

Technology Plan July 1, 2011 – June 30, 2013
City Metro Library
123 Sesame St.
City Metro, OH 90210

Introduction

This plan was developed as a requirement for participation in the USAC E-Rate program and is based on the City Metro Public Library's Information Technology Plan 1996-2000, as adopted by the Governing Body in December 1995.

It includes:

- The Library's Mission Statement and Technology Vision Statement
- Goals, Objectives, Strategies and Measures for Evaluation
- Assessment and Inventory of Current Technology
- Budget for Acquisition and Maintenance in the Plan
- Evaluation

The Library's Mission Statement

The City Metro Library will inform, inspire and enrich our community by linking individuals to information needed for personal success, providing access to a world of imagination and culture and offering convenient and comfortable spaces that enhance exploration and facilitate civic participation. We are the marketplace of the mind.

Technology Vision Statement

We are committed to using technology to enhance library services to patrons by providing means of access to information (public service) and by making technology available to staff to assist them in providing information and services to patrons. This includes support of those providing direct public service as well as support for those staff using technology primarily for administrative functions.

Goals, Objectives, and Strategies and Measures for Evaluation

Goal 1:

Members of all ages of our community will have computers in the library to use for the purposes of educational, career, and economic achievement, creative expression, and participation in a digital world. The community will be involved with the library through the library's website and the interactive services provided by the library to users. Patrons will learn about using computers through training at the library.

Measures: Patrons will have access the library catalog, the library's premium databases, and the Internet on library personal computers. Over 1,400,000 computer reservations will be made in 2011 and 2012. Over 3000 patrons will attend training sessions a year in 2010 and 2011.

1. Provide access to the Internet
 - a. Continue to obtain Internet access from OPLIN via a 100 Mbps connection. Upgrade this if need be based on OPLIN's criteria.
2. Provide a Wide Area Network to make available Internet access to all 22 locations with little or no consistent slowdowns during busy times.
 - a. The branches with 10 Mbps connections will continue to be evaluated for bandwidth growth. If not an upgrade to 20 should be considered.

3. Provide personal computers for use by the public
 - a. Maintain current number of desktop PCs. Replace PC equipment on a 4-year cycle.
 - b. Provide a system so that patrons can reserve PCs to as to equitably make PC resources available to the greatest number of people.
 - c. Continue to add up to 150 laptops total for all locations that can be checked out for in-library use.
4. Provide options for outputting of information – printing, emailing, file servers.
 - a. Provide a Local Area Network in each location so as to make efficient use of printers.
 - b. Provide an automated printing and payment system.
5. Provide laptop computers for patron training classes at the three branch libraries in 2011-2013.
 - a. Use experience gained at Main to provide quick set up training classes using laptops at 3 branches
 - b. Continue training classes at the Main Library and evaluate effectiveness.
6. Provide a library web site and other web-based services for patrons who want to access the library and its services online.
 - a. Add sites for seniors and more web pages devoted to eBooks and other e-media.
 - b. Make the site friendlier to those with mobile devices.
 - c. Continue to digitize historical resources from the library's collection and make them available on the library's website.
7. Provide wireless access to the Internet
 - a. Provide wireless access points at each location so that patrons may access the Internet through their own devices.

Goal 2:

Provide personal computers for staff to use for accessing the Internet and Internet-based resources owned by the library and for using the integrated library system for acquiring, cataloging, circulating, and maintaining library materials as well as for maintaining the web server and all other systems involved with administrative functions.

Measures: Staff use personal computers to locate information on library computers and the Internet to assist patrons with finding materials and information. Staff also use personal computers to complete tasks related to acquiring, cataloging, and circulating library materials as well as for community relations, human resources, finance and other administrative purposes.

1. Provide access to the Internet
 - a. Obtain Internet access from OPLIN via a 100Mbps connection.
2. Provide an integrated library system for making catalog information available as well as for patron transactions relating to the catalog.
 - a. Sign contract and implement new ILS system in 2011. Research SaaS (Software as a Service) options to see to what extent they would benefit the library.
3. Provide a Wide Area Network to make available Internet access to all 22 locations and also for use by the integrated library system
 - a. Maintain network and integrated library system.
 - b. Replace backup system.
4. Provide personal computers for use by staff
 - a. Maintain current number of PCs and survey to determine where additions can be made. Replace PC equipment on a 4-year cycle.
5. Provide options for outputting of information – printing, emailing, file servers
 - a. Provide a Local Area Network in each location so as to make efficient use of printers as well as to central files on backed up file servers.

6. Provide an email system for staff to communicate externally with patrons and others, and for internal communication.
 - a. Provide an email server
 - b. Provide anti-spam service
7. Provide an automated system to replace the manual cash registers now used
 - a. After the new ILS system is in place, evaluate and deploy a cash management system that uses computers for more automated reporting and that integrates with the ILS for automated updating of patron records upon payment.

Goal 3:

Provide voice telephone service for communication with patrons and for internal library communication.

Measures: Staff receive phone calls and provide information over the phone. Locations receive voice messages after hours and respond in a timely manner. Staff are able to call out and patrons are able to reach someone 98% of the time on busy afternoons.

1. Use a system that can take advantage of existing Wide Area Network structure and infrastructure.
 - a. The phone system uses the WAN data lines and Quality of Service is used on network equipment for prioritizing voice traffic to maintain its quality. Central switches plus routers and specialized switches are used at each location to manage voice as well as data communications.
 - b. Use a server located at the Main Library to manage the phone system
1. Provide sufficient bandwidth and channels for inbound and outbound calling
 - a. Provide 4 PRI to provide 92 available channels
2. Provide tools to be able take and manipulate calls when they can't be answered
 - a. Use a server to integrate voice mail with the existing email system (Outlook) to provide more efficient ways to have access and manage voice mail messages. Utilize voice mail for departments so that patrons can leave messages when the locations are closed.
3. Provide alarm lines in support of the security services for all locations except East and West (next to police stations) and North and South, where the need is not so great. Also, provide ability to dial 911 and get the appropriate local dispatcher.
 - a. Use local analog lines for these purposes.

Assessment and Inventory of Current Technology

LAN network and personal computer infrastructure has been in place for some time. The biggest change has been from a conventional to a voice-over-IP system in 2006. Routers have been replaced in the last 2 years to accommodate the switch to fiber for all locations except for Outreach Services. The Outreach Services building does not directly serve the public so 1 T1 line is sufficient.

As we replace personal computers and add new requests to our system, we are purchasing those with 1 GB of RAM to handle the increasing load from today's Internet services, as well as software applications.

Tables at the end include:

Table 1 – Central site data equipment

Table 2 – Data and voice communications equipment and infrastructure

Table 3 – Personal computer inventory

Budget for Acquisition and Maintenance in the Plan

All costs are budgeted in support of this plan. Personal computers and network equipment are purchased out of the capital fund and costs for the ILS are out of the Computer Coop Fund. All other costs are budgeted to come from the general fund. It may be necessary to make changes to purchasing plans if there are funding cuts. The economic outlook is uncertain. We have every intention of having budget to support WAN changes and PC purchases, but this is a time of uncertainty.

The library participates in the Universal Service Discount Program to obtain discounts on telecommunications services. The library is responsible for all non-discounted costs.

Money for technology comes out of three funds:

Capital – used for hardware

Operating – used for software, and ongoing maintenance costs

Computer coop – This is strictly for ILS costs shared by the library and 3 other systems. It is used for hardware upgrades but is mainly used to save for a new system.

Goal 1 – Computer Services for the public

<i>Activity</i>	<i>Cost</i>	<i>Which budget</i>	<i>Year to be spent</i>
Network server replacement	\$ 5,000	Capital	2012
Main WAN switch	\$ 50,000	Capital	2012
Replace ¼ of public PCs & monitors (87/year)	\$ 80,900	Capital	Each year
PC Reservation and print management system maintenance	\$ 17,000	Operating	Each year
SIP server that manages interactions between self check, paying fines on the web, and the ILS server.	\$ 3,000	Capital	2012
Digitize historical documents	\$ 12,000	Operating	2011, 2012
130 Laptops for checkout by the public for in-library use	\$ 100,000	Capital	2011
Computers and wiring for a computer lab at the NorthWest Branch	\$ 20,000	Capital	2012

Goal 2 – Computer services for staff to provide service to the public

<i>Activity</i>	<i>Cost</i>	<i>Which budget</i>	<i>Year to be spent</i>
ILS maintenance	\$ 80,000	Operating	Each year
New ILS	\$ 500,000	Computer coop fund	2011
WAN Maintenance for firewall	\$ 5,200	Operating	Each year
New firewall	\$ 60,000	Capital	2013
Staff PCs – ¼ replacement each year (96)	\$ 77,200	Capital	Each year
LAN maintenance – servers	\$ 24,000	Operating	Each year
Email server	\$ 10,000	Capital	2012

Replace cash registers with computers with interface to ILS	\$ 70,000	Capital	2012
Anti-spam service	\$ 13,000	Operating	Each year

Goal 3 – Provision of phone service for patron and staff communication

<i>Activity</i>	<i>Cost</i>	<i>Which budget</i>	<i>Year to be spent</i>
Phone servers maintenance	\$ 25,600	Operating	Each year
New phone servers for managing calls, 911 and announcements	\$ 90,000	Capital	2011
27 analog lines for branch failover and other purposes	\$ 15,760	Operating	Each year
4 PRI for phone service	\$ 5,250	Operating	Each year
Voicemail maintenance	\$ 3,000	Operating	Each year
Alarm lines	\$ 7,472	Operating	Each year

Evaluation

The goals will be evaluated by the measures listed and these will be evaluated by the Assistant Director for IT Services. Most of the goals include numeric measures, but Goal 2 will be regularly evaluated as to how well it meets staff needs by reference librarians, managers, clerical staff, technical services staff, and IT staff at quarterly meetings and reported to the Assistant Director for IT Services.

Training

Much staff training at City Metro Library is done by the 2-person training department made up of Training Specialist (with MLS) and a Training Assistant. Staff have been trained on the parts of the ILS section most used within their department including Circulation, Acquisitions, Cataloging, and searching. Public service staff are also trained on the use of the public catalog. Basic courses in Introduction to Windows XP, Microsoft Word, Excel and Publisher are offered with most staff taking Word and many taking Publisher and Excel when it relates to their job duties. Staff also receive instruction on reference tools that includes both print and online databases. Over 300 staff have email accounts and receive in-house training on using Outlook email. Public service staff are trained in online reader's advisory by other experienced staff. Training Department staff are working with IT to develop an online training system to make it easier for staff at branches to participate in training while not having to leave the branch. This should be fully developed and heavily used by 2013. Staff also are trained on locally developed web applications such as the online public calendar used for promoting public events and programs. Technology staff take advantage of on-site training by the vendor when new products are installed.

Part of the 2007 Strategic Plan includes patron computer classes in recognition of the great need, which has become greater with the economic downturn. We find a big demand for

Computer and Mouse Basics, as well as Email Basics, Microsoft Word, Excel, and Online Job Hunting. There is also lots of demand for classes about Social Networking (Facebook, Twitter) as people want to use these tools to participate in the larger community. There are four tracks to help ensure patrons have the basics before going on to more advanced topics. We have open labs for several hours 3 days a week to help people with resumes. Classes are staffed by reference staff from the Main Library.

Table 1. Central site data equipment

Hardware	Primary Use
server	Horizon Integrated Library System
server	Horizon public catalog server
server	AquaBrowser catalog enhancement server
server	Web server (being used less and less)
server	Web server and historical digital server
server	Second web server for redundancy and load balancing
server	Filtering server
server	Domain controller, file server
Server	Email server
server	eCommerce server
server	SIP server (for authentication to the ILS server)
server	Backup and disaster recovery server
firewall	Firewall

Table 2. Data and voice communications equipment

Main Library

Item	Primary Use
switch	WAN communication
switch (owned by OPLIN)	Internet access
switches – 2	For managing WAN traffic between the Main library and branches
Fiber connections	For managing WAN traffic between the Main library and branches
circuit	Managing WAN from Main Library to Outreach Services
server	Call managing server – phone system
server	Voice mail server – phone system
server	Call managing server, including call center software for telephone reference service – phone system
server	Server for handling emergency calls – phone system
server	Paging system (through the phone system)
access points	Wireless access

Branches (Table 2)

Item	Primary use
Router (only at Outreach)	Managing data and voice traffic
Router	Managing data and voice traffic
switch	Managing data and voice traffic
access points	Wireless access

Table 3. Personal computer inventory

	Staff PCs	Public PCs	Total
Main Library	181	50	231
North Branch	13	12	25
South Branch	16	11	27
West Branch	16	13	29
NorthWest Branch	13	14	27
East Branch	11	14	25
Total	530	364	894

Submitted by Jane Smith, Assistant Director for Information Technology Services, City Metro Library.