Technology Plan

BLUE ISLAND PUBLIC LIBRARY

BLUE ISLAND, ILLINOIS

January 1, 2025 through December 31, 2027

1. MISSION STATEMENT

The Blue Island Public Library is a vital community center providing access to information and materials that enrich the lives of its patrons by meeting their educational, occupational, cultural, and recreational needs.

2. PLAN JUSTIFICATION

The Blue Island Public Library Board of Trustees and staff recognize the impact of technology, specifically electronic communication, and information, upon the lives of the residents of Blue Island. In order to continue to provide a high standard of public service, the Blue Island Public Library offers a variety of electronic services. This document presents the current and planned technology necessary to deliver these services.

3. TECHNOLOGY STRATEGIES

The Blue Island Public Library will use technology to help meet the library's standards and organizational goals. This section of the Technology Plan sets forth specific action steps, which are defined and measurable, to ensure successful implementation.

GOAL A: Provide resources to support the improved delivery of services.

Objective A1: Upgrade software and hardware for staff.

- Replace staff computers in compliance with the library's standard that all main staff computers are no more than five years old (TARGET: 2nd Quarter 2025. The ISL Technology Infrastructure Grant will allow us to do much of this.)
- Replace staff core server and domain controller to ensure reliability and in compliance with the library's standard that all staff servers are no more than five years old (TARGET: Both servers were replaced in April 2024.)
- Replace backup server to ensure the preservation of critical data and in compliance with the library's standard that all staff servers are no more than five years old (TARGET: 1st Quarter 2026.)
- Evaluate HR, Payroll, and Accounting software systems and identify replacement needs (TARGET: Ongoing. We'll be using what the accountants recommend.)
- Upgrade or replace current phone and voicemail system which is no longer supported (TARGET: 4th Quarter 2027.)

- Assess the need for updated computer software such as graphic design, video editing, videoconferencing, and office productivity (TARGET: 3rd Quarter 2025. We'd like to move on from Office 2013.)
- Update current security camera system (server and cameras) to ensure uptime, reliability, accessibility, and retention policies (TARGET: 1st Quarter 2025. We're in the process of changing out the server software, and also making headway on replacing most of the Raspberry Pi's with IP cameras.)
- Continue to upgrade staff computer equipment and peripherals, such as keyboards and mice, scanners, laser barcode scanners, and printers (TARGET: Ongoing)
- Replace door counter with a more sophisticated people counter with enhanced reporting and data (TARGET: Done. Door counter was replaced in 2021 with another device provided hour by hour statistics.)
- Address alternatives and/or renewal of the current multifunction printer contract with Konica Minolta (TARGET: Done. We were able to buy the equipment outright shortly after the end of the contract.)
- Evaluate alternative internet providers in comparison to the current Comcast contract (TARGET: Ongoing. We received some bids during the E-Rate process, but Comcast is still the most economical provider.)
- Evaluate alternative email services in comparison to Office 365. (TARGET: Ongoing. Office 365 A1 licenses are free for libraries, but we are continually evaluating some of the paid options to get more features.
- Audit current digital signage system, identify alternatives, and replace equipment (TARGET: Ongoing. The open source software Screenly has been working fine for us.)
- Replace staff wireless network equipment, including access points, controllers, switches, and power-over-ethernet equipment (TARGET: 4th Quarter 2025)
- Upgrade or replace the library's network firewall / VPN device per SWAN guidelines. (TARGET: 1st Quarter 2025. The current model (TZ300) is going End of Support in 2025.)
- Upgrade or replace the library's video equipment, including cameras, lighting, stands, microphones, and wireless equipment (TARGET: Ongoing.)
- Replace or upgrade the library's large format printer (TARGET: 2nd Quarter 2026. In 2021 we were able to acquire a 5 year old printer for free from a neighboring library.)

Objective A2: Upgrade hardware and software for public.

- Upgrade public computer equipment in compliance with the library's standard that all public computers are not more than five years old (TARGET: Partially done / 3rd Quarter 2026. New computers were replaced in early 2022 via a grant. Youth computers and Tech Annex computers need to be replaced.)
- Audit current presentation equipment in meeting rooms to ensure operability and ease of use (TARGET: 3rd Quarter 2027.)
- Identify patron needs and add additional software as needed (TARGET: ongoing.)

- Review self-check station and evaluate alternative hardware and software (TARGET: Ongoing. The OneStop software is completely functional.)
- Replace public wireless network equipment including access points, controllers, switches, and power-over-ethernet equipment and expand wireless coverage area (TARGET: 3rd Quarter 2025)
- Upgrade or replace Tech Annex recording studio equipment including microphones, stands, instruments, cables, and mixers (TARGET: 2nd Quarter 2025.)
- Evaluate current state preservation software and identify viable replacements (TARGET: Done. We moved from SmartShield to Deepfreeze in late 2022.)
- Evaluate current proxy / filtering software and identify viable replacements (TARGET: 1st Quarter 2026.)

Objective A3: Leverage new technology.

- Evaluate feasibility of moving staff files, data, and domain controllers to Azure hosted environment (TARGET: 4th Quarter 2027.)
- Assess the practicality of utilizing OneDrive / SharePoint instead of the local network for document sharing, hosting, and collaboration purposes (TARGET: Ongoing.)

GOAL B: Provide training opportunities to enhance services provided to library users.

Objective B1: Provide ongoing technology training to library staff.

- Formulate assessment for technology competencies and training specific to each department and job classification (TARGET: 4th Ongoing.)
- Provide training necessary to ensure current staff are adequate in core computer competencies (TARGET: Ongoing.)
- Make sure appropriate staff have training on current ILS software (TARGET: Ongoing.)
- Train staff in emerging technologies such vinyl cutter, 3D printer, laser engraver, and single board computers (TARGET: Ongoing.)

Objective B2: Evaluate existing technology training and ensure that what the library offers meets community needs.

- Conduct customer training needs assessment and develop appropriate classes in response (TARGET: Annually.)
- Explore expanding class offerings by partnering with other organizations such as libraries, government agencies, non-profit or civic organizations, schools, colleges, and corporations including opportunities for a mobile training lab (TARGET: Ongoing. We have been hosting Pathlights and ABE-LINC classes.)
- Provide individual assistance through one-on-one help by appointment or by videoconferencing (TARGET: Ongoing.)
- Offer training on accessing digital devices and library services to the public (TARGET: Ongoing. Last year we offered instructor led training via PLA's Digital Literacy grant.)

GOAL C: Produce, supply, and maintain reliable, up-to-date, and cost-effective computer services to the public.

Objective C1: Ensure self-service features for the public are appropriate, convenient and continue to improve the user experience.

- Explore options for alternative self-check solutions (TARGET: Ongoing. The OneStop software is completely functional.)
- Assess the effectiveness of the current public computer and print management systems and compare alternatives (TARGET: 2nd Quarter 2025. We have been investigating PC-Res/Princh alternatives. Our current contract runs through May 2025.)
- Provide computing systems for the public to check out such as laptops and Chromebooks (TARGET: 3rd Quarter 2025. We offer tablets to check out but not laptops.)
- Maintain or increase the number hotspots that can be checked out to BIPL patrons (TARGET: Done. We increased the number of hotspots available in July 2024.)
- Maintain or increase the amount of Library of Things items that can be checked out to BIPL patrons (TARGET: 4th Ongoing.)
- Identify needs and purchase public charging stations for phones and laptops (TARGET: 4th Quarter 2026)
- Ensure OPAC/catalog stations are reliable and up-to-date to allow patrons to search for library material and easily manage their accounts (TARGET: Ongoing.)
- Audit existing database subscriptions and discover new services to offer patrons (TARGET: Ongoing. The statewide Ebsco package was updated June 2024.)
- Upgrade existing dedicated scanning station to take over faxing capabilities (TARGET: 2nd Quarter 2025. Part of the Technology Infrastructure Grant is marked for this.)

Objective C2: Maintain sufficient network resources.

 Continue to monitor and evaluate network traffic and install additional resources as necessary (TARGET: Ongoing. We evaluated a 5G internet connection from T-Mobile in September 2023, but it was not found to be reliable.)

GOAL D: Establish process, mechanisms, and structure for delivery and maintenance of IT support.

Objective D1: Implement a help desk ticket system to manage IT work requests and assess response time for problems.

• Cases should be closed in an acceptable timeframe dependent on the severity of the problem (TARGET: 1st Quarter 2027)

Objective D2: Implement effective systems for information security, disaster prevention, and recovery.

- Continue annual hardware cleaning inside of computers and other equipment (TARGET: Ongoing)
- Include network security practices for timely application of updates and patches (TARGET: Ongoing)
- Keep cold spares of critical equipment on-hand in order to reduce downtime in the event of failure (TARGET: Ongoing)
- Evaluate the cost effectiveness of offsite backup systems and determine if a system is needed (TARGET: 1st Quarter 2025)
- Regularly check the local backups to ensure that critical data is backed up accordingly (TARGET: Ongoing)
- Assign appropriate privileges to users in regards to local computers, network shares, and Office 365 management (TARGET: Ongoing)

Objective D3: Develop and implement applications management plan.

• Evaluate software on public staff computers to ensure it is effective, reliable, and up-to-date (TARGET: Ongoing)

GOAL E: Use technology to communicate more effectively with the public.

Objective E1: Ensure that the library website is current and convenient for customers.

- Design a new library website for enhanced user experience and improved communications (TARGET: Done. We built and moved to the current website in late 2021.)
- Implement a new calendar and event registration system on the website for improved user experience (TARGET: Done. Modern Events Calendar was implemented alongside the new website.)
- Perform a content inventory of the library's website at least annually (TARGET: Ongoing.)
- Continue to add services and features to the website to enhance the patron experience (TARGET: Ongoing.)
- Verify that SWAN catalog searching is integrated seamlessly into the website (TARGET: Ongoing.)
- Monitor database links and other content links at least monthly to confirm functionality (TARGET: Ongoing.)

Objective E2: Ensure the library's social media presence helps the library communicate with and effectively engage our community.

- Develop measurement tools to assess the library's social media reach and engagement (TARGET: 4th Quarter 2026)
- Re-assess social media opportunities including social media platforms to develop a social media plan (TARGET: 1st Quarter 2027)
- Evaluate opportunities and options for live and recorded video sharing online (TARGET: 2nd Quarter 2027)

- Implement social media plan to effectively engage our community (TARGET: 3rd Quarter 2027.)
- Confirm that the library's social media pages are all publicly accessible on a regular basis (TARGET: 4th Quarter 2027)
- Continue to send the newsletter and e-newsletter to the library's mailing list on a regular basis (TARGET: Ongoing)

4. TECHNOLOGY INVENTORY

INFRASTRUCTURE:

- 2 custom built servers for domain administration, network management, and resource sharing.
- 1 server for nightly backup job purposes.
- 1 server for the surveillance camera system.
- 1 Sonicwall TZ-300 firewall with site-to-site VPN functions for SWAN connectivity and DMZ functions for segmented public wireless.
- 1 48-port Zyxel core switch.
- Several multiport access switches throughout the building.
- 3 Ubiquiti wireless access points for staff use.
- 3 Ubiquiti wireless access points for public use.
- Cat-5 and Cat-6 wiring throughout the building.

EQUIPMENT:

- 49 public workstations with the following configuration:
 - 18 internet public adult workstations
 - o 12 internet public youth workstations
 - 8 internet media lab workstations
 - 3 catalog workstations
 - 4 public use Chromebooks
 - o 1 iMac
 - o 1 Mac Mini
 - o 2 print release stations
 - o 1 self-check machine
 - o 1 dedicated scanning station
- 26 dedicated staff workstations with the following configuration:
 - o 3 circulation desk workstations
 - 2 director / business office workstations
 - \circ 4 circulation office / outreach / ILL workstations
 - 1 technical services workstation
 - 1 dedicated timeclock workstation
 - 2 reference desk workstations
 - 4 reference office workstations
 - 4 youth department workstations
 - 2 digital media lab workstations

- o 1 iMac
- o 2 information technology workstations
- 4 staff use laptops
- 25 public use hotspots
- 13 printers in the following configuration:
 - 5 multi-function Konica Minolta printers
 - o 5 receipt printers
 - 2 HP desk printers (LJ1020, LJ401n)
 - 1 large format printer
- 5 projectors
- 8 large screen televisions, including signage and digital media lab use
- 6 microphones
- 1 wireless microphone system
- 4 instrument amplifiers
- 3 audio mixers
- 4 photography lights
- 8 video cameras in the following configuration:
 - 1 Zoom Q8 Handy Video Recorder
 - o 1 Panasonic video camera
 - 2 Canon video cameras
 - o 4 Zoom Q3 video cameras
- 6 camera tripods
- 1 Wii gaming console
- 1 USB media capture system
- 1 light/reflection based door counter
- 1 greenscreen with stands
- 1 Makerbot Mini 3D printer

SECURITY:

- 2 Security surveillance server
- 13 security cameras

TELECOMMUNICATIONS:

- 1 Avaya Partner voicemail system
- 21 Lucent telephones
- 1 fax machine

COMPUTER SOFTWARE:

Operating System

- 6 active Microsoft Server operating systems
- Microsoft Windows 10 on staff, public, and DML public workstations
- Ubuntu Linux running a proxy server

- Ubuntu Linux running a security camera server
- Windows 10 running an additional security camera server

Available and Supported Public Applications

- Firefox, Chrome, and Internet Explorer
- Microsoft Office 2013
- Windows Defender
- Adobe Reader
- Centurion Smart Shield
- MyPC and PaperCut
- ePrintIt web and email printing
- Various subscription-based web applications such as Kanopy, Overdrive, Biblioboard, Novelist, Gale Virtual Reference, and Ebscohost databases

Available and Supported Staff Applications

- Firefox, Chrome, Internet Explorer, Microsoft Office 2013, Windows Defender, and Adobe Reader
- SirsiDynix WorkFlows
- Adobe Creative Cloud
- Various specialized software for departments such as QuickBooks, Silhouette Studio, Epson Scan, and Makerbot Print.
- Various subscription-based web applications such as Paylocity, Messagebee, Canva, Zoom, Lynda/LinkedInLearning, and BeanStack.

5. BUDGET

The library's technology plan operates out of the 66000 Computer Equipment and 66200 Computer Software budget lines.

The following initiatives for 2025 have budgetary implications:

- Replace the firewall which is going end-of-life
- Replace staff computers
- Upgrade to a new version of Microsoft Office
- Replace staff wireless network equipment
- Possibly migrate to PC-Res/Princh or another alternative
- Buy a new dedicated scanning station

The following initiatives for 2026 have budgetary implications:

- Replace the backup server
- Upgrade public computers in youth and tech annex areas
- Buy a new large format printer
- Replace the public wireless network equipment
- Move to a newer content filtering system

The following initiatives for 2027 have budgetary implications:

- Upgrade or replace phone and voicemail system
- Replace meeting room equipment
- Move to an Azure hosted environment

6. EVALUATION

The Technology Committee (consisting of the Director, IT Manager, Digital Media Lab Manager, and Reference Manager) will oversee implementation of technology projects and will assess if equipment/software actually accomplishes the goals and objectives set forth in the plan.

The Technology Committee regularly evaluates the computer inventory and makes recommendations for replacement and repair. The Technology Committee reviews progress on all projects on a regular basis.

The following evaluation process will be done annually:

- Replace equipment exceeding 5 years in age
- Review software on public and staff computers to ensure it is effective
- Review telecommunications costs and use

7. STAFF TRAINING

Staff training is conducted on an ongoing basis by attending various workshops. Ongoing training is also provided on topics including productivity software, information security, and emerging technologies.

8. PUBLIC CLASSES

Public classes include the following topics: basic computer skills, Internet browsing and searching, Office applications, cloud computing, resume creation, video recording, audio recording, graphic design, library databases, and personal devices. Software classes are developed and conducted jointly by the library's IT Manager, Digital Media Lab Manager, and Reference Manager. Classes may also be offered by library partner organizations.