

# Technology Plan

## SHAKER HEIGHTS PUBLIC LIBRARY SHAKER HEIGHTS, OHIO

JANUARY 1, 2017 THROUGH DECEMBER 31, 2019

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### 1. MISSION STATEMENT

Shaker Heights Public Library builds community and enriches 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 on new web page templates for Kids and Teens pages (TARGET: Winter 2017)
- Work with web designer on a photo shoot to update select images on the website (TARGET: Spring 2017)
- 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**

- Continue to upgrade all staff workstations to comply with the strategic plan goal of all computers being no more than five years old (TARGET: ongoing)
- Implement a plan to upgrade select staff and public computer monitors annually to ensure older computer monitors are replaced as needed (TARGET: ongoing)
- Audit current security cameras to ensure older cameras are replaced/repared as needed (TARGET: ongoing)

**Objective A3: Upgrade hardware and software for public**

- Upgrade or replace smartboard in Training Lab (TARGET: Summer 2017)
- 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: Fall 2018)
- Ensure mobile devices such as tablets and e-readers used for customer and staff training are current models (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**

- Explore programming with robotics or alternative technologies in Youth Services (TARGET: Spring 2017)
- Implement Memory Lab or other appropriate services for customers to digitize their older personal media (TARGET: Spring 2017)
- Explore in-library lending of tablets, laptops, or comparable equipment to the public (TARGET: Summer 2017)
- Explore providing early literacy computers or tablets in Youth Services (TARGET: Fall 2017)
- Expand gaming programs with additional formats, technology, and target groups (TARGET: Fall 2017)
- Implement software to facilitate incident reporting, tracking, and analysis (TARGET: Fall 2017)
- Investigate implementing a creation space, based on community input and expressed community needs (TARGET: Fall 2018)
- 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 technology competencies and training specific to each department and job classification (TARGET: Fall 2017)
- 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: Fall 2017)
- 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**

- 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: Winter 2017)
- Ensure the meeting room and event scheduling system is reliable and up-to-date based on staff and community needs (TARGET: Winter 2017)

- Explore expanded, flexible printing services such as wireless and multi-function printers (TARGET: Fall 2017)

**Objective C2: Maintain adequate network resources.**

- Continue collaboration with the City of Shaker Heights in pursuit of high speed internet access with One Community (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 disaster prevention and recovery**

- Develop a Technology Management Plan to address the particular ways in which we should approach the use of technology in our business strategy and operations (TARGET: Winter 2017)
- Implement regular hardware cleaning schedule to maintain equipment integrity (TARGET: Winter 2017)
- Replace 1 file server to comply with the strategic plan goal of all computers being no more than five years old (TARGET: Summer 2017)
- Replace or re-license Kaspersky security software (license to expire Fall 2017) (TARGET: Summer 2017)
- Include network security practices for timely application of updates and patches in a technology management plan (TARGET: Fall 2017)
- 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**

- Use systems management software to simultaneously and remotely upgrade all of the library's computers to current versions of Internet browsers, web applications, and plug-ins (TARGET: Summer 2017)
- Evaluate software on public and staff computers to ensure it is effective, reliable, and up-to-date (TARGET: Fall 2017)
- Implement a software upgrade policy to ensure that the library periodically evaluates and updates its network software (TARGET: Fall 2017)

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

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

- Add blogging features to website (TARGET: Winter 2017)
- Explore live video and recorded video sharing online (Target: Fall 2017)
- Continue private/public partnership for widescreen messaging (TARGET: ongoing)
- 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 through the OPLIN project
- Library automation and catalog services provided through CLEVNET consortium

#### Bertram Woods Branch

- Fiber optic connection to Main Library via pass through at Shaker Heights City Hall
- Library automation and catalog services provided through CLEVNET consortium

### INFRASTRUCTURE:

#### Main Library

- 3 Dell servers and 1 HP server for domain administration and network management, file sharing, printer services, application, and web services
- 1 HP server (vendor owned) for backup domain administration
- 1 HP server (vendor managed) for HVAC controls
- 1 router (vendor owned)
- 10 multi-port switches (vendor owned)
- 14 WAP (vendor 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 (vendor owned)
- 1 multi-port managed switch (vendor owned)

- 4 WAP (vendor 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 workstations in Adult Services
  - 11 Internet workstations in Youth Services
  - 3 laptops for Free Reading and Math Tutoring
  - 1 laptop for Free Reading and Math Tutoring (MyCom owned)
  - 5 catalog/database research workstations
  - 2 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
- 9 dedicated public network printers, including receipt printers and one color printer
- 1 public color copier/scanner
- 57 dedicated staff workstations
- 1 shared staff laptop
- 1 shared staff wireless hotspot
- 9 dedicated staff network printers, including 1 copier/scanner and 1 color copier/scanner



- 24 dedicated 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 provided and managed by Digital Media partners

#### **Bertram Woods Branch**

- 13 public workstations with the following configuration:
  - 8 Internet workstations
  - 4 Internet workstations in children's area
  - 2 catalog/database research workstation
- 3 dedicated public network printers, including 1 color printer
- 12 dedicated staff workstations
- 9 dedicated staff local printers, including receipt 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 provided and managed by Digital Media partners
- 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 DVR
- 10 security cameras

**TELECOMMUNICATIONS:**

**Main Library**

- 2 telephone lines for voice
- 6 telephone lines for fax/security/ credit
- 2 telephone lines for modems
- 1 public fax line

**Bertram Woods Branch**

- 3 telephone lines for voice
- 3 telephone lines for fax/security/ credit

**COMPUTER SOFTWARE:**

**Operating System**

- 3 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
- Kaspersky
- 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 2017
- Upgrade 30 public and staff computer monitors in 2017
- Upgrade 1 server in 2017
- Replace 1 smartboard in 2017
- Upgrade 5 public catalog/database workstations in 2017
- Upgrade 30 public and staff workstations in 2018
- Upgrade 30 public and staff computer monitors in 2018
- Upgrade 1 server in 2018
- Upgrade 30 public and staff workstations in 2019
- Upgrade 30 public and staff computer monitors in 2019
- Upgrade 1 server in 2019

## 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 2017 have budgetary implications:

- Ensure mobile devices such as tablets and e-readers used for customer and staff training are current models
- Work with web designer on new web page templates for Kids and Teens pages (TARGET: Winter 2017)
- 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: Winter 2017)
- Work with web designer on a photo shoot to update select images on the website (TARGET: Spring 2017)
- Explore expanded, flexible printing services such as wireless and multi-function printers (TARGET: Fall 2017)
- Replace smartboard in Training Lab (TARGET: Summer 2017)
- Replace 1 file server to comply with the strategic plan goal of all computers being no more than five years old (TARGET: Summer 2017)
- Replace or re-license Kaspersky security software (TARGET: Summer 2017)
- Explore early literacy computers or tablets in Youth Services (TARGET: Fall 2017)

## **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 on-going 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, e-readers, 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. 2016 TECHNOLOGY PLAN ACCOMPLISHMENTS**

- Website updated for customer convenience
  - Updated website to prepare for CLEVNET switch from BiblioCommons to Enterprise

- Added Featured Programs to website Home Page
  - Added quick links to Digital Media on the website Home Page
- Replaced 24 public computers to comply with the strategic plan goal of all computers being no more than five years old
  - Replaced 12 Training Lab computers and 1 staff computer in Training Lab
  - Replaced 12 public computers at Bertram Woods Branch
  - Repurposed computers to replace antiquated staff computers
- Software and Hardware updates for public and staff computers to improve performance and maintain existing equipment
  - Added memory to improve performance on Computer Center and Children's computers
  - Upgraded all staff and public computers to Office 2013
  - Upgraded all staff and public computers to Internet Explorer 11
- Implemented effective systems for disaster prevention and recovery
  - Installed backup domain controller for redundancy
  - Installed Kaspersky security software for computer virus prevention
  - Installed DeepFreeze enterprise to secure public computers from malicious activities
  - Installed uninterruptable power supplies (UPS) in the Server room to prevent damage to servers from power surges or outages
  - Implemented network security practices for timely application of updates and patches with LabTech (provided by Clevnet) and Ninite software
  - Migrated management of daily and incremental backups to Clevnet
- Replaced failing file server / domain controller that manages user logins and authentication
- Added Photoshop Elements 13 in the training lab and presented classes on its use

- Provided individual assistance through one-on-one help by appointment for at least 30 minute sessions to promote digital literacy at the individual level for more than 66 people
- Provided in-class computer training for more than 160 people
- Updated the TechLogic self-check system so customers can renew their materials online
- Installed a maintenance update for the CASSIE time and print management system resolving customer printing issues
- Piloted Chromebox as a less expensive replacement for the antiquated Public Catalog computers.
- Installed 1 personal OCR scanner in the Computer Center and 1 at the Bertram Woods Branch that will allow the customer to convert personal documents to Microsoft Word for editing
- Increased the number of wireless access points from 6 to 14 at the Main Library and from 3 to 4 at Bertram Woods Branch to improve customer access to wireless throughout both buildings
- Monitored customer computer use through the monthly collection of the number of wireless sessions provided by Clevnet
- Evaluated technology staffing needs which resulted in the creation of the Digital Services Department
- Implemented in-house Banner Printing for a cost savings to public relations budget
- Introduced Wireless Hotspots for public lending

Approved by the SHPL Board of Trustees December 12, 2016.