

## **LIBRARIES OF MIDDLESEX AUTOMATION CONSORTIUM**

### **TECHNOLOGY PLAN, 2010 - 2013**

**VISION:** To be indispensable as a premier provider of services and resources to libraries in New Jersey.

**PLANNING PROCESS:** LMxAC guides its technological development through regular monthly meetings of its Executive Board, active involvement of its Committees, and a Strategic Plan which reflects our common vision. Our current goals and objectives are an outgrowth of that process and are based upon the extension of the accomplishments achieved in the implementation to date of our strategic planning efforts. In 2008 a new strategic plan was approved and much of this Technology Plan builds on that plan. This plan covers fiscal years (July through July) 2010-2011, 2011-2012, 2012-2013.

#### **GOALS AND OBJECTIVES (NJSL sections 1, 3 and 5):**

LMXAC is focused on helping our members to improve library services. We consider technology one of many resources we rely upon to help us to meet our service goals. To that end we have identified specific objectives and strategies related to the use of technology that are critical to our ability to meet our service goals.

#### **A. To assist libraries in the management of their collections through a shared integrated library system.**

1. Maintain and provide for the continued development of a shared computer facility operating integrated library system software to support the basic library functions of circulation, cataloging, public catalog access, patron registration. (ongoing)
2. Maintain and consistently improve a shared bibliographic database representing the complete materials holdings of its member libraries. Continue to refine and improve our loading of bibliographic records. (ongoing).
3. Provide and further customize public access to the libraries' shared bibliographic database available in World Wide Web format. (ongoing)
4. Expand use of software modules that provide for electronic management of serials and acquisitions. (2011)
5. Explore the use of mobile applications so that library patrons may access our services via mobile devices. (2010)
6. Provide increasingly more sophisticated statistical reporting capabilities to our members. (ongoing)

7. Explore implementation of add-on services to enhance the use of the automation system. (ongoing) (text messaging 2011; FRBR/RDA 2012)
8. Work with our member libraries to further define service expectations and local service requirements. (ongoing)
9. Continue to work with libraries to implement and maintain PC management software. (ongoing)

**B. To assist our members in securing high-speed and reliable interlibrary data communications services.**

1. Member access to high speed telecommunications services will be facilitated. (ongoing)
2. Members will be provided with options for telecommunications services where appropriate, thus assuring the very highest level of service for the lowest cost.
3. Access to the Internet will be maintained and expanded as bandwidth needs require. (ongoing)
4. Wireless connectivity will be provided and managed by LMxAC for service to bookmobiles. (ongoing)
5. Technical support will be provided to member libraries to understand and locally manage bandwidth usage and ongoing needs (ongoing).
6. Assess headquarters staffing and equipment requirements with the respect to improved network services and capacity for our members. (2010).
7. Explore the potential for high bandwidth connectivity through services such as Internet2 and technologies such as leased fiber, cable, etc. Work with the state library to assure participation in any statewide telecommunications initiatives. (2012) (Capital purchases may be required)
8. Upgrade LMxAC's telephone system (2011).

**C. To provide access for our members to the widest possible range of library materials databases.**

1. Provide technical support and advice to libraries on the building and maintenance of library databases of catalog records, patron information and circulation data. (ongoing)
2. Participate in state and regional initiatives which promote the sharing of library materials, and which implement standardized open systems software will allow the users of member libraries access to a wide range of library databases within the state. (ongoing)

**D. To explore and implement technology services designed to extend the library catalog and integrate search capabilities across a broader variety of information resources.**

1. Explore the implementation of expanded portal services to include local services, local content and a more sophisticated user interface. (2012).

**E. To provide technical and training support to all members of LMxAC and their library staff and to facilitate communication.**

1. Maintain a telephone help desk service, staffed during all hours of service operation observed by its member libraries. (ongoing)
2. Develop training and continuing education programs based on identified member needs. (ongoing)
3. Employ staff members with technical training to do onsite software installation and repairs to Consortium network equipment for its member libraries. (ongoing)
4. Using its own and contractual staff, LMxAC will provide both application-specific and generalized library automation training for its member library personnel. (ongoing)
5. In cooperation with its vendors and other library organizations, LMxAC will coordinate and share facilities and training opportunities in areas of mutual interest. (ongoing)
6. Develop a disaster recovery plan. (2011)

**F. To assist member libraries in acquiring, supporting and maintaining the technology necessary to achieve their service-related goals.**

LMxAC provides a variety of services to member libraries to assist them in the day to day management of technology in the library. Specific ongoing activities in this area include:

1. Negotiation of discounts with vendors whose products are of interest to libraries.
2. Purchasing support.
3. Providing (on a quarterly basis) updated workstation specifications. Providing annual reports on minimum standards and minimum specifications for workstations on the network.
4. Installation of computer and networking hardware and software.
5. Troubleshooting and consulting assistance.

Specific projects include:

1. Provide enhanced support for patron authentication, particularly in a wireless environment (ongoing, currently through EZProxy).

## **TECHNOLOGY ASSESSMENT (NJSL sections 2, 4 and 7):**

The Libraries of Middlesex Automation Consortium is a not-for-profit organization formed by public and college libraries for the centralized administration and maintenance of computer systems for the support of specific library functions. Currently twenty-eight libraries are members. The current systems supported offer the member libraries facilities for the cataloging and itemized inventory of library materials collections; record-keeping of patron information; circulation processing and documentation; public online catalog access; access to databases of non-member libraries; the optional access to commercially produced online services for periodical indexing and bibliographic information; and dedicated access to the Internet. All services are offered through a telecommunications network that is currently based upon an ethernet, TCP/IP LAN/WAN environment.

### **Telecommunications**

Currently most member sites are connected to a frame relay switch via a T1 connection and the frame relay switches are connected to LMxAC via a T3 connection. LMxAC also maintains a separate T3 connection to the Internet. Libraries are equipped with Cisco 1841 routers with Cisco 2950 switches. Some libraries have added additional switch capacity, additional T1 lines and expanded their use of cable to support non-LMxAC activities.

LMxAC maintains 2 Cisco Pix firewalls, a Cisco 7507 switch and a Cisco 3846 which form the backbone of our telecommunications infrastructure.

LMxAC anticipates a significant change in our telecommunications network under this plan. We are seeking a new telecommunications infrastructure that will provide members with significantly more bandwidth and bandwidth growth options.

### **Library Automation System**

Consortium services provide centralized technical staffing, housing and administration of all central computing and telecommunications hardware, administration of hardware and telecommunications contracts, telephone and field support for member library technical equipment and training support for member library personnel.

- LMxAC uses SirsiDynix Symphony software which resides on a SUN server housed at LMxAC.

Running under Sun Solaris 9.0, the Unicorn software server is installed on a Sun Sunfire v880.

Power assurance/conditioning for the Unicorn software server is controlled by a Toshiba 10kVA 1200 series UPS.

- The iBistro web server (also a Sun) houses the web interface for the iBistro Online Catalog.

Power assurance/conditioning for the iBistro server is controlled by a Toshiba 10kVA 1200 series UPS.

- The training server houses a copy of the database information on the Unicorn software server for purposes of training and testing new software releases.

Running under Sun Solaris 9.0, the training server is installed on a Sun V240.

Power assurance/conditioning for the Unicorn software test server is controlled by a Toshiba 10kVA 1200 series UPS.

- Additional servers meet our needs for authentication (EZProxy, phone notification and management information).

## **Email**

In addition to integrated library data and circulation management, LMxAC coordinates access to some commercial reference databases and to Internet services for its member libraries.

Dedicated Internet and e-mail are services provided by the New Jersey State Library.

LMxAC offers web hosting and support services for its members through the state library. A general web page for LMxAC is currently on the web and is maintained by LMxAC staff.

## **Telephone**

LMxAC has a Toshiba phone system that supports 9 lines. We also have separate fax and support lines via cell phones and pagers.

## **Member Libraries**

LMxAC member libraries have a variety of technology available to them. They have, at a minimum a Cisco 1841 series Router, 12 port 10/100 Cisco 2950 Switch, and various computer operating systems including Windows 2000 and Windows XP. The libraries are wired with standard Category five cables, tested to 100 MB. These computers are connected to TLN through the use of the network protocol TCP/IP across TLN's WAN. Some libraries make use of networked printers and PC management software such as SAM by Comprise.

## **TRAINING (NJSL Section 3 and 6)**

LMxAC provides frequent training opportunities for staff of its member libraries in all aspects of the integrated library system software as well as in related automation topics. Training is offered to both professional librarians and support staff of member libraries.

Training is offered at least four times per year, with refresher training in specific software modules offered at least annually. Both hands on and lecture/discussion formats are used for training, and sessions are offered both at LMxAC's training center and at member libraries. LMxAC does not directly train library users, since the member libraries offer technology training to their customers at the local level. LMxAC participates along with its members in training offered by the regional library cooperative as well as that offered by other statewide and regional library groups. For several years LMxAC has made its training facility available to other library groups, including INFOLINK, the Regional Library Cooperative, and the New Jersey State Library, for training sessions in technical areas. Planning is underway for furthering these cooperative efforts.

## **BUDGET (NJSL section 8)**

	<b>2010/2011</b>	<b>2011/2012</b>	<b>2012/2013</b>
Hardware Main	\$ 23,800	\$ 24,990	\$ 26,240
Software Main	\$ 170,972	\$179,521	\$188,497
Telecommunications	\$ 169,000	\$172,000	\$175,000
Database Licensing	\$ 12,000	\$ 12,000	\$ 12,000
Staff Training	\$ 2,200	\$ 2,500	\$ 2,500
Capital Costs*	\$ 5,000	\$ 75,000	\$ 20,000

\* Year 1 includes costs to expand/enhance the online catalog and/or statistical access to the automation system. Years 2 and 3 may be combined to purchase new servers.

## **EVALUATION (NJSL section 9)**

LMxAC is a small central service bureau which offers automation services to its member libraries, which in turn offer direct service to the public. LMxAC libraries collectively serve a population of 713,000, all offer liberal reciprocity of usage with each other. Feedback from the member libraries regarding their implementation of technology and its effect on their users is obtained in reports from the staff of the member libraries. The primary means of evaluating this technology plan will be an annual assessment of the accomplishments of the specific objectives described in the Goals and Objectives section (A through E).

LMxAC, through its staff review process does evaluation of staff use and adaptation to technology on an annual basis. The performance of each staff member of LMxAC is reviewed with regard to the responsibilities of their position and they are given an opportunity to discuss needs for additional training at that time.

## **IMPACT OF E-RATE FUNDS**

LMxAC passes E-Rate discounts directly to its member libraries. E-Rate discounts for central site services are used to decrease member costs. Decisions about how to use savings are local decisions. The steady increase in the bandwidth capabilities of our libraries attests to the overall impact of this program on our libraries' individual ability to provide enhanced technology-based services to their patrons.