

# Technology Plan 2009-2011

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Camden County Library System  
203 Laurel Road Voorhees, NJ 08043

**December 18, 2008**

## Introduction

This Technology Plan covers the time period from June 2009 to June 2011. It is an update of the 2007-2009 Technology Plan and incorporates the goals of the Camden County Library System 2006-2009 Strategic Plan.

The Strategic Plan included six primary initiatives. Our fourth initiative was technology focused.

*Develop strategies that make it possible for CCLS to meet the expectations of County residents with regard to technology, provide staff with adequate technical support, and foster the use of technology to work smarter.*

Many of the recommended strategies to meet these initiatives have been implemented by our library; however there are still specific goals outstanding, which will be addressed by this Technology Plan. These goals include training opportunities for staff to remain current in using new technology, maximizing the effectiveness of the website through the use of e-commerce and using technologies for staff to meet and share work online.

In addition there are ongoing technology infrastructure needs that that the Library must address to enable staff to perform their jobs and provide services to the public. This includes upgrading our network, computers and software.

## Technology Goals for 2009-2011

- Upgrade the Network Infrastructure to a Private Ethernet Fiber Network
- Upgrade Public and Staff client software
- Manage the Website through a Content Management System
- Use the Website to project the Library Brand and focus on local Resources
- Implement Ecommerce including online fine payment and online donations.
- Use technology to attract new customers.
- Provide more learning opportunities for staff to remain current in technology
- Adapt technologies for staff to meet and share work online.

### **Upgrade the Network Infrastructure to a Private Ethernet Fiber Network**

The CCLS network was restructured at the end of 2006 in response to State Library reports that showed network saturation. We removed our four T1 lines at Vogelson and replaced them with a partial D3 (10 meg). We upgraded from frame relay to ATM technology. Each branch was given direct access to the Internet via an ATM T1 line to eliminate the bottleneck that occurred at the Vogelson branch. We also acquired the State as our ISP to reduce costs.

Although the network initially showed significant improvement our computer usage rates have increased considerably since the beginning of 2007. We have also added more computers to our network. In addition, there are more applications that require higher bandwidth on the Internet today than two years ago such as audio and video clips. A review of our network charts as well as the experience from our staff and customers are evidence of increased saturation. This is particularly apparent during our peak system usage times of two to eight o'clock.

Given that we are experiencing saturation at our regional branches, we need to increase our network bandwidth to allow for future growth. The alternative is to restrict our customers to certain types of downloads, (eliminate video files, music and other high bandwidth resources) however these files are ubiquitous. Many of our customers use the library precisely because they choose to access these files but do not have broadband at home- even though they may own computers.

Network technologies are changing rapidly; ATM still meets our needs but provides less speed per dollar than newer technologies such as FIOS, high speed cable and private Ethernet with

fiber (EVLP). Cable and FIOS are relatively inexpensive unfortunately the available cable and DSL options we have reviewed offer the speed we need but not the stability or interconnectivity of a private network.

We are recommending switching our network to an Ethernet solution (EVLP) that would provide the following bandwidth increases:

Vogelson- 100Mbps with a 20Mbps committed rate (twice what we have currently)

South County -10Mbps (approximately three times their current bandwidth)

Haddon, Gloucester Township, Merchantville, Bellmawr- 10Mbps line for each branch with a 5 mbps committed information rate (three times their current bandwidth)

This infrastructure is scalable and should provide the backbone required for our technology plans for the next few years. It will require a cost increase over our current network. We hope to supplement the difference between our existing budget and the cost of network improvements with funds from E-rate. If we receive e-rate funds we can begin the network upgrade in the third quarter of 2009. If we do not receive E-rate funding we will need to delay our plans to upgrade the network until the 2010 budget year.

### **Upgrade Public and Staff client software**

CCLS has adopted the Microsoft Office suite for staff and public computers. We are currently using Office 2003. Microsoft Office 2007 has been installed on a terminal server for Training Center use at Vogelson and will be deployed on all clients beginning in January of 2009. Total deployment and training across branches will be completed in the first quarter of 2009.

Microsoft products require a noticeable investment. To offset these costs, the Information Technology department has begun investigating Open Source software, such as Open Office to replace the next version of the Microsoft Office suite.

Our library has approximately 200 public computers. Our security software automatically restores computers to their previous configuration upon reboot. As a consequence, automatic updates for plug-ins and other software do not take effect and we manually install updates in batches.

The IT department is currently investigating methods to schedule this process that would provide the public with consistent updates across all branches in a timely fashion but require less labor.

### **Manage the Website through a Content Management System**

Not only are our websites a virtual library for our customers they are an important resource and marketing tool for our staff. The websites provide the opportunity to emphasize the Library as a system while promoting the unique activities and collections of each branch. As a consequence,

there is too much information for one or two people to input and maintain. Although the responsibility for updating the website can be delegated to more staff, this increases the danger of inconsistency in the look and feel of the websites. In addition, all of our staff do not have web authoring skills.

A Content Management system (CMS) would allow CCLS to maintain consistency in navigation and layout of its web pages. The Library will develop a Web Services team to gather information pertaining to each branch and relay that information on our websites. The CMS will enable the web authors to focus on content and does not require knowledge of HTML, XHTML or other web languages.

In 2008 the Information Technology department installed two content management systems, Drupal and Joomla! on a test server. We determined that Drupal would be the best CMS for our library due to its existing templates and usability for the staff, although any CMS will require staff training. CMS training for the Web Services team will be conducted by the IT department. Once the team is trained they can assist with other instruction requests across the system. A permanent server has been purchased for Drupal; which will be installed in 2009.

### **Use the Website to project the Library Brand and focus on Local Resources**

Our website was evaluated in 2007 by Kress Consulting; which made the following recommendations to improve our website content.

- Redesign the website to establish a consistent brand
- Include more photographs of Library staff and customers using the Library
- Integrate branch library pages into the primary site
- Break the content of the site into more navigable categories.
- Focus on local resources in subject guides to better serve library customers
- Use domain names consistently

Since we met with Kress Consulting the Library has been consistently using the “camdencountylibrary” domain instead of “camden.lib.nj.us” and we have removed the separate branch websites. However there is still work to be done with branding and style sheets.

The aforementioned Web Services team will explore content issues as part of the CMS project and work with our PR department to provide a more consistent look and feel for our web presence.

### **Implement Ecommerce including online fine payment and online donations.**

CCLS will be using ecommerce on Millennium to pay fines and collect donations. We tested ecommerce software on our integrated library system but delayed implementation until several anticipated software changes were made, including the ability for customers to look up or change their PIN numbers without staff intervention. We will begin retesting ecommerce

in early 2009 with planned implementation for fine payments in the first quarter of 2009. Initial Public training will be provided by staff, supplemented with handouts and instruction on our websites.

Donation applications require a different setup and will be tested after fine collections are underway.

### **Use technology to attract new customers**

After several brainstorming sessions with Kress Consulting our staff determined focus areas for the Technology Plan.

Downloadable video – Last year we installed MyLibraryDV, which is an internet service that provides video programming such as Antiques Road Show, Today’s Homeowner, GlobeTrekker and “how to” content. We have added the Hollywood Favorites and World Cinema collection to our 2009 budget for installation next year; a service that provides Internet access to more than 500 films.

OverDrive audiobooks in MP3 format—We have added MP3 titles to our downloadable audiobooks to attract Ipod users.

Laptops for the Public – In 2009 we will be purchasing wireless-enabled laptops for in-house by our customers. We will test this pilot project at a smaller branch that has high demand for computers but limited space for additional desktop units.

We have also continued to promote our remote usage by increasing our use of del.icio.us, Flickr, MySpace and other social networking sites to promote the Library’s website and services. We will be attending a workshop in Spring of 2009 to learn more about library applications for Utube and other Web 2.0 sites.

### **Provide more learning opportunities for staff to remain current in technology**

During our discovery process for our 2007 technology plan we learned that staff are uncomfortable adapting to new technology. Kress consulting recommended we approach this problem from multiple angles.

- Develop individual technology learning plans based upon staff interests and goals
- Identify lead learners and reward staff who share knowledge
- Increase funding for online training and tutorials

This has been a challenging area for the Information Technology department, in part because the current economic environment has limited outside training opportunities but also because staff reductions have placed more demand on technical solutions.

Our IT staff will devote more time to training but we have also reached out to staff in other departments that are comfortable with technology such as Wikis, downloadable services etc. to act as in-house experts when IT staff are not available.

We will continue to send to staff to technology workshops sponsored by local organizations such as the South Jersey Regional Library Cooperative and NJLA. Following the advice of our consultant, CCLS has availed itself of several online workshops offered by vendors for web products such as Next Reads. The Library has budgeted for two out-of- state conferences with training components -- the Innovative Users Group Conference and Computers in Libraries.

Information Technology has partnered with our Reference department and plan to use video and screen capture software Camtasia and Snagit to develop short online tutorials for the Public and staff in 2009. We will also be experimenting with video recording our technology classes.

### **Adapt technologies for staff to meet and share work online**

Like many libraries we have fewer personnel shouldering increased responsibility. Although the need to collaborate has grown we don't have the staff resources or time to travel to different branches for meetings and projects. We have been exploring ways to use technology to reduce travel.

A small team of librarians tested Microsoft Chat as a vehicle for online meetings but found it wanting; simultaneous responses did not work well, and there were variations in our level of typing skills.

The Information Technology Department will be evaluating software packages such as GoToMeeting and other conferencing software to address our online meeting needs. We are also looking at collaborative features we can use in Outlook 2007 such as shared task lists and schedules. Training will be conducted by the Information Technology Department.

### **Evaluating Progress**

As recommended by Lucien Consulting, a committee of library managers and staff will meet every six months to review the goals and objectives outlined in the technology plan, and evaluate progress toward those goals and objectives. The committee will also evaluate changing conditions within the library and in technology, and determine whether changes should be made to the Technology Plan. The committee will include at least the library director and the supervisor of IT. It is was recommended that the committee also include representatives from library reference staff and public relations staff.

In addition, teams that are assigned individual goals from this Technology Plan will report to the Management Team for periodic progress reports.

## **Appendix A. Current Technology-Based Library Services**

### **Internet Access**

CCLS provides internet access and various software such as resume programs and Microsoft Office software to all library customers.

### **Wireless Internet access**

CCLS provides free wireless Internet access to customers with appropriately equipped wireless devices. Wireless access is available at all branches.

### **Access to Electronic databases and Collections**

CCLS subscribes to a number of electronic databases and encyclopedias that can be accessed in the library or from home with a library card.

### **Downloadable Audio Books**

Customers can borrow digital versions of the latest best sellers, book club favorites, award winning authors, from Overdrive. Audiobooks can be downloaded to a customer's computer or transferred to a digital media player.

### **Online Catalog**

CamCat is the combined catalog of all six branches of the Camden County Library System and the Camden County College Library. Customers can search by author, title, subject, or keyword, and can search individual library collections or the entire collection. Items can also be requested through the online catalog. With the My CamCat feature in the Adult Catalog, customers can view their records renew items, save searches, and change their preferences, both at the library and at home

### **Online Book Clubs**

Customers can sign up to receive book suggestions by email. The NextReads program will deliver reading lists from our library to the subscriber's email inbox.

### **Telephone Renewal**

Customers can renew items by telephone.

### **Interlibrary Loan/Wish List**

Customers can use electronic forms to request books and AV materials that are not owned by CCLS. The library may purchase items that meet the collection development policy. Customers can also request photocopies of magazine and journal articles that are not available in the CCLS collection.

### **Computer Classes and Tutorials**

CCLS offers computer classes at the Voorhees and South County Technology Training Centers. CCLS also provides online tutorials through its website.

**PC Signup**

Customers can reserve public computers in advance, or place themselves in a reservation queue if no public computers are available.

**Online Program/Meeting Room Registration**

Customers can sign up online for programs or reserve meeting rooms across the System.

**Online Library Card Registration**

Customers can sign up online to acquire temporary library cards that will give them access to online databases from home. Customers receive permanent cards when they visit a branch with proof of address.

**Closed Circuit Television Viewers**

The Aladdin Ultra Closed Circuit Television Viewer is available at all library branches. The viewer employs a video camera lens to enlarge text from 3 to 30 times normal text size and allows patrons to change background and font colors, or look at photographs with ease.

## Appendix B. Current Staff and Public Training

Public computer classes are taught by CCLS library staff. Classes include:

- Getting Started with Computers
- Mouse Basics
- Welcome to the Web
- Web Searching
- Microsoft Word 2007 (basic, intermediate, advanced)
- Microsoft Excel 2007 (basic, intermediate)
- Microsoft PowerPoint 2007 (basic, intermediate)
- Microsoft Publisher 2007
- Yahoo! Mail

A number of staff classes are taught by CCLS staff. Classes include:

- Creating Blogs and RSS feeds
- Wiki Basics
- Using Downloadable Audio Books
- How to Create Lists in Millennium
- Basic Millennium Circulation
- Using Signup Room and Program Reservation Software

Staff classes are also provided by Camden County. They include applications in the Microsoft Office 2007 suite (Word, Excel, PowerPoint, Publisher, Access, and Outlook).

The South Jersey Regional Library Cooperative provides classes on specialized Internet searching and using electronic resources. CCLS staff are sent to those classes as needed.

Examples of classes attended during the past twelve months include:

- Podcasting
- Joomla!
- Services on the Run (delivering hand-held services to mobile phones and handhelds)
- Joy of Code
- Tame the Web
- Beyond an Apple a Day (health care information on the internet)

Some CCLS staff also attend conferences and workshops each year, including those hosted by the American Library Association, New Jersey Library Association, Computers in Libraries, and Innovative Users Group.

## Appendix C. Current Technology Infrastructure

The CCLS network is provisioned and maintained by the New Jersey State Library. Branches utilize two virtual circuits on a single T1 circuit, providing private connections between branches and to the Internet via NJSL.

Each branch also provides wireless access to the Internet, via Comcast Broadband. CCLS provides approximately 200 public computers and 148 staff computers, as well as five stand-alone low vision readers. Nineteen servers host the Innovative Millennium library system, Microsoft Exchange email, Microsoft Active Directory services, Comprise SAM public computer management, internet and intranet web services, file and print services, and other services.

CCLS uses the Innovative Interfaces Millennium integrated library system, hosted on a Sun Solaris server.

CCLS uses a wide range of Microsoft operating system and application software, including:

Microsoft Windows Server 2003

Microsoft Windows 2003

Microsoft Exchange 2007

Microsoft Office 2003 and 2007

Microsoft FrontPage

Microsoft Internet Explorer

Dreamweaver

Microsoft Media Player

Additional management applications include Comprise SAM, OCLC Connections and Smart Filter and WinVNC.

Additional client applications include Adobe Acrobat, Adobe DreamWeaver, AISquared /ZoomText, Corel Paint Shop Pro, McAfee Virus Scan, Mozilla Firefox, Quark QuarkXPress.