

Pennsylvania Low Income Housing Coalition – Final Consulting Report
Student Consultant, Nate Borrebach
Community Partner, Craig Stevens

I. Context Analysis

Organization:

Since 1985 the Pennsylvania Low Income Housing Coalition (the Coalition) has advocated for increased affordable housing resources on a statewide level. Its mission is to ensure that all Pennsylvanians, particularly those who are low-income, have access to decent, safe, accessible and affordable housing.

The Coalition is a 501 (c) (4) corporation with over two hundred members. Coalition members created the Pennsylvania Low Income Housing Corporation, a 501 (c) (3) corporation that carries out the Coalition's policy research, education, and information dissemination activities. It operates two offices: A main administrative office in Glenside (outside Philadelphia) and a Western Pennsylvania office in Pittsburgh. The Coalition's statewide Board of Directors consists of thirty members representing diverse housing communities throughout Pennsylvania. The organization operates on a total yearly budget of approximately \$420,000.

Programs

The Coalition takes a grassroots approach to housing advocacy, focusing on the following programs:

- Disseminating information about affordable housing issues to members and others through a variety of means, including a quarterly newsletter, periodic special reports, electronic mail, and a website.
- Gathering information on state and federal housing program activities in order to monitor changes and difficulties in programs and to form a basis for legislative and regulatory reform.
- Performing original policy research.
- Leading and participating in state and federal advocacy efforts.
- Initiating a limited number of demonstration projects.

Ultimately, the Coalition aims to advocate for affordable housing at a statewide, rather than a local or regional, level. Program information is currently available at <http://www.palihc.org/mission.htm>.

Staff

The Coalition currently employs three full-time staff members:

- An Executive Director, Elizabeth G. Hersh, in Glenside.
- A Western Pennsylvania Coordinator, Craig Stevens, in Pittsburgh.
- A Tenant Organizer, Ronell Guy, in Pittsburgh.

Mr. Stevens is the Community Partner (CP) for this partnership. His duties include coalition building and grassroots advocacy in Western Pennsylvania; managing the activities of the Pittsburgh office; keeping receipts and expense records and communicating that information to the Glenside office; and processing information and documents.

Ms. Guy's duties focus predominantly on contacting and organizing local tenant groups and handling outreach activities. Clerical duties such as answering the telephone often fall to her as well.

Technical Environment

The Western Pennsylvania office actively uses four PCs, three of which run Windows 98 and one of which runs Windows 2000. Two of the machines have 100 MB ZIP drives. In addition there is a multifunction fax/scanner/copier that is being used as a standalone fax machine only.

Each of the active PCs is connected to a Verizon DSL line via Ethernet cable and a router. The DSL modem is connected to the phone line through Ms. Guy's Gateway computer. At the beginning of the partnership, Mr. Stevens primarily used a free e-mail account provided by the National Business Association. Ms. Guy used a free web-based e-mail service.

Technology Management

The Coalition performs repairs or upgrades to its computer or communications technology on an as needed basis with little advance planning. The Glenside office hired a consultant, Jay Mitlas, to assist the staff in correcting computer problems and upgrading the office's electronic communications.

For the purposes of basic computer consulting and troubleshooting, the Coalition has recently employed Bob Luczak as a consultant to assist with computer and network upgrades. Mr. Luczak has been available to the office for spot assistance but with no plan to continue paying him as a consultant. The Western Pennsylvania office's computers had anti-virus software installed but not all were set to regularly download new virus definitions or perform system scans.

Technology Planning

Thus far the Coalition has not developed an explicit written plan or budget for its technology. Since its inception in 1985, and particularly within the past two years, the Coalition has operated on a limited budget and as such has tended somewhat to view computer technology as a "creature comfort," more ancillary to fulfilling the organization's mission than directly important. Given the centrality of handling information to the Coalition's program and the potential of modern telecommunications, Mr. Stevens expressed a strong interest in implementing a solid technology plan, in particular in identifying and obtaining dedicated technical funding.

Internal and External Communications

Day-to-day communications with Coalition members in the region (and in some cases statewide) are handled by phone, e-mail, fax, and regular mail. Tenant organizations and contacts in the Pittsburgh area are reached predominantly via phone, mail, or in person. The Glenside office generates and distributes all statewide information and advocacy bulletins by e-mail, fax and mail.

Communication with the Glenside office is essentially external in nature, as there is no intranet or file-sharing system in place between the offices. Documents produced in Glenside are e-mailed or faxed to the Pittsburgh office. Communication within the Western Pennsylvania office between Mr. Stevens and Ms. Guy is predominantly verbal, though written memos and wall planners and calendars are also employed.

Information Management

Mr. Stevens keeps records within the Pittsburgh office primarily in hard copy for easier review and sharing with staff and colleagues. The paper files are stored in cabinets, binders on shelves, or small piles on and around Mr. Stevens' desk and take up a large amount of space. Electronic files have been stored on computer hard drives and on a number of 1.44 MB floppy disks. The existence, age, and location of these electronic backups are not tracked. Mr. Stevens expressed a desire to move towards a less paper-heavy record keeping system.

Paper and electronic files are organized so that individual staff members can access them. However, no centralized system exists such that any present or future staff member or volunteer can easily reach particular records or information.

The Coalition's administrative and budgetary documents are primarily managed by the Glenside office, as well as the website and a mailing list of members and concerned organizations. Mr. Stevens does not have direct access to these files over a computer network, so his management of these records is indirect: For instance, if he wishes to add new contacts to the mailing list, he sends his information to the Glenside office, where the list is updated at some point and submitted back to Mr. Stevens.

Consulting Task 1: Improve communications to and from Pittsburgh office (Standardize E-mail systems)

Configured consistent e-mail accounts for the Pittsburgh office staff. Developed better understanding and management of the accounts.

The following approach was taken:

- Select primary and, if necessary, backup e-mail systems.
- Contact the e-mail service provider to create an appropriate number of new accounts.
- Familiarize the CP with the structure of the e-mail system and with software.
- Generate a definitive address book file based on multiple old address books.

This task addressed these problems with the Coalition:

Prior to the beginning of the partnership, a total of four different e-mail systems were in use in the office. The CP and Tenant Organizer used different primary e-mail systems. The CP was not sure which e-mail address was displayed in the "From" field of his outgoing messages. Address book files, used to store mailing lists of recipients interested in different kinds of information, were not shared between the staff.

These problems impacted the organization's mission in the following ways:

- Because the Western Pennsylvania office's e-mail contact information is inconsistent and unclear, the effectiveness and professionalism of communication with other groups is diminished.
- The extra time and effort required of the CP and Tenant Organizer to pass information clearly between them or determine the recipients of an e-mail message detracts from their directly mission-critical work.

The intended effects on the organization are:

- *Programs.* The Coalition's communications will be more efficient and effective, strengthening its advocacy efforts and its ability to inform other groups about Pennsylvania or federal housing issues.
- *Technical Environment.* The e-mail systems in use in the Western Pennsylvania office will be properly configured and, because both staff will use the same system, easier to troubleshoot when problems arise.
- *Technology Management.* The CP will configure or reconfigure e-mail accounts as the office's needs change. He will demonstrate understanding of basic issues about the software, address book management, and e-mail forwarding by articulating this information to present staff members or the Student Consultant.

- *Internal and External Communications.* The Coalition will more efficiently transmit information pertaining to its advocacy, outreach, and research efforts and more consistently identify itself as the source of this information.
- *Information Management.* The CP and Tenant Organizer will use e-mail to forward documents and confirm scheduling as necessary.

Consulting Task 2: Make documents accessible (Centralize electronic file storage)

Created a file-sharing system within the Pittsburgh office, as well as procedures for managing file sharing and backups. Collected information pertinent to the creation of an inter-office file sharing system.

The following approach was taken:

- Coordinate with the Western Pennsylvania office's computer consultant, Bob Luczak, to complete the configuration of a peer-to-peer network between four office PCs.
- Determine the location and desired accessibility of shared content.
- Familiarize the staff with basic concepts of the network (for example, on which computer files are actually located) and potential problems (for example, overwriting a more current version of a document on another computer.)
- Determine a plan for updating and managing shared content.
- Secure at least two ZIP disks to be used for backups of critical documents. Schedule backups to be performed regularly by the CP at appropriate intervals.
- Configure anti-virus software for all office PCs. If necessary, obtain new software and/or virus definition licenses. Set automatic virus protection and regular virus definition updates.
- Open a line of communication with the Glenside office to discuss possibilities for file sharing between the Coalition's two offices, such as implementing a virtual private network (VPN).

This task addressed these problems with the Coalition:

Documents were initially stored and backed up as hard copies or on floppy disks in a manner not universally accessible by all staff members. This inconvenient storage method detracted from the staff's time. Some files, in particular e-mail address books, were reproduced locally on each machine rather than managed centrally. Electronic documents were susceptible to loss, accidental deletion, and file corruption; files important to the day-to-day work of the Pittsburgh office, such as the CP's e-mail address book, would be costly and time-consuming to recreate.

These problems impacted the organization's mission in the following ways:

- A sudden loss of files, brought on by a computer virus infection, hard drive failure, building fire, or other emergency, could force a costly effort to recreate important documents. Information specific to the Western Pennsylvania office, such as the CP's mailing lists or budgetary information, could be particularly difficult to recover.
- Finding and producing up-to-date versions of documents would have required extra time or redundant work, detracting from the staff's ability to do more mission-critical work.
- The lack of effective technical coordination between the Pittsburgh and Glenside offices prevents the Coalition from fully functioning at a statewide, rather than a regional, level.

The intended effects on the organization are:

- *Organization.* The Coalition, in planning a coordinated effort to introduce inter-office file sharing, will begin to function more as a single organization.

- *Technical Environment.* Documents and printers will be accessible from any of the four networked office PCs. Documents and computer systems will be more reliable and safe.
- *Technology Management.* The Pittsburgh office's PCs will be scanned regularly for computer viruses under the supervision of the CP.
- *Technology Planning.* The CP and ED will explicitly state the Coalition's organization-wide technology goals for the near future.
- *Internal and External Communications.* Sharing and/or regularly updating e-mail address books through the file-sharing system will make the Western Pennsylvania office's electronic communication easier and more effective.
- *Information Management.* The CP will know where important files are stored on computer hard drives and will regularly back them up onto ZIP disks.

Consulting Task 3: Identify potential sources of future technology resources.

Using online and library resources, identified potential types and sources of technology resources that can be pursued by the Pittsburgh office or the entire Coalition.

The following approach was taken:

- Research different kinds of technology resources, including funding, volunteer maintenance or training, and further student partnerships/ internships, and organizations that make these resources available to nonprofits.
- Outline new technology initiatives or technology-based programs that can be used to attract funding. Apply these ideas to a request to the Fall 2002 Grants Pool of the Progressive Technologies Project (PTP).
- Incorporate research and ideas into the student consultant's final report.

This task addressed these problems with the Coalition:

The Coalition currently operates on a tight budget and limited funding has been sought or budgeted explicitly for technology needs. The CP and ED provide equipment, maintenance, and training on an as-needed basis. Due to the lack of available resources, the Coalition's leadership is unable to deeply consider new applications of technology to the organization's mission.

These problems impacted the organization's mission in the following ways:

- The Coalition has not dedicated sufficient staff time and training to the active pursuit of new uses of computer and communications technology that could expand its programs and increase the organization's ability to fulfill its mission.
- The Coalition's current equipment and software are not being maximally applied to its advocacy and outreach programs due to a lack of staff training.

The intended effects on the organization are:

- *Organization.* The Coalition will actively attempt to secure funding for its current and future technology costs.
- *Technology Management.* The CP will be able to describe the Western Pennsylvania office's current technology needs and be prepared to seek resources to provide maintenance, training, and new equipment.

- *Technology Planning.* The organization will have identified one or two feasible expansions of their technology uses and pursue resources to cover its present and future needs.

II. Outcomes and Recommendations

Results of Consulting Work

Task 1: Standardize e-mail systems used within Pittsburgh office.

Four consistent e-mail accounts were configured for use by the Coalition's Western Pennsylvania staff. The consultant and CP worked to institute better management and understanding of the accounts.

The following outcomes were achieved:

- Four e-mail accounts, provided under the Coalition's existing Verizon DSL service, were configured.
- The CP set up Microsoft Outlook Express (OE) on an office PC to use his e-mail account, created a signature to be affixed to outgoing messages, associated different accounts with different OE 'identities' on the same machine, and imported and exported his address book file.
- The CP assembled a single, comprehensive e-mail address book based on contacts stored in multiple address books stored on his hard drive and on floppy disks.

Before the consulting partnership, the CP was dividing his e-mail usage between two primary accounts. The Tenant Organizer relied solely on a free web-based e-mail service. Additional e-mail accounts available through Verizon were not being used for staff or for general contact information. The CP's full list of e-mail contacts, which he has built up over five years as Western Pennsylvania Coordinator, was not fully utilized.

Although the CP has demonstrated the setup and use of his account in OE, the Tenant Organizer has not yet moved over to a Verizon e-mail account from her web-based service. Thus the full standardization of the Coalition's e-mail usage will depend on the comfort of all staff with the newly configured accounts.

The more consistent appearance and contact information provided by more consistent e-mail usage will result in more effective electronic communications with both policymakers and the Coalition's constituents. The consolidated e-mail address book will cut down on the CP's time needed to look up contact information or target groups of recipients, reducing redundant work and freeing him to spend more time on directly mission-critical tasks.

This is a sustainable outcome. The CP has demonstrated his ability to perform basic setup and configuration of e-mail accounts and OE software within the office, showing that in the future he will be able to assist new staff members in initializing their accounts, modify existing accounts, or help transition the office over to a new service while still using OE. In addition, the CP has utilized both Verizon's telephone and web-based technical support, included with the DSL package, which he can draw on to perform necessary troubleshooting or changes.

In one regard, this task is only a technological "baby step," bolstering the Coalition's current technology practices without directly informing its mission. However, it addresses the importance of e-mail to the Coalition's advocacy and outreach programs in addition to more direct means of communication, such as the telephone, which are particularly central to the Western Pennsylvania office's tenant outreach work.

This basic improvement in the effectiveness in the Coalition's e-mail usage can encourage more and better electronic communications in the future, particularly in the Coalition's efforts to act more consistently on a statewide level. Any change in approach to the Coalition's communications suggests a change in how the organization fulfills its mission.

Recommendations

The CP should instruct the Tenant Organizer in performing basic tasks in Outlook Explorer, most importantly:

- Importing, modifying, saving, and exporting e-mail address books.
- Composing a signature, including title and contact information, to be affixed to outgoing mail.
- Creating a new identity in OE and configuring an e-mail account to be associated with it.

Moving to fully standardize e-mail usage among all Pittsburgh staff will demonstrate more consistency and professionalism and help increase the Coalition's visibility through its staff's electronic communications. Also, OE is a faster and more powerful e-mail tool than web-based systems and provides time- and work-saving features such as using address books and mailing lists and easily saving or storing important messages.

The CP has discussed the possibility of instructing Western Pennsylvania tenant representatives in basic e-mail usage with the student consultant. Aiding the Coalition's constituents in taking advantage of computer resources in their communities (such as in libraries) would introduce them to a potentially very broad and powerful communications tool, helping to open another channel of communication not only with the Coalition but also with other tenants, organizations, and state housing policymakers.

Preparing and offering any e-mail education program for Pittsburgh-area tenants could be time-consuming or otherwise costly. The CP and Tenant Organizer should determine the priority of such an effort within the Coalition's tenant outreach programs and statewide mission and act accordingly.

The following steps can be taken to carry out these recommendations:

- The CP should compose a short written list or document to serve as a basic guide to using e-mail for present and future Coalition staff members.
- The Tenant Organizer should follow this document as an introduction to the office's current e-mail account setup. She and the CP should then work together to edit the document as needed.
- The document can serve as a model for a similar document, focused on available community e-mail and Internet resources, to be provided to tenant representatives and/or housing consumers as part of an electronic communications outreach program. Such training by Coalition staff can be small in scale and geared towards basic but crucial web-browsing and e-mail usage.

The following Internet resources will be helpful in documenting and troubleshooting the Coalition's current e-mail setup:

- <http://onlinehelp.verizon.net> is Verizon's web-based configuration and troubleshooting guide. Information on how exactly to configure the Coalition's e-mail software to access its current Verizon accounts can be found here.
- <http://email.about.com/cs/oetipstricks/> offers many links to easy-to-read instructions for a variety of tasks in OE, such as creating signatures and filtering out spam.
- <http://insideoe.tomsterdam.com/> provides basic, user-friendly OE information as well as a substantial list of links to other technical support sites.
- <http://support.microsoft.com> offers a searchable Knowledge Base pertaining to all Microsoft products. Documentation here tends to be arcane, highly detailed, and sometimes difficult to sift

through, but it is comprehensive and would be most useful for diagnosing software bugs and errors.

In addition, the built-in Help feature in Outlook Express can be used to look up a number of tasks. This built-in documentation is not always thorough or detailed but provides quick answers for how to perform tasks such as saving and loading address books, sorting mail, etc.

Task 2: Centralize document storage.

A peer-to-peer network among the four office PCs was completed by the Western Pennsylvania office's computer consultant, Bob Luczak, at the time the student consultant began work with the CP. Once this was set up, the student consultant assisted the CP with identifying documents to be shared, installing and configuring antivirus software, and planning a file backup procedure.

This task produced the following outcomes:

- A "shared" folder, accessible from the other three networked PCs, was created on the Tenant Organizer's computer. The CP has moved select files, including his e-mail address book, into the shared directory and sorted the contents into subfolders.
- The CP used the shared folder to copy his address book onto a different PC on which he was configuring Outlook Express, exhibiting the use of the peer-to-peer network for effective file sharing.
- The CP and student consultant installed Symantec AntiVirus software on the networked PCs. The software was configured to automatically download new virus definitions regularly and scan files.
- The CP and student consultant examined the contents of all ZIP disks in the office, cleared outdated or irrelevant contents, and set aside two disks to be used in performing backups.
- The CP copied the contents of the shared folder onto a ZIP disk, demonstrating the intended regular procedure for backing up important electronic files.
- The CP and student consultant made contact with the Glenside office's computer consultant, Jay Mitlas, and produced a base of information about both offices' current networking status and the steps needed to enable interoffice file sharing.

Prior to this work, electronic files were moved between computers using floppy disks. The existing antivirus software was not properly configured to update virus definitions or provide system protection. No mechanism for backing up electronic files had been planned. The contents of ZIP disks in the office were not known; the disks were generally used only in saving hard drive contents during computer upgrades or replacement.

The use of the file sharing system to pass documents between the CP and Tenant Organizer was not observed, suggesting that the staff's familiarity with the system and the range of files being shared can be developed further. In addition, the staff's ability to modify or troubleshoot the basic network configuration was not examined.

In order to sustain the use of the peer-to-peer network, Mr. Luczak will likely need to be employed to correct any future problems with the configuration. The CP should work with him in that case to identify and record basic configurations so that the staff can perform minor changes or correct small problems without calling on Mr. Luczak. The CP has demonstrated the ability to install and configure antivirus software. The sustained effectiveness of the ZIP disk-based backup system depends on the CP scheduling and carrying out regular backups (preferably every one to two weeks.)

As with the e-mail account setup (Task 1), this work primarily strengthens the Coalition's current use of technology without directly supporting a new vision of its mission. In particular, effective computer virus protection and file backups are a critical part of the organization's technology management, though they do not in and of themselves suggest new applications of technology to housing advocacy or tenant outreach. However, the use and protection of a file sharing system, though it is limited in its scope to the Western Pennsylvania office, serves as a precursor to a larger file sharing network between the Coalition's Glenside and Pittsburgh offices. The convenience of more direct and efficient document availability in Pittsburgh can inform the organization's approach to file and information sharing between its two offices and help move it towards more consistent and coordinated action on a statewide level.

Recommendations

The Coalition should plan to introduce an interoffice network, such as a Virtual Private Network (VPN), within twelve months of the conclusion of this consulting partnership.

Currently, neither office can directly access the full range of the Coalition's informational and communications resources. The administrative office maintains a database of contact information, used for broadcasting fax and e-mail messages, which the Western Pennsylvania staff cannot utilize. The CP cannot directly look up budgetary information. He cannot directly update or modify the content of the Coalition's website or introduce his own list of contacts into the database.

In order to fully act as a statewide presence, the Coalition must make its tools and resources accessible to staff in both Eastern and Western Pennsylvania.

The following steps can be taken towards implementing interoffice networking:

- The CP and ED should hold an evaluation and planning session, using information provided by Mr. Mitlas as a starting point. They should list and discuss the requirements of the network, including:
 - Access to the membership database and broadcast fax and e-mail software from the Western Pennsylvania office.
 - Mutual access to electronic files.
 - Modification of website content from either office.
- The equipment, Internet services, software, and support necessary for the creation of an adequate system should be identified, as well as an estimate of the funding and time required to create the network.
- The ED and CP should establish a timeline for introducing these technology changes and upgrades into the organization. While the development of a full network may be long and costly, at least a limited level of electronic access between the offices (for instance, sharing selected important files) should be implemented within one year.

The information exchanged among Mr. Mitlas, the CP, and the student consultant during this consulting partnership is available in Appendix 1 of this report. In addition, the following Internet resources may be useful:

- The ENTECH website at <http://epic.cuir.uwm.edu/fatica/> provides links to vendors of discounted software, as well as shareware and freeware tools. Follow the link on the main page to "web.dots", then to "software." Other links to technology information for nonprofits are listed as well, including information about computer networks. Click on "web.dots", then "networking."
- <http://www.techsoup.org> provides, among other resources, a range of discounted computer products and software.

Task 3: Identify potential sources of future technology resources.

The student consultant and CP explored Internet and online resources to identify potential sources of technology funding, equipment, or assistance.

The major outcome that emerged from this task was the completion of a request to the Fall 2002 Grant Pool of the Progressive Technologies Project (PTP). The student consultant drafted the narrative and the CP revised and completed the grant package. It proposes to create the role of *Policy Advocate* for the CP, in which he would assume management of the Coalition's external communications programs by utilizing improved networking and desktop publishing resources. This proposed role change reflects discussions between the CP and student consultant about how technology can expand the organization's mission-fulfilling capacity. The narrative of the Coalition's grant request is reproduced in Appendix 2. Information about PTP is available from their website, <http://www.progressivetech.org>.

Prior to this consulting partnership, the Coalition did not directly address technology needs in its grant requests. In particular, the importance and potential of computer and communications technologies to the Coalition's core advocacy and outreach programs were not fully considered or described to grantmaking organizations.

The CP and student consultant did not deeply explore other potential resources during the partnership or draft a short-term plan for doing so. Further technology planning, even at this relatively low level, will move the Coalition closer to accommodating its current technological needs and identifying ways to extend its programs.

Whether or not the Coalition receives a grant from PTP, the process of composing the grant request has encouraged thought about how new or improved technology can be applied to the organization's most mission-critical programs. This task's benefit to the Coalition will be sustainable if the CP and ED use the grant request as a model for future grant applications and as a starting point for broader, organization-wide technology planning. It has catalyzed preliminary ideas about how technology can improve the Coalition's effectiveness and visibility through its communications and expand its tenant outreach programs. By pursuing its ideas the Coalition can improve its ability to push its own technological capacity forward.

Recommendations

The Coalition should develop a comprehensive written technology plan for the next two to three years. Because of the geographical separation of the administrative and Western Pennsylvania offices, effective computer usage and electronic communications offer a great opportunity to strengthen the Coalition's capacity to act as a single statewide organization. This technological opportunity cannot be realized without coordination and planning between the CP and ED. Evaluating and drafting a plan to address the Coalition's technological needs and potential, both present and future, will allow the Coalition's leadership to prioritize and act upon all technology issues according to the needs of the greater organization. Although the development of such a plan will be costly and time-consuming for the CP and ED, it is ultimately critical to the Coalition's ability to act on its mission of statewide housing advocacy.

The student consultant recommends these initial steps:

- The CP and ED should familiarize themselves with NPower's "Technology Literacy Benchmarks for Nonprofit Organizations". This guide provides a mechanism for evaluating a nonprofit's technological capacity and institutionalizing the process of technology planning and

implementation. “Technology Literacy Benchmarks” is recognized as a standard among nonprofit organizations and has informed much of the work of this consulting partnership.

- The CP and ED should evaluate the current status of the Coalition’s technology and identify potential new projects that will bolster the statewide, rather than regional, presence of the Coalition. In particular, they should address:
 - Interoffice networking.
 - The modification of the CP’s responsibilities within the organization related to Electronic Policy Advocacy, as described in the PTP grant narrative (Appendix 2).
- The CP and ED should integrate the Coalition’s technology improvements and operating costs into the organization’s future grant requests. The crucial tie between the Coalition’s technology use and its core communications programs should be explicitly established as in the PTP grant.

The following resources can be used in planning and continuing to identify resources:

- <http://www.benton.org> is the website of the Benton Foundation, publisher of NPower’s “Technology Literacy Benchmarks for Nonprofit Organizations.” The document is available for download in Adobe Acrobat (PDF) format.
- The Foundation Center at the Carnegie Library of Pittsburgh (website at <http://www.clpgh.org/locations/foundationcenter/>) provides information about technology resources for nonprofits, particularly within Western Pennsylvania. This consulting partnership did not explore the organizations listed as providers of technology assistance as intensively as originally planned. They should be considered when planning for the Coalition’s Western Pennsylvania technology needs, particularly in seeking assistance such as staff training.
- Based on input from the course instructor, the student consultant recommends that the CP establish contact with other Pittsburgh-area nonprofits interested in technology:
 - Information Renaissance (website at <http://www.info-ren.org>).
 - The Bloomfield-Garfield Corporation (<http://bloomfieldgarfield.org>). This organization’s project to provide Internet resources – both bandwidth and content – to Pittsburgh’s East End may be of interest to the Pittsburgh office’s tenant outreach activities.

Additional Recommendations

1. Electronic Policy Advocacy.

During this consulting partnership, the CP raised his concern that no one Coalition staff member in either office is directly responsible for managing, composing, and distributing housing advocacy information to constituents or policymakers. Currently the ED in Glenside handles this work with some input from the CP and assistance from a part-time office assistant. The organization plans to hire a full-time Policy Director, in charge of generating policy research and information, once funding allows. However, the ED will still need to decide who will be primarily responsible for processing policy advocacy information into communications, electronic and otherwise.

Because of the communications technology divide between the offices, the CP has been unable to assume any creation or distribution of electronic newsletters and alerts, broadcast e-mails, or fax alerts, or to update the content of the Coalition’s website.

The CP and ED should define and consolidate responsibilities for the prioritization, composition, and distribution of the Coalition's electronic communications. These responsibilities should form the basis of a Policy Advocate role to be taken on by the CP.

Establishing the CP as Policy Advocate for the Coalition will enable a new, higher level of management of the organization's mission-critical external communications. He will be able to ensure, as no staff member currently does, that all documents, messages, and web content are timely, relevant to the Coalition's current agenda, and directed towards the correct recipients. Given the staggering amount of electronic communication encountered by e-mail and Web users, presentation is key; the Policy Advocate will be able to work towards more attractive and eye-catching documents. The ED will need to spend considerably less time and effort handling communications from Glenside, allowing her to focus on her other administrative tasks.

This redefinition of the CP's position within the organization will depend upon the creation of a suitable interoffice network, as recommended above. Establishing the new position's responsibilities, as well as identifying the technology resources required to allow the CP to act effectively as Policy Advocate from Pittsburgh, should be included in the creation of an organization-wide technology plan.

2. Utilize the Pittsburgh office's multifunction fax/ scanner/ copier.

The inefficient use of the Brother MFC 7300C was noted at the beginning of this partnership but not acted upon. The machine is currently in use as a stand-alone fax machine and occasionally as a color copier but can also be connected to one of the office's computers and used as a scanner.

Modifying or excerpting documents that are available only in hard copy or in electronic formats that can only be edited with software not possessed by the Coalition (such as Adobe Acrobat) is currently done by reconstructing the document as best as possible from scratch. Using the MFC and its included PC scanning software will provide a far more effective and efficient means of converting documents from hard copy to an electronic format. The staff will be spared time-consuming and redundant work when modifying formatted documents such as grant request cover sheets. The MFC will provide a means of scanning text and graphics into word processing or other desktop publishing software, potentially improving the quality and visual impact of electronic documents.

The following steps should be taken:

- Collect the materials that came with the MFC and check that all necessary materials (including software CDs) are present.
- Review the setup requirements for the MFC as described in the user manual. Some basic information is outlined in Appendix 3.
- Employ Bob Luczak in configuring the MFC, installing the scanning software, and learning how to perform necessary tasks. (The instructions for setup and usage described in the manual are somewhat complex; in particular they are sensitive to steps being performed out of order.)

The student consultant recommends these resources:

- The Brother MFC 7300C user manual. The copy in the office has been annotated and bookmarked to highlight important information.
- Brother's homepage for customers in the USA is <http://www.brother.com/usa/usalocal.html>. Obtaining information or support may require product registration.

About the Consultant

Nate Borrebach is a fifth-year senior at Carnegie Mellon University. In December 2002 he will graduate with a Bachelor of Science in Computer Science with an Additional Major in Creative Writing. He is currently seeking work in technology consulting or any computer-related job that would take him to a German-speaking country. Besides consulting reports, he writes poetry and short fiction.

Appendix 1: Interoffice networking information

The following information is based largely on e-mail correspondence with the administrative office's computer consultant, Jay Mitlas.

Glenside's technical environment

The Glenside office currently has three computers, which will soon be connected via a peer-to-peer network. Each computer currently accesses the Internet through a dial-up connection. The ED has discussed DSL service but none has been ordered. DSL service will take up to six weeks to set up following its purchase.

Static vs. Dynamic IP addresses

The IP address for a computer, which identifies its location on the Internet, can be either *static* or *dynamic* depending on how the Internet Service Provider assigns it. Static IP addresses remain the same each time the computer connects to the Internet. Therefore they are best for servers and other machines, which computers will need to "find" in the same place. Dynamic IP addresses can change each time a computer connects; in general they are assigned each time from a pool of available addresses. Services that provide static IP addresses tend to be more costly than those that provide dynamic addresses.

Networking options

The CP's most immediate priority is accessing the membership database remotely from Pittsburgh. Directly accessing budgetary information and modifying web page content are also important. Any interoffice network should provide these services.

- A "true" VPN would require a server and backup system in each office, as well as DSL or cable services that provide static IP addresses. This would allow each office to access the other's network and provide the greatest level of security. The setup would be the most complex and costly.
- A one-way connection from Pittsburgh to Glenside would still permit database access and more limited file sharing without as much expense, setup, or maintenance. In this case the requirements for the Glenside office would be the same but the Pittsburgh office could keep its current networking system in place. Since the database and web content are maintained in Glenside, the inability of the administrative office to directly access the Western Pennsylvania computers may not be a substantial hindrance. The Pittsburgh office's means of connecting to the Glenside network, as well as the associated setup time and cost, would be similar to that for a normal dial-up Internet connection.
- *Symantec pcAnywhere* software can be used to remotely access computers through a dial-up connection through DSL, a cable modem, or a dedicated phone line. This, or a similar software package, could be used to provide remote database access with minimal changes to either office's network setup.

Appendix 2: Grant Request Narrative

The Pennsylvania Low Income Housing Corporation (PALIHC) Proposal to the Progressive Technology Project Grants Pool November 2002

Organizational Profile

The mission of the Pennsylvania Low Income Housing Corporation (PALIHC) is 501-c-3 non-profit organization was formed by members of the Pennsylvania Low Income Housing Coalition (Housing Coalition), a 501-c-4 education and advocacy organization, to promote the preservation, revitalization, and development of safe, decent, accessible, and affordable housing for all Pennsylvanian's. The Housing Coalition is a statewide membership organization with over 350 members made up of housing consumers, advocates, providers, developers and public officials.

PALIHC has two offices, one in Glenside in southeastern Pennsylvania, the other in Pittsburgh serving Western Pennsylvania. The Executive Director, Elizabeth Hersh, operates out of the Glenside office with support at this time from a part-time administrative assistant and accountant as well as project consultants. The Pittsburgh office is overseen by Craig Stevens, the Western Pennsylvania Coordinator (WPA Coordinator) who works with the Affordable Housing Preservation Coordinator/Tenant Organizer, Ronell Guy.

PALIHC is research, education, and outreach organization whose mission is carried out through the following activities:

- Information and Education: Publication and dissemination of reports, newsletters, broadcast e-mail and fax, website, conferences and training.
- Research: Useful, objective information about housing policy, practice, finance and trends.
- Coalition Building: Building partnerships to expand and support affordable housing solutions at the state and federal levels.
- Watchdog: Monitoring state and federal housing legislation, funding, and programs for threats and opportunities.
- Outreach and Advocacy: Reaching out to represent the housing needs and interests of rural, suburban, and urban communities.
- Organizing and empowerment: Engaging extremely low income residents of publicly subsidized housing to have a voice in the quality and affordability of their housing
- Technical Assistance: We help housing organizations meet their goals more effectively. We assist policy makers in solving housing problems.

Constituency: PALIHC's constituency is the general public and all advocates of safe, decent, accessible and affordable housing in Pennsylvania. We also seek to engage housing policy makers at the state and federal level to influence the shape and outcomes of affordable housing programs. Our primary constituencies are (1) the 350 members of the Housing Coalition, (2) over 1000 contacts on our electronic/fax/mailling list and (3) low income tenant organizations and local housing coalitions which we work directly with in the Pittsburgh and Philadelphia areas and around the state as travel permits.

Structure: PALIHC's leadership is elected by the Coalition's Board of Directors, which in turn is elected by the membership. This broad base of representation ensures that PALIHC is responsive to the emerging needs and interests of rural, suburban, and urban communities statewide.

Organizing Agenda

PALIHC is working on several, related policy and organizing initiatives. These are:

- **Developing Pennsylvania’s first-ever comprehensive State Housing Policy.** This will be developed through (1) identifying key affordable housing needs of urban, rural and suburban communities, (2) assessing existing resources and programs designed to meet these needs and (3) developing a new Comprehensive State Housing agenda that has the broadest possible support amongst stakeholders, (4) presenting these findings to the general public via print, visual and electronic media and (5) engaging policy makers in supporting the implementation of our the State Housing Policy.
- **Preservation, rehabilitation and expansion of permanent affordable rental housing particularly for extremely low-income households** (incomes below 30% of median income in the state, roughly \$17,000 annual income and below across the state). We will do this through (1) organizing and empowering low income tenants and community members to give a “human face” and grass roots ‘voice’ to the value of publicly supported and subsidized affordable housing (2) advocating for federal, state and local policies that prioritize housing for the lowest income residents in our communities
- **Community Revitalization – Reversing Blight, Building Strong Communities:** Promoting development of strong, healthy and economically and racially diverse communities through sustainable and equitable land use and development, revitalization of our cities and towns, strengthening public laws and community role in reversing housing and community blight, and expansion of homeownership opportunities for racial ‘minorities’ and low income households, as well as quality rental housing for all income levels.

Grant Request

PALIHC requests \$10,000 from the Progressive Technology Project to strengthen and expand its electronic and other communications with its constituency. PALIHC must develop an effective electronic communications system in order to maintain effective communication and connections with our membership, contacts and tenant organization and local coalition partners. This grant project will help PALIHC begin to upgrade and strengthen our electronic communications with our constituency as well as provide additional education and assistance to members who are crossing the ‘digital divide’ to become connected to the internet and skilled at use of email.

This funding will support the following activities:

1. WPA Coordinator will be able to serve as **PALIHC’s ‘electronic Policy Advocate’**, dedicating 10% of his time to engage and mobilize PALIHC’s members and constituency on PALIHC’s housing policy agenda
2. **Create and maintain a Virtual Private Network (VPN) between PALIHC’s offices in Glenside and Pittsburgh** to improve communications and increase the quality of our web based and electronic communications, information sharing and educational and advocacy materials. Specifics of this activity will include:
 - Purchase a server for the Glenside office.
 - Purchase DSL service and support for the Glenside and Pittsburgh offices.
 - Secure software necessary for database access for Pittsburgh office.
 - Hire computer consultants to train both offices’ staff in network use and maintenance and to provide technical support

3. **Improve quality of documents electronic communications** through use of more powerful desktop publishing software
 - Purchase Adobe Acrobat and other needed software
 - Provide training and support to WPA Coordinator to improve skills at electronic information and advocacy
 - Provide information on PALIHC website about how to utilize the web site and access information such as opening and distributing documents in Adobe Acrobat (.pdf) format

Impact of Technology on Organizing Goals

PALIHC recognizes that timely, effective communication is critical to its advocacy and outreach programs. The *electronic Policy Advocacy* project will improve PALIHC's internal and external communications, and enable the WPA Coordinator to serve in the role of electronic Policy Advocate in a physically separate office from the Executive Director who oversees PALIHC's activities including policy advocacy.

Documents and information are currently shared between the two offices indirectly, via electronic mail, fax, and telephone. Establishment of a Virtual Private Network between the PALIHC offices will enable staff in both offices to maintain PALIHC's membership database and utilize common software to fax and e-mail information updates and grass roots advocacy and legislative alerts to its members and contacts.

Creating a VPN will allow the WPA Coordinator to take on the role of *electronic Policy Advocate*. With immediate electronic access to documents at both PALIHC offices, he will assume responsibility for processing, prioritizing, and distributing research and policy information to PALIHC's constituents statewide. By utilizing and updating the member database he will deliver information more quickly and easily to the appropriate recipients. By working with the technology consultant who functions as Webmaster in Glenside he will ensure that PALIHC's website is kept relevant, timely, and accurate, cementing its role as the definitive source of housing-related information in Pennsylvania.

The electronic Policy Advocate will monitor the effectiveness of all of PALIHC's information distribution. He will process feedback from members and housing consumers and work to make sure PALIHC distributes all information about Pennsylvania housing policy and advocacy needed by the state's low-income residents.

Improved desktop publishing will aid the WPA Coordinator's role as 'electronic' Policy Advocate. Using powerful, up-to-date publishing software, he will be able to compose newsletters and updates in an easily distributed electronic format. By supplementing timely, practical information with photographs, charts, and other visual aids he will make PALIHC's advocacy and educational releases more striking, professional, and readable. Better documents impact readers more strongly. Better desktop publishing software will produce more results from PALIHC's communications, both in disseminating research and policy information to its constituents and in representing their needs and concerns to Pennsylvania's policymakers.

Current Technological Capacity

Right now PALIHC is poised to take advantage of inter-office computer networking. The Western Pennsylvania office recently implemented a peer-to-peer file sharing system between its four personal computers, allowing electronic documents to be accessed, edited, and printed from any machine in the office. Verizon DSL service provides high-speed Internet access to each PC. The administrative office is

currently investigating its options for upgrading its computers' Internet access from dial-up to DSL and securing a server for a VPN.

Each office has an established working relationship with a local technology consultant. PALIHC's equipment needs for this technology expansion are nearly met. To implement a functional network between the offices one additional computer needs to be purchased for the administrative office, and software need only be licensed for use in the Western PA office. This will allow a portion of the PTP grant to offset the most significant expenses of new technology, staff training and user support.

Measures of Success

The WPA Coordinator will survey PALIHC contacts and Housing Coalition members on their use of electronic technology to receive information from PALIHC and communicate with their own constituencies and public and elected officials who shape housing policy in their region and the state. The WPA Coordinator will perform a follow survey of our contacts to assess whether our constituency believes that our electronic communications have become more timely, user-friendly and effective in informing and activating them particularly around breaking policy issues and PALIHC's grass roots advocacy efforts.

Success will further be measured through noting the number of 'hit's to our web site which will be the primary 'home' or library for PALIHC's current and ongoing education and advocacy materials. In addition, success will be measured by assessing whether our members and contacts have increased the number of actions they have taken to effect policy and improve housing in the state, counting such things as letters to the editor, letters to policy makers (public and private), and relaying of PALIHC electronic communications or alerts to their own constituencies.

Ultimately, the better packaging and delivery of PALIHC's educational and advocacy messages will be reflected in Pennsylvania's state housing policies, as the needs of all rural, suburban, and urban residents are addressed effectively.

Appendix 3: Brother MFC 7300C Information

Capabilities

As it is configured now, the machine can be set up to use:

- Speed dialing of fax numbers (pages 8-1 to 8-2 in user manual.)
- Groups for broadcasting faxes (page 8-4 in manual.)

If the machine is attached to a computer, and the software is installed from the included CD, it can be used for the following:

- Scanning documents as images into the computer (pages 18-1 to 18-2.)
- Scanning a text document into Microsoft Word (page 18-3.)
- Printing documents from the computer (pages 15-1 to 15-4.)

Unfortunately, this model scanner CANNOT be used to:

- Accept faxes directly into a computer.
- Send faxes directly from a computer.

What is needed?

- Software CD that came with the scanner (Multi-Function Link® Pro software)
- Filter Core & Cable Tie that came with scanner (in plastic bag in office)
- Either:
 - A USB Printer/Scanner Cable (in plastic bag in office)
 - A bi-directional Parallel Cable (IEEE-1284 compliant) – Would have to be purchased

Other Considerations

The fax/scanner will likely have to be moved closer to one of the PCs in order to be connected. (The USB cable is six feet long.)

Compaq 1 (in corner by window) does not have a USB port, but does have a parallel port (labeled with a printer icon on the back of the machine.) To connect the fax/scanner to this computer, a parallel cable would have to be bought.