



BUFFALO AND ERIE COUNTY PUBLIC LIBRARY

TECHNOLOGY PLAN

2001 – 2004

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INTRODUCTION

The Buffalo & Erie County Public Library Technology Plan (2001 – 2004) documents the strategies necessary for deploying relevant technology that will provide superior library service to the residents of Buffalo and Erie County. The System consists of a Central Library, 15 branches in the City of Buffalo, Extensions Services and the following 22 contracting libraries:

- Amherst Public Library
- Angola Public Library
- Aurora Town Public Library
- Boston Free Library
- Cheektowaga Public Library
- City of Tonawanda Public Library
- Clarence Public Library
- Denio Memorial Library (Newstead Public Library)
- Eden Library
- Elma Public Library
- Ewell Free Library
- Grand Island Memorial Library
- Hamburg Public Library
- Hulbert Library of the Town of Concord
- Lackawanna Public Library
- Lancaster Public Library

- ❑ Marilla Free Library
- ❑ Orchard Park Public Library
- ❑ Town of Collins Public Library
- ❑ Town of North Collins Public Library
- ❑ Town of Tonawanda Public Library
- ❑ West Seneca Public Library

The technology needs and requirements of all libraries are met by the Buffalo and Erie County Public Library System and are included in this document.

In 1997, the Buffalo & Erie County Public Library (B&ECPL) completed a formal technology plan that set forth an implementation strategy the Library could follow to ensure that access to information was equal to all. To accomplish the goals of the plan, it was necessary to build the required infrastructure at the Central Library and the fifty-one city branch and contracting libraries. On December 21, 1998, a major milestone was met with the introduction of the B&ECPL's web site incorporating the new web-based on-line catalog. At the same time, patrons were provided with graphical access to the World Wide Web at the Central Library using approximately thirty state-of-the-art personal computers. The objectives of the plan were exceeded in November 1999 when the project to install at least one workstation with Internet access in each facility was completed and over 400 personal computers were made available to library patrons. While great strides were made in narrowing the digital divide in the community, serious on-going support issues were created. These issues are addressed in this technology plan.

In 1997, the Library began a strategic planning process by hiring Aaron Cohen Associates, Ltd. to study its processes, services, facilities and relationships. *The Buffalo & Erie County Public Library in the Third Millennium* was the result. The goal of the report was to outline a strategy to provide **expanded, improved and innovative library services** delivered by an organization that was governed openly and efficiently. The primary thrust of the B&ECPL planning process was to transform the System into an organization that consistently delivers high-quality services that proactively meets the needs of individuals that live and work in Erie County.

The Board of Trustees immediately began to review the ACA report with the intent of molding it into a plan that the System and the people of Erie County could call their own. They endorsed the spirit and intent of the strategic planning process, reaffirming their commitment toward improving services, resources and facilities, and approved a work plan which included the establishment of a New Services Task Force to evaluate present services and recommend new and enhanced programs. The Technology Services Committee of the Task Force collected information on trends and weighed options for enhancement of current services. Its recommendations are included in this document.

On December 14, 2000, the planning process culminated in the adoption of *Expanding Horizons: Directions for Superior Public Library Service in Erie County* by the Buffalo & Erie County Public Library Board of Trustees. Rebecca Mahoney, Board President, said, "*Expanding Horizons* emphasizes the need for libraries that are safe, convenient, accessible and inviting, that promote the sharing of ideas and provide an environment where people can gather for a

variety of purposes. The plan advocates *expanding* the library's offerings of printed materials, media, **technology resources** and entertaining, informative programs.”

The Buffalo & Erie County Public Library Board of Trustees, Director and Administrative Team recognize that technology planning is complicated by the on-going planning process and rapid changes in technology. This plan, as was the previous plan, will be continuously reviewed and revised as necessary. The Director and the Administrative Team will monitor it throughout the year and input will be gathered from all department heads and contracting library directors at monthly managers’ meetings.

The Technology Plan (2001-2004) sets the direction for technology service in the Buffalo and Erie County Public Library. The elements of this plan are: 1) Mission Statement, 2) Vision, 3) Current Assessment, 4) Technology Trends and Libraries, 5) Goals and Objectives, 6) Network Strategy, 7) Security, 8) Office of Network Support Staffing, 9) Training, 10) Costs/Funding, 11) Schedule, 12) Project Management and Tracking and 13) Acknowledgements.

MISSION STATEMENT

At the core of the Buffalo & Erie County Public Library's strategic planning process is a commitment to quality library service that acknowledges and embraces the wants, needs and unique qualities of the people of Erie County. To this end, the Board of Trustees adopted the following Mission Statement on December 17, 1998.

Our mission is to enrich the lives of the individuals of Erie County's diverse communities by creating and sustaining superior public library services through responsive staff, dynamic collections, appropriate technology and access to global information.

To achieve this mission, the B&ECPL must incorporate state-of-the-art technologies. This document outlines strategies to implement these technologies. Because it is a working document, revisions will be made as needed to ensure that the Library is poised to embrace any rapidly evolving advances.

VISION

Excellence is no accident. The people of Buffalo and Erie County will have convenient access to electronic information resources in and through their libraries. The role of the library, whether virtual or physical, is to provide value-added products and services that guide and direct customers to quality information. Patrons will be assisted by trained and knowledgeable staff who can help them make the best use of both new and traditional information resources. Staff will be supported by up-to-date technology in providing quality services that are efficient and cost-effective.

To support this vision, the Buffalo and Erie County Public Library relies on the following:

- ❑ The acquisition and use of technology to support the mission of the Library.
- ❑ The principles of intellectual freedom to guide patrons' access to the Internet.
- ❑ The availability of appropriate electronic resources for persons of all ages.
- ❑ The integration of electronic resources with other materials and services provided by the Library.
- ❑ Staff interaction with patrons to assist them in locating, interpreting and evaluating information, whether in library buildings or remotely.

The Buffalo & Erie County Public Library will adhere to the following principles adopted in 1998 by the Library's Board of Trustees:

- ❑ Provide open, equal and free access to information in accordance with the American Library Association's "Library Bill of Rights." (Appendix A)
- ❑ Deliver timely, confidential and customer-oriented service to meet the informational, recreational and educational needs of the community.
- ❑ Promote lifelong learning by encouraging all children and adults in their enjoyment of reading and discovery.
- ❑ Contribute to the region's economic vitality by assisting individuals, businesses and government as they pursue better jobs and economic growth.
- ❑ Create and maintain an environment that attracts, develops and encourages a diverse and skilled staff.
- ❑ Listen to the entire community in the pursuit of the Library's mission.
- ❑ Manage resources effectively and be accountable to its funding sources.
- ❑ Pursue the private and public funding necessary to fulfill the Library's mission.

In implementing the vision, the strategy is to make the B&ECPL a technology leader by:

- ❑ Positioning the Library for future technology developments.
- ❑ Developing standards-based information strategies.
- ❑ Coordinating Library efforts with other units of government and with local schools.
- ❑ Maintaining current relationships with other metropolitan public libraries, professional library organizations and the B&ECPL automation vendor.
- ❑ Developing a stable, skilled and experienced Network Support team to nurture and grow existing systems and to build new technology applications.

CURRENT ASSESSMENT

The Buffalo & Erie County Public Library is very proud to have met and, in many cases, exceeded the goals and objectives of the 1997 Technology Plan. State-of-the-art technology and Internet access at all fifty-two locations are realities. The B&ECPL was able to end the 20th century with the networked computer technology that most other large library systems had employed for most of the past decade. The status of the goals and objectives of the 1997 Technology Plan is summarized in Appendix B.

Critical factors in the successful achievement of the goals set by the 1997 Technology Plan were:

- ❑ Commitment by the Board of Trustees
- ❑ Administrative and technical leadership
- ❑ Major funding increases, including an Erie County four-year bond issue, grants from MCI, the Bill and Melinda Gates Foundation, New York State and the federal government, and “e-rate” discounts from the Telecommunications Act of 1996
- ❑ Strong staff training program
- ❑ Formation of a Network Support team dedicated to the Library’s technology

To progress and not stagnate, it is critical to review the past and assess the present. The B&ECPL, as one of DRA’s first customers, was an early leader in library automation. Throughout the last decade, there were several successful technology programs, including the award-winning “Technology Tuesdays,” a lunchtime series of lectures and on-line demonstrations. However, through lack of foresight, funding and a cohesive technology plan, the Buffalo & Erie County Public Library fell significantly behind other similar institutions.

Significant strides have been made since 1997. Today, the basic infrastructure is strong and the Library is poised for technical excellence. Trustees and administrators have set superior library service as the primary goal and continued progress is expected in each of the following major areas:

NETWORK ARCHITECTURE

The wide area network of the Buffalo and Erie County Public Library was upgraded according to a plan developed by DRA. It is a fully routed TCP/IP network and can easily grow with the demands for increased performance and bandwidth. The upgrade consisted of the following:

- ❑ Networking the Central Library with a 384Kbps line and the remaining fifty-one sites with 56 Kbps lines into multiple frame-relay “clouds,” connecting to a central site via a T-1 (high-speed) frame relay circuit. A frame relay circuit provides affordable connectivity for each library by reducing central site equipment and the number of data circuits running into the central site location.
- ❑ Replacing obsolete multiplexers with Cisco routers. This enables libraries to connect both PCs and character terminals to the network, allowing each PC workstation to take full advantage of GUI functionality, including Internet access.
- ❑ Installing a Microsoft NT server at each library to provide improved control and flexibility.

BASIC LIBRARY AUTOMATION

Use of DRA library automation software provides a stable environment for basic circulation, catalog, acquisitions and serials functions. Today, the system is running the most current release of the *Classic* software (Version 2.5-1) on a recently upgraded state-of-the-art Digital Equipment Corporation Alpha, DS20 server. The B&ECPL is positioned for a “smooth migration” to the long-promised and finally available, *TAOS*, DRA’s new generation, intuitive client-server-based software.

OPAC

Beacon, the web-based on-line public access catalog built upon DRA’s Web 1 product, is available at all fifty-two Buffalo & Erie County Public Library facilities and from any workstation on the Internet. Users around the world now have access to bibliographic data from all libraries in the System.

PERSONAL COMPUTING AND INTERNET ACCESS

The B&ECPL Internet Team, a volunteer group of librarians and Network Support staff, developed a policy for Access to Internet and Personal Computing Resources. It was approved by the Board of Trustees of the Buffalo & Erie County Public Library in July 1998 and governs Internet access at all public libraries in Erie County.

A standardized, public access “model” provides a common platform at all libraries. The model resides on Intel-based Pentium workstations using the most secure Microsoft NT operating system. Software on the workstations includes the Internet Explorer browser, Microsoft Office applications (*Word*, *Excel* and *PowerPoint*), *Encarta*, *Expedia*, *Creative Writer* and several children’s programs.

Appendix C contains an inventory of workstations at the 52 libraries in the System.

STAFF COMPUTING AND OFFICE AUTOMATION

Library staff continue to be the proverbial “shoemaker’s children” since limited attention has been paid to administrative computing needs. Many libraries are without a dedicated Intel-based Pentium computer in the workroom so librarian and clerical staff are forced to use personal computers in public areas to perform budgeting and office functions. No matter where the computing is done, the Microsoft Office suite is the standard.

While the use of e-mail is encouraged, many staff members must access mail via dumb terminals or common mailboxes. During the strategic planning process, the need for enhanced communication was identified and the establishment of a staff Intranet was recommended to improve information sharing. To that end, an Intranet was developed in 2000. Through networked access, staff members are able to assist colleagues in answering reference questions or clarifying policy to patrons. The Administrative Team also makes use of the electronic network as a reliable and regular form of communication with all staff members.

NETWORK SUPPORT ORGANIZATION

A Network Support organization was created to provide the dedicated resources required to implement the 1997 Technology Plan and to immediately respond to patron/staff problems during all hours of library operation. A Network Center was constructed in the Central Library, consolidating all network and server equipment. Staff was hired and trained.

Today, the B&ECPL has an Information Technology team of highly trained, experienced and skilled professionals to complete the Library’s objectives. The Network Support Office, led by the Deputy Director – CIO, consists of 7 full-time staff. It provides almost 7 x 24 support to the 52 libraries scattered throughout a 1,000 square mile county. An organization chart is found in Appendix D.

At the present time, the Library Information Systems Coordinator provides all programming services and VMS support for the DRA Library Automation System. The Technical Support Services Specialist supports the WAN (Wide Area Network), fifty-one LANs (Local Area Networks), security issues and all public and staff workstations. Three full-time and two part-time computer operators maintain a Help Desk and perform routine system processing, including critical server backups. They are assisted by two "out-sourced" technicians in the maintenance of hundreds of desktop devices, including all Pentium-based workstations, dumb terminals, networked high-capacity laser printers, receipt printers, bar code scanners and OCR wands. The technicians are permanently assigned to the Library as part of a contract with IKON Business Systems. The contract value is approximately \$150,000 annually. IKON also provides consulting and system engineer services when needed.

The Network Support team has made significant progress and is positioned to both support the new networks and systems and to develop applications for new patron services.

TRAINING

Early in 1998, the Buffalo & Erie County Public Library was awarded a \$425,000 grant by the Gates Library Foundation to install over 150 workstations at the Central Library, eleven branches in Buffalo and the Lackawanna Public Library. Receipt of the grant required a commitment from the B&ECPL to conduct technical training for both staff and patrons. The award included training for four staff members in the establishment of a training program for the B&ECPL.

In 1999, a state-of-the-art computer training lab, designed to accommodate twenty-two students, was created at the Central Library. A full curriculum was developed, covering staff topics from *Computer Basics* to *Train the Trainer Workshops* to patron education sessions like *College Choices 101* and *WebRx: Online Health Resources for the Consumer*. All staff throughout the System now receive basic training and can elect to take intermediate and advanced level courses. A curriculum was also developed for the public and regular classes are offered. Fifteen hundred people received public training in the year 2000. Sample course schedules, for staff and patrons, are found in Appendix E.

In the 1997 Technology Plan, current trends, in both society and technology, were explored in order to assess their possible impact on libraries. In January 1999, the Library and Information Technology Association (LITA), a division of the American Library Association, formed a committee to semi-annually review technological issues that have a good chance of affecting libraries. In writing this plan, the issues identified by LITA, as well as local themes, were examined. These topics are summarized here.

1. Internet access and computer ownership are rising for almost all groups of U.S. citizens, yet a digital divide remains and has expanded slightly in some cases.

Falling Through the Net: Toward Digital Inclusion, an August 2000 report by the U.S. Department of Commerce, demonstrates that computer ownership and Internet access rates are rapidly rising nationwide for almost all groups. The Internet is no longer a luxury. Nonetheless, there are still sections of America that are not adequately connected digitally. Western New York is one of them.

Data show that schools, libraries, and other public institutions continue to serve groups that do not have access at home. Certain populations, including the unemployed and urban/rural poor, are more likely to use public libraries to access the Internet. The Buffalo & Erie County Public Library must expand access to quality electronic resources for those who are still on the wrong side of the “digital divide.”

2. The “Buffalo Byte Belt,” a downtown corridor that has attracted dozens of new high-technology companies, is a strong indicator of improvement in the economic climate of the Buffalo-Niagara region.

California has Silicon Valley. Boston has the Route 128 corridor. Buffalo hopes to catch up with the high-tech boom by fostering a “Byte Belt.” The *Buffalo News* reported in November 1999 that Mayor Anthony Masiello launched a plan to turn downtown into a hothouse for start-up ventures, calling information technology the city's greatest economic catalyst. He said, “My goal or dream for Buffalo is to be mentioned in the same breath as Boston or Charlotte . . . as a great place for info tech.” He outlined a plan -- the Buffalo Byte Belt Technology Development Initiative -- that included grants for wiring “smart” buildings, links to private capital and support for a potential info-tech charter school. ¹

¹ Fred O. Williams, “Buffalo Bytes Back,” *The Buffalo News*, November 19, 1999, City edition, sec. Business.

A year later, the initiative seems to be working. In November 2000, the *Buffalo News* quoted Alan S. DeLisle, president of Buffalo Economic Renaissance Corp., the city's development arm: "I think it's exceeded all of our expectations." The Byte Belt "is one of the strongest elements of our overall economic strategy." Fifteen new technology companies have opened and nine have expanded in the downtown area, adding 535 jobs and bringing the total number of info-tech companies in Buffalo to at least 33 with nearly 3,900 employees. These numbers do not include the technology companies thriving in the suburbs. Tech firms are "putting the brakes on the exodus of our young, talented people," Masiello said. "It's become the antithesis of our brain drain." ²

Long-time residents know that success in Buffalo can be fleeting. Although Buffalo ranked in the top half of a recent tech start-up survey of 60 major metropolitan areas, the city faces a serious challenge in retaining successful new firms.³ The Central Library, long known as a partner to area businesses, is located in the center of the "Byte Belt" and can play an influential role in this challenging climate.

3. **The number of American citizens over age 65 will double in the next 30 years.**

Profile of Older Americans 1999, compiled by the Administration of Aging of the U.S. Department of Health and Human Services and published by AARP, reported that:⁴

- ❑ Persons 65 years or older numbered 34.4 million in 1998, representing 12.7% of the U.S. population. The number of older Americans increased by 10.1% since 1990, compared to an increase of 8.1% for the under-65 population.
- ❑ Since 1900, the population of Americans 65 and over has more than tripled (4.1% in 1900). In absolute terms, the number has increased 11 fold from 3.1 million.
- ❑ The older population will continue to grow significantly. This growth slowed somewhat during the 1990's because of the relatively small number of babies born during the Great Depression, but the older population will burgeon between the years 2010 and 2030 when the "baby boom" generation reaches age 65.

² Fred O. Williams, "High-Tech Town," *The Buffalo News*, November 26, 2000, Final edition, sec. News.

³ Ibid.

⁴ Donald Fowles, Alfred Duncker, Saadia Greenberg, in *A Profile of Older Americans 1999*, (1997; reprint, Washington, D.C.: American Association of Retired Persons, 1999).

- By 2030, there will be about 70 million senior citizens, more than twice the number in 1998. People 65 and over were projected to represent almost 13% of the population in 2000 and 20% by 2030.

In the *1999 State of the Region Report* by the University at Buffalo Institute for Local Governance and Regional Growth, the population of the Buffalo-Niagara Region was found to be older on balance than its national counterparts. Residents 65 years and older comprised about 16% of the population, compared to 12.7% for the entire United States, 12.4% for the Province of Ontario and 13.4% for New York State as a whole.

The report documented that the population age structure has changed significantly over the past four decades. In 1960, just after the height of the baby boom, Western New seniors aged 65 and over formed about 10% of the population. At the other end of the spectrum, there has been a decline in the young adult population in recent years, from 26.8% in 1990 to 22.5% in 1997.

Such age shifts have significant implications for service delivery and governance. Seniors generally require more assistance through health care, public transit, and certain social services, while younger people demand more recreation and education services. Support for the older population is quickly becoming a crucial public issue. Libraries must offer more services to senior citizens.

4. Library patrons who are Web users, a growing group, expect customization, interactivity, and customer support. Approaches that are user-focused instead of library-focused will become increasingly relevant.

In 1998, Cornell University librarians Karen Calhoun and Zsuzsa Koltay conducted a study to gauge patron satisfaction with the library's web site.⁵ The site offered an array of information and online services, including a selection of 2,000 networked resources.

Calhoun and Koltay found that users considered the site to be occasionally "overwhelming" and desired "a more personal space...where they can dictate how important certain resources are based on their own needs." Additionally, they noted, "Users want to be in closer communication with the library. They feel that the library provides great services for those who happen to find out about them and teach themselves how to use them." Among their post-study recommendations were the following suggestions:

- Explore new ways and technologies to simplify the task of navigating a complex information scene.
- Provide personalized and current awareness services.
- Add new features to the site such as "What's New," hot topics, favorite databases, and subject guides.

⁵ Suzanne Cohen, John Ferreira, Angela Horne, et. al, "MyLibrary," *D-Lib*, April, 2000.

Studies by other libraries, including the Public Library of Charlotte & Mecklenburg County, have reported similar results. To make the B&ECPL web site more vital to its users, it must not only be updated regularly with timely information but redesigned using cutting-edge technologies. Users expect the Amazon.com paradigm – the e-commerce site that has yet to make a profit but remembers what you last read and says, “if you liked this book, you will also like...” The Buffalo and Erie County Public Library must respond.

5. The American Library Association, as part of a 16-member Privacy Coalition, has called on federal lawmakers to sign a pledge to promote privacy standards and protect consumer information. According to *American Libraries*, the group wants comprehensive legislation to pass sometime this year, calling the privacy question “the major social issue of the information society and the top technology issue in the 107th Congress.”⁶

At the January 2000 ALA MidWinter Conference, privacy was one of the top technology issues discussed by Library and Information Technology Association members. They reported: “The comparative ease of collecting individual data about Web usage is both a threat and an opportunity. Librarians have historically worked to protect individual privacy in relation to intellectual freedom, but many of us are not aware that we may be leading patrons to online resources that don't offer this protection.”⁷

As Karen Schneider states, “With our historical ethical commitment to patron privacy, most libraries go to great lengths not to capture patron information, so that the use of our resources is ‘free from government intrusion, intimidation, or reprisal,’ as ALA’s Intellectual Freedom Manual recommends. But we are probably swimming against the tide.”⁸

While most library automation systems delete information about patron borrowing once materials have been returned, very little has been done to extend patron confidentiality to use of the Web and electronic databases. In fact, there are those who want library catalogs to mimic Amazon.com by greeting visitors with “Welcome Back, Hal” and giving recommendations based upon previous purchases. Ms. Schneider ends her discussion by telling us, “Or we can decide that concerns about online privacy are classic librarianship, given our history of protecting the freedom to read, and begin work now on the problems posed by our changing environment.”⁹ There are challenging decisions ahead for libraries.

⁶ "News Briefs - ALA Urges Congress to Sign Privacy Pledge," *American Libraries*, February 19, 2001.

⁷ Karen Coyle, Walt Crawford, Pat Earnest, et. al., *Top Technology Trends for Libraries*, ALA MidWinter , LITA , San Antonio, TX, January, 2000.

⁸ Karen G. Schneider, "Privacy: The Next Challenge," *American Libraries*, August, 1999.

⁹ Ibid.

6. **“Through collaboration among all of our partners, including public officials and patrons, the B&ECPL can increase its value to the community for many years to come,” said Annette Juncewicz, B&ECPL Board Planning Chair.**

Expanding Horizons emphasizes the need for collaboration. The B&ECPL Board of Trustees and senior management recognize that, as we enter the 21st century, the Library cannot function in isolation. Technology provides libraries with both tools and opportunities for collaboration. Former ALA President, Sarah Ann Long, said, **“Libraries build community.** We've always done it. Libraries have always been the hearts of the geographic community as well as the virtual community: the nerve center, mission control, the nucleus, the core. From this central vantage point, libraries can reach out to all people. We can partner, make alliances, embrace and present all opinions. In person and online, libraries connect even the smallest communities with the whole world of ideas and information and with each other.”¹⁰

Examples of successful library partnerships include the Cedar Rapids Public Library’s “Read and Ride” program, which provides free bus rides to the library for children; the Chester County Library’s children’s literacy initiative with Starbuck’s Coffee; the San Jose Public Library’s after school arts program offered in partnership with the Office of Cultural Affairs and the Arlington Heights Memorial Library’s CyberSeniors project with the local senior citizen center.

The Buffalo & Erie County Public Library must be proactive in looking for similar partnership opportunities, especially with organizations that have the capacity to fund our initiatives. It is a given that the Library will cooperate with other local institutions, such as Erie County, the City of Buffalo, the Buffalo Public Schools, the 29 suburban school districts, the local SUNY campuses and the many community colleges. The B&ECPL must also form new alliances with private industry to enable seamless and rapid resource sharing and a cooperative learning environment.

¹⁰ Sarah Long, in *Celebrating America's Library & America's Libraries: Ideas and Tips for Promoting Libraries and Building Partnerships*, (Washington, D.C.: American Library Association, Library of Congress, 1999).

GOALS AND OBJECTIVES

The goals and objectives in the Technology Plan (2001 – 2004) are the service improvement targets defined in the strategic planning process. Clearly, the Library cannot enrich the lives of the individuals of Erie County's diverse communities with inadequate tools. Technology is an integral part of virtually every planned service enhancement. This Technology Plan defines the tasks necessary to

- ❑ Nurture and grow the infrastructure, network and systems.
- ❑ Provide state-of-the-art access to the Internet and computer applications.
- ❑ Deliver the required technology elements of planned new services.

The significant accomplishments of the past three years have allowed the B&ECPL to “leapfrog” from a position significantly behind other large public libraries to one where the Library provides the technology training and programs expected in the 21st century. These enhancements cannot be allowed to wither and die. The Buffalo and Erie County Public Library must strive to again “leapfrog” its peers and become a leader in information technology.

History has shown that it is impossible to continue to implement new systems without protecting the current collection and investing in its support and development. Existing technology must be constantly evaluated, sustained and weeded as necessary.

INFRASTRUCTURE GOALS AND OBJECTIVES

The infrastructure goals of the Technology Plan (2001 – 2004) address immediate improvements necessary to the hardware, network and systems already in use.

First, bandwidth must be increased at all library locations outside the Central Library. These upgrades are necessary to accommodate the increased demand for more intensive applications, especially during peak use periods.

Second, the need to upgrade the public access “model” with the more current software became evident months after the initial rollout was completed. Unfortunately, there is now no easy way to perform the needed changes. Network Support staff members must physically touch each of the 52 servers and almost 500 public access workstations to add and change the browser, supporting programs such as McAfee virus protection and Adobe Acrobat, and professional software such as Microsoft Publisher. It is evident that a method to streamline similar upgrades for the future must be developed at the same time this upgrade is completed. The objective is to develop a solution that would facilitate the installation of a new public access “model” from the Central Library. The increased bandwidth will make this goal easier to achieve.

Third, additional workstations must be installed, for both staff and patrons, and access to an ever-increasing collection of electronic resources must be supplied.

Fourth, a major shortcoming of the new Web-based catalog must be alleviated – the inability to “limit by location” (select materials by subject or keyword for a particular library).

Finally, the B&ECPL must continue to evaluate the DRA Classic library automation system and determine if/when a migration to the new web-based product, TAOS, is warranted.

LIBRARY SERVICES GOALS AND OBJECTIVES

Technology is a key component of the mission of the Library System. The Technology Plan (2001 – 2004) provides the basis for following the directions outlined in *Expanding Horizons* and elaborated upon by the New Services Task Force. The six fundamental goals are:

1. Evaluate and improve the B&ECPL's operations and services.
2. Refine and maintain state-of-the-art resources for the public and staff.
3. Strengthen information access and delivery.
4. Attract, develop and encourage a diverse and skilled staff.
5. Promote the use of library resources and services.
6. Secure the public and private funding necessary to fulfill the Library's mission.

PROJECTS

Projects were developed, prioritized and scheduled to meet the infrastructure and service goals and objectives of the B&ECPL. Each project was broken down by the goals, objectives and activities associated with it as well as its target dates and details of the technology/other resources required. A budget was developed for each project. This information is found in Appendix F.

NETWORK STRATEGY

The network strategy mandate is to design, develop and implement a robust infrastructure that will support the “next generation” high bandwidth services needed by the Buffalo & Erie County Public Library. *Technology Review*, MIT’s award-winning Magazine of Innovation, recently discussed the critical question of computer speed.¹¹ They reported that in 1965, Gordon Moore, who would later become the co-founder of Intel, predicted that the number of electronic devices on a microchip would roughly double every two years – an exponential increase that has come to be known as *Moore’s Law*. A corollary to *Moore’s Law* is that the need for increased bandwidth will also grow as the power of computers expands.

The frame relay network infrastructure established in 1997 – 1998 was built primarily for text-based computer “terminal-like” applications. Plans to add high-powered workstations with a graphical user interface were made with the understanding that a 56K frame relay circuit could comfortably support six workstations. As of January 2001, approximately half the B&ECPL libraries need increased bandwidth and this need will grow as additional workstations are added through the Erie County “Educational Technology Initiative” and the 2001 New York State awards from the Bill and Melinda Gates Foundation.

Options for expanding the bandwidth were explored with the current vendor. Verizon offered only two choices, a fractional T-1 (384K) for approximately \$500/month or a full T-1 at approximately \$700/month. The cost for the current 56K circuit was approximately \$125/month.

A Request for Proposal was developed and responses were solicited. After careful examination, a contract with AT&T to install point-to-point T-1s to each of fifty-one city branch and contracting libraries was determined to be the best solution. Correspondingly, two T-3s will be connected, extending the multiplexed T-1s to the Central Library.

It will be necessary for Network Support to install new Cisco routers, with an integrated DSU/CSU unit, to complete AT&T’s installation. Staff will utilize the “QOS – Quality of Service” features of the new equipment to prioritize network traffic and improve overall throughput. To better monitor traffic, network management tools will be employed.

¹¹ Charles C. Mann, “The End of Moore’s Law,” *Technology Review*, *An MIT Enterprise*, May/June, 2000.

SECURITY

Security of the network is critical to the Buffalo & Erie County Public Library. The resources of the Library must be protected and the privacy of patron information must be guarded. The Technology Plan (2001 – 2004) includes a multi-faceted, comprehensive strategy to ensure effective system-wide security.

At the beginning of the 21st century, the core of any organization's security plan is its "firewall." The B&ECPL equipment, installed in 1998, has afforded more than satisfactory protection. However, several factors are driving Network Support to examine the level of support necessary to maintain it. After an evaluation, a decision will be made to retain the present firewall or to replace it with one that provides the same defense with less required maintenance. In addition, the organization will investigate and implement any other promising measures, whether physical or virtual, to protect the resources of the Buffalo & Erie County Public Library.

OFFICE OF NETWORK SUPPORT STAFFING

The complexity of the Buffalo & Erie County Public Library network is expected to increase with the number of applications and workstations. Resource demands will expand accordingly. A major objective for 2001 is to investigate methods of automating many existing activities to maximize staff time. Based upon the results of this project, the staffing requirements for the Office of Network Support will be analyzed and organization recommendations will be made. The operating budgets for 2002, 2003 and 2004 will reflect the re-organization.

TRAINING

Training is integral to the B&ECPL and a very important element of the Technology Plan (2001 – 2004) – for both the public and staff. The administration of the B&ECPL has long recognized the importance of formalized training for staff. A Training Task Force was established to develop plans for an overall training program and to regularly propose updates and additions to the program as warranted. With the Bill and Melinda Gates Foundation grants acting as impetus, technology training predominates in this Library System. The rapid deployment of technology in recent years has brought training for the public to the forefront as well.

There are two formal computer-training labs, one at the Central Library (22 workstations plus instructor) and a newly opened facility at the East Delavan Branch Library (12 workstations plus instructor). Both are used to train the public and staff. Course offerings include basic, as well as more advanced, aspects of the Internet, computer applications software, computer basics, electronic reference tools and the staff Intranet. A “Train the Trainer” approach has been particularly effective for staff. All staff are required to attend the basic series of classes. While attendance is not mandatory for the intermediate and advanced classes, participation is strongly encouraged. Classes, for the public and for staff, are repeated regularly to ensure that all have an opportunity to attend. Appendix E lists recent course schedules.

As new electronic reference tools are considered, product demonstrations are conducted in the training lab and public service staff are encouraged to attend. Products under consideration are also accessible through the staff Intranet. Once a new product has been added to the network, formal classes are offered in its use.

The Assistant Deputy Director for Human Resources is responsible for training at the System level. A full-time Librarian II is dedicated to training and subject specialist librarians develop and present programs. Clerical staff serve as monitors during classes to aid participants.

Technology training is also available through Erie County Community College. The Human Resources Department distributes a list of offerings and staff can sign up to attend classes on release time. Staff are encouraged to attend conferences, usually receive release time and can apply for limited professional development funds set aside for conference travel.

Formal training programs are expanding to include locations other than the Central Library. A training lab recently opened at the East Delavan Branch, funded by a grant from the Bill and Melinda Gates Foundation. Through a grant from the Erie County Legislature, the library purchased 8 lap top computers to establish a “Cyber Train” to bring portable computer training to libraries lacking sufficient numbers of PCs to conduct classes. A second “Cyber Train” will be added to accommodate “Cyber Camp,” a technology summer program for youth that will be introduced in 2001. In addition, distance-learning alternatives will be investigated.

Training for the staff in Network Support is critical to the ongoing success of the Library’s Technology Plan. Without the proper education, efforts to implement new systems will, at best, take significantly longer or, at worst, fail. Every opportunity will be pursued to obtain training early in the project life cycle. The Library will collaborate with

other organizations in Erie County and in the library profession to attend the highest quality programs for the lowest cost. For example, the B&ECPL is currently investigating certified Cisco education in conjunction with Erie County Community College.

While formal technical training will be required for many of the projects identified in the Technology Plan (2001 – 2004), a “train the trainer” approach also will be employed. Consultants will be judiciously employed with the intention of both completing the task and providing on-the-job teaching. The staff in the Office of Network Support will also avail themselves of the Library’s collection of technical materials.

Specifically, technical training needs will be addressed in the following areas:

- ❑ DRA Web2
- ❑ DRA MFHD
- ❑ DRA UDMS Report Writer Software
- ❑ DRA Operator Training
- ❑ Microsoft Windows NT/2000 Operating System
- ❑ Microsoft Access
- ❑ Network Management Software and Utilities
- ❑ Security
- ❑ Web Development
- ❑ Cisco

In addition to this training, the technical staff will participate with professional librarians in conferences and joint meetings to ensure proper information exchange. Selected staff from both Network Support and Support Services will continue to attend the annual DRA conference to stay current with the Classic system and the new TAOS application. Important ALA and PLA conferences, as well as local sessions on relevant topics such as e-books, will be attended to ensure that the continued relevance of the Library’s plans.

COSTS/FUNDING

Appendix G provides an analysis of the costs necessary to implement the Library's goals and related objectives and the funding available for these projects.

SCHEDULE

The Library Director and the Administrative Team, with input from managers and the New Services Task Force, have prioritized the goals and objectives. A schedule for 2001 has been established and a tentative timetable for the remaining goals and objectives has been projected. Both are found in Appendix H.

PROJECT MANAGEMENT AND TRACKING

The Buffalo & Erie County Public Library Technology Plan (2001 – 2004) will be updated frequently to address the Library's strategic and operational requirements, the needs of the community and the emergence of new technologies. The Library recognizes that changes in network and communication technologies will affect projected costs and schedules. Throughout each year, fine-tuning will be provided through the weekly meetings of the Administrative Team and the monthly managers' meetings, which involve all department heads and contracting library directors. All Library goals and objectives are revisited annually to ensure that they are still appropriate and relevant to the mission of the Buffalo and Erie County Public Library. The Director and the Administrative Team will consider any changes in circumstances and refine the plan as needed.

Potentially useful new technologies are identified through attendance at conferences, reading current literature and networking with peers. With the committee structure put in place during the strategic planning process and regular managers' meetings, all staff have a mechanism to make recommendations and are encouraged to do so.

The status of the goals and objectives defined in the 1997 Technology Plan is summarized in Appendix B. Any needs and technologies that have emerged since 1997, and are considered essential for the Library, are incorporated into this plan as listed in Appendix F.

ACKNOWLEDGEMENTS

The Buffalo & Erie County Public Library would like to express its sincere appreciation to the following organizations for their financial contributions, technical guidance and never-ending encouragement. Without their support, the successful execution of the 1997 Technology Plan would not have been possible.

- ❑ Bill and Melinda Gates Foundation
- ❑ Erie County Legislature
- ❑ MCI LibraryLINK
- ❑ The Library Foundation of Buffalo & Erie County
- ❑ Margaret L. Wendt Foundation
- ❑ James H. Cummings Foundation
- ❑ Goldome Foundation

The Buffalo & Erie County Public Library recognizes that excellence is not an accident. It will only be with continued funding from our committed benefactors that the Technology Plan (2001 – 2004) will achieve its goal to *expand the horizons of the community by sharing a world of information.*

AMERICAN LIBRARY ASSOCIATION

Library Bill of Rights

The American Library Association affirms that all libraries are forums for information and ideas, and that the following basic policies should guide their services.

- I. Books and other library resources should be provided for the interest, information, and enlightenment of all people of the community the library serves. Materials should not be excluded because of the origin, background, or views of those contributing to their creation.
- II. Libraries should provide materials and information presenting all points of view on current and historical issues. Materials should not be proscribed or removed because of partisan or doctrinal disapproval.
- III. Libraries should challenge censorship in the fulfillment of their responsibility to provide information and enlightenment.
- IV. Libraries should cooperate with all persons and groups concerned with resisting abridgment of free expression and free access to ideas.
- V. A person's right to use a library should not be denied or abridged because of origin, age, background, or views.
- VI. Libraries which make exhibit spaces and meeting rooms available to the public they serve should make such facilities available on an equitable basis, regardless of the beliefs or affiliations of individuals or groups requesting their use.

**The Buffalo and Erie County Public Library
Technology Plan 1997 - 2000**

Goals and Objectives - Accomplishments

Goal	Objective	Status	Comments
Basic Library Automation <i>Continue to support and upgrade the DRA application and its hardware platform as well as to enhance the network infrastructure to support future software releases</i>	Upgrade our network to a routed TCP/IP network.	Completed	
	Install the Serials and Acquisitions modules.	Completed	
	Implement the new TAOS OPAC Client for patron access to the Library's catalog and the Internet at all 52 libraries.	Completed	
	Convert from OCR to Bar Code	On-going	Three-year conversion plan developed and execution now in progress. In addition, receipt printers installed at all libraries.
	Install robust workstations, running the Windows/NT operating system for staff access to the Acquisition, Cataloging, Serials and Circulation Clients	On-going	Circulation clients will be replaced just prior to actual conversion; thin client solution will be evaluated
OPAC <i>Implement an on-line public access catalog at the Central Library and fifty-one city branch and town libraries</i>	Upgrade the physical infrastructure of the Central Library by completing the following major improvements:		
	Construction of a new data center to house the DEC Alpha Server, the Web Server and firewall, the NT administrative servers and all network equipment	Completed	
	Migration of server and network equipment, currently housed at the Erie County Headquarters to the Central Library, in order to provide direct support to all 52 library locations for the OPAC application	Completed	

**The Buffalo and Erie County Public Library
Technology Plan 1997 - 2000**

Goals and Objectives - Accomplishments

Goal	Objective	Status	Comments
	Installation of 2 new transformers to provide isolated "clean" power to all network equipment, servers and workstations	Completed	
	Construction of 5 new wiring closets to distribute the required network equipment, including routers, switches, hubs, terminal servers and patch panels throughout the 350,000 sq. ft. structure.	Completed	
	Replacement of all existing communications cable with and addition of new enhanced Category 5 cable for all OPAC and staff workstations	Completed	
	Upgrade the Central Library automation application database infrastructure by completing the following modifications:		
	Consolidate the multiple agencies, representing the separate departments of the Central Library, into one agency in order to facilitate improved reporting for OPAC	Completed	
	Complete major "Recon" project which will result in the addition of over 250,000 materials to the databases and vastly improved reporting for OPAC	On-going	
	Install the necessary hardware and conduct staff training for the implementation of approximately 100 OPAC workstations in all departments of the Central Library	Completed	New, state-of-the-art training laboratory built at Central Library for outstanding and comprehensive training program developed for all staff

**The Buffalo and Erie County Public Library
Technology Plan 1997 - 2000**

Goals and Objectives - Accomplishments

Goal	Objective	Status	Comments
	Install Category 5 cabling and implement the OPAC application at the remaining 32 city branches and town libraries.	Completed	OPAC installations were completed at Akron, Alden, Angola, Blasdell, Brighton, Clarence, Collins, Depew, Dudley, East Clinton, East Delavan, Eden, Eggertsville-Snyder, Elma, Fairfield, Greenhaven, Kenilworth, Lancaster, Marilla, Mead, Niagara, North Cheektowaga, North Collins, North Jefferson, North Park, Northwest, Sheridan Parkside, Tonawanda, West Falls, Williamsville
Web Site Development	Design a refined, professional image to be reflected throughout the web site, with the exception of the Children's pages	Completed	
<i>Make the library's vast collection available to all users of the Internet, especially residents of Buffalo & Erie County</i>	Select an absolutely different, spirited, bright, light-hearted set of images to engage children, from toddler to middle-school age	Completed	
	Complete the DRA/Web catalog installation, including basic design modifications and training materials, for both staff and patrons	Completed	
<i>Use web site foundation to enhance the information and reference services of the Library</i>	Install the necessary hardware and software	Completed	

**The Buffalo and Erie County Public Library
Technology Plan 1997 - 2000**

Goals and Objectives - Accomplishments

Goal	Objective	Status	Comments
	Develop appropriate content and links for the first three sections (About Our Library, Business and Children) of the web site to be made public, along with the web catalog, as soon as possible	Completed	
	Establish an on-going organization to maintain the web site and to continue its development by adding additional reference departments including, but not limited to, genealogy and information about our special collections, including the anti-slavery materials, the Milestones of Science and our Mark Twain manuscript	On-going	
Internet Access	Develop an Internet Policy to be used at the Central Library, all city branches and by contract, all town libraries	Completed	
<i>Provide patron access to the Internet at all locations</i>	Obtain approval from the Board of Trustees for the Internet Policy, after developing a review process with the Board of Trustees	Completed	Policy was presented as requested to various town Library Board of Trustees, County Legislature and other government officials and community representatives
	Standardize on an Internet Browser	Completed	Microsoft Internet Explorer
	Update at least one PC at each library where OPAC has been installed with the Internet browser, with the Buffalo and Erie County Public Library world wide web site as the default	Completed	All dumb terminals were replaced with Internet-ready workstations
	Modify the OPAC implementation procedures so that all future OPAC implementations include the implementation of at least one PC with Internet access	Completed	Almost 500 Internet-ready workstations were installed at the Central Library, city branches and town libraries.

**Buffalo Erie County Public Library
Current Inventory Assessment**

Network Equipment and Number of Workstations by Type by Library

Library	Bandwidth (Frame Relay)	Cisco Router Model	Hub/ Switch Model	Server		Public Access Workstations*	Total
				Server	Staff Workstations		
Amherst Public Library							
<i>Audubon</i>	384K	2501	Nortel Switch 350 + Xyplex	1	3	15	19
<i>Clearfield</i>	56K	2501	Nortel Switch 350	1	3	12	16
<i>Egbertsville-Snyder</i>	56K	2501	Nortel Switch 303	1	3	6	10
<i>Williamsville</i>	56K	2501	Nortel Switch 350	1	1	5	7
Angola Public Library	56K	2501	Nortel Switch 350	1		4	5
Aurora Town Public Library							
<i>East Aurora</i>	56K	2501	Nortel Switch 350	1	1	8	10
<i>West Falls</i>	56K	2501	Nortel Switch 350	1		3	4
Boston Free Library	56K	2501	Nortel Switch 350	1		4	5
Cheektowaga Public Library							
<i>Julia Boyer Reinstein</i>	384K	2501	Nortel Switch 350 + Xyplex	1	3	15	19
<i>North Cheektowaga</i>	56K	2501	Nortel Switch 303	1		4	5
<i>Reinstein</i>	56K	2501	Nortel Switch 350	1	1	10	12
<i>South Cheektowaga</i>	56K	2501	Nortel Switch 350	1	1	4	6
City of Tonawanda Public Library	56K	2501	Nortel Switch 350	1	1	6	8
Clarence Public Library	56K	2501	Nortel Switch 350	1	3	6	10
Denio Memorial Library (Newstead Public Library)	56K	2501	Nortel Switch 303	1	2	6	9
Eden Library	56K	2501	Xyplex	1	1	4	6
Elma Public Library	56K	2501	Nortel Switch 350	1		8	9
Ewell Free Library	56K	2501	Nortel Switch 350	1		4	5
Grand Island Memorial Library	56K	2501	Nortel Switch 350	1	1	7	9
Hamburg Public Library							
<i>Blasdell</i>	56K	2501	Nortel Switch 350	1		4	5
<i>Hamburg</i>	384K	2501	Nortel Switch 350	1	3	10	14
<i>Lakeshore</i>	56K	2501	Nortel Switch 350	1	1	6	8
Hubert Library of the Town of Concord	56K	2501	Nortel Switch 303	1	1	6	8
Lackawanna Public Library	56K	2501	Nortel Switch 303	1		7	8
Lancaster Public Library							
<i>Depew</i>	56K	2501	Nortel Switch 350	1		5	6
<i>Lancaster</i>	56K	2501	Nortel Switch 350	1	1	8	10
Marilla Free Library	56K	2501	Nortel Switch 350	1		4	5
Orchard Park Public Library	56K	2501	Nortel Switch 350	1	2	9	12
Town of Collins Public Library	56K	2501	Nortel Switch 350	1		2	3
Town of North Collins Public Library	56K	2501	Nortel Switch 350	1	1	6	8
Town of Tonawanda Public Library							
<i>Brighton</i>	56K	2501	Nortel Switch 303	1	1	6	8
<i>Greenhaven</i>	56K	2501	Nortel Switch 350	1		5	6
<i>Kenilworth</i>	56K	2501	Nortel Switch 350	1		6	7
<i>Kenmore</i>	384K	2501	Nortel Switch 350	1	3	10	14
<i>Sheridan Parkside</i>	56K	2501	Nortel Switch 350	1		4	5
West Seneca Public Library	56K	2501	Nortel Switch 350	1	1	11	13
Central Library	56K	3640	Cisco 2900	4	133	138	275
Buffalo City Branches							
<i>Cazenovia</i>	56K	2501	Xyplex	1	1	12	14
<i>Crane</i>	384K	2501	Nortel Switch 303	1	1	11	13
<i>Dudley</i>	56K	2501	Nortel Switch 303	1	1	9	11
<i>East Clinton</i>	56K	2501	Nortel Switch 303	1	1	9	11
<i>East Delavan</i>	56K	2501	Nortel Switch 303+350	2	2	21	25
<i>Fairfield</i>	56K	2501	Nortel Switch 303	1	1	7	9
<i>Fronczak</i>	56K	2501	Nortel Switch 303	1	1	11	13
<i>Kensington</i>	56K	2501	Nortel Switch 303	1	1	9	11
<i>King</i>	56K	2501	Nortel Switch 303	1	1	7	9
<i>Mead</i>	56K	2501	Nortel Switch 350	1	1	9	11
<i>Niagara</i>	56K	2501	Nortel Switch 303	1	1	9	11
<i>North Jefferson</i>	56K	2501	Nortel Switch 303	1	1	7	9
<i>North Park</i>	56K	2501	Nortel Switch 350	1	1	12	14
<i>Northwest</i>	56K	2501	Nortel Switch 303	1	1	7	9
<i>Riverside</i>	56K	2501	Nortel Switch 303	1	1	6	8
Total				56	187	524	767

* All "Public Access" workstations are capable of Internet Access

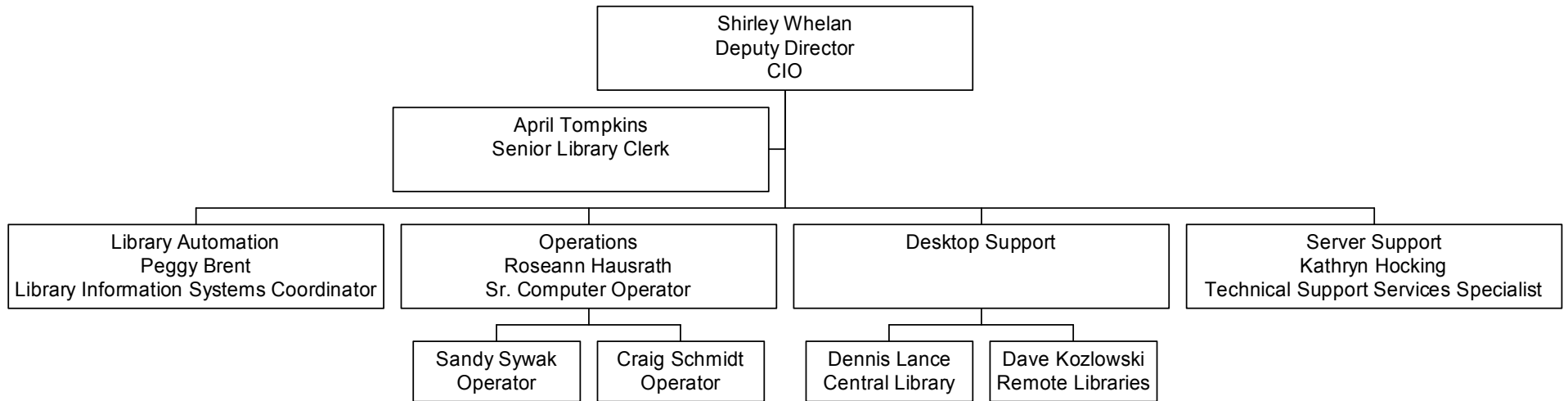
**Buffalo Erie County Public Library
Current Inventory Assessment**

Network Equipment and Number of Workstations - Central Library

Library	Server	Staff Workstations	Staff Laptops	Public Access Workstations	Public Access Laptops	Total	Total with Internet Access	Public Access with Internet Access	Public Access without Internet
BS&T		8		34		42	20	12	22
Network Support		10	2			12	12	0	
Data Center	6					6	0	0	0
Cataloging		10				10	10	0	
Processing		8				8	8	0	
HSS		11		34		45	24	13	21
RRC		7				7	7	0	0
Children's Room		1		8		9	5	4	4
Music		1		2		3	2	1	1
Special Collections		2		2		4	3	1	1
LLC		4		25		29	14	10	15
Music Cage		1				1	1	0	
Circulation		3				3	3	0	
Security		1				1	1	0	
Microform		1				1	1	0	
Graphics		2				2	2	0	
Urban Services		2				2	2	0	
Mobiles		2	8			10	10	0	
Maintenance		2				2	2	0	
Engineer		1				1	1	0	
Administration		20	4				24	0	
Business Office		11				11	11	0	
Prairie		4				4	4	0	
Training Room		1		24		25	25	24	
Cyber Train					9	0	9	9	
Total	6	113	14	129	9	271	201	74	64



Organization Chart – March, 2001



BUFFALO AND ERIE COUNTY PUBLIC LIBRARY

TECHNOLOGY PLAN

2001 – 2004

APPENDIX E

[B&ECPL TRAINING LAB – COURSE SCHEDULES](http://www.buffalolib.org/ComputerTraining/Training.html)

<<http://www.buffalolib.org/ComputerTraining/Training.html>>

Buffalo and Erie County Public Library
Technology Plan (2001 - 2004)
Project Index

Goal Number	Project	Description	Year		Project Number
3	Web/catalog	Web 2 - Limiting by Location	2001		1
3	Web/catalog	Web 2 - Patron Information	2001		1
3	Web/catalog	Web 2 - Patron Requests & Renewals	2001		1
3	Web/catalog	Web 2 - Install	2001		1
3	Web/catalog	Web 2 - Spanish Language Catalog	2001		1
3	Web/catalog	Web 2 - Children's Catalog	2002		1
3	Web/catalog	MFHL	2003		1
3	Web/catalog	Web 2 - Search Other Catalogs	2003		1
3	Web/catalog	Catalog - Web Sites (Project CORC, ISAAC Network)	2003		1
3	Web/catalog	Integrate catalog and database searches	2003		1
1	Perf. Measures	Performance Measures (Usage Statistics)	2001	Ongoing	2
1	Network	Strengthen Network's Ability to Maintain Public Access & Staff Workstations	2001	Ongoing	3
1	Patron Database	Reregistration	2001		4
1	Collection Agency	Collection Agency	2001		5
1	CIPA	Filter Acquisition Process Begin 2001 Install 2002 (CIPA)	2001		6
1	Improved Routines	Finger Image Identification Pilot Study	2001		7
1	Improved Routines	Printer Cost Recovery	2001		7
1	Improved Routines	Investigate Self checkout - Pilot	2002		7
1	Improved Routines	Automated Telephone renewals	2002		7
1	Improved Routines	Automated Telephone/e-mail notices (overdue and requests)	2002		7
1	Process Improve.	Process Improvement Database Development	2001	Ongoing	8
1	Collins Library	Update technology in new libraries	2001		9
1	Akron Library	Update technology in new libraries	2001		9
1	NJF Libray	Update technology in new libraries	2002		9
2	Gates	Gates Grant (New York State 2001) Computer Additions	2001		10
2	Model	Backup/Recovery Procedures Improvements	2001		11
2	Model	Upgrade "Public Access" Model Software	2001	Ongoing	11
2	Model	Spanish Language version "Public Access" Model	2001	Ongoing	11
2	Model	Virus Protection	2001	Ongoing	11
2	Model	Managing the New Infrastructure - evaluate Citrix, SMS, Cybrarian, Reserve-It	2002	Ongoing	11
2	Model	Add Hardware to "Public Access" Model	2003	Ongoing	11
2	Security	Security - Improved Firewall	2001		12
2	Staff Computers	Expand and Replace Work Stations for Staff	2001	Ongoing	13
2	ETI	ETI - Matching Grant Projects	2001		14
2	ETI	ETI - Youth Resource Centers	2001		14
5	ETI	ETI - Cyber Train and Cyber Camps	2001		14
2	Web Site	New Electronic Resources	2001	Ongoing	15
2	Web Site	Web site upgrade - Homework Centers	2001		15
2	Web Site	Web site maintenance - Reference Desk (check links, etc.)	2001	Ongoing	15
2	Web Site	Web Site Upgrade - Expanded On-line Tutorials	2001	Ongoing	15
1	Web Site	Web Site upgrade - Creation & Management Software	2002		15
2	Web Site	Web-Based Collaboration Applications (e.g., GIS)	2002	Ongoing	15
5	Web Site	Electronic Dissemination - Promote Library Events and Usage	2002		15
5	Web Site	Web Site Upgrade - On-line Book Discussion Groups	2003		15
5	Web Site	Web site upgrade - Reader's Advisory	2003		15
5	Web Site	Online Program Registration	2003		15
1	Web Site	Web Site Upgrade - Customization/personalization	2004		15
1	Web Site	Alternative Online Payment Options	2004		15
3	Bandwidth	Bandwidth Upgrades	2001	Ongoing	16
3	Assistive Tech.	Assistive technology (software and accessories for persons with disabilities)	2001	Ongoing	17
3	Digitization	Digitization of unique items in the B&ECPL collection	2001	Ongoing	18
3	ILL	ILL	2001	Ongoing	19
3	ILL	Regional and Statewide Virtual Catalogs	2003		19
3	RRC	Remote Reference Service - E-Mail	2001		20
3	RRC	Remote Reference Service - Extend Service Hours	2001	Ongoing	20
3	RRC	Remote Reference Service - On-Line Chat	2004		20
4	Training	Training - Staff	2001	Ongoing	21
5	Training	Training - Public	2001	Ongoing	21
2	Training	Second Central Library Training Lab for Public and Staff	2002		21

Buffalo and Erie County Public Library
 Technology Plan (2001 - 2004)
 Project Index

Goal Number	Project	Description	Year		Project Number
3	Web/catalog	Web 2 - Limiting by Location	2001		1
3	Web/catalog	Web 2 - Patron Information	2001		1
2	Training	Training - Distance Learning	2004		21
1	DRA	Library Automation System Evaluation	2002		22
4	Internal Comun.	New E-Mail System	2002		23
4	Internal Comun.	Automatic maintenance of necessary internal distribution lists	2002	Ongoing	23
4	Internal Comun.	Upgrade Intranet	2002	Ongoing	23
3	Universal Design	Web site upgrade - Universal Design (Bobby)	2002	Ongoing	24
1	Mobiles	Mobile Library Service - put bookmobiles on-line	2003		25
2	Electronic Collect.	New Technologies - E-Books	2003		26
3	Rare Books	Rare Book Consortium Catalog	2003		27
6	Funding	E-rate	2001	Ongoing	28
6	Funding	State Reports	2001	Ongoing	29

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001

Project Number: 1

Library Goal: Strengthen information access and delivery.

Objective: Enhance the B&ECPL's web and catalog capabilities.

Activities:

1. Install DRA Web2 software.
2. Limit catalog searches by location.
3. Activate the patron information function.
4. Initiate patron requests and renewals.
5. Introduce the Spanish version of the catalog.

Technology Needed:

1. DRA Classic Web2 Version 1.3a Software+
2. New Web Server.

Other Resources Needed:

1. Consulting
2. Technical Training – Network Support
3. Technical Training – Catalog Department
4. Spanish Translation
5. Staff Training
6. Patron Training

Project Budget:

\$14,165

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2002

Project Number: 1

Library Goal: Strengthen information access and delivery.

Objective: Enhance the B&ECPL's web and catalog capabilities.

Activities:

1. Create a user-friendly catalog interface for children.

Technology Needed: Latest version of DRA Web2 software

Other Resources Needed:

1. Consulting
2. Technical Training – Catalog Department
3. Technical Training – Network Support
4. Staff training

Project Budget:

\$5,000

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2003

Project Number: 1

Library Goal:	Strengthen information access and delivery.
Objective:	Enhance the B&ECPL's web and catalog capabilities.
Activities:	<ol style="list-style-type: none"> 1. Introduce the ability to search other catalogs. 2. Provide easier patron access to complicated serials holdings and titles in series by purchasing and installing MFHD from DRA (if the Library stays with DRA and has not migrated to TAOS.) 3. Investigate and initiate the addition of web sites to the on-line catalog (Project CORC, ISAAC Network). 4. Integrate catalog and database searches.
Technology Needed:	<ol style="list-style-type: none"> 1. DRA Client/Server Z39.50 Software 2. DRA MFHD Software 3. Site identification and link maintenance software
Other Resources Needed:	<ol style="list-style-type: none"> 1. DRA Training – Network Support and Catalog Department 2. Staff training 3. Patron training
Project Budget:	\$52,668

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001 &
Ongoing

Project Number: 2

Library Goal: Evaluate and improve the Buffalo and Erie County Public Library's operations and services.

Objective: Provide more relevant indicators of library use through the measurement of electronic library services and resources.

Activities:

1. Install/modify software to identify users by library.
2. Install/modify software to identify remote users.
3. Install/modify software to identify staff use.
4. Install/modify software to authenticate computer users and to monitor computer usage.

Technology Needed:

1. Software to capture, measure and report usage of electronic library services and resources.
2. Server

Other Resources Needed:

Project Budget:

\$9,300 for server, cabling and furniture
Software cost will be determined and paid for using the B&ECPL materials budget.

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001 &
Ongoing

Project Number: 3

Library Goal: Evaluate and improve the Buffalo and Erie County Public Library's operations and services.

Objective: Strengthen Network Support's ability to maintain public access and staff workstations.

Activities:

1. Review Ikon contract.
2. Monitor "Help Desk" patterns and revise procedures.
3. Review coverage during peak hours of service.
4. Develop emergency procedures for "downtime"

Technology Needed:

Other Resources Needed:

Staff training

Resource/Instruction sheets for routine operations

Project Budget:

N/A

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001

Project Number: 4

Library Goal: Evaluate and improve the Buffalo and Erie County Public Library's operations and services.

Objective: Improve the accuracy and functionality of the patron database.

Activities:

1. Reregister all borrowers, issue new library cards and assign PIN numbers.
2. Provide patron activity reports.

Technology Needed:

While not required to issue PIN numbers, installation of DRA Classic Software – Version 2.5-2, scheduled for release Summer, 2001), will streamline activity

Other Resources Needed:

Staff training

Project Budget:

N/A (included in annual DRA Support contract)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001

Project Number: 5

Library Goal: Evaluate and improve the Buffalo and Erie County Public Library's operations and services.

Objective: Encourage the prompt return of library materials through automated collection agency services.

Activities:

1. Outsource and improve the timeliness of notice and billing functions.
2. Generate collection agency communications.
3. Provide collection status and activity reports.

Technology Needed:

1. DRA Collection Agency Module
2. UDMS Reports

Other Resources Needed:

Staff training

Project Budget:

N/A (DRA Collection Agency Module purchased in 2000)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY

TECHNOLOGY PLAN

2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001

Project Number: 6

Library Goal: Evaluate and improve the Buffalo and Erie County Public Library's operations and services.

Objective: Comply with the Children's Internet Protection Act as enacted and subsequently interpreted by the courts.

Activities:

1. Evaluate and select appropriate filtering software.
2. Determine impact on existing PAC configurations.

Technology Needed:

Other Resources Needed:

Revised Internet Safety Policy and Procedures

Project Budget:

N/A

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2002

Project Number: 6

Library Goal: Evaluate and improve the Buffalo and Erie County Public Library's operations and services.

Objective: Comply with the Children's Internet Protection Act as enacted and subsequently interpreted by the courts.

Activities:

1. Install filtering software.
2. Monitor the performance of the filtering software.

Technology Needed:

1. Filtering Software
2. Server

Other Resources Needed:

Staff training

Project Budget:

\$25,900

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY

TECHNOLOGY PLAN

2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001**Project Number:** 7

Library Goal:	Evaluate and improve the Buffalo and Erie County Public Library's operations and services.
Objective:	Increase efficiency and improve patron convenience during routine library operations.
Activities:	<ol style="list-style-type: none"> 1. Introduce self-serve, user-friendly printer cost recovery at all public workstations. 2. Explore cardless checkout and positive borrower identification through a pilot study of finger imaging identification. 3. Investigate self-checkout, beginning with a pilot study.
Technology Needed:	<ol style="list-style-type: none"> 1. Printer Cost Recovery Software 2. Server and database software 3. DRA Self-checkout Software Modules 4. 3M Self-checkout Workstations - 3 5. Borrower identification Software and Hardware
Other Resources Needed:	<ol style="list-style-type: none"> 6. Staff training 7. Policy/procedures refinements
Project Budget:	\$14,375 (Self-checkout workstations funded by individual libraries)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2002 &
Ongoing

Project Number: 7

Library Goal: Evaluate and improve the Buffalo and Erie County Public Library's operations and services.

Objective: Increase efficiency and improve patron convenience during routine library operations.

Activities:

1. Introduce automated telephone renewals.
2. Introduce automated telephone/e-mail notices for overdue materials and requests.

Technology Needed:

1. DRA Telephone Renewal and Notice Software
2. Server with Voice Boards

Other Resources Needed:

Staff training

Project Budget:

\$26,600

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001 &
Ongoing

Project Number: 8

Library Goal:	Evaluate and improve the Buffalo and Erie County Public Library's operations and services.
Objective:	Assess library activity levels and maximize staff effectiveness through a process improvement study.
Activities:	<ol style="list-style-type: none">1. Set up a database connecting staff duties and library processes
Technology Needed:	Server
Other Resources Needed:	Services of a database developer
Project Budget:	\$19,500

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001 &
Ongoing

Project Number: 9

Library Goal:

Evaluate and improve the Buffalo and Erie County Public Library's operations and services.

Objective:

Analyze and support the technology requirements of library construction projects.

Activities:

1. Town of Collins Public Library construction project
2. Newstead Public Library construction project

Technology Needed:

N/A (Existing network equipment will be transferred)

Other Resources Needed:

Project Budget:

N/A (Cabling costs to be included with Building Capital Spending)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2002 &
Ongoing

Project Number: 9

Library Goal: Evaluate and improve the Buffalo and Erie County Public Library's operations and services.

Objective: Analyze and support the technology requirements of library construction projects.

Activities:

1. Jefferson construction project

Technology Needed:

N/A (Existing network equipment will be transferred)

Other Resources Needed:

Project Budget:

N/A (Cabling costs to be included with Building Capital Spending)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY

TECHNOLOGY PLAN

2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001**Project Number:** 10

Library Goal: Refine and maintain state-of-the-art resources for public and staff.

Objective: Install new Bill & Melinda Gates Foundation computers awarded through their New York State program

Activities:

1. Monitor/assist/integrate installations into the Library's network.
 - i. Cheektowaga Public Library – Reinstein Memorial Branch
 - ii. Town Tonawanda Public Library – Kenilworth & Sheridan Parkside Branches
 - iii. Town of Collins Public Library
 - iv. Participants in Partial Building Grants program
2. Evaluate software and its potential for use in other libraries.

Technology Needed:

N/A (to be provided by Bill and Melinda Gates Foundation)

Other Resources Needed:

Project Budget: N/A (to be provided by Bill and Melinda Gates Foundation)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001 &
Ongoing

Project Number: 11

Library Goal:	Refine and maintain state-of-the-art resources for public and staff.
Objective:	Provide regularly scheduled updates to existing computer workstations to optimize performance.
Activities:	<ol style="list-style-type: none"> 1. Evaluate new methods for managing the new infrastructure (Citrix, SMS, Cybrarian, Research It). 2. Improve the backup/recovery procedures. 3. Upgrade “Public Access” model software (e.g., Internet browser, MS Office, typing instruction and resume creation software, MS Publisher, specialized options like GIS and CAD, critical browser plug-ins). 4. Create/purchase “Public Access” model in Spanish. 5. Provide automated upgrades of virus protection software.
Technology Needed:	<ol style="list-style-type: none"> 1. Network Management Software 2. Tape Backup Hardware 3. New/upgraded “Public Access” model software 4. Virus protection software
Other Resources Needed:	<ol style="list-style-type: none"> 1. Consulting 2. Technical Training - Network Support 3. Staff Training
Project Budget:	\$85,674

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2003 &
Ongoing

Project Number: 11

Library Goal: Refine and maintain state-of-the-art resources for public and staff.

Objective: Provide regularly scheduled updates to existing computer workstations to optimize performance.

Activities:

1. Investigate and add hardware to public access model.

Technology Needed:

1. Scanner
2. Color Printer
3. Other as requested

Other Resources Needed:

Project Budget:
N/A (will use existing hardware)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001

Project Number: 12

Library Goal: Refine and maintain state-of-the-art resources for public and staff.

Objective: Increase security for the System network.

Activities:

1. Improve/replace the firewall.

Technology Needed:

Firewall hardware and software

Other Resources Needed:

1. Consulting
2. Technical Training – Network Support

Project Budget:

\$62,000

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001 &
Ongoing

Project Number: 13

Library Goal: Refine and maintain state-of-the-art resources for public and staff.

Objective: Increase staff access to computer technology.

Activities:

1. Develop a staff/computer ratio for each library.
2. Develop a regular schedule for adding staff workstations and replacing outdated models.
3. Upgrade software on staff computers on a regular basis (e.g., MS Office, MS Internet Explorer, Adobe Acrobat).
4. Use network configurations to maximize staff workstation use within the Central Library.

Technology Needed:

1. Server
2. Workstation hardware and software

Other Resources Needed:

Staff training

Project Budget:

\$171,500

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY

TECHNOLOGY PLAN

2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001

Project Number: 14

Library Goal: Refine and maintain state-of-the-art resources for public and staff.

Objective: Implement the technology components of the Erie County Educational Technology Initiative

Activities:

1. Install technology ordered through its Matching Grants component.
2. Establish Youth Resource Centers at all libraries.

Technology Needed:

1. Workstations and selected software
2. Network cabling

Other Resources Needed:

Furniture for workstations

Project Budget:

\$280,000

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY

TECHNOLOGY PLAN

2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001 &
Ongoing**Project Number:** 14

Library Goal:	Promote the use of library resources and services.
Objective:	Implement the technology components of the Erie County Educational Technology Initiative
Activities:	<ol style="list-style-type: none"> 1. Develop and implement Cyber Camps as a summer program. 2. Make increased use of the Cyber Train as a programming/training vehicle throughout the year, especially targeting small libraries and low income/minority populations. <ol style="list-style-type: none"> i. Add a second traveling classroom. ii. Have it available for community events.
Technology Needed:	<ol style="list-style-type: none"> 1. 11 Laptop Computers 2. Wireless Equipment 3. InFocus Projector
Other Resources Needed:	Staff (professional and technical)
Project Budget:	\$53,940

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001 &
Ongoing

Project Number: 15

Library Goal: Refine and maintain state-of-the-art resources for public and staff.

Objective: Enhance the B&ECPL website to serve as an additional customer service point.

Activities:

1. Investigate and acquire new electronic resources for reference services.
2. Continue to evaluate, develop and weed the Reference Desk as necessary.
3. Compile and mount frequently asked reference questions and answers.
4. Place a conspicuous “quick search” form on the home page.
5. Investigate and install automated link checkers and HTML validation tools.
6. Expand the “Homework Center” concept.
7. Expand on-line tutorials.

Technology Needed:

1. Proxy Server
2. Web Site Productivity Software

Other Resources Needed:

Establish a Webmaster position.

Assign support staff to this “service point.”

Staff training

Project Budget:

\$19,165

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2002

Project Number: 15

Library Goal:

Evaluate and improve the B&ECPL's operations and services.

Objective:

Enhance the B&ECPL website to serve as an additional customer service point.

Activities:

1. Explore and install new creation and management software to enable increased functionality, such as, establishing a real time reservation system for training classes and workstation booking.

Technology Needed:

Web Development Tools

Other Resources Needed:

Consulting

Project Budget:

\$20,000

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2002 &
Ongoing

Project Number: 15

Library Goal: Refine and maintain state-of-the-art resources for public and staff.

Objective: Enhance the B&ECPL website to serve as an additional customer service point.

Activities:

1. Introduce web-based collaboration applications like GIS.

Technology Needed:

Other Resources Needed:

Training for staff and public

Project Budget:

N/A (will collaborate with Erie County Government)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2002

Project Number: 15

- Library Goal:** Promote the use of library resources and services.
- Objective:** Enhance the B&ECPL website to serve as an additional customer service point.
- Activities:** Aggressively promote technology services to attract new users and retain repeat users.
1. Begin electronic dissemination of library events, usage community issues and current interest topics.
 2. Create a “branded” logo and lobby for permanent placement on heavily visited local web sites.
 3. Create a B&ECPL newsletter and distribute via e-mail.

Technology Needed:

Other Resources Needed:

Project Budget:

N/A (will utilize existing infrastructure and resources)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2003

Project Number: 15

Library Goal: Promote the use of library resources and services.

Objective: Enhance the B&ECPL website to serve as an additional customer service point.

Activities:

1. Establish on-line book discussion groups
2. Introduce a readers' advisory function including:
 - i. Linking staff reading suggestions to the online catalog
 - ii. E-mailing customized reading lists to patrons.
3. Institute real time on-line program registration.

Technology Needed:

Existing hardware, software and productivity tools

Other Resources Needed:

1. Staff training
2. Consulting

Project Budget:

\$24,000

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2004

Project Number: 15

Library Goal:

Evaluate and improve the B&ECPL's operations and services.

Objective:

Enhance the B&ECPL website to serve as an additional customer service point.

Activities:

1. Explore the creation of customized/personalized interfaces.
2. Investigate and implement alternative on-line payment options

Technology Needed:

Other Resources Needed:

Project Budget:

N/A (will utilize existing infrastructure and resources)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001 &
Ongoing

Project Number: 16

Library Goal: Strengthen information access and delivery.

Objective: Provide faster Internet access at all library locations.

Activities:

1. Increase bandwidth at all library locations to full point-to-point T-1 from 56K frame relay circuit.

Technology Needed:

New routers with integrated DSU/CSU

Other Resources Needed:

1. AT&T On-time Delivery of New Circuits
2. Expanded bandwidth to ISP (Applied Theory)
3. Consulting

Project Budget:

\$166,748

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001 &
Ongoing

Project Number: 17

- Library Goal:** Strengthen information access and delivery.
- Objective:** Upgrade and expand adaptive technology and assistive devices at selected locations.
- Activities:**
1. Evaluate, acquire and install software technology specifically developed for the blind and the learning disabled (e.g., screen readers, screen magnification programs, etc.).
 2. Install alternate input devices for persons with disabilities (e.g., trackballs and touch screens).
 3. Install larger display monitors at selected workstations.
 4. Provide large print key tops.
 5. Install anti-glare filters.
 6. Upgrade the Radio Receivers.
 7. Provide inductive neck loops for the hard-of-hearing.
 8. Provide circulating Telecommunication Devices for the Deaf (TDD) and/or Teletypewriters (TTY).
 9. Provide a TTY at a public phone in the Central Library.
- Technology Needed:**
1. Large monitors and miscellaneous hardware devices
 2. Zoom Text, JAWS and/or other software
- Other Resources Needed:** Collaboration with Verizon
- Project Budget:**
- | | |
|-----------|-----------|
| Hardware: | \$76,000 |
| Software: | \$46,000 |
| Total: | \$122,000 |

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2002 &
Ongoing

Project Number: 17

Library Goal: Strengthen information access and delivery.

Objective: Upgrade and expand adaptive technology and assistive devices at selected locations.

Activities:

1. Acquire Braille Embosser for printing output.
2. Provide Phonic Ear for the hearing impaired and the learning disabled.
3. Upgrade the Central Library electronic magnifier to closed circuit TV (CCTV) video magnifier.
4. Provide Secondary Audio Programming (SAP) converters for the blind and visually impaired.

Technology Needed:

Other Resources Needed:

Project Budget:

\$30,000

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2003 &
Ongoing

Project Number: 17

Library Goal: Strengthen information access and delivery.

Objective: Upgrade and expand adaptive technology and assistive devices at selected locations.

Activities:

1. Provide dedicated “task lighting.”
2. Install Voice Activation capabilities for the physically disabled.
3. Provide optical scanners for the visually impaired.
4. Provide CCTV with color capabilities.

Technology Needed:

Other Resources Needed:

Project Budget:

\$22,000

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001 &
Ongoing

Project Number: 18

Library Goal: Strengthen information access and delivery.

Objective: Digitize unique items in the B&ECPL collection.

Activities:

1. Develop guidelines for digitization of selected collections.

Technology Needed:

Other Resources Needed:

Project Budget:

N/A (will use operating budget)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2002 &
Ongoing

Project Number: 18

Library Goal: Strengthen information access and delivery.

Objective: Digitize unique items in the B&ECPL collection.

Activities:

1. Identify, evaluate and prioritize local collections for digitization.

Technology Needed:

1. Server storage
2. High quality scanner

Other Resources Needed:

1. Consulting
2. Staff training

Project Budget:

\$18,000

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001

Project Number: 19

Library Goal: Strengthen information access and delivery.

Objective: Enhance resource sharing for B&ECPL patrons through interlibrary loan opportunities.

Activities:

1. Acquire a scanner and implement electronic document delivery via Ariel.
2. Investigate the use of automated record keeping software (e.g., OCLC ILLiad).
3. Participate in the WNYLRC Virtual Union Catalog.

Technology Needed:

1. Scanner
2. Ariel Software
3. DRA Client/Server Z39.50 Software

Other Resources Needed:

Collaboration with WNYLRC and local university library

Project Budget:

Project costs of \$1,900 will be paid by WNYLRC RBDB Grant

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2002

Project Number: 19

Library Goal: Strengthen information access and delivery.

Objective: Enhance resource sharing for B&ECPL patrons through interlibrary loan opportunities.

Activities:

1. Develop procedures for, and implement, patron placed interlibrary loan requests.

Technology Needed:

Other Resources Needed:

Project Budget: N/A (will utilize existing infrastructure and resources)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY

TECHNOLOGY PLAN

2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2003

Project Number: 19

Library Goal: Strengthen information access and delivery.

Objective: Enhance resource sharing for B&ECPL patrons through interlibrary loan opportunities.

Activities:

1. Investigate participation in the New York State EmpireCat.

Technology Needed:

DRA Client/Server Z39.50 Software

Other Resources Needed:

Project Budget:

N/A (will utilize existing infrastructure and resources)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001 &
Ongoing

Project Number: 20

Library Goal: Strengthen information access and delivery.

Objective: Enhance remote reference service.

Activities:

1. Introduce e-mail reference service.
2. Extend the service hours of the Remote Reference Center, adding Saturday hours in 2001 and further expanding the hours in subsequent years as resources permit.

Technology Needed:

Other Resources Needed:

Project Budget:

N/A (will utilize existing infrastructure and resources)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2004

Project Number: 20

Library Goal: Strengthen information access and delivery.

Objective: Enhance remote reference service.

Activities:

1. Investigate and implement real time on-line reference service using chat or instant messaging.
2. Monitor developments and evaluate commercial live reference products.

Technology Needed:

Software for real time on-line reference service

Other Resources Needed:

Project Budget:

\$25,000

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001 &
Ongoing

Project Number: 21

- Library Goal:** Attract, develop and encourage a diverse and skilled staff.
- Objective:** Train staff to acquire the skills necessary to optimally use the new technologies and electronic resources.
- Activities:**
1. Continue to offer all full-time library staff a regular complement of basic, advanced and annual refresher instruction.
 2. Provide network support staff with regular training opportunities on new developments/new technologies as they are implemented at B&ECPL.

Technology Needed:

Other Resources Needed:

Project Budget:

Training costs will be covered in annual operating budget

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2002 &
Ongoing

Project Number: 21

- Library Goal:** Attract, develop and encourage a diverse and skilled staff.
- Objective:** Train staff to acquire the skills necessary to optimally use the new technologies and electronic resources.
- Activities:**
- Develop staff workshops to address new and changing technology needs including, but not limited to:
- i. Adaptive technologies for patrons
 - ii. Microsoft Access for selected staff
 - iii. Real time on-line reference strategies
 - iv. Computer troubleshooting basics
 - v. Web design training for selected staff
- Technology Needed:**
- N/A (needed expertise will be identified and purchased as part of other projects)
- Other Resources Needed:**
- Project Budget:**
- N/A (hardware and software will be identified and purchased as part of other projects)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001 &
Ongoing

Project Number: 21

Library Goal:

Promote the use of library resources and services.

Objective:

Train the public to acquire the skills necessary to optimally use the new technologies and electronic resources.

Activities:

1. Continue to expand and enhance training at the Central Library and the East Delavan Training Labs.

Technology Needed:

Other Resources Needed:

Project Budget:

N/A (will utilize existing infrastructure and resources)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2003 &
Ongoing

Project Number: 21

Library Goal:	Promote the use of library resources and services.
Objective:	Train the public to acquire the skills necessary to optimally use the new technologies and electronic resources.
Activities:	<ol style="list-style-type: none"> 1. Incorporate lab workstations equipped with assistive technologies into public workshops. 2. Expand library-oriented programming conducted by librarian subject specialists. 3. Develop specialized programs for targeted audiences such as the business community, job seekers, children and young adults. 4. Provide practice sessions in the computer labs supervised by senior page computer assistants. 5. Offer specialized training workshops conducted by experts in the community. 6. Become the premier training location for the Erie County Internet Mapping System. 7. Expand computer literacy programs for individuals lacking home, work or school access to computers and/or the Internet. 8. Increase small group/individual training opportunities at all B&ECPL libraries by increasing the use of Cyber Train(s) and employing more technology assistants.
Technology Needed:	
Other Resources Needed:	Staff
Project Budget:	N/A (will utilize existing infrastructure and resources)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2002

Project Number: 21

Library Goal: Refine and maintain state-of-the-art resources for public and staff.

Objective: Train the public and staff to acquire the skills necessary to optimally use the new technologies and electronic resources.

Activities:

1. Open a second training lab in the Central Library for the public and for staff.

Technology Needed:

2. Twelve workstations for students; 1 for Trainer
3. Laser Printer
4. Cisco Switch

Other Resources Needed:

Furniture

Project Budget:

\$38,750

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2004

Project Number: 21

Library Goal: Refine and maintain state-of-the-art resources for public and staff.

Objective: Train the public and staff to acquire the skills necessary to optimally use the new technologies and electronic resources.

Activities: Explore alternatives to on-site training:

1. Investigate distance learning/video conferencing.
2. Expand access to on-line training programs and interactive tutorials.

Technology Needed:
To be determined

Other Resources Needed:

Project Budget:
Funding for extensive distance learning/video conferencing projects will come from special grants that will aggressively pursued upon completion of a successful feasibility study.

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2002

Project Number: 22

Library Goal:

Evaluate and improve the B&ECPL's operations and services.

Objective:

Provide a state-of-the-art, stable and responsive automation system.

Activities:

1. Evaluate DRA and determine if the Library should continue to use this company as its vendor.

Technology Needed:

Other Resources Needed:

RFP

Project Budget:

DRA currently estimates that the TAOS conversion cost will be \$178,148. This cost will be the baseline for considering other alternatives.

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2002 &
Ongoing

Project Number: 23

Library Goal:	Attract, develop and encourage a diverse and skilled staff.
Objective:	Improve the B&ECPL's internal communications mechanisms.
Activities:	<ol style="list-style-type: none"> 1. Introduce a new e-mail system. 2. At a minimum, establish e-mail accounts for all full-time staff. 3. Expand staff access to e-mail within library buildings and offsite. 4. Provide automatic maintenance of necessary internal distribution lists. 5. Enhance the staff Intranet by: <ol style="list-style-type: none"> i. Automating all forms so that they can be completed electronically. ii. Creating an on-line calendar of staff meetings and events iii. Converting PowerPoint files and handouts to Intranet presentations.
Technology Needed:	<ol style="list-style-type: none"> 1. E-mail server 2. Messaging and collaboration software 3. Workflow software for document creation and distribution
Other Resources Needed:	<ol style="list-style-type: none"> 1. Technical Training – Network Support 2. Training – Staff
Project Budget:	\$33,308

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2003 &
Ongoing

Project Number: 23

Library Goal: Attract, develop and encourage a diverse and skilled staff.

Objective: Improve the B&ECPL's internal communications mechanisms.

Activities:

1. Investigate the addition of digital signature software to the staff Intranet

Technology Needed:

1. Digital signature software to the staff Intranet

Other Resources Needed:

Project Budget:

\$2,500

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2004 &
Ongoing

Project Number: 23

Library Goal: Attract, develop and encourage a diverse and skilled staff.

Objective: Improve the B&ECPL's internal communications mechanisms.

Activities:

1. Mount conference, workshop and committee reports on the staff Intranet.
2. Implement a staff suggestion box on the staff Intranet.

Technology Needed:

Other Resources Needed:

Project Budget:

N/A (will utilize existing infrastructure and resources)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2002 –
2004

Project Number: 24

- Library Goal:** Strengthen information access and delivery.
- Objective:** Adopt the concept of “universal design” to ensure web access for the widest range of users.
- Activities:**
1. Adopt minimum web accessibility standards established by the World Wide Web Consortium (W3C).
 - i. Support text browsers or offer alternative text-only pages.
 - ii. Create fast loading web pages.
 - iii. Convert to current web standards – HTML 4.0 and Cascading Style Sheets (CSS).
 - iv. Test web pages across multiple browsers.
 - v. Create a “Bobby Approved” web site.
 2. Continue to redesign the web site for improved access and usability, such as the addition of met tags to major pages to increase hit rates and improve page descriptions in major search engine listings.

Technology Needed:

Other Resources Needed:

Project Budget:

N/A (Special software is included in previous projects)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2003

Project Number: 25

Library Goal: Evaluate and improve the B&ECPL's operations and services.

Objective: Optimize mobile library services.

Activities:

1. Bring mobile units on-line.

Technology Needed:

1. VPN using Nortel Contivity Switch
2. Workstations for staff and public
3. Laser printers

Other Resources Needed:

Cell phone contract with no network access charges and access to all libraries

Project Budget:

\$28,690

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2003

Project Number: 26

Library Goal: Refine and maintain state-of-the-art resources for public and staff.

Objective: Expand and strengthen electronic collections.

Activities:

1. Evaluate commercial e-text services.
2. Provide links to public domain e-book sites.
3. Investigate the feasibility of adding bibliographic records for e-texts and web resources to the on-line catalog.
4. Continue to monitor developments in the portable device dependent e-book industry.
5. Consider an e-book pilot project (after standards have been established).

Technology Needed:

Server for downloads

Other Resources Needed:

Reading appliances

Project Budget:

\$6,500

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001 &
Ongoing

Project Number: 27

Library Goal: Strengthen information access and delivery.

Objective: Create a regional rare books catalog and a virtual rare books library in conjunction with the SUNYAB libraries.

Activities:

1. Research the requirements for an independent catalog with a separate server.

Technology Needed:

1. 2nd Web2 Server
2. Web2 Software

Other Resources Needed:

1. Technical Installation & Training – Network Support
2. Training – Staff

Project Budget:

\$34,238

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001 &
Ongoing.

Project Number: 28

Library Goal: Secure necessary public and private funds.

Objective: Seek funds to support and augment the Library's technology-based services.

Activities:

1. Apply annually for e-rate discounts for libraries throughout the System.

Technology Needed:

Other Resources Needed:

Project Budget:

N/A (Staff resource intensive process)

BUFFALO AND ERIE COUNTY PUBLIC LIBRARY
TECHNOLOGY PLAN
2001 – 2004

GOALS SUMMARY SHEET

Target Date: 2001 &
Ongoing.

Project Number: 29

Library Goal: Secure necessary public and private.

Objective: Satisfy State mandated reporting requirements for basic aid.

Activities:

1. Generate the reports necessary to complete the Annual Reports to the State of New York.

Technology Needed:

Report writer

Other Resources Needed:

Consulting

Project Budget:

\$8,000

**Buffalo & Erie County Public Library
Technology Plan 2001 - 2004
Budget**

Funding*	1,781,067
Costs*	1,781,067
	0

* See Schedules G-2, G-3, G-4 for detail

**Buffalo & Erie County Public Library
Technology Plan 2001 - 2004
Budget**

Funding

Remainder of Erie County OPAC Project Legislature Bonds	615,000
Other	
Portion of Erie County Capital Budget - Committed (2001)	275,000
B&ECPL Contingency Fund designated for Improvements and Long-term Replacements	150,000
Educational Technology Initiative Youth Resource Centers	280,000
Future Requests for Erie County Capital Budget, State, Federal, & Private Grants	461,067
Grand Total	\$1,781,067

Buffalo & Erie County Public Library
Technology Plan 2001 - 2004
Budget

Project Costs

Web 2	\$	71,833
Performance Measurement Stats	\$	9,300
Strengthen Network Support	\$	-
Patron Re-registration	\$	-
Collection Agency	\$	-
CIPA - Internet Filtering	\$	25,900
Patron Convenience/Staff Efficiency	\$	68,958
Process Improvement Database	\$	19,500
New Library Construction	\$	-
Gates Foundation Grant - 2001	\$	5,499
Enhance Public Access Model	\$	85,674
Security Improvements	\$	62,000
Staff Workstations	\$	171,500
ETI	\$	333,940
Enhance B&EPL Web Site	\$	63,165
Bandwidth Upgrades	\$	154,248
Assistive Technology	\$	174,000
Digitization	\$	18,000
ILL	\$	-
RRC	\$	25,000
Training Enhancements	\$	38,750
DRA	\$	178,148
Improve Internal Communications	\$	36,308
Web Site Universal Design	\$	-
Establish On-line Access - Mobile Libraries	\$	28,690
E-Books	\$	6,500
Rare Books	\$	34,238
E-Rate	\$	-
State Reports	\$	8,000

Sub-Total \$ **1,619,152**

Contingency **161,915**

Grand Total \$ 1,781,067

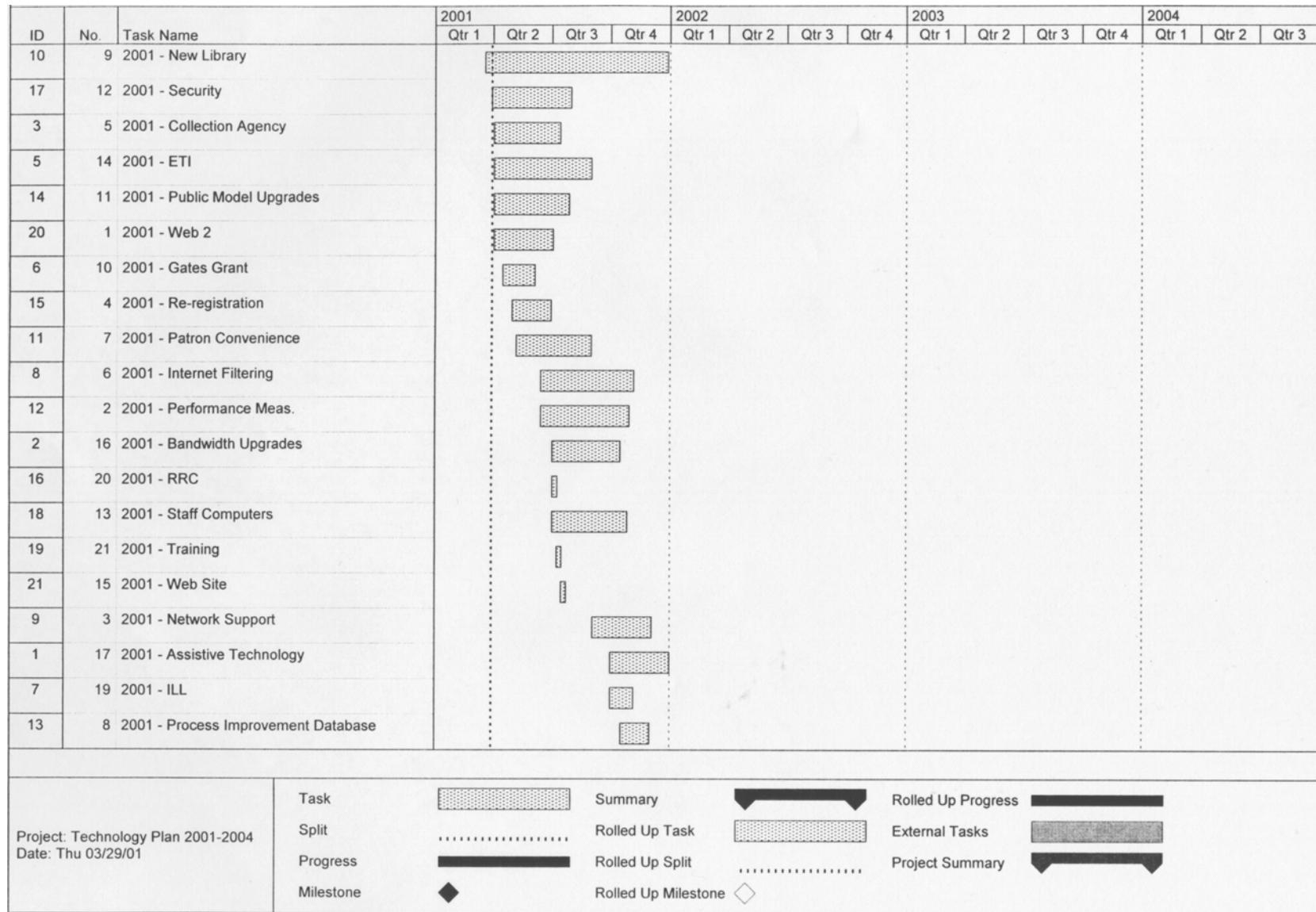
**Buffalo and Erie County Public Library
Technology Plan 2001 - 2004**

Project Costs

	Library	Cabling Costs	Workstation Hardware Costs	Network Hardware Costs	Furniture	Consulting	Win NT, UNIX, OVMS Server Costs	Software Costs	Technical Training	Other	Total Costs
1	Web 2	-	-	-	-	15,000	4,165	46,668	6,000	-	71,833
2	Performance Measurement Stats	1,000	-	-	1,800	-	6,500	-	-	-	9,300
3	Strengthen Network Support	-	-	-	-	-	-	-	-	-	-
4	Patron Re-registration	-	-	-	-	-	-	-	-	-	-
5	Collection Agency	-	-	-	-	-	-	-	-	-	-
6	CIPA - Internet Filtering	-	-	-	-	-	6,500	19,400	-	-	25,900
7	Patron Convenience/Staff Efficiency	0	0	0	0	0	20,665	48,293	0	0	68,958
8	Process Improvement Database	1,000	-	-	-	12,000	6,500	-	-	-	19,500
9	New Library Construction	-	-	-	-	-	-	-	-	-	-
10	Gates Foundation Grant - 2001	-	-	-	-	-	5,499	-	-	-	5,499
11	Enhance Public Access Model	0	0	0	0	10,800	29,512	45,362	0	0	85,674
12	Security Improvements	-	-	-	-	12,000	-	50,000	-	-	62,000
13	Staff Workstations	30,000	90,000	-	24,000	-	6,500	21,000	-	-	171,500
14	ETI	33,600	216,191	2,349	44,800	10,800	29,512	78,962	0	3,400	333,940
15	Enhance B&EPL Web Site	0	0	0	0	34,000	4,165	25,000	0	0	63,165
16	Bandwidth Upgrades	-	-	154,248	-	-	-	-	-	-	154,248
17	Assistive Technology	0	76,000	0	0	0	0	46,000	0	52,000	174,000
18	Digitization	-	-	-	-	5,000	13,000	-	-	-	18,000
19	ILL	-	-	-	-	-	-	-	-	-	-
20	RRC	-	-	-	-	-	-	25,000	-	-	25,000
21	Training Enhancements	6,500	19,500	3,000	5,200	-	-	4,550	-	-	38,750
22	DRA	-	-	-	-	-	100,000	78,148	-	-	178,148
23	Improve Internal Communications	-	-	-	-	12,000	15,000	9,308	-	-	36,308
24	Web Site Universal Design	-	-	-	-	-	-	-	-	-	-
25	Establish On-line Access - Mobile Libraries	-	18,000	4,690	-	1,800	-	4,200	-	-	28,690
26	E-Books	-	-	-	-	-	6,500	-	-	-	6,500
27	Rare Books	-	-	-	-	9,000	15,218	10,020	-	-	34,238
28	E-Rate	-	-	-	-	-	-	-	-	-	-
29	State Reports	-	-	-	-	8,000	-	-	-	-	8,000
	Sub-Total	72,100	419,691	164,287	75,800	130,400	269,236	511,912	6,000	55,400	1,619,152
	Contingency									10%	161,915
	Grand Total										\$ 1,781,067

Notes: Web 2 Project


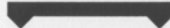
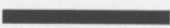



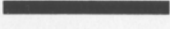



DRA MFHD Software and Miscellaneous software for site identification and link maintenance
Consulting/Training split between MFHD installation and actual Web 2 installation



ID	No.	Task Name	2001				2002				2003				2004		
			Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3
4	18	2001 - Digitization															
22	17	2002 - Assistive Technology															
23	18	2002 - Digitization															
24	22	2002 - DRA															
25	28	2002 - E-Rate															
26	19	2002 - ILL															
27	23	2002 - Internal Communications															
28	6	2002 - Internet Filtering															
29	9	2002 - New Library															
30	7	2002 - Patron Convenience															
31	11	2002 - Pub. Model Upgrades															
32	13	2002 - Staff Workstations															
33	29	2002 - State Reports															
34	21	2002 - Training															
35	24	2002 - Universal Design															
36	1	2002 - Web 2															
37	15	2002 - Web Site															
38	17	2003 - Assistive Technology															
39	26	2003 - E-Books															
40	19	2003 - ILL															

Project: Technology Plan 2001-2004 Date: Thu 03/29/01	Task		Summary		Rolled Up Progress	
	Split		Rolled Up Task		External Tasks	
	Progress		Rolled Up Split		Project Summary	
	Milestone		Rolled Up Milestone			

ID	No.	Task Name	2001				2002				2003				2004		
			Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3
41	23	2003 - Internal Communications															
42	25	2003 - Mobiles															
43	11	2003 - Pub. Model Upgrades															
44	27	2003 - Rare Books															
45	13	2003 - Staff Workstations															
46	15	2003 - Web Site															
47	1	2003 - Web2															
48	23	2004 - Internal Communications															
49	20	2004 - RRC															
50	21	2004 - Training															

Project: Technology Plan 2001-2004 Date: Thu 03/29/01	Task		Summary		Rolled Up Progress	
	Split		Rolled Up Task		External Tasks	
	Progress		Rolled Up Split		Project Summary	
	Milestone		Rolled Up Milestone	