Technology Plan

SHAKER HEIGHTS PUBLIC LIBRARY
SHAKER HEIGHTS, OHIO

JANUARY 1, 2020 THROUGH DECEMBER 31, 2022

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 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 selected staff computer equipment in compliance with the Library’s standard that all computer equipment is no more than five years old (TARGET: 2nd Quarter 2020)

- Evaluate HR/Payroll software systems to replace current inadequate system (TARGET: 4th Quarter 2020)
- Assess need for an update or redesign of the Staff Intranet (TARGET: 3rd Quarter 2020)
- Upgrade or replace staff computer equipment in compliance with the Library’s standard that all computer equipment is no more than five years old (TARGET: 2nd Quarter 2021)
- Replace Domain Controller to ensure reliability and in compliance with the Library’s standard that all computer equipment are no more than five years old (TARGET: 3rd Quarter 2021)
- Address results of Intranet Assessment and implement necessary changes (TARGET: 4th Quarter 2021)
- Upgrade or replace CISCO phones to maintain support levels required by vendor (TARGET: 2nd Quarter 2022)
- Continue to upgrade staff computer equipment, in compliance with the Library’s standard that all computer equipment is no more than five years old (TARGET: ongoing)
- Audit current security cameras to ensure older cameras are replaced/repaired as needed (TARGET: ongoing)

**Objective A2: Upgrade hardware and software for public**
- Upgrade public computer equipment in compliance with the Library’s standard that all computer equipment is no more than five years old (TARGET: 2nd Quarter 2021)
- 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 A3: Leverage new technology**
- Transition staff files/data to SharePoint for reduced costs and improved storage capacity (TARGET: 2nd Quarter 2020)
- Explore options for a facilities maintenance ticketing system (TARGET: 1st Quarter 2021)

**Objective A4: Implement Technology in support of renovations**
• Provide laptop lending for flexible and convenient on-site public computer use (TARGET: 3rd Quarter 2020)

• Evaluate options and upgrade or replace digital signage as determined by assessment (TARGET: 2nd Quarter 2021)

• Evaluate opportunities for the purchase of updated presentation and AV equipment in meeting rooms and coordinate installation (TARGET: 2nd Quarter 2021)

• Coordinate purchase of IP speakers for meeting rooms and throughout library (TARGET: 2nd Quarter 2021)

• Provide expanded, flexible printing services such as multi-function printers/copiers (TARGET: 2nd Quarter 2021)

• Implement Papercut print management software, kiosks, and paystations to provide flexible and simple wireless printing (TARGET: 2nd Quarter 2021)

• Evaluate options and implement self-check system replacement or updates (TARGET: 2nd Quarter 2021)

• Assess need and opportunities for early literacy computers and related technology in the Children’s area and address results as necessary (TARGET: 2nd Quarter 2021)

• Identify and purchase gaming systems for teen engagement (TARGET: 2nd Quarter 2021)

• Purchase Smart TV, laptops, and relevant equipment for mobile training lab (TARGET: 2nd Quarter 2021)

• Assess need for charging stations or lockers for public mobile devices and address results as necessary (TARGET: 2nd Quarter 2021)

• Replace people counters with a more flexible product that provides enhanced reporting and data (TARGET: 2nd Quarter 2021)

• Outfit a creation space based on research and exploration including community feedback and interests (TARGET: 2nd Quarter 2021)
• Update and expand security cameras throughout renovated building (TARGET: 2nd Quarter 2021)

• Expand building access controls throughout renovated building (TARGET: 2nd Quarter 2021)

• Work collaboratively with Architects, Building Design Team, and CLEVNET to provide technology recommendations for library renovations based on community need, best practices, and budget (TARGET: 4th Quarter 2021)

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: 3rd Quarter 2021)

• 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 2021)
• 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)

• 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.

• Explore implementation of a meeting room and event scheduling system provided by CLEVNET based on staff and community needs (TARGET: 1st Quarter 2020)

• Implement necessary changes to current meeting room and event scheduling system, or migrate system based on exploration of CLEVNET provided system (TARGET: 2nd Quarter 2020)

• In collaboration with CLEVNET explore opportunities to provide library card applications online for convenient access to Emedia (TARGET: 4th Quarter 2020)

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

- Develop plan to ensure any user data stored in the Incident Tracker software that is eligible within the data retention policy will be discarded annually. (TARGET: 2nd Quarter 2020)
- 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

- Evaluate software on public and 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 the library website is current and convenient for customers

- Design new Library website for an enhanced user experience and improved communications (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 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: 3rd Quarter 2020)

- Re-assess social media opportunities including social media platforms to develop a social media plan (TARGET: 4th Quarter 2020)

- Evaluate opportunities and options for live and recorded video sharing online (TARGET: 4th Quarter 2020)

- Implement social media plan to effectively engage our community (TARGET: 2nd Quarter 2021)

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

- 4 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
  - 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 the Teen Center
  - 4 self-check machines in Circulation
• 1 public scanning workstation
• 58 dedicated staff workstations
• 2 shared staff laptops
• 46 printers including copiers, document scanners, receipt printers, 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
• 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
• 12 staff workstations
• 13 printers including copiers, document scanners, receipt printers, 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
- 1 Security Surveillance Server
- 53 security cameras

Bertram Woods Branch
- 12 security cameras

TELECOMMUNICATIONS:

Main Library
- 1 telephone line for voice
- 2 telephone lines for fire/burglar

Bertram Woods Branch
- 1 telephone line for voice
- 2 telephone lines for fire/burglar

COMPUTER SOFTWARE:

Operating System
- 4 Microsoft Windows Server 2012 r2s
- Microsoft Windows 10 on the workstations

Available and Supported Public Applications
- Microsoft Office 2016, Firefox, Chrome, Internet Explorer 11, and Microsoft Edge
- Deep Freeze
- Windows Defender
- Cassie
Available and Supported Staff Applications

- SirsiDynix library automation client software
- Microsoft Office 2016, Office 365, Photoshop Elements 13, Adobe Creative Cloud, 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

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 2020 have budgetary implications:

- Upgrade 3 staff computers
- Upgrade 3 staff computer monitors
- Upgrade or replace HR/Payroll systems
- Design new website

The following initiatives for 2021 have budgetary implications:

- Upgrade and replace staff and public computer equipment
- Replace Domain Controller
- Facilities maintenance ticketing software

The following initiatives for 2022 have budgetary implications:
• Upgrade 30 public and staff computers and monitors
• Upgrade staff CISCO phones
• Upgrade and replace out-of-date security cameras
• Replace one file server

The following initiatives are in support of renovations and have budgetary implications:
• Provide Laptop vending for easy and convenient on-site laptop lending
• Replace or update digital signage system and digital TVs
• Replace AV equipment for meeting rooms
• Install IP speakers for meeting rooms
• Purchase multi-function printers and services for public and staff
• Install Papercut kiosk for wired and wireless printing services at Main Library
• Update and replace self-check systems
• Purchase early literacy computers or tablets
• Purchase gaming systems for teen engagement
• Purchase SmartTV and Laptops for mobile training lab
• Purchase charging stations and lockers for public mobile devices
• Purchase and install people counters
• Outfit a Creation Space with innovative and engaging equipment and technology
• Update and replace out-of-date security cameras
• Expand building access controls throughout renovated building

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. 2019 TECHNOLOGY PLAN ACCOMPLISHMENTS

- In compliance with the Library’s standards of all computers being no more than five years old
  - Replaced 25 public computers in the Computer Center and 5 staff computers including laptops
  - Repurposed computers to replace outdated public service desk computers and staff computers
  - Replaced one staff printer at the Bertram Woods Branch
  - Replaced one staff printer at Main Library
  - Replaced 5 bar code scanners at self-check computers for ease of use
- Replaced 1 file server that supports the new financial management system

- Upgraded all staff and public computer operating systems to Windows 10.

- Developed preliminary technology recommendations for library renovations based on community need, best practices, and budget.

- Evaluated options and made recommendations for security surveillance and access control systems to ensure best practices to mitigate risk.

- Audited current security cameras and developed a plan to ensure older cameras are replaced/repaired as needed.

- Installed and implemented new access control systems to ensure best practices to mitigate risk.

- Installed new security surveillance systems for centralized management and better security controls.

- Implemented new Summer Reading software to address current staff and patron needs for summer 2020.

- Replaced remaining business managed phone lines to VoIP for a reduction in operating expenses.

- Instituted free FAXing services as a result of replacing business managed phone lines with VoIP.

- Updated HVAC server and software for compatibility with Windows 10.

- Installed new multi-function copier/printer/scanner/FAX to provide expanded services to the Bertram Woods Branch.

- Installed new Incident Tracker software for better management and monitoring of incidents.

- Purchased and installed a large format printer for Public Relations for a reduction in printing expenses.
• Assessed and implemented solutions for improved website forms to provide ease and convenience for staff and public users.

• Conducted software audit and inventory in keeping with the Technology Management Plan to maintain documentation of technology resources.

• Provided training opportunities to enhance services provided to library users.
  o Offered more than 85 one-on-one training sessions to promote digital literacy at the individual level
  o Presented digital literacy opportunities by offering more than 25 Computer Classes attended by greater than 100 patrons.

Approved by the SHPL Board of Trustees December 16, 2019