



Connected Tennessee® Technology Assessment of Tennessee Consumers

Executive Summary January 2009



Summary of Key Findings

- **Computer ownership among Tennessee residents increased by 7% since the inception of Connected Tennessee in July 2007, compared to estimated national growth of 3%. In Tennessee, 76% of residents say they own home computers, which is above the national average of 75% of adults who say they use a computer.**
- **Statewide, 84% of all Tennessee residents say they use the Internet (either from home or from some other place), compared to the national average of just 74%.**
- **Home broadband adoption has grown by 26% in Tennessee since July 2007, compared to an estimated national growth of just 15%. This includes a 28% increase among urban residents, 43% increase among suburban residents, and a 23% increase among rural Tennessee households. In the past 18 months, Tennessee has reduced the gap between its broadband adoption rate and the national average by more than one-half, from a seven point gap in July 2007 to a three point gap now.**
- **The value of home broadband service can be seen through the access it provides to home subscribers to vital services. Home broadband subscribers are significantly more likely to rate their access to healthcare services and information, educational opportunities, government services, job opportunities, and entertainment choices higher than individuals who do not subscribe to broadband service.**
- **There is no significant difference between how rural broadband users rate their access to these important resources and the state averages, suggesting that broadband helps close urban-rural gaps in access to healthcare, education, and other vital services.**



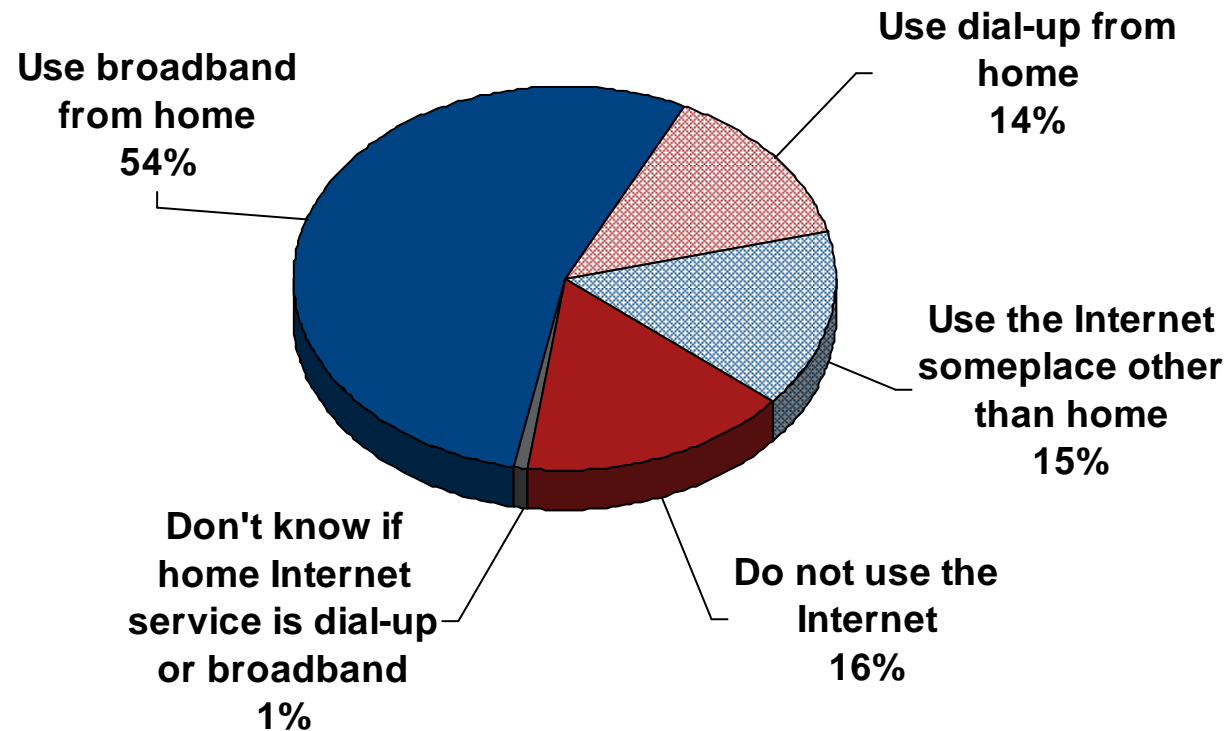
Summary of Key Findings (Continued)

- The percentage of working Tennesseans who say they telework has doubled since July 2007. In addition, nearly one-half of homemakers, one-third of adults with disabilities, and nearly one-fifth of retirees say they would likely join the workforce if empowered to do so by teleworking.
- Computer use among Tennessee businesses has grown by 5% since July 2007.
- Broadband adoption among Tennessee businesses has increased by 22% since July 2007; businesses of every size, from the smallest home business to the largest corporation, reported using broadband more frequently.
- Broadband adoption among small rural businesses has increased by 41% since July 2007. At the same time, download speeds among broadband-connected small businesses across Tennessee have more than doubled.
- Businesses that use broadband service reported having median annual revenues more than double those of businesses that do not use broadband.
- Small rural businesses realized a 33% increase in their median annual revenues since July 2007, while rural businesses without broadband experienced a 33% decrease during the same time period.
- The top barriers to broadband adoption among Tennessee businesses continue to be a lack of computer use and the belief that they do not need broadband service.



Tennessee Technology Adoption Summary

Percent of Tennessee residents who:



Q: Do you have an Internet connection at home?
(n=1,200 TN residents)

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Source: January 2009 Connected Tennessee®
Residential Technology Assessment
www.connectedtennessee.org



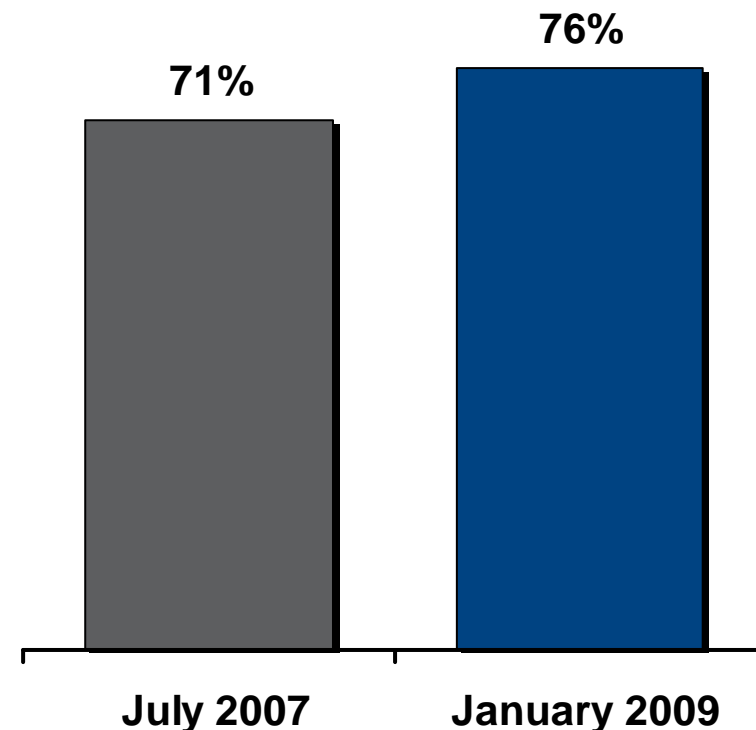
Tennessee Residents With a Computer in Their Household

More than three out of four Tennessee residents (76%) report that they have a computer at home. This translates into about 3.5 million Tennessee adults.

This number is a 7% increase from July 2007, compared to a 3% estimated national increase in computer use* over a similar time period.

While 76% of Tennessee adults report owning a home computer, only 75% of adults nationally say they use a computer.*

Percent of all Tennessee residents who own a computer:



Source: July 2007 and January 2009 Connected Tennessee® Residential Technology Assessments

*Estimated from national surveys conducted by Pew Internet Project from March 2007-Dec 2008

Q: Does your household have a computer?
(n=9,513 TN residents in 2007 and n=1,200 TN residents in 2009)
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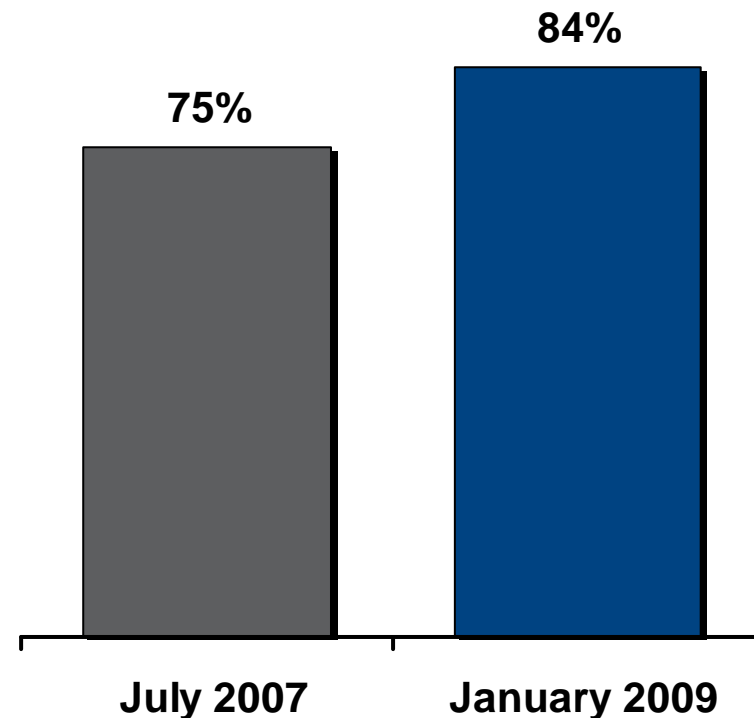
Tennessee Residents Who Use the Internet

(Either Dial-Up or Broadband)

Eighty-four percent of Tennessee residents say they access the Internet through broadband or dial-up from either their home or from some other place (such as school, work or Wi-Fi “hot spots”). This is a 12% increase from July 2007 when 75% of Tennessee residents said they accessed the Internet.

Nationally, only 74% of Americans say they use the Internet at home or someplace else.*

Percent of all Tennessee residents who access the Internet from home or some other place:



Q: At what locations do you use the Internet?
(n=9,513 TN residents in 2007 and n=1,200 TN residents in 2009)
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*Source: Pew Internet Project, Dec 2008
Source: July 2007 and January 2009 Connected Tennessee® Residential Technology Assessments

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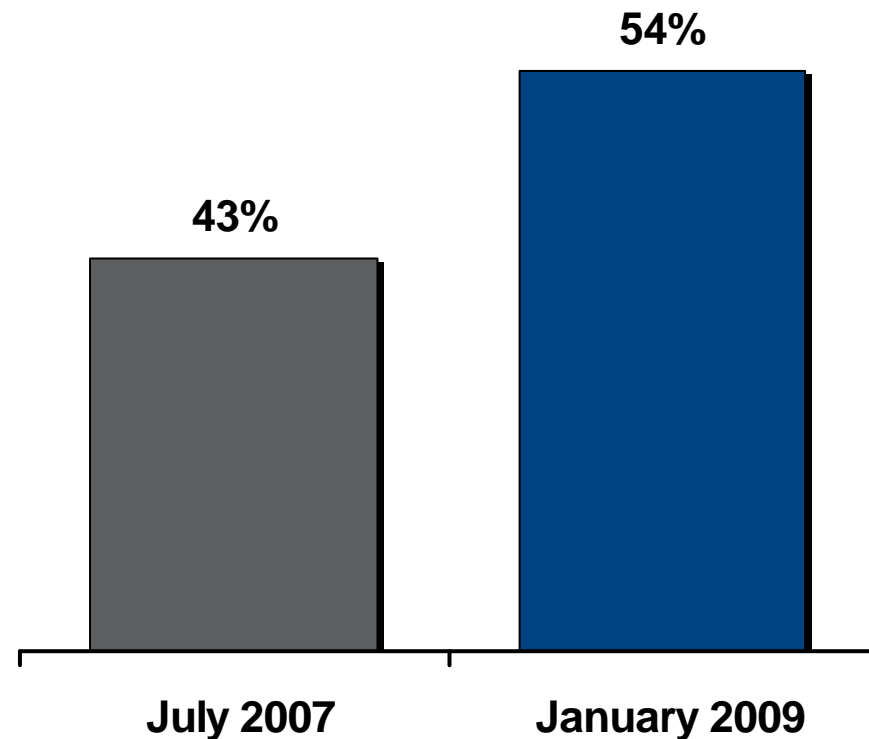


Tennessee Residents That Have Broadband Service at Home

More than one-half of all Tennessee residents (approximately 2.5 million Tennessee adults) have broadband service at home. This is an increase of nearly 26% from July 2007, compared to a national increase in broadband adoption of 15%.*

In the past 18 months, Tennessee has cut the gap between its broadband adoption rate and the national average by more than one-half, reducing it from a seven-point gap in July 2007 to a three-point gap now.*

Percent of all Tennessee residents with broadband service at home:



Q: Which of the following describe the type of Internet service you have at home?
(n=9,513 TN residents in 2007 and n=1,200 TN residents in 2009)
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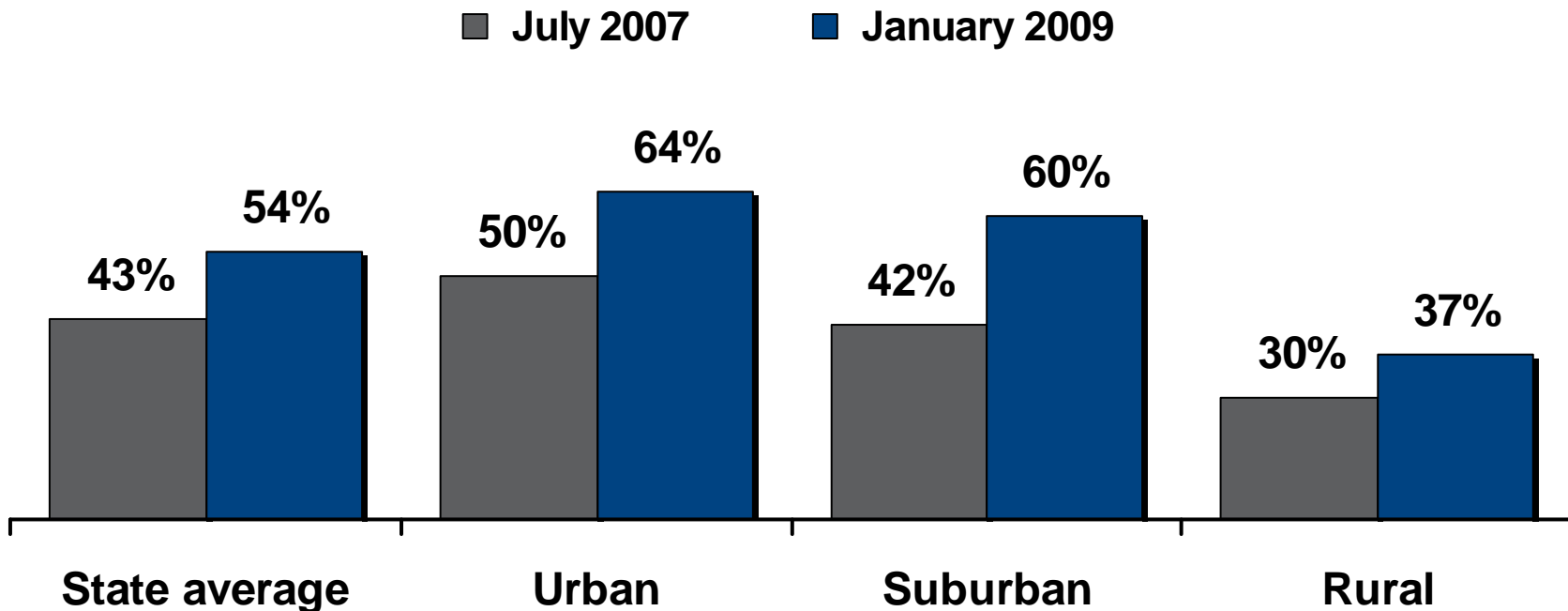
Source: July 2007 and January 2009 Connected Tennessee® Residential Technology Assessments
*Estimated from national surveys conducted by Pew Internet Project from March 2007-Dec 2008

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Trends in Broadband Adoption by Urban-Rural Classification

Percent of Tennessee residents with broadband service at home:



Q: Which of the following describe the type of Internet service you have at home?
(n=9,513 TN residents in 2007 and n=1,200 TN residents in 2009)
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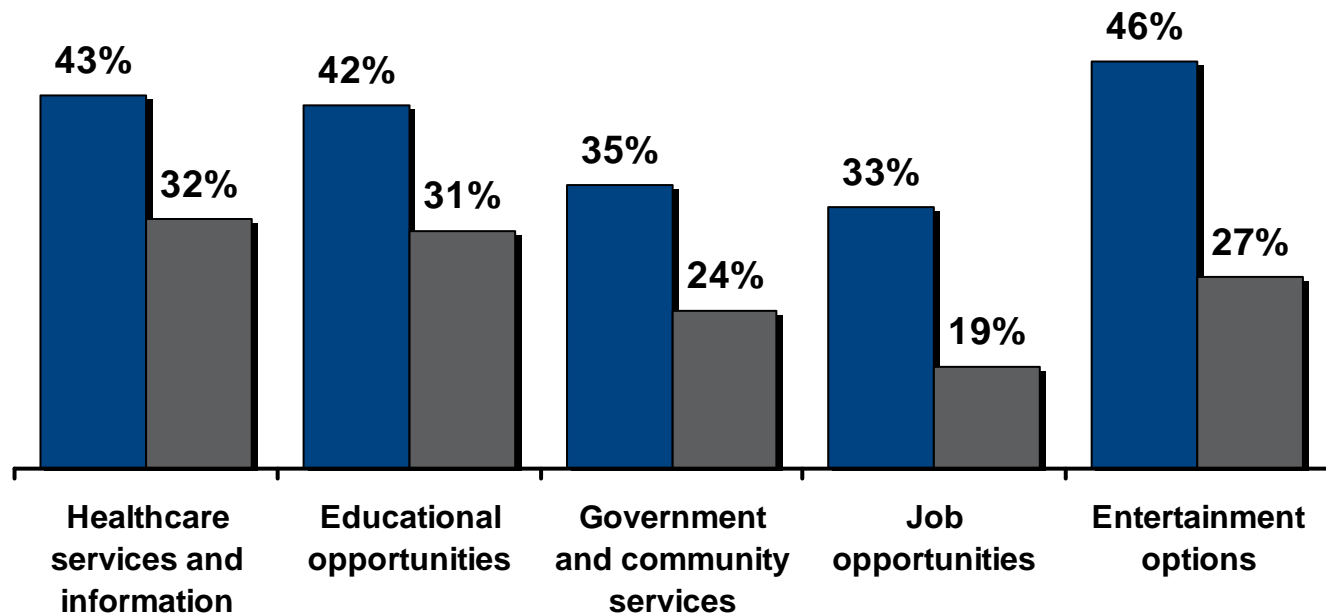


Broadband's Impact on Tennessee Residents' Quality of Life

Tennessee residents who report they have "excellent" access to the following resources:

- Home broadband subscribers
- Residents without home broadband service

Home broadband subscribers are significantly more likely to report that they have excellent access to a variety of resources.



Q: How would you rate your current access to... ?
 (n=1,200 TN residents)
 Based on a five point scale, where 5=excellent and 1=poor
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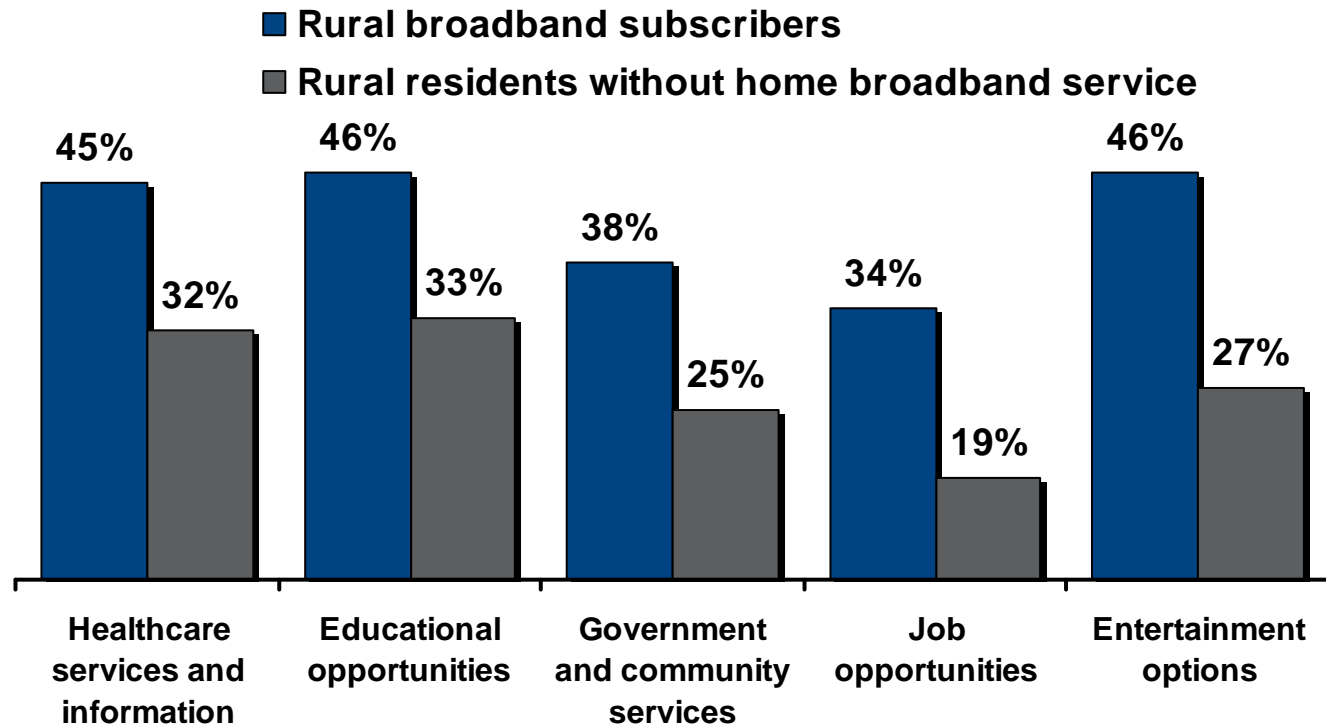
Source: January 2009 Connected Tennessee® Residential Technology Assessment
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Broadband's Impact on Rural Tennessee Residents' Quality of Life

Rural Tennessee residents who report they have "excellent" access to the following resources:

Rural broadband-subscribers are significantly more likely to have excellent access to important resources than rural residents who do not subscribe to broadband.



Q: How would you rate your current access to... ?
 (n=392 rural TN residents)
 Based on a five point scale, where 5=excellent and 1=poor
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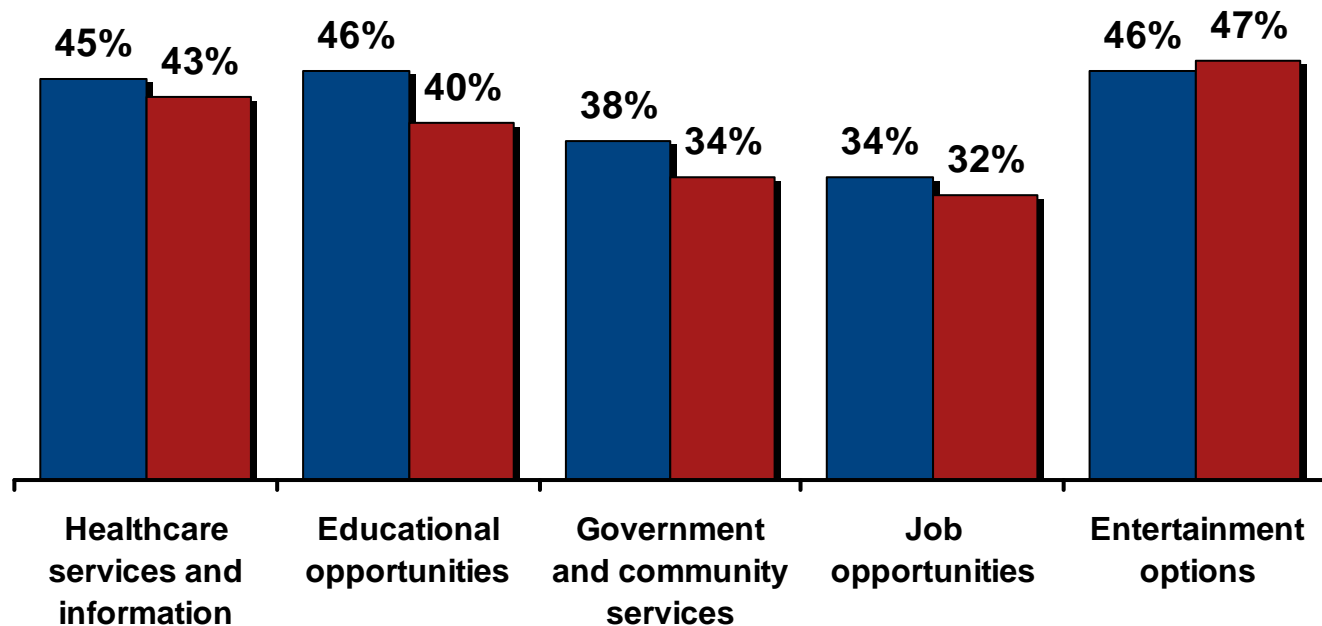


Broadband's Impact on Rural Tennessee Residents' Quality of Life

Broadband subscribers who report they have "excellent" access to the following resources:

Rural broadband subscribers rate their access to these resources as being similar or greater than other broadband subscribers, suggesting that broadband helps close urban-rural gaps in access to healthcare, education and other vital resources.

■ Rural broadband subscribers
■ Urban/Suburban broadband users



Q: How would you rate your current access to... ?
 (n=642 TN broadband subscribers)
 Based on a five point scale, where 5=excellent and 1=poor
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Source: January 2009 Connected Tennessee® Residential Technology Assessment
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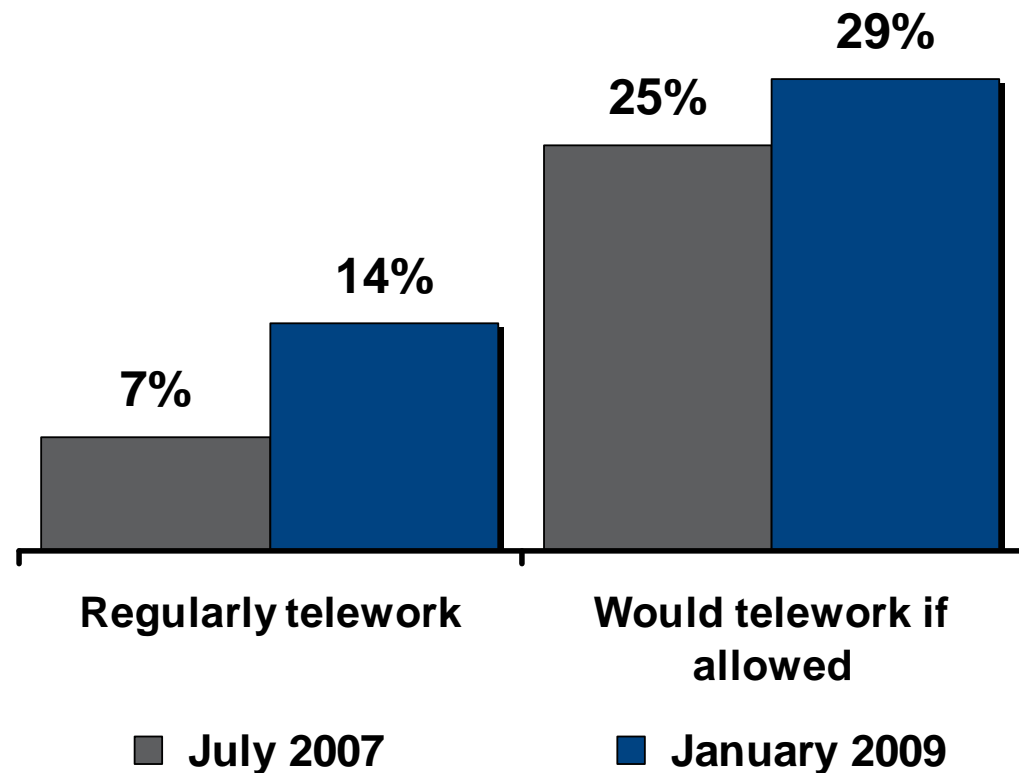
Teleworking Trends Among Tennessee Residents

The percentage of Tennessee employees who telework has doubled since July 2007.

This suggests that as more people have learned about the economic and environmental benefits of teleworking, the number of people who want to telework has grown.

Q: Do you regularly work from home through a broadband connection, commonly known as teleworking (2007)?
 Q: Which of the following describe the way you work from home (2009)? And
 Q: Would you be interested in teleworking if your employer allowed it (2007 and 2009)?
 (n=5,101 TN residents in 2007 and n=751 TN residents employed full-time or part-time in 2009).
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Among Tennessee residents employed full-time or part-time:



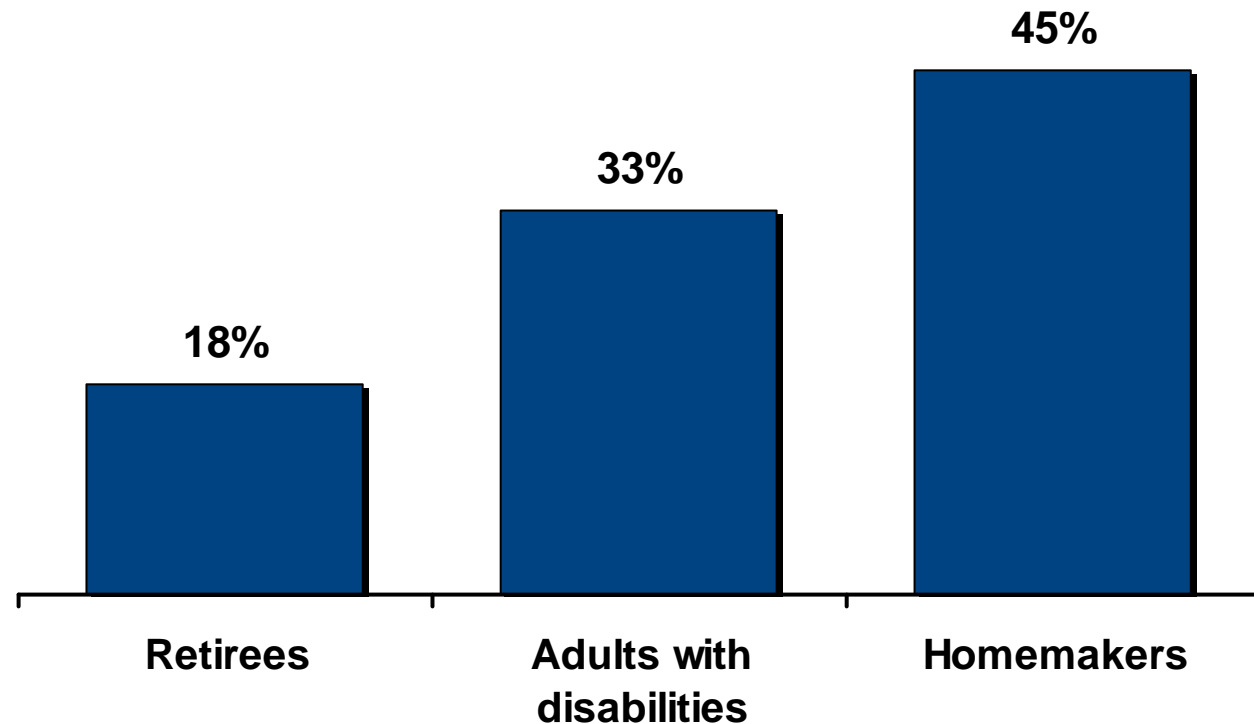
Source: July 2007 and January 2009 Connected Tennessee® Residential Technology Assessments
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The Potential Impact of Telework on the Labor Force

Tennessee residents who do not currently work and are “very likely” or “somewhat likely” to work outside the home if allowed to telework:

Teleworking could also provide an additional boost to the state’s workforce, as nearly one-fifth of retirees, one-third of adults with disabilities and nearly one-half of homemakers say they would likely join the workforce if empowered to telework.



Q: If you were able to work from home through a broadband connection - commonly known as teleworking - how likely is it that you would work outside the home?

(n=449 TN residents not employed full-time or part-time)

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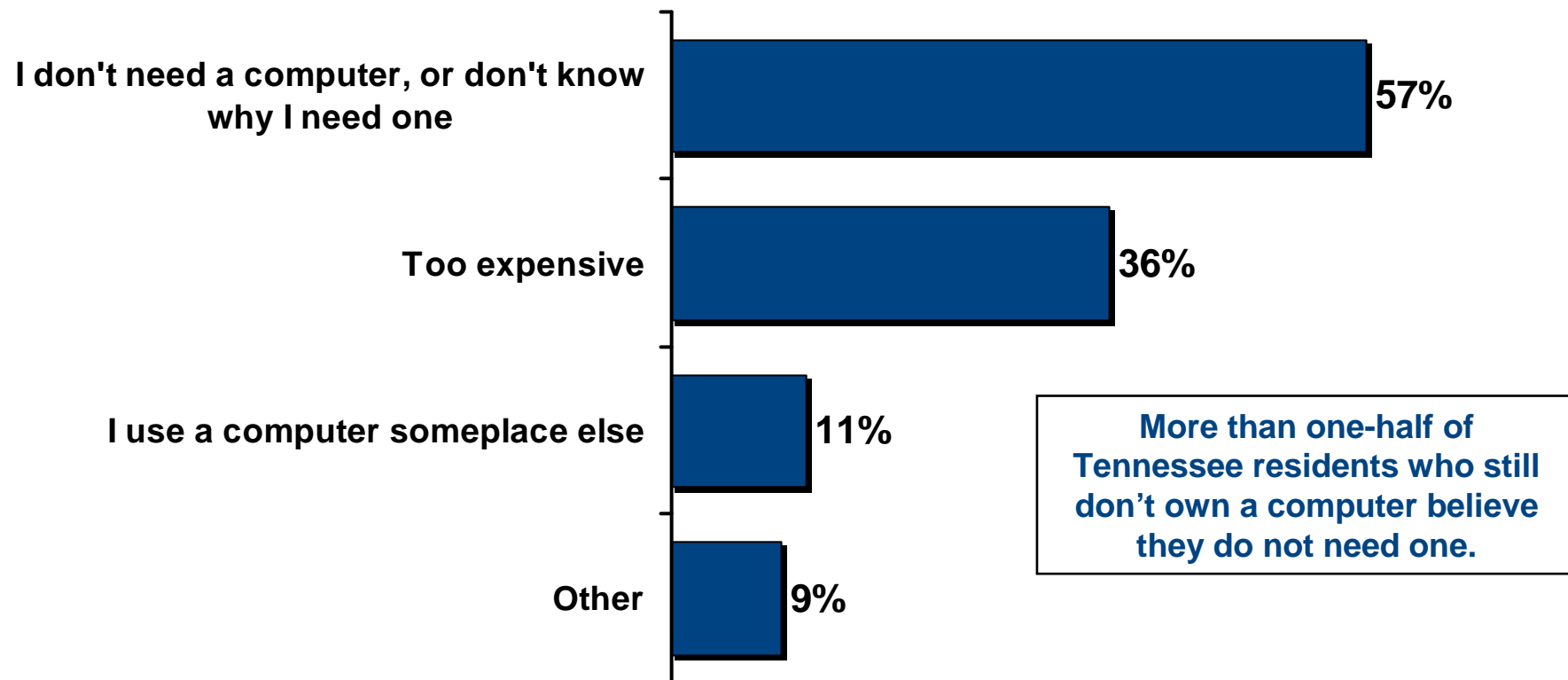
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Barriers to Computer Ownership

Percent of Tennessee residents with no computer at home:*



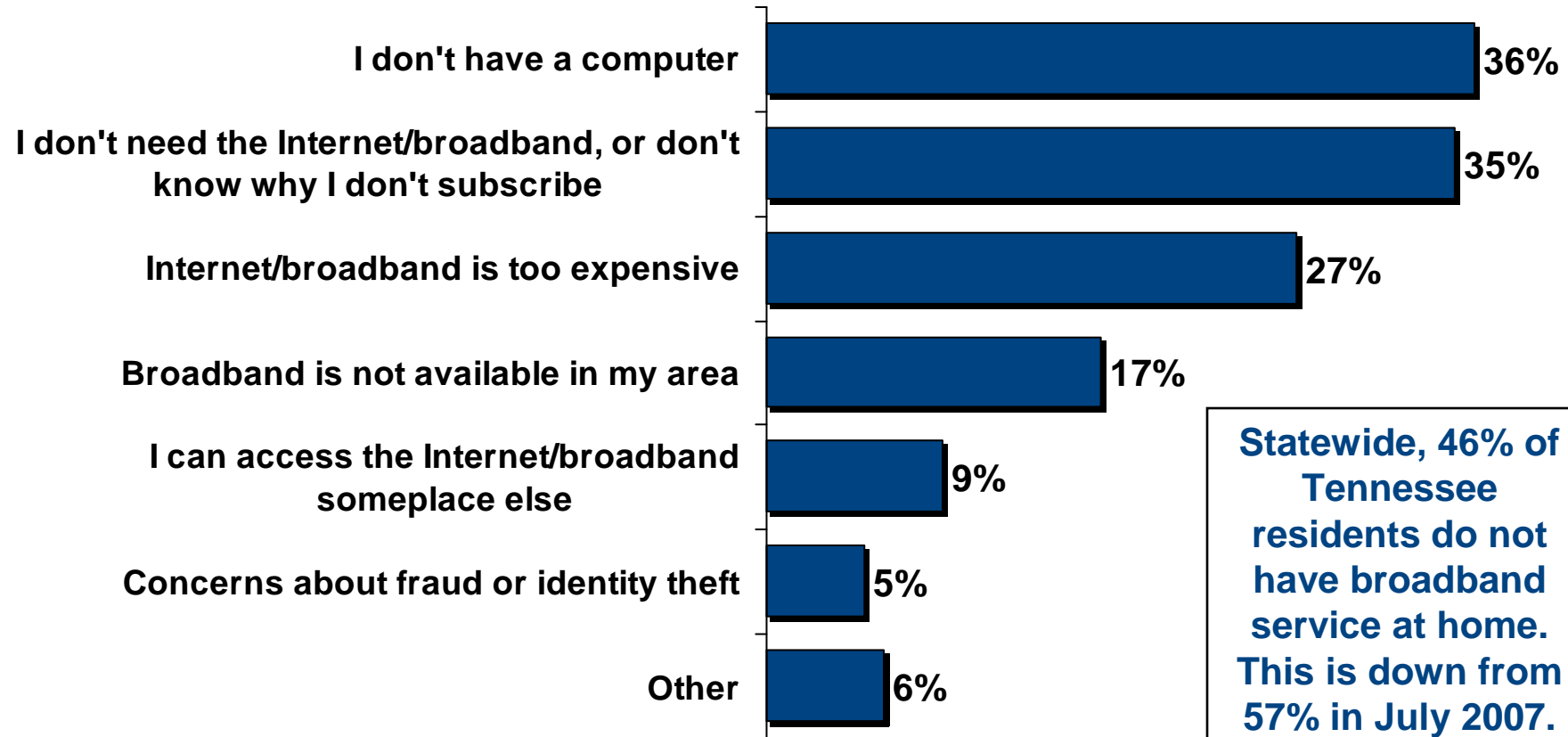
Q: Why don't you have a computer at home?
(n=296 TN residents with no home computer)
*Percentages do not add up to 100% because individuals could give multiple responses.
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Barriers to Broadband Adoption

Among Tennessee residents with no home broadband service:



Statewide, 46% of Tennessee residents do not have broadband service at home. This is down from 57% in July 2007.

(n = 558 TN residents who have no broadband connection at home)

**Percentages do not add up to 100% because individuals could give multiple responses.*

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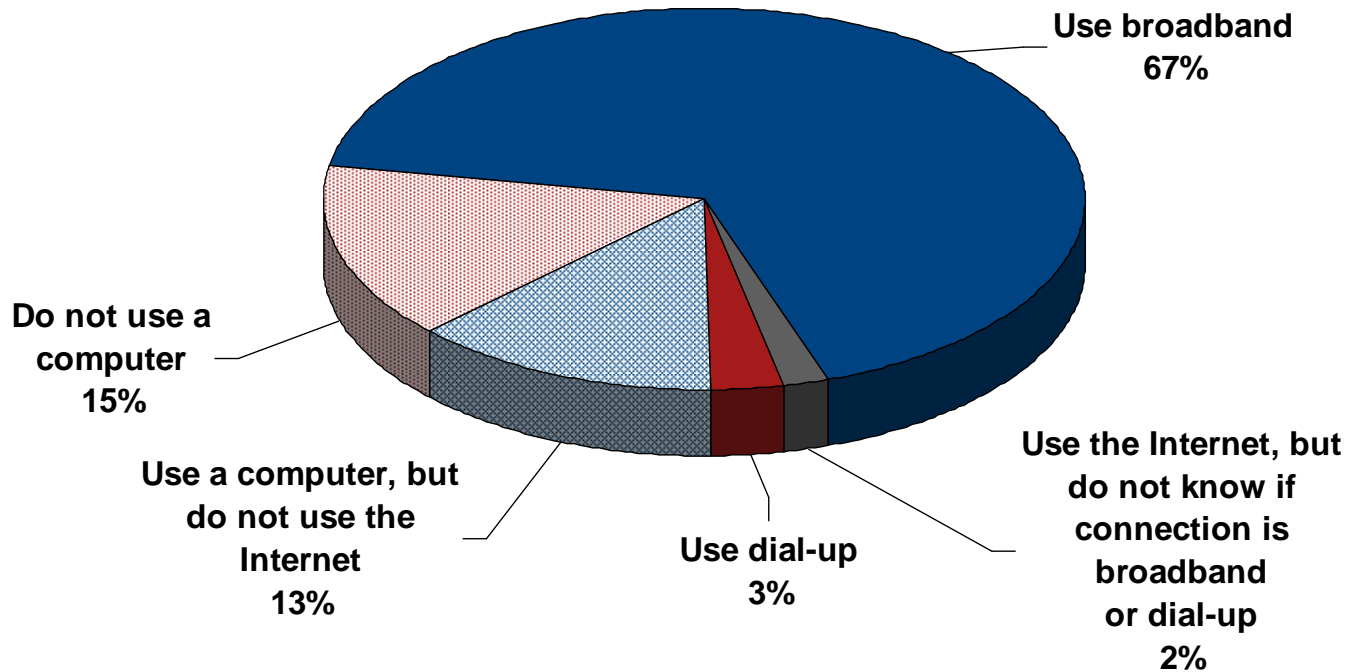
Source: January 2009 Connected Tennessee® Residential Technology Assessment

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Technology Adoption Among Tennessee Businesses

Percent of all Tennessee businesses that:



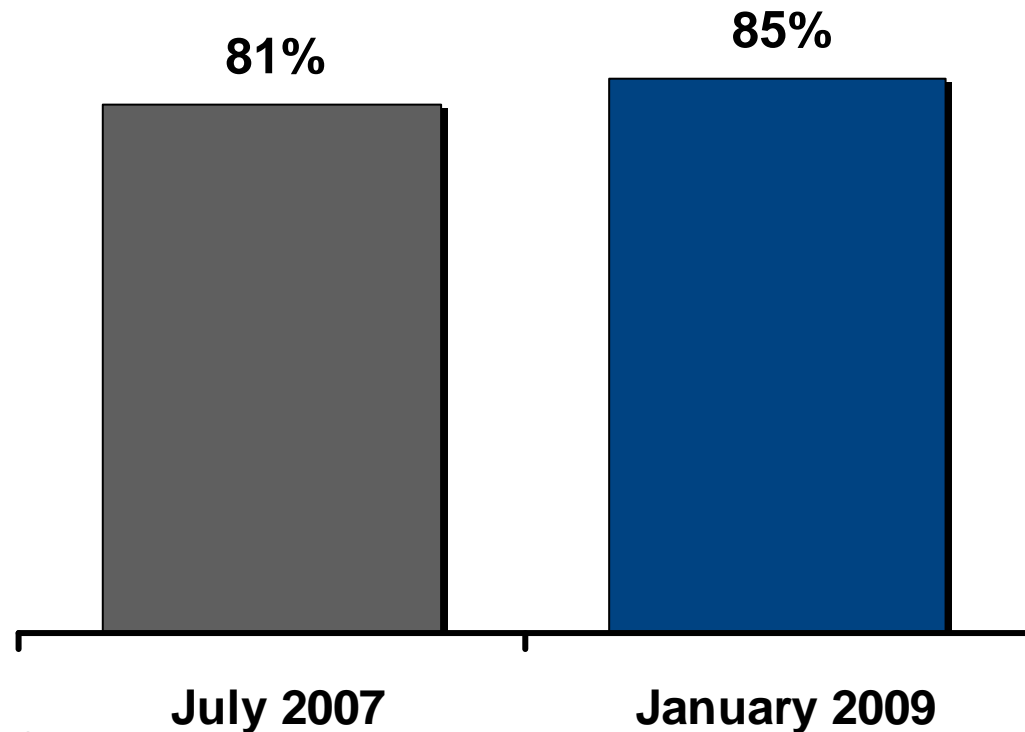
Source: January 2009 Connected Tennessee® Survey of Businesses



Use of Computer Technology

Percent of all Tennessee businesses that use a computer:

In January 2009, 85% of Tennessee businesses reported that they use computers for their work; this is a 5% increase from July 2007.



Q: Does your company use any type of computer technology to handle some or all of its business functions (for example: sales, cash receipts, accounting, inventory control or management reporting)? (n=812 TN businesses in 2007 and n=810 TN businesses in 2009)

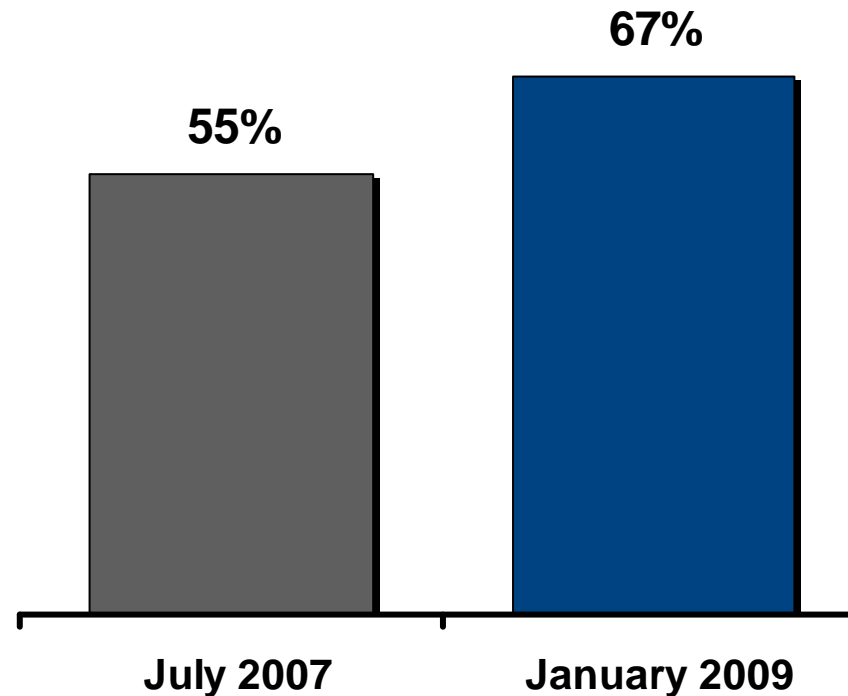
Source: July 2007 and January 2009 Connected Tennessee® Surveys of Businesses



Trends in Broadband Adoption

Percent of all Tennessee businesses with broadband service:

Two-thirds (67%) of Tennessee businesses subscribe to broadband Internet service; this is a 22% increase since July 2007.



Q: Which of the following describes the type of Internet access your company has?

(n=812 TN businesses in 2007 and n=810 TN businesses in 2009)

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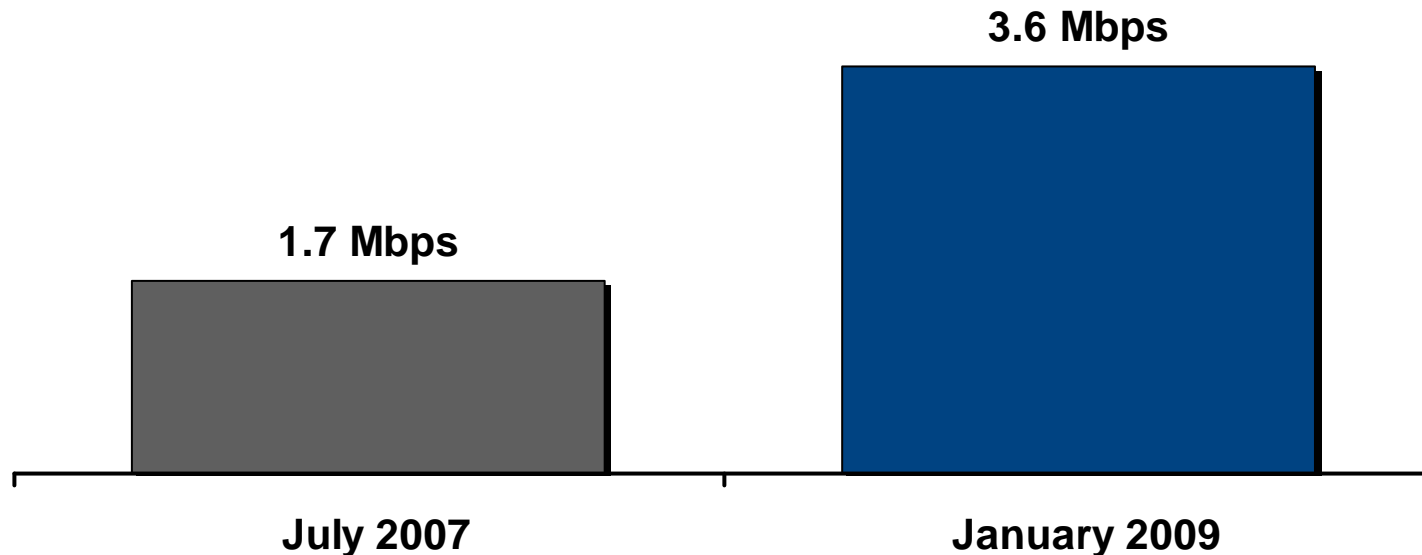
Source: July 2007 and January 2009 Connected Tennessee® Surveys of Businesses



Trends in Broadband Speeds Among Small Business

The average download speed among broadband-connected small businesses has more than doubled since July 2007.

Average download speed (Mbps) among Tennessee small businesses:



*Q: To the best of your knowledge, what is the approximate bandwidth provided by your Internet service provider?
(n=232 TN businesses in 2007 and 203 TN businesses in 2009, all with fewer than five employees)*

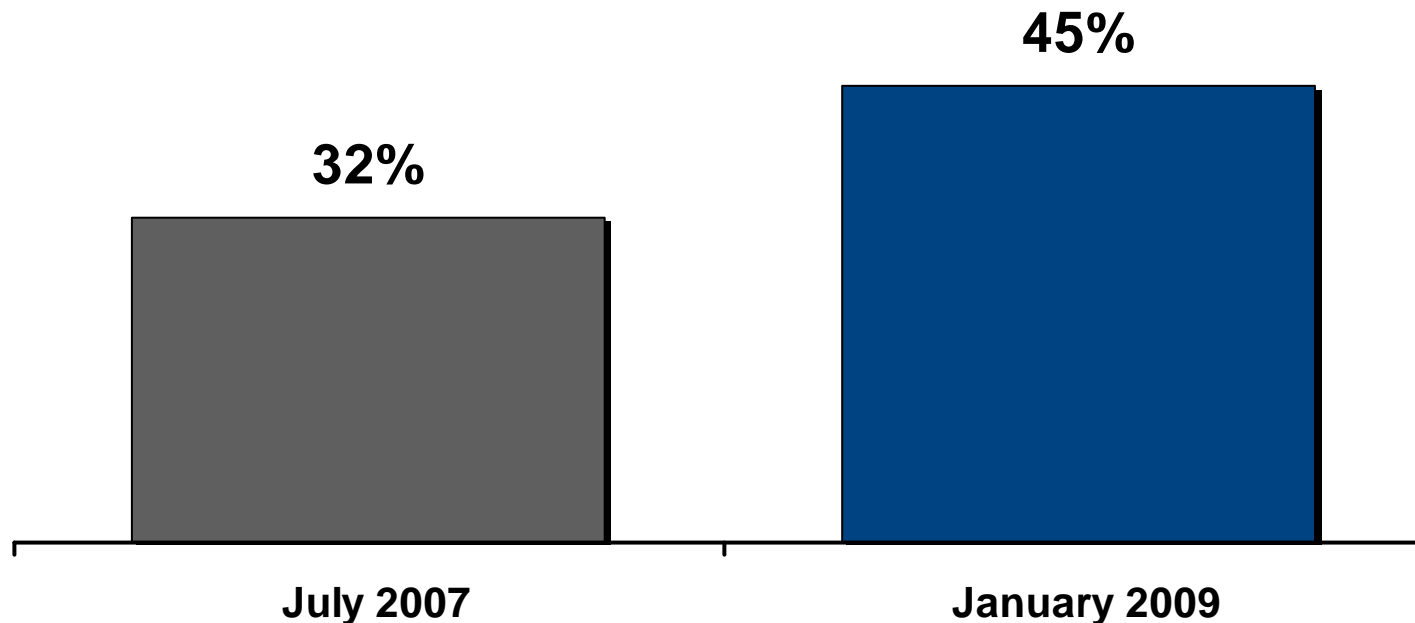
Source: July 2007 and January 2009 Connected Tennessee® Surveys of Businesses



Broadband Adoption Among Rural Small Businesses

Broadband adoption among rural Tennessee businesses with fewer than five employees has increased by 41% since July 2007.

Percent of small rural Tennessee businesses with broadband service:



*Q: Which of the following describe the type of Internet access your company has?
(n=67 rural TN businesses in 2007 and n=62 rural TN businesses in 2009, all with fewer than five employees)*

Source: July 2007 and January 2009 Connected Tennessee® Surveys of Businesses

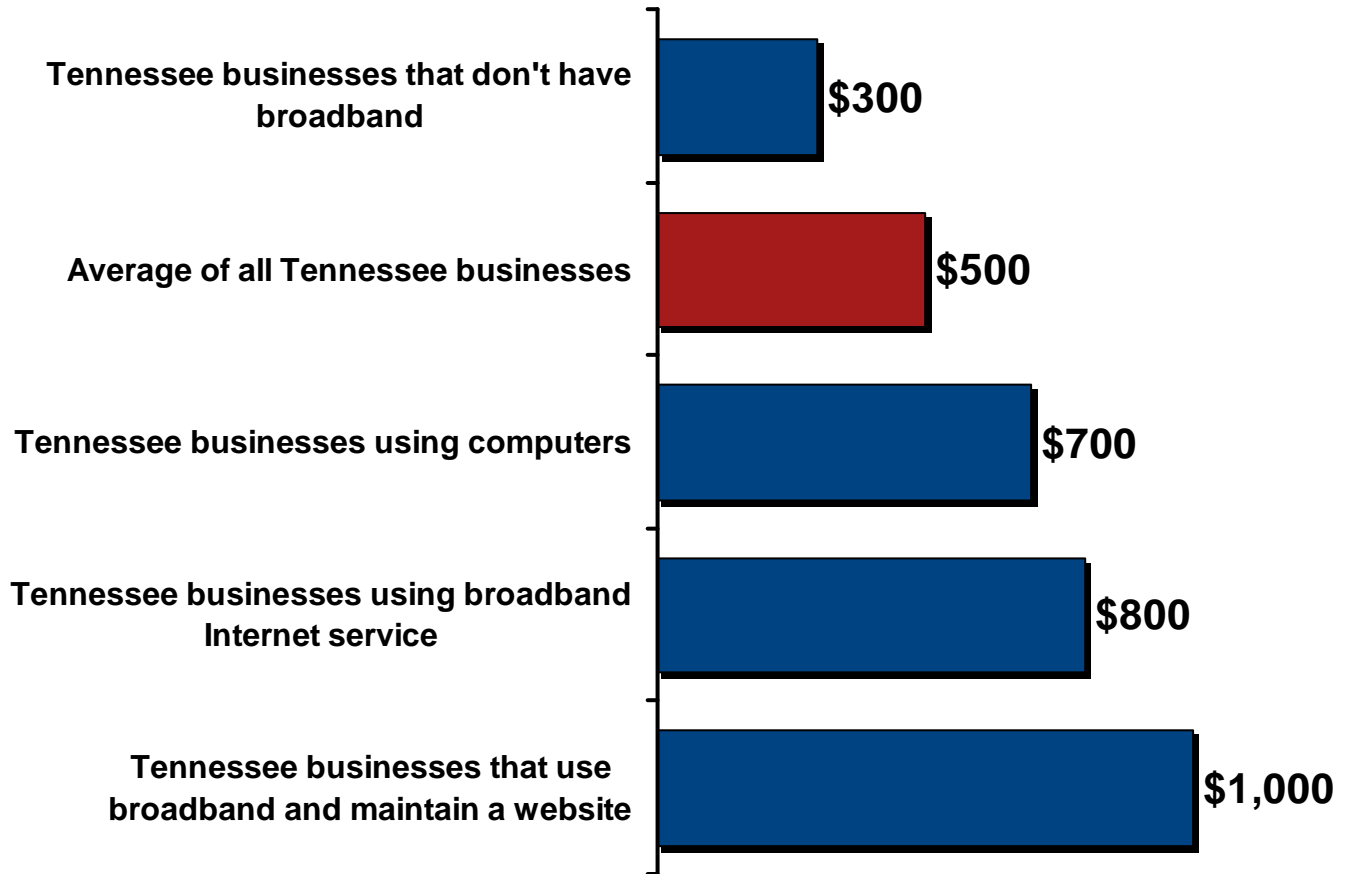


Technology Adoption and Business Revenues

Median Annual Revenues (\$000)

Tennessee businesses with broadband report median annual revenues that are 60% higher than the state average.

Broadband-connected businesses that maintain a website have median annual incomes that are twice as large as the state average.



Q: What is your firm's approximate average annual revenue?
(n=810 Tennessee businesses)

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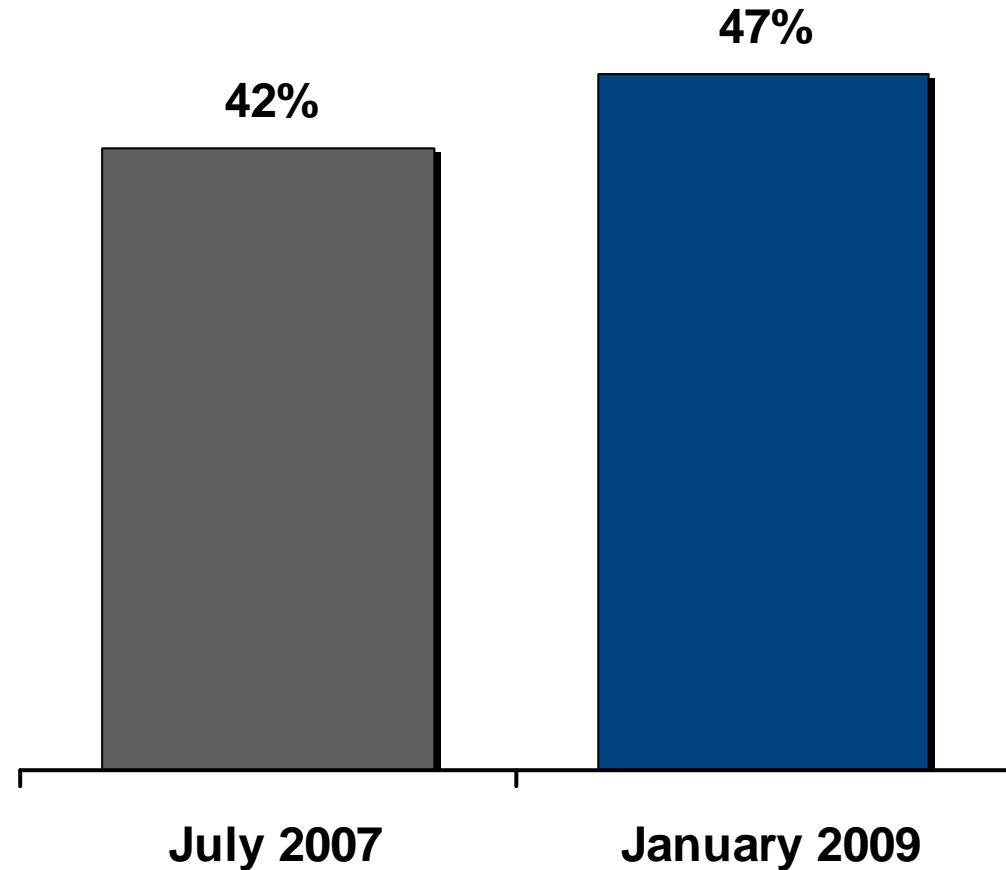
Source: January 2009 Connected Tennessee® Survey of Businesses

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Tennessee Businesses With a Website

Percent of all Tennessee Businesses:



Statewide, 47% of all Tennessee businesses have a website. This is a 12% rate of growth since July 2007.

Q: Does your company have a website?
(n=812 TN businesses in 2007 and n=810 TN businesses in 2009)

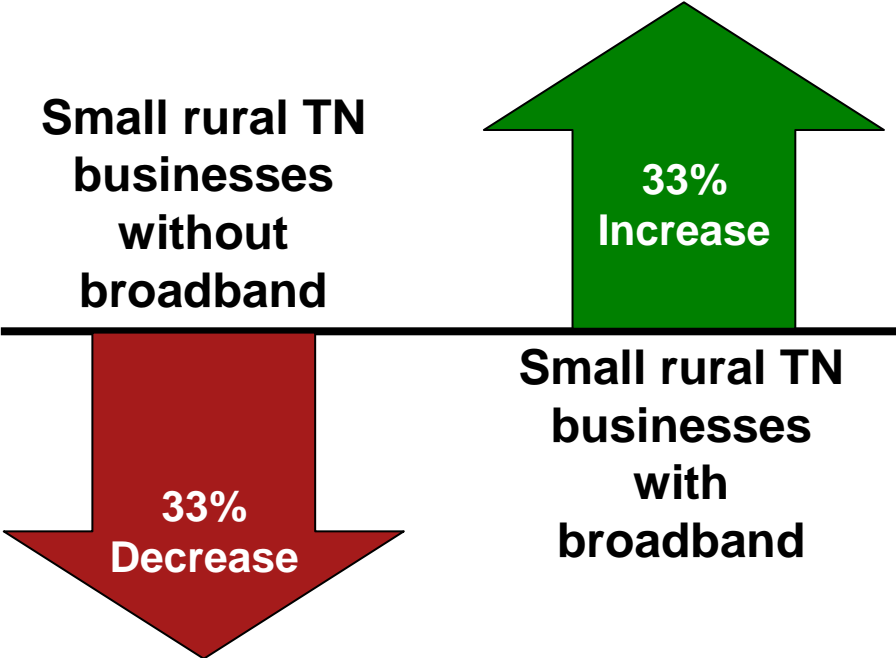
Source: July 2007 and January 2009 Connected Tennessee®
Surveys of Businesses

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Trends in Median Revenues

Median revenues among broadband-connected small rural Tennessee businesses have increased by 33% since July 2007, while revenues among small rural Tennessee businesses without broadband have decreased by 33%.



Percent change in median revenues from July 2007 to January 2009

Source: July 2007 and January 2009 Connected Tennessee® Surveys of Businesses

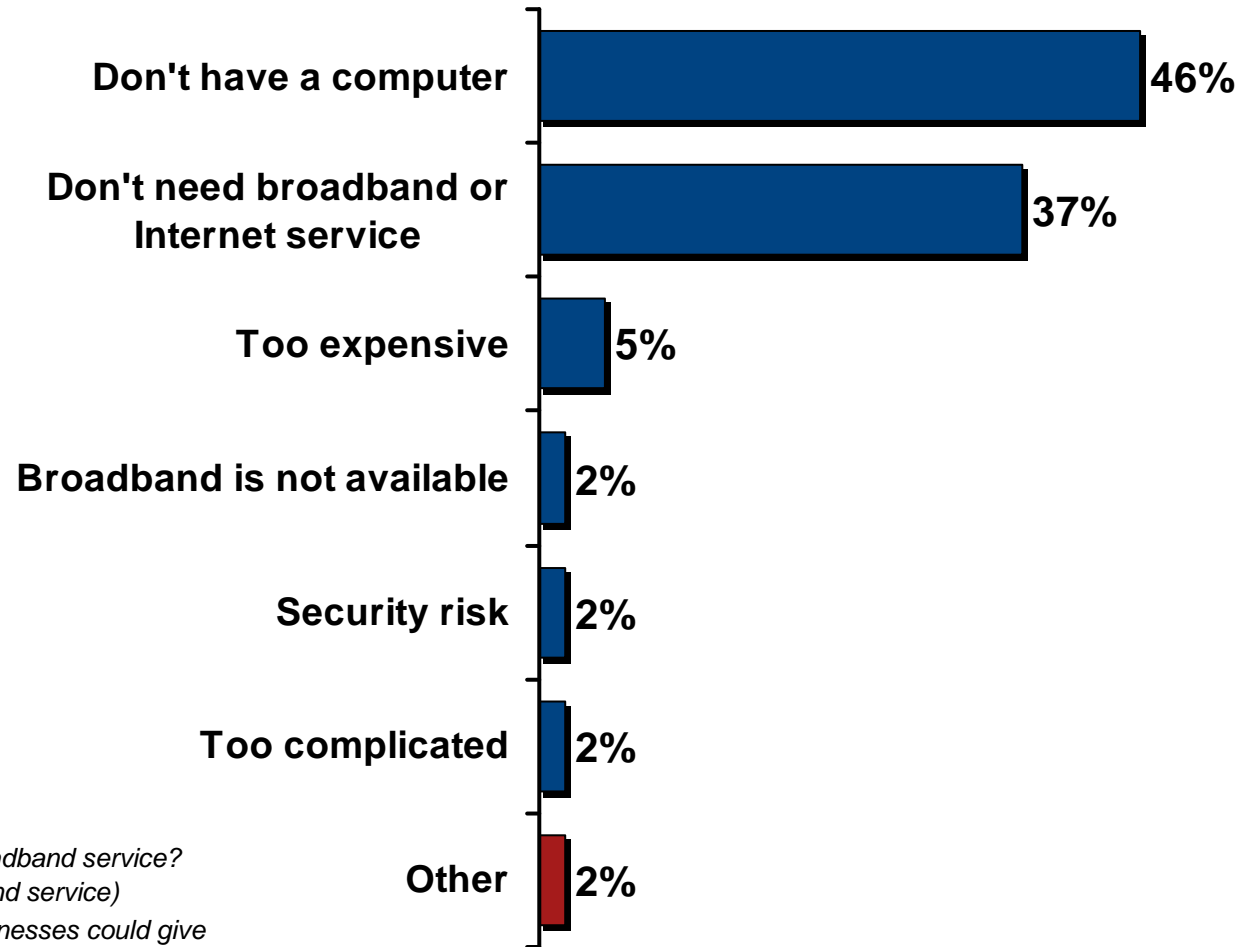


Barriers to Broadband Adoption

Among Tennessee businesses with no broadband service:*

Nearly one-half of businesses that do not subscribe to broadband do not use a computer.

The perceived lack of need for broadband or Internet service is the second-most often cited reason among businesses without broadband service.



Q: Why doesn't your organization subscribe to broadband service?
(n=207 TN businesses with no Internet or broadband service)

*Percentages do not add up to 100% because businesses could give multiple responses. Barriers were calculated differently than in previous surveys.

Source: January 2009 Connected Tennessee® Survey of Businesses
www.connectedtennessee.org



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