Sample Technology Plan

Rochester Hills Public Library Technology Plan 2011–2014
Prepared by:
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January 2011

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Library Mission

The goal of this plan is to detail how technology can help the Library fulfill its stated mission: “The Rochester Hills Public
Library provides resources to inform, educate, enlighten and entertain the people of our community."

Increasingly, new technology offers the resources to meet the varied needs of our community. As technology continues to play a vital role in providing access to information, our library users' expectations continue to demand increased access to technology. An integral part of fulfilling our mission is providing materials and resources in electronic formats. Successful integration of technology into our library environment requires ongoing training for all staff. We provide our users with access to information, regardless of the means or the format.

Our technology infrastructure has grown over the years, and it is now quite stable and robust and serves our library needs well. Looking forward, we are faced with decreased revenues, likely for at least five years to come. Therefore, as we must do more with less, we must plan carefully to maintain a balanced and quality of service.

To that end, Rochester Hills Public Library (RHPL) must work to prioritize services and the technology that supports them. The residents in our service area will be our priority, and when we need to scale back due to budget concerns, we will need to shape our technology resources to serve our residents first. It will not be easy to maintain our technology with limited resources. In particular, we want to continue to investigate new technologies and provide high-quality services that our customers expect in the 21st century. This plan is created to maintain what we have and expand to new services, if the funding allows.

**Technology Goals**

**Goals for Public Service**

Objective 1: Continue to improve methods for accessing information about the Library's materials and customer accounts online through Polaris.
• Add new foreign languages to our self-check machines by December 2011.

• Provide access to a mobile PAC (online catalog) when released in Polaris version 4 by April 2012.

• Investigate notification via text messaging when released in Polaris version 4 by April 2012.

• Maintain access to ChiliFresh, allowing customers to read and write reviews of titles in the Polaris catalog. Explore the new social networking options under development by ChiliFresh to determine if they would provide value to our customers by September 2013.

• Continue to customize interface for Polaris web catalog (ongoing).

• Continue to clean up materials database for Polaris (ongoing).

Objective 2: Continue to improve methods for accessing electronic resources.

• Add Catalog stations to locations closer to the stacks for easy access when searching for print materials by August 2011.

• Explore services available to cell phone users, such as Guide by Cell, by July 2013.

• Create a mobile version of the library’s website to optimize usage on a mobile device by December 2013.

• Follow developments by vendors for apps, widgets, and other tools that make access to electronic resources easier, on mobile devices or the web as a whole (ongoing).

• With help from Adult Services, review current collection of electronic databases and evaluate their use, both in the library and remotely (ongoing).
Objective 3: Continue to provide methods for accessing materials that RHPL does not own whenever possible.

• Evaluate usage and costs for OCLC services to ensure appropriate return on investment by December 2011.

• With help from Polaris staff, evaluate the functionality of NCIP for Polaris and MeLCat libraries to improve workflow for MeLCat participation by December 2012.

• Continue participation in MeLCat as funding permits (ongoing).

Objective 4: Maintain and upgrade computer equipment to provide consistent and efficient access to electronic products and services.

• With grant funds, purchase and provide in-building circulation of wireless laptops by September 2012.

• Maintain EnvisionWare software to manage public computers and printing (ongoing).

• Replace/upgrade all public computers to improve performance as funding allows, which may fall outside our previous schedule of every three to four years.

Objective 5: Improve access to library services for customers who do not visit the Main Library on a regular basis.

• Improve internet access from the Bookmobile with Verizon network options by August 2011.

• Support Outreach & Bookmobile Services with the Books by Mail project, and investigate expanding the project through Polaris version 4 by December 2012.

• Explore options for automating circulation at the mini-branches and take advantage of the features available in Polaris by July 2013.
Objective 6: Provide effective training for the public to increase skills with and awareness of electronic products and services.

- Use wireless laptops as a mobile training lab for hands-on internet classes to be offered at the Library or at off-site locations by October 2012.
- Expand availability of recorded video training for customers on website by December 2012.
- With help from Adult Services, continue to offer internet training sessions to the public (ongoing).

Objective 7: Continually improve website functionality and user interface.

- With help from the Web Team, maintain and update the RHPL website with new content and technologies (ongoing).
- Continue to evaluate the user interface and make changes as necessary to provide easier and better access to internet resources (ongoing).

Objective 8: Explore options for providing improved circulation and check-out services to the public.

- If funding allows, install an additional self-check for customer use by October 2013.
- Investigate options for implementing RFID to replace our current electromagnetic security system by November 2013.
- Continue to evaluate the use of the self-check machines and market them for increased usage (ongoing).
Goals for Collection Development

Objective 1: With the help the librarians and Technical Services staff, provide access to information and materials in Polaris that meets our customers' needs.

- Increase the options for importing records for materials from z39.50 databases, Midwest Tape for other material types, and other vendors as determined by library staff by July 2012.

- Explore using the Polaris Acquisitions module to streamline the ordering process and provide a central source for materials on order for the library by November 2013.

- Track developments in delivery of audio-visual materials to libraries, including ebooks (and readers), movies on flash drives, downloadable music and/or movies, and more. As funding allows and the technology fits, add these new options to the library’s collection (ongoing).

- Assist as needed with configuring the import and customization of records to our Polaris database when they are received from vendors or other sources (ongoing).

Objective 2: With the help of the Web Team, expand the Library’s website consistent with Library collection development policies.

- Expand the offerings on our website to include online tutorials, online story times, and other interactive content by December 2011.

- With the help of Adult Services, expand our electronic local history materials by digitizing more of this unique material (ongoing).

- Continue to add to the links that are available via our website in an effort to direct our patrons to sites of particular value (ongoing).
Objective 3: Collect statistics on usage of the Library’s resources.

- Continue to report statistical information to the board on a monthly basis about usage of our materials and technology and resources (ongoing).
- Monitor statistics provided by electronic database vendors to help analyze product use (ongoing).

Goals for Community Relations

Objective 1: In conjunction with Adult Services and our Community Relations Specialist, increase the promotion of our electronic resources.

- Continue to offer internet training classes on using Polaris, subscription databases, and other timely topics (ongoing).
- Highlight electronic resources both on our website and in Library publications (ongoing).

Objective 2: Use current technology to promote Library events and services and communicate with our community.

- Maintain and improve our electronic tools for conversations with our community through our email forms and live chat options for customers to communicate with library staff from our website (ongoing).
- With help from the Web Team, continue to promote RHPL’s presence on the social networking sites of Facebook and Twitter, and expand the library’s use of these tools (ongoing).
- Continue to expand and promote our offerings of enewsletters that are available through BookLetters (ongoing).
Objective 3: Establish partnerships with neighboring libraries and organizations to share in technology endeavors.

- Support the website development needs of the Community Organization Resource Exchange (CORE) by hosting its Events Calendar with the Library's Evanced Solutions software and maintaining both the content and hosting for their website (ongoing).
- Attend meetings with Metro Net and TLN libraries and participate in joint technology projects with these libraries (ongoing).
- Remain active in the Polaris Users Group (PUG) in order to benefit as much as possible from the experiences of other Polaris libraries and the Polaris staff (ongoing).

Goals for Staff Development and Training

Objective 1: Maintain and upgrade computer equipment to provide consistent and efficient access to electronic products and services.

- Replace/upgrade all staff computers to improve performance as funding allows, which may fall outside our previous schedule of every three or four years.

Objective 2: Implement technology solutions that improve staff efficiency, communication, and productivity.

- Expand the use of Room Reserve (from Evanced Solutions) to assist staff in scheduling all conference rooms in the library, including those used solely by the staff, by January 2012.
- Implement a solution to schedule the use of shared technology in the library, especially laptops and projectors, by July 2012.
• With the help of the Web Team, continue to update the information available on the staff intranet (Rhub) and provide access to as many resources there as possible (ongoing).

• Maintain and support the use of cell phones and smartphones for key staff members to ensure access when needed (ongoing).

Objective 3: Increase staff competencies in using all appropriate computer resources.

• Create documentation for all staff in use of library technology for basic troubleshooting by November 2013.

• Bring in Polaris staff for refresher training by December 2013.

• Investigate options for offering staff training, both done in-house and by outside groups such as MCLS or MLA (ongoing).

• Create “cheat sheets” for staff to refer to for help with new technology and common problems (ongoing).

Goals for Facilities and Equipment

Objective 1: Maintain and upgrade the Library’s network, telephony, and server technology to provide optimal performance and service for staff and public.

• Upgrade the software for the Library’s pass-card security system by July 2011.

• Clean up wiring closets and labeling by November 2011.

• Implement a formalized disaster recovery plan by December 2011.
Objective 1: Strengthen the Library’s disaster recovery plan.

- Continue with remote data backup of the Library’s most critical data in addition to the on-site tape backup rotation (ongoing).
- Sustain sufficient network connectivity and bandwidth to provide access as needed for voice and data for the Library, including planning for upgrades of network lines for either voice or data or both, as needed (ongoing).

Objective 2: Improve methods of communication and management of technology resources at the Library.

- Optimize the process for managing which staff members have access to which technology resources, including streamlining the creation and deletion of these resources, through a single database by December 2011.
- Enhance our internal help-desk solution used by staff to report computer problems to include more features as possible by August 2013.

Objective 3: Create and maintain technology department documentation.

- Inventory all systems and document network, servers, clients, and all related equipment (ongoing).
- Document how to use staff and public computers to provide some written instructions for staff in how to use them (ongoing).

Current Status and Equipment Inventory

Local Area Network (LAN)

The Rochester Hills Public Library has a fiber link to the internet, currently provided by AT&T. We increased the bandwidth from 10mb to 20mb in December 2009.
Our LAN connections are managed by Cisco equipment: an ASA 5520, a 3250 core switch, and seven switches (1-2900s and 6-2950s) connected between two wiring closets by fiber.

The Library also maintains a cable modem connection provided by Comcast to support our public wireless network.

Our LAN connections to support our wireless network are managed by a D-Link switch and a Bluesocket Wireless Gateway.

**Servers**

We develop, maintain, and upgrade our network. We support the network equipment listed in the previous section with servers.

We installed the infrastructure for a virtual server environment in January 2011. This includes two high-end HP servers running ESX VMWare and one EMC SAN (storage area network) AX4.

In addition to the two ESX servers, we will maintain eight physical servers as needed for key network roles including two domain controllers, four Polaris servers, our mail server, and tape backup server. These other physical servers are running Windows 2003 or 2008. We have migrated t10 of our physical servers to virtual servers on this new infrastructure in order to improve performance, reliability, and management. The virtual servers are running Windows 2003 or 2008.

We maintain two Windows domains, one for staff and one for public. In addition, our web servers reside in a DMZ. These networks are segmented through the Cisco ASA. The servers manage the clients on each network.

**Workstations**

We have replaced almost all the computers (and repurposed some lower-usage computers) in the building in the past three years. We have 157 computers total.

Public Computers (82 total):

- Adult Catalog computers (8) – purchased in 2006
• Adult Internet computers (12) – purchased in 2008
• Quiet Computer Room computers (20) – purchased in 2007
• Teen computers (8) – purchased in 2007
• Outreach computers (5) – purchased in 2007
• Youth Internet/Catalog computers (18) – purchased in 2008
• Print Release/Reservation computers (5) – purchased in 2006
• Library Card Registration computers (2) – purchased in 2006
• Self-checkout computers (4) – purchased in 2006

Staff Computers (75 total):
• Adult Services staff computers (10) – purchased in 2007
• Outreach Services staff computers (7) – purchased in 2008
• Bookmobile staff computers (2) – purchased in 2008
• Youth Services staff computers (8) – purchased in 2008
• Circulation Services staff computers (13) – purchased in 2007
• Technical Services staff computers (8) – purchased in 2009
• Service Desk computers (12) – purchased in 2009
• Administration staff computers (6) – purchased in 2008
• IT staff computers (2) – purchase dates vary
• Other: Friends, Staff Lounge, Laptops (7) – purchase dates vary

Total: 157 computers

**Software**

Operating systems: The Rochester Hills Public Library uses Windows XP for all of our computers.
Applications: We primarily use the following software applications:

- Microsoft Office 2007 Professional
- Polaris Integrated Library System and Innovative Millennium for MeLCat
- Internet Explorer, Mozilla Firefox, and Public Web Browser

The Library uses a number of other software applications for specific projects.

**Printers and Copiers**

We have a variety of printers and copiers being used by staff and public users in our Library.

Public Printers and Copiers (7 total):

- Color printers (2)
- Black and white copiers (4)
- Color copier (1)

Staff Printers and Copiers (24 total):

- Black and white network printers (10)
- Black and white parallel/USB printers (8)
- Color printers (1)
- Black and white copiers (5)

**Telephony**

We have two PRI lines and DS1 service on those lines, including a block of DID numbers. We also have 2 POTS lines and an analog alarm trunk. AT&T is our telephone service provider for local and long distance. We have an Avaya Merlin Magix traditional telephone system with voice mail. The library has 70 telephone handsets.
Staffing and Training

Current Staffing

The technology for the library is managed by the Information Technology Manager, a full-time librarian who manages IT, Technical Services, and Circulation Services.

For IT, the library has two part-time Computer Systems Technicians to assist the IT Manager. These positions provide computer support for the entire library. For larger projects, some help from contract IT staff is necessary.

Technical Services is staffed by a full-time department head, 4 full-time clerks, and 1 part-time clerk. Circulation Services is staffed by a full-time department head, 3 full-time clerks, 6 part-time clerks, and a number of hourly clerks. The Head of Circulation also assists in the system administration of our Polaris database.

IT Staff Training

The field of technology changes so rapidly that continuing education and training is essential. In order to fulfill the goals outlined in this plan, training in more advanced topics will be necessary.

Library Staff Training

With the continued introduction of updated hardware and software, library staff members need frequent training updates and refreshers to help keep their skills current. They also need more advanced level training to help them use computers more efficiently and effectively. In particular, our staff members need more training on Windows, our subscription databases, Polaris, and help using much of the software applications. Our Internet Librarian offers learning lunches to help provide learning opportunities for staff. When available, staff is able to attend training classes and conferences outside the library, including the Michigan Library Association conference, workshops at the Michigan Library Association and the Michigan Library Consortium, and national...
conferences including the Public Library Association conference and the Computers in Libraries conference.

**Consulting and Design Services**
The Library frequently employs the services of network consultants to assist with design, planning, and implementation of complex projects such as new server installation or major network upgrades.

**Budget Requirements and Projections**

2011 (4% Total Budget Decrease Over 2010)

<table>
<thead>
<tr>
<th>Project planned</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IT Equipment</strong></td>
<td></td>
</tr>
<tr>
<td>Servers for Polaris and virtualization</td>
<td>$15,000</td>
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<tr>
<td>Grant match for wireless laptops</td>
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</tr>
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<td>Computer upgrades/replacements</td>
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<td>Smaller IT equipment/supplies/maintenance</td>
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<td>Category subtotal:</td>
<td>$65,000</td>
</tr>
<tr>
<td><strong>Equipment/Systems Maintenance</strong></td>
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</tr>
<tr>
<td>Polaris maintenance</td>
<td>$33,000</td>
</tr>
<tr>
<td>Postal meter maintenance</td>
<td>$2,700</td>
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<tr>
<td>Telephone system maintenance</td>
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<tr>
<td>Photocopier maintenance</td>
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<tr>
<td><strong>Voice and Data Network Connectivity:</strong></td>
<td></td>
</tr>
<tr>
<td>Phone (including wireless cell)</td>
<td>$25,800</td>
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<tr>
<td>Internet</td>
<td>$31,000</td>
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<td>Category subtotal:</td>
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<tr>
<td><strong>Software Maintenance and Support</strong></td>
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<tr>
<td>Symantec anti-virus</td>
<td>$5,500</td>
</tr>
<tr>
<td>Cisco firewall, switches</td>
<td>$1,700</td>
</tr>
<tr>
<td>Spam solution for staff email</td>
<td>$2,700</td>
</tr>
</tbody>
</table>
### Websense filter software
- Cost: $1,025

### Deep freeze rollback software on public computers
- Cost: $200

### Public web browser
- Cost: $50

### EnvisionWare PC/print management software
- Cost: $5,800

### ITG self-check maintenance
- Cost: $6,900

### Peek-a-book
- Cost: $1,200

### Early literacy station
- Cost: $400

### Evanced calendar
- Cost: $4,000

### ChiliFresh renewal
- Cost: $1,200

### OCLC Resource Sharing and CatExpress
- Cost: $3,500

**Category subtotal:** $34,175

#### Staff Training
- **Public Library Association conference attendance**
  - Cost: $2,000
- **MLA/MCLS workshops/conference attendance**
  - Cost: $2,000
- **Polaris Users Group conference**
  - Cost: $2,000

**Category subtotal:** $6,000

**2011 Technology Budget Total**
- $202,175

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### 2012 (12% Total Budget Decrease Over 2011)

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<tr>
<td><strong>IT Equipment</strong></td>
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<tr>
<td>Budget for emergency equipment needs</td>
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**2012 (12% Total Budget Decrease Over 2011)**
Evaluation

Evaluation is a key part of this Technology Plan:

- The IT Manager will review progress on projects in this plan every three (3) months.
- Each goal and objective in this plan has a deadline, and it is the IT Manager's responsibility to ensure that projects are completed in their scheduled timeframe or adjusted according to library needs and priorities.
- The IT Manager will remain aware of evolving technologies that may benefit RHPL by her participation on email discussion lists, attendance at conferences and workshops, and networking with others through The Library Network, Metro Net, and other consortia (ongoing).

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<td>MozyPro</td>
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**2012 Technology Budget Total:** $151,950
• When a new project presents itself that could benefit RHPL, the IT Manager will work with the Library Director to determine if we can pursue the project and if there is a way to budget for the project within the current or a future fiscal year.

• The IT Manager will meet with other library managers and the Director annually to discuss progress of the Technology Plan.

• The IT Manager is responsible for keeping the plan current throughout the length of the plan and creating a new one every three (3) years.

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