

Broadband Use by Nebraska Businesses

In Sept. 2013, the Nebraska Broadband Initiative partnered with Strategic Networks Group (SNG) to conduct a survey of Nebraska businesses on their use of broadband technologies. The findings are summarized below:

Broadband Utilization and Impact

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.

Nebraska businesses on average are utilizing 13 Internet applications and processes.

- Over 85 percent of businesses use the Internet to purchase goods and services online.
- Over 60 percent of organizations sell goods and services online and over 53 percent deliver services and content online.
- The two areas with lowest current utilization (service delivery and rich media content) also have the highest level of planned use.
- 55% of respondents are using cloud services with another 17% actively considering using cloud services. Access from any location was cited as the biggest driver for the adoption of cloud services.

Mobile devices and access are becoming increasingly important to Nebraska businesses.

- Over 88 percent of organizations 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%).

Broadband availability is impacting business location decisions.

- Over 50 percent of businesses say that the availability of broadband services was essential or very important for selecting their business location, and 83 percent say that broadband is essential or very important for remaining in their current location.

Broadband utilization varies by employment size, region and community size, and industry.

- Broadband utilization increases with employment size.

- Broadband utilization varies by region and community size, with businesses in the Omaha and Lincoln areas reporting the highest utilization of Internet technologies. Businesses in Central Nebraska (Cherry, Keya Paha, Brown, Rock, Boyd, Holt, Blaine, Loup, Garfield, Wheeler, Custer, Valley, Greely, and Sherman Counties) reported lower levels of utilization of Internet technologies. Businesses in isolated small towns reported lower levels of utilization of broadband technologies than businesses located in larger communities.
- Broadband utilization varies by industry, with educational services; information; professional and technical service; finance and insurance; and retail trade having the highest utilization levels. Agriculture, forestry and fishing had the lowest levels of utilization.

Broadband applications are becoming increasingly important for agricultural producers.

- The use of broadband technologies by agricultural producers is increasing with significant numbers of producers using the Internet for regulatory management (58%), business planning (58%), crop management (50%), and direct product sales (45%).

Broadband Access and Satisfaction

Nearly all Nebraska businesses have broadband access, and 75% of businesses are satisfied with their broadband service.

- Nearly all respondents have broadband access, with cable (29%), DSL (24%) and fiber (19%) as the predominant technologies. Small enterprises (less than 20 employees) are more likely to use DSL and fixed wireless. Fiber and T1 connectivity is far more common among large enterprises.
- A small percentage of businesses use dial-up (0.3 percent) and satellite (1.8 percent) as their primary connections. These are predominately very small businesses.
- Speed test results show significant difference between technologies, with fiber providing the fastest connection speeds. Fixed wireless, cable and T1 connections formed the second fastest tier of services. DSL, mobile wireless, and satellite connections recorded the slowest speeds.
- Speed test results from metropolitan areas were higher than speeds from non-metro areas.
- Approximately 65% of respondents taking the speed test had download speeds of at least 6 mbps. In comparison, approximately 25% had upload speeds of at least 6 mbps.
- Just over a quarter of respondents taking the speed test had upload speeds of less than 768 kbps. Slow upload speeds may limit the adoption of higher level applications which involve the creation and sharing of information electronically.
- The monthly expenditures of Internet connectivity increase with business size. Over 76 percent of very small establishments (1-9 employees) spend less than \$150 per month, while almost 50 percent of establishments with 250 or more employees spend \$2,000 or more per month.

- Fiber is considered the most reliable technology. Satellite was assessed as the least reliable, with 54 percent of respondents with satellite service reporting frequent or occasional problems, followed by mobile wireless

Barriers and Adoption Uses

Security and privacy concerns are bigger barriers to adoption of broadband technologies than the speed of available Internet service.

- Security and privacy concerns were the most significant barriers with 56% of respondents citing security concerns and 46% citing privacy concerns as very important.
- Sixteen percent of respondents cited Internet speed as a very important barrier to broadband utilization.

The complete report, *Nebraska Broadband eSolutions Benchmarking Report: Utilizations and Impacts of Broadband for Nebraska Businesses* is available at broadband.nebraska.gov.