



## **Vision Statement**

Geneva Public Library District will be a resource for the community, both a physical place and an information portal, where patrons will learn and explore 21<sup>st</sup> century skills and technologies. Patrons will be able to access the library 24/7, through its website and digital resources. Patrons will be assisted by knowledgeable, trained staff that can help them make the best use of both new and traditional information resources. Library staff will be supported by up-to-date technology equipment that enables the provision of quality services that are efficient and cost-effective.

## **Background Information**

### **Edge Initiative - Technology Assessment**

In December 2014, the Library completed the Edge Assessment. The Edge Assessment is a self-assessment and technology planning tool developed by a national coalition of leading library and local government organizations, funded by the Bill and Melinda Gates Foundation, and led by the Urban Libraries Council. The Edge Initiative provides benchmarks in three key areas related to technology.

Below is a summary of scores in each key area:

Community Value	225 / 310
Engaging the Community	95 / 295
Organizational Management	220 / 395
<b>Total Points Achieved</b>	<b>540 / 1000</b>

The average total score in a peer comparison group (libraries with a single building serving populations of between 15,000 and 65,000) was between 505-649 points. The Library placed in the mid-range of the peer comparison group with a total score of 540 points.

Some specific benchmarks to be improved upon and incorporated into goals for the coming years are as follows:

- Include technology goals in strategic planning
- Provide regular classes on internet searching
- Provide regular classes on multimedia such as photo, video, and audio editing
- Provide photo, video, and audio editing software
- Provide mobile devices for patron use within the library
- Add technology competencies to job descriptions

## **Goals and Strategies for 2015-2017**

### **Server Virtualization**

The Library's current infrastructure consists of 5 physical servers, each hosting multiple applications and services necessary to support the library's internal network and public services. In the current configuration, any hardware failure or malfunction poses a potential threat to disruption of library operations. In addition, due to inherent suboptimal utilization of the hardware by one operating system residing on one physical server, the library's modern multicore processor hardware is not being used to full potential. Deployment of any additional services which require their own dedicated server platforms, such as a new Minecraft or in-house email server, bear significant costs associated with the purchase of their own server hardware.

An alternative approach to server hardware utilization is through deployment of virtualization, a technology that has become an industry standard in recent years. Server virtualization allows for multiple instances of operating systems to run on a single piece of hardware, effectively turning one server into many. Virtualization technology allows for server redundancy and eliminates any potential for disruption of service. Server virtualization also allows increased performance and scalability as well as reduced hardware costs.

Optimal deployment of virtualization will require moderate redesign and upgrade to the library's current infrastructure. The redesign consists of converting the currently flat network into multiple virtualized Local Area Networks (VLANs). This can be accomplished with the purchase of 2 new identical servers and the addition of a new Cisco layer 3 switch. Utilization of VLANs in the Library's networking infrastructure is necessary to conform to best practices in implementation of virtualization technologies, and will provide the network backbone needed to support future growth and expansion.

### **Email Migration and Office Suite Upgrade**

The Library's email is currently hosted by LINC and resides on the web-based WorldClient server platform. Plans are underway to upgrade to the Microsoft Office 2013 Suite and to begin using Outlook 2013 as email client for library staff. The Library has set up an internal WebDAV (web

publishing) server to facilitate the sharing of staff calendars and schedules through Outlook. In the coming year, the library will evaluate the option of configuring our own internal Exchange email server versus moving to a cloud-based Microsoft platform.

### **Digital Media Lab / Maker Space**

As the “Maker Movement” gains momentum, libraries worldwide are exploring ways to promote and support this growing trend. Many libraries provide Maker Spaces and Digital Media Labs with access to tools needed for creation, invention, and design. Examples include 3D printers, computer programming kits, robotics, and video and audio editing software. Building on the success of the mobile Teen Tech Studio Lab implemented in 2013, the Library will assess current hardware and software offerings and develop a plan for providing greater digital media creation and maker space capabilities.

### **Technology Exploration & Learning**

The Library is ideally suited to help community members learn and explore 21<sup>st</sup> century technologies. To that end, the Library will provide users with a broad selection of popular interest electronic resources including eBooks, eAudiobooks, and streaming content. The Library will offer a wide array of technology programming ranging from basic skills to advanced applications using staff as well as industry professionals. The Library will also purchase a selection of popular electronic devices for use in the Library and possible circulation to community members. Library staff will stay abreast of emerging technologies and trends and will evaluate new products and services as they arise.

### **Digital Marketing Initiative**

The Library seeks to use a variety of technologies to interact with community members and increase awareness of Library services. The Digital Content Strategy Group, a cross-departmental committee, was formed to ensure a consistent library voice across all communication channels. The Digital Content Strategy Group will continue to develop consistent, clear, and easy to understand instructions for using the Library’s e-resources and to create a welcoming online experience for community members. The Library will continue to explore new ways to highlight library services and connect with users online.

### **Mobile Access**

As mobile devices become commonplace in the lives of community members, mobile access to library materials, resources, and staff becomes increasingly important. In 2013, the Library developed the current website using a responsive mobile-friendly web design. In the coming year, the Library will evaluate new options for providing mobile access to the catalog, such as adding an app, and will continue to explore ways to highlight our mobile services.

## **Audiovisual Equipment**

The Library will explore options for updating the projection, sound and lighting systems in the large meeting room.

## **Staff Technology Competencies**

To help our patrons make the best use of new technologies and digital information resources, it is important that Library staff be knowledgeable and well trained. A survey of staff technology competencies was completed in December 2014. Plans are currently underway to develop an ongoing staff training program and to incorporate technology competencies into job descriptions.

## **Current Library Technologies**

### **Network Infrastructure**

#### **Servers and Switches**

The Library's network infrastructure consists of 4 HP Procurve 2530 GB POE switches and 2 NetGear GB switches. These switches provide 10/100/1000 connectivity with POE support to the desktop. The Library runs 5 physical servers, 4 with Windows Server 2008 R2 and 1 with Windows Server 2012. Plans are underway to convert to a virtual environment using HyperV, to upgrade all servers to Windows Server 2012 R2, and to add a layer 3 Cisco switch to support the addition of Virtual LANS (VLANs).

#### **Internet**

The Library's Internet connectivity is provided by Comcast and the Illinois Century Network (ICN). All general internet traffic is routed across the Comcast connection which has recently been upgraded to 50 Mbps. The ICN line is used for a VPN connection to the LINC Office in St. Charles as well as a failover and will support all traffic if the Comcast line is down. LINC is currently in the process of upgrading this connection from a T1 to a fiber optic line.

#### **Wi-Fi**

The library's Wi-Fi network consists of 4 Cisco Meraki MR18 802.11n and 5 Cisco WAP4410n access points. The Wi-Fi network supports both patron and staff access and typically sees 120 unique devices connected per day with the majority of those devices being patron devices. The staff Wi-Fi is used for 5 Online Public Access Catalog (OPAC) stations and for the wireless hold wrapper printers in the Circulation Department. The staff Wi-Fi uses WEP encryption and does not broadcast its SSID. The patron Wi-Fi is open and unencrypted and resides on a subnet

separated from the rest of the library's network. Wi-Fi coverage extends to all public areas within the library building.

### **Firewall / Router**

The Library uses a Sonicwall NSA 3500 for network perimeter firewall protection. The NSA 3500 is a 'next-generation' firewall that provides deep packet inspection and offers intrusion protection, malware protection and gateway anti-virus. The Library uses a Cisco 3800 Series router.

### **Backup System**

Library data is backed up to tape using an HP LTO-5 Ultrium tape drive and the Acronis Advanced Backup software. A full backup is done weekly with incremental backups added each night. The most current backup tape is kept off-site and rotated weekly.

### **VOIP Phone System**

In January 2014, the Library implemented the Avaya IP Office VOIP phone system to replace the existing Nortel PBK system. The new system allows us to make administrative changes in-house via the IP Office and Voicemail Pro software. The system uses 3 HP ProCurve 2530 switches and can accommodate 60 phones.

### **Integrated Library System (ILS)**

The Library belongs to the LINC Consortium of 9 member libraries (Batavia, Bloomingdale, Franklin Park, Geneva, Glen Ellyn, Itasca, St. Charles, Villa Park, and West Chicago). LINC uses the SirsiDynix Symphony 3.4 automation system and the SirsiDynix Enterprise OPAC (Online Public Access Catalog). Staff throughout the library access the system using the WorkFlows Symphony software to find materials and patron information, and to generate reports. The Director's Station software is available to management staff and is used to generate reports. LINC provides the Shoutbomb (texting) service and the Mobile Circ and LIBAnywhere apps. The recently implemented Mobile Circ app allows staff to access patron data while off-site and has made it possible for staff to offer off-site library card registration. The LIBAnywhere app is a mobile interface to the catalog available for patrons. Plans are underway for LINC to purchase the CollectionHQ and eResource Central software.

### **Public Internet and Computer Use**

The Library offers free wireless internet access throughout the building for public use. Adults have access to 13 wired computers, 12 are used as general internet stations and 1 is reserved for providing access to subscription databases. Children have access to 8 wired computers, 6 are used for general internet and 2 are AWE early learning stations. Internet computers in Youth

Services use the filtering software, K-9 Blue Coat. Public computers in Adult Services are not filtered.

MyPC time management software is used on all public computers, with the exception of the AWE stations, to distribute computer time equitably. Patrons in Adult Services can make reservations for the next available computer or up to a week in advance. Printing is managed with the PaperCut software and is available from all public computers. Both black and white and color prints are available.

The following software is available on public PCs in the Adult Services:

- Microsoft Word
- Microsoft Excel
- Microsoft PowerPoint
- Microsoft Publisher
- Microsoft Access

The following software is available on public PCs in the Youth Services:

- Mighty Math Calculating Heroes
- Sammy's Science
- Bailey's Book House
- Millie
- I Spy Treasure
- Kid Pix Deluxe
- Microsoft Word
- Microsoft Excel
- Microsoft PowerPoint
- Microsoft Publisher
- Microsoft Access

### **Desktop and Software Management**

The Library uses a variety of software programs to manage and deploy desktop computers for both patrons and staff. Microsoft Windows Operating System and Microsoft Office Suite licenses are purchased through the Microsoft Volume Licensing program. The Microsoft Volume Licensing with software assurance allows the Library to continually upgrade at no additional cost. Windows Operating System updates are distributed through WSUS (Windows Server Update Services) and performed daily. Third party and Plugin updates such as Flash, Adobe Reader, and WinZip are handled through the Ninite software platform and completed weekly. Faronics Antivirus is installed on all desktop PCs and servers and automatically update every few hours. Digital

Services staff use Windows AIK (Automated Installation Kit) for desktop imaging and maintain current images of all PC configurations. Windows AIK, Windows Group Policy, and WSUS are free services bundled with Windows Server software.

All public computers are configured for security through Windows Group Policy and use Faronics DeepFreeze, a system restore program that clears changes upon reboot. Public Web Browser is used as security software on the OPACs.

The following is a list of subscription software renewed annually:

- Faronics AntiVirus
- Faronics DeepFreeze
- Ninite Pro
- Public Web Browser

### **OPACs (Online Public Access Catalogs)**

There are 11 OPAC stations throughout the library. The OPACs use Public Web Browser software in kiosk mode to limit patron searching to the library catalog.

### **PC Replacement Cycle**

The Library purchases PCs on a 4 year replacement cycle. Older PCs are repurposed as OPACs. Equipment that is no longer usable is taken to the Kane County Recycling Center.

### **Remote Access**

Remote Access is available to members of the Leadership Team via a subscription to the LogMeIn software.

### **Self-Check Kiosks**

The Library owns 3 iCirc Self Check kiosk units provided by Central Technology, Inc. Plans to upgrade the units and add credit card processing are underway. The self check units typically handle 53-55 % of all checkouts.

### **Digital Signage**

The library has 2 LED monitors and uses the Rise Vision Digital Display platform to create digital displays highlighting services and upcoming events. The Rise Vision platform allows staff to use the RSS feed from the event calendar and existing slider content from the Library's webpage. The software can also be managed off-site which allows for a flexible and efficient workflow.

## **Print Management**

The Library contracts with Gordon Flesch for managed print and copy service. Gordon Flesch provides printer and copier maintenance and repairs and delivers toner and ink cartridges.

## **Website and Web Applications**

The library maintains a website to provide information and access to materials. The website is maintained on the open source platform, Drupal, and is hosted by the LINC Consortium.

The Library uses the following third party web applications:

- Mosio Text-a-Librarian – Provides for text message and chat reference
- Shoutbomb – Sends text messages to patrons regarding the availability of holds and renewals
- New Book Alerts – Provides notification to patrons regarding new books, videos, and movies added to the library catalog
- Author Check – Allows patrons to subscribe to favorite authors and receive notification when new material is added to the catalog
- LIBAnywhere – Website and app providing mobile access to our library catalog
- Evanced Events and Room Reserve – Displays calendar of events, handles program registration and room reservation

## **Social Media**

The Library connects with patrons through the following social media platforms:

- Facebook (862 followers as of March 2015)
- Twitter (1,609 followers as of March 2015)
- Instagram (new as of March 2015)
- Pinterest (285 followers as of March 2015)
- Foursquare (1,806 total visits as of March 2015)
- Google+ (104 followers as of March 2015)
- YouTube (13 subscribers as of March 2015)
- Yelp (6 reviews as of March 2015)
- LinkedIn (117 followers as of March 2015)
- Flickr (251 photos shared, retired as of February 2015)

## **Streaming and Downloadable Content**

The Library offers digital content through a number of different platforms. The OverDrive eMediaLibrary platform provides access to eBooks and eAudiobooks and is compatible with most tablets, smartphones, and computers. eBooks are also available through eRead Illinois. In

September 2014, the Library implemented Hoopla which allows patrons to stream movies, television shows, eAudiobooks and movies. The Library continues to evaluate and consider additional digital products such as Zinio, Freegal, and Freeding.

The Library currently offers the following e-resource platforms:

- OverDrive eMediaLibrary (eBooks & eAudiobooks)
- eRead Illinois (eBooks)
- Hoopla (movies, music, TV & eAudiobooks)

### **Subscription Databases and Learning Platforms**

The Library invests in a number of subscription-based electronic databases and online learning platforms. Staff continues to investigate new products and to monitor usage of existing services. A current list of subscriptions is provided at the end of this document.

### **Laptop Training Lab**

In 2014, the Library purchased 16 laptops to be used in the meeting room for patron training and programming. The laptops are used to teach a variety of adult classes and to support both youth and teen programs.

### **Teen Tech Studio Lab on a Cart**

In 2013 the Library received a \$5000 Community Grant from Best Buy to purchase the following equipment to be used as the “Teen Tech Studio”:

- MacBook Pro
- Lenovo Think Vision LT2252p Monitor
- JVC Everio GZ-EX250 Camcorder
- 2 Blue Yeti microphones
- Sunpak minitripod 61’ tripod
- MicroBeam 512 LED Video Light
- Green Screen
- Creative Suite 6 Production

## **Current Technology Inventory**

### ***Physical Network***

3 HP Procure 2530 48port GB POE switches -	LAN
2 NetGear 24port GB switches	LAN
1 #COM Super stack 4200 100MB switch	LAN
1 HP Procure 2530 8port GB POE switch	WiFi

3 HP 2530 24port GB POE switches  
Avaya IP Office 500 v2  
SonicWALL NSA 3500  
Cisco 2800 Series  
4 Cisco Meraki MR18  
5 Cisco WAP4410n

VOIP  
VOIP Phone System  
Firewall  
Router  
Access Points  
Access Points

### ***Physical Servers***

GPLDC13 Windows Server 2012 R2  
GPLDC12 Windows Server 2008 R2  
GPLDC10 Windows Server 2008 R2  
AVServer Windows Server 2008 R2  
GPLDC07 Windows Server 2003

MyPC / Counter  
DNS  
File / Print Server DHCP DNS  
Antivirus / DeepFreeze  
Ticketing software

### ***Desktop Computers***

30 Dell Optiplex 990  
23 Dell Optiplex 9010  
19 Dell Optiplex 960  
7 Dell Optiplex 580  
27 Dell Optiplex 760

### ***Laptops***

16 MSI Laptops Windows 7 64 bit  
6 Dell Laptops Windows 7 32 bit

### ***Copiers***

2 Canon ImageRunner 3225  
1 Canon ImageRunner 3480

### ***Mobile Devices***

iPad Mini  
Microsoft Surface pro  
Samsung Galaxy Tablet  
Kindle Fire HDX  
Kindle Fire  
Nook Tablet  
Nook Simple Touch  
Kindle Basic  
Kindle Touch  
2 Sony eReaders  
2 Kobo eReaders  
5 iPads  
1 LeapFrog  
1 vTech InnoTab2

2 Chromebooks

***Printers***

HP 4200

HP 3600

HP CM2320

HP CP3525

HP LaserJet 1100

HP LaserJet 1300

HP LaserJet 1320

HP LaserJet 1505

HP LaserJet 3015

HP LaserJet 1600

HP DesignJet 90r

HP DesignJet 130

HP LaserJet Pro M451dn

HP LaserJet MFP 575

2 HP LaserJet 1022

***Miscellaneous***

2 MacBook Pro

Lenovo Think Vision LT2252p Monitor

JVC Everio GZ-EX250 Camcorder

2 Blue Yeti microphones

Sunpak minitripod

Sunpak tripod

2 JVC HANC250 Headphones

MicroBeam 512 LED Video Light

Green Screen

Epson PowerLite Projector

Shure ULX Lavalier microphone

DVD Player

ScanStation scanner

Money AutoLoader

2 C pads

4 Star Receipt printers

4 Epson Receipt printers

50 Avaya handset phones

3 Cen-tec iCirc self-checkout machines (computer, monitor, scanner, printer, cabinet)

## Current Subscription Databases

A to Z Databases  
A to Z Maps Online  
A to Z the USA  
A to Z World Travel  
Access Science  
Amazing Animals of the World  
America the Beautiful  
Ancestry Library Edition  
Auto Repair Reference Center  
Biography in Context  
BookFlix  
Books & Authors  
Britannica Library Reference center  
Chicago Manual of Style  
College Preparation Center  
Consumer Reports  
County and Regional Histories & Atlases: Illinois  
CulturalGrams  
CulturalGrams Kids Edition  
CultureGrams States Edition  
Enciclopedia Estudianti Hallazgos  
Encyclopedia Britannica Online for Kids  
Encyclopedia Americana  
ePrep  
Ferguson's Career Guidance Center  
FirstSearch  
Gale Artemis Literary Sources  
Gale Directory Library  
Gale Virtual Reference Library  
General Reference Center Gold  
Geneva Republican  
Global Issues in Context  
GPO Monthly Catalog  
Grolier Multimedia Encyclopedia  
Grolier Online Kids  
Grolier Online Passport  
Health & Wellness Resource Center  
HelpNow!  
HeritageQuest Online  
eRead Illinois  
Inside MLB

Inside the NFL  
Issues & Controversies  
Job & Career Accelerator  
JobNow!  
Kids search  
Lands and Peoples  
LearningExpress Library  
Literary Reference Center  
Literature Resource Center  
Mango Languages  
Morningstar  
Muzzy Online  
National Geographic  
New Book of Knowledge  
New Book of Popular Science  
Novelist K-8 Plus  
Novelist Plus  
La Nueva Enciclopedia Cumbre  
Opposing Viewpoints in Context  
OverDrive eMediaLibrary  
Overland Journeys: Travels in the West 1800-1880  
Oxford English Dictionary  
Oxford Reference  
PebbleGo  
Primary search  
Record Information Services  
Science in Context  
Searchasaurus  
Something about the Author  
Student Resources in Context  
Today's Science  
Transparent Language Online  
TrueFlix  
U.S. History in Context  
U.S. presidents  
Universal Class  
Value Line research Center  
WilsonWeb OmniFile  
World book Web  
World History in Context  
World News Digest