

Broadband & Business

Leveraging Technology
in Kansas to Stimulate
Economic Growth



MAY 2011



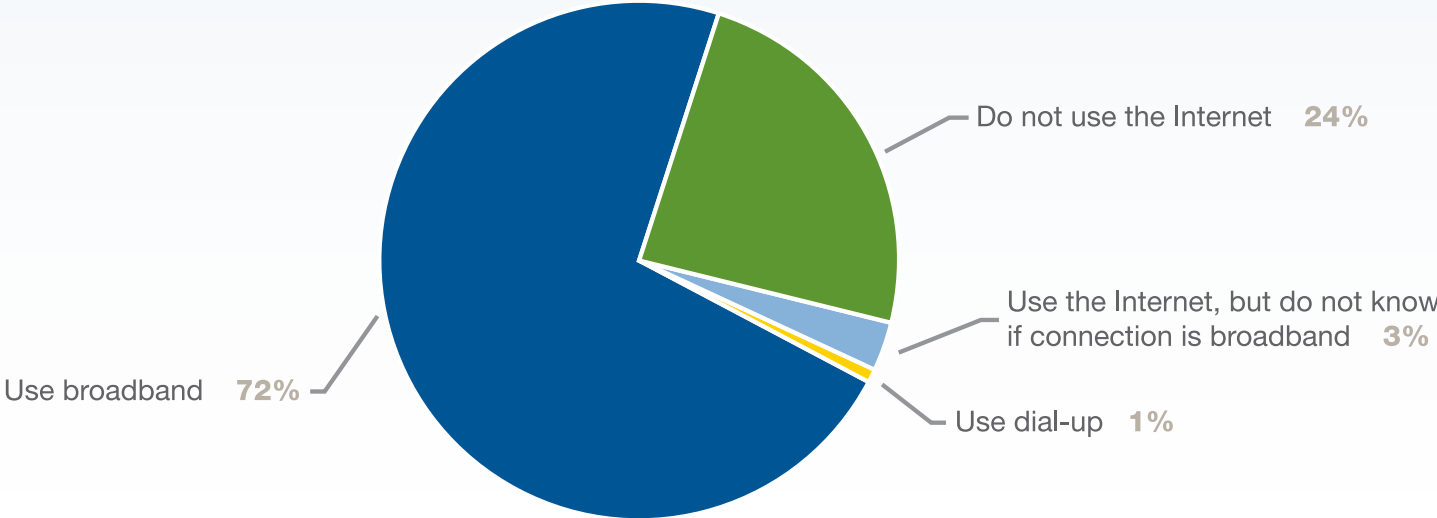
Broadband is the Engine of Economic Growth in Kansas

Increasingly, businesses seeking to open or expand operations look to see not only whether a community has robust broadband access, but also whether potential workers have digital literacy skills and tools. The economic future of communities in Kansas depends not only upon whether robust broadband infrastructure is present but also upon whether businesses and individuals fully utilize that technology to grow and develop local economies.

To better understand these relationships, Connect Kansas is studying how businesses use broadband and broadband's impact on Kansas' business landscape. In 2008, our research found that a seven percentage point increase in broadband utilization in Kansas could result in an annual economic boost of \$1.1 billion, including nearly 23,000 jobs saved or created. In this report, we present the results of a telephone survey of 805 business establishments in Kansas that measured business broadband adoption, examined the use of broadband technology by those businesses, and assessed the price and quality of broadband service that Kansas businesses purchase. And the results are somewhat surprising.

- **22,000 (28%)** Kansas businesses (est.) do not use broadband
- Broadband-connected businesses in Kansas bring in **\$100,000** more in median annual revenues

Technology Adoption



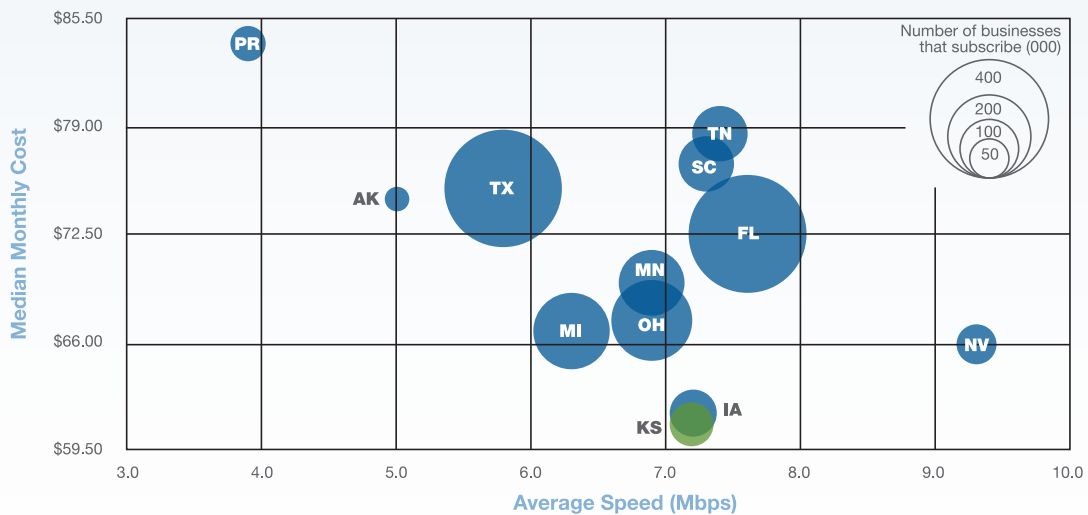
KEY FINDINGS OF THE KANSAS BUSINESS TECHNOLOGY ASSESSMENT

- Nearly 22,000 businesses in Kansas still do not use broadband technology
- Adoption in crucial sectors, such as the Other Services sector which represents businesses engaged in activities such as education, waste management, machine repair, advocacy, and personal care services, trails even further – over two-fifths of all Kansas firms in the “Other Services” industry do not subscribe to broadband
- Median annual revenues of broadband-connected Kansas businesses are \$100,000 higher than those without broadband
- Kansas businesses pay a median monthly price of \$61.06 for their broadband service, the lowest average monthly cost among all of the states/territories served by Connected Nation. The average download speed (7.2 Mbps), though, is above average among all states/territories served by Connected Nation
- Approximately 15,000 Kansas businesses allow their employees to telework, reducing the cost of office space, as well as the number of miles that employees are forced to commute for work

Kansas Businesses Pay Lower Prices for Broadband

Kansas businesses pay the least for their broadband connections, but their download speeds are higher than average.

Kansas businesses pay a median monthly price of \$61.06 for their broadband service, which is less than the median price of \$71.92 paid by all businesses in states/territories served by Connected Nation.



Kansas businesses that know their advertised download speeds report an average speed of 7.2 Mbps, compared to the average advertised download speed of 6.7 Mbps among all states and territories served by Connected Nation.

28% of Kansas Businesses Do Not Use Broadband

Addressing technology adoption gaps will require a concerted effort between the public and private sector. Over the next three years, Connect Kansas will be educating, engaging, and informing businesses, community anchor institutions such as schools, libraries, and healthcare centers, and community leaders about the broadband challenge facing their communities – and we will help those communities devise and implement grass-roots solutions to those challenges.

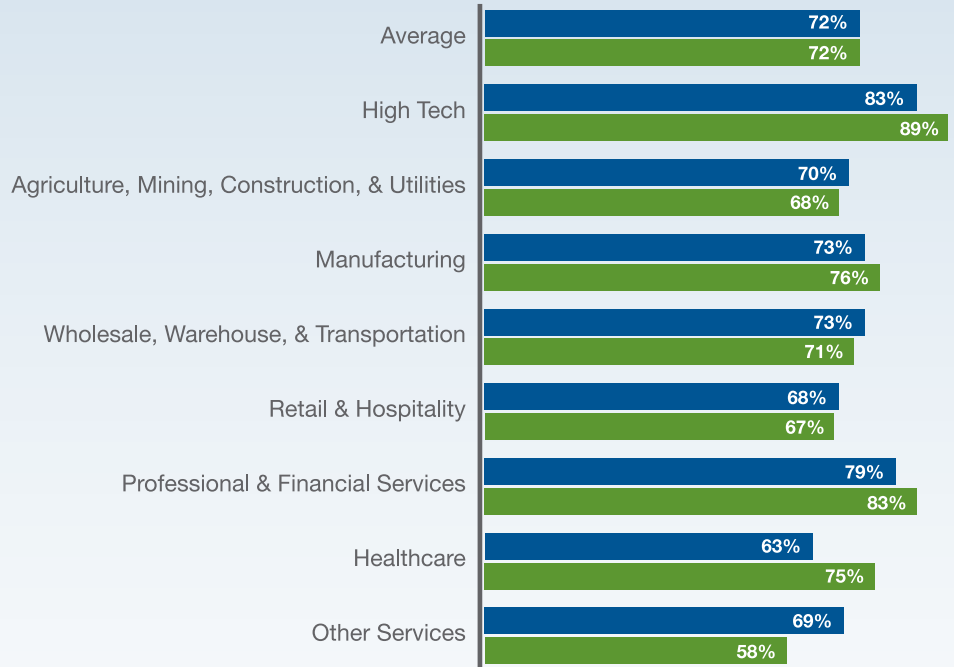
The High Tech and Professional & Financial Services sectors lead in broadband adoption, with about 12,000 businesses in the Professional & Financial Services sector and 6,000 businesses in the High Tech sector using broadband.

On the other extreme, the Other Services sector reports the lowest adoption rates at 58%, or about 5,000 Kansas businesses engaged in activities such as education, waste management, advocacy, and personal care services not connected to broadband.

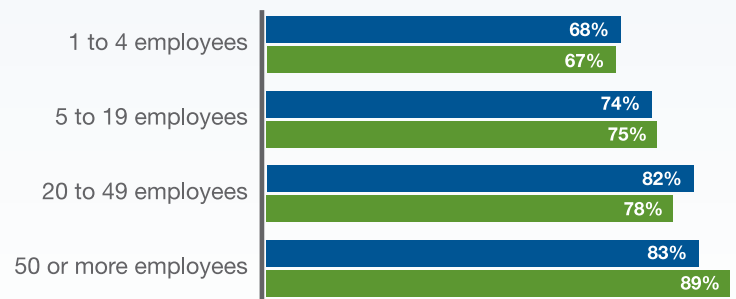
Broadband adoption rates in Kansas mirror those in other Connected Nation states by size and industry sector, with no significant differences between Kansas businesses and the average for each industry sector and size bracket.

Broadband Adoption

by sector:



by business size:



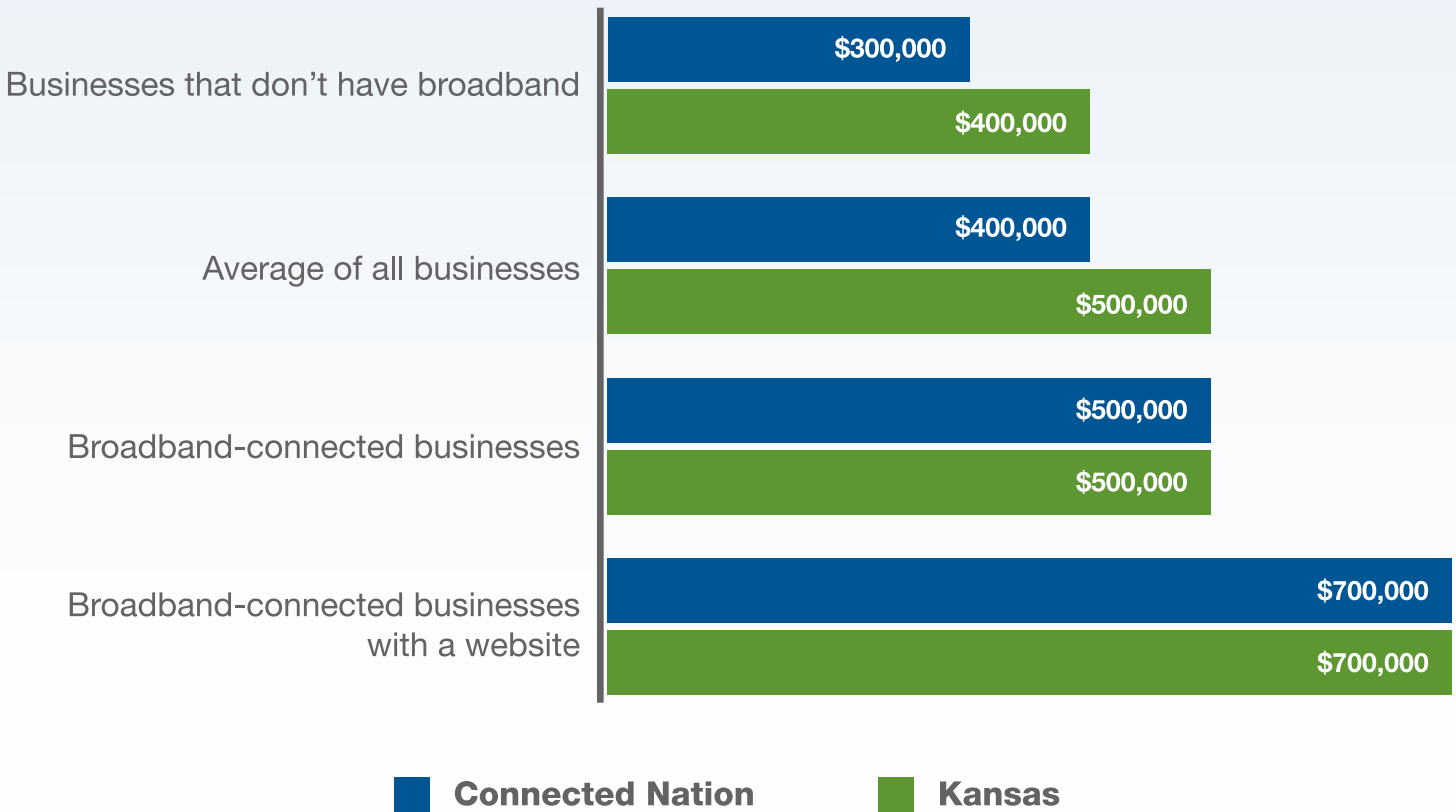
■ Connected Nation ■ Kansas

Businesses with Broadband Generate More Revenues

The impact of broadband on Kansas businesses can be seen in the difference in revenues between businesses with and without broadband, the number of businesses that increase their revenues by using the Internet, and the number of businesses that empower their employees to telework.

Across Kansas, businesses that subscribe to broadband report median annual revenues to be \$100,000 higher than businesses that do not use broadband. In addition, Kansas businesses that subscribe to broadband and maintain a website report median annual revenues that are \$300,000 higher than businesses that do not use broadband at all. Broadband-connected businesses (with or without websites) report median annual revenues that are equal to those reported by their peers across all of the states/territories served by Connected Nation.

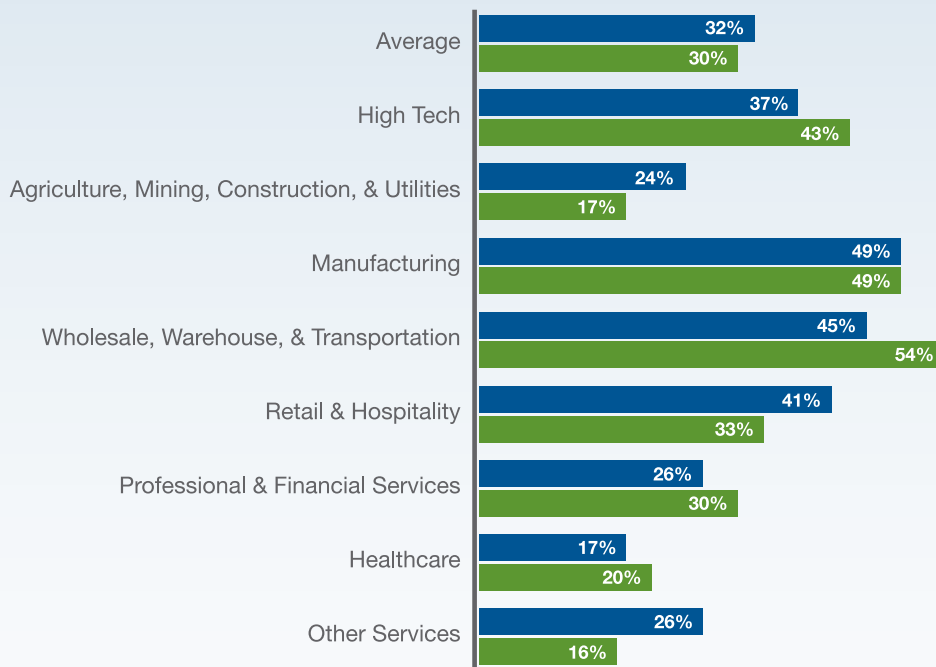
Median Annual Revenues (Self-Reported)



Statewide, 30% of Internet-connected businesses (approximately 18,000 statewide) report earning revenues through online sales and transactions, compared to the Connected Nation average of 32%. In Kansas, this includes 1,000 businesses in the Manufacturing sector and 3,000 businesses in the Wholesale, Warehouse, & Transportation sector.

Internet-Connected Businesses That Earn Revenues From Online Transactions

by sector:



by business size:



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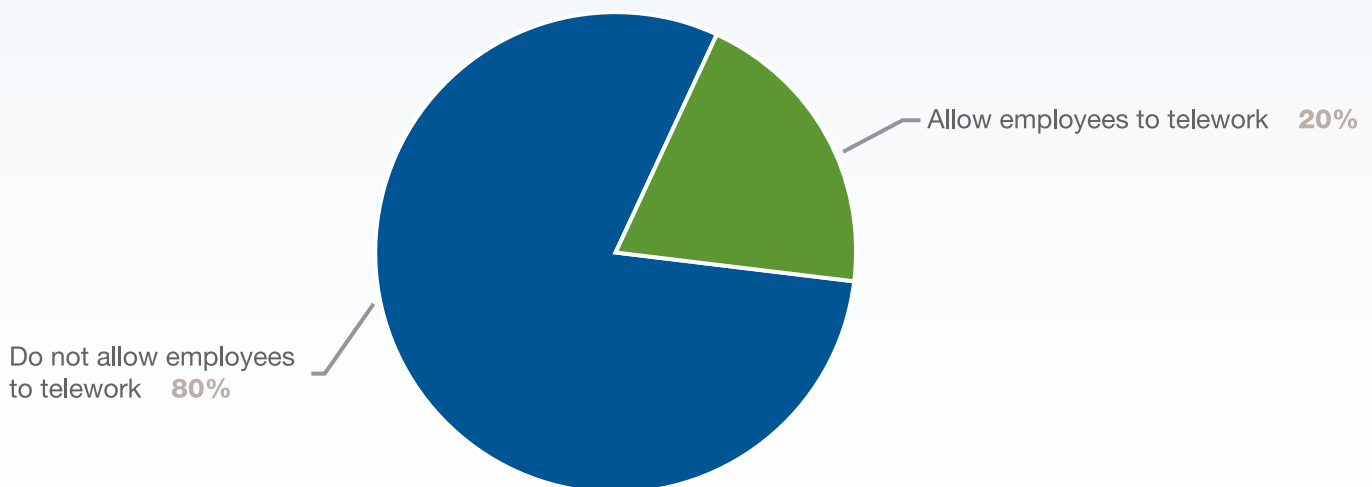


Kansas Businesses Use Broadband in Unique Ways

Kansas businesses use technology in ways that make the state stand out from the crowd and highlight ways that the state’s unique character has influenced its workforce. For example:

- While broadband-connected businesses tend to earn higher median annual revenues than their peers who do not subscribe, this difference is most pronounced among urban businesses. In urban Kansas, the median annual revenue among businesses with broadband is more than three times higher (\$800,000 higher) than urban businesses without broadband.
- Among rural Internet-connected businesses in Kansas, nearly one-fifth (19%) maintain a blog to stay in contact with current and potential customers; this is significantly higher than the rural average among states/territories served by Connected Nation.
- Kansas businesses in the Agriculture, Mining, Construction, and Utilities sector use blogs to stay in touch with current and potential customers more often than other states/territories served by Connected Nation.
- In addition, broadband helps empower the Kansas workforce by enabling workers to telework. Across Kansas, 20% of businesses (approximately 15,000) allow employees to telework. By comparison, 23% of businesses in states/territories served by Connected Nation allow their employees to telework.

Teleworking Among Kansas Businesses



Survey Methodology

Connect Kansas conducted a random digit dial telephone survey of 805 business establishments statewide between June 23 and July 16, 2010. Data were collected by Thoroughbred Research Group, located in Louisville, KY. The purpose of this survey was to set benchmarks for technology adoption and barriers to adoption; determine best practices by identifying which applications Kansas businesses use most often; and measure the average price and speed of broadband service among business establishments across Kansas. On average, these surveys took approximately nine minutes to complete.

Sample quotas were established by company size (5 brackets) and industry sector (8 sectors). Within these 40 cells, a randomly-drawn sample of businesses listed with Dun & Bradstreet were contacted for the survey. Altogether, this sample included 186 businesses with 50+ employees, 219 businesses with 20-49 employees, 200 businesses with 5-19 employees, and 200 businesses with 1-4 employees. In cases where the respondent's information regarding the number of employees at the establishment differed from the information provided by Dun & Bradstreet, the respondent's answer was used in determining business size quotas. Connect Kansas intentionally over-sampled large businesses to ensure a sample that was large enough to analyze and compare to smaller businesses.

In addition to the size and sector quotas, the data was subsequently weighted to ensure that the sample was representative of all employer business establishments statewide, with targets determined according to the 2007 United States Census Bureau's County Business Pattern report, the most recent data that was available at the time the survey was conducted. Weighting of the survey data and research consultation were provided by Lucidity Research LLC, located in Westminster, MD.

This sample provides a margin of error of $\pm 4.9\%$ at the 95% confidence level for the total sample of 805 businesses. This sample error accounts for sample weighting, using the effective sample size.

The Kansas Business Technology Assessment was conducted as part of the State Broadband Data and Development (SBDD) grant program, funded by the National Telecommunications and Information Administration (NTIA). The SBDD grant program was created by the Broadband Data Improvement Act (BDIA), unanimously passed by Congress in 2008 and funded by the American Recovery and Reinvestment Act (ARRA) in 2009.

If you have any questions or would like further information about Connect Kansas, please visit our website at www.connectkansas.org or e-mail us at info@connectkansas.org.

