



# Technology Plan

Three Year Plan: 2018-2021

June 2017

## **Mission**

The mission of the Lexington Public Library (LPL) is to connect people, inspire ideas, and transform lives. Necessary to the accomplishment of this mission is the provision of appropriate technology, for use by staff and by customers. We fully understand our place in this ever-insulated world of decentralized sources of information. The tasks of resource validation and aggregation are no less crucial in this digital era than they were in decades past. The reality is that they are more important now than ever before. Internet searches yield millions of sources but no means for substantiation. The residents of the Lexington area can feel confident that their Public Library remains the cornerstone for information that it always has been.

The use of technology as a platform for service and content delivery continues to influence the expectations of our customers and shape the direction of our organization. We are responding to these expectations and are actively seeking innovative and new solutions.

The Technology Goals for LPL during the life of this plan are:

1. Improve the free Wireless Internet Service to provide better service to the growing number of users.
2. Improve overall network security, making the services provided by the Library safer and more reliable.
3. Work closely with the Facilities Department to improve meeting room facilities and other areas within the library locations.
4. Consider potential solutions for an improved Public Computer Service.
5. Consider Integrated Library System options.

## **Part 1. Assessment of Current State**

The previous planning cycle represented the first phases of a new Strategic Plan, resulting in several large initiatives—a synergy of efforts that yielded very positive results for the organization. To describe these efforts, this section is broken into areas representing parts of the previous Technology Plan. What is clear from these accomplishments is that the organization is well positioned and poised to respond positively to the evolving needs of our ever changing and growing community. Looking forward, this planning cycle will keep the positive forward momentum going and the Library will continue evolving in tandem with our customers.

### **Part 1.1: Laying the Foundation**

This area of the previous plan was an initial focal point, where basic technological services were evaluated and prioritized for improvements. The improvements made in this area are discussed in more detail below.

## **Telecommunications System (phone system)**

LPL replaced the telephone system in place for many years with a Voice over IP (VoIP) system. The new system offers many new features to the organization, but the most notable is how flexible the new system is at handling call flow. The new phone system enabled a reduction in service points for multiple locations, freeing staff to serve customers in new ways. The new system also includes a robust video conferencing solution that staff continue to use more often to coordinate meetings.

## **Network Equipment (switches, firewall, etc.)**

The Library had been utilizing networking equipment that provided a maximum of 100 Mbps to each desktop. By upgrading the switching and routing equipment within each building, end-points were able to achieve speeds up to ten times faster than with the older equipment. This translates to more customer-friendly services, and a more efficient staff.

## **Wide Area Network (WAN) Improvements**

After resolving the network concerns within each library facility, efforts were made to improve the way each building communicated with each other. These efforts resulted in a better solution from our vendor, where our core WAN was increased from 1Gbps to 10Gbps, an increase of up to ten times faster. This improved core connectivity was utilized to provide discreet 1Gbps connections to each library location. This is a significant improvement over the shared 1Gbps connection that all locations shared.

## **Internet Connectivity**

The Library system also obtained a 25% increase in overall Internet capacity, from 400Mbps to 500Mbps.

## **Server Environments**

Efforts were made to remove servers that were running on older, unsupported operating systems. All Microsoft Windows Server 2003 systems were removed or replaced. Progress has also been made in the removal of Microsoft Windows Server 2008.

## **Desktop Environments**

In the previous planning cycle, upgrading to the then-current Windows 8 operating system was considered a priority. This was in response to the fact that Windows XP, despite its age, was still the primary operating system at the time.

Since then, not only has the organization upgraded to Windows 8, LPL has also maintained a current level operating system since. Windows 10 is now the primary operating system.

## **Part 1.2: Optimizing the Virtual Services Delivery System & Interfaces**

In May 2014, Lexington Public Library's Virtual Services Department launched a new, mobile-friendly website under the premise that it was a "virtual branch" of the Library. As such, the site emphasizes digital collections and customer interaction. Since that time, annual circulation of downloadable materials has grown substantially: +14% for eBooks; +47% for eAudiobooks; and +68% for eMagazines. Additionally, new services have been added to meet customers in the virtual space:

- Ask a Librarian – a chat- and text-based reference service.
- Book a Librarian – an online intake form allowing customers to book dedicated time with a staff member at a physical Library location.
- Your Next Chapter – a reader's advisory service that provides personalized reading recommendations via e-mail.
- Checked Out – a book club podcast produced by the Library's staff.
- Digital Archives – items of local significance from the Library's special collections that have been digitized for online access.

In December 2014, a new, responsive version of the Library's catalog debuted. It features direct integration of digital collections and highlights recommended titles and authors. This interface is now utilized within the Library's mobile app for more accurate searching and enhanced account management features. The Virtual Services Department solicits feedback on an ongoing basis to continue improving the user experience. The most recent survey took place in March 2017 and received 172 responses, 92% of which indicated that the respondent is typically able to find needed information when accessing the Library online.

## **Part 1.3: Automating the Mundane**

The Library staff have embraced the many changes mentioned above with open arms, and have used the new capabilities to make their jobs easier. As previously mentioned, the telecommunications system is providing more flexibility regarding where calls are answered, as well as how meetings are conducted.

Library staff are also actively seeking more efficient methods for addressing routine issues. For example, the process of routinely removing inactive accounts from our databases has improved several procedures. Offering email receipts through our self-checkout system reduces the use of thermal receipt paper. Moreover, offering notifications for arrived items via Text Messaging improves our communications with customers.

Library staff continue to look for new ways to leverage technologies available to us in efforts to improve our customers' experience as well as that of the staff.

#### **Part 1.4: Additional Accomplishments**

In addition to the goals discussed previously, there were other noteworthy accomplishments during the planning cycle. These are briefly listed here:

- Renovated the IT Office area as planned.
- Developed a Network Operations Dashboard to improve IT response capabilities to situations that occur.
- Significantly improved the enforcement of user- and computer-based policies.
- Upgraded all existing wireless access points as part of a lifecycle management effort.
- The Library relocated one of its facilities to provide better service to a portion of the Lexington Community.
- The Library is now offering notifications of arrived items via text messaging.

### **Part 2. Planning the Future**

The Library has identified five specific goals to improve our customers' experience with the services we offer. As time progresses and the needs of the system evolve, there will undoubtedly be more priorities than those mentioned below.

#### **2.1: Improve Wireless Internet Service**

LPL has had a free Wireless Internet Service for our customers for a long time. This service has been increasing in use each year we have been collecting statistics. As a result, we will be adding additional access points to assist in handling the increased wireless service demands in our locations.

This initiative will include hiring a consultant to identify the best places for access points in our facilities. The consultant will consider the design of the building as well as the location of bookshelves and other items that would hinder a wireless signal. After the consultant has provided us with that information, LPL will install new networking devices in areas that need improvements.

#### **2.2: Improve network security**

Data breaches are becoming an unfortunately common occurrence, and we understand that these risks apply to us as well. To that end, we are

taking several steps to reduce our risks and increase the safety of our network for both our customers and staff.

### **2.3: Improve meeting room facilities and other areas**

Our meeting spaces are among our most popular services. As a result, we will be upgrading the audio/visual equipment in these areas more often. This will include projectors, PA/speaker systems and other equipment in the rooms. Efforts will also be made to standardize the interfaces when at all possible. Appendix B of this document includes a schedule that includes the replacement plans for the audio/visual equipment as well as the computing environment.

### **2.4: Consider potential solutions for the Public Computer software**

Our Public Computer labs are also among our more popular services. In previous years, we've improved the software update cycles so new features are available to our customers much faster than before. We will expand our efforts and review potential replacements for core features of the service. There is a software product that manages computer availability, and another that manages customer-submitted printing. These critical products will be evaluated against competitive products.

### **2.5: Consider Integrated Library System options**

Nearly all services that the library offers are managed by, or interact in some way with the Integrated Library System. This system maintains our customer records as well as our item inventory. LPL will take some time during this planning cycle to ensure that we're using an industry-leading product from a reliable vendor.

## **Part 3: Training**

Ongoing staff training will continue to be necessary as software upgrades and improvements to the Integrated Library System are released. The Library's Virtual Librarian will coordinate most of these needs through the Public Service/IT Committee and the Branch Managers. These individuals will coordinate with the Information Technology Department to determine the best way to train all staff on a given item.

## **Part 4: Budget**

The library will support its technology goals and acquire its equipment and services primarily through appropriations made in the Library's operating budget. An excerpt from the FY2018 Budget that is pertinent to the IT portions of the overall Library budget can be found in Appendix A. It provides information on the operating budget for the Information Technology Department.

## **Part 5: Evaluation**

We will continue to evaluate new technology choices as they become available and to anticipate the relevance of those likely to become available. The average lifespan of technological advancement is eighteen months and Lexington Public Library will need to keep up with this pace in order to meet the evolving needs of its customers. The library's senior team will review IT goals and objectives on a quarterly basis. User surveys and annual output measures will be reviewed to help determine what changes in technology would be most valuable to the public.

## Appendix A – IT Budget as presented in FY2017-2018 Operating Budget

### Support Services - Information Technology Department

	BUDGET		PROPOSED BUDGET	
	FY'17	FTE's	FY'18	FTE's
<b>1. PERSONNEL</b>				
Total Full Time	\$ 238,038	5	\$ 238,381	5
Total Part Time	27,625	1.0	31,476	1.0
Fringe Benefits	97,916		101,353	
	<u>-</u>		<u>-</u>	
<b>TOTAL - PERSONNEL</b>	<u>363,580</u>		<u>371,210</u>	
<b>2. OPERATION AND MAINTENANCE</b>				
Internet Access	91,000		97,165	
Telephone	86,491		88,901	
Office Expense	40,000		40,000	
Automation Maintenance	212,517		221,395	
Staff Education	-		600	
Professional Dues	-		-	
Automation/Equipment Upgrade	<u>197,000</u>		<u>250,000</u>	
<b>TOTAL - OPERATION/MAINTENANCE</b>	<u>627,008</u>		<u>698,061</u>	
<b>TOTAL - ALL CATEGORIES</b>	<u>\$ 990,588</u>		<u>\$ 1,069,271</u>	



## Appendix B – Planned Obsolescence Schedule

The table below provides a guide for how we intend to evaluate the need to replace equipment in our Five-Year lifecycle plan. This expanded replacement strategy includes the planned obsolescence of our audio/visual equipment as well as our computing equipment.

The abbreviations in this schedule represent our Library locations:

- BB – Beaumont Branch
- EB – Eastside Branch
- TB – Tates Creek Branch
- MS – Maintenance Facility (non-public)
- CL – Central Library
- NB – Northside Branch
- VB – Village Branch

### Year One

• NB – Computers	• CL – Computers on LL and 1
• NB – A/V in Large Meeting Room	• CL – A/V in Conference Room A
• NB – Media Carts	• NB – Computers in the Digital Studio

### Year Two

• BB – Computers	• CL – Computers on Level 2
• BB – A/V in Large Meeting Room	• BB – Media Carts

### Year Three

• TB – Computers	• CL – Computers on Level 3
• TB – A/V in Large Meeting Room	• MS – Computers at Maintenance Shop
• TB – Media Carts	• CL – Media Carts

### Year Four

• VB – Computers	• CL – Computers on Level 4
• VB – A/V in Large Meeting Room	• CL – A/V in Conference Rooms B and C
• VB – A/V in Teen Room	• VB – Media Carts

### Year Five

• EB – Computers	• CL – Computers on Level 5
• EB – A/V in Large & Medium Rooms	• CL – A/V in Board Room
• EB – Media Carts	• CL – A/V in Administration Meeting Room