



Technology Plan

Fiscal Years 2024-2026

February 2024

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Abstract

This Technology Plan seeks to provide the users and staff of the Villa Park Public Library with a plan for the effective and efficient utilization of current and future technologies. The Library's use of these technologies is in direct support of its statement of purpose:

"The Villa Park Public Library is a community hub. We connect people to information and ideas, and we connect people to people in an inviting and accessible environment. The library's outreach services extend the library's presence outside its physical walls to those residents who have limited or no access to their library."

Policy 101: Statement of Purpose

Specific objectives are detailed below in relation to the fiscal year for which they are planned.

Technology Vision Statement

The Villa Park Public Library sees automation as an extremely important tool for enhancing the delivery of library services and wants to utilize this tool in every possible way that is affordable to an organization operating within the constraints of tax-cap funding. In coming years, the Library hopes to use automation in extending patron self-service in the areas of circulation, reference and information (currently we offer self-searching of the Library holdings catalog, other automated databases, including the Internet, and selected online products). We will use automation to enhance collection development (providing reference and periodical titles in automated format, plus the imaging of documents such as local newspapers and local information files). We will use automation for communication and training purposes, inside and outside the organization; for record keeping; and for the acquisition and processing of library materials. In many of these activities, we will join with the other public library members of the System Wide Automated Network (SWAN), which will allow us to be more cost-efficient, while improving accuracy and timeliness, and also reducing effort. We look to our membership in SWAN as an opportunity to share our resources and also to build on our resources through the contributions of others--to bring all these resources within easy, affordable access of our patrons as quickly and smoothly as possible.

Technology Assessment/Inventory (Current)

As stated in the Technology Vision Statement, the Library is currently a member of SWAN. This consortium consists of 100 public, academic, and special use libraries and uses SirsiDynix as its automation vendor. SWAN personnel at the SWAN office located in Westmont, Illinois, manages and maintains the SirsiDynix system hosted in the Microsoft Azure cloud as well as an array of network and software services for member libraries. SWAN is funded by tiered monthly automation fees from member libraries.

SirsiDynix's software includes circulation, cataloging, and the public access catalog, and provides staff access to the consortium's bibliographic and patron databases. As a member of Online Computer Library Center, Inc. (OCLC), the Library contributes to a national database of bibliographic records and utilizes the records from this database.

Digital Reference & Electronic Resources

Patrons have access to the Library's browser-based public access catalog both within and outside the library. The catalog also provides access to the following electronic resources:

- Axis 360 (eRead Illinois)
- Booklist Online
- Britannica
 - Encyclopædia Britannica / Britannica for Kids
 - Spanish Resource Center
- Consumer Reports
- Core Collection Databases (for staff)
 - Children's Core Collection
 - Fiction Core Collection
 - Middle and Junior High Core Collection
 - Nonfiction Core Collection
 - Senior High Core Collection
 - Graphic Novel Core Collection
- CreativeBug*
- Data Axle Reference Solutions (formerly ReferenceUSA)
- Digital Library of Illinois (formerly MyMediaMall)
- EBSCO
 - Academic Search Premier
 - Auto Repair Source
 - Business Source Premier
 - ConsumerReports.org
 - Consumer Health Complete
 - Explora K-5 / Secondary / Public Librarians
 - History Reference Center
 - LearningExpress Library (English & Spanish)
 - Literary Reference Center
 - MasterFile Premier
 - Middle Search Plus
 - Novelist Plus & Novelist K-8 Plus
 - Points of View Reference Center
 - Primary Search
 - Science Reference Center
 - Home Improvement Reference Center
 - Small Business Reference Center
 - Small Engine Repair Reference Center
 - Vocational & Career Collection
- Financial Ratings Series

- Gale/Cengage Learning (includes the following)
 - Gale Ebooks
 - Gale Legal Forms*
- Hoopla
- Medigap Buyer's Guide
- Morningstar Investment Research Center
- NewsBank (includes the following)
 - Chicago Community Coverage (Chicagoland newspapers, Daily Herald, Villa Park Suburban Life, State Journal-Register)
 - Chicago Sun-Times (1986 – current)
 - Chicago Tribune Historical Archive
 - America's News Historical & Current
 - HeritageHub (formerly America's Obituaries & Death Notices and America's GenealogyBank)
- Niche Academy
- New York Times Online*
- OCLC
 - FirstSearch
 - WorldCat
- PressReader
- ProQuest
 - Ancestry Library
 - Chicago Tribune
 - HeritageQuest Online
- Record Information Services
- Scholastic Teachables
- Transparent Languages
- Tumblebook Library
- TumbleMath
- Valueline Investment Survey
- WorldBook*
 - WorldBook Encyclopedai (various editions)
 - Encyclopedia for Spanish Students

* New subscription in 2022/2023

In April 2020, SWAN entered into an agreement with EBSCO to purchase database titles at a discount for all public libraries in the consortium. This reduces the Library's cost for several existing product and adds several new ones.

In addition to the subscription databases listed in the Digital Reference & Electronic Resources section, the Library has also invested in e-reference titles through the Gale Virtual Reference Library. These are reference e-books that the Library has purchased to replace a number of print reference series as they become out of date. GVRL titles are accessible through a Gale website and are linked through the Library's online catalog.

Downloadable eBooks, audiobooks, music, and videos are searchable through several platforms, including Axis 360 (branded as eReadIllinois), the Overdrive and Libby apps (together branded as Digital Library of Illinois), and Hoopla. These resources are collectively branded "eLibrary" on the Library's website and many collections are searchable through the SWAN Enterprise catalog.

The Library has made remote access available to patrons for electronic resources whenever possible. Currently, all electronic resources except Ancestry Library allow usage via the Internet using a Web proxy service managed by SWAN. The Library has integrated remote access to include the FirstSearch database made available by the Illinois State Library.

The Library currently provides access to the Internet at 28 staff workstations, 12 public workstations located in Adult Services, and 2 public workstations located in Youth Services. 13 of these public workstations (11 in Adult Services and 2 in Youth Services) have both Microsoft Office products and access to the Internet (including the online electronic resources referenced above). There is 1 Express Station in Adult Services providing access only to the Internet, limited to 15-minute

sessions. In addition, 3 games stations (expanding to 6 in early 2024) located in Youth Services offer children access to recreational media. Youth Services also offers several iPads for checkout dedicated to early literacy software for preschool through third grade patrons. As of late 2022, capacity limitations due the ongoing COVID-19 (novel coronavirus) pandemic have been lifted, and computer availability has generally returned to pre-pandemic conditions, including internet computers and youth gaming stations.

Wireless Internet access and wireless printing are available to patrons. Multiple access points provide coverage throughout the building on a network that is separated from the main network by the firewall. An outdoor wireless access point was added in April 2020 to provide coverage in the parking lot while the library was closed to the public.

As of late 2022, the Library has retired the last of its PCs and laptops running Windows 7, as that operating system is now out of support by Microsoft and other software vendors. All desktop PCs and laptops in the building are now running the Windows 10 operating system. New machines purchased in the future will include Windows 11 licensing; the Library will plan to deploy this operating system in phases at a later date. Windows 10 will continue to be updated and supported by Microsoft for several more years.

The Library has begun acquiring a collection of popular tablet and e-reader devices from leading manufacturers. These are intended both for public circulation and for staff to gain experience and familiarity supporting the Library's downloadable media services on devices patrons are likely to own. These are currently available for checkout.

Hardware Owned

The following is a list of equipment currently owned by the Library as well as a list of the functions of the workstations:

Servers & Network Equipment

- 3 Dell file servers
 - 1 – 24-core 2.1 GHz Xeon server with 3600 GB disk array, 96GB of memory (purchased 2023)
 - 1 – 16-core 2.30 GHz Xeon server with 2400 GB disk array, 48GB of memory (purchased 2020)
 - 1 – Dual 8-core 2.10 GHz Xeon server with 2400 GB disk array, 64GB of memory (purchased 2018, upgraded 2021)
- 1 Barracuda Backup 390 disk/cloud backup appliance (purchased 2020)
- 1 Synology DiskStation DS214+ Network Attached Storage (NAS) device
- 1 Network Router (owned by LINC)
- 2 Sonicwall network security firewalls (purchased 2022, 2015)
- 31 Wireless access points
 - 1 – Cisco Meraki MR74 outdoor access point (purchased 2020)
 - 24 – Cisco Meraki MR45 access points (purchased 2019)
 - 4 – Linksys wireless "G" access points (purchased 2008)
 - 2 – Linksys wireless "G" access points, formerly used as Annex wireless bridge (purchased 2008)
- 5 48-port network switches
- 7 24-port network switches
- 3 5-port switches
- 1 Networked KVM switch
- 1 Video surveillance system, including 27 IP cameras, network video recorder
- 1 Luxer One outdoor locker system

Computers & Laptops

- 79 Windows PCs (includes obsolete pending disposal and new to be deployed)
- 26 Laptop computers
 - 7 – Dell Latitude 5590 (purchased 2018, pending disposal)
 - 2 – Dell Latitude 5500 (purchased 2020)
 - 5 – Dell Latitude 5510 (purchased 2020)
 - 1 – Dell Precision 5550 (purchased 2020)
 - 3 – Dell Latitude 5530 (purchased 2022)
 - 8 – Dell Latitude 5540 (purchased 2023)
- 3 iMac computers
- 1 Mac Mini computer

- 1 TBS Scan-EZ Station
- 3 Cen-Tec self-checkout stations

Tablets & E-reading Devices

- 6 Apple iPad tablet
- 1 Microsoft SurfacePro tablet
- 3 Amazon Kindle tablet/reader
- 1 Amazon Fire tablet/reader

Copiers

- 1 Konica Minolta Bizhub C458 color copier/printer (leased 2018 to 2019)
- 1 Konica Minolta Bizhub C3351 color copier/scanner/fax (purchased 2017)
- 1 Konica Minolta Bizhub C450i color copier/printer (purchased 2021)
- 1 Konica Minolta Bizhub C250i color copier/printer (purchased 2022)
- 1 Canon ImageRunner Advance C357 copier/fax (purchased 2021)
- 1 Canon ImageRunner Advance C356 III copier/fax (purchased 2020)

Printers, Scanners, Peripherals

- 8 Black & white laser printers
- 2 Color laser printers
- 2 Large format color inkjet printer
- 13 Thermal receipt printers
- 1 Cordless receipt printer
- 1 Color flatbed scanner
- 24 Metrologic/Honeywell handheld laser barcode scanners
- 1 Cordless handheld laser barcode scanner
- 2 Computype Replicator Label Genius GX430t barcode duplicator/printer
- 1 Zebra Technologies TLP 2844 bar code duplicator

Audio/Video Equipment

- 4 LCD/DLP Video projectors
- 2 Digital cameras
- 1 Digital SLR camera, lenses & accessories
- 1 Digital video camera
- 2 Audio mixing board/sound rack
- 9 Large (40" – 75") Smart TVs
- 1 19" LCD TV
- 1 Apple TV
- 2 BrightSign digital signage devices
- 2 Blu-Ray players
- 2 DVD players
- 1 VHS/DVD recorder
- 1 VCR
- 2 A/V receivers
- 1 Xbox One X console
- 1 PlayStation 4 console
- 1 Shure QLX wireless microphone system with bodypack transmitter and handheld/SM58
- 1 Point Source CO-3 earset microphone

Digital Media Lab Equipment

- 1 LulzBot TAZ 3d printing system
- 1 DJ turntable
- 1 Keyboard
- 1 Electronic drum controller
- 1 Guitar tuner/metronome
- 1 Creative pen tablet
- 1 Super 8 film to digital converter
- 1 Video capture interface
- 1 CD-R turntable

Hardware Leased

- 1 Pitney Bowes SendPro C425 postage meter (leased 2024 to 2029)

PC Workstation/Laptop Operations

- 5 Adult Services PACs (Public Access Catalogs)
- 4 Youth Services PACs (Public Access Catalogs)
- 12 Adult Services Internet workstations (11 with MS Office, 1 is Express)
- 2 Youth Services Internet workstations
- 6 Youth Services gaming workstations
- 1 Microfilm station
- 19 Laptops
- 32 Staff workstations
- 12 Workstations in storage, being deployed, or awaiting disposal

Mac Workstation Operations

- 2 Digital Media Lab
- 1 Public Information Coordinator

Software

The Library runs supported versions of Microsoft Windows 10 on PC. Over the next year, the library expect to begin deploying Windows 11 as the final feature update of Windows 10 was released in the second half of 2022 and will reach end of servicing in October 2025. Microsoft Office Professional and SirsiDynix Workflows are available at all staff workstations. The Print Shop version 15 and Adobe Creative Suite are available on select workstations. Microsoft Office is also available on Internet stations and word processing stations for patron use. The Library is currently running Office version 2019 throughout the building and some machines are volume licensed up to the 2021 release. All Library computers, with the exception games stations, have cloud-managed Sophos Intercept-X Advanced for virus and security protection.

Non/Capital Equipment Replacement Schedule

Equipment	Type	Qty	Purchase Date	Life (yrs)	Replace
Dell PowerEdge R440	Server	1	10/23/2020	5	2025
Dell PowerEdge R450	Server	1	9/7/2023	5	2028
SonicWall NSA 2700	Firewall	1	9/16/2022	7	2029
Cisco 2960X-48LPS-L	Switch	1	4/17/2017	7	2024
Cisco 2960X-24PS-L	Switch	1	4/13/2018	7	2025
Cisco 2960X-24PS-L	Switch	1	10/18/2018	7	2025
Cisco 2960X-24PS-L	Switch	1	10/18/2018	7	2025
Cisco 2960X-24TS-L	Switch	1	2/12/2019	7	2026
Cisco 2960X-48FPS-L	Switch	1	8/9/2019	7	2026
Cisco 2960X-48FPS-L	Switch	1	8/29/2019	7	2026
Cisco 9200L-24T-4G-E	Switch	1	11/1/2022	7	2029
Cisco 9200L-48PL-4G-E	Switch	1	12/7/2022	7	2029
Meraki wireless access points	WAP	24	9/4/2019	7	2026
Dell Optiplex 5050*	PC	2	3/24/2017	5	2022
Dell Optiplex 5050	PC	11	9/7/2017	5	2022
Dell Optiplex 5050	PC	6	12/6/2018	5	2023
Dell Optiplex 5070	PC	6	11/27/2019	5	2024
Dell Optiplex 5080	PC	10	12/3/2020	5	2025
Dell Optiplex 5270	PC	8	1/9/2020	5	2025
Dell Optiplex 7090	PC	10	11/21/2021	5	2026
Dell Optiplex 3280 AiO	PC	6	1/6/2022	5	2027
Dell Optiplex 5490 AiO	PC	12	1/14/2022	5	2027
Dell Alienware Aurora	PC	3	3/26/2018	5	2023
Dell Optiplex 7010 Plus Tower	PC	3	11/28/2023	5	2028
Dell Latitude 5590*	Laptop	8	12/6/2018	5	2023
Dell Latitude 5500	Laptop	2	3/13/2020	5	2025
Dell Latitude 5510	Laptop	5	8/21/2020	5	2025
Dell Latitude 5530	Laptop	3	10/5/2022	3	2027
Dell Precison 5550	Laptop	1	11/3/2020	5	2025
Konica Minolta Bizhub C3351 - Circulation Workroom	Copier	1	2017	7	2024
Konica Minolta Bizhub C458 - Copy Room	Copier	1	2018	7	2025
Konica Minolta Bizhub C450i - Materials Services	Copier	1	2021	7	2028
Konica Minolta Bizhub C250i - Adult Services	Copier	1	2022	7	2029
Canon ImageRunner Advance C356 - Adult Services	Copier	1	2020	7	2027
Canon ImageRunner Advance C357 - Business Office	Copier	1	2021	7	2028

*removed from service and pending disposal

Equipment retained as spare	Type	Qty	Purchase Date	Life (yrs)	Replace
Dell PowerEdge R740	Server	1	11/14/2018	5	2023
SonicWall NSA 3600	Firewall	1	11/11/2015	7	2022
HP 1920-48G-PoE+	Switch	1	10/2/2015	7	2022
Cisco 2960X-24TS-L	Switch	1	10/2/2015	7	2022

Villa Park Public Library

Modified: 2/14/2024

	2023	2023												2024												2025												2026												
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	
Non-Capital Outlay/Software																																																		
Sophos Intercept-X	5/12/2021													(New 3-year agreement 2024)																																				
Adobe CC (Direct)	1/29/2023																																																	
Adobe CC (JourneyEd)	2/9/2023																																																	
Deep Freze	6/23/2023																																					(New 3-year 2026)												
Automation Services																																																		
SonicWall	Dec. 2022	(New 3-year agreement 2022)																								(New 3-year agreement 2025)																								
Duo MFA (new)	5/24/2023																																																	
VMWare**	2/21/2023	(New 3-year agreement 2023)																																				(To be determined 2026)												
Meraki	9/4/2019																																																	9/2/2027
TBS MyPC/PaperCut	6/2/2023																																																	6/1/2027
TBS ePrintIt/vend	5/1/2023																																																	4/30/2027
Promo Receipt	Oct. 2023																																																	
Barracuda Email	2/8/2023	(New 3-year agreement 2023)																								(New 3-year agreement 2026)																								
Barracuda Backup	11/1/2020																																																	
GoDaddy Hosting	Sept. 2022																																																	
Maintenance of Equipment																																																		
TBS Scan station	10/14/2022																																																	
Self-Checkouts	July 2023																																																	
Microfilm scanner	10/30/2022																																																	
Sound Inc Support	2/1/2023																																																	
Sound Inc - Partner	3/7/2023																																																	
LuxerOne Kiosk	Oct. 2020													(New 3-year agreement 2023)																																				
Broadband Services																																																		
AT&T ASE	9/3/2020																																					(Renew)												
Comcast cable*	Dec. 2021													(New agreement pending)																																				
Mobile Beacon	July 2023																																																	

* Pending negotiation of new contract

** Licensing model has changed and library staff will evaluate future options

Accomplishments in 2022-2023

As the community continues to emerge from the ongoing COVID-19 pandemic, the Library has spent much of the first half of 2022 restoring services to full capacity as library usage increases, refreshing most public-facing computer stations with new equipment, and implementing projects previously delayed during the pandemic. Some hardware purchases were swapped between FY21 and FY22 due to vendor supply chain issues. Projects completed over the past year include:

- Replaced and upgraded the library's firewall with multi-year service under the Sonicwall Secure Upgrade program
- Purchased two new Cisco network switches as part of the Library's hardware replacement cycle
- Added an additional iMac station with Adobe Creative Cloud software for the Public Information Coordinator
- Replaced color copier in Adult Services with new machine from Konica Minolta
- The library expanded centrally-managed electronic lock security to the program rooms and east staff entrance. Library staff can now use their own entrance codes to access the building, enhancing security.
- Added additional interior and exterior security cameras to the Digital Watchdog system
- Implemented Duo Multi-Factor Authentication and Single Sign-On for all library staff and trustees. As of August 2023, Duo is enabled for all access to cloud applications and email in Microsoft 365. This has been a requirement for the library's cybersecurity insurance policy.
- The library evaluated and selected FirstComm Communications as its new voice service provider, and a new hosted Voice Over IP (VOIP) phone system was implemented in August 2023. The system eliminates the need for on-premises servers and offers additional mobility features for staff
- Replaced the PaperCut software print release stations with integrated payment kiosks from Today's Business Solutions, expanding payment options with credit cards and Apple Pay in addition to cash and coins

Remaining Projects from FY2023

- Expand Duo MFA implementation to protect administrative access to PCs, servers, network equipment, and remote access to the VPPL network
- Deploying additional games PCs in Youth Services with new software titles

Technology Needs Assessment (Community and Library Needs)

Internet Connectivity

The Library currently maintains two connections to the internet:

- Metro Ethernet/fiber lines to the Illinois Century Network (ICN) with a bandwidth of 3 Mbps, primarily used for connectivity to SWAN and the Sirsi ILS.
- Comcast Business cable service at 600 Mbps downstream and 35 Mbps upstream. This is the primary patron and staff internet bandwidth.

In 2015, the Library upgraded its ICN internet connection from AT&T T1 lines to Switched Ethernet Service over fiber optic lines. At the time, the Library expected to increase ICN bandwidth to 10Mbps, but the cuts to the Illinois state budget eliminated all free bandwidth allotments from ICN. Bandwidth and usage must continue be monitored to ensure the Library is meeting the needs of today's and tomorrow internet and media applications. In 2021, the Library increased the Comcast connection speed to 600Mb/s to provide needed bandwidth for patron and staff internet usage. AT&T and Comcast both installed new demarcation points and equipment as part of the Library's 2018-19 construction project.

Library staff will continue to monitor current market trends for internet and voice service. Recently, the State of Illinois has established K-12 broadband network¹, which is available at no cost to public schools, and to libraries at a 90% discount through federal E-rate funding. The Library may consider this network, or other competitive bids for broadband services using E-rate funding. However, acceptance of any E-rate funding requires compliance with the federal Children's Internet Protection Act (CIPA). CIPA imposes a number of technological and policy requirements on schools and public libraries receiving federal funding:

Schools and libraries subject to CIPA may not receive the discounts offered by the E-rate program unless they certify that they have an Internet safety policy that includes technology protection measures. The protection measures must block or filter Internet access to pictures that are: (a) obscene; (b) child pornography; or (c) harmful to minors (for computers that are accessed by minors). Before adopting this Internet safety policy, schools and libraries must provide reasonable notice and hold at least one public hearing or meeting to address the proposal.²

Schools and libraries are required to implement an internet usage policy requiring the filtering of "obscene" and "harmful" material on computers accessible by both children and adults, and also disable that filtering for adults "bona fide research or other lawful purposes"² on request. In addition to the cost of implementing filtering software and staff time and training to operate it, there are also civil liberties and intellectual freedom concerns to take under consideration. The American Library Association website³ provides further information on these issues.

References:

- 1) <https://www2.illinois.gov/icn/projects/k12network/Pages/default.aspx>
- 2) <https://www.fcc.gov/consumers/guides/childrens-internet-protection-act>
- 3) <http://www.ala.org/advocacy/advleg/federallegislation/cipa>

Specific Goals for Meeting Future Technology Needs

The Library views automation as a tool for enhancing the delivery of library services. Specific goals include:

- Providing personalized service through electronic means – assisting patrons with PINs, TXT reference, email notifications, electronic readers' services.
- Incorporate electronic forms on the Web site in order to expand reference services to patrons.
- Expand content on the Library's staff intranet.
- Provide ongoing training for Library staff, Board, and public.
- Plan and implement hardware and software upgrades to fileserver, workstations, and security equipment.

- Incorporate wireless technology into the Library's existing network, thus providing staff and patrons the benefits of this mobile automation tool.
- Respond to all trouble reports in a timely, cost-effective manner. Department goal is to respond within two days.

Staff Core Competencies

As technology permeates all levels of the Library's operations and services, every staff member must be comfortable using applications, computers, and other equipment. A core of technology competency is required of all staff members, to contribute to the overall effectiveness of the organization, whether they work behind the scenes or interacting with the public. As more Library services are available electronically and through the internet, it is essential that all staff have the necessary training to assist and advise patrons on the use of Library technology, software, and services, both in the Technology Center and using personal devices such as laptops, tablets, and smartphones. Staff members are required to meet the staff core competencies.

SWAN personnel provide basic video training for the Library staff on SirsiDynix functions. The Library provides additional one-to-one SirsiDynix training for new staff. Money is allocated for staff training and continuing education. Staff are encouraged to attend technology/computer workshops and classes either online or in person. The Library maintains a subscription to Niche Academy, a service available to patrons and staff offering web-based video courses on a variety of software products, web technologies, and professional development topics. Professional development workshops are also available to staff through library organizations such as RAILS, LACONI, SWAN, and ILA.

Specific Strategies (Action Steps) / Timetable / Budget

Fiscal Year 2024

The Library plans to act on the following items in FY2024. Specific costs are itemized in the table below, and may include a 5% projected cost escalation from previous years.

- Purchase approximately 16 desktop computers, laptops, and monitors as part of the technology replacement cycle.
- Equip (3) study rooms and GCR with display screens and wireless collaboration connectivity
- Replace one network switch as part of the technology replacement cycle
- Replace one color multifunction copiers at end of life (1st floor vending area)
- Renew software license agreements with Adobe (Creative Cloud), Public Web Browser², Sage (accounting software), and Sophos (endpoint protection).
- Renew service agreements with Duo (multi-factor authentication), TBS (managed PC reservation/printing), Library Calendar, Beanstack (summer reading), Cen-Tec (promo receipts), and GoDaddy (web hosting)
- Begin service agreement with PageFreezer (social media archiving), Skedda for study room scheduling, and Smore (newsletter/language translation)
- Renew maintenance agreements for print release and vending units (3), TBS Scan Station, self-checkout, digital microfilm reader, and disc cleaner
- Existing contract agreements continue with Faronics (Deep Freeze), SonicWall (gateway security), VMWare (server virtualization), Meraki (WiFi cloud management), Barracuda (email security & network backup) , and LuxerOne (locker system)
- Begin new postage meter lease

Technology costs are itemized below. The budget column reflects a projected annual budget, and may be higher than the sum of enumerated items for some accounts:

Non-Capital Outlay/Cabling or Wireless solutions	01-02-5540	\$500.00
Non-Capital Outlay/PCs and Monitors (includes tablet devices)	01-02-5500	\$42,000.00
<ul style="list-style-type: none"> • Includes study room/GCR project - \$20,000 		
Non-Capital Outlay/Hardware replacements		
<ul style="list-style-type: none"> • Switch replacement (2960X-48LPS-L) - \$3,500 • Color copier (replace C3351) - \$3,500 	01-02-5530	\$10,000.00
Non-Capital Outlay/Server Upgrades	01-02-5550	\$0.00
Non-Capital Outlay/Software Upgrades		
<ul style="list-style-type: none"> • Adobe CC - \$1,250 (3 seats) • Faronics / Deep Freeze - \$0¹ • NinjaForms - \$100 • Public Web Browser - \$125² • Sage Accounting - \$1,500 • Sophos AV - \$6,000³ 	01-02-5520	\$8,975.00

Contractual/Automation Services		
• Sonicwall maintenance - \$0 ⁴		
• VMWare maintenance - \$0 ¹		
• Meraki WiFi management - \$0 ⁵		
• Duo MFA - \$2,160		
• MyPC/PaperCut - \$749		
• Wireless printing - \$395		
• Library Calendar - \$1,500		
• Skedda - \$500		
• Summer Reading (Beanstack) - \$900	01-01-5103	\$13,109.00
• MyPromo receipt software - \$265		
• Barracuda/Office 365 - \$0 ¹		
• Barracuda backup updates & cloud storage - \$0 ⁶		
• Security Awareness Training - \$850		
• ScanEZ Fax - \$50		
• Web hosting - \$840 ⁷ (multi-year)		
• PageFreezer - \$4,700		
• Smore - \$200		
Contractual/Automation-Monthly (SWAN)	01-01-5101	\$38,000.00
Contractual/Broadband Services		
• AT&T fiber circuit - \$3,200		
• IL Century Network Internet - \$504	01-01-5105	\$11,144.00
• Cable Internet - \$6,480		
• Mobile broadband - \$960 (8 @ \$120)		
Contractual/Technology Services	01-01-5125	\$3,000.00
• Technology consulting/contracting - \$3,000		
Contractual/Rental/Lease	01-01-5102	\$920.00
• Postage meter @ \$230/quarter * 4 quarters		
Buildings & Contingency/Maintenance of Equipment		
• TBS vending maintenance - \$1,690		
• TBS Scan Station maintenance - \$855		
• Cisco maintenance - \$0		
• Copier maintenance/consumables - \$5,000	01-01-5236	\$12,315.00
• ScanPro maintenance - \$790		
• Self-check maintenance - \$3,290		
• Telephone system maintenance - \$0 ⁸		
• LuxerOne kiosk maintenance - \$0 ¹		
• ELM USA disc cleaner maintenance - \$690 ⁷		
Utilities/Telephone	01-01-5202	\$14,400.00
• Includes OpEx spending for hosted phone system		
Total Technology Costs--FY 2024		\$154,363.00

¹ Cost reflects a 3-year service term purchased in 2023

² The Library is currently able to license Public Web Browser at no cost through the RAILS system. Since the current agreement through RAILS is renewed annually later in the year, the cost to renew for VPPL is reflected here as a contingency

³ Cost reflects a new 3-year service term

⁴ Service included with new device purchased in 2022

⁵ Cost reflects a 7-year service term purchased in 2019

⁶ Cost reflects a 5-year service term purchased in 2020

⁷ Cost reflects a new 2-year service term

⁸ Hardware coverage for UCaaS phone system now contained within Utilities/Telephone

Fiscal Year 2025

The Library plans to act on the following items in FY2025. Specific costs are itemized in the table below, and may include a 5% projected cost escalation from previous years.

- Purchase approximately 16 desktop computers, laptops, and monitors as part of the technology replacement cycle.
- Replace two network switches as part of the technology replacement cycle
- Replace one color multifunction copiers at end of life (staff copy center)
- Replace one virtualization server as part of the technology replacement cycle
- Renew software license agreements with Adobe (Creative Cloud), Public Web Browser², and Sage (accounting software).
- Evaluate data backup capacity and assess any need to upgrade network backup appliance
- Renew service agreements with Duo (multi-factor authentication), SonicWall (gateway security), TBS (managed PC reservation/printing), Library Calendar, summer reading program, Cen-Tec (promo receipts), Barracuda (network backup), GoDaddy (domain name renewal), PageFreezer (social media archiving), Skedda, and Smore (newsletter/language translation)
- Renew maintenance agreements for SonicWall (gateway security), print release and vending units (3), TBS Scan Station, self-checkout, and digital microfilm reader
- Existing contract agreements continue with Faronics (Deep Freeze), Sophos (endpoint protection), VMWare (server virtualization), Meraki (WiFi cloud management), Barracuda (email security), GoDaddy (web hosting), LuxerOne (locker system), and ELM USA (disc cleaner)

Technology costs are itemized below. The budget column reflects a projected annual budget, and may be higher than the sum of enumerated items for some accounts:

Non-Capital Outlay/Cabling or Wireless solutions	01-02-5540	\$500.00
Non-Capital Outlay/PCs and Monitors (includes tablet devices)	01-02-5500	\$22,000.00
Non-Capital Outlay/Hardware replacements		
• Switch replacements (48-port POE, 24-port POE) - \$6,500	01-02-5530	\$20,000.00
• Multifunction color copier - \$12,000		
Non-Capital Outlay/Server Upgrades		
• Virtualization server- \$7,500	01-02-5550	\$7,500.00
Non-Capital Outlay/Software Upgrades		
• Adobe CC - \$1,250 (3 seats)		
• Faronics / Deep Freeze - \$0 ¹		
• NinjaForms - \$100	01-02-5520	\$3,025.00
• Public Web Browser - \$125 ²		
• Sage Accounting - \$1,550		
• Sophos AV - \$0 ³		

Contractual/Automation Services		
• Sonicwall maintenance - \$5,000 ⁴		
• VMWare maintenance - \$0 ¹		
• Meraki WiFi management - \$0 ⁵		
• Duo MFA - \$2,160		
• MyPC/PaperCut - \$749		
• Wireless printing - \$395		
• Library Calendar - \$1,500		
• Skedda - \$500		
• Summer Reading - \$1,000	01-01-5103	\$20,044.00
• MyPromo receipt software - \$280		
• Barracuda/Office 365 - \$0 ¹		
• Barracuda backup updates & cloud storage - \$2,760		
• Security Awareness Training - \$850		
• ScanEZ Fax - \$50		
• Web hosting - \$400 ^{6,7}		
• PageFreezer - \$4,200		
• Smore - \$200		
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Contractual/Automation-Monthly (SWAN)	01-01-5101	\$38,000.00
• Automation monthly charge - \$38,000		
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Contractual/Broadband Services		
• AT&T fiber circuit - \$3,200		
• IL Century Network Internet - \$504	01-01-5105	\$11,144.00
• Cable Internet - \$6,480		
• Mobile broadband - \$960 (8 @ \$120)		
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Contractual/Technology Services	01-01-5125	\$5,000.00
• Technology consulting/contracting - \$5,000		
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Contractual/OCLC	01-01-5104	\$0.00
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Contractual/Rental/Lease	01-01-5102	\$920.00
• Postage meter @ \$230/quarter * 4 quarters		
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Buildings & Contingency/Maintenance of Equipment		
• TBS vending maintenance - \$1,690		
• TBS Scan Station maintenance - \$855		
• Cisco maintenance - \$0		
• Copier maintenance/consumables - \$5,000	01-01-5236	\$11,830.00
• ScanPro maintenance - \$830		
• Self-check maintenance - \$3,455		
• LuxerOne kiosk maintenance - \$0 ³		
• ELM USA disc cleaner maintenance - \$0 ⁶		
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Utilities/Telephone	01-01-5202	\$14,400.00
• Includes OpEx spending for hosted phone system		
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Total Technology Costs--FY 2025		\$154,363.00

¹ Cost reflects a 3-year service term purchased in 2023

² The Library is currently able to license Public Web Browser at no cost through the RAILS system. Since the current agreement through RAILS is renewed annually later in the year, the cost to renew for VPPL is reflected here as a contingency

³ Cost reflects a 3-year service term proposed in 2024

⁴ Cost reflects a new 3-year service term

⁵ Cost reflects a 7-year service term purchased in 2019

⁶ Cost reflects a 2-year service term proposed in 2024

⁷ New 5-year term for domain registration & privacy protection

Fiscal Year 2026

The Library plans to act on the following items in FY2026. Specific costs are itemized in the table below, and may include a 5% projected cost escalation from previous years.

- Purchase approximately 13 desktop computers, laptops, monitors, and tablet devices as part of the technology replacement cycle.
- Replace Meraki wireless access points at end of life
- Renew software license agreements with Adobe (Creative Cloud), Faronics (Deep Freeze), Public Web Browser², and Sage (accounting software).
- Begin Microsoft 365 subscriptions for staff to replace perpetual Office licensing, and upgrade to current perpetual version on public PCs and laptops
- VMWare significantly modified its licensing structure in 2024 following acquisition by Broadcom. This may increase the Library's cost substantially. Staff will explore alternative virtualization solutions.
- Renew service agreements with Duo (multi-factor authentication), TBS (managed PC reservation/printing), Library Calendar, Cen-Tec (promo receipts), Barracuda (email security/archiving/backup), GoDaddy (web hosting), PageFreezer (social media archiving), Skedda, Smore (newsletter/language translation), and Microsoft 365
- Renew expiring and/or negotiate new broadband service agreements with AT&T and Comcast
- Renew maintenance agreements for print release and vending units (3), TBS Scan Station, self-checkout, digital microfilm reader, and LuxerOne (locker system)
- Existing contract agreements continue with Sophos (endpoint protection), SonicWall (gateway security), Meraki (WiFi cloud management), Barracuda (network backup), GoDaddy (web hosting)

Technology costs are itemized below. The budget column reflects a projected annual budget, and may be higher than the sum of enumerated items for some accounts:

Non-Capital Outlay/Cabling or Wireless solutions	01-02-5540	\$500.00
Non-Capital Outlay/PCs and Monitors (includes tablet devices)	01-02-5500	\$23,000.00
Non-Capital Outlay/Hardware replacements		
• Switch replacements (48-port POE, 24-port non-POE) - \$6,000	01-02-5530	\$27,000.00
• Wireless access points - \$20,000		
Non-Capital Outlay/Server Upgrades	01-02-5550	\$0.00
Non-Capital Outlay/Software Upgrades		
• Adobe CC - \$1,250 (3 seats)		
• Faronics / Deep Freeze - \$1,000 ¹ (multi-year)		
• NinjaForms - \$100		
• Public Web Browser - \$125 ²	01-02-5520	\$4,725.00
• Sage Accounting - \$1,450		
• Sophos AV - \$0 ³		
• Microsoft Office volume licenses - \$800		

Contractual/Automation Services		
• Sonicwall maintenance - \$0 ⁴		
• VMWare subscription - \$3,500		
• Meraki WiFi management - \$0 ⁵		
• Duo MFA - \$2,160		
• MyPC/PaperCut - \$749		
• Wireless printing - \$395		
• Library Calendar - \$1,575		
• Skedda - \$500		
• Summer Reading - \$1,000	01-01-5103	\$31,079.00
• MyPromo receipt software - \$290		
• Barracuda/Office 365 - \$10,000		
• Barracuda backup updates & cloud storage - \$2,760		
• Security Awareness Training - \$850		
• ScanEZ Fax - \$50		
• Web hosting - \$840		
• PageFreezer - \$4,200		
• Smore - \$210		
• Microsoft 365 for staff - \$2,000		
Contractual/Automation-Monthly (SWAN)		
• Automation monthly charge - \$38,000	01-01-5101	\$38,000.00
Contractual/Broadband Services		
• AT&T fiber circuit - \$3,276 (9 x \$264, 3 x \$300)		
• IL Century Network Internet - \$504	01-01-5105	\$11,540.00
• Cable Internet - \$6,800		
• Mobile broadband - \$960 (8 @ \$120)		
Contractual/Technology Services		
• Technology consulting/contracting - \$5,000	01-01-5125	\$5,000.00
Contractual/Rental/Lease		
• Postage meter @ \$230/quarter * 4 quarters	01-01-5102	\$920.00
Buildings & Contingency/Maintenance of Equipment		
• TBS vending maintenance - \$1,690		
• TBS Scan Station maintenance - \$855		
• Cisco maintenance - \$0		
• Copier maintenance/consumables - \$5,000		
• ScanPro maintenance - \$870	01-01-5236	\$18,800.00
• Self-check maintenance - \$3,625		
• Telephone system maintenance - \$0		
• LuxerOne kiosk maintenance - \$6,010 ¹		
• ELM USA disc cleaner maintenance - \$750		
Utilities/Telephone		
• Includes OpEx spending for hosted phone system	01-01-5202	\$14,400.00
Total Technology Costs--FY 2026		\$174,964.00

¹ Cost reflects a new 3-year service term

² The Library is currently able to license Public Web Browser at no cost through the RAILS system. Since the current agreement through RAILS is renewed annually later in the year, the cost to renew for VPPL is reflected here as a contingency

³ Cost reflects a 3-year service term proposed in 2024

⁴ Cost reflects a 3-year service term proposed in 2025

⁵ Cost reflects a 7-year service term purchased in 2019

Areas for Future Expansion

The Library would like to implement several other technological innovations. However, due to budgetary restraints, the Library has determined not to plan for these items during any particular fiscal year. Instead the Library will refer to this portion of its Technology Plan as its "Technology Wish List" and will look to apply for grants and other sources of funding to assist in the implementation of these services. Other contingencies, which the Library cannot plan for during any particular year, will also be added to this "wish list". Some of these are listed in the following sections.

RFID

Library staff will continue to evaluate purchasing an RFID checkout system. Implementing RFID would require purchasing RFID-equipped checkout gate, upgrading the self-checkout stations, tagging the entire materials collection, as well as coordination with SWAN to implement RFID through the Sirsi ILS. Potential costs include hardware, RFID tags, electrical upgrades in the lobby, and staff time to tag the collection.

Automation Staffing

The Library expects to continue expanding the availability and use of computer technology and multimedia in the future. The Library will likely have a need in the future for additional automation staff hours to cope with expanding technology and patron and staff expectations of timely service and support. As a result, the Library may need to explore restructuring its organization to establish Automation as a separate department.

Other Areas of Potential Growth

The Library will:

- Monitor emerging technologies such as netbooks, electronic books, and cloud computing
- Explore the possibility of hiring additional automation staff to assist in ongoing projects
- Evaluate additional capabilities to add to the Digital Media Lab and update equipment on an ongoing basis
- Promote usage of videogame stations in the Teen area
- Monitor the utilization of the public wireless network and plan to expand capacity in the future if the need is indicated
- Staff will work with the library's insurance carrier to identify areas necessary to comply with cybersecurity liability policies
- Explore additional technology and equipment to add to the Library's creative and maker spaces