

Technology Plan

for the

Burke County Public Library

2004-2008

RB Software & Consulting
<http://www.rburgin.com>
December 2003

Table of Contents

Executive Summary	2
Introduction	4
Recommendation 1	8
Recommendation 2	15
Recommendation 3	21
Recommendation 4	28
Recommendation 5	39
Recommendation 6	47
Recommendation 7	54
Recommendation 8	60
Recommendation 9	69
Recommendation 10	80
Recommendation 11	93
Appendix 1. Equipment Replacement Policy.....	100

Executive Summary

This report makes the following recommendations for consideration by the Burke County Public Library.

1. The Burke County Public Library should implement filtering software on its public and staff computers and should review its Internet safety policy. (Target Date, FY 2003-2004.) *(The Children's Internet Protection Act requires these actions of libraries wishing to receive federal funds.)*
2. The Burke County Public Library should maintain its Web site to promote the library and its programs and services but should outsource hosting of the Web site. (Target Date, FY 2003-2004.) *(Outsourcing the hosting of the Web site will reduce the work load on library staff and give the library better usage statistics, better security, and better bandwidth maintenance.)*
3. The Burke County Public Library should establish at least one new staff position to manage and coordinate its technologies. (Target Date, FY 2004-2005.) *(The present staff is not adequate to support the present level of technology being used by the Burke County Public Library and will certainly not be adequate to support the new technologies recommended in this plan.)*
4. The Burke County Public Library should upgrade its automated library system. (Target Date, FY 2004-2005.) *(The automated system currently used by the library is no longer supported by the vendor and will soon be phased out. The current system is relatively inflexible, imposes workflow restrictions on staff, and generally makes the work of the staff less efficient than it could be.)*
5. The Burke County Public Library should implement a system to manage its public computers. (Target Date, FY 2004-2005.) *(The heavy use of the library's public access computers requires a great deal of staff oversight. Without a system to automatically manage the public computers, the staff of the library will be called upon to devote more time to these day-to-day problems, thus making their work less effective and less efficient.)*

6. The Burke County Public Library should upgrade its computers in accordance with its Equipment Replacement Policy. (Target Date, FY 2004-2005 and ongoing.) *(Upgrading the library's computers will allow the library to better guarantee effective access to the information resources that it provides for its users.)*
7. The Burke County Public Library should establish a framework and methodology for ongoing technology assessment, planning, and budgeting. (Target Date, FY 2004-2005.) *(A good planning process is needed to ensure the best return on the library's investment.)*
8. The Burke County Public Library should focus on training its staff to make better use of the new technologies to serve the library's users. (Target Date, FY 2005-2006 and ongoing.) *(In order to ensure the proper and effective use of the technology, a firm commitment to staff development is needed. Otherwise, the benefits of the technology will not be fully realized.)*
9. The Burke County Public Library should enhance the content provided to users of the library's Web site. (Target Date, FY 2005-2006.) *(Statistics suggest that the library's electronic resources are underutilized. Library staff could do more to promote the electronic content that is currently available and to add content to the Web site.)*
10. The Burke County Public Library should explore alternatives for funding the new technologies. (Target Date, ongoing.) *(Funds must be obtained to acquire the hardware, software, licenses, services, and staff needed to implement the recommendations of this plan. Furthermore, funds must be budgeted annually to maintain existing technology, to update or replace obsolete technology on a regularly scheduled basis, and to provide necessary staff support.)*
11. The Burke County Public Library should expand its efforts to promote collaboration with other libraries and agencies in the area. (Target Date, ongoing.) *(Information technologies can make collaboration easier to accomplish and can often be supported by collaborative efforts.)*

Introduction

The Burke County Public Library of Morganton, North Carolina, is a public library and a department of the Burke County local government. In addition to local funding from Burke County, the City of Morganton, the City of Valdese, the library receives funding from the State of North Carolina in the form of state aid and, on occasion, federal aid from the Library Services and Technology Act. The Library consists of the Headquarters Library in Morganton and two branch libraries: the Valdese Public Library and the C. B. Hildebrand Public Library in Hildebran

In July 2003, the Burke County Public Library received a federally-funded LSTA (Library Services and Technology Act) grant to develop a technology plan for its library system. The need for a technology plan was stated in the library's five-year plan for 2003-2007 as Service Goal I-A, Objective 1, action step 6:

Plan, develop, and implement a five-year technology plan (2002-2006) for anticipated expenses associated with telecommunications, hardware replacement and software upgrades associated with the automated library system and public Internet access.

As the LSTA grant application notes, "A major motivating factor for the development of a comprehensive technology plan is the reactionary position the library has found itself in when responding to external and internal demands for technology. Because of this, the library's ability to respond to customer and staff needs is hampered by a lack of information and budgetary support. Customers and staff are often dissatisfied that the library can not respond more quickly to their technology needs. The library would like to be in the position of anticipating and planning for these needs rather than scrambling to react after they have been expressed."

The library contracted with Dr. Robert Burgin of RB Software & Consulting of Cary, North Carolina, for the development of the technology plan. An outside consultant was sought due to the lack of staff time and expertise in this area, and Dr. Burgin was

selected due to his twenty seven years of experience in library education, library consulting, and library administration.

The recommendations made in this report are based on information gathered during site visits to the Burke County Public Library on August 8, 2003, and October 15, 2003, as well as telephone and email communications with various individuals.

Among those interviewed were:

- Steve Farlow, Burke County Public Library
- Jim Wilson, Burke County Public Library
- Becky Stragand, Burke County Public Library
- Lyvonne Ellison, Trustee, Burke County Public Library
- Alicia Lorenzo-Scott, Burke County Public Library
- Nicole Mull, Burke County Public Library
- Timothy Owens, Consultant for Public Library Networking, Library Development Section, State Library of North Carolina
- Grant Pair, Assistant State Librarian for Information Technology, State Library of North Carolina

The eleven recommendations in this report form the basis of a five-year technology plan for the Burke County Public Library. The recommendations have been based on three factors:

- A desire to improve service to the users of the library.
- A need to increase the efficiency and effectiveness of the library staff. The library ranks 43rd among the 51 county libraries in the state in terms of FTE staff per 1000 persons served and should focus on increasing the efficiency of its existing staff.
- A desire to do a better job of using existing resources.

The recommendations focus on five areas of the technology: the library's automated system; the library's computers; the library's Web site; the library staff; and the issues of collaboration, funding, and ongoing technology assessment and planning. The recommendations are listed in priority order based on the year in which library staff propose to take action.

Any technology plan must address the need for funds to implement the plan. The potential costs of each recommendation are discussed with the presentation of the recommendation. These costs are also summarized in Table 1 on the following page. In order to fund the eleven recommendations of this plan, the Burke County Public Library would need to spend between \$172,075 and \$267,475 on one-time expenditures and between \$89,525 and \$130,725 per year on recurring expenditures.

Table 1
Estimates Costs of the Recommendations
in the Technology Plan

Recommendation	Estimated Cost
1. Filtering software and review of Internet safety policy	Could be purchased as part of Recommendation 5 Otherwise ... \$4,700 to purchase \$1,750 per year to maintain
2. Outsource hosting of the Web site.	As little as \$100 per year with a one-time \$50 set-up fee
3. New staff position to manage and coordinate its technologies	\$51,425 per year
4. Upgrade the automated library system	Between \$70,000 and \$110,000 to purchase Between \$10,500 and \$12,000 per year to maintain
5. System to manage the public computers	Approximately \$25,500 to purchase Approximately \$2,750 per year to maintain
6. Upgrade computers in accordance with Equipment Replacement Policy	Between \$21,000 and \$36,000 per year
7. Framework and methodology for ongoing technology assessment, planning, and budgeting	From \$4,000 to approximately \$15,000 for one-time consulting assistance Approximately \$2,000 per year for annual security audits of networked resources
8. Staff training	Up to \$14,700 per year
9. Enhance the content provided to users of the library's Web site	From no cost beyond staff time to approximately \$10,000 for one-time consulting assistance and \$10,000 or more per year for database licensing
10. Alternatives for funding the new technologies	None
11. Promote collaboration with other libraries and agencies in the area	From no cost beyond staff time to the cost of local matches for grants

Recommendation 1

The Burke County Public Library should implement filtering software on its public and staff computers and should review its Internet safety policy.

(Target Date, FY 2003-2004)

Assessment of the Current Situation

The Burke County Public Library currently has seventy one desktop computers that provide library and information services to the library's staff and users. These include forty three computers for use by the public, twenty two computers for use by staff, and six laptops that are used for training purposes.

In December 2000, the United States Congress passed the Children's Internet Protection Act (CIPA). This law requires that libraries and schools receiving Universal Service (E-rate) discounts or federal Library Services and Technology Act (LSTA) funds must establish Internet use policies meeting specific criteria and must use "technology protection measures" to block access to certain visual materials on the Internet. On June 23, 2003, the Supreme Court ruled that the CIPA Internet filtering requirement for public libraries is constitutional. On July 24, 2003, the Federal Communications Commission (FCC) released an order that focuses on the time frame for compliance with the Court's ruling. Because the FCC recognized the need for libraries to budget for the costs associated with filtering technology and to plan for its implementation, the Commission has given libraries until the start of 2004 services to comply with CIPA's filtering mandate. For most libraries this date will be July 1, 2004.

The State Library now requires that "Every library that submits an application for funding to the State Library *must* include the appropriate CIPA certification documents as part of its application package. This applies to all grant applicants – no matter what type of library or what type of grant." (See the State Library's CIPA certification

guidelines at <http://statelibrary.dcr.state.nc.us/lsta/certguidelines.pdf>.) The LSTA CIPA certification documents specify that any public library intending to use LSTA funds to purchase computers for accessing the Internet or to pay for direct costs to access the Internet must have an Internet safety policy in place and that the policy must include “a technology protection measure,” i.e., a filter. If a library does not have such a policy in place, then it must certify that it is taking action to put a policy in place and that it will be in compliance with the law “before the library receives funding for a subsequent program year.”

In 2002-2003, the library received a refund of \$16,231 from the E-rate program. The library has also received over \$150,000 in LSTA funds since 1998-1999. Because the Burke County Public Library receives and hopes to continue to receive LSTA funds and because the library receives and hopes to continue to receive E-rate discounts, the library is required to implement filtering on all of its computers – public and staff – that have Internet access as well as have in place an Internet safety policy.

Filtering. The Burke County Public Library does not currently filter its computers that have Internet access. Consequently, if the library wishes to continue to take advantage of LSTA funds and E-rate discounts, the library will be required by CIPA to provide filters on all computers with access to the Internet. While the FCC has taken no position on specific products, the filtering software must be capable of protecting against access to visual depictions that are obscene, related to child pornography, and harmful to minors.

Internet safety policy. The Burke County Public Library has an Acceptable Use Policy for Electronic Resources, which is available on the library’s Web site at http://www.bcpls.org/computer_policy.htm. However, the current policy does not appear to meet the requirements of CIPA for the following reasons:

- The law states that the library’s policy “must include the use of filters to protect against access to the visual depictions outlawed in the act.” The current policy of the Burke County Public Library makes no mention of filters.

- The law requires that an Internet safety policy address “the safety and security of minors when using electronic mail, chat rooms, and other forms of direct electronic communications.” The current policy of the Burke County Public Library makes no mention of these forms of Internet use.
- The law requires that an Internet safety policy address “unauthorized access, including so-called ‘hacking,’ and other unlawful activities by minors online.” The current policy of the Burke County Public Library makes no mention of these issues.
- The law requires that an Internet safety policy address “unauthorized disclosure, use, and dissemination of personal identification information regarding minors.” The current policy of the Burke County Public Library makes no mention of these issues.
- The law requires that an Internet safety policy address “measures designed to restrict minors’ access to materials harmful to minors.” As noted in the first item in this list, the current policy of the Burke County Public Library makes no mention of filters or other such measures.

On the other hand, the Burke County Public Library policy does appear to adequately address one of the items that CIPA requires, i.e., “access by minors to inappropriate matter on the Internet and the Web.” The current policy notes that

The Internet may contain material that is inappropriate for viewing by children. The Library staff is not in a position to monitor and supervise children’s use of the Internet. As with other Library materials, restriction of a child’s access to the Internet is the responsibility of the parent/legal guardian. Parental consent for unsupervised use of Internet resources is required for children 12-15 years old. Onsite parental supervision is required for children under 12 years old.

Aside from the issues of content discussed above, the law also requires that any Internet safety policy be adopted after holding at least one public hearing or meeting.

This hearing or meeting could be part of a regular library board meeting if the meeting allows for public comments and follows local or state open meeting laws. The current policy was adopted after such a meeting.

Alternatives

Filtering. There are two alternatives for implementing filtering software on the public and staff computers at the Burke County Public Library. The library could purchase and implement a filtering product by itself or the library could purchase a filtering product as part of a larger solution, such as the computer management system discussed in Recommendation 5.

Within the option of purchasing and implementing a filtering product by itself, the library has two options: a stand-alone filter; or a server-based filter. A stand-alone filter is installed on a single computer and controls Internet access for that computer only. A server-based filter is used in a network setting, and all Internet access from networked computers passes through the server on which the filter is installed. Typically, server-based filters are more powerful and flexible.

Internet safety policy. There are no alternatives regarding the development of an Internet safety policy that meets the requirements of the law. As soon as possible, the library should develop a policy that meets the requirements of CIPA and should adopt the policy after holding at least one public hearing or meeting. The library should not jeopardize its ability to receive LSTA or E-rate funds.

Recommendation

Filtering. As soon as possible, the Burke County Public Library should implement filtering software on its public and staff computers. The recommended method for accomplishing this goal is the purchase of a filtering product as part of the computer management system discussed in Recommendation 5; most of the vendors of computer management systems also provide Internet filtering as part of their systems.

An alternative is to purchase and implement a filtering product by itself. This method would be preferred only if the library is unable to afford a computer management system. Given the number of public and staff computers provided by the Burke County Public Library and given the library's existing network, a server-based filter would be preferable to a stand-alone filter. Server-based filters are generally more powerful and flexible than stand-alone filters. In addition, upgrading the software as new versions are released will be more easily managed with a server-based product. There are a number of filtering products, and the library staff should familiarize themselves with these software packages if the library selects the option of purchasing filtering software apart from a computer management system. Among the better reviews of filtering software is "Internet Filtering Options Analysis: An Interim Report," by Lori Bowen Ayre for the InFo People Project. (Available on the Internet at http://www.infopeople.org/howto/filtering/InternetFilter_Rev1.pdf.)

Internet safety policy. As noted above, the library should develop a policy that meets the requirements of CIPA and should adopt the policy after holding at least one public hearing or meeting. There are several Web sites that will provide information for the staff as they develop such a policy. In particular, the following should be consulted:

- The Wisconsin Department of Public Instruction FAQ (<http://www.dpi.state.wi.us/dlcl/pld/cipafaq.html>)
- The American Library Association Web site on CIPA (http://www.ala.org/Content/NavigationMenu/Our_Association/Offices/ALA_Washington/Issues2/Civil_Liberties,_Intellectual_Freedom,_Privacy/CIPA1/CIPA.htm)
- The law itself (<http://www.cdt.org/legislation/106th/speech/001218cipa.pdf>)

This consultant has helped libraries develop CIPA-compliant Internet safety policies and would be happy to review any policy drafted by the Burke County Public Library staff. The library's consultant with the State Library of North Carolina should also be able to review a draft of the policy.

Following the development of a policy, the library's board of trustees should adopt the policy after holding at least one public hearing or meeting. As noted earlier, this public hearing or meeting can be part of a regular library board meeting if the meeting allows for public comments and follows local or state open meeting laws. If the library staff decides to hold the public hearing at a regular library board meeting, staff should fully document the public hearing by keeping a copy of the notice and noting any actions taken.

Potential Costs and Funding

Filtering. The costs associated with purchasing filtering software as part of a computer management system are outlined in Recommendation 5.

If the library is unable to purchase a filtering solution as part of a computer management system, then the library should purchase and implement a server-based filter. The approximate cost of this solution for the number of computers used by the Burke County Public Library would be approximately \$2,200 to purchase the software and \$1,500 per year to maintain the license and purchase upgrades. If a server is needed for the software, an additional \$2,500 will be needed for that purchase and an additional \$250 per year in maintenance. Thus, the total purchase price would be roughly \$4,700, and the total annual costs would be \$1,750.

The annual costs of filtering should be covered by the library's existing budget. The costs of purchasing a filtering solution will depend on which option the library chooses. If the library purchases filtering software as part of a computer management system, then it has the option of applying for federal LSTA funds, as outlined in Recommendation 5. However, LSTA funds are not available for the purchase of filtering software by itself, and if the library chooses this option, it would be required to obtain the funding locally, i.e., from the county or from alternative funding options, some of which are outlined below in Recommendation 10.

Internet safety policy. There are no direct costs associated with developing the Internet safety policy, especially if the public hearing is part of a regular library board meeting.

Action Steps

In order to implement this recommendation, the Burke County Public Library needs to take the following steps:

1. The library staff should decide whether to purchase filtering software as part of a system to manage the library's computers or to purchase filtering software separately.
2. If the library staff decides to purchase filtering software as part of a system to manage the library's computers, then the library staff should follow the action steps listed in Recommendation 5.
3. If the library's application for an Internet Infrastructure Improvement Grant is not approved or if the library staff decide to purchase a filtering solution separately, then the staff should become familiar with the various products available for filtering its computers. The library staff will then need to identify funding for the purchase of filtering software and purchase and install it.
4. In the meantime, the library should develop a policy that meets the requirements of CIPA.
5. Following development of such a policy, the library board should officially adopt the policy after holding at least one public hearing or meeting.

Recommendation 2

**The Burke County Public Library should maintain its Web site to promote the library and its programs and services but should outsource hosting of the Web site and email for staff.
(Target Date, FY 2003-2004)**

Assessment of the Current Situation

The Burke County Public Library currently has a Web site that is used to promote the library and its programs and services (<http://www.bcpls.org/>). The types of information and services that are included on the Web site include:

- A link to the library's online catalog, which allows users to access the catalog via the Internet
- A link to the online databases provided to users of the Burke County Public Library through NC LIVE (North Carolina's statewide set of licensed online databases)
- A page for young adults, "The Teen Chillin' Couch," which is maintained by the library's Young Adult Advisory Board
- Information on the library itself, including a list of branches and their hours of operation, a calendar of programs offered by the library, online registration for those programs, information on library policies, and maps and directions to the library branches
- A "Kid's page" for the library's younger users, which includes links to a calendar of library story times and other children's programs, links to fun sites on the Web, and links to learning sites on the Web

- “Burke County Links,” which provides links to information on Burke County government, Burke County history, and other aspects of the community
- “North Carolina Links,” which provides links to information on North Carolina travel, North Carolina government, and other topics related to the state
- A link to the library’s email reference service, “Ask a Librarian”
- A link to information on the library in Spanish

The Burke County Public Library’s Web site is currently hosted on an in-house server running the Solaris operating system, NetConnect 3.2 Web server software, and sendmail email software. The server is a Sun SPARC 5, which was purchased in 1997-98.

The Web site maintained by the Burke County Public Library is quite good and both promotes the library and its services and provides direct service to the users of the library. The Web site thereby helps the library meet the important goals of providing better service to its users and (by providing users with self-service opportunities like the online catalog or links to information on the library itself) improving the efficiency of its staff.

Alternatives

The Burke County Public Library staff should continue to provide a Web site to its users. In fact, the staff is involved in making improvements to the Web site and should be encouraged to continue to do so. (See Recommendation 9 below for further discussion of ways to improve the Web site’s content.)

There are, however, alternatives for how the Web site is hosted. The library could continue its present practice of hosting the Web site on a server that is housed and maintained at the library headquarters in Morganton or the library could outsource the hosting of the Web site to a company that specializes in Web site hosting.

The primary advantage of continuing to provide a Web site hosted on an in-house server is that it requires no change in the way in which the site is currently

provided. The staff also maintains greater control of the Web site and the server. However, there are several disadvantages to this approach:

- Staff time and expertise are required to maintain the Web server hardware and software. This is a distinct disadvantage for the Burke County Public Library, given its lack of staff.
- The Burke County Public Library currently lacks software to provide thorough statistics on the use of its Web-based resources. Such log analysis software will be needed, however, because the State Library of North Carolina will soon require public libraries to report the number of accesses to the library's Web-based catalog and the number of accesses to the library's Web site from outside the library. Without such software, gathering these statistics will be impossible.
- As long as the library maintains an in-house Web server, security will be a potential problem. Again, staff time and hardware and software purchases will be required to maintain security and deter hackers.
- There is also the danger that the bandwidth available at the headquarters library in Morganton might not be adequate to support access to the Web site in the future, if the site becomes more popular.
- The Sun SPARC 5, which was purchased in 1997-98, is outdated and is reaching the end of its technological life. The server should be replaced soon, and this purchase would represent a cost of \$2000 to \$3000, depending on the configuration.
- Additional staff expertise and time as well as software purchases may be needed if the library wishes to support more sophisticated uses of the Web, such as Web forms and database access.

Alternatively, the Burke County Public Library could outsource the hosting of its Web site to a Web services company. There are a number of these companies, and they offer the advantage of handling the details of maintaining the server hardware and software needed to support the library's Web site. Advantages include the following:

- Because the Web services company maintains the Web server hardware and software, there is less work required on the part of the staff of the Burke County Public Library.
- Web services companies typically provide log analysis software so that the library would be able to provide the kinds of statistics on the use of its Web-based resources that will be required by the State Library of North Carolina as well as the kinds of statistics that are needed for better management of the Web site.
- The Web services company handles security.
- The Web services company handles bandwidth needs.
- The Web services company handles hardware and software upgrades.
- Web services companies typically support more sophisticated uses of the Web, such as Web forms and database access.

A further advantage to outsourcing the hosting of the library's Web site to a Web services company is that such companies typically provide email as part of their hosting packages. This would further lessen the work currently required on the part of the staff of the Burke County Public Library to provide email accounts to its staff members. Likewise, security issues related to email – including problems with spam and email-attachment viruses – can often be handled by the Web services company.

The primary disadvantage of this alternative is that the library no longer controls the server hardware and software. This is generally not a concern, as the Web services companies typically guarantee excellent "up time." This option also represents an additional cost to the library, but that additional cost is very small – possibly as little as \$100 per year with a one-time set-up fee as low as \$50 – and the savings in staff time and the improved level of service more than offset the additional costs. Furthermore, the cost of using a Web services company is much less than the cost of replacing the library's current Web server, which should be done in the very near future.

Recommendation

Because of the minimal cost of using a Web services company and because of the advantages that this option presents, it is recommended that the Burke County Public Library use a Web services company to and host its Web site.

Potential Costs and Funding

As noted above, the likely cost of using a Web services company to host the library's Web site would be as little as \$100 per year with a one-time set-up fee as low as \$50. This small amount should be available in the library's current budget.

Action Steps

In order to implement this recommendation, the Burke County Public Library needs to take the following steps:

1. The first step is to select and contract with a Web services company. There are several Web sites that provide guidance. For example, CNET ranks Web services companies at http://webservices.cnet.com/html/aisles/Most_Popular_-_Hosting_Plans.asp. Some sites, such as <http://www.10-cheapwebhosting.com/>, rate less expensive Web services companies. The library staff should develop a set of criteria by which to evaluate the potential companies. These criteria might include the operating system used by the company, the amount of disk space provided by the plan, the amount of data transfer allowed by the plan, the availability of access logs and statistics, and the availability of email.
2. The second step is to transfer the library's current domain name (<http://www.bcpls.org>) to the Web services company. The Web services company will have a form to handle this transaction.
3. The files that make up the library's Web site will then need to be transferred (via FTP) to the Web services company server.

4. After the Web services company has been selected and the Web site has been transferred, the library staff can then begin the process of maintaining the Web site at its new location. This typically involves testing the Web pages on a local machine and then uploading them to the Web services company server when they are ready to be made accessible to the public.

Recommendation 3

**The Burke County Public Library should establish
at least one new staff position to manage and coordinate its technologies.
(Target Date, FY 2004-2005)**

Assessment of the Current Situation

The technologies that are currently employed by the Burke County Public Library require a high level of management on a day-to-day basis and require troubleshooting for any problems that arise.

The management and troubleshooting duties are currently handled by the Assistant Director of Library Operations, a full-time professional position with a Masters degree in Library Science. Another full-time staff member spends part of her time assisting with the development and maintenance of the library's web site, and a full-time person at Valdese devotes approximately one-fourth of her time to overseeing the computers at that branch. There are no other dedicated staff, full-time or part-time, to assist with the library's technologies. A few of the other staff members are able to troubleshoot minor problems, but no one (aside from the Assistant Director of Library Operations) can troubleshoot a network or server issue or independently develop and implement a protocol for PC installation/security/maintenance.

The library is already understaffed, ranking 43rd among the 51 county libraries in the state in terms of FTE staff per 1000 persons served, and the current staffing for technology support is not adequate to sustain the present level of technology and will certainly not be adequate to support the new technologies recommended in this plan.

The management and troubleshooting of the current technologies are now handled by the Assistant Director of Library Operations. However, this individual has a number of other duties:

- Directly supervises the Adult Services and Youth Services departments at the Morganton location.
- Supervises the Technical Services department.
- Has cataloging responsibilities.
- Has systemwide responsibility for all building services, including janitorial, phones, maintenance, grounds, etc.
- Serves as the system administrator for the library's Dynix system.
- Has oversight for all aspects of technology from selection and purchase to installation and maintenance.
- Serves as the primary facilitator for the library's management team.
- Writes and implements one to two grants per year, as needed.
- Assists with programming for Young Adults on a regular basis (one to two programs a month).
- Undertakes special projects as needed.

This heavy work load means that work related to the management and support of the technologies cannot be handled as efficiently and effectively as possible. The installation of new equipment, the installation of software upgrades, and development of the library's Web site are often delayed. For example, the Burke County Public Library recently purchased eleven Pentium IV computers with federal LSTA money to replace the original computers donated to the library by the Gates Foundation. This purchase will allow the original Gates machines to trickle down to staff, thus providing them with more powerful and up-to-date computers. In all, the library has between twenty and twenty five computers that are ready to trickle down. Unfortunately, the Assistant Director of Library Operations does not currently have the time to get these computers ready and the process is being slowed down.

In addition to his heavy work load, the current Assistant Director of Library Operations has a limited knowledge of the technology and this knowledge has been developed mainly through experience. His primary training is as a librarian, not as a technology coordinator or computer technician. Some issues facing the library –

particularly networking and telecommunications issues – may require more expertise than the library staff currently has.

The situation is further aggravated by the fact that there are no other dedicated staff, full-time or part-time, to assist with the library's technologies. As noted above, while a few staff members maybe able to troubleshoot minor problems, only the Assistant Director of Library Operations is able to troubleshoot major problems like network or server issues or to set up and install computers.

Training for both staff and the public in the technology is also a concern. Until recently, the Burke County Public Library had on staff a trainer who had completed the State Library's Master Trainer program and who could provide training programs for staff and for the public. That individual has left the library, however, and his position has been frozen. Current staff cannot provide the same level of training that was provided when the position was filled.

Finally, the need for a staff member who can focus solely on supporting the technologies used by the library is made more critical by the fact that the Burke County government has a very small (two-person) IT department, no wide area network, and no email. This lack of support at the county level means that the library is responsible for full support of the technologies that it uses to serve its users.

Alternatives

The present staff is not adequate to support the present level of technology being used by the Burke County Public Library and will certainly not be adequate to support the new technologies recommended in this plan. The most feasible alternative to the current situation would be to add staff to support these technologies.

A generally-accepted rule of thumb is that an organization should have one support staff position for every forty to fifty workstations. The North Carolina Public Library Directors Association's 1998 "Guidelines for North Carolina Public Libraries" (<http://statelibrary.dcr.state.nc.us/ncplda/guidelines.htm>), also recommend that "At least one full-time computer technician is designated for every 50 computer workstations and related printers and peripherals." The Burke County Public Library currently has over

seventy one desktop computers that provide library and information services to the library's staff and users. This and the considerations outlined in the previous paragraph suggest that at least one new staff position to manage and coordinate the library's technologies is needed.

The funds needed to provide the library with a full-time Technology Coordinator should be viewed as supporting the considerable investment in the technology that the library has already made and will make if the recommendations of this report are implemented. A full-time Technology Coordinator will allow the library to better serve its users, both directly (through the individual in the position) and indirectly (through other staff, who would be trained in the technology by the individual in the position). By contrast, if the library fails to hire a full-time Technology Coordinator, it runs the risk of not providing adequate support for the technology that it employs and the technology will not be used in a cost-effective manner.

Recommendation

The technologies that are currently employed by the Burke County Public Library and the new technologies recommended in this plan will require a high level of management and coordination. Library staff will be responsible for managing these technologies on a day-to-day basis and for troubleshooting any problems that arise. Automated library system vendors typically require that a staff member be designated as the administrator of the automated library system. Someone on the staff will need to serve as the library's Webmaster in order to create and maintain an effective Web site. Local staff will need to take responsibility for troubleshooting and maintenance of an increasing number of sophisticated workstations and software. Finally, as noted in Recommendation 8, someone will need to take responsibility for staff training needs, which will become more important as the use of the technology increases.

The Burke County Public Library should establish at least one new staff position to manage and coordinate its technologies. The individual in this position would perform various functions involving the day-to-day management and operations of the library's automated library system, Internet access, computers, and local area networks;

staff training in the technology; and communications with library users and vendors.

The major duties and responsibilities of the position would include:

- Managing the library's use of the technology in general
 - Planning, developing, implementing, and managing library computing and network systems that support library users and staff
 - Purchasing or approving for purchase necessary supplies
 - Advocating for the application of technology to create, deliver, and improve library services
 - Drafting and reviewing library policies and procedures related to the technology
 - Developing an annual library technology budget
- Supervising the daily operation of the library's broadband Internet access and local area networks
 - Monitoring broadband and network activity and use
 - Performing troubleshooting and maintenance as appropriate
 - Calling for repair and maintenance service as needed
- Managing the automated library system's use and operation
 - Monitoring automated library system activity and use
 - Scheduling the installation and implementation of new or additional hardware
 - Scheduling the installation and implementation of new software releases or updates
- Serving as the library's Webmaster
 - Monitoring the use of the library's Web pages
 - Maintaining and reviewing existing Web pages
 - Creating and implementing new Web pages
- Overseeing the daily operation of the library's computers
 - Monitoring the use of the library's computers
 - Performing troubleshooting and maintenance as appropriate
 - Calling for repair and maintenance service as needed

- Coordinating the training of users and staff members (see next recommendation)
 - Overseeing training programs for staff and library users on the use of electronic resources
 - Communicating with staff and library users regarding network and system activities, functions, problems, and issues
- Acting as a liaison with vendors
 - Communicating with vendors regarding problems
 - Overseeing contract compliance
 - Reviewing and approving invoices from vendors for payment
 - Coordinating the support of software and hardware
 - Coordinating the installation of new software and hardware

Potential Costs and Funding

The cost of providing a full-time Technology Coordinator for the Burke County Public Library will depend on the salary needed to attract a qualified individual. In all likelihood, the salary for such a position would lie between the average salary for a beginning professional librarian in North Carolina's public libraries last year (approximately \$31,500) and the typical beginning salary for systems administrators in the United States (approximately \$50,250, according to the Bureau of Labor Statistics *Occupational Outlook Handbook*). The midpoint of this range is \$40,875, which represents a reasonable estimate for the total salary that would be needed. In addition, approximately \$10,550 for benefits, consistent with the Burke County personnel policies, should be included to bring the total needed to fund this position to \$51,425.

As noted above, the county should be encouraged to look at the position as supporting the investment in the technology that the library has made and will continue to make if the recommendations of this report are implemented.

Action Steps

In order to implement this recommendation, the Burke County Public Library needs to take the following steps:

1. As part of its annual budget presentation, the library staff should include a request for the funding needed to provide a full-time Technology Coordinator.
2. If funding is approved, the library staff should follow the usual procedures for establishing a new position and hiring an individual for that position.

Recommendation 4

**The Burke County Public Library should upgrade
its automated library system.
(Target Date, FY 2004-2005)**

Assessment of the Current Situation

Since 1997, the Burke County Public Library has used the Dynix Classic automated library system to support a wide range of library functions, including the circulation and cataloging of materials and the provision of an online catalog of the library's holdings. The Dynix Classic system currently operates on a two-year-old Windows NT server.

The library has four modules as part of its automated library system:

- Circulation, which allows staff to efficiently check out materials to users and to check in materials that users have returned. The module also allows staff to monitor overdue materials and items that users have placed on reserve. The circulation module must support a quick interaction with users in order to ensure a high degree of user satisfaction. The current circulation module is text-based.
- Cataloging, which allows staff to manage the central database of the library's holdings. Because all of the other modules access this central database to carry out their work, the cataloging function is extremely important to the efficient operation of the entire automated library system. The current cataloging module is text-based; the library has a Windows-based version of the cataloging module but does not use it.
- Public access, which allows staff and users to access a wide variety of library resources, including the records that were traditionally maintained in the library's

card catalog. Again, the ability of the public access catalog to provide users with adequate search tools is very important in helping users find the materials to meet their needs. There are currently three interfaces to the public access catalog: one is text-based; one is Windows-based; and one is Web-based and provides for access from both inside and outside the library facilities.

- Community resources, which provides users with quick and easy access to information pertinent to the local community. The Burke County Public Library uses the community resources module primarily for indexing the local newspaper, the *Morganton News Herald*. The community resources module is text-based.

In reaction to user concerns about the three interfaces to the public access catalog and out of a desire to improve service to users, the Burke County Public Library plans to replace its current public access module with the newer Dynix iPac module in February 2004. The iPac module was originally designed for the Dynix Horizon product (a newer-generation automated library system) but it functions with the older Dynix Classic system that the Burke County Public Library uses.

The iPac module will provide with four major benefits:

- A single interface to the library holdings that will replace the three interfaces that are currently used. The different looks and levels of functionality among the three interfaces have been a cause of concern for some library users, and so the new iPac is expected to improve user satisfaction.
- A consistent, graphical search interface across all of the library's resources (its catalog as well as other databases). This "one-stop" approach to the library's various resources will be similar to the portal approach of Internet resources like Google and Yahoo, which many library users are familiar with.
- Enriched content (book reviews, tables of contents, excerpts, and book cover art) for library users.

- A children's interface to the catalog that makes use of colorful icons and easy-to-understand navigation to make it easier for children to search the library's resources.

While the current Dynix Classic system has made the work of the library staff more effective and efficient and has also enabled library users to have better access to and make better use of the resources of the library. Likewise, the planned iPac module represents an interim solution to some of the problems being experienced with the Dynix Classic system.

However, the current system does not represent the best long-term solution for the Burke County Public Library for several reasons.

- Dynix no longer supports development of the Classic product. New modules and other capabilities are not being developed for that product.
- Dynix will eventually phase out all support for the Classic product. Most estimates of the life of the Classic product suggest that Dynix will only support it for seven to ten more years. At that point, the Burke County Public Library will be forced to purchase a new system.
- The Dynix Classic system does not allow for any customization by the local library staff. Instead, Dynix charges a fee for any changes or modifications to its standard system. For example, the Burke County Public Library wanted to create indexes to its catalog of materials based on format (i.e., videos, audiobooks, collection codes). The product does not allow the local staff to create such indexes on their own, and Dynix charged \$1,000.00 for each index. The staff decided that these changes would be too expensive. As a result, library users are unable to access the library's resources by format even though doing so would be very helpful.
- The Dynix Classic system is relatively inflexible and imposes workflow restrictions on staff. In other words, staff have to adjust their work to the Classic system rather than being able to customize the Classic system to better match their workflow.

- The Dynix Classic system does not take full advantage of data sharing within the system, which may increase the need for redundant data entry, thus making the work of the staff less efficient than it could be.
- From a technical point of view, Dynix Classic is based on an outdated technology and is not built on a multi-tier architecture or an open database structure. This means that third-party products are not available for the system. This also increases the library's dependence on Dynix for all levels of support.

Alternatives

There are two alternatives for upgrading the Burke County Public Library's automated library system. The library could purchase an upgraded system and install and maintain the hardware and software locally or the library could purchase the right to use an application service provider (ASP) system, which would provide the library with access to the automated library system software over the Internet.

Purchase of a New System. The shortcomings of the Dynix Classic system can be seen when it is contrasted with newer automated library systems, including the Horizon product that Dynix now markets.

Since the early 1990s, Dynix has focused its development efforts on the Horizon system, which is meant to be a replacement for Dynix Classic. The Horizon system has several advantages over the Classic product.

- Horizon is based on the modern standards of multi-tier architecture and open database structure. This allows a library more flexibility in incorporating third-party products into its automated library system. For example, the recent implementation of a Vendor Interface Protocol allows Horizon users to do pre-order searching across the local catalog and multiple book vendor databases with a single keystroke. This extremely efficient functionality is not available to Classic users.

- Horizon allows users more flexibility to build their own indexes without intervention from Dynix support staff. For example, the Burke County Public Library staff would be able to create its own index to materials by format, as described above.
- Horizon modules share a single database. The database and modules pass information freely among themselves, so there is no need for redundant data entry.
- Because the modules pass information freely among themselves, there is little system-imposed workflow with Horizon. The system adapts to the staff's workflow, instead of forcing the staff to change their established procedures. Horizon would enable the staff of the Burke County Public Library to be more efficient in their work.
- All Horizon modules use Windows-based functionality, which would again increase the efficiency of staff who use the system.
- Because the Horizon system uses an SQL relational database, the Horizon system's report manager is far superior to that provided by Dynix Classic. It would be easier for library staff to generate custom reports on demand and thereby better manage the library's resources.
- Horizon is under continuous development, and new features are added to its modules. For example, Horizon compliant with the NCIP standard for the interchange of circulation information. Support for this standard is also needed for self-service checkout as well as for interaction with the automated systems of other libraries for reciprocal borrowing arrangements and interlibrary loan.

In addition to the Dynix Horizon system, there are several other vendors of automated library systems, most of whom offer systems that are more up-to-date and provide better functionality than the Classic system that the Burke County Public Library currently uses. These include:

- Endeavor's Voyager system
- Innovative Interfaces Millennium system

- Sirsi Corporation's Unicorn system
- TLC's Library-Solution system

Application Service Provider. An alternative to the purchase of a new automated library system is an application service provider. An ASP system would offer the library access to the automated library system software over the Internet. The central server hardware and central software needed to support the automated library system would be hosted by the vendor. Dynix and several other vendors offer ASP alternatives for their automated library systems.

An ASP approach offers several advantages to the outright purchase of a system. The initial cost with an ASP approach is somewhat less than it would be if the library were purchasing the system. There are also no server maintenance issues, because the server would be maintained by the vendor at its central site. The vendor would also maintain the library automation software at its central site.

There are, of course, some disadvantages to the ASP approach. The major disadvantage is that the library will have to provide adequate connectivity to the vendor's site. This requires a good broadband connection as well as additional "middle tier" software to enable the library's clients to access the vendor's central server. In essence, the library replaces maintenance of the automated library system server and software with maintenance of connectivity. There are also control issues, and the library in an ASP environment will have less control of system configuration and customization than it will with a purchased system.

Finally, the long-term costs associated with an ASP system are higher than those associated with a purchased system. A cost estimated provided by Dynix states that the estimated annual cost of an ASP solution would be \$69,500 for the first year and \$45,500 per year for subsequent years. While the ASP system would be less expensive in the first two years, its cost would exceed the cost of a purchased system in the third and subsequent years. Given that the average life span of an automated library system is five to seven years, a purchased system would be less expensive.

There is no long-term savings in cost to the library over the long term with the ASP option. Likewise, any savings in staff time realized by having the vendor host the

hardware and software would likely be offset by the staff time required to maintain connectivity and the “middle tier” software. Finally, the ASP alternative would lead to some loss of system customization and local control, both of which are important to the Burke County Public Library. Consequently, the ASP alternative is not recommended.

Recommendation

The Burke County Public Library should purchase an upgraded automated library system. The current Dynix Classic system is no longer supported by the vendor and will be phased out completely in a few years, so the library will soon be forced to replace the system. Furthermore, the current system does not allow for any customization by the local library staff, is relatively inflexible and imposes workflow restrictions on staff, and generally makes the work of the staff less efficient than it could be.

Because the automated library system affects both the efficiency of staff and the level of services that are provided to users of the library, an upgraded library system will provide considerable benefits to the Burke County Public Library. Potential benefits include improved services to library users through the incorporation of new modules and services being developed by the automated system’s vendor, increased staff efficiency, the ability of staff to customize the system without assistance from the vendor’s staff, and more flexibility in incorporating third-party products into its automated library system.

In addition, the library may wish to purchase additional modules with its new automated library system to enable the library staff to be even more efficient. A telephone notification and renewal module would allow library users to be notified by telephone or email about overdue materials and materials on reserve and would allow library users to renew their own items on the telephone. Such a module would free staff from these tasks and thereby allow them to focus their attention on other duties. The cost of a telephone notification and renewal module would be approximately \$30,000 to purchase and \$4,500 annually for maintenance.

Potential Costs and Funding

The cost of upgrading the Burke County Public Library’s automated system will not be known until several vendors have been contacted, but a Request for Information that was sent to Dynix and to another automated library system vendor (Sirsi) determined that a new automated library system for the Burke County Public Library would likely cost between \$70,000 and \$100,000 to purchase the system and between \$10,500 and \$12,000 annually for subsequent years. (See Table 2 below for a summary of the costs.)

Table 2
Cost Estimates for New Automated Library System
(Based on Vendor Responses to a Request for Information)

	Dynix Horizon		Sirsi Unicorn	
	Purchase Price	Annual Costs	Purchase Price	Annual Costs
Software	\$ 40,045	\$ 8,162	\$ 57,841	\$ 9,854
Services (i.e., Data Migration, Training, etc.)	\$ 22,989	\$ 0	\$ 32,140	\$ 0
Hardware	\$ 7,394	\$ 3,469	\$ 7,077	\$ 700 *
Total	\$70,428	\$ 11,631	\$97,058	\$ 10,554

In addition, if the library is required to follow a formal bid process to procure a new automated library system, then an additional \$10,000 in consulting services may be needed to assist with writing the Request for Proposals, the evaluation of bids, and contract negotiation.

Based on figures provided by the vendors, the annual costs of this recommendation can be covered by the library’s existing budget. The library currently

* Estimate. Vendor provides a 3-year warranty and did not list ongoing hardware maintenance.

pays over \$19,000 per year in maintenance and support for the Dynix Classic system, so the annual maintenance costs associated with a newer system would actually be less than the cost of maintaining the current system. (This is not surprising, given the dwindling user base for the Dynix Classic system. It becomes more expensive for the vendor to support a system for fewer and fewer users.)

Local funding appears to be the primary option available for the purchase of the system. Unfortunately, the Burke County Public Library's situation does not meet the requirements of the Automated System Grants program administered by the State Library of North Carolina. That program provides grants to libraries that have automated systems that do not meet one or more of the following criteria from the Minimum Standards for Library Automation in North Carolina:

- The capability to export the library's entire bibliographic and holdings databases in MARC format.
- The capability of showing the circulation status of items in the library's online catalog.
- The ability to access the library's online catalog via the Internet through a graphical Web browser interface.

Because the Burke County Public Library's current Dynix Classic system does meet those requirements, the library would not be eligible to apply for an Automated System Grant.

The most obvious source of the funding is, of course, a one-time grant from the local governments – Burke County, the City of Morganton, and the City of Valdese – that currently fund the library's budget. A one-time allocation of \$70,000 to \$110,000 would represent between 10 to 16 per cent of local government's most recent annual allocation to the library for operating expenditures, and the benefits to the citizens of Burke County would be enormous.

Payment for automated library systems is typically staggered in three stages: a small percentage of the total is usually required at contract signing, a larger percentage at delivery, and a smaller percentage at system acceptance. However, in some cases,

vendors such as Dynix and Sirsi are able to offer alternatives methods of payment. For example, some vendors have been able to stretch out the payments for as much as a calendar year without interest; this approach allows the library to pay for the system over two library budget years. Some vendors refer clients to a third party for financing, which may allow payment over a period of 24 to 60 months at the prevailing interest rate. The Burke County Public Library may wish to explore alternative financing if it would make the acquisition of a new automated system more likely.

Should the local governments not be willing to provide these funds or all of these funds, then the library staff will need to identify alternative funding options, some of which are outlined below in Recommendation 10.

Action Steps

In order to implement this recommendation, the Burke County Public Library needs to take the following steps:

1. The library staff should begin identifying and obtaining the necessary funding for this recommendation.
2. While funding is being obtained, the library staff needs to determine whether a formal bid process will need to be followed to procure a new automated library system. This determination will likely be made by the county's purchasing department.
3. If a formal bid process needs to be followed to procure a new automated library system, then a Request for Proposals (RFP) needs to be drafted. The State Library maintains a convenience contract of consultants who can draft RFPs for automated library systems. See <http://statelibrary.dcr.state.nc.us/LSTA/contract.htm>.
4. When the library has identified the funding, it should select an automated system vendor, using an RFP if necessary. The process of issuing an RFP, receiving and evaluating bids, selecting a vendor, and negotiating a contract typically requires 90 days.

5. Following the selection of an automated system vendor and successful contract negotiation, the library staff and vendor should agree upon a time line for the implementation of the new system. The implementation of a new system will usually require 90 to 120 days.

Recommendation 5

**The Burke County Public Library should implement
a system to manage its public computers.
(Target Date, FY 2004-2005)**

Assessment of the Current Situation

The Burke County Public Library provides over forty computers for use by its borrowers at its three locations. These public access computers are primarily used for Internet access but are occasionally used for word processing and other purposes. The computers are heavily used by the public; between 150 and 200 users access them per day.

Unfortunately, the heavy use of the computers requires a great deal of staff oversight, which is a particular problem given the lack of staff at the Burke County Public Library. Public access computers, such as those provided by the Burke County Public Library, entail several management problems:

- Authentication, i.e., restricting the use of the library's resources. The computers themselves may need to be restricted to library borrowers or to borrowers who have paid the annual technology fee or to borrowers who do not have overdue fines or other fees owed to the library. In addition, specific resources – software or databases – may need to be restricted to specific users.
- Scheduling, i.e., providing a way for users to schedule specific times to use the computers.
- Time management, i.e., restricting the amount of time that any individual can use a computer.

- Print management, i.e., allowing the library to charge for printing and thereby recover the costs of paper, toner, and other resources associated with printing.
- Record keeping, i.e., tracking the number of times and the amount of time that resources are used.

These management problems require a great deal of staff time, and the library staff too often find themselves dealing with problems related to the computers and printers rather than with performing their library-related duties.

The staff of the Burke County Public Library are able to handle some of the tasks related to managing public-access computer and printer issues through their Dynix Classic system. For example, the Dynix Classic system handles time management and “times out” users after a specific period of time, thus guaranteeing that a single individual does not monopolize a computer. The Dynix Classic system can also be used to handle one aspect of authentication in that an individual user can be blocked from using the computers. However, in order to accomplish this task, staff must know who to block and must manually alter the individual’s record in the system to deny access.

While the ability to manage these aspects of the public access computers is helpful, the Dynix Classic system does not handle the scheduling, print management, or record keeping issues outlined above. Furthermore, as noted in Recommendation 4, the library will replace its current public access module with the newer Dynix iPac module in February 2004. Unfortunately, the Dynix iPac module does not support the time management and authentication capabilities that the Dynix Classic module provides. The iPac module provides many benefits, of course, and these outweigh the loss of time management and authentication capabilities. Nevertheless, it is likely that staff will be required to spend more time overseeing the use of the public access computers when the iPac module is put in place.

The current Dynix Classic system solves some of the problems associated with the management of the public access computers at the Burke County Public Library. This approach has allowed staff to focus more of their time and attention on performing their library-related duties. However, the current system will soon be replaced with a

system that will not handle the time management and authentication functions. Staff may be called upon to devote more time to the day-to-day management problems associated with the public access computers. These demands could make the work of the staff less effective and less efficient.

Alternatives

Several vendors provide software solutions for the management of public access computers such as those provided by the Burke County Public Library. These include:

- CMS, which provides authentication, scheduling, time management, and record keeping through its PC Cop product and print management through its DigiNet product. See <http://www.cmsdiginet.com/ProductsandServices/productsandservices.htm> for more information.
- CybraryN Solutions, which provides these capabilities through its CybraryN product. See <http://www.cybraryn.com/default.asp> for more information.
- EnvisionWare, which provides authentication, scheduling, time management, and record keeping through its PC Reservation product and print management through its LPT:One product. For more information, see <http://www.envisionware.com/>.
- Pharos, which provides authentication, scheduling, time management, and record keeping through its SignUp product and print management through its Uniprint product. See <http://www.pharos.com/Markets/PublicLibrary.asp> for more information.
- SAM, which provides these capabilities through its Comprise product. See <http://www.comprisetechologies.com/libraries.htm> for more information.
- Telus, which provides these capabilities through its Library Online product. See <http://www.sri.bc.ca/library.htm> for more information.

Products such as these provide solutions to the management problems outlined above.

- **Authentication.** The use of public access computers can be restricted to library borrowers or to borrowers who have paid the library's annual technology fee. Likewise, specific resources – software or databases – can be restricted to valid users or to classes of users. Borrowers who have overdue fines or other fees owed to the library can be denied access. Some products can display the library's Internet Use Policy on the computer screen and require that users agree to it before accessing Internet resources.
- **Scheduling.** Library users can reserve library computers for specific times in advance, thus allowing the library to ensure the equitable and fair use of its public access computers. Some systems allow reservations to be made from outside the library via the library's Web site. Some systems send email reminders to users who have reserved computers. Systems such as these eliminate manual signup sheets and waiting lines.
- **Time management.** The time spent by individual users can be monitored and automatically enforced so that a user can no longer access the resources when his or her time is up. The abuse of time limits based on library policies is eliminated, and because the process is automated, confrontations between staff and users are avoided. Again, this capability allows the library to ensure the equitable and fair use of its public access computers.
- **Print management.** The library can use these products to charge for printing from its public access computers. Charges can be established for printer quality, paper size, color printing, and other special needs. This approach helps the library recover the costs associated with printing at its public access computers and, because patrons pay for what they print, also minimizes paper and toner waste. (The experience of most libraries is that such waste is reduced by 50 per cent with print management software.)
- **Record keeping.** Detailed reports of the use of the computers can be provided to library staff. These reports may include information on the use of specific software, databases, and other resources. This information will be helpful in making decisions regarding the allocation of library funds and in providing

statistics on the use of electronic resources, which are required by the State Library of North Carolina on an annual basis.

Several of the products work in tandem with automated library systems, which provides the benefit of allowing the library staff to manage computer resources via a single system. For example, PC Cop, CybraryN, PC Reservation, and Pharos SignUp include direct interfaces to both the Dynix Horizon and Sirsi Unicorn automated library systems, among others.

Recommendation

The Burke County Public Library should implement a system to manage its public computers. The heavy use of the library's public access computers requires a great deal of staff oversight, and the new iPac module will not support even the limited ability to handle some of the tasks related to managing public-access computer and printer issues through their current system. Without a system to automatically handle the authentication, scheduling, time management, print management, and record keeping tasks outlined above, the staff of the Burke County Public Library will be called upon to devote more time to these day-to-day problems, thus making their work less effective and less efficient.

The implementation of a software solution to manage its public computers would benefit both the library staff and the library users. Staff would be able to spend more time on their library-related duties. The library could better enforce its policies on the use of public computers. Print costs could be recovered, and paper and toner waste could be minimized. Information on the use of computers and resources could be tracked. Library users would benefit from the more equitable use of the computers, the elimination of manual signup sheets and waiting lines, and the elimination of the abuse of time limits by some users.

Potential Costs and Funding

The cost of a system to manage the library's public access computers will depend on the system that the library decides to purchase and on the system components that the library decides to implement. A Request for Information that was sent to Dynix (as a reseller of CybraryN) suggests that such a system for the Burke County Public Library would likely cost approximately \$23,000 to purchase and approximately \$2,300 per year to maintain. If a server is needed for the software, an additional \$2,500 will be needed for that purchase and an additional \$250 per year in maintenance. Thus, the total purchase price would be roughly \$25,500, and the total annual costs would be \$2,750.

This cost estimate is based on the assumption that the library would purchase the following modules for their public access computers at all three sites:

- Authentication through the base CybraryN product
- Scheduling through the CybraryN RSVP module
- Time management through the base CybraryN product
- Print management through the CybraryPRINT Solutions module
- Record keeping through the base CybraryN product
- The ability to manage remote computers (i.e., those at the branches) from a central location through the Cybrary Server module

In addition, the CybraryN product includes Internet control through its CybrarySite module. This module is discussed in further detail in Recommendation 1 on Internet filtering. The cost estimate provided here includes the CybrarySite module for all public and staff computers at the Burke County Public Library.

Finally, the library will also need to purchase the Dynix RPA (Remote Patron Authentication) module in order to provide an interface between the CybraryN product and the patron database for authentication.

The annual costs of this recommendation should be covered by the library's existing budget. The costs of installation and other non-recurring costs might also be

covered by the library's regular budget through a one-time allocation. But another option for funding the installation and non-recurring costs of the system would be federal grant monies administered by the State Library of North Carolina through the Internet Infrastructure Improvement Grants program. According to the program guidelines, this program provides grants to libraries to "develop technological infrastructure solutions to problems or issues that hinder the library's ability to provide optimal user access to the Internet and online content, such as NC LIVE resources, North Carolina ECHO, and StartSquad.org. Examples include: *systems to manage access to workstations or printing*; hardware and software to improve network and user security; special equipment for training or demonstrations; and improvements in the library's telecommunications infrastructure for increased bandwidth capacity."

Clearly, the acquisition of a system to manage the public computers at the Burke County Public Library would qualify for funding under this program. Several similar projects have been funded in other public libraries in North Carolina over the past few years.

The maximum grant request is \$100,000, and the minimum grant request is \$10,000. There is a required local match of 25 per cent for this grant. Given the cost of implementing the service (\$21,000), a local match of \$5,250 would need to be obtained. This amount should be provided by the county as a one-time allocation. If it is not possible to obtain this amount from the county, then the library will have to identify alternative funding options, some of which are outlined below in Recommendation 10.

Action Steps

In order to implement this recommendation, the Burke County Public Library needs to take the following steps:

1. The library staff should become familiar with the various products available for managing public access computers. This can be accomplished by talking with vendors about their products and by talking with libraries that own such products

about their experiences. Demo versions of some products (such as PC Cop) are also available.

2. As the staff become familiar with these products, they should develop criteria to help determine which product is most appropriate for use by the Burke County Public Library. While somewhat biased towards its PC Reservation product, the Envisionware site (<http://www.envisionware.com/pcres/comparison/comparison.htm>) contains a long list of criteria that can be used to evaluate the products. The staff may also want to take into consideration that CybraryN is a Dynix partner, which means that Dynix customers (like the Burke County Public Library) can purchase the product at a discount.
3. The library staff should next identify and obtain the necessary funding. As noted above, the most promising option for funding involves applying for one of the State Library's LSTA-funded Internet Infrastructure Improvement Grants. Local matching funds will also need to be identified, and a commitment for local funding of ongoing costs will also be needed.
4. If the library's application for an Internet Infrastructure Improvement Grant is approved, then the library will be able to purchase and implement a system to manage its public computers.

Recommendation 6

**The Burke County Public Library should upgrade its computers
in accordance with its Equipment Replacement Policy.
(Target Date, FY 2004-2005 and ongoing)**

Assessment of the Current Situation

The Burke County Public Library currently has seventy one desktop computers that provide library and information services to the library's staff and users. These include forty three computers for use by the public, twenty two computers for use by staff, and six laptops that are used for training purposes. Table 3 below shows the number of computers for each function at each site, the operating system currently being used, and their technical specifications. These include forty six at Morganton, eighteen at Valdese, and seven at Hildebran. (Another twenty to twenty five computers are ready to be put into service, but there is not adequate staff to devote to processing these machines.)

The number of computers available for the public and staff at the Burke County Public Library represents an area in which the library does a good job relative to other public libraries in North Carolina. Based on the 2002-2003 statistical report from the State Library, the Burke County Public Library ranks 13th among the 51 county library systems in the state in the number of Internet-accessible computers for the public per capita. The library also ranks 3rd among the 51 county library systems in the state in the number of Internet-accessible staff computers per FTE staff member.

In this area, the Burke County Public Library also meets the 1998 "Guidelines for North Carolina Public Libraries," developed by the North Carolina Public Library Directors Association (<http://statelibrary.dcr.state.nc.us/ncplda/guidelines.htm>). Those guidelines recommend one computer workstation per 2,500 people in a library's service

area or approximately thirty six computers for Burke County's population of 88,963. The Burke County Public Library provides forty three public-access computers and thereby meets the standard.

However, having a large number of computers does not guarantee that the computers are up-to-date and able to support the latest versions of software, many of which make heavy demands on the hardware. For example, if the Burke County Public Library follows Recommendation 4 and upgrades to the Dynix Horizon automated library system, library staff will have to take into consideration the Dynix recommendation that staff workstations used with its Horizon system be at the Pentium IV level or better. Only five of the twenty two computers used by the Burke County Public Library staff meet this recommendation. The most recent guidelines from the State Library of North Carolina also recommend that newly-purchased workstations be at the Pentium IV level. Only twenty one of the library's seventy one computers meet this guideline.

Consistent with a recommendation from the State Library, the Burke County Public Library has an Equipment Replacement Policy. (See Appendix 1.) In keeping with standard practice, this policy recommends that the library's computers be upgraded or replaced every three to five years. In addition, in order to make the most of its computers, the policy defines three tiers of computers based on use and recommends that the high-end computers be upgraded or replaced and that the machines being upgraded or replaced then "trickle down." In other words, if a high-end or comprehensive-level computer is replaced, the computer being replaced is then used to replace a mid-range or basic-level computer and that older mid-range computer is then used to replace a low-end or limited-level computer.

The need to upgrade its computers on an ongoing basis was further recognized in the library's five-year plan for 2003-2007, where Service Goal I-A, Objective 1, action step 2, states, "Replace microcomputers as per schedule proposed in Library's Computer Equipment Upgrade Policy Statement through FY 2004-2005."

The Burke County Public Library has an excellent Equipment Replacement Policy. Its definition of different tiers of computers is particularly sensible. However, a policy such as this is only as good as the ability of the library to follow it consistently.

Alternatives

There are two alternatives for the acquisition of new computers in accordance with the library's Equipment Replacement Policy: purchasing and leasing.

Purchasing. Purchasing is the option most often used by library systems to acquire computers. The primary advantage to purchasing is that it provides the library with a great deal of flexibility. Computers can be purchased, upgraded, or added onto whenever the library has funding. The library can take advantage of grant programs such as the Gates and LSTA grants. The library is not committed to any vendor over a long period of time. Vendors can be changed at any time to take advantage of the best pricing or the best technology that is available.

There are, of course, disadvantages to purchasing computers. Unless the library has access to a steady source of funds, the computers may not be purchased in a consistent or timely manner, and many computers may become obsolete before the library is able to obtain funds to replace them. Purchasing often leads to a "feast or famine" technology environment, which can be disruptive to service.

Leasing. Some library systems and other institutions have turned to leasing as an alternative to purchasing computers. For example, Caldwell County – one of Burke County's neighbors – leases computers from Dell on a three-year cycle that guarantees the replacement of leased equipment after a predetermined period of time.

Leasing would allow the library to avoid equipment obsolescence by determining an acceptable life cycle for the computers and scheduling its replacement. Leasing would also allow the library to standardize its equipment, which would lead to better and more efficient support for the computers.

Recommendation

The Burke County Public Library has an excellent Equipment Replacement Policy and should commit sufficient funds to follow it. The library has been lucky to date and has been able to purchase an adequate number of computers from sources other than the library's local budget – for example, the Gates and LSTA grants. However, the library's luck may not hold out forever, and there should be a commitment on the part of local governments to provide the funding needed to implement the library's Equipment Replacement Policy.

Upgrading the library's computers will allow the library to better guarantee effective access to the information resources that it provides for its users. Library users will be able to use newer software products. By contrast, failing to upgrade the library's computers in accordance with its Equipment Replacement Policy would be unacceptable. As the library's policy notes, "Rapid changes in technology require continuous upgrade and replacement of computer equipment to guarantee effective access to information resources." If the library's computers are not upgraded, then service to its users will rapidly degrade. Newer software cannot be used on computers that are inadequate to support that software.

There are no compelling reasons in favor of either purchasing or leasing. Purchasing gives the library more flexibility, allowing it to purchase or upgrade computers whenever funding is available. Leasing provides the library with greater consistency, avoiding obsolescence by guaranteeing the replacement of leased equipment at specified intervals.

There appears to be little difference in the two alternatives from the point of view of cost. For example, the Burke County Public Library could put its computers on a three-year lease, as does Caldwell County. Gateway's 0%-lease for a three-year cycle would cost \$41.67 per month per machine. If the library leased all seventy one of its computers at this price, the total cost would be \$2,960 per month or \$35,520 per year. By contrast, if the library replaced one-third of its computers annually – equivalent to a three-year lease – it would need to purchase approximately twenty four computers each

year. At an estimated cost of \$1,500 per computer, the purchasing alternative would total \$36,000 per year, roughly the same cost as leasing.

For the leasing alternative to work, however, the library needs to obtain a commitment from Burke County, which provides the majority of local funding to the library. If the county will agree to provide the funds needed to implement a three-year lease, then that alternative would be more attractive than purchasing the computers. If not, then the flexibility provided to the library by the purchasing alternative makes it the preferred option.

Potential Costs and Funding

The costs of this recommendation will depend on the replacement cycle selected by the library. The cost of a three-year replacement cycle for the library's seventy one computers would be approximately \$36,000; by contrast, the cost of a more conservative five-year replacement cycle (the upper limit of the cycle defined by the library's Equipment Replacement Policy) would be less. Under a five-year replacement cycle, the library would replace 14 of its computers in each of the next fiscal years. At an estimated cost of \$1,500 per desktop computer, the total cost would be \$21,000 in each of these fiscal years.

The most obvious source of the funding for the upgrade of its computers is, of course, the Burke County government, which funds the library's budget. The county should be encouraged to provide sufficient funds each year for the library to implement at least a five-year replacement cycle. This total represents about 4 per cent of the county's most recent annual allocation to the library for operating expenditures, but the funding would provide very tangible benefits to the citizens of Burke County.

Another funding source is the Basic Equipment Grants that are administered by the State Library of North Carolina. The purpose of these grants is to "help eligible libraries have sufficient up-to-date computer workstations to ensure that their users have access to the Internet and online content." The maximum grant request is \$25,000, and 15 per cent of the granted funds must be matched locally. However, the first criteria used to determine priority for funding grant requests is whether the library

has an adequate number of workstations. For the grant program in 2003-2004, “adequate” for public libraries is defined as one workstation for user access to the Internet and online resources per 5,000 legal service population. For the legal service population of the Burke County Public Library, “adequate” would be defined as eight workstations. As noted above, the library has forty three workstations for user access to the Internet and online resources, and therefore its need (as defined by the State Library) would be low. This does not mean that the Burke County Public Library cannot receive a Basic Equipment Grant, only that the library would need to provide justification for its request. As the grant application notes, “If available grant funds are limited, priority will be given to libraries that do not meet the minimum adequacy standards.” The library may wish to apply for a Basic Equipment Grant to upgrade its outdated workstations in conjunction with the implementation of a new automated library system.

Other, more general funding options are outlined below in Recommendation 10.

Action Steps

In order to implement this recommendation, the Burke County Public Library needs to take the following steps:

1. The library staff should negotiate with Burke County the possibility of funding a three-year leasing cycle for its computers. The library staff should be clear regarding the County’s commitment to this funding. Otherwise, there is no advantage to leasing over purchasing the computers.
2. If the library decides to rely on purchasing, then as part of its annual budget presentation, the library staff should include a request for the funding needed to upgrade its computers every three to five years.
3. If the library staff decides to pursue a Basic Equipment Grant for new equipment, then the application should be developed and sent to the State Library by the grant deadline, typically late February.

Table 3
Desktop Computers in Use at the Burke County Public Library

Location*	Name	Function	Number	OS	Processor	Speed
CBH	Public Access	Public	6	WIN XP	Pentium 4	1.8 GHz
CBH	Circulation	Staff	1	WIN 98	Pentium MMX	166 MHz
MPL	Design PC	Staff	1	WIN 98	Pentium 2	
MPL	Jim	Staff	1	WIN 2000	Pentium 3	
MPL	Holly	Staff	1	WIN 95	Pentium MMX	166 MHz
MPL	Meeting Room	Staff	1	WIN 98	Pentium 3	
MPL	YS Circulation	Staff	1	WIN 95	Pentium	75 MHz
MPL	YS Circulation	Staff	1	WIN 95	Pentium MMX	166 MHz
MPL	YS Circulation	Staff	1	WIN 98	Pentium	233 MHz
MPL	YS Public Access	Public	8	WIN XP	Celeron	
MPL	Ashleigh	Staff	1	WIN 98	Celeron	
MPL	Nancy	Staff	1	WIN 98	Celeron	
MPL	Alicia	Staff	1	WIN 98	Pentium 4	
MPL	Becky	Staff	1	WIN XP	Pentium 4	
MPL	Steve	Staff	1	WIN 98	Celeron	300 MHz
MPL	Ank	Staff	1	WIN 98	Celeron	300 MHz
MPL	Ref Desk 1	Staff	1	WIN 98	Pentium 2	
MPL	Ref Desk 2	Staff	1	WIN XP	Pentium 4	
MPL	Circulation	Staff	2	WIN 95	Pentium MMX	166 MHz
MPL	Nicole	Staff	1	WIN XP	Celeron	
MPL	Gale	Staff	1	WIN XP	Celeron	
MPL	NC Room	Public	1	WIN 95	Pentium MMX	166 MHz
MPL	Picture Burke	Staff	1	WIN XP	Pentium 4	
MPL	Picture Burke Laptop	Staff	1	WIN XP	Pentium 4	
MPL	Public Access RIAA	Public	10	WIN XP	Celeron	1.3 GHz
MPL	RIAA Laptop	Public/Staff	6	WIN XP	Celeron	1.6 Ghz
VPL	Gates Lab	Public	10	WIN XP	Pentium 4	
VPL	Gates YS	Public	4	WIN NT	Pentium 3	
VPL	Public Access	Public	4	WIN 98	Pentium 2	

* CBH = Hildebran
MPL = Morganton
VPL = Valdese

Recommendation 7

**The Burke County Public Library should establish a framework and methodology for ongoing technology assessment, planning, and budgeting.
(Target Date, FY 2004-2005)**

Assessment of the Current Situation

A process to ensure ongoing technology assessment, planning, and budgeting is necessary to ensure that the goals and objectives of the Burke County Public Library's technology plan are actually implemented and that the library staff are aware of new challenges and opportunities. The current technology plan represents a good first step towards establishing such a process.

Ongoing technology planning is especially important for the Burke County Public Library, which has invested substantial funds in the new technologies. Based on the 2002-2003 statistics, the library ranks 23rd among the state's 51 county libraries in expenditures on access to electronic materials and services, 16th in the number of materials in electronic format, 17th in the number of Internet terminals used by staff, 17th in the number of Internet terminals used by the public, and 29th in the number of users of electronic resources in a typical week. A good planning process is needed to ensure the best return on the library's investment.

Alternatives and Recommendations

There are several areas on which the library staff should focus as it develops a process of ongoing technology planning.

Planning in general. Technology planning takes place within the larger context of planning in general, and so it is important that the library staff implement an ongoing general planning process. The library currently has a good five-year plan, but the library staff should consider implementing the planning process recommended by the Public Library Association (Sandra Nelson, *The New Planning for Results* [Chicago: American Library Association, 2001]). That planning process focuses on involving community representatives in developing the library's plan and provides the dual benefits of providing library staff with clearly defined goals and enhancing the library's visibility in the community.

Evaluating and updating the technology plan. An evaluation process is necessary to ensure that the goals and objectives of the Burke County Public Library's technology plan are actually implemented. This is best done on a regular basis (at least annually) at staff meetings and meetings of the library board. The easiest way to evaluate the technology plan is to tie the evaluation process to the list of recommendations made in the report. For example, a goal may be to select and contract with a Web services company for hosting the library's Web site by July 2004. The evaluation process would be a simple matter of determining whether that goal has been met. If a goal has not been met, then library staff should examine the obstacles to meeting that goal and determine an action plan for overcoming the obstacles.

A similar process may be used to update the plan. Because the technologies change so rapidly, the library staff should review the technology plan on a regular basis to determine whether it is still relevant or whether new challenges and opportunities should be incorporated into it. As part of this process of keeping the technology plan updated, the library staff may wish to consult the Public Library Association's publication, Diane Mayo and Sandra Nelson's *Wired for the Future: Developing Your Library Technology Plan* (Chicago, IL: American Library Association, 1999).

Surveys of user satisfaction. The library staff should also consider conducting periodic surveys of users to determine the impact of the implementation of the recommendations in this report. For example, following the acquisition and implementation of a fully-integrated automated library system, the library staff could survey users to determine their level of satisfaction with the new system.

User surveys can be conducted in a number of ways, including paper surveys, telephone surveys, and Web surveys. They can be ongoing or can be conducted at specific times. They can focus on satisfaction with library services in general or on more specific aspects of the library. User surveys can be small and inexpensive projects, conducted by the staff, or they can be larger and more complex and conducted by professionals. The staff should consider the possibility of surveys to determine user satisfaction and should familiarize themselves with resources such as George R. Plosker's article, "Conducting User Surveys: An Ongoing Information Imperative," *Online* 26 (September/October 2002): 64-68 and Gail Junion-Metz and Derrek L. Metz's book, *Instant Web Forms and Surveys for Public Libraries* (New York: Neal-Schuman, 2001).

Hardware and software inventories. In order to plan for improving its use of the technologies in general and in order to implement the equipment replacement cycle outlined in Recommendation 6, the Burke County Public Library staff should conduct a regular inventory of computer hardware and software. In general, the location, function, processor, processor speed, and operating system of all desktop computers should be maintained in a database that is kept up to date. Likewise, the location, purpose, version, and date of purchase of all software should be maintained in a database that is kept up to date.

Security audit. Because the resources of the Burke County Public Library are routinely available to the general public and because of limited staff time, hacking, viruses, and other security-related issues are serious concerns. In order to mitigate the risks to its computer hardware and infrastructure, the library should conduct a one-time full security audit of its networked resources and should then conduct annual audits.

A complete security audit will perform both external and internal tests. For example, tests from outside the library can identify any weaknesses in the infrastructure by using the same tools available to hackers as well as specialized network and security software. Tests from inside the library can identify vulnerabilities through tests conducted without special access to the network as well as tests conducted with full administrative access to the network. All computers can be checked to ensure that security patches and services packs are installed for all software on the machines.

Issues related to the library's security policies can be examined as well as physical security.

Evaluating email reference. Consistent with Service Goal I-A, Objective 1, action step 5 from the library's five-year plan for 2003-2007, the Burke County Public Library has implemented limited email reference service to its customers. The staff should now evaluate this service to determine whether it is meeting the goals and objectives that were set for it when it was being planned. A survey form could be included with each response to an email reference question; alternatively, a survey form could be created on the library's Web site, and email reference users could be asked to fill it out. The focus of the survey could include the level of usage of the service, the types of questions being asked, and the overall satisfaction of patrons with the service. The results of the survey could determine how well the service has met its goals and could help set the future direction of the service.

Ongoing awareness. The library staff should be aware of what other libraries are doing to use the technologies in innovative ways. For example, the "Innovative Internet Applications in Libraries" site at <http://www.wiltonlibrary.org/innovate.html> provides links to innovative projects in libraries across the United States. The Burke County Public Library staff should be aware of these and other projects and should consider ways to implement similar projects in their own library.

Potential Costs and Funding

Planning in general. If the Burke County Public Library staff chooses to use the planning process outlined in *The New Planning for Results*, then they should consider applying for an EZ Planning Grant from the State Library of North Carolina. These grants are provided "to encourage and support effective planning in public and academic libraries by enabling them to secure the services of a qualified consultant to assist with ... general planning for programs and services." Libraries may apply for up to \$15,000, and there is no local match. There will be some costs associated with such a project that the library will be required to bear; a reasonable total cost for supplies, photocopying, printing, postage, and refreshments would be \$1,500.

Evaluating and updating the technology plan. There are no costs associated with periodically evaluating and updating the technology plan beyond the staff time required to do so.

Surveys of user satisfaction. As noted earlier, user surveys can be small and inexpensive projects, conducted by the staff, or they can be larger and more complex and conducted by professionals. The cost of any user survey will therefore vary, depending on the scope of the project. It would be possible, however, to gather valuable information on user satisfaction for very little cost beyond staff time.

Hardware and software inventories. There are no costs associated with conducting a regular inventory of computer hardware and software, especially if these are maintained in a database that is kept up to date, beyond the staff time required to do so.

Security audit. The library should hire an experienced firm to conduct its security audit. An estimate received from one such firm stated that a full security audit would cost approximately \$4,000. Annual audits should then cost approximately \$2,000 each. The cost to correct any problems uncovered by the audit cannot be estimated at this time. These costs should be covered by the library's existing budget. Considering the amount of money spent by the library on electronic resources and computer hardware, a one-time cost of \$4,000 and an annual cost of \$2,000 represent very inexpensive insurance against potential catastrophes.

Evaluating email reference. An evaluation of the email reference program can be kept small and inexpensive, involving only staff time.

Ongoing awareness. Again, there are no costs associated with an ongoing awareness of what other libraries are doing to use the technologies in innovative ways beyond the staff time required to do so.

Action Steps

1. **Planning in general.** If the library staff decides to apply for an EZ Planning Grant to allow them to hire a consultant to assist with implementation of the planning process outlined in *The New Planning for Results*, then the deadlines

associated with the grant program need to be followed. Deadlines for the LSTA grant programs are published by the State Library on its Web site at <http://statelibrary.dcr.state.nc.us/lsta/lsta.htm>. The grant application will include a time line, which the library should then follow if the funding is approved.

2. **Evaluating and updating the technology plan.** These tasks are best done on a regular basis at staff meetings and meetings of the library board. The library director should place evaluation and update of the plan on the agendas of staff and library board meetings at least annually.
3. **Surveys of user satisfaction.** Library staff should conduct surveys of user satisfaction on an as-needed basis.
4. **Hardware and software inventories.** As soon as possible, one of the library staff members should create a database to support an ongoing inventory of computer hardware and software at the library. Maintaining this database would eventually be assigned to the staff member hired to support the library's technologies. (See Recommendation 3 above.)
5. **Security audit.** Staff should identify funding for the security audit and should identify a firm with experience in this area. The time required to complete a full security audit of the networked resources of the library is roughly one week.
6. **Evaluating email reference.** Staff should determine the nature of the email reference evaluation and the period of time over which the data will be gathered. After that period of time, library staff should compile data and use the results to determine how well the service has met its goals and to set the future direction of the service.
7. **Ongoing awareness.** On an ongoing basis, library staff should be encouraged to be aware of what other libraries are doing to use the technologies in innovative ways.

Recommendation 8

**The Burke County Public Library should focus on training its staff to make better use of the new technologies to serve the library's users.
(Target Date, FY 2005-2006 and ongoing)**

Assessment of the Current Situation

Too often, the emphasis in technology planning is placed on the hardware and software aspects of technology. However, in order to ensure the proper and effective use of the technology, a firm commitment to staff development is needed. Otherwise, the benefits of the technology will not be fully realized.

As noted above, training for both staff and the public in the technologies is a major concern for the Burke County Public Library. The importance of training is reflected in the library's five-year plan for 2003-2007, where Service Goal I-A, Objective 1, action step 4 states, "Plan, develop, and implement a comprehensive staff development program for all employees of Burke County Public Library through FY 2005-2006."

Until recently, the library had on staff a trainer who had completed the State Library's Master Trainer program and who could provide training programs for staff and for the public. That individual has left the library, however, and his position has been frozen. Current staff cannot provide the same level of training that was provided when the position was filled.

Alternatives

In order to improve the skills of the current staff, the Burke County Public Library should focus on three aspects of staff training:

- What training is needed by staff?
- Where can training be found?
- How can transfer of training be maximized?

What Training Is Needed? The first step is to determine what staff training is needed, and this goal can best be achieved by conducting both an organizational training needs assessment and individual training needs assessments.

The organizational needs assessment should focus on the technological skills needed by the staff in order to accomplish the Burke County Public Library's mission: to provide free and equal access to information, knowledge of new technologies, lifelong learning opportunities, and the joys of reading for a diverse community of users. This is best done by having staff members consider which technologies best help the library meet these goals.

Individual training needs assessments can be accomplished by having all staff members develop individual training plans, based on the organizational needs (defined above) and their individual skill levels. Every staff member should identify those areas of the technology in which she or he needs training in order to contribute to the mission of the library. Acquiring or improving these specific skills should be included in individual staff work plans and monitored by the library director, who should assist staff members in finding training opportunities in the areas identified as important.

Where Can Training Be Found? Staff training is available from several sources. The director and the staff of the Burke County Public Library should monitor these and other sources to ensure that staff are aware of training opportunities that are relevant to their needs and to the needs of the library. Sources of staff training include:

- The State Library of North Carolina sponsors a number of workshops for librarians in the state. These are announced periodically on the State Library's continuing education Web site (<http://statelibrary.dcr.state.nc.us/ce/ceopps.htm>). For example, State Library sponsored classes in the spring of 2004 include

“Power Searching the Internet,” “Web Authoring with Front Page,” “Securing Public Access PCs,” and “Introducing John & Jane Public to Your Online Resources.” Workshops typically cost \$20 for a one-day session and are often held in multiple locations throughout the state.

- Library associations, such as the North Carolina Library Association and the American Library Association, offer workshops on a wide range of topics. The workshops sponsored by the North Carolina Library Association would be particularly attractive to the staff of the Burke County Public Library, because they are held in the state and are usually less expensive than those sponsored by the American Library Association. Continuing education opportunities are announced on the North Carolina Library Association Web site at <http://www.nclaonline.org/>.
- The Western Piedmont Community College offers some courses that may be relevant to the needs of the staff of the Burke County Public Library. These include courses on various aspects of computer hardware and software such as “Computer Upgrade/Repair,” “Computer Architecture,” and “Internet Servers.” These courses require a greater commitment of time and money but also provide more in-depth instruction. The College’s catalog is available on the Web at <http://www.wp.cc.nc.us/catalog.htm>.
- Library schools also offer staff training opportunities, and the staff of the Burke County Public Library should be aware of these options. They range from workshops to distance education programs that lead to the Masters degree in Library Science. The Web sites of the various schools should be consulted for specific opportunities.
- A new automated library system will require that the staff be trained to use the system. This training is typically included in the price of acquiring the automated system, and the Burke County Public Library should consider the optimal amount of training. Training in the use of a new automated library system will be particularly important for the Burke County Public Library staff, because the current Dynix classic system is text-based and the newer automated library

systems are based on Windows-like graphic interfaces. This change in user interfaces may entail a steep learning curve for many of the staff.

- The library staff may consider contracting with individuals to provide the kinds of training that are needed. One potentially inexpensive option might be to use one of the Master Trainers who have been trained by the State Library to conduct technology-related staff training. (One of the former Burke County Public Library staff members was a Master Trainer, and other Master Trainers work at nearby libraries.) More details about the Master Trainers are available at <http://statelibrary.dcr.state.nc.us/mtrainer/index.html>.
- The Burke County Public Library should strongly consider having another of its staff members participate in the Master Trainer program itself, thereby enhancing her or his skills in training for both staff members and library users.

Transfer of Training. Libraries and other employers devote considerable time and money to continuing education and staff development. Some researchers have estimated that from \$40 to \$70 billion is spent annually in the United States on formal training and \$240 billion on informal on-the-job training. Others estimate that over \$500 per employee is spent per year on training activities.

The purpose of continuing education, staff development, and training is to produce a desired change, and these activities are of little value if the desired changes in behavior, attitude, understanding, or skill level do not take place. Unfortunately, there is evidence that transfer of training rarely takes place. Some researchers suggest that, on average, only 40 per cent of the content of management development programs transfers to the work place immediately after training, only 25 per cent is still being applied six months later, and a mere 15 per cent is being applied at the end of a year. Others have stated that only 10 per cent of training expenditures result in observable changes in on-the-job behavior.

If the Burke County Public Library is going to focus on staff training, then part of that focus should be on transfer of training, i.e., ensuring that the desired changes in behavior, attitude, understanding, and skill level do take place.

A number of articles and books on transfer of training (most notably, *Transfer of Training: Action-Packed Strategies to Ensure High Payoff from Training Investments* by Mary Broad and J.W. Newstrom [Reading, MA: Addison-Wesley, 1992]) have suggested ways in which the transfer of skills gained in training can be maximized. These techniques can be implemented as part of the staff training effort at the Burke County Public Library:

- Selecting staff to attend training on the basis of individualized training plans
- Selecting staff to attend training according to established criteria used for all employees
- Prior to training, conferring with staff regarding performance expectations following the training
- Arranging to have a staff member's work covered during the training period
- Allowing staff preparation time before the training session
- Planning assessment procedures to use when staff members are back on the job
- Working with staff to practice ways to reinforce the use of new job behaviors related to the training
- Scheduling a meeting with staff back on the job to plan the use of their new skills, ideas, or information
- Developing opportunities for staff to use their new skills, ideas, or information immediately on the job
- Providing staff with checklists or worksheets related to their new skills, ideas, or information for use on the job
- Providing counseling or coaching related to the use of the new skills, ideas, or information on the job
- Asking newly-trained staff to share their training experience and learning with co-workers on the job
- Holding regular meetings of groups of trainees to discuss the use of new behaviors and skills
- Giving staff positive reinforcement for desired performance related to their training

- Requesting reports from staff on the use of new skills, ideas, or information and knowledge on the job

Recommendation

The Burke County Public Library should focus on training its staff to make better use of the new technologies to serve the library's users. In particular, the library should focus on determining what specific training is needed by staff in order to accomplish the Burke County Public Library's mission, on options for providing that training (including contracting with individuals to provide the kinds of training that are needed), and on techniques to maximize the transfer of training so that the desired changes in understanding and skill level do take place.

Specifically, the staff of the Burke County Public Library should develop a staff training plan in keeping with the North Carolina Public Library Directors Association's 1998 "Guidelines for North Carolina Public Libraries" (<http://statelibrary.dcr.state.nc.us/ncplda/guidelines.htm>), which recommend that:

The library supports and encourages staff to enhance basic skills, acquire new skills, keep current on new developments in public libraries, and renew their enthusiasm for library work. Attendance at library conferences, participation in course work, seminars, and other in-service training offerings all provide opportunities for library staff to improve their knowledge base and to add new skills. The library provides paid work time and funding for related expenses for such training. Special emphasis is placed on the need to train staff in the use and maintenance of information technologies.

- a. At least 2% of the personnel budget is allocated to in-service training and continuing education.
- b. Each library brings its staff together annually for a minimum of eight hours of education and training.

- c. Each library has an established in-service training schedule that includes provision for each staff member to participate in at least one opportunity annually for education and training.

Potential Costs and Funding

If the Burke County Public Library follows the guideline above and devotes 2 per cent of its personnel budget to in-service training and continuing education, then the costs of providing staff training – based on the library’s 2002-2003 expenditures – would have been roughly \$14,700 in that fiscal year. That amount would have provided approximately \$775 in staff training for each full-time staff equivalent. Realistically, adequate staff training would probably require much less money, especially if the State Library and the North Carolina Library Association continue to provide inexpensive training opportunities in convenient locations.

Trained staff can better serve the users of the library and can provide a better return on the investment in the technology. The satisfaction of library users will increase, and the library will be more likely to accomplish its mission and achieve its goals. By contrast, if the library fails to provide library staff with adequate training in the technology, service to patrons will degrade as technologies continue to change and become more sophisticated. If adequate staff training does not accompany the implementation of the recommendations made in this report, the technology will not be used in a cost-effective manner.

The most obvious source of the funding for staff training is the Burke County government, which funds the library’s budget. The county should be encouraged to provide sufficient funds each year for the library to provide training to its staff members. A reasonable target is 2 per cent of the library’s personnel expenditures. The funds devoted to staff training would have a substantial return on the investment, would protect the investment that the County has already made in the technology, and would provide tangible benefits to the citizens of Burke County.

One option suggested above – having a staff member participate in the State Library’s Master Trainer program – would improve in-house training for both staff

members and library users but would cost the library nothing, as the State Library covers the costs associated with Master Trainer program participation.

Staff training related to the use of a new automated library system would be funded as part of that recommendation. The library is encouraged to purchase as much training in the automated library system “package” as seems feasible. The details of training can be negotiated with potential vendors through the Request for Information or Request for Proposals.

Other, more general funding options are outlined below in Recommendation 10.

Action Steps

In order to implement this recommendation, the Burke County Public Library needs to take the following steps:

1. As part of its annual budget presentation, the library staff should include a request for the funding needed to provide adequate training for its staff members.
2. The library director should meet with library staff as a group to determine the technological skills needed by the staff in order to accomplish the Burke County Public Library’s mission.
3. At the beginning of each fiscal year, the library director should meet individually with staff members to develop individual training plans, based on the organizational needs (defined above) and the individual skill levels of each staff member.
4. Periodically, the library director and staff members should check the Web sites of the State Library, the North Carolina Library Association, and other organizations that provide training and notify one another of potential training opportunities.
5. If the Burke County Public Library wishes to pursue the option of having a staff member participate in the State Library’s Master Trainer program, the library director should contact the State Library’s consultant for continuing education to determine the deadline for applications for that program. Deadlines for applications have varied in the past.

6. As part of the process of obtaining information from automated library system vendors through a Request for Information or a Request for Proposals, the staff should focus on the details of the staff training provided by the vendors.

Recommendation 9

**The Burke County Public Library should enhance
the content provided to users of the library's Web site.
(Target Date, FY 2005-2006)**

Assessment of the Current Situation

As noted in the previous recommendation, the Burke County Public Library's Web site (<http://www.bcpls.org/>) currently does a good job of promoting the library and its programs and services. The Web site includes links to the library's online catalog and NC LIVE (North Carolina's statewide set of licensed online databases), information about the library itself, pages aimed at specific service populations (young adults, children, and Spanish-speaking individuals), and links to information about Burke County and about North Carolina.

While there is a valuable amount of content available to users of the library's Web site, there is a desire on the part of library staff both for better utilization of the content that the library has and for additional content.

Alternatives and Recommendations

Better Utilization of Available Content

In 2002-2003, the Burke County Public Library ranked 16th among the state's 51 county libraries in the number of materials available to library users in electronic format, but only 29th in the number of users of electronic resources in a typical week. These statistics suggest that the library's electronic resources are underutilized and that library staff could do more to promote the electronic content that is currently available.

Areas in which the library staff should focus their attention include the following.

Web site analysis. The staff of the library should consider conducting an in-depth analysis of the current Web site in order to identify potential areas for improvement. There are a number of ways in which such an analysis can be conducted, including the following:

- An analysis of the Web site's accessibility to individuals with visual and other disabilities. The Burke County Public Library serves such individuals and should ensure the accessibility of its Web site to them. An accessibility analysis can be conducted by submitting the individual pages of the library's Web site to the Bobby Web accessibility tool at <http://bobby.watchfire.com/bobby/html/en/index.jsp>. Bobby is a Web accessibility tool designed to "help expose and repair barriers to accessibility and encourage compliance with existing accessibility guidelines." The tool tests for compliance with government standards and offers suggestions for improving a site's accessibility based on the Web Content Accessibility Guidelines provided by the World Wide Web Consortium's (W3C) Web Access Initiative. For example, Bobby would note that two of the images on the library's home page (<http://www.bcpls.org/>) do not have ALT tags and alternative text associated with them; these would improve accessibility by allowing the alternative text to be displayed in place of the images under certain circumstances, including when a screen reader is being used by a visually impaired user.
- An analysis of any broken links on the library's Web site. One of the more important tasks of maintaining a Web site is the periodic checking of links to determine whether the links on the Web site are still accurate. Links may become outdated for several reasons, including Web site restructuring (by far the most common reason). For example, the link to the North Carolina Zoo on the library's "Museums & Zoos" page (http://www.bcpls.org/museums_&_zoos.htm) points to an old site that is no longer available. If a patron clicks on the link on the library's Web site, an "Object not found!" message appears. Such broken

links are frustrating for users of the Web site, and library staff should periodically check the links on the Web site to make sure that they are current.

- An analysis of the Web site's log file. As noted earlier, the State Library of North Carolina will soon require public libraries to report the number of accesses to the library's Web-based catalog and the number of accesses to the library's Web site from outside the library. Gathering these statistics will require that library staff analyze the Web site's log files. In addition, an analysis of the log files can provide the library with valuable information about the site's use and its visitors, including lists of the most requested pages on the site.
- A Web-based survey of users of the Web site. Even more information on the use of the library's Web site can be obtained through a Web-based survey, such as the pop-up surveys used by companies such as SurveySite (<http://www.surveysite.com/newsite/docs/popsoft.htm>) and Whetstone at the Leading Edge (<http://www.whetstone.biz/page.asp?partid=91>). Such pop-up surveys can ask a visitor if she or he would be willing to complete a short online survey about the site. If the visitor declines, then the window disappears and the visitor is allowed to continue browsing the Web. If the visitor agrees, then she or he is redirected to a Web page containing a survey to be filled out and submitted on the Web. Cookies can be used to ensure that visitors are not asked more than once to participate in the survey. The pop-up survey can be limited to specific pages of the library's Web site if desired.
- A usability analysis of the library's Web site. Web site usability has been defined as "The ease with which visitors are able to use a Web site." ("Marketing Terms.com," http://www.marketingterms.com/dictionary/web_site_usability/) Usability is important for a Web site, because if visitors find a site difficult to use, they are more likely to get frustrated and leave and may form a bad impression of the organization that hosts the Web site. One recent, popular set of usability guidelines is that developed by Jakob Nielsen and Marie Tahir in their book, *Homepage Usability: 50 Websites Deconstructed* (Indianapolis, IN: New Riders Publishing, 2002). The book focuses on the homepages of fifty well-known organizations and provides 113 criteria for usability as well as other

recommendations for determining and improving the level of usability of any Web site. A usability analysis of the Burke County Public Library Web site would ensure that its users are less likely to be frustrated and more likely to find what they are looking for. For example, usability guidelines suggest that a Web site provide users with an input box on the homepage to enter search queries. The Burke County Public Library Web site does not include such a search function, and implementing one would improve the usability of the site to its users.

Electronic books through NetLibrary. The Burke County Public Library has access to a collection of over 22,000 electronic books (or ebooks) through NetLibrary (one of the databases provided through NC LIVE). NetLibrary contains the full text of these English-language books from U.S. publishers, which cover all subjects and most of which were published in the 1990s. The collection also includes older literary classics in the public domain.

These titles represent a potentially valuable set of resources for the users of the library, especially in light of the fact that the Burke County Public Library ranks 43rd among the 51 county libraries in North Carolina in collection size. Unfortunately, in Burke County and in most libraries across the state, the NetLibrary collection is underused. The staff of the library should consider various ways in which to increase the use of these electronic books.

- Do a better job of publicizing the NetLibrary resources. Aside from a link to the NC LIVE resources on its “Online Databases” page, the NetLibrary collection is not linked or highlighted on the library’s Web site. If staff want to promote the use of these materials, then better publicity is needed. For example, a separate page describing the resources and highlighting specific areas of the collection (such as that provided by the Denver Public Library at http://www.denver.lib.co.us/readers_connection/netlibrary.html) would be helpful. North Carolina State University also provides a brief but informative description of NetLibrary at <http://www.lib.ncsu.edu/colmgmt/netlibrary/>. This page includes a link to NetLibrary’s animated demo at <http://www.netlibrary.com/multimedia/>

flash/ebookdemo/base.html; the demo shows the user how to create an account and log in, how to search for an ebook in the NetLibrary collection, how to use an ebook, and how to check out an ebook. The NetLibrary Web site has a section on promoting ebooks at <http://www.netlibraryebooktoolkit.com/>; this site includes training resources, logos, graphics, and other promotional materials.

- In particular, highlight specific parts of the NetLibrary collection. The NetLibrary collection includes Cliffs Notes, the SAMS “Teach Yourself” series, and other titles of interest to users of the Burke County Public Library. Lists of these and other areas of the NetLibrary collection might improve their level of use in Burke County. The most popular NetLibrary titles could also be listed, as North Carolina State University did in its April 2002 newsletter (see http://www.lib.ncsu.edu/administration/publications/NLArchives/NL.vol.29/NL_29_9.pdf).
- Make it easier for users to set up an account and a password. The NetLibrary collection can be accessed by any library user from home or the library only if the user has set up an account and password *from a workstation in the library*. This process is somewhat cumbersome but is required by NetLibrary. Nevertheless, the library should do what it can to make the process easier. Printed materials explaining how to set up a NetLibrary account could be used, or the library’s Web site could include instructions of how to set up an account. The Denver Public Library’s site at http://www.denver.lib.co.us/readers_connection/netlibrary.html includes step-by-step instructions for setting up an account.
- Provide links to the titles in the NetLibrary collection from the library’s catalog. This approach will show users of the catalog that a title is available via NetLibrary and should increase the use of these materials. These links can be implemented by adding a link to the NetLibrary record in the 856 field of the MARC record for the title in the library’s catalog. MARC records for the NC LIVE collection of NetLibrary books can also be downloaded from the NC LIVE site at <http://www.nclive.org/netlibmarc.phtml?BL=5> and loaded into the library’s catalog.

- Encourage staff to become familiar with NetLibrary. The more familiar staff are with the resource, the more likely they will be to promote it and to use it when helping library users. The NC LIVE site has an excellent FAQ for NetLibrary at <http://www.nclive.org/faq/netlibraryfaq.phtml>, which contains a great deal of information about the resources.

NC LIVE resources in general. In addition to the ebooks just mentioned, NC LIVE (North Carolina Libraries for Virtual Education) provides a searchable, online gateway to the complete articles from over 5,500 newspapers, journals, magazines, and two encyclopedias. The service also provides indexing for over 10,000 periodical titles. NC LIVE is supported by the General Assembly and the citizens of North Carolina and is provided free to the users of public, community college, college, and university libraries throughout North Carolina.

As with the ebooks provided through NetLibrary, the NC LIVE resources are potentially valuable to the users of the Burke County Public Library. Unfortunately, the NC LIVE resources are underused in Burke County and in many libraries in the state. The staff of the library should consider various ways in which to increase the use of NC LIVE resources in general.

- Do a better job of publicizing NC LIVE. The Burke County Public Library does include a link to the NC LIVE resources on its “Online Databases” page and does list featured databases with direct links, but more might be done to promote the use of these resources. For example, a full listing of the magazines indexed by NC LIVE could be provided; see <http://www.cpcc.edu/library/db/dbhome.htm> for an example of how one library has implemented such a list. A breakdown of the subject areas covered by NC LIVE could also be provided; see <http://www.earlibrary.org/nclive.htm> for an example, which also includes an alphabetical listing of the magazines indexed by NC LIVE.
- Encourage staff to learn more about NC LIVE. As with the ebook resources provided through NetLibrary, the more familiar staff are with the resource, the more likely they will be to promote it and to use it when helping library users.

The State Library of North Carolina sponsors a number of workshops on NC LIVE resources for librarians in the state. These are announced periodically on the State Library's Web site (<http://statelibrary.dcr.state.nc.us/ce/ceopps.htm>), and staff should be encouraged to attend these workshops.

Alternatives and Recommendations

Additional Content

In addition to better utilization of the content that the library has, there is also a need for additional content. Areas in which the library staff should focus their attention include the following.

Digitization. In 2002-2003, the library received a federally-funded LSTA Digitization Starter Grant totaling \$5,125 to begin digitizing photographs from its local history collection; the goal is to eventually display these photographs on the library's Web site. This project is consistent with Service Goal III, Objective 1, action step 5 of the library's five-year plan for 2003-2007:

Plan, develop, and implement a project to digitize photographs relevant to the history of Burke County in cooperation with Burke County Historical Society, Burke County Genealogical Society, and the State Library of North Carolina beginning FY 2002-2003 through FY 2005-2006.

The digitization of materials from the local history collection of the library and other local organizations would provide excellent content for the library's Web site, content that has proven to be very popular with the users of other libraries' Web sites. The Burke County Public Library staff can find numerous examples of how digitized content can be presented at North Carolina ECHO (<http://www.ncecho.org/>), the State Library's portal to the special collections of North Carolina's libraries, archives, museums, historic sites, and other cultural institutions.

If the initial digitization project proves successful, library staff may wish to expand their efforts by applying for one of the NC ECHO Digitization Grants or Heritage Partners Grants offered by the State Library. See Recommendation 11 below for further information.

Other multimedia content. There are many other possibilities for providing multimedia content on the library's Web site. For example, the Detroit Public Library offers "computer storytime," a set of Web activities organized by themes and including online games and a Shockwave coloring book. (See http://www.detroit.lib.mi.us/childrens_library/storytime.htm.) The Waukesha (Wisconsin) Public Library offers several online games as part of its "Kid's Corner" at <http://www.waukesha.lib.wi.us/kc/games.shtml>. The New York Public Library offers coloring pages on its Web site at <http://kids.nypl.org/arts/coloring.cfm>. Examples of multimedia content for adults include the virtual tour of the Public Library of Charlotte and Mecklenburg County at <http://www.plcmc.org/multimedia/default.htm>. The "Innovative Internet Applications in Libraries" site at <http://www.wiltonlibrary.org/innovate.html> provides further examples of innovative projects in libraries across the United States, and the library staff should consider implementing similar projects in their own library.

Databases in addition to those provided through NC LIVE. The library makes several online databases available to its users through NC LIVE. However, there are many online databases that are not carried by NC LIVE, some of which may be of particular interest to the users of the Burke County Public Library. The library may wish to purchase its own licenses to these databases.

One example is WilsonWeb, which provides access to a number of databases that correspond to publications of the H. W. Wilson Company. Many of these sources – *Current Biography* and *Short Story Index*, for example – are already owned by the library, but the online versions provide several advantages: they can be accessed from outside the library at all times; they provide more sophisticated search methods; and multiple users can access the resources at one time. (Further information on WilsonWeb can be found at <http://www.hwwilson.com/Documentation/WilsonWeb/tecfaq7.html>.)

Other possibilities include the following:

- The Facts.com Reference Suite, which includes online versions of *Facts on File*, *Issues and Controversies on File*, *Today's Science on File*, *The World Almanac*, and *The World Almanac Encyclopedia*. See <http://www.facts.com/online-fdc.htm> for further information.
- The online version of the *Encyclopedia Americana*. See <http://go.grolier.com/go-ol/static/features/eafeatrs.htm> for more details.
- HeritageQuest Online, a collection of research materials for tracing family histories and genealogies, including the complete U.S. Federal Census from 1790 through 1930. See <http://www.heritagequestonline.com/prod/genealogy/index>.
- The LearningExpress Library, which provides access to online practice tests for academic, civil service, military, and professional licensing and certification exams. More information is available at <http://www.learnatest.com/LearningExpressLibrary/Home.cfm>.
- Reference USA, a database of business information that contains data on more than 12 million U.S. businesses. See <http://www.referenceusa.com/au/au.asp?si=39442423439236> for more information.

Potential Costs and Funding

In general, efforts to increase the use of content that is currently available can be implemented with little or no cost, other than the staff time required.

Web site analysis. The staff of the library could conduct many of the analyses of the library's Web site that were discussed above, thus restricting the costs of such a project to staff time only. (If the library outsources its Web site hosting in accordance with Recommendation 2 above, then log analysis software should be provided as part of the hosting package. Otherwise, the library will need to purchase the log analysis software at a cost of approximately \$500.) If an outside consultant were hired to do a full analysis of the Web site, the cost would likely be around \$10,000.

Electronic books through NetLibrary. None of the recommendations listed above will cost the library beyond staff time. The Burke County Public Library has access to the NetLibrary collection through NC LIVE, which is funded by the state legislature.

NC LIVE resources in general. The NC LIVE workshops held by the State Library typically cost \$20 for a one-day session and are often held in multiple locations throughout the state. Otherwise, none of the recommendations listed above will cost the library beyond staff time.

Some of the ideas for adding content to the Web site are inexpensive, but others may require additional funds.

Digitization. The library has already received funding to begin digitizing photographs from its local history collection. The grant helped the library purchase scanning equipment and computer hardware to support the digitization project, and further digitization would require only staff time.

Other multimedia content. In most cases, adding other multimedia content to the Burke County Public Library Web site will cost the library nothing beyond the staff time involved.

Databases in addition to those provided through NC LIVE. The library would be required to pay licensing fees for any online databases beyond those provided through NC LIVE. The details of pricing vary widely from product to product.

As an example, a license for WilsonWeb that would allow up to 12 simultaneous users would cost the library approximately \$6,400 per year. These costs might be offset by savings if the library decided to drop print subscriptions to publications (like *Current Biography* and *Short Story Index*) that were available in the online databases. By contrast, another example mentioned above, the Facts.com Reference Suite, would cost the library \$2,858 per year for unlimited usage.

Action Steps

1. **Web site analysis.** The staff of the library should determine whether they wish to conduct the analyses of the library's Web site that were discussed above or whether an outside consultant is needed. If the staff can conduct the analyses, then they would carry these out according to a predetermined time line. If an outside consultant is hired to do the analysis of the Web site, then funds would need to be identified.
2. **Electronic books through NetLibrary.** The staff of the library should determine the recommendations that they wish to implement and should determine a time line for these activities.
3. **NC LIVE resources in general.** Again, the library staff should determine the recommendations that they wish to implement and then determine a time line for these activities.
4. **Digitization.** The library has already received funding to begin digitizing photographs from its local history collection. The grant application's time line should be followed, and goals and time lines for future work in this area should be developed on an annual basis.
5. **Other multimedia content.** The library staff should generate or borrow ideas for adding content to the library's Web site on an ongoing basis. Individual projects will have their own time lines.
6. **Databases in addition to those provided through NC LIVE.** The library staff would need to determine which additional databases they wished to acquire, negotiate licensing fees with the appropriate vendor, and identify funding (probably from local government). Because such databases are typically licensed on an annual basis, the library staff will want to keep track of usage statistics and periodically evaluate whether the new databases are being used at a level that justifies their expense.

Recommendation 10

**The Burke County Public Library should explore alternatives for funding the new technologies.
(Target Date, ongoing)**

Assessment of the Current Situation

Any technology plan must address the need for funds to implement the plan. Funds must be obtained to acquire the hardware, software, licenses, services, and staff needed to implement the recommendations of this plan. Furthermore, funds must be budgeted annually to maintain existing technology, to update or replace obsolete technology on a regularly scheduled basis, and to provide necessary staff support. Specific funding options have been explored for each of the recommendations made in this report, and the current recommendation discusses funding in more general terms.

The Burke County Public Library currently receives funding primarily from two sources: local funds from Burke County, the City of Morganton, and the City of Valdese; and state aid from the State of North Carolina. In addition, the library receives occasional funding through federal aid from the Library Services and Technology Act, which is administered by the State Library of North Carolina; local fund raising; and non-governmental grants. The library also receives a discount on telecommunications services through the Universal Service program, established by the 1996 Telecommunications Act.

Local Funding. Local funding for the operations of the Burke County Public Library comes from Burke County, the City of Morganton, and the City of Valdese. In the most recent fiscal year (2002-2003), this funding totaled \$510,897 from Burke County, \$146,906 from the City of Morganton, and \$34,060 from the City of Valdese.

The towns of Drexel and Hildebran also contributed \$2,000 and \$500 respectively. This funding totaled approximately 59 per cent of the library's total operating income.

State of North Carolina. The Burke County Public Library receives state funding through the State Aid to Public Libraries program that is administered by the State Library of North Carolina. In the most recent fiscal year (2002-2003), this funding totaled \$151,501 or approximately 13 per cent of the library's total operating income.

Other State Grants. In 2002-2003, the Burke County Public Library also received \$75,516 in state grants from two other sources: \$51,196 in Smart Start funds; and \$24,320 in Rural Internet Access Authority funds. The library has been particularly successful in receiving Rural Internet Access Authority funds, having been awarded three such grants in recent years.

LSTA. Federal funding to public libraries in the United States is provided primarily through the Library Services and Technology Act (LSTA), which is administered in each state by the state library. In North Carolina, LSTA funds are administered by the State Library of North Carolina, in conjunction with a Five Year Plan for Implementation and an LSTA Advisory Committee, which composed of leaders from the state's library community.

The Burke County Public Library has received over \$170,000 LSTA grants since 1998-1999:

- The library received a Basic Equipment Grant totaling \$20,000 in 1998-1999.
- The library received an Enhanced Connectivity Grant totaling \$33,750 in 1999-2000.
- The library received a Hispanic Services Project Grant totaling \$43,817 in 2001-2002. This grant allowed the library to market library services to the Hispanic community in Burke County and to purchase Hispanic collections for library users.
- The library received a Digitization Grant totaling \$5,125 in 2002-2003. This grant allowed the library to begin digitizing photographs from its local history collection for eventual display on the Web.

- The library received a Technology Planning Grant totaling \$18,900 in 2003-2004. This grant has funded the development of the current technology plan.
- The library received a Gates Training Lab Sustainability Grant totaling \$29,971 in 2002-2003 to upgrade its Gates lab computers in Valdese.
- The library received a \$20,000 Strengthening Library Collections grant in 2003-2004 to develop or strengthen subject areas in the collection to meet user needs.

Local fund raising. The Burke County Public Library has had success in raising funds from local non-governmental sources. The library raised \$254,847 in funds from local non-governmental sources in 2002-2003 and ranked 2nd among the state's 51 county libraries in the percentage of operating income raised from non-governmental sources (22 per cent, over four times that state median of 5 per cent).

Sources of local non-governmental funding include the fund balance of BPCL, Inc., gifts, trust funds, fines and fees, a grant from the East Burke Learning Alliance, book gifts, and rental income.

Non-governmental grants. Grants from private companies or foundations have also been obtained by the Burke County Public Library, most notably the \$86,773 grant from the Bill and Melinda Gates Foundation's Library Program in 2000-2001. This grant provided eleven computers (ten workstations and one server) and T1 connectivity for a training lab in Valdese (one of only twenty such labs in North Carolina) as well as five computers (four for public access and one content server) each at Morganton and Valdese.

E-rate. The Universal Service provision of the 1996 Telecommunications Act (commonly referred to as E-rate) mandates discounted rates for telecommunications services for libraries and schools. The E-rate program allows eligible schools and libraries to purchase commercially available telecommunications services, Internet access, and internal connections at discounted rates. Thus, the cost of these telecommunications services to the Burke County Public Library is less than it would be if the Universal Service provision were not in place. In 2002, the Burke County Public Library received a total refund of \$16,231 from the E-rate program. For 2003, the discount for the Burke County Public Library will be 60 per cent of eligible expenses.

Alternatives and Recommendation

The staff, board members, and supporters of the Burke County Public Library should explore alternatives for funding the new technologies. In some cases, this will entail seeking continued or increased funding from existing sources. In other cases, the library staff – with assistance from the library board and other supporters of the library – must identify and pursue new sources of funding.

Local Funding. Local funding for the Burke County Public Library totaled \$694,863 in 2002-2004 or \$7.78 per capita for the service population. Unfortunately, this per capita figure ranks as one of the ten lowest figures for per capita library support among the 51 county libraries in North Carolina. In fact, the \$7.78 per capita in local support for the Burke County Public Library is 25 per cent less than the median local per capita support for county libraries in North Carolina of \$10.41. In order to reach that level of funding, the Burke County Public Library would need to increase local funding to approximately \$930,000 per year – almost \$235,000 more per year than is currently provided to the library.

The lack of adequate local funding can also be seen in the fact that local funding accounted for approximately 59 per cent of the library's total operating income in 2002-2003. This percentage is far below the median of 78 per cent for the 51 county libraries in North Carolina, and only two other county libraries received less of their operating income from local funds. This low percentage is a result of the lack of adequate local funding, combined with the excellent work of the library staff in raising local funds from other sources.

The library board, the library staff, and other supporters of the library need to ensure the continued level of local funding to the Burke County Public Library as well as work for increased local funding to the library. Actions to achieve these goals include:

- Communicating the importance of local funding to local funding authorities. Any reduction in local funding would make it difficult for the library to provide adequate services to its users. Furthermore, because the library must maintain

its level of local funding from year to year in order to continue to receive state funding, any attempts to cut local funding to the library could cause the loss of further funds.

- Advocating for increases in local funding. As noted above, the current level of per capita local support for the library ranks 41st among the 51 county libraries in North Carolina. The \$7.78 per capita in local support for the Burke County Public Library is 25 per cent less than the median local per capita support for county libraries in North Carolina of \$10.41. Increased local funding is needed to ensure the library's ability to provide adequate services to its users and to implement the recommendations of this technology plan.
- Showing that library staff and supporters are working hard to identify and pursue new sources of funding. It is important that local funding authorities understand that the library staff is making every possible effort to find alternative sources of funding. The fact that the Burke County Public Library ranks 2nd among the state's 51 county libraries in the percentage of operating income raised from non-governmental sources (22 per cent, compared to a state median of 5 per cent) is evidence of the hard work of staff and supporters to identify such funding.

State of North Carolina. As noted above, the Burke County Public Library receives approximately 13 per cent of its operating income as state funding through the State Aid to Public Libraries program that is administered by the State Library of North Carolina. This funding is governed by a formula that is partly based on the population of the library's service population and partly based on the per capita income of the library's service population. There is obviously little that the library staff can do to affect the amount of state funding that the library receives.

However, there are several actions that the library board, the library staff, and other supporters of the library can take to ensure the continued availability of and perhaps even an increase in state funding to the Burke County Public Library:

- Communicating the importance of state funding to local and state funding authorities. State aid represents approximately 13 per cent of the total operating

income of the Burke County Public Library, and any reductions in that funding make it difficult for the library to provide adequate services to its users. Due to the state's recent fiscal situation, State Aid to Public Libraries has fluctuated in recent years, and the allocation to the Burke County Public Library was reduced from \$155,154 in 1999-2000 to \$131,750 in 2001-2002 before rising to \$151,501 in 2002-2003.

- Communicating the requirements for the library to receive state funding to local funding authorities. First, the library must retain a professional (MLS-degreed) librarian as the library director. Second, the library must maintain its local funding from year to year unless local funding for the library is reduced as part of an overall general budgetary reduction reflecting local economic conditions and local government fiscal constraints. Attempts to cut local funding to the library may jeopardize state funding.
- Advocating for increases in the State Aid to Public Libraries program. The North Carolina Public Library Directors Association has discussed restoring state aid to its 1998-99 level of \$16.9 million – an increase of \$2.5 million over its 2002-2003 level. If funding were restored to this level, it could result in an increase in state aid to the Burke County Public Library of approximately 15 per cent or over \$22,000. Another, more ambitious proposal by the North Carolina Public Library Directors Association would increase state aid to \$26.5 million, which would increase state aid to the Burke County Public Library by more than \$125,000. The library board, the library staff, and other supporters of the library should encourage their state legislators to support increases in the State Aid to Public Libraries program.

Other State Grants. Only two other county libraries in the state received more money from other state grants in 2002-2003 than did the Burke County Public Library. While these grants are further evidence of the hard work of staff and supporters to identify funding to supplement the money received from local governments, it also suggests that the local governments need to make a stronger commitment to provide adequate levels of support to the library.

The library board, the library staff, and other supporters of the library should continue the pursuit of additional funds from other state grants, while working for increased levels of local funding to the library. Actions to achieve this goal include:

- Continuing the library's participation in the Smart Start and Rural Internet Access Authority programs.
- Being aware of possible programs and funding through these and other state-funded programs.

LSTA. As noted above, the State Library of North Carolina administers federal funding to public libraries in the state through various grants programs, which are funded by the Library Services and Technology Act (LSTA). The Burke County Public Library has received over \$170,000 in such funds since 1998-1999. Between 1998-1999 and 2002-2003, the library ranked 12th among the state's 51 county libraries in the amount of LSTA funds received, further evidence of the hard work of staff and supporters to identify funding to supplement the money received from local governments.

The library board, the library staff, and other supporters of the library should continue the pursuit of federal funds, while working for increased levels of local funding to the library. Actions to achieve this goal include:

- Follow Recommendation 1 by implementing filtering software on its public and staff computers and reviewing its Internet safety policy in order to ensure that the library will be eligible to receive LSTA funds in the future.
- Being aware of LSTA grant programs and pursuing those that are pertinent to the library's goals as aggressively as possible. LSTA grant programs have been mentioned in conjunction with several of the recommendations made in this plan, and the library staff should work to obtain these grants.
- Communicating the importance of federal funding to Congressional representatives. It is particularly important that those in Congress be aware of

the local impact of federal money, especially in relatively poor, rural counties like Burke.

Local fund raising. As noted earlier, the Burke County Public Library has been quite successful in raising funds from local non-governmental sources. Only one other county library in North Carolina raised a larger percentage of its 2002-2003 operating income from local non-governmental sources.

These fund-raising efforts provide evidence that the staff and supporters of the library are working hard to identify funding to supplement the money received from local governments. Unfortunately, the fact that the Burke County Public Library raises 22 per cent of its operating income from local non-governmental sources also suggests that funding from local governments should be increased.

While they work to increase that funding, the library board, the library staff, and other supporters of the library should continue to seek out such local fund raising opportunities. Some options that should be explored include:

- Developing clear goals and objectives regarding local fund raising from non-governmental sources. While these funds do benefit the library, the library board and library staff should be careful that their success in these fund-raising activities does not provide local governments with an excuse not to provide adequate levels of funding to the Burke County Public Library.
- Continuing to develop the Library Foundation, which was begun three years ago and has just hired a fund raising consultant.
- Continuing to work with the Burke County Friends of the Library. The library director and the members of the Friends groups may find the Friends of Libraries USA (FOLUSA) site to be particularly helpful, especially the "Best Ideas from Friends 1995-1999." (<http://www.folusa.org/html/best4.html>)
- Using the library's Web site for online fundraising. Several public libraries in North Carolina have used their Web sites for local fundraising, most notably the Public Library of Charlotte and Mecklenburg County, which has an online gift shop. Staff should consult the article by Timothy C. Hunter ("Cyber-Fundraising

and North Carolina Public Libraries”) in the Winter 2002 issue of *North Carolina Libraries*.

Non-governmental grants. The Foundation Center’s report (*Foundation Growth and Giving Estimates, 2002 Preview*, available on the Web at http://www.fdncenter.org/research/trends_analysis/pdf/fgge03.pdf) reports that there are 62,000 grantmaking foundations in the United States and that these organizations made grants totaling \$30.3 billion in 2002.

It may be possible for the Burke County Public Library to obtain grants from private companies and foundations, but these require that the staff identify such grants and apply for them. The following actions may help the staff in these efforts:

- Obtaining information about grants from private companies and foundations. Staff should consult the article by Janice Steed Lewis (“Making Connections: North Carolina Libraries and Grantmaking Foundations”) in the Spring/Summer 2002 issue of *North Carolina Libraries*. The article provides information on foundations that have made grants to libraries in the state in recent years and foundations that may be potential benefactors in the future. The article includes tables showing the foundations that made grants, the libraries to which they made grants, and the amount of each grant. The Lewis article also identifies a number of Web and print resources for information on foundations, including the following:
 - The Foundation Center (<http://fdncenter.org/>) provides a wide range of information on philanthropy in the United States. Of particular interest is the Foundation Finder, a free database that provides basic information on 70,000 private and community foundations. The Foundation Directory Online provides more information on the foundations but is available only through subscription.

- GuideStar: The National Database of Nonprofit Organizations (<http://guidestar.com/>) also provides a free searchable database of information on foundations and other nonprofit organizations.
 - GrantSmart (<http://grantsmart.org/>) provides a similar free database of information on foundations.
 - Capital Development Services (<http://www.capdev.com/NCdirectory.htm>) publishes *North Carolina Giving Online*, an online directory of foundations in North Carolina. The directory is available through subscription.
- Being particularly aware of the philanthropic efforts of local companies. Several of the larger companies in Burke County do provide grants. These include:
 - Caterpillar, which provides support in communities where Caterpillar has a presence for the areas of education, civic and community activities, health and human service, and culture and art. During 2002, the Caterpillar Foundation contributed over \$11 million to various organizations, and in recent years, the Foundation has granted funds to organizations in North Carolina (a \$250,000 donation for renovation of the Clayton Cultural Arts Center) and libraries (a \$1 million donation for construction and operation of the Abraham Lincoln Presidential Library and Museum in Springfield, Illinois). A brochure outlining the program and its guidelines is available on the Web at http://www.cat.com/about_cat/social_responsibility/01_social/05_communities/images/foundationar.pdf. Further information on this foundation can also be found at the Foundation Center's Foundation Finder Web site: <http://fdncenter.org/cgi-bin/findershow.cgi?id=CATE001>.
 - Dana Corporation, whose foundation provides "funding to charitable organizations that improve the quality of life for children, families and communities throughout the world," focuses on education and community development and, to a lesser degree, culture and human service organizations. During its 2001-2002 fiscal year, the Dana Corporation Foundation contributed nearly \$2.9 million to various organizations, and in

- recent years, the Foundation has granted funds to over 30 organizations in North Carolina (including the Susan G. Komen Breast Cancer Foundation and the United Way of Burke County) and libraries (a \$30,000 donation to the Toledo Lucas County Library; a \$3,000 donation to the Friends of the Payne Branch Library in Findlay, Ohio). No Web site for the foundation could be identified, but further information on this foundation can also be found at the Foundation Center's Foundation Finder Web site: <http://fdncenter.org/cgi-bin/findershow.cgi?id=DANA003>.
- The Sara Lee Bakery Group (which owns the Waldensian Bakeries) provides support for nonprofit organizations working in five areas – including arts and culture – through the Sara Lee Foundation. In fiscal year 2002, the Foundation reported total cash contributions of over \$13 million. The grants process is outlined on the Foundation's Website at <http://www.saraleefoundation.org/funding/process.cfm>. Further information on this foundation can also be found at the Foundation Center's Foundation Finder Web site: <http://fdncenter.org/cgi-bin/findershow.cgi?id=SARA001>.
 - Being aware of the fundraising process. Again, two articles from *North Carolina Libraries* (Joline R. Ezzell's "A Twelve-Step Program for Stronger Grant Proposals," *North Carolina Libraries* 53 [Spring 1995]: 6 – 7; and Steve Sumerford, "Careful Planning: The Fundraising Edge," *North Carolina Libraries* 53 [Spring 1995]: 3 – 5) may prove helpful to staff of the Burke County Public Library.

E-rate. The E-rate discounts represent a small source of funding for the Burke County Public Library. In 2002-2003, the library received a refund of \$16,231 from the E-rate program.

The library needs to make the best use of this program by:

- Following Recommendation 1 by implementing filtering software on its public and staff computers and reviewing its Internet safety policy in order to ensure that the library will be eligible to receive the E-rate discount in the future.
- Taking advantage of the E-rate discount as much as possible. The library's staff should discuss potential E-rate applications with the State Library's Consultant for Public Library Networking and should be familiar with the list of services that are eligible for E-rate discounts (<http://www.sl.universalservice.org/reference/eligible.asp>). For example, basic telephone service, T-1 lines, wireless telecommunications services, and the installation and maintenance of internal connections are eligible for discounts. The equipment needed to transport information within a library – including routers, hubs, network file servers (including the necessary software), and wireless local area networks – is eligible for discounts. By contrast, equipment such as computers (with the exception of network file servers) and other hardware, software (with the exception of the software required for the operation of network file servers), fax machines, modems, teacher training, and upgrades to the electrical system are not eligible for discounts.
- Communicating the importance of the E-rate discount program to Congressional representatives. It is particularly important that those in Congress be aware of the local impact of this program, especially in relatively poor, rural counties like Burke.

Potential Costs and Funding

There are no costs associated with pursuing this recommendation. If any of the above suggestions are successful, funding to the Burke County Public Library will be increased.

Action Steps

The action steps needed to implement this recommendation have been outlined above under the different options for funding.

Recommendation 11

The Burke County Public Library should expand its efforts to promote collaboration with other libraries and agencies in the area.

(Target Date, ongoing)

Assessment of the Current Situation

Technology planning may involve collaboration between agencies for one of two reasons. First, information technologies can make collaboration easier to accomplish. Second, the technologies themselves and particularly the acquisition of those technologies can often be supported by collaborative efforts.

The Burke County Public Library has been involved in several collaborative projects with other libraries and agencies in Burke County through the Rural Internet Access Authority (RIAA). In 2002-2003, the library received a \$12,000 RIAA grant for public access and a \$20,000 RIAA grant for digital literacy. In 2003-2004, the library received a \$5,000 RIAA grant for public access and a \$3,000 RIAA grant for e-commerce.

The public access and digital literacy initiatives are addressed in the library's five-year plan for 2003-2007 as Service Goal I-A, Objective 1, action steps 7 and 8:

In cooperation with the Burke County School system, plan, develop, and implement a Rural Internet Access Authority grant to increase fee public access to electronic information at Morganton Public Library and George Hildebran Elementary School during FY 02-03.

In cooperation with Western Piedmont Community College, plan, develop, and implement a Rural Internet Access Authority grant to provide digital

literacy training opportunities at Morganton Public Library and the Small Business Center at WPCC during FY 02-03.

The 2002-2003 public access grant added eight computers to the Burke County Public Library, thereby expanding the number of computers available for public Internet access by 25 per cent, and established an additional public access site at a rural elementary school in Hildebran. The 2002-2003 digital literacy grant allowed the Burke County Public Library and the Western Piedmont Community College to expand and enhance their digital literacy programs for the public by offering new classes in basic computer literacy, e-commerce (in conjunction with the Community College's Small Business Center), and skills in the Internet, electronic mail, Microsoft Office, and Windows.

The 2003-2004 public access and e-commerce grants allowed the Burke County Public Library to purchase a server for the new Dynix iPac module discussed earlier in Recommendation 4. As noted there, the iPac module will provide a single interface to the library holdings; a consistent, graphical search interface across all of the library's resources; enriched content; and a children's interface to the catalog. Library users will benefit from the module, which will highlight resources of interest to Burke County residents, including government and social services, GIS data, employment and health information, and other local resources. Users will also be able to search the collections of other libraries in the area, including Western Piedmont Community College and public libraries in Catawba and Caldwell Counties.

Alternatives and Recommendations

The Burke County Public Library should expand its efforts to promote collaboration with other libraries and agencies in the area. In particular, there are several areas that warrant further investigation by the library staff.

Rural Internet Access Authority. The Burke County Public Library should continue to pursue funding from the Rural Internet Access Authority. The Authority's

goal of providing public access to the Internet is consistent with the mission of the library and increases the library's visibility in the community. The library has benefited from these funds in the past and should continue to benefit from them.

LSTA Grants in General. Collaboration has become an area of emphasis for the federal LSTA grants that are administered by the State Library of North Carolina. The 2003-2007 LSTA plan for the state (<http://statelibrary.dcr.state.nc.us/lsta/plan2003-07.pdf>) lists "Emphasizing collaboration in all aspects of the program" as one of five areas that the LSTA Advisory Committee identified as areas of emphasis and lists "Improving access to library and information resources for all North Carolinians through cooperation, collaboration, and effective use of technology" as one of two priorities for the LSTA program in North Carolina. The plan also notes that "During the next five years, there will be an increased emphasis on cooperation and collaboration in the grant programs. Grant applications that demonstrate an integration of those concepts into their programs will be given preference in most funding decisions."

The Burke County Public Library staff should work with other librarians in Burke County and in surrounding counties to take advantage of this emphasis on collaboration and to determine whether collaborative projects are feasible. Library staff should also discuss these possibilities with the State Library's Federal Programs Consultant, Penny Hornsby.

NC ECHO Digitization Grants and Heritage Partners Grants. As noted earlier, the library recently received a federally-funded LSTA Digitization Starter Grant totaling \$5,125 to begin digitizing photographs from its local history collection for eventual display on the Web.

The State Library of North Carolina also provides larger LSTA grants relayed to digitization, and these may be of interest to the Burke County Public Library and other libraries in the area.

The NC ECHO Digitization Grants are provided "for digital technologies to improve access to the unique cultural holdings of North Carolina's libraries, museums, archives and historical societies." These grants are available to public and academic libraries with a maximum of \$75,000 for collaborative projects. A local match of 10 per cent of the total grant request is required.

The NC ECHO Cultural Heritage Partners Grants are provided “to create online resources on a topic of significant statewide interest. Grants to libraries with substantial experience in digitization to lead a large, multiyear, multi-partner project.” These grants are available to public and academic libraries but must include at least one non-library institute (for example, a museum). Multiyear projects are required, and a maximum of \$150,000 annually is available. A local match of 10 per cent of the total grant request is required.

These grant programs are particularly interesting, given the historical importance of Burke County and the surrounding area. Projects focusing on topics such as the history of the furniture industry in North Carolina or the Waldensians might lend themselves to these programs. (See <http://www.ncecho.org/onlineprojects.asp> for a list of previously funded projects, which have included such topics as the history of forestry in the state, the people of the North Carolina mountains, North Carolina currency and maps, and the World War II experience in the Cape Fear region.) The focus of the grant programs includes three areas that might be of interest to the organizations in Burke County and neighboring counties: the creation of online content, such as Web sites; the preparation of online finding aids for archival and manuscript materials; and the building of effective partnerships for digitization.

Because of the complexities involved in a project like this, the Burke County Public Library may wish to pursue an LSTA Project Planning Grant, which is “designed to aid libraries that wish to develop plans, evaluate the viability of a concept, and/or complete preliminary activities that enable them to prepare applications for several LSTA grant programs.” The maximum amount that may be requested by a library system for a Project Planning Grant is \$15,000, and there is no local match.

The staff of the Burke County Public Library should work with other librarians in Burke County and in surrounding counties to determine whether such a grant would be possible. Library staff should also discuss these possibilities with the State Library’s Federal Programs Consultant, Penny Hornsby.

Powerful Partners Collaboration Grants. The State Library of North Carolina also provides federal LSTA funds “to support collaborative projects focusing on youth.” These grants are available to public, academic, and public school libraries and must be

implemented by community teams. The grants provide a maximum of \$50,000, and a local match of 10 per cent of the total grant request is required.

The focus of this grant program is on building community teams to provide services to youth, to help libraries work in partnership with other local organizations, and to give libraries a visible leadership role in the local community. Grant funds may be used to purchase equipment (including computer equipment), library materials, wages and benefits for temporary project staff, contractual services, and supplies. The level and quality of the collaborative partnership in the project should be particularly strong.

Again, because of the complexities involved in a project like this, the Burke County Public Library may wish to consider an LSTA Project Planning Grant, which is “designed to aid libraries that wish to develop plans, evaluate the viability of a concept, and/or complete preliminary activities that enable them to prepare applications for several LSTA grant programs.” The maximum amount that may be requested by a library system for a Project Planning Grant is \$15,000, and there is no local match.

The staff of the Burke County Public Library should work with other librarians in Burke County and in surrounding counties to determine whether such a grant would be possible. Library staff should also discuss these possibilities with the State Library's Federal Programs Consultant, Penny Hornsby.

Other Collaborative Grants. There are other examples of collaborative grants among North Carolina's library community. For instance, in 2002 and 2003, the State Library of North Carolina awarded two LSTA Hispanic Services Grants totaling \$175,000 to a group of four public libraries in North Carolina – the Asheville-Buncombe Library System and the public libraries of Haywood, Madison, and Transylvania counties. In 2001, a \$15,000 LSTA Technology Planning Grant was awarded to a group of small college libraries in western North Carolina. In 1999, a \$43,300 LSTA Automated System Grant was awarded to a consortium of libraries in Rutherford County that included the county library system, the Isothermal Community College Library, and three independent municipal libraries.

Other Libraries in Burke County. The Burke County Public Library may wish to explore the creation of a Burke County Library Association that would involve the various librarians in Burke County, e.g., those in the county library, the Western

Piedmont Community College Library, and the school libraries. The Metrolina Library Association (in the Mecklenburg County area), the Durham County Library Association, and others provide models for this kind of countywide organization. Such organizations typically sponsor meetings at which library staff exchange ideas and concerns as well as workshops or speakers. Ideas for further collaboration may grow out of these meetings.

Other Libraries in the Area. The Burke County Public Library may wish to explore the creation a regional library association, which would involve public, academic, and possibly school librarians in Burke County and surrounding counties. Librarians in the Asheville area and public librarians in the northwestern and southeastern parts of the state have formed such associations, both formal and informal. Again, such organizations typically sponsor meetings at which library staff exchange ideas and concerns as well as workshops or speakers.

Potential Costs and Funding

Implementing this recommendation does not require the expenditure of funds beyond the required local match should one of the LSTA grants mentioned above be pursued. One of the benefits of collaboration, of course, is that costs of local matches such as these can be shared among multiple organizations.

Action Steps

In order to implement this recommendation, the Burke County Public Library needs to take the following steps:

1. In the case of the Rural Internet Access Authority, the library should continue to pursue funding from this source to support collaborative projects with other libraries and agencies in Burke County.
2. In the case of LSTA grant programs, such as the NC ECHO Digitization and Heritage Partners Grants and the Powerful Partners Collaboration Grants:

- a. The first step is to determine whether a particular grant program is appropriate for the library and any community partners.
 - b. If so, then the deadlines associated with the grant program need to be followed. Deadlines for the LSTA grant programs are published by the State Library on its Web site at <http://statelibrary.dcr.state.nc.us/lsta/lsta.htm>.
3. In the case of establishing ties with other libraries in Burke County or other libraries in the area, the staff of the Burke County Public Library should determine whether the approach is worth pursuing and, if so, make the necessary contacts to set up an initial meeting of the parties to be involved.

Appendix 1. Equipment Replacement Policy

Burke County Public Library System Equipment Replacement Policy

The Burke County Public Library System provides various information technology resources for use by its patrons and staff. The use of these resources must be consistent with the goals of the library system. All library staff and patrons are expected to act responsibly and to follow the library system's guidelines, policies, and procedures in using the technology.

Technology has become essential for the daily needs of the patrons and staff of the Burke County Public Library System. Rapid changes in technology require continuous upgrade and replacement of computer equipment to guarantee effective access to information resources. The purpose of this policy is to set forth guidelines for replacement of computer equipment on a timely basis.

Acknowledging the rapid pace of change in technology, the Burke County Public Library System plans for the replacement or upgrade of computer equipment on a schedule in keeping with the best practices of industry, every three to five years.

The diverse system requirements of technological resources in the Burke County Public Library System allows for a gradual shifting of equipment from one function to another. More powerful computers will be used where needed and older, less powerful computers will be used in more limited environments. Each computer will be evaluated before the end of each fiscal year as part of budget planning for the upcoming year. There are three general levels of use:

- (1) *Comprehensive* - a high-end, network ready computer, capable of performing an extensive variety of applications including internet access and multimedia, and library networked and remote access online catalog – within a graphical operating environment.
- (2) *Basic* - mid-range, network ready online catalog and circulation computers and/or internet and multimedia access – within a graphical operating environment.
- (3) *Limited* - low-end, older computers adequate for a few select applications such as multimedia and word processing – ideally, but not necessarily within a graphical operating environment.

This policy will be reviewed on a yearly basis (at July board of trustees meeting) and revised or modified as deemed necessary by the library administrators and the board of trustees.

The Burke County Public Library System plans to purchase new computers from a single manufacturer, hopefully to reduce ongoing support and maintenance costs. In making equipment purchases, the Burke County Public Library System will adhere to computer equipment specifications provided by the State Library of North Carolina.

*Approved by the Burke County Public Library Board of Trustees
August 15, 2000*