

Technology Plan

SHAKER HEIGHTS PUBLIC LIBRARY SHAKER HEIGHTS, OHIO

JANUARY 1, 2018 THROUGH DECEMBER 31, 2020

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

- Work with web designer to update home page that is easier to search and navigate and is a place for us to communicate our message (TARGET: 1st Quarter 2018)
- Complete a website assessment to determine if an update or re-design is necessary (TARGET: 3rd Quarter 2018)
- Design or update website based upon assessment results (TARGET: 4th Quarter 2019)
- 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

- Work with CLEVNET to implement InformaCast notification system to deliver emergency communications and announcements (TARGET: 1st Quarter 2018)
- Test new barcode scanners in Circulation for improved efficiency and more accurate scanning (TARGET: 2nd Quarter 2018)
- Evaluate upgrades for Financial Management software and alternatives to best meet business needs (TARGET: 4th Quarter 2018)
- 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)
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- Audit current security cameras to ensure older cameras are replaced/repaired as needed (TARGET: ongoing)

Objective A3: Upgrade hardware and software for public

- Migrate CASSIE system server to CLEVNET virtual server (TARGET: 1st Quarter 2018)
- Evaluate options to replace older smartboard in Training Lab (TARGET: 3rd Quarter 2018) Evaluate Summer Reading software to address current staff and patron needs for summer 2019 (Target: 4th Quarter 2018)

Assess 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: 4th Quarter 2018)

- 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

- Implement Memory Lab or other appropriate services for customers to digitize their older personal media (TARGET: 3rd Quarter 2019)
- Explore providing early literacy computers or tablets in Youth Services (TARGET: 4th Quarter 2018)
- Explore software to facilitate incident reporting, tracking, and analysis (TARGET: 4th Quarter 2018)
- Explore in-library lending of tablets, laptops, or comparable equipment to the public (TARGET: 3rd Quarter 2019)

- Investigate implementing a creation space, based on community input and expressed community needs (TARGET: 4th Quarter 2019)
- Continue to work with CLEVNET to refine features available with VoIP (TARGET: ongoing)

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 2018)
- 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 explore expanding what the library offers

- 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 (TARGET: 4th Quarter 2018)
- 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 adequate, reliable, up-to-date, and cost effective computer services to the public

Objective C1: Increase the level of self-service features for the public

- Explore expanded, flexible printing services such as wireless and multi-function printers (TARGET: 3rd Quarter 2018)
- 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)
- Ensure the meeting room and event scheduling system is reliable and up-to-date based on staff and community needs (TARGET: ongoing)

Objective C2: Maintain adequate 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)
- Map, analyze, and document shared network drives and printing resources to help discover wasted disk space,

cleanup network drives, and secure user permissions
(TARGET: 1st Quarter, 2018)

- Migrate computer security and anti-virus management to a centralized CLEVNET supported system (TARGET: 3rd Quarter 2018)
- Replace 1 file server to comply with the strategic plan goal of all computers being no more than five years old (TARGET: 3rd Quarter 2018)
- 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 2018)
- Evaluate software on public and staff computers to ensure it is effective, reliable, and up-to-date (TARGET: ongoing)

GOAL E: Provide expanded services to the public via digital resources.

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

- Explore live video and recorded video sharing online (Target: 4th Quarter 2018)
- Install updated digital signage and assess potential system expansion (Target: 2nd Quarter 2018)

- Continue to expand social media presence (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 2 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)
- 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
 - 2 laptops for Free Reading and Math Tutoring
 - 1 laptop for Free Reading and Math Tutoring (MyCom owned)
 - 5 catalog workstations
 - 3 print release/sign up stations
 - 25 Internet/office application workstations in the Computer Center

- 12 Internet/office application workstations in Training Lab
- 5 Internet/office application workstations in Teen Center
- 4 self-check machines in Circulation
- 1 public scanning workstation
- 9 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
- 57 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
- 1 large-screen TV in the Teen Center
- 1 public LCD projector, 1 large-screen TV and 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
- 2 digital bulletin boards

Bertram Woods Branch

- 13 public workstations with the following configuration:

- 8 Internet/office application workstations
- 4 Internet workstations in children's area
- 2 catalog workstation
- 1 public scanning workstation
- 3 public network printers, including 1 color printer
- 1 public local document scanner
- 11 staff workstations
- 9 staff local printers, including receipt and label printers
- 1 staff multifunction Lexmark inkjet color printer/ copier/ scanners
- 1 self-check machine in Circulation
- 1 public print release/sign up station
- 1 staff fax machine
- 1 digital bulletin board
- 1 projector for staff and public use
- 1 large-screen TV and DVD player

SECURITY:

Main Library

- 3 DVRs and 1 NVR
- 57 security cameras

Bertram Woods Branch

- 1 NVR
- 10 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
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COMPUTER SOFTWARE:

Operating System

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

Available and Supported Public Applications

- Microsoft Office 2013, Firefox, Chrome, and Internet Explorer 11
- Deep Freeze
- BitDefender
- Photoshop Elements 13
- Cassie

Available and Supported Staff Applications

- SirsiDynix library automation client software
- Microsoft Office 2013, Office 365, Photoshop Elements 13, Internet Explorer 11, 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 2018
- Upgrade 30 public and staff computer monitors in 2018
- Upgrade 1 server in 2018
- Replace 1 smartboard in 2018
- Upgrade 5 public catalog/database workstations in 2018
- Upgrade 30 public and staff workstations in 2019
- Upgrade 30 public and staff computer monitors in 2019
- Upgrade 1 server in 2019
- Upgrade 30 public and staff workstations in 2020
- Upgrade 30 public and staff computer monitors in 2020
- Upgrade 1 server in 2020

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 2018 have budgetary implications:

- Upgrade 30 public and staff workstations
- Upgrade 30 public and staff computer monitors

- Replace 14 barcode scanners in Circulation for improved efficiency and more accurate scanning (TARGET: 2nd Quarter 2018)
- Work with web designer on new web page templates for Kids and Teens pages (TARGET: 1st Quarter 2018)
- 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)
- Implement Memory Lab or other appropriate services for customers to digitize their older personal media (Target: 3rd Quarter 2018)
- Explore expanded, flexible printing services such as wireless and multi-function printers (TARGET: 3rd Quarter 2018)
- Replace smartboard in Training Lab (TARGET: 3rd Quarter 2018)
- Replace 1 file server to comply with the strategic plan goal of all computers being no more than five years old (TARGET: 3rd Quarter 2018)
- Explore live and recorded video sharing online (Target: Fall 2018)
- Install updated digital signage and assess potential of system expansion (Target: 2nd Quarter 2018)

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. 2017 TECHNOLOGY PLAN ACCOMPLISHMENTS

- In compliance with the strategic plan goal of all computers being no more than five years old
 - Replaced 25 Computer Center computers and 3 staff computers
 - Repurposed computers to replace antiquated staff computers
 - Replaced 1 file server that supports internal library applications
- Expanded gaming programs with adult game nights, Wii Wednesdays for Teens and Wii Tuesday for school age children, structured Minecraft game days and Minecraft Free Play
- Provided training opportunities to enhance services provided to library users
 - Formulated technology competencies, a set of observable and measurable skills, knowledge and performance behaviors that contribute to successful employee performance and the effective and efficient function of the organization.
 - Assessed customer training needs and technology training trends and adjusted the focus of technology training to the individual and adapting to provide more one-on-one training for customers and fewer classes.

- Provided more than 150 one-on-one sessions to promote digital literacy at the individual level
- Presented digital literacy opportunities by offering more than 75 Computer Classes attended by greater than 250 patrons
- Presented 9 training sessions to 50 employees for the new meeting room and events scheduling software
- Migrated the meeting room and event scheduling system to a more reliable and up-to-date application
- Implemented effective systems for security, disaster prevention and recovery
 - Developed a Technology Management Plan to address the particular ways in which we should approach the use of technology in our business strategy and operations
 - Replaced expired security software with BitDefender to monitor and mitigate risk
 - Installed WSUS (Windows Server Update Services) in keeping with secure application management practices for timely application of updates and patches in technology management
 - Improved security of network administration by re-assessing and modifying the structure of our distribution groups, users, and computers
- Provided expanded services to the public via digital resources
 - Added blogging features to website
 - Purchased the Constant Contact newsletter services to provide better and more attractive newsletters
 - Introduced Formidable Forms to our web services for more flexible and easy to maintain web forms
- Reviewed telecommunications use resulting in a savings of \$23,000 the first year and another \$3,000 for following years
- Assessed options for maintenance of the fiber network that connects Main Library and Bertram Woods. Oplin ordered a new line and CLEVNET will provide maintenance at a savings of approximately \$2,000 annually
- Developed an Access database to track communication plan tasks and objectives

- Evaluated and implemented free CRM (Customer Relationship Management) software to support and manage community relationship data
- Evaluated and implemented options for Asset Management software for facilities planning and inventory control

Approved by the SHPL Board of Trustees December 18, 2017.