

## Community NETworker Demonstration: Project Narrative

### Executive Summary

This is a Demonstration project intended for the Community-wide primary application area and for the Human Services secondary application area. NCexChange and three statewide partners propose a two-year demonstration of the Community NETworker model (developed through a 1994 TIAP planning grant) in four disadvantaged communities. Locally based Community NETworkers will help nonprofits, local government, and small businesses apply information and communication technologies strategically to solve real-world problems in their communities and achieve their organizational goals.

NETworkers, in cooperation with statewide resource organizations, will demonstrate the value of information infrastructure, build local capacity, promote collaboration, and create a self-sustaining support system. The effectiveness of NETworkers operating in different geographic settings, issue groups, and organizational structures will be evaluated, and the findings disseminated.

### 1. Problem Definition

National leaders are increasingly calling for a shift in public interest telecommunications strategies towards addressing the issue of relevance to real-world problems. For example, IBM CEO Louis Gerstner describes the current challenge as "translating technology into value." Although the national information infrastructure (NII) is growing and becoming more accessible, practical applications that benefit low-wealth communities are elusive. Few community practitioners are online (less than 21% of nonprofits in North Carolina, according to a study by the N.C. Center for Nonprofits), and fewer still are actively networking (only 33% of those connected, according to a survey by NCexChange).

Focus groups conducted in four low-wealth communities during the planning phase of this project confirm the many difficulties that community-based organizations (CBOs), locally based government agencies, and small businesses experience in trying to use the NII in addressing the needs of their communities. They find it hard to grasp its relevance to their work, and they find the technology confusing — often overwhelming. CBOs and local government agencies are wary of the added burden telecommunications might impose on their already overworked staff. They are reluctant to trade-off valuable time to master unfamiliar technology for which they don't see a direct benefit. Few have local access to training and technical support. When they do go online, it is difficult for them to find information that matches their real needs. Perceived cost is also a major barrier and they need help in identifying the most cost effective networking strategies. (Barriers to networking nonprofits are described in greater detail in Appendix H.)

Nonetheless, most community practitioners are intrigued with the potential of networking and are afraid of being left behind. In a 1995 N.C. Rural Center survey, 72% of local governments and 92% of nonprofits said they would use electronic networks if they had the necessary training and support. But that support has been difficult to obtain. Potential local support organizations, such as public libraries and cooperative extension offices, would like to respond, but are still developing their own networking expertise and have little or no experience in training others. Many statewide resource organizations who serve these groups would like to disseminate information electronically, to improve its usefulness and timeliness. However, those experienced with online posting rarely got feedback. And only some of the end user groups are online. These statewide resource organizations need help not only in using online communication tools such as Web pages and listservs but also in evaluating the costs and benefits of these strategies.

NCexChange's six years of experience in public-interest networking confirms the survey results. A major barrier to online participation by CBOs is inadequate consultation, training, and technical support. We believe that connectivity alone will not significantly reduce disparities in access to and use of the NII by low-wealth communities. People who work in and serve those communities must experience first-hand the power of telecommunications to help them discover new resources and ideas, communicate interactively with colleagues, form new collaborations, participate more actively in the development of public policy, and achieve visibility for their efforts.

In this demonstration, Community NETWORKERS (locally based networking ‘helpers’) will assist designated end users (CBOs, locally-based government agencies, and small businesses) employ the resources of the NII to achieve clearly defined mission statements, goals and objectives, or business plans that support community revitalization. The NETWORKER will provide a range of technology support services customized to meet the needs of the users and their community. These include building the capacity of local support organizations to assume NETWORKER functions and providing feedback to thirteen key statewide resource organizations who will provide online information targeted directly to the end users. All participants including end users, local support and statewide resource organizations will measure and document the usefulness of the NII to their work and the value added by the NETWORKER towards achievement of their defined objectives.

## **2. Technical Approach**

We will implement the Community NETWORKER model in four low-wealth communities in North Carolina, incorporating the knowledge and materials developed in our 1994 TIAP planning project. Each demonstration site represents a different geographic setting, type of host organization, and special issue focus: (1) *Greensboro* (urban); host – community networking center; focus – nonprofits, community lending and small business; (2) *Rocky Mount* (small city); host – family resource center; focus – family economic security; (3) *Northeast region: Martin, Washington, Tyrrell, and Beaufort counties* (four-county rural); host – community development corporation; focus – rural economic development; and (4) *Swain County* (one-county rural); host: – cooperative extension office; focus – small farms and small business. (Site locations are shown in Appendix A.)

At each demonstration site, an individual with networking experience and sensitivity to the needs of communities will be hired as a Community NETWORKER and trained to do the following:

- Identify the goals and objectives of each end user and design a communication and information strategy to meet those goals.
- Serve as a networking expert, matching information available on-line with strategic information needs.
- Promote, through demonstrations and site visits, the active use of telecommunications services to address community problems, and help groups integrate networking functions into their ongoing operations.
- Provide training, technical support, and follow-up, directly or through screened volunteers.
- Create and promote opportunities for cross-sector cooperation and collaboration, self-sufficiency, and empowerment within the community.
- Document successes and failures in case-study format and participate in project evaluations.

At each demonstration site, the NETWORKER will recruit as project participants (end users) an average of 15-20 CBOs and local government agencies and 8-12 small businesses. At the four-county rural site, the NETWORKER will operate as a circuit-rider, rotating among different organizations. NETWORKERS will be free to address a wide range of human services and community development issues for end users.

A key feature of this model is that the NETWORKER’s specific activities will be determined locally, in response to community needs identified through a structured process and a local advisory committee. As part of the planning project, a community networking guide containing a self-assessment and guidelines for developing a strategic networking plan is being created to be used in conjunction with the model. It will provide a customized, problem-driven approach to meeting each end user’s human services, community development or business goals. NCexChange will hire and supervise the NETWORKERS at two of the demonstration sites; the NETWORKERS at the other two sites will be hired by the host organizations. NCexChange will train, coordinate activities for, monitor, and evaluate all NETWORKERS.

Throughout the demonstration, NETWORKERS will work to develop a community networking support system by identifying and building the capacity of local support organizations willing to

assume networking functions for their constituencies. At each site, these will include the public library, the cooperative extension office, and the regional field office of the state Division of Community Assistance. Other potential support organizations include community development corporations, community action centers, councils of government, family resource centers, and one-stop career centers. End users also may start as or evolve into local support organizations.

In addition, NCexChange has a commitment from thirteen key statewide resource organizations to participate in a unified information dissemination and feedback system. This strategy requires them to provide online information that meets the specific needs of the project's end users. NCexChange will design a collaborative strategy, provide training, and collect feedback from the NETworkers on the usefulness of the online information.

The project will provide each NETworker with the following equipment: a Pentium-90+ Laptop with color monitor and 16M RAM, a V.34 - 28.8k modem, the Microsoft Office Suite, and an active-matrix LCD projection panel for public demonstrations. In addition, two of the hosts will provide the NETworker with access to a desk model PC system with a minimum configuration of 486DX2- 66, a V.34 - 28.8k modem, and a laser or ink jet printer.

At the Greensboro site, the NETworker will be based in a 10,000-square-foot Community Networking Center, which will serve adults learners, small businesses, and nonprofits. A training facility with 20 work stations (Pentium-120s, 16M RAM, 4x CD-ROMs, and sound cards, with Windows 95 and MS Office) will be developed for use by the NETworker. The workstations will be networked, with a T1 speed access connection to the Internet via the county schools' T3 line. The NETworker will provide networking demos, trainings and hands-on support at this site

Private-sector Internet service providers will provide 60 free SLIP/PPP accounts for NETworkers and participating end users. All of the demonstration sites are in areas with access to the advanced capabilities of the N.C. Information Highway (NCIH) — the most powerful broadband network in the country — and NETworkers will promote the active use of NCIH sites for community-based applications. Participating local support and statewide resource organizations will be required to obtain, at a minimum, SLIP/PPP Internet access and the latest user-friendly HTML (or a successor standard) editing software. Resource organizations and others if interested will receive training in Web page development.

Although this project will not create new infrastructure, NETworkers will actively promote standards of interoperability, scalability, adequate system maintenance, and end user privacy, to the extent that these issues are relevant to infrastructure and/or hardware initiatives by their constituencies.

The NETworkers will be in place three months after the start of the project, the initial training will be completed by the end of the fourth month and work plans for the NETworkers will be established in the eighth month. A mid-point evaluation will be conducted between at the 14 months. A detailed project timeline is provided as Appendix C.

### **3. Ability to Serve as a Model**

The Community NETworker project (previously called the Community Information Broker project) has been one of the first initiatives to address the issue of the relevance of information technology to real-world problems in human services and community development. The proposed demonstration is designed to assess the effectiveness of the NETworker model across a range of community variables, including geographic setting, type of host organization, and issue area. The demonstration will also explore sustainability of the model through local community support of the NETworker, by building the capacity of local support organizations to assume NETworker functions and by assessing the willingness of the end users to engage the NETworker on a fee-for-service basis. The information gained through evaluation of this comprehensive application of the model will facilitate its replication in communities across the U.S.

The Community NETworker concept is already viewed as a model for initiatives by other cutting-edge public-interest telecommunications practitioners. The Morino Institute has incorporated the concept of "net-workers" or technology champions based in large institutions as part of the

Potomac Knowledgeway project. The Southern Rural Development Initiative has proposed to U.S. Department of Agriculture that a version of the NETworker be placed in two rural sites in the Southeast. Charles Saxe, technology consultant to the Neighborhood Housing Services programs in Chicago, is interested in applying the model to inner-city neighborhoods. National organizations such as the Center for Policy Alternatives (CPA) and OMB Watch are interested in the NETworker approach and are well positioned to promote the model once it has been successfully demonstrated. CPA will provide support in the development of a sustainability plan. Letters of support from these practitioners and organizations are provided as Appendix I.

#### **4. Applicant Qualifications**

NCexChange is leading the Community NETworker planning project (which will be completed by mid July 1996) and will continue to coordinate implementation of the model in the demonstration project. NCexChange was launched in 1990 by the N.C. Rural Economic Development Center as part of the Ford Foundation-sponsored Rural Telecommunications Initiative and is now a program of the N.C. Client and Community Development Center. The Client Center is known statewide and nationally for its support strategies and technical assistance projects that empower low- and moderate-income and minority communities, organizations, and individuals.

NCexChange was the nation's first statewide nonprofit telecommunications project. Our six years of pioneering experience in networking nonprofits throughout North Carolina has given us unparalleled practical knowledge of the special needs of community-based organizations in applying information technologies. NCexChange's strong relationships with numerous statewide agencies and nonprofit resource organizations has enabled us to recruit them as key players in this demonstration.

Terry Grunwald, who has guided NCexChange from its inception, created the Community NETworker model and will direct the demonstration. Ms. Grunwald serves on the Governor's Policy Committee for the NCIH and has presented workshops on nonprofit networking and the Community NETworker model around the U.S. and internationally.

#### **5. Partnerships and Community Support**

NCexChange will work with three operating partners, four local host organizations, 13 statewide resource organizations, two ISPs, and eight key organizations and individuals willing to contribute training, evaluation, and other consultation.

##### **Partners**

The N.C.-based *Center for Community Self-Help* is the largest nonprofit development bank in the U.S. Self-Help has developed five non-profit and small-business incubators across the state, and it provides financial and management services to small businesses underserved by traditional lenders, including minority-owned, women-owned, and rural businesses. It is developing the visionary Community Networking Center in its Greensboro Self-Help Center, where the NETworker will be based. Self-Help will continue to advise on the application of the model to small businesses.

*The N.C. Department of Commerce's Division of Community Assistance (DCA)* operates regional field offices whose mission is to provide N.C. counties, municipalities, and CBOs with technical assistance for community development. DCA and its regional offices are committed to integrating information technology into innovative strategies for community capacity-building and economic empowerment, in implementing the state's Strategic Economic Development Plan. DCA also is co-facilitating the state's Community Resource Information Service project. DCA will continue to advise on the application of the model to local governments, and four DCA regional field offices will provide back-up support to the NETworkers.

*The N.C. Cooperative Extension Service*, operated by the N.C. State University College of Agriculture and Life Sciences, offers a broad range of programs for rural revitalization. They will evaluate the applicability of the model to a new role for extension agents and will help coordinate model implementation at the Swain County demonstration site.

**Demonstration Sites.** *Greensboro* (urban): Greensboro Credit Union, in addition to its community lending functions, owns and operates the Self-Help Building, which houses 20 nonprofits and the Greensboro Community Networking Center. *Rocky Mount* (small city): The Down East Partnership for Children, one of the Governor's innovative Smart Start organizations, funds and coordinates 52 projects designed to deliver quality services to family and children and to promote family economic security in the region. *Northeast region* (four-county rural): The Bertie, Martin, Washington Community Development Corporation is a grassroots collaborative that is nurturing eight emerging CBOs in its region. The CDC is building 40 units of affordable housing and provides a variety of human services to its rural constituency. *Swain County* (one-county rural): The Swain County Cooperative Extension Office is co-located with Southwestern Community College, which is opening a state-of-the-art technology facility in May 1996. They will focus the efforts of the NETworker towards small businesses, including farmers. A NETworker has already been designated and will be in place at the start of the project.

**Statewide Resource Organizations.** The following statewide resource organizations have agreed to participate in an information dissemination and feedback system: N.C. Department of Human Resources, Office of Economic Opportunity; N.C. Association of County Commissioners; N.C. League of Municipalities; N.C. Low Income Housing Coalition; N.C. Child Advocacy Institute; N.C. Community Development Initiative; N.C. Institute of Minority Economic Development; N.C. Association of Community Development Corporations; N.C. Equity; N.C. Center for Nonprofits; N.C. Rural Economic Development Center; N.C. Budget and Tax Center; Community Reinvestment Association of North Carolina; and the N.C. Fair Housing Center. These organizations will design an information strategy for their constituents, post and maintain information online, and modify the information based on feedback from NETworkers and demonstration project end users.

**Internet access** for participating CBOs will be provided by two private-sector ISPs, CoastalNet (40 accounts in eastern N.C.) and Interpath (20 accounts in Greensboro). The N.C. Cooperative Extension Service will provide Internet access for the Swain County NETworker.

**Other Advisors** include the Aspen Institute's Rural Economic Policy Program (D.C.) on rural development, the N.C. State Library, Greensboro and Braswell (Rocky Mount) Public Libraries on library services, and the N.C. Institute of Government on local government. Trainers in addition to NCexChange and its partners will include Irvin Henderson Associates, an expert on community economic development, who will serve as lead trainer, the staff of Charlotte's Web on Internet tools and Web development, the N.C. Institute of Government on online research techniques, and Ed Hickey, a community reinvestment mapping specialist on geographic information systems. NETworkers may also receive consultation on GIS mapping projects to demonstrate the needs of their community. Michael Hawthorne, Ph.D., professor of political science at Pembroke State University (Lumberton, NC), will continue as evaluation consultant.

## **6. Support for End Users**

Customized support for end users (CBOs, locally based government agencies, and minority- and women-owned small businesses in disadvantaged communities) is the primary purpose of this demonstration project, as described in Sections 1 and 2. End user needs have been identified in NCexChange's 1993 survey of networked nonprofits and in a series of focus groups conducted during the planning project. At each demonstration site, a representative sample of members of the end-user organizations will serve on a local project advisory committee, along with potential local support organizations. The NETworker will work first with each end user to define organizational information and communication goals and then with the committee to define community information and communication goals. This profile will be used to create a customized work plan for the NETworker's activities. The NETworker will make every effort to deliver tangible benefits of telecommunications to the end user: demonstrations, training, technical assistance, handholding, cheerleading, etc. If the NETworker is unable to respond directly to technical questions, they may identify, screen, and assign local volunteers to work with the end user. Although based at one host site, the NETworker may make his or her services available at a variety of locations in the community on a pre-arranged schedule.

## **7. Evaluation and Dissemination**

Project evaluation will be directed by Michael Hawthorne, with major input from the N.C. Cooperative Extension Service. The evaluation will measure the model's effects on the capacity of the end users, local support organizations, and statewide resource organizations to use telecommunications effectively to achieve well-defined goals. The NETworker will work with each end user to formulate specific goals for the demonstration, based on its mission statement or business plan. Such goals may include access to new information on community development resources and management tools, better internal and external communication, increased collaboration, improved service delivery, more effective community problem-solving, or increased visibility of end user and the community.

Surveys will be administered at the beginning, midpoint, and conclusion of the demonstration. End users will be surveyed to determine (1) current telecommunications usage and perceived barriers, (2) awareness of online information and resources, (3) perceived ability to access, assess, and effectively use online tools for community development, either directly or indirectly, (4) knowledge of and willingness to engage in online communication and collaboration for community development, and (5) willingness to pay for the services of a NETworker. Local support organizations will be surveyed to assess their capacity to assume NETworker functions within the community. Statewide resource organizations will be surveyed to assess the importance of telecommunications in disseminating information and providing technical assistance to constituents statewide. The effects of variations in geographic setting, host organization, and issue focus will be analyzed.

A premise of the model is that improved use of online resources can cause a conceptual leap, resulting in recognition of new needs for information and communication. Periodic interviews with end users will provide insight into how the NETworker is affecting their awareness and goals. Feedback from surveys and interviews will be provided to the statewide resource organizations. NETworkers also will be interviewed to measure the responses of the statewide resource organizations to changing information usage. Interviews and contextual data will provide a rich and detailed understanding of how implementation of the model is proceeding and will indicate adjustments that could be made during the demonstration.

NETworkers will compile case studies documenting their achievements and difficulties experienced. These case studies will provide insight into the extent to which technology can be used to solve community problems and will aid in identification of possible refinements in the model. NCexChange will compile, publish, and disseminate the case studies. All strategies, lessons learned, evaluation results, guides, and tools developed will be made available on a World Wide Web site and/or gopher site.

## **8. Reducing Disparities in Access To and Use Of the NII**

The core goal of this demonstration is to reduce disparities in access to the NII in disadvantaged communities by providing support for the key organizations involved in human services and community development (as described in Sections 1 and 2). All four demonstration sites are in underserved areas with significant rural, minority, and/or low-income populations, where the services of a NETworker will be valuable in extending the benefits of the NII. Three of the sites serve rural populations. One site (Rocky Mount) is an Enterprise Community and two (Greensboro and the Northeast region) are federally designated Champion Communities. The fourth site (Swain County) has the highest poverty rate in western N.C. and the fifth-highest unemployment rate in N.C. A demographic profile of each site is provided as Appendix G.

Reducing disparities in access to the NII also means providing options by which those organizations not yet "ready to network" — those who do not have the hardware, skills, or interest to directly access information and communications opportunities available through electronic networks — can benefit from the NII. NETworkers will extend the reach of electronic information sources to "non-linked" entities in their communities.