

Acting Locally: Resource Sharing Through a Community Network

by Pat Ryckman

"Think globally, act locally" the bumper stickers exhort us.

Community networks offer a dynamic model for local resource sharing.

So... now we have the Internet and we can share resources worldwide. Instead of waiting weeks for an interlibrary loan request to bear fruit, we can download a dissertation from a university in Australia in a matter of minutes. We can enjoy an exhibit at the Louvre, study photographs of Mars, review recent U.S. Supreme Court decisions — all with just a few keystrokes.

But what about that report from our own city hall, just half a mile across town? And what about the minutes of the last school board meeting, the local job listings, the schedule for the community concert series, the city ordinance on barking dogs? Are these available right on our desktop? In all likelihood the current temperature in Maui is more readily available than any of these, thanks to the Internet. Building and organizing comprehensive collections of local information — local government documents, annual reports of local businesses, local directories, calendars of events — has always been a difficult and time consuming task. Yet it is these local

resources that are the more important to our daily lives. We may be interested in following the Iditarod sled dog races, but what we care about most deeply is the zoning change request by our neighbor down the road — can he really be planning to operate a hog farm!?

Today more and more libraries are acting globally, making the resources of the Internet available to their patrons. But many more libraries need to be acting locally — working to assure electronic access to the valuable resources within their own communities.

A powerful tool for providing access to these local resources is the commu-

nity network (also known as a Free-Net). The community networking movement traces its roots to the bulletin board services or BBSs developed in the late 1970s. The first true community network — with free open access to community-wide information — was the Cleveland Free-Net, begun at Case Western University in 1986 by Dr. Tom Grundner. Since that time, dozens of community networks have been launched around the country. The first community network to be established in North Carolina was the Fayetteville Area Community Telecommunications System (F-A-C-T-S) providing public dial-in access to city and county government information, job listings, and discussion groups. Organizing committees are currently working to establish community networks for the Research Triangle area, Winston-Salem, Greenville, and Wilmington, and the Mountain Area Information Network is under development to serve Western North Carolina.

Typically, community networks will provide access to electronic collections of resources using modems and phone lines.



Visitors to the Virtual Library, PLCMC's community computer lab located at the Main Library, can access Charlotte's Web resources on any of the 16 public access terminals.

Seven Reasons to Develop a Community Network for Sharing Local Resources

1. **Access.** Unlike the library, community networks can operate 24 hours a day, 365 days a year. The information is available from any computer equipped with a modem or Internet connection. No need for patrons to drive to a library branch and find a parking place; no need to maneuver a wheelchair down an aisle. No need for the Library to duplicate resources at several branch locations.
2. **Free Labor.** A community network seems to attract a special class of volunteers, dedicated to the concept of electronic communities and bringing with them a high level of useful skills.
3. **Economy.** Although a large system with three or four paid staff might cost between \$200,000 and \$300,000 a year to operate, a community network is very scalable. A basic service using volunteer labor, a 486 computer and a couple of dial-in lines can still offer a wealth of information to a small community.
4. **Timeliness.** Information on a community network can be updated and kept current much easier than information in print form. A report on crime statistics can be uploaded by the police department as soon as compiled, long before the print version is typeset, printed, mailed, cataloged, and shelved.
5. **Depth and Breadth.** Large files are not a problem. While a print directory of local civic organizations might be limited to basic information of address, phone number, and contact person, because of space considerations, in the computer, we can store detailed information on the history of the organization, services, annual reports, calendars of events, and even leave e-mail for the contact person.
6. **Distributed workload.** Each information provider in the community uploads and manages its own information in the system, giving each a stake in the project.
7. **Equity.** Every information seeker is equal. A community network — if it provides sufficient and well-located public access points — can level the playing field for all community members. It is the on-ramp to the Information Highway for those without access to computers at school, home, or business.

Many also provide public terminals for those citizens lacking home computers. Because each community network reflects its own community's interests, values and concerns, each is unique. But their offerings often include information about local government, educational opportunities, civic organizations, and health and human services. They may provide calendars of community events, access to library catalogs, and online forums. Community networks can put citizens in touch with each other and with their local govern-

ment by offering electronic mail and sponsoring on-line forums.

Community networks are built by many hands, and strong community partnerships are essential to their success. Each information provider in the community must supply and maintain its own portion of the network, uploading, editing, and updating the information as necessary.

Although most community networks are grassroots in origin, many maintain strong ties with their local libraries. And in some cases, libraries — public, school, and academic — have taken a leadership role in developing a network for their community. This is a most appropriate role for an institution charged with collecting, organizing, and providing access to information and educational resources to play.

For the past two years, the Public Library of Charlotte and Mecklenburg County has led the development of *Charlotte's Web*, a free access community network for Mecklenburg and its neighboring North and South Carolina counties. As the system grows in information, services, and community partnerships, it has become an increasingly important tool for local resource sharing. By playing an active role in the development of *Charlotte's Web*, the Library has been better able to fulfill its mission of excellent service to the community.

Weaving the Web: A Brief History of *Charlotte's Web*

In the spring of 1993, a committee of citizens approached the library asking for help in developing a community network for the Charlotte area. Library Director Bob Cannon was very open to the idea. He was already using technology on several fronts to enhance library service and he immediately saw the potential for local resource sharing which a community networking project represented. He offered the Library's support and assigned a staff member to help the

citizens group in their efforts.

In September 1993, the Library hosted a town meeting to assess community interest in developing a network for the Charlotte area, and over eighty citizens packed the auditorium. Many of these signed on as volunteers and are still active in the project today.

By the winter, we were recruiting institutional partners and investigating funding sources. The Library applied for three grants to support *Charlotte's Web*. Two grant proposals were for funds for general support: one to the Corporation for Public Broadcasting and one to the Telecommunications and Information Infrastructure Assistance Program (TIIAP) of the National Telecommunications and Information Administration (NTIA). A third application requested funding from the National Library of Medicine to support development of electronic HIV/AIDS information resources. For each of these grants, we established strong partnerships with other community organizations and obtained pledges of support to meet local matching fund requirements.

In the spring of 1994, the Library purchased an 80486 computer with 16MB RAM and five modems, and installed phone lines for the use of *Charlotte's Web*. By Memorial Day, volunteers had a small gopher system online and open for business. With this development system we were able to offer a sampling of the kinds of resources a full-scale network could provide. Volunteers used the system as an educational tool as they met with community groups and potential information providers to develop support for the project.

By September of 1994, when we received news of \$475,000 in grant awards from the NTIA and the National Library of Medicine, *Charlotte's Web* was ready for expansion. We had a solid volunteer structure, office space at the Main Library, a growing gopher, and name recognition throughout the community. Using grant funds, the Library hired three staff for the *Web* — a project director, a systems administrator, and a volunteer coordinator, all of whom had played an active role as volunteers in the early stages of the project. With the delivery of two new Sun Sparc20 computers, we were ready to tackle the job of weaving a full-service, user-friendly, resource-rich community network for our area.

Charlotte's Web Today

Ten months into the first funded year of the project, *Charlotte's Web* has begun to fulfill its potential for local resource

sharing. Over forty-two megabytes of information are now available to the public from a wide variety of information providers, including local government, arts organizations, public schools and universities, the Chamber of Commerce, HIV/AIDS agencies, and the Employment Security Commission. The gopher structure has been replaced by a World Wide Web interface. The system receives an average 4,500 guest logins each month and 1,200 files are transferred daily over 12 phone lines and the Internet.

Dialing into *Charlotte's Web*, citizens can find a job, take a class on the Internet, visit an online art museum, view and download historical photographs, check the status of local road construction, and get to know the candidates before the school board elections. They can also leave comments and suggestions for *Charlotte's Web* staff, continuing our tradition of grassroots involvement.

A fifteen-member Advisory Board, made up of representatives from partner organizations, the major information providers, and citizens, is charged with developing policies on issues such as acceptable use, content, and commercial involvement. Policy drafts are also posted on *Charlotte's Web* to encourage input from users.

Volunteers have continued to make significant contributions to the project. During the April-June quarter, 221 volunteers worked 1,993 hours, an estimated value of \$41,750. The volunteer organizational structure has become increasingly complex to handle the changing work of the project. Volunteer committees now include HTML Authoring, Publicity, Clerical Support, Technical Support, Content Review, Speakers Bureau, Information Providers, File Management, Training, and UNIX System Programmers.

By the end of July, *Charlotte's Web* was accessible from sixty public access terminals across the service area including public library branches, neighborhood centers, health organizations and homeless shelters. Citizens could also access the system from twenty-seven public schools, area colleges and universities, homes, and businesses.

As more citizens have gained access and more resources and services have become available, success stories have begun to roll in — stories that show the Web to have a growing impact on people's lives. We've heard from successful job seekers who first learned of their positions through *Charlotte's Web's* job listings files. We've had e-mail from a resident of the Uptown Men's Shelter who used the *Web* to get registration information on classes at the community college. We've seen children living in one of *Charlotte's* poorest inner city housing developments, expanding their horizons by exploring the world graphically via the World Wide Web.

The weaving of *Charlotte's Web* hasn't been flawless. Snags have developed as they would in any project of this complexity and rapid growth rate. We've had to face difficult issues of appropriate use of the system, censorship, and the need for ongoing financial support. But the Library's support and sponsorship of the project has already paid off in better access to local resources for our community.

Learning More About Community Networking

The best way to learn more about community networking is to pay a visit to some of the systems now available around the world.

- The *WWW Virtual Library's Community Networks* page located at http://www.rmsd.com/comnet/wwwv1_commnet.html will lead you to over sixty sites in the United States and six other countries.
- *Freenets and Community Networks*, presented by Peter Scott at the University of Saskatchewan (<http://duke.usask.ca/~scott/pfree.html>), offers tours via gopher and telnet as well as the World Wide Web. In addition, Scott provides links to a wide range of community networking information, including conferences, mailing lists, newsletters, and archives.
- *Community Networking Resources* was created by Professor Joan C. Durrance and students in the School of Information and Library Studies at the University of Michigan (<http://141.211.203.30/Community/Community.html#item1>). Guides offer suggestions for the types of information to provide in a community network and provide links to selected examples at existing systems.

Two organizations which provide information and assistance to developing community networks are:

- The Morino Institute works to empower people to improve their lives and their communities using interactive communications. The Institute maintains a directory of public access networks and a library of related documents at <http://www.cais.com/morino>.
- The National Public Telecomputing Network (<http://nptn.org/>) helps local volunteers organize to develop community networks, and provides professional services and programming to those systems which choose to become affiliates.

Community networking is still a rather new development, but more research is becoming available over the Internet:

- Doug Schuler's *Community Computer Networks Survey* results are available at <http://www.cs.washington.edu/research/community-networks>. These surveys provide data for comparing organizational structure, services, funding, and policies of over thirty diverse systems.
- *Communities On-line: Community-Based Computer Networks* (<http://alberti.mit.edu/arch/4.207/anneb/thesis/toc.html>) is a master's thesis by Anne Beamish (Department of Urban Studies and Planning, Massachusetts Institute of Technology, February 1995). She provides a thorough overview of the community networking movement and addresses issues of sustainability, commercial involvement, and evaluation.

For information on grants available for community networking, check out the Telecommunications and Information Infrastructure Assistance Program (TIIAP) home page at the National Telecommunications and Information Administration (NTIA). It's located at <http://www.ntia.doc.gov/tiiap/tiiap.html> and also provides information about and links to currently funded projects.

Electronic mailing lists are a great way to be in touch with others involved in community networking activities. Art McGee's list of community and rural electronic mailing lists is available by anonymous FTP from <ftp://netcom.com> (in directory [pub/amcgee/community](ftp://netcom.com/pub/amcgee/community)).

Finally, plan to visit *Charlotte's Web* at <http://www.charweb.org>. As an NTIA demonstration project, we serve as a model for other communities working to develop networks and are more than happy to answer your questions.