

Chapter 3

PUBLIC SUPPORT FOR BRIDGING THE GAP

THE EFFECTS OF DEREGULATION

Congress passed the Telecommunications Act of 1996 (the Act), the first major overhaul of telecommunications law in almost 62 years, to remove the legal and economic barriers to competition in the industry. Proponents of the legislation asserted that increased competition would drive down rates, increase consumer choice, and facilitate the development of advanced communication networks throughout the country. Although telecommunications reform was motivated by business interests rather than by the needs of the poor (Sanyal and Schon 1999), deregulation was supposed to make a wider array of services affordable to major segments of the population that had previously been denied access to telecommunication networks.

Contrary to the stated goals, deregulation has resulted in the rapid consolidation of the industry. This consolidation has dampened the competition that was expected to emerge and, as a result, many customers have experienced price increases in basic phone, cable, and Internet services. In the absence of competition and government regulation, telecommunication companies have little incentive to provide new, high-speed services to rural areas, inner cities, and other high-cost or low-revenue places (Wilhelm 1999b). According to Jenn Brandon, executive director of the Community Technology Institute, “it just seems that there is less concern for local communities the bigger these companies get” (Brandon as quoted in Breckheimer and Taglang 1999, 2).

An unfettered market environment cannot be relied upon to equitably allocate information technology services to all individuals and households. Government intervention is necessary to bridge the gap between the “haves” and the “have nots.” Without such safeguards, the digital divide described in chapter 1 is sure to widen. Community technology activists have made the following policy recommendations:

- Access to technology must expand beyond telephone service to include other kinds of technology.
- Access must include more than just hardware and connectivity costs.
- Policies that aim to make telecommunication services accessible to low-income individuals and households should not be viewed as handouts for the poor but as components of a responsible economic and social policy in the information age.

We expand on these recommendations and make some of our own in chapter 8. The next section examines policies and programs designed to ensure that all individuals have access to basic information networks.

THE TELECOMMUNICATIONS ACT OF 1996 AND FEDERAL UNIVERSAL SERVICE PROGRAMS

Universal service policies can help extend the potential benefits of telecommunications technologies to low-income and underserved communities (Mitchell 1999). In the past, commitment to universal service meant providing affordable person-to-person telephone service to rural and low-income consumers through a web of subsidies. Given that telephone service still is not universal, such subsidies remain necessary. However, today, telecommunications technology reaches beyond the telephone to include a wide array of voice, data, and video services provided by phone companies, cable operators, and Internet providers. In light of these changes, it has been necessary to redefine “universal service” to ensure that the nation’s commitment to access for all keeps pace with the rapid changes in technology.

As stated above, universal service policies that aim to make telecommunication services affordable for low-income individuals and households are not handouts for the poor but components of a responsible economic and social policy in the information age. Such policies connect citizens to education, health and safety services, employment opportunities, businesses, and government, and allow them to engage more fully in all aspects of political, social, and economic life. Moreover, by increasing subscribership to telecommunication services, universal service policies protect all ratepayers from paying for underused investments in telecommunication networks, reduce the financial burden of subscribership, and increase the value of the networks (Benton Foundation 1997).

For the first time in federal legislation, the Act sets forth principles and mechanisms designed to guarantee that a certain set of telecommunication services is available to all at affordable rates (Benton Foundation 1996). The universal service rules mandated by the Act seek to lower basic telephone rates in rural markets, where it is more expensive to provide service; reduce rates for low-income consumers who have difficulty maintaining their telecommunication services; provide rate parity for high-bandwidth urban and rural telemedicine connections; and provide schools and libraries with discounts for basic and advanced communication networks such as the Internet (Benton Foundation 1997). An examination of three federal universal service programs—Lifeline Assistance, LinkUp America, and the E-rate—follows.

Lifeline Assistance and LinkUp America

The Act has preserved and strengthened two programs that serve low-income consumers who have difficulty securing basic telecommunication service—the Lifeline Assistance Program and the LinkUp America Program. Instituted by the Federal Communications Commission (FCC) in the mid-1980s, Lifeline provides reductions in monthly telephone service charges for low-income consumers who have difficulty getting and maintaining basic telecommunication services. As of 1997, 44 states participated in the program. LinkUp provides federal support to reduce initial connection charges by up to one half for qualified low-income consumers. The FCC has expanded both programs to make them available in every state, territory, and commonwealth, and it has increased the

federal contribution to Lifeline support. The FCC also has adopted changes that require all providers of interstate telecommunication services to contribute to universal funding mechanisms. Other new FCC rules allow all eligible telecommunications carriers to receive support for offering Lifeline and LinkUp services, thereby expanding the base of companies that contribute to and provide offset communication service rates (Benton Foundation 1997).

Lifeline and Link Up are examples of universal service initiatives that benefit program participants and thereby increase the overall welfare of society. Low-income households that would otherwise “fall off” telephone networks, or be unable to join them, benefit by having access to essential services like emergency health care, and fire and police stations. From an economic perspective, affordable rates for low-income households generate more income than do unused lines. By helping households stay connected to telephone networks, universal service initiatives can make a contribution to fixed costs and lessen the burden on other ratepayers (Cooper 1996).

E-rate

The newest and perhaps most widely recognized universal funding mechanism is the E-rate program. The E-rate initiative attempts to address the inequalities that result from uneven access to computers and the Internet at public education institutions. While these institutions started to receive small levels of funding from the federal and state governments in the early 1990s, the Act, through the E-rate program, has substantially expanded that commitment by requiring discounts for universal service and the provision of advanced services. The E-rate program provides discounts of 20 to 90 percent on telecommunications services, Internet access, and internal connections for schools and libraries that serve poor and rural communities. The discount provided depends on the income level of the community.

The program is funded by fees collected from long-distance telecommunications providers who received relief from network access fees when the E-rate was created. It is administered by the Schools and Libraries Division of the Universal Service Administrative Company (USAC). Between November 1998 and February 1999, program commitments totaled \$1.66 billion: 67 percent of the funds were allocated to urban schools and 11 percent to rural schools. Just over half of the funds (54 percent) will help applicants pay for internal wiring of schools and libraries so that they can link local networks to the Internet. Another 40 percent will reduce the costs of telecommunication services (Benton Foundation 1999a). Earlier this year, the FCC voted to support the second year of funding for the program at \$2.25 billion.

Although a formal evaluation of the E-rate program has not yet been conducted, several preliminary studies suggest that the program has provided an incentive for states to promote and make investments in telecommunications technologies for schools and libraries. According to a study by the National Center for Education Statistics, Internet access nearly doubled from 27 percent of classrooms wired in 1997 to more than half (51 percent) wired in the first year of E-rate funding (Benton Foundation 1999b).

Certainly, the E-rate initiative has helped reduce the costs of telecommunications services for the neediest educational institutions, and it is likely to continue to do so in the coming year. However, the E-rate does not go far enough in addressing universal service needs. Some public interest advocates feel that by zeroing in on one aspect of the digital divide, mainly K–12 schools, the E-rate program diverts attention from the principle of universal service and divides the universal constituencies into “haves” (schools with a high percentage of children eligible for the school lunch program, libraries, and rural health centers) and “have nots” (every other public interest group from nonprofits to community colleges and community technology centers) (Grunwald 1999b, 15). Other public interest advocates contend that the E-rate acts as a powerful disincentive for collaboration among community based organizations and institutions. The Act insists that all recipients of E-rate funds be libraries, schools, or rural health facilities; other groups cannot touch the funds. This restriction creates burdensome administrative chores for the libraries, schools, or rural health care facilities that may try to build community alliances (Schuler and McClelland 1999).

The FCC establishes what should be covered by universal service policies, yet state regulatory agencies and public utilities are free to broaden definitions outlined in the Act and to recognize community networks and centers as eligible for telecommunications discounts. Community technology activists are frustrated that most community computing efforts are not part of the FCC mandate and that each state must fight to authorize the E-rate for these groups. Thus far, California and Louisiana have authorized discounts for community groups (see section titled State Public Utility Commissions). In North Carolina, NCExChange, a program dedicated to promoting and supporting the effective use of electronic networking technologies by nonprofit organizations and low income communities throughout the state, has been working with the NC Nonprofit Users Group to redefine universal service.

FEDERAL COMMUNITY TECHNOLOGY INITIATIVES

Community Technology Center Program

The Community Technology Center (CTC) program is a federal initiative that acknowledges the role of community-based organizations and nonprofits in delivering access to basic and advanced telecommunication services. The aim of this grant program is to promote the development of CTCs that will provide access to information technology and related learning services to children and adults. Grants are targeted to public and private nonprofit or for-profit agencies and organizations, as well as state and local education agencies and institutions of higher education.

Congress set aside \$10 million in fiscal year 1999 to support CTCs as part of the budget for the Adult and Vocational Education Office of the U.S. Department of Education. The Department is currently completing its review of applications for the FY 1999 competition. Award announcements are scheduled for the end of September 1999.

The Clinton administration has proposed a \$65 million budget for CTCs in fiscal year 2000. While the request is certainly encouraging, tight caps on discretionary

spending will likely create a situation in which community technology advocates must fight to maintain existing funding levels. In the opinion of many citizens and political leaders, access to information and telecommunication technologies is not yet an economic, political, or social necessity. For this reason, proposals to use public funds to establish community access centers often encounter resistance (Goslee 1998).

Telecommunications and Information Infrastructure Assistance Program (TIIAP)

In 1994, the U.S. Department of Commerce's National Telecommunications and Information Administration (NTIA) initiated the Telecommunications and Information Infrastructure Assistance Program (TIIAP). As described by the NTIA, TIIAP is a program that

provides matching grants to nonprofit organizations such as schools, libraries, hospitals, public safety entities, and state and local governments. Grants are used to fund projects that improve the quality of, and the public's access to education, health care, public safety, and other community-based services. The grants are used to purchase equipment for connections to networks, including computers, video conferencing systems, network routers, and telephones; to buy software for organizing databases; to train staff, users, and others in the use of equipment and software; to purchase communications services, such as Internet access; to evaluate the projects; and to disseminate the project's findings.

Since its inception, TIIAP has awarded 378 grants in 50 states, the District of Columbia, and the U.S. Virgin Islands. Approximately \$118 million in federal grant funds has been matched by more than \$180 from local, state, and private-sector sources.

Despite the tremendous interest the TIIAP program has generated—more than 5,300 applications requesting \$2.1 billion—funding for TIIAP demonstration programs has actually decreased. The TIIAP program began in fiscal year 1994 with \$26 million in funding for competitive grant awards. For fiscal year 1999, \$17 million is available. Attempts by the Clinton administration to increase overall funding for the program have been met by congressional opposition.

HUD Neighborhood Networks

Neighborhood Networks is an unfunded initiative of the U.S. Department of Housing and Urban Development (HUD) that encourages the development of computer learning centers in HUD-insured and -assisted housing. The initiative began in September 1995, and there are now 500 learning centers in operation and 780 in the planning stage (Famuliner 1999). Neighborhood Network centers offer a range of technical and nontechnical services including computer training, Internet access, job readiness support, microenterprise development, GED certification, health care, and social services. Services available through the centers help residents become more self-sufficient, employable, and economically self-reliant.

Although HUD encourages the creation of Neighborhood Networks centers it does not have sufficient funds to capitalize them. HUD resources are only intended to serve as “gap fillers.” Owners of HUD-insured and -assisted properties must seek support from state and local government, educational institutions, private foundations, and corporations. Owners may borrow funds from financial institutions for hardware, software, and start-up costs provided that the loan is not secured against the property, does not lead to unapproved rent increases, and does not interfere with the services that the property has agreed to provide.

Local HUD resident initiative specialists and asset managers assist owners and residents in developing their Neighborhood Network plans and help them to identify local resources and potential partners. HUD may allow owners to use certain portions of their HUD assistance (for example, budgeted rent increases and special rent adjustments) to cover the costs of establishing a center.

STATE PUBLIC UTILITY COMMISSIONS

Although the Telecommunications Act of 1996 limits local and state regulation in favor of a competitive market environment, devolution creates new opportunities for organization at the state and local levels (Kim and Muth 1999). In accordance with the Act, each state’s public utility commission (PUC) is responsible for designing its state’s technology plan. Community involvement in the development of these plans is necessary to protect the public interest. This section examines how public interest advocates in a number of states have advanced their universal service goals through regulatory processes approved by the state PUCs.

PUCs and the Public Interest

State PUCs in California and Louisiana have authorized E-rate discounts for community groups. In California, community-based organizations (CBOs) that provide health care, job training, job placement, or educational instruction are eligible for universal service discounts. Funding for these discounts comes from the California Teleconnect Fund surcharge of 0.41 percent on telephone bills. While efforts by the California Utilities Commission are important in expanding universal access to include CBOs, as Schofield (1998) notes, many community technology advocates believe that the strictly discount-focused approach is not enough to meet their universal service goals. Provisions should be made for capacity building, the training of CBO staff, and administrative costs. In addition to telecommunications discounts, the Louisiana model provides support for a centralized HelpDesk to be used by CBOs and funding for a development officer to raise additional funds from other sources. In Louisiana, state funds, rather than surcharges, are used to provide universal service discounts to eligible CBOs.

The New York State Diffusion Fund is another example of a statewide funding pool made available through a state PUC. The \$50 million fund, established as part of the

performance-based incentive regulatory plan for NYNEX, is administered by the Public Utility Law Project (PULP) through a five-year diffusion program. The purpose of the program is to bring advanced technology to economically disadvantaged areas of New York. Approximately 80 percent of the program funds have been earmarked for the NYNEX-installed network infrastructure necessary to support advanced telecommunication applications. The remaining 20 percent has been set aside for grantee equipment and project-related training. The program does not provide participants with assistance for monthly telecommunications services. Project participants have included educational, local government, and health care institutions; libraries; CBOs; and small businesses.

In Ohio, a coalition of community groups and consumer advocates formed in response to Ameritech Ohio's application to the Public Utilities Commission of Ohio (PUCO) to change the way in which the company was regulated by the state. The coalition pressed Ameritech for community computer centers; an educational technology fund; general rate reductions for all residential customers; and the establishment of a Universal Service Assistance (USA) program, which would allow low-income residents to get reduced-rate phone service without having to pay a deposit and connection charge (Jacobs 1998). All of these were included in the final agreement. The precedent-setting Ameritech case marked a major victory for public interest advocates. It also marked the first time that community technology centers were included in the settlement of a case by a state PUC.

Telecommunication Mergers

Local telecommunication mergers provide unique opportunities for local groups to press state PUCs to place conditions on mergers in order to improve community access to technology. State PUCs in Ohio and California have opened up the merger review processes to include a discussion of strategies for securing funds for community telecommunications services (Wilhelm 1999b). On the local level, the City of Seattle has been able to extract 500 cable drops from AT&T in exchange for approval of its recent takeover of TCI (see chapter 6).

The intended merger between SBC Communications and Ameritech will likely be another precedent-setting case for government and community technology advocates. The consolidation would create the largest local telephone company in the United States, with a local calling area covering 13 states. On June 30, 1999, SBC and Ameritech submitted to the FCC a list of conditions to the merger, based on negotiations with FCC staff, that seek to address public interest concerns. Public interest advocates argue that the provisions do not go far enough in bridging the digital divide, but are meant merely to get the companies and the regulators through the merger process. For instance, although SBC has agreed to fund community technology centers and other projects aimed at helping low-income communities gain access to telecommunication technologies in prior settlements in California and Ohio, the FCC has not expanded those efforts throughout the SBC/Ameritech territory (Breckheimer and Taglang 1999).

The US Department of Justice has already approved the acquisition of Ameritech by SBC as have state regulators in Ohio and Illinois. In Ohio, parties involved with the

merger case before the PUCO agreed to several important consumer protections including \$3.25 million to fund CTCs and other telecommunications projects in low-income communities and a commitment not to redline city neighborhoods when advanced and broadband services are introduced (Edgemont Neighborhood Coalition 1999). Although approval of the merger by the FCC is still pending, many feel that FCC approval will not be difficult to obtain. Final action by the FCC is expected in October of 1999.

When preparing their case for regulators to place conditions on prospective local mergers, community groups should consider the importance of funding for the following: capacity building and infrastructure development in underserved neighborhoods; new computer centers; assessments of community technology needs; and outreach and awareness of CTC programs (Wilhelm 1999b). Ellis Jacobs, who represented the Edgemont Neighborhood Coalition in the Ameritech Ohio case, suggests that public interest advocates and community-based organizations seeking to address the digital divide through regulatory bodies must keep in mind the following four steps (Wilhelm 1999b). First, it is necessary that public interest groups prove that the merger is not in the public interest because of the digital divide. Second, they must allocate resources wisely so that they can stay on top of the case. Third, they must educate regulators on the digital divide and be prepared to keep at it. A positive outcome may not be reached the first time around. Finally, it helps the credibility of the parties involved if they build alliances with community organizations, consumer advocacy groups, and civil rights organizations.

LOCAL GOVERNMENT AND FRANCHISE AGREEMENTS

Local government has the opportunity to promote the public interest and advance universal service goals in the negotiation of franchise agreements with telecommunications carriers. Franchise agreements are the arrangements by which telecommunications firms may provide services to a local area. Franchise agreements have historically had terms of 10 to 15 years. Long-term agreements were necessary for companies to recoup their investments. More recently, franchise agreements have been negotiated for shorter terms, generally around five years (Network Democracy 1999b). Telecommunications providers may seek a renewal agreement once original agreements expire.

Local authorities may place conditions on telecommunications carriers in the granting and renewing of franchise agreements. In Pittsburgh, for example, community technology activists have requested that the City require TCI to build an Institutional Network (I-Net) as a condition of renewing TCI's franchise agreement (see chapter 5). Franchise authorities may also exact fees from telecommunications providers. While some regard franchise fees as a tax, others view them as just compensation for the use of public property. As Schuler and McClelland (1999, 21) explain:

The streets of your town are public property, managed by your local government. The poles on the side of the road and the conduits below the ground are also managed by your local government. These "rights-of way" and "pole attachments" are leased to cable TV and other telecommunications companies.

The City of Seattle has used a portion of revenues from cable franchise fees to support and implement community technology projects and employ a community technology planner (see chapter 6).

STATE INFRASTRUCTURE INVESTMENTS

Many states have used state, and sometimes federal (TIIAP), funding to add physical infrastructure to the nation's telecommunications infrastructure in the name of promoting access and connectivity. In 1996, Missouri's General Assembly appropriated \$6 million for Missouri Express, a three-year capital-improvement project to create community information networks (CINs) across the state. Part of the funding was allocated to increase backbone and bandwidth capabilities for diagnostic equipment. The rest of the funding has gone to help create and maintain CINs. Missouri Express is not a grant-funding mechanism. None of the funds were provided to the communities operating the CINs. Instead, the Missouri Express project: provides CINs with equipment and general technical support; operates a reference desk; and covers connection costs to modem pools, local phone line charges, system administration fees and maintenance contract costs.

The state of Iowa has underwritten the construction of the Iowa Communications Network (ICN), a fiber-optic network that extends more than 3,400 miles across the state. The ICN, a \$350 million project nearing completion, provides the telecommunications infrastructure to make educational, medical, and government services more accessible to all Iowans. State ownership of the network has been a source of controversy, prompting some lawmakers to call for the sale of the network or the development of a public-private management partnership. Private telecommunication companies complain that the state-subsidized network unfairly competes for business (Roos 1998). Although investments in infrastructure provide a way to increase access and connectivity, some question the appropriateness of using state and federal funds to contribute to the privately owned telecommunications system (Pigg 1999).

Texas's Telecommunications Infrastructure Fund (TIF) is one of the most significant state-level telecommunications initiatives. Following federal policy, the TIF focuses on connecting schools, libraries, and not-for-profit health-care institutions. As of February 1999, the TIF Board has funded 2,732 projects amounting to \$202.67 million. The majority of TIF grants have been awarded to public school districts.

REDEFINING ACCESS

Access to telecommunication networks and the information transmitted or exchanged through them is not sufficient to narrow the digital divide. If the objective of public policy is to bridge the gap between “haves” and “have nots,” then policy must address the barriers to access more comprehensively. In addition to the high cost of access and the information redlining of rural and low-income communities, the National Community Builders identify four barriers to access in their guide to telecommunication technology: cultural or linguistic inappropriateness of information technology; poor location of access points; lack of adequate training and follow-up support; and uses inconsistent with the needs of the community (NCBN 1997, 8). Rather than focusing primarily on investments in infrastructure/hardware, state and local governments should invest in the development of technology-based programs and information content, building awareness of the importance of technology; and training. Policymakers must understand the role of information in the community and the way in which it is accessed. Further, communities differ in the ways in which they use and access information, and these differences must be recognized and built into policy. We make more specific policy recommendations in chapter 8.