

The Impact of Broadband Speed and Price on Small Business

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Purpose

Public Law 110-385 Section 105 directed the Office of Advocacy to conduct a study evaluating the impact of broadband speed and price on small businesses. The study was to include (1) a survey of broadband speeds available to small businesses, (2) a survey of the cost of broadband speeds available to small businesses, (3) a survey of the type of broadband technology used by small businesses, and (4) any policy recommendations that may improve small businesses' access to comparable broadband services at comparable rates in all regions of the nation.

Legislative Overview

The stage for the report has been set by important legislation in recent decades. Local competition in telecommunications markets was enabled by provisions in the Telecommunications Act of 1996 (P.L. 104-104). Title 1, Part II, of the Telecom Act defines "development of competitive markets." Following the enactment of the law and the ensuing regulations at the Federal Communications Commission (FCC) implementing its intent, thousands of competitive local exchange carriers (CLECs) and Internet service providers (ISPs) came into being and began providing Internet services that were innovative and competitively priced. Ensuing developments culminating in the "Brand X" decision for the cable industry and related regulations at the FCC, turned back the clock on competitive providers, as the infrastructure was no longer for lease.

The status quo in the industry has prevailed since 2001-2002. In 2008, Congress enacted the Broadband Data Services Improvement Act of 2008 (P.L. 110-385) to "improve the quality of Federal and State data regarding the availability and quality of broadband services and to promote the deploy-

ment of affordable broadband services to all parts of the Nation." As part of this effort, Congress sought to gather information on how small businesses were faring in the status quo. The current report is in response to this mandate.

Overall Findings

A single definition of what constitutes broadband data service does not exist. The range of speeds referred to as "broadband" spans several orders of magnitude. Rather than defining broadband in terms of speed, the authors recommend defining "broadband" services in terms of the applications they support, from email to high-resolution medical imaging. This approach is in response to the evolving nature of information technology. As the number of applications running on existing small business Internet connections increases, so will the needed bandwidth. What seems acceptable today may not be in the near future.

- The percentage of businesses using the Internet is considerably higher than the percentage of residential users. The authors' survey found that the small business Internet adoption rate has increased to 90 percent, compared to 74 percent of adults with Internet access in the home, and just 65 percent of adults who use their home Internet connection.¹

- Small businesses want both competition and choice in broadband service market. They see competition as key to innovation, customer service, and lower prices. The survey data demonstrate that the small business Internet market, in most cases, does not provide this competition or choice to small businesses from a performance perspective, or a price perspective.

- Although there is no statistically significant difference between metro and rural markets in terms of businesses' needs for Internet access, the survey

results indicate statistically significant differences between metro area and rural businesses in terms of broadband availability, speed, and price.

- Approximately one-third of small businesses surveyed indicated a need for broadband service requiring greater capacity networks than currently exists in many locations in the United States.
- The authors conducted a review and analysis of the broadband market using standard tools to evaluate competition; they found that very little, if any, competition exists. Small business consumers' choice in a given geographical area is limited to very few broadband providers, and in most cases just two: the incumbent and the cable company.

Highlights

- Holding prices constant, rural small businesses get less service when compared to metro small businesses; holding services constant, rural small businesses paid higher prices than metro small businesses.
- Metro small businesses pay on average \$115 for Internet service, while rural small businesses pay \$93.
- Rural small businesses pay significantly higher prices than metro small businesses for the same bandwidth, and small businesses in metro regions have access to higher bandwidth services than rural businesses do (at higher costs).
- Approximately 71 percent of the small businesses surveyed had a website.
- Metro small businesses would readily move to have access to better services, but rural businesses do not have that flexibility.
- DSL is the dominant small business Internet connection type. The exception is the Northeast, where over half the respondents have cable modem Internet connections.
- The authors compared their results with 2003 surveys published by the Office of Advocacy.² They found that dial-up use dropped overall from 44 percent to 6 percent. Monthly prices for leased T1 lines,

on the other hand, increased from \$121 to \$294, \$28 to \$70 for wireless, and \$60 to \$88 for cable.

- Approximately 15 percent of the small business respondents use voice-over-Internet-protocol (VoIP), compared with 3.3 percent in the 2003 study. Of those using VoIP, 80 percent use an external connection, and 20 percent rely exclusively on an internal LAN.
- Several case studies examined local service and pricing. Most notably, the case study comparing the prices paid by small businesses and residential Internet consumers in Minnesota and Tennessee found that small business Internet customers pay two to three times what residential Internet customers pay for equivalent speeds, irrespective of the community under analysis.

Policy Recommendations

The authors offered eight policy recommendations.

1. Stay the course on national broadband planning and implementation of the FCC's National Broadband Plan.
2. Encourage and enable small business broadband providers and other competitors by supporting their unfettered access to existing network infrastructure.
3. Define future broadband speeds to meet small business application needs.
4. Provide small businesses with accurate, actionable data to make broadband purchasing decisions.
5. Protect small business consumers.
6. Consider creating federal broadband incentive programs focusing on small business.
7. Consider rural small business needs in Universal Service reform.
8. Consider efforts that expand small business broadband deployment and adoption.

Scope and Methodology

The report consists of two related parts: (1) a survey of individual businesses' Internet usage (OMB control number 3245-0371), and (2) an analysis of market conditions, price and service based on a review of current literature and data gathering in dozens of U.S. communities. The analysis interprets the survey results and offers policy recommendations.

An additional note: In 2009, the American Recovery and Reinvestment Act of 2009 (P.L. 111-5) was enacted to create jobs and promote investment and consumer spending during the recession. Title 1 of the Recovery Act introduced BIP, the

1. Federal Communications Commission, Sixth Broadband Deployment Report, July 16, 2010, http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-10-129A1.doc.

2. Telenomic Research, *A Survey of Small Businesses' Telecommunications Use and Spending* and www.sba.gov/advo/research/rs236tot.pdf, and *Broadband Use by Rural Small Businesses* www.sba.gov/advo/research/rs269tot.pdf. Published by U.S. Small Business Administration, Office of Advocacy, 2003.

Broadband Initiatives Program (administered by the Department of Agriculture's Rural Utility Service), and Title 6 introduced BTOP, the Broadband Technology Opportunity Program (administered by the Department of Commerce's National Telecommunication Information Administration). The aim of both programs is to expand broadband access and adoption in communities across the United States, which will increase jobs, spur investments in technology and infrastructure, and provide long-term economic benefits. The current study does not encompass efforts underway as a result of BTOP and BIP.

This report was peer reviewed consistent with the Office of Advocacy's data quality guidelines. More information on this process can be obtained by contacting the director of economic research at advocacy@sba.gov or (202) 205-6533.

Ordering Information

Research from the Office of Advocacy is online at www.sba.gov/advo/research. The url of the report is www.sba.gov/advo/research/rs373tot.pdf. Copies are available for purchase from:

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