1. INTRODUCTION
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.

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

3. TECHNOLOGY VISION
The vision for technology, mirroring the library’s mission of transforming lives by “bringing together people, information, and ideas,” is to provide effective and equitable access to technology within the library and to the broader world of online resources beyond the library walls.

4. GUIDING PRINCIPLES
Shaker Library strives to be an integral and vibrant center for our community by providing access to computers, high-speed internet, up-to-date online databases, and software to help users meet their educational, occupational, informational, and entertainment needs. In addition to supporting the library’s mission statement above, the following principles are inherent in each of the library’s technology goals:

- We ensure that the needs of the community are the driving force in our decision-making processes.
- We use proven, cost-effective methods to maintain, upgrade, and enhance technologies and to introduce new ones.
- We standardize equipment and configurations whenever possible to simplify maintenance and upgrades.
- We comply with state and national standards and encourage vendor compliance with standards.
- We make public access computers available to all sectors of the population.
- We regularly evaluate and adapt the goals, strategies, and tasks to ensure success of the plan.
We continually monitor and review installed technologies for relevance and effectiveness.
We monitor technology trends and implement them if feasible and appropriate.
We regularly evaluate statistics and services to best answer the needs of our users.
We provide hands-on, one-on-one, and group learning opportunities to help our customers learn the skills they need to become digitally literate.
Library staff is provided with the necessary training in order to remain current with the new technologies so they may train our customers to use them.
We strive to cooperate with other libraries, governmental units, schools, and community organizations to improve the quality and efficiency of electronic services.

5. TECHNOLOGY ASSESSMENT

Inventory

<table>
<thead>
<tr>
<th></th>
<th>Main Library</th>
<th>Bertram Woods</th>
<th>Storage</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Desktop</td>
<td>18</td>
<td>12</td>
<td>14</td>
<td>44</td>
</tr>
<tr>
<td>Staff Laptop</td>
<td>13</td>
<td>1</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Public Desktop</td>
<td>11</td>
<td>12</td>
<td>45</td>
<td>68</td>
</tr>
<tr>
<td>Public Laptop</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Public Catalog</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Self-Check Station</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Print Station</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Tablets/iPads</td>
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<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Digital Screen</td>
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<td>2</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Staff Printer</td>
<td>17</td>
<td>3</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>Public Printer</td>
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<td>2</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Copier</td>
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<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>MFP copy/fax/scan</td>
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<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Desktop Scanners</td>
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<td>Webcams</td>
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<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Cameras</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

All technology assets are tagged and documented in the Asset Management software. When an item is decommissioned, it will be de-accessioned in the software.

Equipment no longer useful or in use is disposed of in accordance with the Disposal of Surplus Material and Equipment Policy.

Computer Software
- 3 Microsoft Windows Server 2012 r2s
- Microsoft Windows 10 on the workstations
- Microsoft Office 2016
Network and Infrastructure
Shaker Heights Public Library is a member of the CLEVNET Consortium which provides all network connectivity and additional technical services including library automation, catalog services, security software, telephony (VoIP), and wireless internet access.

100 Mb internet connectivity is provided by OPLIN and the CLEVNET Consortium.

A 100 Mbps fiber connection links Main Library and Bertram Woods Branch.

The Main Library and Bertram Woods Branch each maintain 3 business phone lines:

• 1 telephone line for voice
• 2 telephone lines for security and fire

Servers and Backups
CLEVNET provides and maintains a virtual server in the State of Ohio Computer Center (SOCC) managed by OPLIN for applications. The Domain Controller is scheduled to be moved to the SOCC in 2021.

CLEVNET also provides backup and recovery for most files, systems, and servers. In the instances when CLEVNET does not support backup and recovery, the library maintains backup systems.

The library maintains additional servers in support of the following services:

• Self-check systems
• Domain Controller and Backup Domain Controller
• Financial Management Systems
• Security and Access Control systems
• HVAC systems
• File and Printer shares

6. 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.
7. TECHNOLOGY GOALS AND OBJECTIVES

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. Objectives with significant budgetary implications will be marked with an asterisk (*).

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

Objective A1: Upgrade Hardware and Software
- Replace backup system for servers previously backed up by CLEVNET (TARGET: 1st 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: 2nd Quarter 2021)*
- Replace HR/Payroll system to ensure reliability and ease of use (TARGET: 1st Quarter 2021)*
- Update or replace out-of-date intranet theme and necessary components in order to provide uninterrupted internal communication (TARGET: 4th Quarter 2021)
- Upgrade or replace CISCO phones to maintain support levels required by vendor (TARGET: 2nd Quarter 2022)*
- Evaluate benefits of upgrading to Microsoft Office 2019 (TARGET: 3rd Quarter 2022)
- Renegotiate contract with Spectrum for the Fiber network between Main Library and Bertram Woods branch (TARGET: 3rd Quarter 2023)*

Objective A2: Leverage new Technology
- Assess meeting room software options (TARGET: 1st Quarter 2021)
- Migrate to new meeting room software if justified by assessment (TARGET: 2nd Quarter 2021)
- Explore options for a facilities maintenance ticketing system (TARGET: 3rd Quarter 2022)
- Explore moving Finance server to the Cloud for reduced hardware costs and better disaster recovery solutions (TARGET: 3rd Quarter 2023)*
- Explore virtual server environments for simpler and more efficient infrastructures (TARGET: 4th Quarter 2023)*
Objective A3: Implement Technology in support of Renovations

- Upgrade or replace digital signage for improved communication to the public (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 pay stations to provide flexible and simple wireless printing (TARGET: 2nd Quarter 2021)*

- Replace and relocate basement wiring rack to enable better flexibility for cable management and expanded networking capacity (TARGET: 1st Quarter 2021)*

- Provide laptop lending for flexible and convenient on-site public computer use (TARGET: 1st Quarter 2021)*

- Install self-check system replacement or updates (TARGET: 1st Quarter 2021)*

- Coordinate with vendor and contractors for installation of updated presentation, collaboration, and AV equipment in meeting rooms (TARGET: 4th Quarter 2021)*

- Coordinate installation of IP speakers for meeting rooms and throughout library (TARGET: 4th Quarter 2021)

- Purchase and install touchscreens for early literacy in the Children’s area (TARGET: 4th Quarter 2021)*

- Identify and purchase gaming systems for teen engagement (TARGET: 4th Quarter 2021)*

- Replace analog security cameras with IP cameras throughout renovated building (TARGET: 4th Quarter 2021)*

- Expand building access controls throughout renovated building (TARGET: 4th Quarter 2021)*

- Purchase Smart TV, laptops, and relevant equipment for mobile training lab (TARGET: 4th Quarter 2021)*

- Outfit creation spaces (to be known as The Workshop and The Tech Studio) based on research and exploration including community feedback and interests (TARGET: 4th Quarter 2021)*
- Replace elevator phone security system for updated and improved service (TARGET: 4th Quarter 2021)*

- Replace antiquated fire and burglar system for better safety and service (TARGET: 4th Quarter 2021)*

**GOAL B: Promote Digital Literacy through educational programs and/or assistance to the community and staff on the use of information technology**

**Objective B1: Provide computer/technology learning opportunities for customers of all ages on a variety of topics**
- Conduct customer training needs assessments and develop appropriate classes in response (TARGET: 3rd Quarter 2022)

- Develop training sessions and documentation for tools provided in The Tech Studio and The Workshop (TARGET: 4th Quarter 2022)

- Explore expanding class offerings by partnering with other organizations such as libraries, schools, colleges, and corporations, including opportunities for the mobile training lab (TARGET: 4th Quarter 2022)

**Objective B2: Provide staff development opportunities to ensure all staff meet expected technology competency levels**
- Formulate assessments for technology competencies and training specific to each department and job classification (TARGET: 2nd Quarter 2022)

- Develop staff training and documentation for tools provided in the Creation Space to help staff provide appropriate support to customers (TARGET: 2nd Quarter 2022)

- Develop plans for ongoing staff training and development (TARGET: 3rd Quarter 2022)

**GOAL C: Use technology to communicate more effectively with the public**

**Objective C1: Ensure the library website is current and convenient for the public**
- Participate in community project to update Shaker Buildings database site and migrate ownership and management of site from City of Shaker Heights to Shaker Library (TARGET: 3rd Quarter 2021)

- Design new library website for an enhanced user experience and improved communications (TARGET: 1st Quarter 2022)*

- Develop a process for evaluating website analytics including specific page hits and statistics to determine usage and viewship (TARGET: 4th Quarter 2022)

- Identify and implement appropriate tools to monitor and evaluate website links and content at least monthly (TARGET: 4th Quarter 2022)
Objective C2: Ensure the library’s social media presence is timely and effectively engaging to the community

- Re-evaluate all social media platforms to assess community reach and develop a plan of engagement (TARGET: 4th Quarter 2021)

- Update and implement social media guidelines and processes (TARGET: 4th Quarter 2021)

8. TRAINING

Staff Training
Staff receive training on an ongoing basis by attending workshops from a variety of providers. 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.

Public Classes
Public Classes include the following topics: basic computer skills, internet browsing and searching, Microsoft Office applications, cloud computing, library databases, and using e-books, e-readers, and other downloaded or streaming media. Software classes are developed and conducted by the Library’s Technology Trainer. Classes may also be offered by library partner organizations.

9. TECHNOLOGY MAINTENANCE

Technology Management Plan
Ongoing and routine maintenance of technology will be documented and managed based on the Technology Management Plan which will be administered by the Digital Services Manager, in consultation with the Technology Committee. The Technology Management Plan will be updated as necessary and reviewed on an annual basis.

Disaster Recovery
The Library’s Disaster Recovery Plan outlines disaster preparedness and recovery for library technology. The Disaster Recovery Plan is reviewed and updated as necessary and on an annual basis by the Technology Committee.

10. 2020 TECHNOLOGY PLAN ACCOMPLISHMENTS

- Coordinated for instant and unplanned remote work while providing unprecedented, ongoing support for employees.
• Outfitted essential employees with the necessary equipment, software, and tools to do their jobs remotely.

• Researched, identified, and implemented the appropriate tools for creating virtual programming including YouTube video production, social media, and Zoom webinars.

• Developed processes and procedures for remote customer and staff communication and engagement.

• In support of Phase 1 of renovations, prepared wiring closets by organizing and removing unused Ethernet ports.

• Provided network infrastructure to temporary spaces by running wires and pulling Ethernet into rooms/spaces.

• Relocated public and staff computers, printers, phones, and associated computer equipment to temporary spaces for Phase 1 renovations.

• Prepared east entrance for door access control and surveillance.

• Worked with vendor to install door access controls and surveillance at east entrance.

• Improved customer and staff experience by adjusting phone call-flow, implementing hunt-groups, and adjusting internal processes.

• Transitioned all online forms (intranet and website) to a more convenient, reliable and flexible platform.

• Transitioned staff files/data to SharePoint for reduced costs and improved storage capacity.

• Replaced outdated analog cameras and surveillance equipment for improved security and surveillance visibility and identified equipment needs for the renovated library building.

• Replaced aging and semi-functional door access controls and software with an expandable and superior access control software and identified equipment needs for the renovated library building.

• Migrated incident tracking software and staff intranet access to single-sign-on for an improved user experience and secure applications.
- Identified expanded, flexible printing services such as multi-function printers/copiers and Papercut print management software, kiosks, and pay stations to provide flexible and simple wireless printing for the renovated library building.

- Evaluated and identified necessary presentation and AV equipment for meeting rooms and collaborative spaces.

- Evaluated and identified additional apparatus for the renovated library building including IP speakers, teen gaming equipment, digital signage, early literacy computers or tables, and self-check equipment.

- Replaced people counters with a more flexible product that provides enhanced reporting and data including building capacity counters.

- Outfitted public services staff with tools to enable remote use of library phone systems.

- Assessed and implemented opportunities for online or virtual programming and gaming systems.

- Provided video creation tools and resources for virtual programming and services.

- Expanded social media reach with the addition of Instagram and YouTube accounts.

- In collaboration with CLEVNET provided library card applications online for convenient access to Emedia.

Approved by the SHPL Board of Trustees December 21, 2020