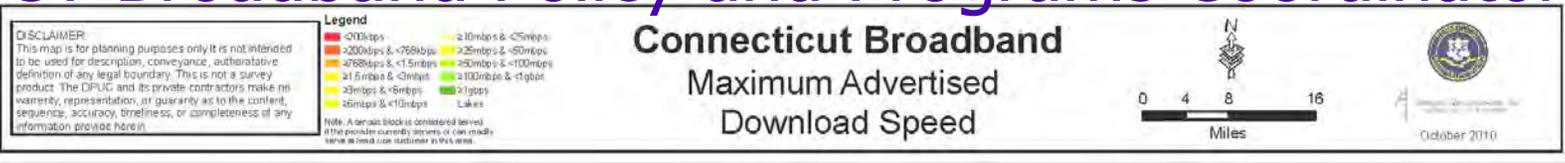


# The Impact of High Speed Internet Access (Broadband) on Small Business in Connecticut

William Vallée  
 CT Broadband Policy and Programs Coordinator



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**PRINCIPLES AND FACTS  
RELATING TO  
BROADBAND USE  
BY  
SMALL BUSINESS  
IN CONNECTICUT**

# Primary Resources

- ***The Impact of Broadband Speed and Price on Small Business***, U.S. Small Business Administration, November 2010.
- <http://www.sba.gov/advo/research/rs373tot.pdf>

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- ***Business Broadband Capability Survey Results***, FCC, DA 10-22511, November 2010
- [http://www.fcc.gov/Daily\\_Releases/Daily\\_Business/2010/db1129/DA-10-2251A1.pdf](http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db1129/DA-10-2251A1.pdf)

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- ***Exploring the Digital Nation: Home Broadband Internet Adoption in the United States***. A Report Prepared by the Economics and Statistics Administration and the National Telecommunications and Information Administration in the U.S. Department of Commerce, Nov 2010.
- [http://www.ntia.doc.gov/reports/2010/ESA\\_NTIA\\_US\\_Broadband\\_Adoption\\_Report\\_11082010.pdf](http://www.ntia.doc.gov/reports/2010/ESA_NTIA_US_Broadband_Adoption_Report_11082010.pdf)

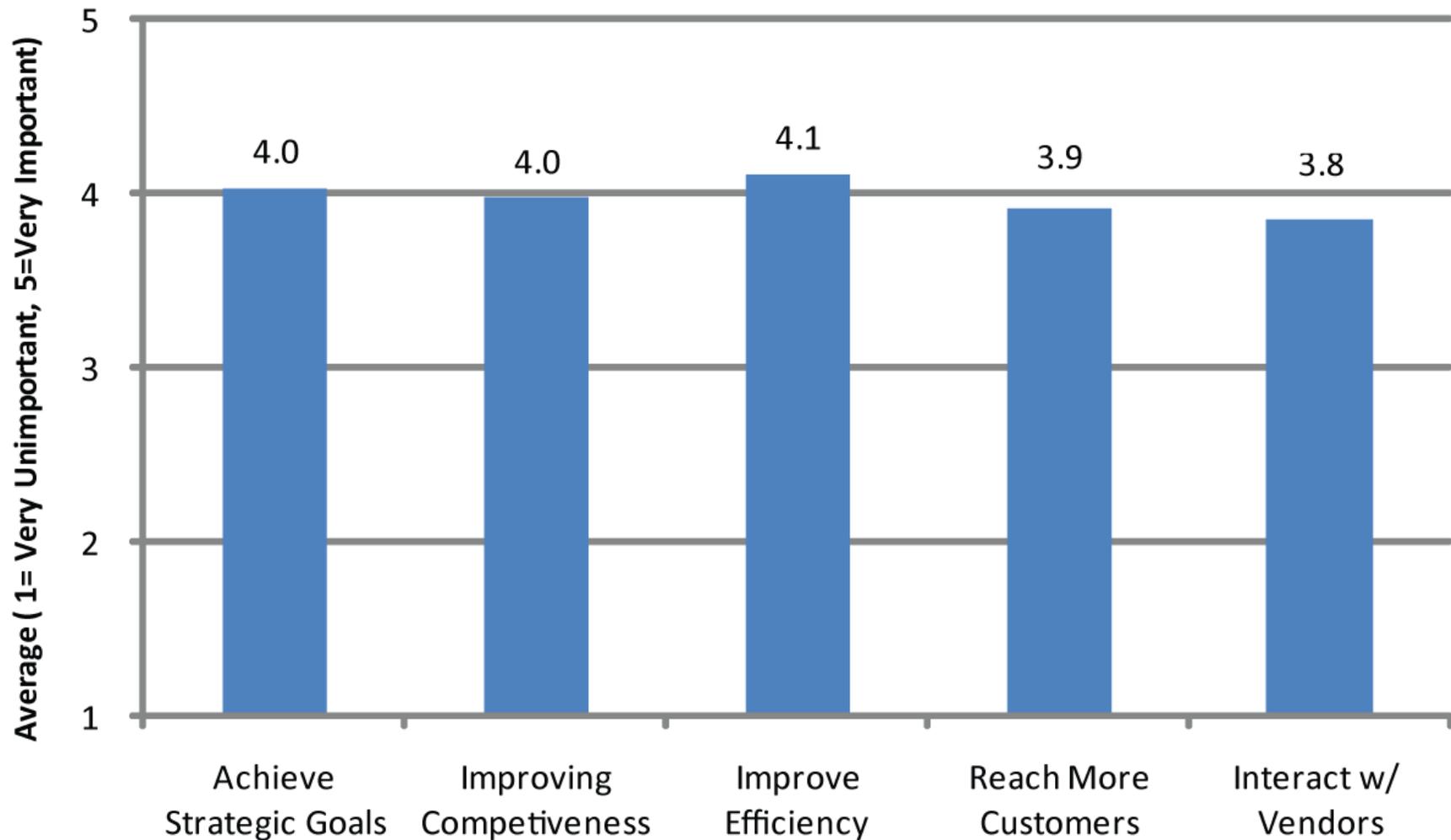
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- **The e-NC Authority Survey March 2010** -- e-NC commissioned Strategic Networks Group (SNG) to survey businesses, organizations, and households on the availability of broadband as well as the uses, benefits, drivers and barriers to broadband.
- <http://www.e-nc.org/documents/0000/0395/SNG - NC e-Strategy Report - Final.pdf>

**Small businesses indicate that high-speed Internet access (broadband) is as essential to their business as other utilities such as water, sewer, or electricity.**

*The Impact of Broadband Speed and Price on Small Business, U.S. Small Business Administration, Nov 2010.*

## Importance of Internet Service to Business



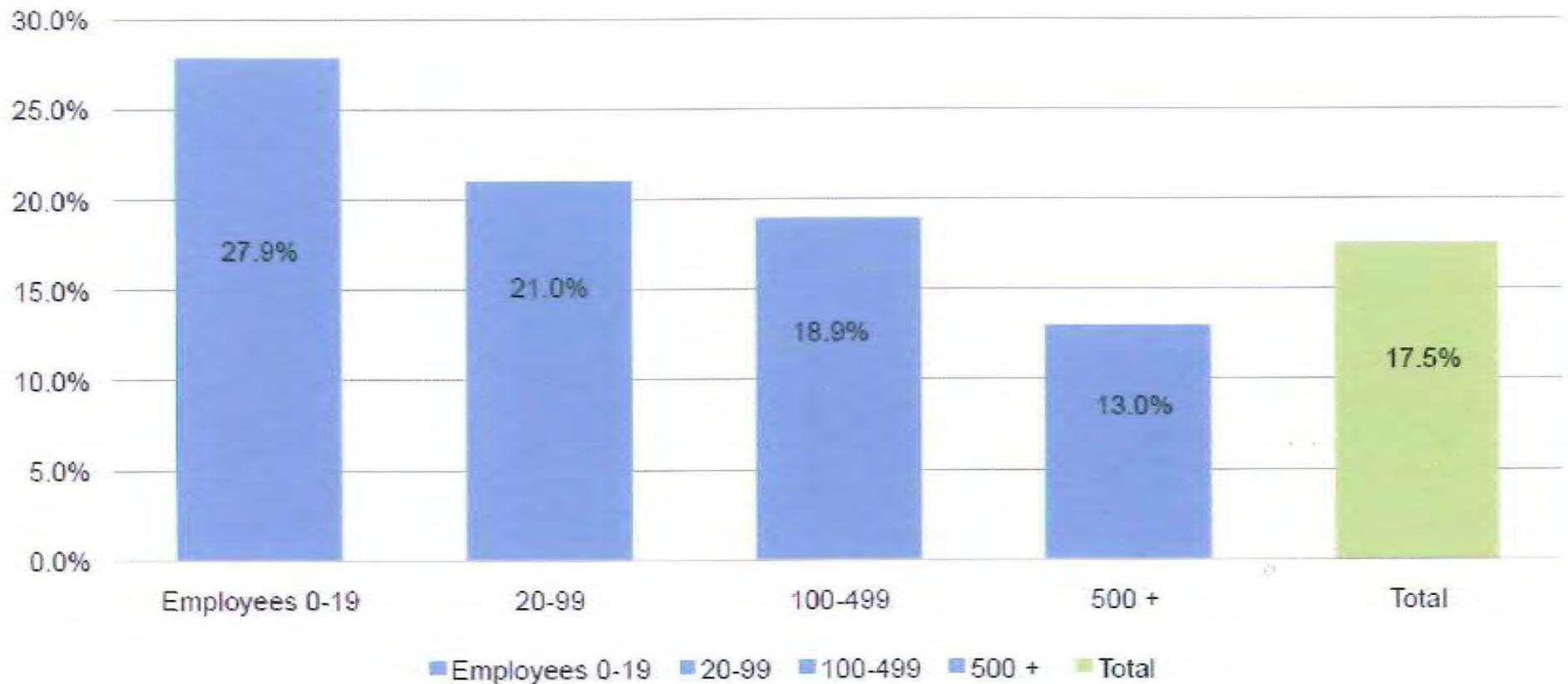
Source: Columbia Telecommunications Corporation.

# **American communities and businesses without broadband will find themselves left out of the digital revolution.**

- Small businesses account for a majority of the more than 1.2 million new jobs generated by the growth of the Internet during the last 10 to 15 years. (FCC- NBP)
- 62% percent of American workers rely on the Internet to perform their jobs.\*
  - \*Mary Madden & Sidney Jones, Pew Internet & Am. Life Project, Networked Workers 3 (2008).

- Broadband is responsible for 17.5% of all new jobs (NC).
- Small businesses are more reliant on broadband for job creation.

### Percent of New Jobs Attributed to Internet *By Size of Employer Group*



## **Jobs, business growth, relocation questions, and very existence at stake due to broadband**

- **18%** of *new jobs* were created as a result of broadband use.
- **28%** of *new small business growth* attributable to using the Internet.
- **54%** of the responding businesses said that they would *not be in business* if they did not have broadband
- **41%** said that they would have to *relocate* if they were unable to access broadband in their community.

\*\* *e-NC Authority* ,Strategic Networks Group (SNG) Survey March 2010.

**The percentage of businesses using the Internet is considerably higher than the percentage of residential users.**

- The small business broadband adoption rate has increased to 90% as of the date of this survey (April 2010),
- compared to 74% of adults with broadband *access* in their homes and just 65% of adults who *use* their home broadband connections.
- **\*\* *The Impact of Broadband Speed and Price on Small Business*, U.S. Small Business Administration, Nov 2010.**

# **The most important broadband benefits to businesses and organizations are productivity, and reaching and supporting customers:**

- – Ease of operations (73.9% say very important)
- – Improving resource efficiency (71.8%)
- – Improving customer service (73.6%)
- – Reaching new customers (65.6%)

*\*\* e-NC Authority ,Strategic Networks Group (SNG) Survey March 2010.*

## Revenue Impacts from Internet Use

The smallest businesses reap the highest rewards.

Size of Organization by Number of Employees	Average Revenue per Organization	Average Revenue from Internet Use	% Revenue from Internet
0-19	1,284,576	231,824	18.0%
20-99	8,603,014	1,207,238	14.0%
100-499	38,542,168	6,335,703	16.4%

# **Jobs And Economic Security**

## **Governor-elect Malloy's small business outreach proposal**

*Jobs And Economic Security= <http://www.danmalloy.com/policy>*

Establish recruiting teams comprised of :

- the local chief elected official and local economic development specialists,
- local and regional representatives from business groups such as local Chambers of Commerce
- "builders" of communities, such as educational leaders, community non-profits, foundations, and arts and culture organizations.

## Governor-elect Malloy's outreach proposal <http://www.danmalloy.com/policy>

*(continued)*

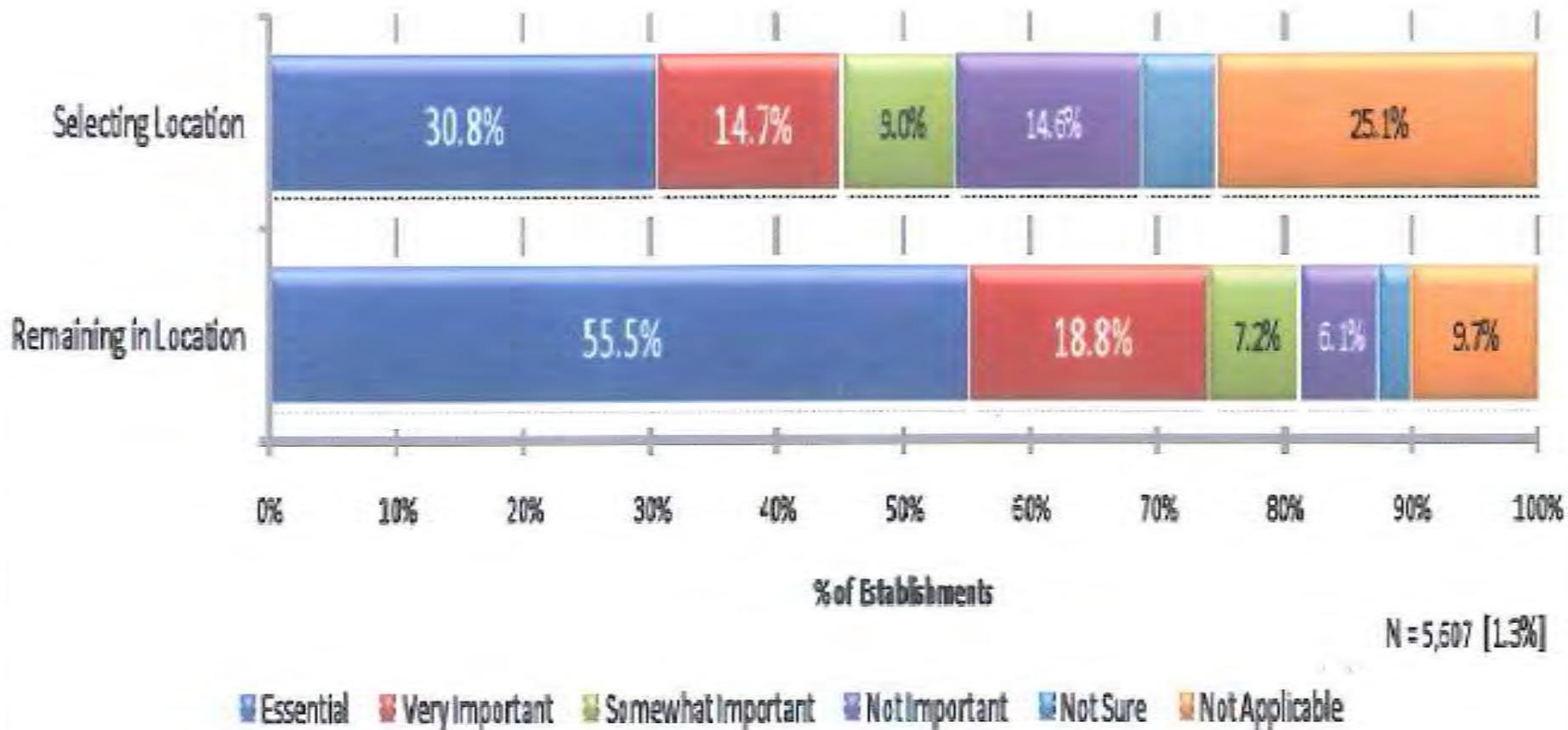
### **Jobs And Economic Security**

- Coordinating teams will have key individuals from state agencies related to a company's industry.
- Teams will help link companies to local, state, and federal fiscal resources.
- CT Broadband Coordinator Vallée adds =  
"Teams should include a broadband assessment."

## **Metro v. Rural = Needs equal, but availability greatly different**

- There is not a significant difference between metro and rural markets in terms of businesses' need for broadband
- There are, however, significant differences between metro and rural areas with respect to availability of high-speed options, performance, and price of broadband.

## Importance of Broadband to Location



**Speed** is the input and  
**use** is the output.

The real upside is not in increasing speed,  
it's in increasing the applications.

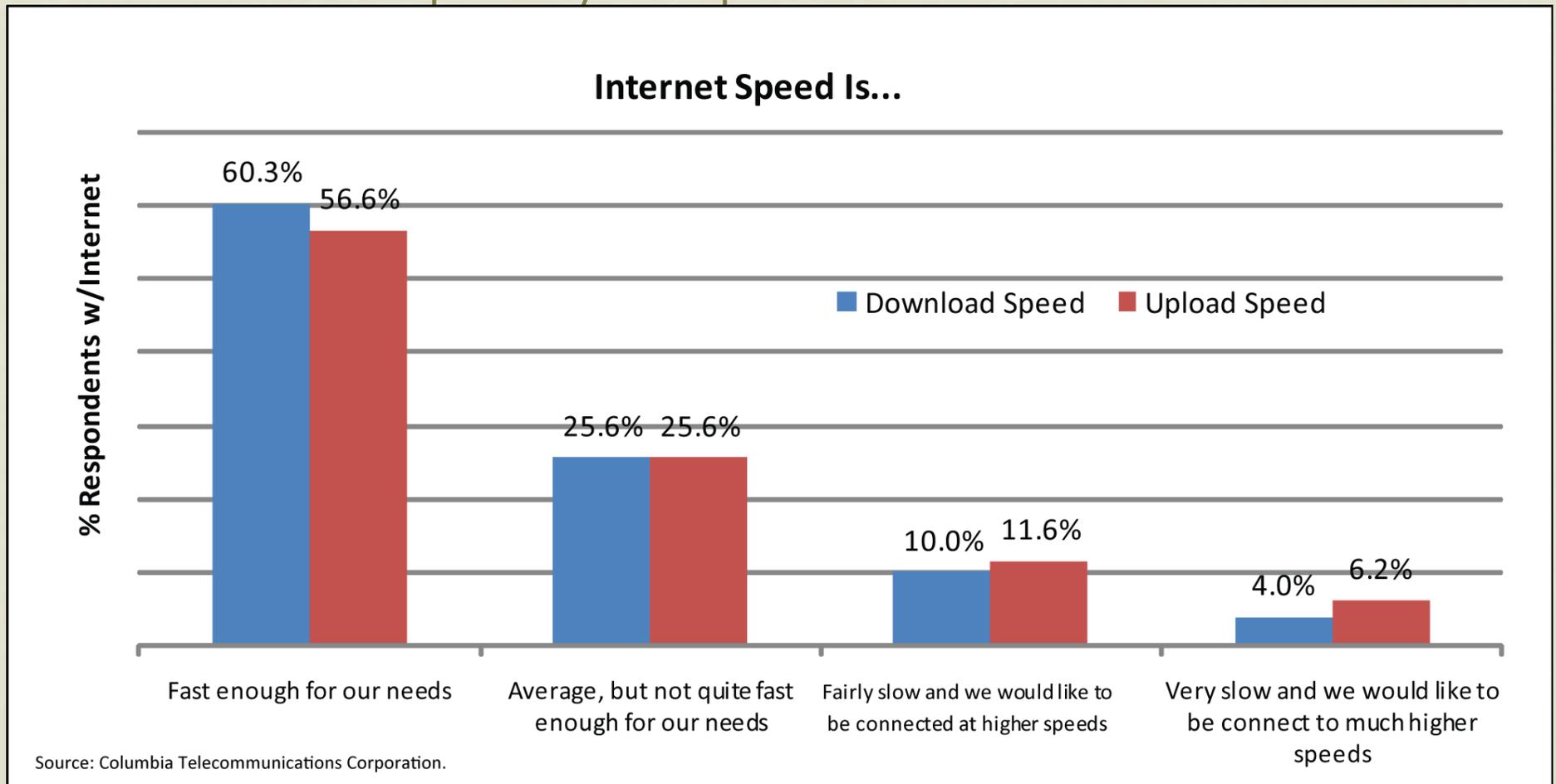
## **Future broadband speeds should meet small business application needs.**

- From a small business perspective, the definition of broadband must be:
  - ***Application needs*** should be the defining metric, not the provider's particular speed.
  - "broadband is a connection that is sufficient in speed and capacity such that it does not limit a user's required application."

## **Defining broadband on speed alone is challenging and inadequate.**

- The number of applications that businesses need to run over their data and Internet connections continues to increase.
- The speed required to support these applications is also increasing.
- Therefore, what appears to be an adequate broadband speed today will appear to be as slow as dial-up tomorrow.

- \*\* Approximately 60% of respondents say that their Internet download speed is fast enough for their needs = 40%, slow.
- \*\* Less than 5% say that their download speed is very slow, and these are primarily dial-up users.



■ ***The Impact of Broadband Speed and Price on Small Business, U.S.***  
**Small Business Administration, Nov 2010.**

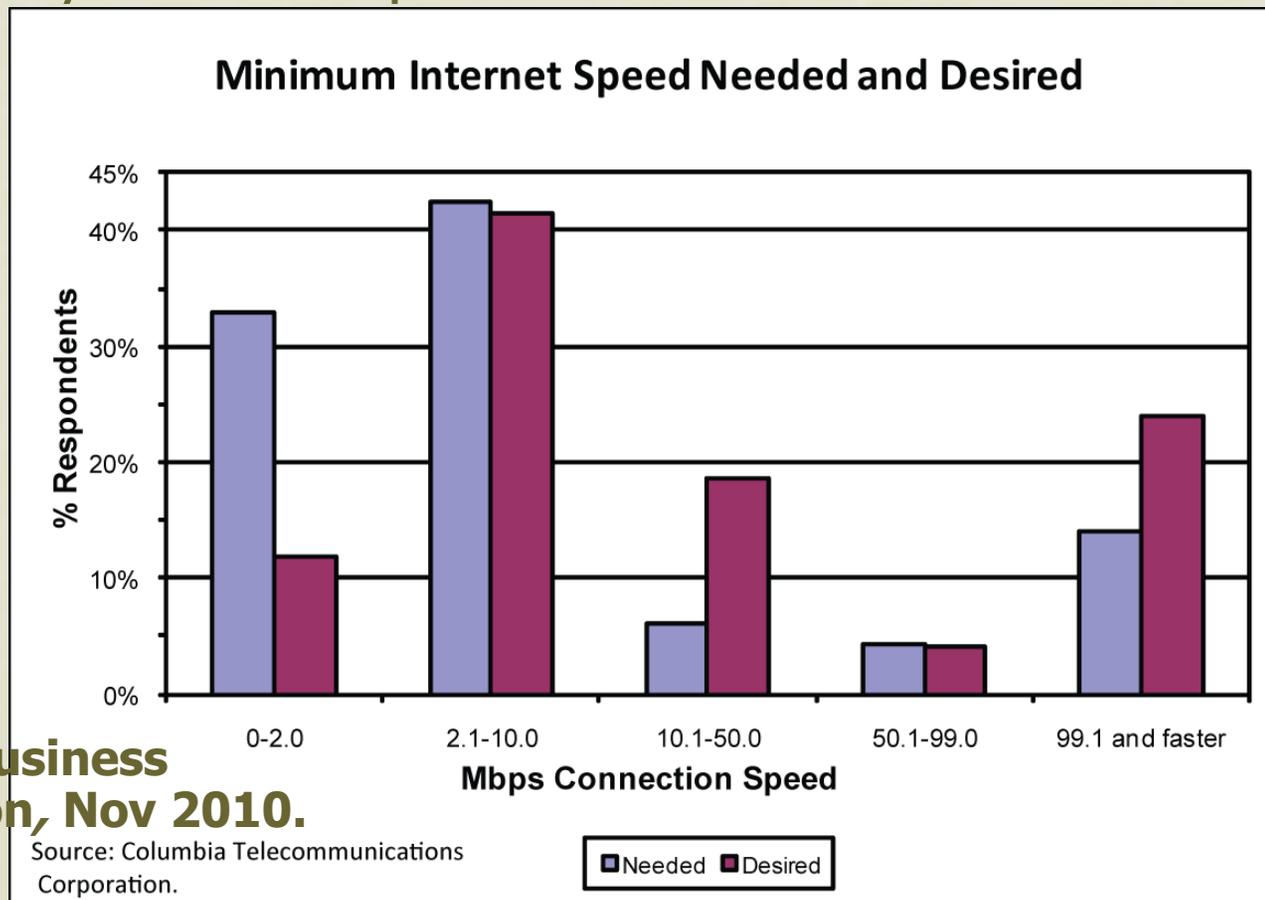
## There is a need for greater Internet speeds available to small business

- Almost half (48%) of *rural* small business respondents, and
- More than one-third (37%) of *metro* respondents
- =report that they are *not* satisfied with their Internet speed.

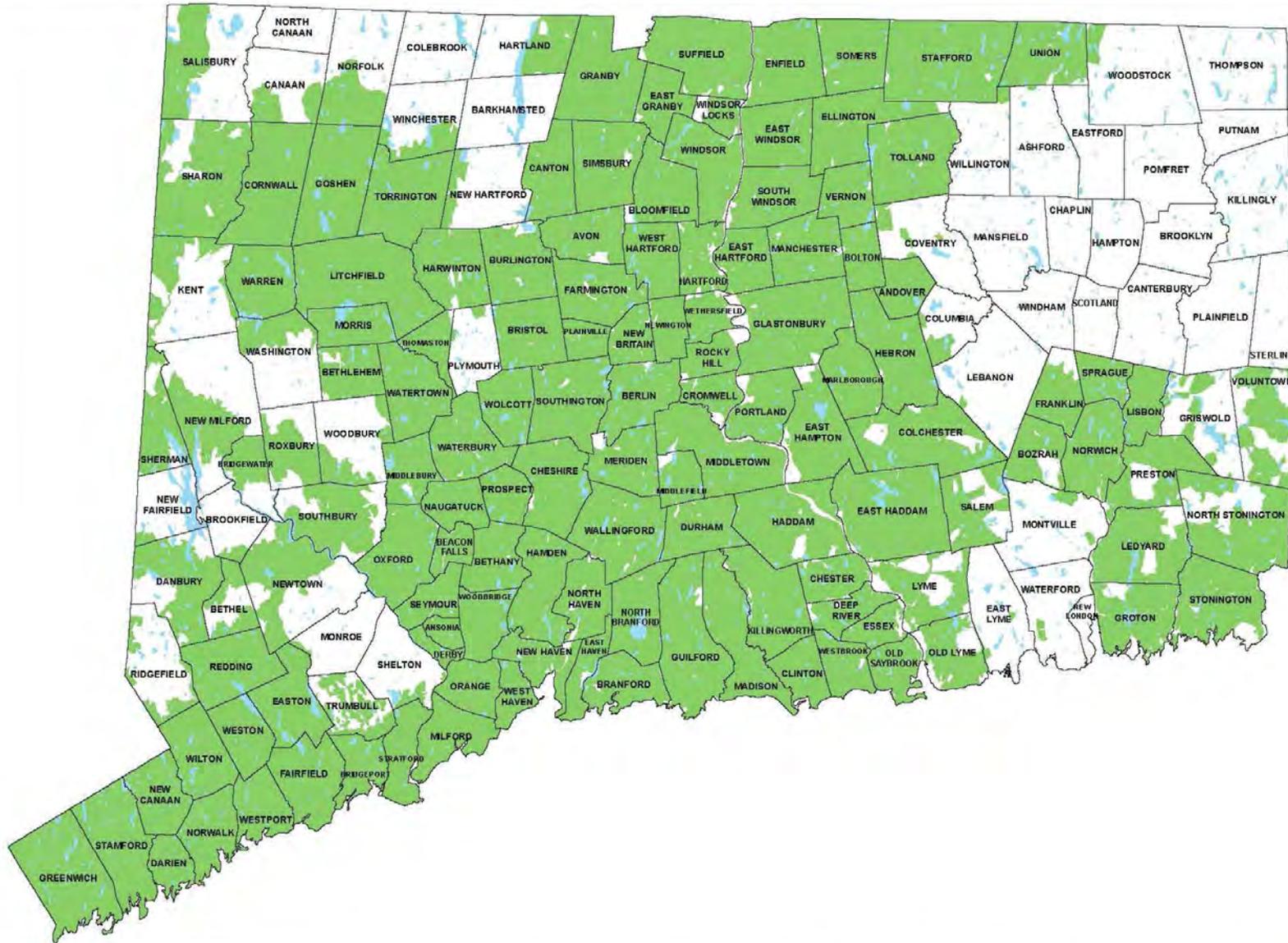
**\*\* *The Impact of Broadband Speed and Price on Small Business,*  
U.S. Small Business Administration, Nov 2010.**

## Small Businesses Need More Speed

Most businesses (70%) suggest that download speeds of 2 Mbps to 10 Mbps meet current needs, but, almost 30% of business respondents indicated a need for speeds beyond 50 Mbps.



■ **U.S. Small Business Administration, Nov 2010.**

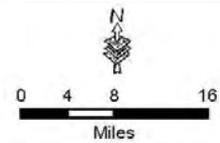


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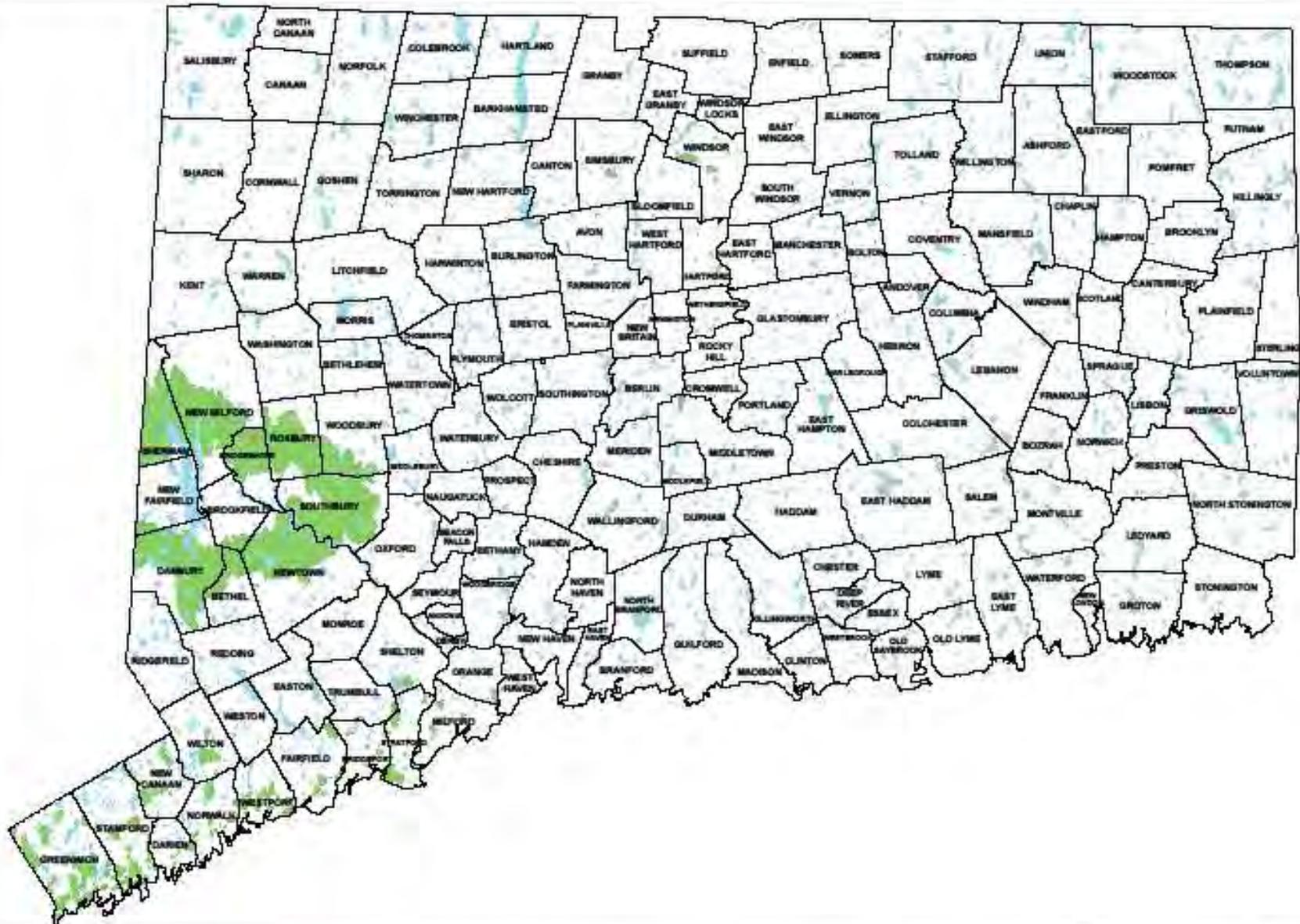
**Legend**  
 Lakes  
 50 mbps or Greater

Note: A census block is considered served if the provider currently serves or can readily serve at least one customer in this area.

## Connecticut Broadband Maximum Advertised Download Speed of 50 MBPS or Greater



APPLIED GEOGRAPHICS, INC.  
 October 2010



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**Legend**  
 ■ 1 gbps or Greater  
 ■ Lower

Note: A small black dot is considered served if the provider currently serves or has readily served at least one customer in this area.

## Connecticut Broadband Maximum Advertised Download Speed of 1 GBPS or Greater

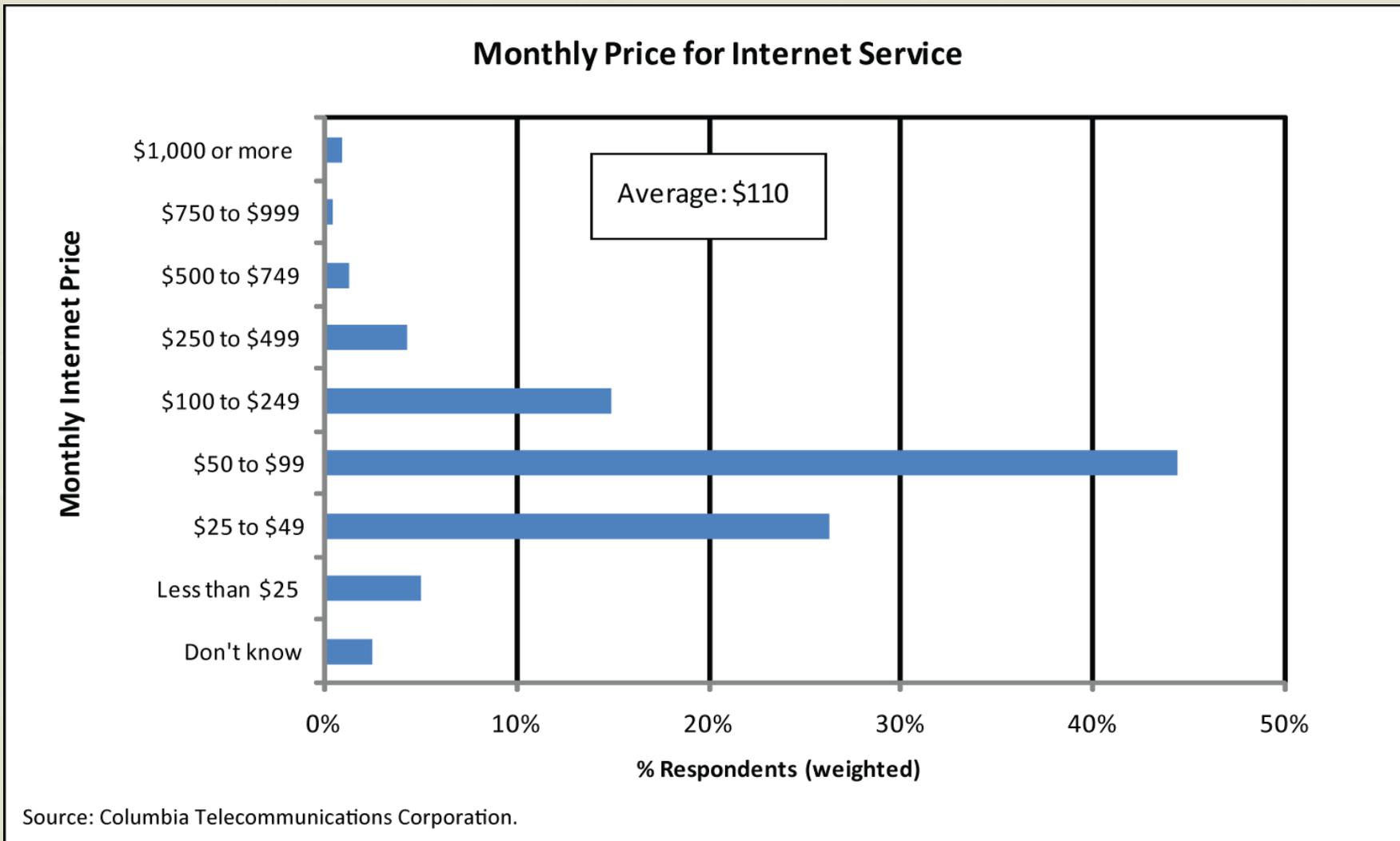


## **Some businesses foresee a need for much higher speeds**

- Nearly 25% of respondents say they need more than 10Mbps for business purposes.
- Nearly 50% say that they desire speeds of greater than 10Mbps.
- Almost 30% of respondents want speeds greater than 50 Mbps. \*

\* Such high speeds require FTTP technology, or fiber close to the premises for DSL or cable modem. These services are largely unavailable.

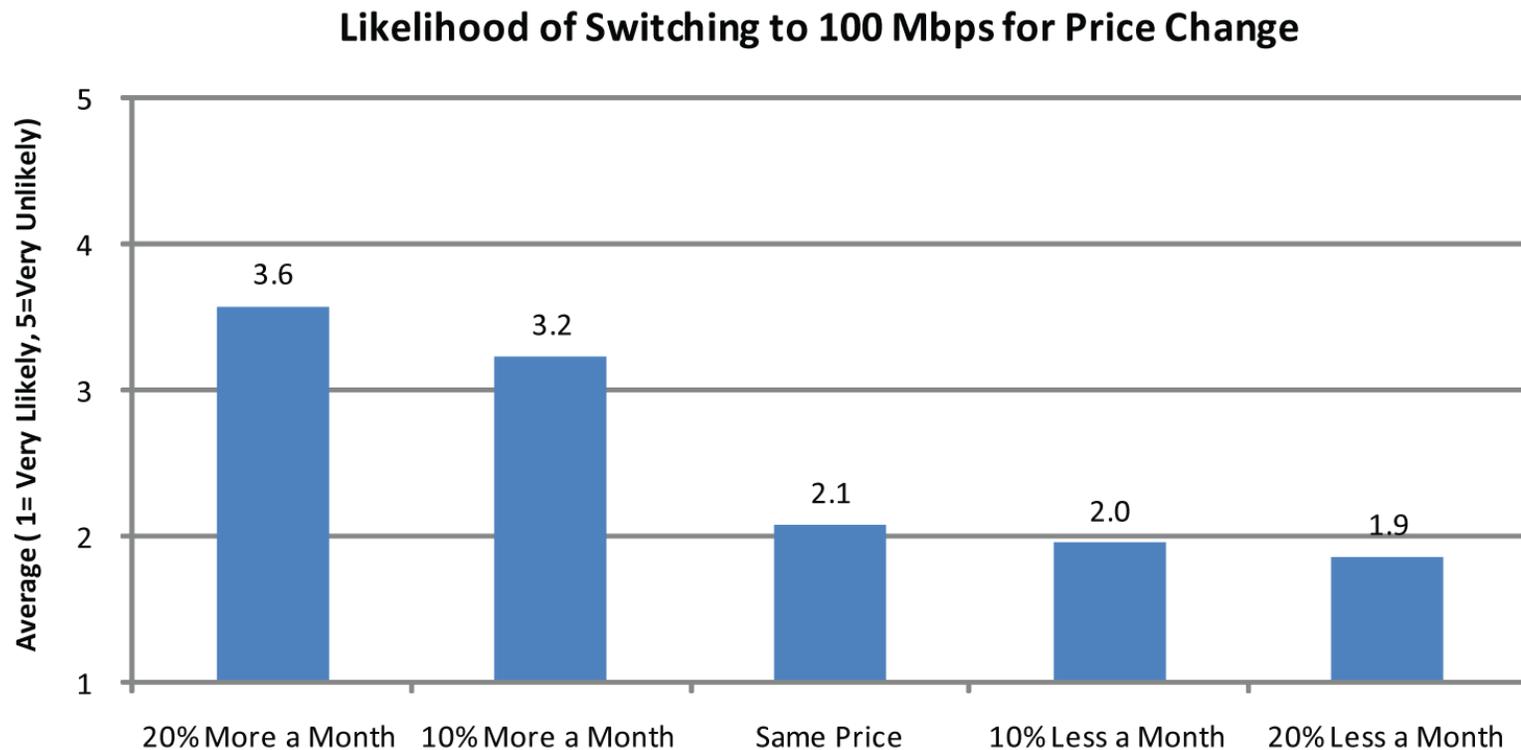
**Respondents pay an average of \$110 per month for Internet service. Most of the businesses pay between \$50 and \$99 per month.**



**\*\* *The Impact of Broadband Speed and Price on Small Business,* U.S. Small Business Administration, Nov 2010.**

## Likelihood of Switching Internet Providers

- \*\* Respondents are likely to switch to a higher-speed Internet connection (100 Mbps) as long as the price does not increase.
- \*\* Even for a 10% price increase, businesses are significantly less likely to switch to higher-speed service.



**\*\* *The Impact of Broadband Speed and Price on Small Business,***

Source: Columbia Telecommunications Corporation

**U.S. Small Business Administration, Nov 2010.**

**Hurdles to be solved  
to improved access  
and adoption by  
businesses**

- Nearly 95 percent of American businesses use broadband.
- For those businesses planning to upgrade their service,
  - running new applications and
  - improving communication with customers
  - were the most cited reasons for doing so.

## **85% of businesses were not planning to upgrade their service in the next 12 months.**

- Businesses satisfied with current connection;
- Doubts that increased speed would improve productivity; and
- 50% of businesses cited cost as the major reason not to upgrade.
  - 30% cited it as a major reason, while 20% cited it as a minor reason.

## **COMPETITION IS ESSENTIAL TO PROVIDING BUSINESS WITH MAXIMUM BENEFITS FROM BROADBAND**

- Small businesses indicate that in order to meet their price, customer service, and performance needs, they need more choice among broadband service providers.
- Followed closely by the option to purchase faster bandwidth.
- *The Impact of Broadband Speed and Price on Small Business, U.S. Small Business Administration, Nov 2010*

## Small businesses reporting having no broadband option

- The number of small businesses reporting having no broadband option:
- 7.7% for rural respondents and
- 3.5% for metro-area respondents.

The number declines to 1.8% of respondents if satellite is *added*.

- ***The Impact of Broadband Speed and Price on Small Business, U.S.***  
**Small Business Administration, Nov 2010.**

## **Small businesses face disadvantages that limit their choices and use of broadband**

- Small businesses are often required to sign multiyear service contracts with typically steep penalties for early termination.
- They pay higher rates than do residential customers for comparable services.
- *The Impact of Broadband Speed and Price on Small Business, U.S. Small Business Administration, Nov 2010.*

# **Action Steps to improve access and adoption of broadband for small businesses in Connecticut**

## **Connecticut has extensive access - it should lead the U.S. in adoption**

- The state needs allies and champions to act.
- Public/Private partnerships are fundamental to success.
- Cooperation among community groups will be the ultimate driver.
- Digital literacy training must be offered statewide to expand adoption of broadband services.
- State government must lead the way through its own broadband use.

## **Need to establish public-private partnerships to support small businesses in low-income areas**

- Provide small businesses in low-income areas with digital literacy and computer training to maximize the utility of their broadband connections.
- The partnership effort should target the most important players in the technology industry to help small businesses with hardware, software, professional services, and online services.

## Telecommuting Can Increase Cost Savings For Both Businesses And Employees

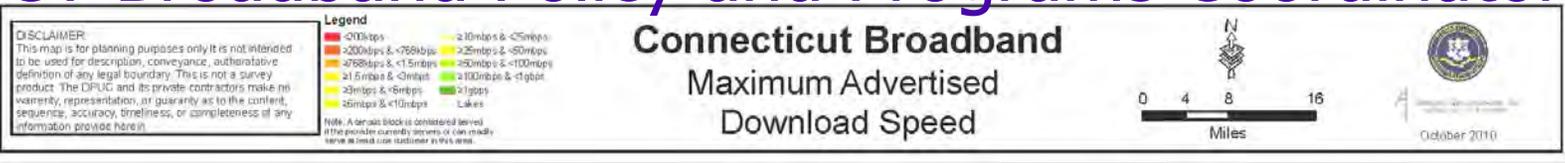
- Increasing telecommuting could lead to greater demand for broadband deployment, especially in rural and underserved areas.
- Nearly half of small business employers currently allow telecommuting.
- About 28% of *rural* businesses and 24% of *metro* businesses indicate that they would encourage more telecommuting if employees had very high-speed Internet.
- *The Impact of Broadband Speed and Price on Small Business*, U.S. Small Business Administration, Nov 2010.

**The state must investigate methods to encourage providers to more aggressively roll out high-speed broadband**

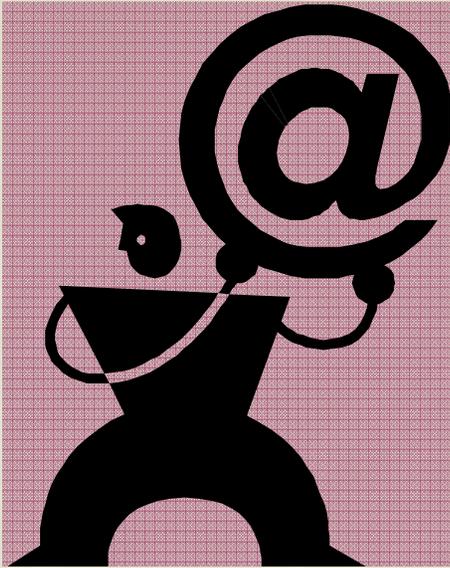
- The cable, wireless, and telephone company networks will require extensive upgrades, such as the construction of fiber optics closer to the premises, in order to provide businesses the capacity many businesses currently need and most will eventually need.

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