ± 0.0
11	Utah	95.5% ± 0.0
12	Illinois	94.5% ± 0.0
13	California	94.3% ± 0.0
14	Florida	94.1% ± 0.0
15	Nevada	94.1% ± 0.0
16	Maryland	93.3% ± 0.0
17	Oregon	93.3% ± 0.0
18	Pennsylvania	90.4% ± 0.0
19	Michigan	88.0% ± 0.0
20	Minnesota	87.4% ± 0.0
21	Arizona	86.9% ± 0.0
22	Georgia	86.8% ± 0.0
23	Indiana	86.4% ± 0.0
24	Ohio	85.9% ± 0.0
25	North Dakota	85.8% ± 0.0
26	Wisconsin	84.2% ± 0.0
27	New Hampshire	83.2% ± 0.0
28	Tennessee	83.1% ± 0.0
29	Colorado	82.1% ± 0.0
30	South Dakota	82.1% ± 0.0
31	South Carolina	81.9% ± 0.0
32	Virginia	80.6% ± 0.0
33	Idaho	79.5% ± 0.0
34	Iowa	79.1% ± 0.0

Rank	Name	Speed Download DL>25
35	Kansas	**78.5%** ± 0.0
36	Maine	**78.3%** ± 0.0
37	Nebraska	**74.9%** ± 0.0
38	Louisiana	**74.8%** ± 0.0
39	Missouri	**74.2%** ± 0.0
40	New Mexico	**74.0%** ± 0.0
41	Alabama	**71.6%** ± 0.0
42	Wyoming	**71.0%** ± 0.0
43	Mississippi	**68.3%** ± 0.0
44	Texas	**66.2%** ± 0.0
45	Oklahoma	**64.3%** ± 0.0
46	Kentucky	**62.6%** ± 0.0
47	Alaska	**61.5%** ± 0.0
48	Puerto Rico	**60.4%** ± 0.0
49	West Virginia	**59.3%** ± 0.0
50	United States Virgin Islands	**55.5%** ± 0.0
51	Arkansas	**51.0%** ± 0.0
52	Vermont	**20.3%** ± 0.0
53	Guam	**16.5%** ± 0.0
54	Montana	**13.3%** ± 0.0
55	American Samoa	**0.0%** ± 0.0
56	Commonwealth Of The Northern Mariana Islands	**0.0%** ± 0.0

The **National Broadband Map** is a tool to search, analyze and map broadband availability across the United States.
Created and maintained by the **NTIA**, in collaboration with the **FCC**, and in partnership with 50 states, five territories and the District of Columbia.

National Broadband Map
How connected is my community?

Analyze » Rank

Rank » State » Within Nation
Metric» Speed Download Greater Than 50 Mbps

nbm.gov/lzL3

Tweet

Below are rankings for the requested broadband characteristics. The broadband data below is as of December 31, 2013 and represents data collected by SBDD grantees.

Rank	Name	Speed Download DL>50
1	Rhode Island	99.4% ± 0.0
2	Connecticut	98.6% ± 0.0
3	North Carolina	98.4% ± 0.0
4	District Of Columbia	98.3% ± 0.0
5	New Jersey	97.2% ± 0.0
6	New York	97.2% ± 0.0
7	Delaware	96.8% ± 0.0
8	Massachusetts	96.2% ± 0.0
9	Hawaii	95.9% ± 0.0
10	Washington	95.8% ± 0.0
11	Nevada	93.7% ± 0.0
12	California	93.6% ± 0.0
13	Utah	93.5% ± 0.0
14	Florida	93.4% ± 0.0
15	Maryland	93.0% ± 0.0
16	Illinois	92.7% ± 0.0
17	Oregon	92.1% ± 0.0
18	Pennsylvania	89.9% ± 0.0
19	Michigan	86.1% ± 0.0
20	North Dakota	85.3% ± 0.0
21	Georgia	85.2% ± 0.0
22	Minnesota	84.3% ± 0.0
23	Ohio	83.1% ± 0.0
24	Indiana	82.8% ± 0.0
25	Tennessee	82.5% ± 0.0
26	Wisconsin	82.3% ± 0.0
27	Arizona	81.8% ± 0.0
28	South Carolina	80.7% ± 0.0
29	Colorado	79.5% ± 0.0
30	New Hampshire	79.4% ± 0.0
31	Virginia	78.5% ± 0.0
32	Iowa	77.7% ± 0.0
33	Maine	77.7% ± 0.0
34	Idaho	77.0% ± 0.0

Rank	Name	Speed Download DL>50
35	Kansas	**76.0%** ± 0.0
36	Nebraska	**72.0%** ± 0.0
37	New Mexico	**71.5%** ± 0.0
38	South Dakota	**71.0%** ± 0.0
39	Louisiana	**70.4%** ± 0.0
40	Missouri	**67.1%** ± 0.0
41	Alabama	**65.9%** ± 0.0
42	Mississippi	**63.0%** ± 0.0
43	Oklahoma	**60.6%** ± 0.0
44	Alaska	**60.6%** ± 0.0
45	Kentucky	**60.1%** ± 0.0
46	West Virginia	**59.3%** ± 0.0
47	Puerto Rico	**59.3%** ± 0.0
48	United States Virgin Islands	**55.5%** ± 0.0
49	Texas	**52.0%** ± 0.0
50	Arkansas	**46.8%** ± 0.0
51	Vermont	**20.0%** ± 0.0
52	Wyoming	**5.1%** ± 0.0
53	Montana	**2.9%** ± 0.0
54	Guam	**0.0%** ± 0.0
55	American Samoa	**0.0%** ± 0.0
56	Commonwealth Of The Northern Mariana Islands	**0.0%** ± 0.0

The **National Broadband Map** is a tool to search, analyze and map broadband availability across the United States.
Created and maintained by the **NTIA**, in collaboration with the **FCC**, and in partnership with 50 states, five territories and the District of Columbia.

National Broadband Map
How connected is my community?

Analyze » Rank

Rank » State » Within Nation
Metric» Speed Download Greater Than 100 Mbps

nbm.gov/CAJ1

Tweet

Below are rankings for the requested broadband characteristics. The broadband data below is as of December 31, 2013 and represents data collected by SBDD grantees.

Rank	Name	Speed Download DL>100
1	Rhode Island	99.3% ± 0.0
2	District Of Columbia	98.2% ± 0.0
3	North Carolina	97.0% ± 0.0
4	Connecticut	96.6% ± 0.0
5	Massachusetts	95.8% ± 0.0
6	Washington	95.3% ± 0.0
7	New Jersey	94.6% ± 0.0
8	Nevada	92.4% ± 0.0
9	Utah	91.9% ± 0.0
10	Delaware	90.5% ± 0.0
11	Illinois	88.8% ± 0.0
12	Oregon	87.4% ± 0.0
13	Maryland	87.2% ± 0.0
14	Michigan	83.1% ± 0.0
15	Minnesota	82.9% ± 0.0
16	Tennessee	81.4% ± 0.0
17	Georgia	78.9% ± 0.0
18	Arizona	76.9% ± 0.0
19	Colorado	76.8% ± 0.0
20	Virginia	76.0% ± 0.0
21	Pennsylvania	74.4% ± 0.0
22	Indiana	72.3% ± 0.0
23	New Hampshire	69.9% ± 0.0
24	Florida	68.0% ± 0.0
25	Kansas	67.0% ± 0.0
26	Louisiana	66.3% ± 0.0
27	South Dakota	65.9% ± 0.0
28	Iowa	64.3% ± 0.0
29	Missouri	60.9% ± 0.0
30	Alaska	60.5% ± 0.0
31	Alabama	60.1% ± 0.0
32	Nebraska	59.4% ± 0.0
33	North Dakota	58.0% ± 0.0
34	New York	57.9% ± 0.0

Rank	Name	Speed Download DL>100
35	New Mexico	56.3% ± 0.0
36	United States Virgin Islands	55.5% ± 0.0
37	California	52.9% ± 0.0
38	Oklahoma	47.5% ± 0.0
39	South Carolina	39.2% ± 0.0
40	Wisconsin	39.1% ± 0.0
41	Mississippi	38.2% ± 0.0
42	Arkansas	35.7% ± 0.0
43	Texas	32.7% ± 0.0
44	West Virginia	32.4% ± 0.0
45	Vermont	19.8% ± 0.0
46	Idaho	10.3% ± 0.0
47	Maine	9.3% ± 0.0
48	Ohio	8.7% ± 0.0
49	Kentucky	7.5% ± 0.0
50	Montana	1.6% ± 0.0
51	Wyoming	1.0% ± 0.0
52	Puerto Rico	0.7% ± 0.0
53	Hawaii	0.6% ± 0.0
54	Guam	0.0% ± 0.0
55	American Samoa	0.0% ± 0.0
56	Commonwealth Of The Northern Mariana Islands	0.0% ± 0.0

The **National Broadband Map** is a tool to search, analyze and map broadband availability across the United States.
Created and maintained by the **NTIA**, in collaboration with the **FCC**, and in partnership with 50 states, five territories and the District of Columbia.

National Broadband Map
How connected is my community?

Analyze » Rank

Rank » State » Within Nation
Metric» Speed Download Greater Than 1gbps

nbm.gov/zr2r

Tweet

Below are rankings for the requested broadband characteristics. The broadband data below is as of December 31, 2013 and represents data collected by SBDD grantees.

Rank	Name	Speed Download DL>1000
1	Rhode Island	97.4% ± 0.0
2	South Dakota	58.6% ± 0.0
3	North Dakota	58.0% ± 0.0
4	Oregon	57.6% ± 0.0
5	Utah	40.4% ± 0.0
6	Indiana	36.0% ± 0.0
7	Tennessee	17.0% ± 0.0
8	Nebraska	11.5% ± 0.0
9	Florida	10.5% ± 0.0
10	Washington	10.2% ± 0.0
11	Georgia	10.0% ± 0.0
12	Illinois	9.8% ± 0.0
13	Mississippi	9.7% ± 0.0
14	Missouri	8.4% ± 0.0
15	New York	7.7% ± 0.0
16	Pennsylvania	7.6% ± 0.0
17	Nevada	7.5% ± 0.0
18	District Of Columbia	7.5% ± 0.0
19	Minnesota	5.9% ± 0.0
20	North Carolina	5.9% ± 0.0
21	Kansas	5.3% ± 0.0
22	Vermont	5.2% ± 0.0
23	South Carolina	4.1% ± 0.0
24	Idaho	4.0% ± 0.0
25	New Jersey	4.0% ± 0.0
26	Louisiana	3.8% ± 0.0
27	Virginia	3.6% ± 0.0
28	Iowa	3.6% ± 0.0
29	Alabama	2.5% ± 0.0
30	Maryland	2.3% ± 0.0
31	Arkansas	2.3% ± 0.0
32	Texas	2.1% ± 0.0
33	Massachusetts	1.9% ± 0.0
34	Connecticut	1.8% ± 0.0

Rank	Name	Speed Download DL>1000
35	Colorado	1.5% ± 0.0
36	Ohio	1.2% ± 0.0
37	Kentucky	1.1% ± 0.0
38	Michigan	1.0% ± 0.0
39	Arizona	0.9% ± 0.0
40	New Hampshire	0.8% ± 0.0
41	Delaware	0.8% ± 0.0
42	Maine	0.7% ± 0.0
43	Oklahoma	0.6% ± 0.0
44	California	0.6% ± 0.0
45	Wyoming	0.4% ± 0.0
46	Wisconsin	0.4% ± 0.0
47	New Mexico	0.4% ± 0.0
48	Montana	0.3% ± 0.0
49	Hawaii	0.1% ± 0.0
50	Alaska	0.1% ± 0.0
51	Puerto Rico	0.0% ± 0.0
52	West Virginia	0.0% ± 0.0
53	Guam	0.0% ± 0.0
54	United States Virgin Islands	0.0% ± 0.0
55	American Samoa	0.0% ± 0.0
56	Commonwealth Of The Northern Mariana Islands	0.0% ± 0.0

The **National Broadband Map** is a tool to search, analyze and map broadband availability across the United States.
Created and maintained by the **NTIA**, in collaboration with the **FCC**, and in partnership with 50 states, five territories and the District of Columbia.

Broadband Connecting Nebraska Conference

October 1 & 2, 2014
Younes Conference Center
Kearney, Nebraska

KEYNOTES:
- Shane Farritor, Professor of Engineering, University of Nebraska-Lincoln
Maker Spaces: Driving Creativity, Innovation & Entrepreneurship

KEYNOTE SPEAKER
Daniel Sieberg
Senior Marketing Manager
Google

Putting the Pieces Together: Making Sense of Transformational Technologies

-Keith Adams, Deputy Director, USDA Rural Development Rural Utilities Service Program
Smart Communities & Broadband

- Gene Hand, Nebraska Public Service Commission
E-Rate & Other Broadband Regulatory Changes

- Anne Byers, Nebraska Information Technology Commission
Moving Forward with the State Broadband Plan

REGISTER TODAY:
www.aimforbrilliance.org/broadband

The Broadband Connecting Nebraska Conference is an opportunity for individuals of nearly all occupations:

- To learn valuable information and skills that will contribute not only to their personal success, but also to the success of their business.

- To fully utilize Information Technology which is embedded in every industry and area of practice from (simply) computers, to computer networks, to the internet to everyday efficiency.

Whether you're looking for ways to improve your market using IT, looking to find your next qualified candidate for a job, or simply aiming to make your business run more efficiently, this conference will undoubtedly provide you with something that will positively affect the future of your business or company.

This conference is not just for IT professionals, it's for all people who want to increase the productivity of their business using technology.

Leaders from across Nebraska will explore the potential of broadband technologies to promote economic and community growth.

SESSION TOPICS:
- Moving to the Cloud: Things to Understand & Consider
- Driving Community & Economic Growth through Broadband
- Cool Tools & Mobile Apps for Business
- Security Do's and Don'ts
- Developing the IT Talent Pipeline
- Remote Video & Sensing
- Broadband Availability & Affordability

BROADBAND CONNECTING NEBRASKA CONFERENCE PARTNERS

AIM

NEBRASKA
possibilities...endless™
Department of Economic Development

CIO

University of Nebraska Lincoln

Community Council Members and Nominees

Rural and Community IT Development

Members

Rod Armstrong, AIM Institute
Norene Fitzgerald
Darla Heggem, Twin Cities Development, Scottsbluff
Joan Modrell, Nebraska Department of Labor
Pam Adams, American Broadband
Randy Bretz, TEDxLincoln Curator
Dave Hahn, Nebraska Information Network
Connie Hancock, University of Nebraska Extension
Jacob Knutson, Nebraska Department of Economic Development
Vacant
David Lofdahl, IT Consultant
Vacant
Monica Lueking-Crowe, Furnas Harlan Partnership
Marion McDermott, Kearney Area Chamber of Commerce
Megan McGown, City of Sidney, Community Development Director

Libraries and Local Government

Members

Chris Anderson, City of Central City
Brett Baker, City of Seward
Phil Green, City of Blair
Jessica Chamberlain, Norfolk Public Library
Steve Fosselman, Grand Island Public Library
Steve Henderson, City of Lincoln
Holly Woldt, Nebraska Library Commissio**n**

At Large

Members

Jerry Vap, Nebraska Public Service Commission