

Broadening Broadband

Most experts agree that broadband would benefit everyone, but a digital divide still exists.

BY PAM GREENBERG

Back at the turn of the century, you could finish off a large, non-fat, decaf, caramel latte with no foam in the time it took your computer to load a website. Now it happens before your second sip, virtually instantaneously, via a high-speed broadband connection.

Almost two-thirds of Americans now use broadband to connect to the Internet, up from just 3 percent in 2000, according to the Pew Internet & American Life Project. And even though broadband is becoming more available, not everyone is taking advantage of its potential benefits. After a decade of strong growth, the public's adoption of broadband started to slow in 2009, just as \$293 million in grants for new broadband projects from the American Recovery and Reinvestment Act were being directed to states.

Who's Using Broadband?

Two recent surveys, one by the Pew project in 2012 and another by the National Telecommunications and Information Administration (NTIA) in late 2010, confirm that gaps in broadband use among demographic groups remain. People who are poor, disabled, elderly, less-educated, single, unemployed, from a minority group or who live in rural areas lag behind in having Internet access at home and broadband specifically.

And despite the growing importance of the Internet to everyday life, more than one-quarter of Americans choose not to use the Internet at all. They cite lack of a computer, no need or interest, the irrelevancy of the Internet to their lives, high cost and difficulty of use for not subscribing to broadband.

Pam Greenberg tracks Internet and IT issues in state legislatures for NCSL.

The Benefits of Broadband

But citizens are at a huge disadvantage without the ability to connect, and some policymakers are working to change that. Students with broadband at home have a 6 percent to 8 percent higher graduation rate compared to similar students without broadband, according to the Federal Communications Commission (FCC). Broadband access and home computer use also correlate positively to higher academic achievement and better test scores.

In addition, a growing number of jobs require computer skills—50 percent today, and an expected 77 percent in the next decade. Indeed, more than 80 percent of Fortune 500 companies currently require job applicants to apply online, according to the FCC.

“One thing we know is that Internet access can take people beyond their borders,” Delegate Meshea Poore (D) of West Virginia says. “Kids sometimes have never gone outside their immediate community and don't know what other options they have, or can't see what's possible for them.” She also believes it's important to have community services in place so that when broadband service becomes available, training and computers are available, too.

“Broadband is important to make sure all citizens are able to participate in distance learning, teleworking, telemedicine and other activities that will modernize the way people are educated, work and receive health care,” says Delegate Joe T. May (R), a member of Virginia's Broadband Advisory Council and the Joint Commission on Technology and Science (JCOTS). “Broadband guarantees that all citizens will have the chance



Delegate
Meshea
Poore (D)
West Virginia



Delegate
Joe T. May (R)
Virginia



to participate in the global economy.”

Broadband is becoming increasingly important in the health care arena as well. A New York Law School report, “Broadband Adoption: Why It Matters and How It Works,” documents general economic effects of broadband as well as the benefits in delivering health care. “Broad-

band-enabled telemedicine and health information technology services ... extend the range of enhanced medical services to rural parts of the country, streamline the administration of health care, enable a wide array of cost savings, and empower individuals to have more control over medical decisions,” the report says.

Broadband Development in Rural and Low-Income Communities

The Federal Communications Commission’s updated Lifeline program is designed to spur broadband development to help low-income Americans find jobs, connect with family and receive 911 services.

Approximately 26 million Americans, mostly in rural communities, are at a disadvantage for some jobs and educational and economic opportunities made possible by high-speed connections, according to a report by the FCC in May 2011.

Over the past 25 years, the FCC’s Lifeline program has helped tens of millions of low-income Americans afford basic phone services. Now, the federal commission is planning to use \$25 million in savings generated from reforms within the Lifeline program to increase broadband use among the same group of consumers.

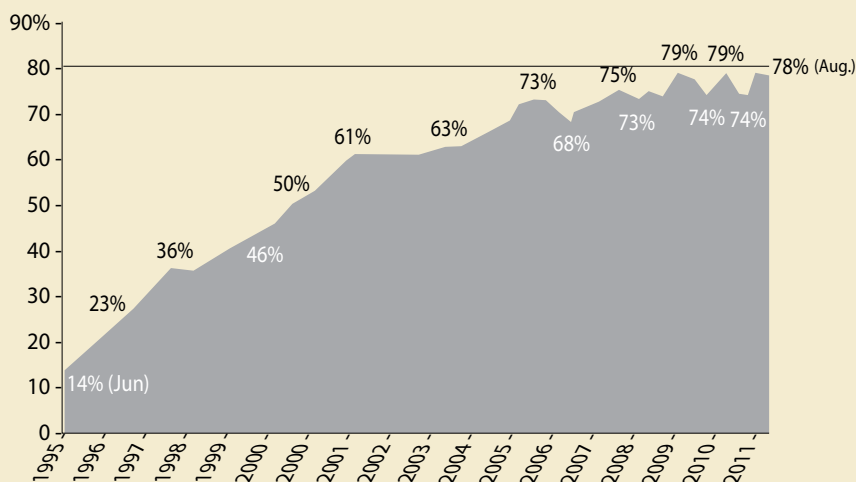
In April, it launched a competition to identify the most successful strategies for increasing broadband usage. The commission cited three main obstacles identified by a recent study by the Pew Research Center: digital literacy, relevancy and cost. The study found that when broadband access was available, low-income households subscribed much less often than households in other income brackets. In fact, according to the U.S. Census Bureau, fewer than 36 percent of families with incomes less than \$25,000 subscribe to broadband at home, compared with nearly 92 percent of families with incomes over \$75,000.

The initiative will begin some pilot projects this fall measuring the success of different levels of discounts on broadband service. It will build on the FCC Connect to Compete project, a public-private partnership designed to tackle barriers to broadband adoption begun in 2011.

—Jo Anne Bourquard, NCSL

The Growth of Internet Use

Percent of American adults who use the Internet, from June 1995 to August 2011.



Source: Pew Internet & American Life Project surveys.

Federal Support for Broadband

Federal funds helped create task forces to devise the means to increase access to broadband. Grants were directed to help small businesses and community institutions use technology more effectively, increase access to government services and information, and conduct research on barriers to broadband usage. Other grants funded the basic infrastructure needed to support broadband development.

The NTIA's State Broadband Initiative also targeted funds to assist states in mapping the availability, speed and location of broadband. For the first time, a national interactive map and searchable database became available in 2011 showing broadband services in the United States. Using data collected by states and broadband providers, the National Broadband Map (www.broadbandmap.gov) is updated every six months.

Initiative director Anne Neville explained the importance of mapping in a post on the federal government's Broadband Map blog. "The map has proved a valuable tool to a wide range of stakeholders, including consumers, researchers, policymakers, local planning officials and application developers," she wrote. "Broadband drives economic growth and innovation—including advances in health care, education and public safety—so data on America's broadband capabilities is of increasing importance, especially as we work to close the digital divide."

State Broadband Legislation

In addition to broadband mapping and other state-directed programs funded by the NTIA grants, state legislatures are actively promoting the expansion of broadband use.

At least 44 states have enacted some type of broadband legislation, and the remaining states have established task forces and programs by executive order and within existing executive branch agencies. States are dedicating funds to promoting broadband by, among other things, providing tax credits, exemptions or other incentives to increase broadband availability. Others are providing funds for technology training and digital literacy programs; hardware, software and Internet access; and development of services or content to be delivered through broadband.

States are taking different approaches to reach the shared goal of expanding the availability and use of broadband. For example:

- ◆ Idaho created a tax credit for qualified broadband expenditures.
- ◆ Iowa developed a grant program to create jobs for public broadband.


- ◆ Tennessee established rural assistance grants to expand broadband connectivity.
- ◆ Kansas provided funds to help schools, libraries and hospitals use broadband-based video communication for distance learning and telemedicine, and required an assessment of current and future broadband service and quality needs.

A few states have approved legislation to direct in-state Universal Service Funds to support broadband deployment. The funds were established by the FCC in 1997 to expand advanced telecommunications services, among other things. Oregon directed funding from its universal service e-fund, for example, to mapping activities so it could better determine where adequate broadband service exists, and likewise, where better service is needed.

Next Steps

These state and federal initiatives almost certainly have improved Americans' access to broadband and the benefits it provides. Still, its usage rates remain about where they were in 2009, when many of these broadband projects began, and efforts to measure their success are still underway.

The FCC's National Broadband Plan calls broadband the great infrastructure challenge of the early 21st century. President Obama is calling for more funding for wireless broadband. Some members of Congress, however, have questioned the American Recovery and Reinvestment Act of 2009 money already spent on broadband, especially before the nation had a clear map of existing availability. Additionally, some researchers and policymakers suggest that full broadband adoption eventually will happen on its own, without additional state and federal subsidies.

John B. Horrigan, a former researcher on the Pew project and now vice president of policy and research at TechNet, a national bipartisan network of CEOs promoting technology, called for combining efforts. In a March 2012 report released by TechNet, Horrigan said coordination and assessment at the state and federal levels are necessary to determine whether broadband initiatives can make a difference. Without it, "stakeholders are flying blind when it comes to understanding best practices to improve broadband adoption," he wrote. "To the extent that poor policy coordination hampers efforts to increase broadband adoption, we run the risk of having a less inclusive society, a smaller domestic market for tech goods and services, and a less innovative economy." 

SL ONLINE

Find a listing of state broadband laws and task forces at www.ncsl.org/magazine.