

# Broadband & Business

Leveraging Technology  
in Ohio to Stimulate  
Economic Growth



MAY 2011

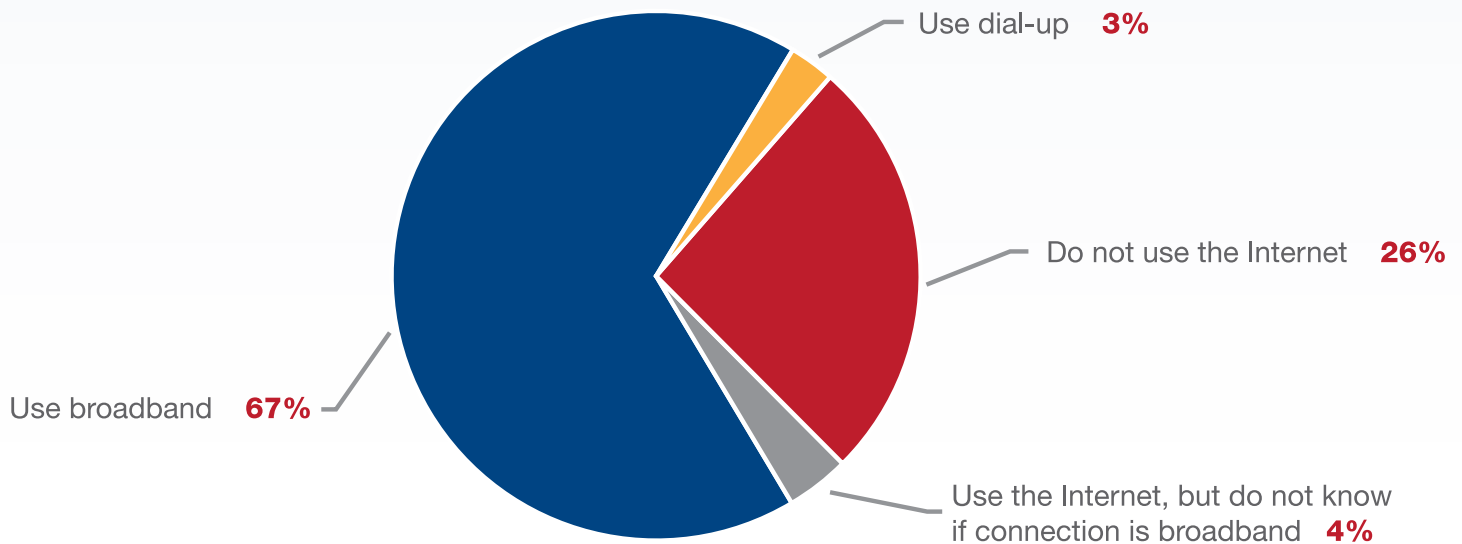
## Broadband is the Engine of Economic Growth in Ohio

Broadband is a powerful, enabling technology that is fast becoming the engine of economic growth in America. 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 Ohio depends not only upon whether robust broadband infrastructure is present but also upon whether a businesses and individuals fully utilize that technology to grow and develop local economies.

- **88,000 (33%)** Ohio businesses (est.) do not use broadband
- Broadband-connected businesses in Ohio bring in **\$200,000** more in median annual revenues

To better understand these relationships, Connect Ohio is studying how businesses use broadband, and broadband's impact on Ohio's business landscape. In 2008, our research found that a seven percentage point increase in broadband utilization in Ohio could result in an annual economic boost of \$5.2 billion, including 96,000 jobs saved or created. In this report, we present the results of a telephone survey of 802 business establishments in Ohio that measured business broadband adoption, examined the use of broadband technology by those businesses, and assessed the price and quality of broadband service that Ohio businesses purchase. The results are somewhat surprising.

## Technology Adoption



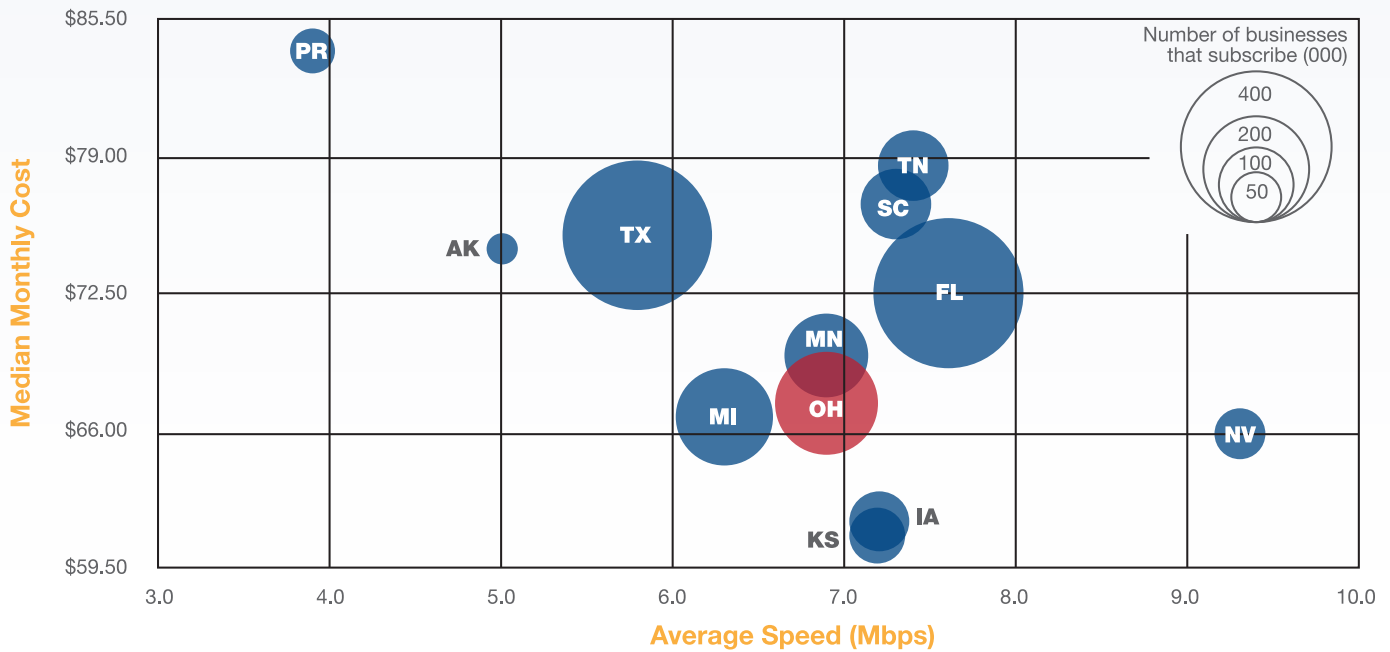
KEY FINDINGS OF THE OHIO BUSINESS TECHNOLOGY ASSESSMENT

- Approximately 88,000 businesses in Ohio still do not use broadband technology
- Adoption in crucial sectors, such as Healthcare, trails even further – almost one-half of all Ohio firms in the Healthcare industry do not subscribe to broadband
- Median annual revenues of broadband-connected Ohio businesses are \$200,000 higher than those without broadband
- Ohio businesses pay a median monthly price of \$67.36 for their broadband service. While this is lower than the average among all states/territories served by Connected Nation, the average download speed (6.9 Mbps) is slightly higher
- Approximately 59,000 Ohio businesses allow their employees to telework, reducing the cost of office space and the number of miles that employees are forced to commute for work

### Ohio Businesses Pay Lower Prices for Broadband

Ohio businesses pay less than average for their broadband connections, but their download speeds are higher than average.

Ohio businesses pay a median monthly price of \$67.36 for their broadband service, which is slightly lower than the median price of \$71.92 paid by all businesses in states/territories served by Connected Nation.



Ohio businesses tend to subscribe to higher-than-average broadband speeds, though. Ohio businesses that know their advertised download speeds report an average speed of 6.9 Mbps, compared to the average advertised download speed of 6.7 Mbps among all states and territories served by Connected Nation.



## 33% of Ohio Businesses Do Not Use Broadband

While two out of three Ohio businesses use broadband, some sectors still lag behind in broadband adoption.

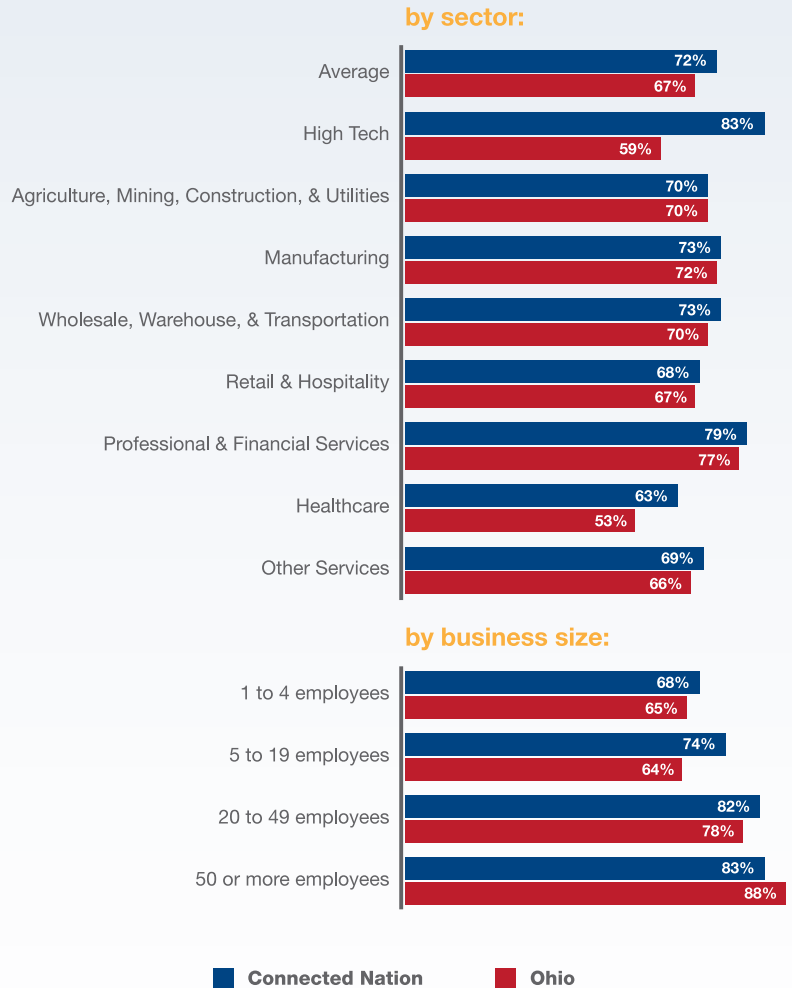
Increasing broadband adoption among Ohio businesses will require a concerted effort between the public and private sector. Over the next three years, Connect Ohio will continue educating, engaging, and informing businesses, community anchor institutions such as schools, libraries, and healthcare centers, 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.

Statewide, 67% of all Ohio businesses subscribe to broadband, compared to 72% of businesses in states and territories served by Connected Nation. This means that approximately 88,000 Ohio business establishments do not use broadband or benefit from the opportunities it offers.

The Manufacturing and Professional and Financial Services sectors lead in broadband adoption, with approximately 9,000 businesses in the Manufacturing sector and 36,000 businesses in the Professional and Financial Services sector using broadband. On the other extreme, only 53% of businesses in the Healthcare sector use broadband, which means about 13,000 Healthcare-related businesses do not subscribe.

Broadband adoption rates in Ohio are similar to adoption rates in other Connected Nation states and territories by size and sector, with the exception of businesses with 5 to 19 employees. Approximately 34,000 businesses in Ohio with 5 to 19 employees do not use broadband.

### Broadband Adoption



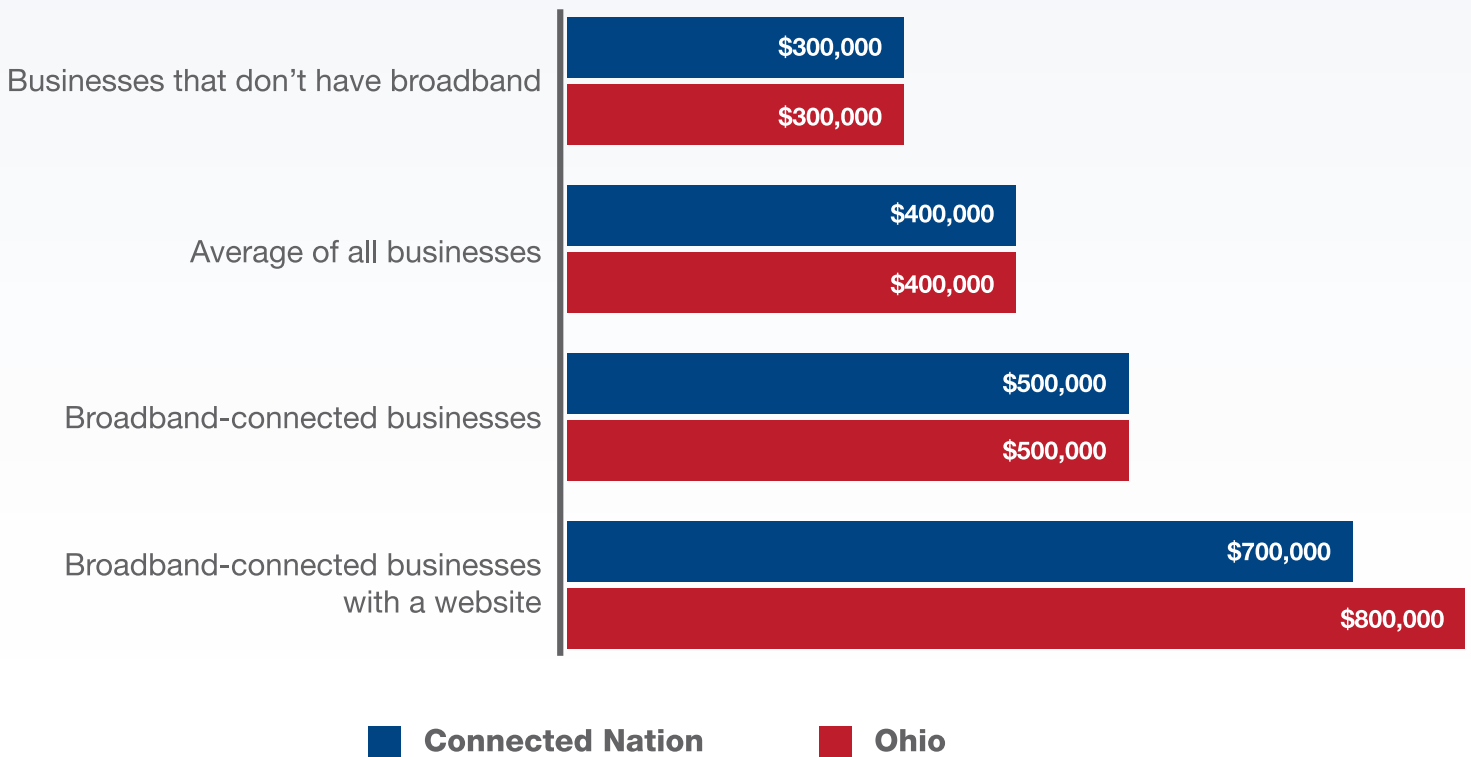


## Businesses with Broadband Generate More Revenues

The impact of broadband on Ohio 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 Ohio, businesses that subscribe to broadband report median annual revenues that are \$200,000 higher than businesses that do not use broadband. In addition, Ohio businesses that subscribe to broadband and maintain a website report median annual revenues that are \$500,000 higher than businesses that do not use broadband at all. Overall, Ohio businesses (regardless of their level of technology adoption) report median annual revenues that are comparable to their competitors in other states and territories served by Connected Nation.

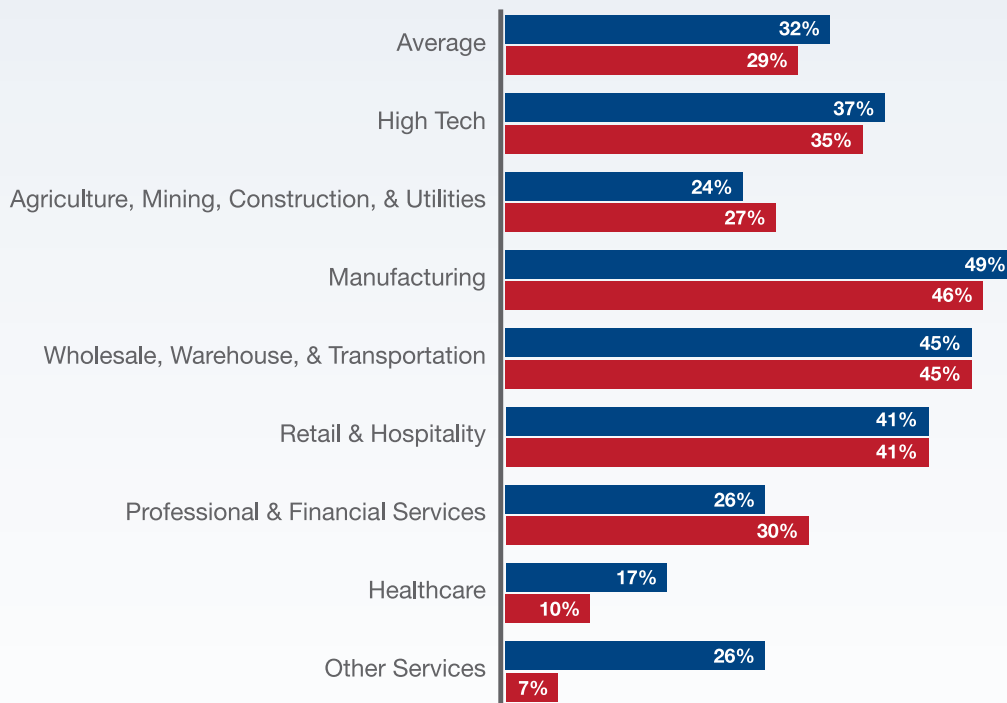
## Median Annual Revenues (Self-Reported)



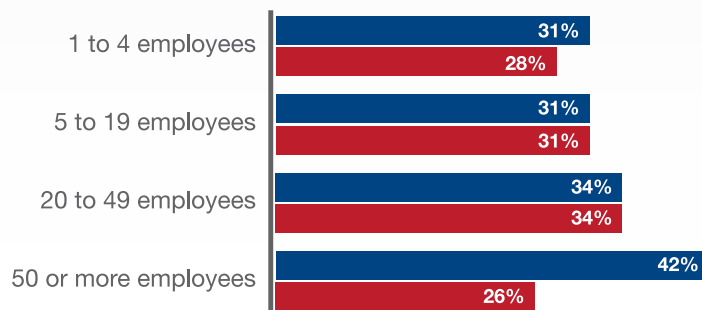
Statewide, 29% of Internet-connected businesses (approximately 59,000 statewide) report earning revenues through online sales and transactions, compared to the Connected Nation average of 32%. In Ohio, this includes 5,000 businesses in the Manufacturing sector and 8,000 businesses in the Wholesale, Warehouse, and Transportation sector.

## Internet-Connected Businesses That Earn Revenues From Online Transactions

### by sector:



### by business size:



■ Connected Nation     ■ Ohio

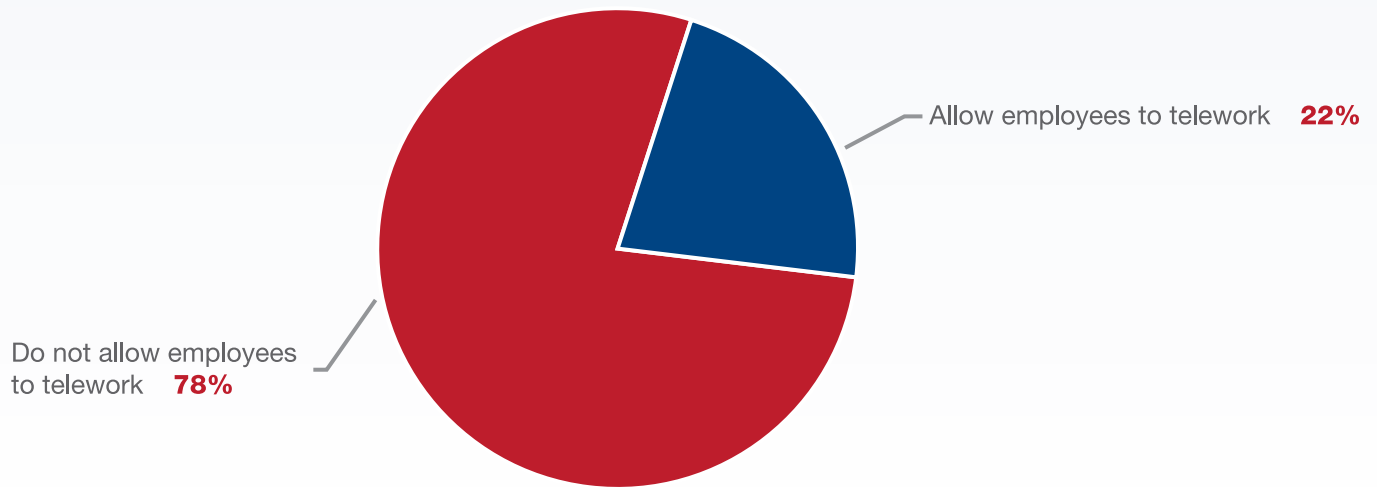


## Ohio Businesses Use Broadband in Unique Ways

Ohio 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:

- Nearly one-quarter of all rural business in Ohio (24%, or approximately 16,000 rural businesses) allow their employees to telework, which is significantly higher than the rural average of businesses located in states and territories served by Connected Nation.
- Six out of ten Internet-connected small businesses in Ohio (60%, or approximately 57,000 businesses with fewer than five employees) advertise products and services online, which is higher than other small businesses located in Connected Nation states and territories.
- Nine out of ten Internet-connected Ohio businesses in the Retail & Hospitality sector go online to purchase or order goods, which is higher than any other businesses in this sector located in states or territories served by Connected Nation.
- In addition, broadband helps empower the Ohio workforce by enabling workers to telework. Across Ohio, 22% of businesses (approximately 59,000 businesses) allow employees to telework. By comparison, 23% of businesses in states/territories served by Connected Nation allow their employees to telework.

## Teleworking Among Ohio Businesses





## Survey Methodology

Connect Ohio conducted a random digit dial telephone survey of 802 business establishments statewide between June 22 and July 21, 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 Ohio businesses use most often; and measure the average price and speed of broadband service among business establishments across Ohio. 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, 203 businesses with 20-49 employees, 209 businesses with 5-19 employees, and 204 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 Ohio 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  $\pm 4.7\%$  at the 95% confidence level for the total sample of 802 businesses. This sample error accounts for sample weighting, using the effective sample size.

The Ohio 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 Ohio, please visit our website at [www.connectoh.org](http://www.connectoh.org) or e-mail us at [info@connectoh.org](mailto:info@connectoh.org).

