

Bridging the digital divide

States are finding ways to bring access to the Internet to residents who otherwise might be left behind in the race to get online.

BY ANDY TEAGUE

The speed with which technology and the Internet have integrated into many peoples' lives is without comparison. E-mail addresses are exchanged in place of telephone numbers, and major companies dare not omit their Web-site addresses from advertisements. The Internet is becoming the first source many people turn to for information, and businesses and governments are striving to place as much information as possible online.

While the Internet represents an effi-

cient and affordable medium to distribute information to the masses, many legislators are concerned that some people will be left out. The "digital divide" is the gap between those with and without the access and the skills to use the Internet.

Who will be left on the wrong side of the digital divide? There is no simple demographic to use when illustrating the problem. Governments in urban and economically depressed areas can find the cost of technology difficult to prioritize compared to other needs.

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The cost of distributing the Internet to sparsely populated rural areas may be prohibitive. Elderly people, especially retirees, may not have had as



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many opportunities to become proficient with computers and the Internet as many younger people have. People with disabilities must overcome barriers to use an Internet designed for people without visual or motor-skill difficulties.

(See "A gap in Web access" in this issue.) Overall, there are many people who may not be able to join the high-speed progress of technology.

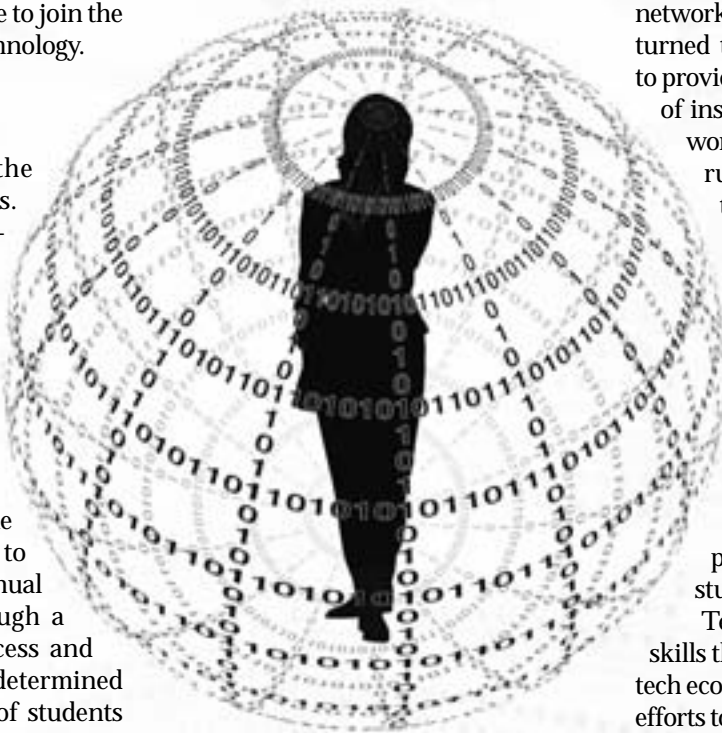
Funds to fill the gap

Initiatives to bridge the divide come at all levels. Schools and libraries can receive substantially reduced rates on high-speed Internet access through the Federal Communications Commission "E-Rate" program. The FCC collects the funds for this program from taxes on personal and business telephone bills. The funds then are distributed to schools and libraries in annual grants, determined through a complex application process and based on need. Need is determined based on the percentage of students eligible for the school-lunch program in the school or library district or region. In its third year of issuing grants, the program has only \$2.25 billion to distribute and \$4.7 billion worth of requests.

Private foundations also are addressing the divide. The Bill and Melinda Gates Foundation, formed by Microsoft Corporation Chairman Bill Gates and his wife, Melinda, provides grants to public libraries in states deemed most in need based on personal income and poverty levels. The grants provide

computers, software, Internet connections and staff training to allow libraries to become community centers for learning technology.

Each state faces unique challenges in addressing the digital divide. Because demographics and peoples' needs vary greatly across the country, there is no blanket solution. Many states have already begun to aggressively bring all residents up to "Internet speed." Some states are starting with education programs in the schools, others are building high-speed networks and others are getting computers into peoples' homes.



Rural networks

North Dakota is constructing a major statewide network, linking hundreds of cities, schools, libraries and universities. "We need to get more technology into the K-12 schools to help our children get more computer literate" said Curtis Wolfe, North Dakota chief information officer.

Building a major network is just the beginning of the solution. "It's how you use it that brings value to the com-

munity," Wolfe said. The new network will be the catalyst for work-force development and education.

Washington has completed a network that connects all public schools and colleges to the Internet. Network features will help children with disabilities participate in video conferences and help high-school students prepare for college-entrance exams.



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Wyoming also is investing in an infrastructure designed to seamlessly network the entire state. South Dakota turned to its corrections department to provide labor to help defray the cost of installing a major statewide network. By building these networks, rural states can bring educational opportunities to residents who would otherwise have to drive long distances to attend a university or community college. Agricultural communities have lost population as younger workers pursue careers other than farming. Rural areas may attract better jobs with better salaries if they produce technically skilled students.

Teaching students the technical skills they need to compete in a high-tech economy begins early. Many state efforts toward closing the digital divide start by focusing on the K-12 schools.

Starting early

Other states are taking on the issue
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CSG resources

For more on access to high-speed information services, see "Investing in a digital economy," *SGN* August 2000 and "Universal service?" *SGN* April 2000.

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from the inside out. Maine Gov. Angus King this year proposed a plan to distribute notebook computers to every seventh grader in the state. King suggested students would have Internet access through the school library, and would be able to dial in from home. The governor and legislative leaders appointed a commission in August to recommend how the state will spend \$50 million set aside for school technology. King suggested the commission look into buying a new type of portable computer terminals that would give

students access to the Internet under strict state controls.

Pennsylvania recently sponsored the “Tax-free PC” week. During one week in August, Pennsylvania residents were able to purchase a personal computer for home use with the incentive that retailers would not charge any sales tax on the computer. August was picked to target parents who were shopping for school supplies.

As these examples show, states are considering a range of programs to make sure the new Internet economy does not leave their residents behind. ★

Privacy on the line

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tious step in appointing a Task Force on Privacy and Technology to be led by the state’s chief technology officer, Roy Cales. This task force will examine best practices in working to protect proprietary information constituents submit to the state online.

In researching the privacy issue, policy-makers must consider constituents’ values and interests in maintaining control of their personal information. The Direct Marketing Association maintains that online retailers can better target customer needs via the acquisition and manipulation of personal data. Of course, increasing collections

of personal data heightens the opportunities for fraudulent activity. On the other hand, limiting the amount or type of personal information collected can reduce the number of services available online while lowering the efficiency of e-government tools.

E-government models are just starting to develop and will continue to evolve. As they do, networks will increasingly be relied upon to enhance productivity and improve services to constituents. Policy-makers must weigh carefully the implications of information policy for privacy, confidentiality, security and efficiency as part of their state’s e-government agendas. ★

Privacy principles

- **Access** — Individuals should have access to their own data to know what has been collected and to ensure its accuracy.
- **Choice** — Individuals should be given a choice whether or not to provide their personal information, subject to law.
- **Data Integrity** — Individuals should have reasonable assurance that their information was entered correctly and has not been corrupted.
- **Notice** — Individuals should be notified when their information is being collected and informed about how it will be used.

- **Transfer** — Individuals should be notified and given a choice if their personal information will be transferred to another organization than the one that originally collected it, or whether the information will be used for a different purpose than that for which it was collected.

- **Security** — Individuals should have reasonable assurance that their information is secure and protected from outside attack or unauthorized alteration.

Source: “Privacy — Building the Public Trust,” National Governors’ Association, Issue Brief, June 20, 2000, www.nga.com.

A gap in Web access

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cally address the accessibility of their Web sites. Typically, agencies addressed accessibility on an “as needed” basis, but such an approach inevitably failed to remove all barriers to accessing public services. Now, agencies must have a comprehensive plan for meeting accessibility needs.

Having government Web sites meet accessibility standards will help bring online government services to the estimated 54 million Americans with disabilities. With implementation of these standards, however, more can be done to narrow the general digital divide. Additional benefits will accrue as well for nondisabled Americans from accessible Web sites.

Screen-reading software that audibly translates the content of a Web page will give governmental access to people who are illiterate. People who have inexpensive, low-tech or older computers and systems with slow Internet connection speeds will be able to readily obtain information from Web sites accessible to the disabled. Relevant information that is available in a text format can travel easily over common phone lines and be processed by older and slower hardware. Moreover, text-based information is accessible by increasingly popular portable digital phones with Internet access.

As e-government Web sites meet accessibility standards, government services will be brought to more Americans, disabled or not, and communities will benefit from the fuller participation of their residents. Everyone wins, said Cynthia Waddell, ADA compliance officer for San Jose, Calif. and leading national advocate for Internet accessibility. She said, “By embracing our individual differences, the collective community receives greater benefits than that achieved through the segregation and isolation of people with disabilities.” ★