

Technology Plan

SHAKER HEIGHTS PUBLIC LIBRARY SHAKER HEIGHTS, OHIO

JANUARY 1, 2019 THROUGH DECEMBER 31, 2021

1. MISSION STATEMENT

Shaker Heights Public Library strengthens our community and transforms lives by bringing together people, information, and ideas.

2. PLAN JUSTIFICATION

The Shaker Heights Public Library Board of Trustees and staff recognize the impact of technology, specifically electronic communication, and information, upon the lives of the residents of the Shaker Heights School District. In order to continue to provide a high standard of public service, the Shaker Heights 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 Shaker Heights Public Library will use technology to help meet the long-range goals and objectives outlined in the Library's Strategic Plan. 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: Ensure the library website is current and convenient for customers

- Complete a website assessment to determine if an update or re-design is necessary (TARGET: 3rd Quarter 2019)
- Design or update website based upon assessment results (TARGET: 4th Quarter 2020)

- Perform a content inventory of the library's website at least annually (TARGET: ongoing)
- Continue to add self-service features that add convenience for customers (TARGET: ongoing)
- Monitor and update website links and content at least monthly (TARGET: ongoing)

Objective A2: Upgrade software and hardware for staff

- Assess options for staff ID maker software to ensure compatibility with Windows 10 (TARGET: 2nd Quarter 2019)
- Update HVAC server and software to ensure Windows 10 compatibility (TARGET: 2nd Quarter 2019)
- Implement recommendations for Financial Management software to best meet business needs (TARGET: 3rd Quarter 2019)
- Implement recommendations for staff ID maker software ensuring compatibility with Windows 10 (TARGET: 3rd Quarter)
- Evaluate HR/Payroll software systems to replace current inadequate system (TARGET: 4th Quarter 2019)
- Assess options for staff entry security systems to ensure best practices to mitigate risk (TARGET: 4th Quarter 2019) Continue to upgrade staff workstations and monitors to comply with the strategic plan goal of all computers being no more than five years old (TARGET: ongoing)
- Audit current security cameras to ensure older cameras are replaced/repaired as needed (TARGET: ongoing)

Objective A3: Upgrade hardware and software for public

- Work with vendor to implement new Summer Reading software to address current staff and patron needs. (Target: 1st Quarter 2019)

- Evaluate self-check system to ensure the technology is current and the workstations are reliable and comply with the strategic plan goal of all computers being no more than five years old (TARGET: 1st Quarter 2019)
- Migrate all computers using Windows operating systems to Windows 10 in order to maintain current technical business standards (TARGET: 3rd Quarter 2019)
- Implement self-check system replacement or updates (TARGET: 3rd Quarter 2020)
- Continue to upgrade public workstations and monitors to comply with the strategic plan goal of all computers being no more than five years old (TARGET: ongoing)
- Assess customer and staff needs for presentation equipment in meeting rooms and update as needed (TARGET: ongoing)
- Assess customer needs and add additional software to help meet those needs (TARGET: ongoing)

Objective A4: Leverage new technology

- Develop preliminary technology recommendations for library renovations based on best practices, budget, and community need. (TARGET: 1st Quarter 2019)
- Install software to manage building security to facilitate best security practices and mitigate risk (TARGET: 4th Quarter 2019)
- Transition staff files/data to SharePoint (TARGET: 1st Quarter 2020)

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

Objective B1: Provide ongoing technology training to library staff.

- Formulate assessments for technology competencies and training specific to each department and job classification (TARGET: 4th Quarter 2019)
- Provide training necessary to ensure current staff are assessed at “area of strength” on the library’s technology core competencies (TARGET: ongoing)
- Provide training opportunities in a variety of formats, including classes, webinars, and online tutorials, for staff to improve their technology skills (TARGET: ongoing)
- Make sure appropriate staff have training on current ILS software (TARGET: ongoing)
- Train staff in emerging technologies (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: Summer, 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: 4th Quarter 2019) Provide individual assistance through one-on-one help by appointment for at least 30 minute sessions to promote digital literacy at the individual level (TARGET: ongoing)
- Provide updated software and equipment to support customer demand for training (TARGET: ongoing)
- Offer training on accessing digital devices and library services to the public (TARGET: ongoing)

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.

- Provide expanded flexible Print/FAX/Scan services at Bertram Woods Branch (TARGET: 1st Quarter 2019)
- Explore expanded, flexible printing services such as wireless and multi-function printers (TARGET: 3rd Quarter 2019)
- Explore implementation of a meeting room and event scheduling system provided by CLEVNET based on staff and community needs (TARGET: 3rd Quarter 2019)
- Explore alternative up-to-date catalog station hardware to leverage new technology for an improved customer experience (TARGET: 4th Quarter 2019)
- Ensure the catalog computers are reliable, up-to-date, and cost effective to allow customers to search for library material and easily manage their accounts (TARGET: ongoing)

Objective C2: Maintain sufficient network resources.

- In collaboration with CLEVNET continue to monitor and evaluate network traffic and install additional resources as necessary (TARGET: ongoing)

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

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

- Cases should be closed 90% of the time within the target Service Level Agreement (SLA) established by CLEVNET (TARGET: ongoing)

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

- Continue regular hardware cleaning to maintain equipment integrity (TARGET: ongoing)
- Include network security practices for timely application of updates and patches in a technology management plan (TARGET: ongoing)

- Keep cold spares on hand to use in place of devices that become non-operational (TARGET: ongoing)

Objective D3: Develop and implement applications management plan

- Conduct software audit and inventory in keeping with the Technology Management Plan to maintain documentation of technology resources (TARGET: 3rd Quarter 2019)
- Evaluate software on public and staff computers to ensure it is effective, reliable, and up-to-date (TARGET: ongoing)

GOAL E: Provide convenient, helpful services to the public via digital resources.

Objective E1: Use technology to communicate more effectively with the public

- Explore opportunities to provide library card applications online for convenient access to Emedia (TARGET: 3rd Quarter 2019)
- Explore live video and recorded video sharing online (Target: 4th Quarter 2019)
- Ensure the library's social media presence helps the library communicate with and effectively engage our community (TARGET: ongoing)

Objective E2: Provide digital library offerings

- Continue to provide access to subscription online databases (TARGET: ongoing)
- Expand downloadable eBook collection (TARGET: ongoing)
- Expand downloadable audio book collection (TARGET: ongoing)
- Explore downloadable magazine collection (TARGET: ongoing)
- Expand streaming media collection (TARGET: ongoing)

4. TECHNOLOGY INVENTORY

COLLABORATION:

Main Library

- 100 MB Internet connectivity provided by OPLIN and the CLEVNET consortium
- Library automation and catalog services provided through CLEVNET consortium

Bertram Woods Branch

- 100 Mbps fiber connection to Main Library provided by OPLIN and the CLEVNET consortium
- Library automation and catalog services provided through the CLEVNET consortium

INFRASTRUCTURE:

Main Library

- 2 Dell servers and 3 HP servers for domain administration and network management, file sharing, applications, and printer services.
- 1 HP server (CLEVNET owned) for backup domain administration
- 1 HP server for HVAC controls
- 1 router (CLEVNET owned)
- 10 multi-port switches (CLEVNET owned)
- 14 WAP (CLEVNET owned)
- 248 fully centralized in-wall premise category-5 and category-6 wiring runs; flush wall and/or floor mount terminations at the client end and rack and panel terminations in the distribution facilities, 79% utilized

Bertram Woods Branch

- 1 layer 3 switch (CLEVNET owned)
- 1 multi-port managed switch (CLEVNET owned)

- 1 router (CLEVNET owned)
- 4 WAP (CLEVNET owned)
- 72 fully centralized in-wall premise category-5 and category-6 wiring runs; flush and surface wall and/or floor mount terminations at the client end, 98% currently utilized

EQUIPMENT:

Main Library

- 74 public workstations with the following configuration:
 - 6 Internet/office application workstations in Adult Services
 - 11 Internet workstations in Youth Services
 - 1 laptop for Free Reading and Math Tutoring (MyCom owned)
 - 5 catalog workstations
 - 3 print release/sign up stations
 - 25 computer workstations in the Computer Center
 - 12 computer workstations in Training Lab
 - 5 computer workstations in Teen Center
 - 4 self-check machines in Circulation
 - 1 public scanning workstation
- 8 public network printers, including receipt printers and two color printers
- 4 public local printers, including receipt printers and document scanners
- 1 public color copier/scanner
- 58 dedicated staff workstations
- 2 shared staff laptop

- 11 staff network printers, including 1 copier/scanner and 1 color copier/scanner
- 16 staff local printers, including receipt and label printers
- 1 staff fax machine and 1 public fax machine
- 1 staff LCD projector
- 6 large-screen TVs, including digital signs, Teen Center, and for public use
- 1 public LCD projector,
- 1 public DVD player
- Various e-readers and tablets to support staff and public training
- 1 Wii gaming console in the Teen Center
- 1 Xbox One and 1 PlayStation 4

Bertram Woods Branch

- 13 public workstations with the following configuration:
 - 8 computer workstations
 - 4 computer workstations in children's area
 - 2 catalog workstation
- 2 public network printers, including 1 color printer
- 11 staff workstations
- 10 staff local printers, including receipt and label printers
- 1 self-check machine in Circulation
- 1 public print release/sign up station
- 1 staff fax machine
- 1 projector for staff and public use
- 2 large-screen TVs including digital sign and for programming

- 1 DVD player

SECURITY:

Main Library

- 3 DVRs and 1 NVR
- 57 security cameras

Bertram Woods Branch

- 1 NVR
- 12 security cameras

TELECOMMUNICATIONS:

Main Library

- 3 telephone lines for voice
- 1 telephone line for staff fax
- 2 telephone lines for security
- 1 telephone line for public fax

Bertram Woods Branch

- 1 telephone line for voice
- 2 telephone lines for security
- 1 telephone line for staff fax

COMPUTER SOFTWARE:

Operating System

- 2 Microsoft Windows Server 2008 r2s
- 3 Microsoft Windows Server 2012 r2s
- Microsoft Windows 7 on the workstations
- Microsoft Windows 10 on 4 workstations

Available and Supported Public Applications

- Microsoft Office 2016, Firefox, Chrome, and Internet Explorer 11
- Deep Freeze
- Windows Defender
- Cassie

Available and Supported Staff Applications

- SirsiDynix library automation client software
- Microsoft Office 2016, Office 365, Photoshop Elements 13, Internet Explorer 11, Microsoft Edge, Firefox, and Chrome
- Various specialized software for departments such as Maintenance, Security, Human Resources, Public Relations, Administration, and the Business Office

FUTURE PLANNED & BUDGETED HARDWARE, SOFTWARE, AND TELECOMMUNICATIONS SERVICES (as funds allow)

- Upgrade 30 public and staff workstations in 2019
- Upgrade 30 public and staff computer monitors in 2019
- Replace Financial Management software and Server in 2019
- Replace 1 smartboard with a SmartTV in 2019
- Upgrade or replace self-check systems in 2019
- Upgrade 30 public and staff workstations in 2020
- Upgrade 30 public and staff computer monitors in 2020
- Upgrade 1 server in 2020
- Upgrade 30 public and staff workstations in 2021
- Upgrade 30 public and staff computer monitors in 2021
- Upgrade 1 server in 2021

5. BUDGET

The library participates in the Federal Communication Commission's Universal Service Discount (E-rate) Program for affordable access to advanced telecommunication services.

The Shaker Heights Public Library Board of Trustees approves annual appropriations, which include funding for both telecommunications and technology. Currently, the library is operating on a four- to five-year replacement cycle for computer related equipment. In addition to yearly expenditures, the Library Board has the option of appropriating additional money for large-scale technology projects.

The library also pays yearly CLEVNET consortium fees to the Cleveland Public Library for automation services.

The following initiatives for 2019 have budgetary implications:

- Upgrade 30 public and staff workstations
- Upgrade 30 public and staff computer monitors
- Provide expanded, flexible Print/FAX/Scan services at Bertram Woods Branch (TARGET: 1st Quarter 2019)
- Replace 1 smartboard with a SmartTV in 2019
- Update HVAC server and software to ensure Windows 10 compatibility (TARGET: 2nd Quarter 2019)
- Implement recommendations for Financial Management software to best meet business needs (TARGET: 3rd Quarter 2019)
- Implement recommendations for staff ID maker software ensuring compatibility with Windows 10 (TARGET: 3rd Quarter)
- Migrate all computers using Windows operating systems to Windows 10 in order to maintain current technological business standards (TARGET: 3rd Quarter 2019)
- Install and manage software for facility security to facilitate best security practices and mitigate risk (TARGET: 4th Quarter 2019)

6. EVALUATION

The Technology Committee (consisting of Director, Deputy Director, and Digital Services 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 telecommunication use
- Review telecommunications costs
- Review telecommunications discounts for success

7. STAFF TRAINING

Staff training is conducted on an ongoing basis by attending various workshops. All staff members will receive ongoing training on enhancements to the SirsiDynix automation system as CLEVNET provides upgrades. 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, Microsoft Office applications, cloud computing, library databases, and e-readers. Software classes are developed and conducted by the library's technology trainer. Classes may also be offered by library partner organizations.

9. 2018 TECHNOLOGY PLAN ACCOMPLISHMENTS

- In compliance with the strategic plan goal of all computers being no more than five years old

- Replaced 12 computers and 1 staff computer in the Training lab; 11 public computers in Youth Services; and 3 staff laptops
 - Repurposed computers to replace outdated Teen Center and Express computers, public catalog workstations, and staff computers
 - Replaced printers in the Computer Center, Express Printing area, and Branch Manager
 - Replaced 1 file server that supports library file and printer services
- Upgraded staff and public computer software to Office 2016
- Replaced incompatible hardware and software in preparation for Windows 10 migration
- Explored opportunities to leverage new technology including:
 - Early literacy computers or tablets in Youth Services
 - In-library lending of tablets, laptops, or comparable equipment to the public
 - Implementation of a Creation Space or Memory Lab
- Worked with web designer to update home page that is easier to search and navigate and is a place for us to communicate our message.
- Worked with CLEVNET to implement InformaCast notification system to deliver emergency communications and announcements.
- Evaluated Financial Management software to best meet business needs.
- Assessed options and made recommendations for security systems including staff access controls, camera and DVR/NVR replacements, and system monitoring to ensure best practices to mitigate risk.
- Migrated CASSIE system server to CLEVNET virtual server.
- Evaluated options to replace older smartboard in Training Lab. Upon completion of evaluation, provided a prototype with spare equipment for demonstrations and assessment.

- Evaluated and selected Summer Reading software to address current staff and patron needs for summer 2019.
- Continued to work with CLEVNET to refine features available with VOIP including switching all FAX lines over to VOIP for a reduction in operating expenses.
- Explored expanded, flexible multi-function printing services for the Bertram Woods Branch.
- Mapped, analyzed, and documented shared network drives and printing resources to help discover wasted disk space, cleanup network drives, and secure user permissions.
- Migrated computer security and anti-virus management to a centralized CLEVNET support system
- Migrated mission critical network backup systems to a centralized system provided by CLEVNET to ensure system continuity.
- Migrated financial servers and file and print servers to a new integrated backup and disaster recovery system to ensure system continuity and mitigate risk.
- Evaluated software on public and staff computers to ensure it is effective, reliable, and up-to-date.
- Assessed the impact of a Windows 10 migration and developed a plan for a complete move for all public and staff computers in 2019.
- Installed updated digital signage.
- Provided training opportunities to enhance services provided to library users
 - Provided more than 222 one-on-one sessions to promote digital literacy at the individual level
 - Presented digital literacy opportunities by offering more than 62 Computer Classes attended by greater than 248 patrons

Approved by the SHPL Board of Trustees November 19, 2018.