



Broadband in Nebraska

Current Landscape and Recommendations

Oct. 27, 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 Information Technology Commission (nitc.nebraska.gov) promotes the use of information technology in education, health care, economic development, and all levels of government service. The nine-member, governor-appointed commission is chaired by Lieutenant Governor John E. Nelson..

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.



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Executive Summary

Vision, Objectives 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.

Objectives

- 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 stimulating the continuing deployment of broadband technologies which meet the need for increasing connection speeds.
- To increase digital literacy and the widespread adoption of broadband technologies in business, agriculture, health care, education, government and by individual Nebraskans.

Goals

The following goals and targets help focus attention on key aspects of the plan and provide a way to assess the state's progress in addressing broadband development:

Increase household adoption of broadband

- Over 90% of households statewide will subscribe to broadband by 2020.
- 85% of households in rural Nebraska will subscribe to broadband by 2020.

Increase broadband availability

- Broadband service of 25 Mbps down will be available to 90% of households by 2020.
- Broadband service of 1 gbps down will be available to 25% of households by 2020.

Support broadband-related development by increasing the number and diversity of IT workers

- At least 1,400 degrees in computer and information science, management information systems, computer engineering, and bioinformatics will be awarded annually by Nebraska colleges and universities by 2020.
- Women receive at least 25% of the degrees in computer and information science, management information systems, computer engineering, and bioinformatics will be awarded by Nebraska colleges and universities by 2020.

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Economic Impact

Broadband is impacting Nebraska's economy in a number of ways¹, including:

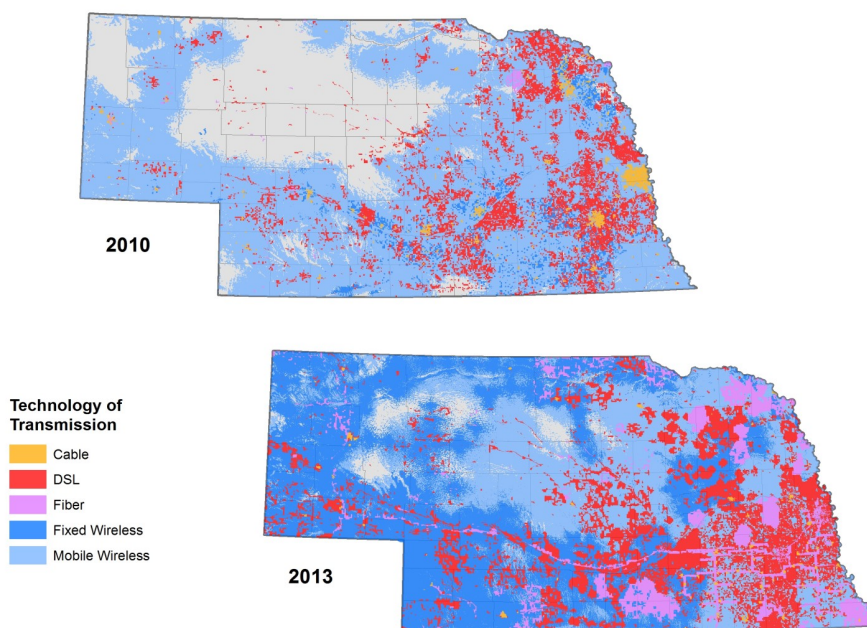
- **Expanding Markets by Selling Online.** Over 60% of Nebraska businesses reported selling goods or services online.
- **Increasing Efficiencies and Reducing Costs.** Nebraska businesses reported cost savings averaging 4% due to using the Internet.
- **Creating Jobs.** A 2013 survey of Nebraska businesses 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.
- **Increasing Revenue.** 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.

National and international research links broadband availability with economic growth. However, broadband adoption appears to have a stronger economic impact than broadband availability, contributing to growth in household income, lower unemployment and other measures of economic success in non-metropolitan counties.²

Broadband Availability

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.³ Nebraska ties for 12th on this measure.

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.



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Broadband availability in Nebraska continues to improve. The map on the previous page shows improvements in broadband coverage from 2010 to late 2013. Some areas of the state remain unserved, however.⁴

Mobile connections are becoming increasingly important to residents and businesses with over 80% of Nebraska businesses currently using smart phones.⁵ 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.

Broadband Adoption

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.⁶

Nearly all Nebraska businesses are utilizing broadband access to the Internet. 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, 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.⁷

Recommendations

The following recommendations emerged from discussions with stakeholders:

- 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 businesses and agriculture.
- Support the development of libraries as community anchor institutions.
- Support the use of broadband in education and health care.
- Support the use of broadband by government and public safety entities.
- Support efforts to attract new residents and retain youth.
- Increase digital literacy and broadband access to the Internet.

Broadband adoption appears to have a stronger economic impact than broadband availability.



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