

MCFLS Technology and Resource Sharing Plan, 2020-2024

Introduction and Purpose

MCFLS is a consortium of public libraries representing all 19 Milwaukee County municipalities (15 autonomous library boards) and serves a population of approximately 950,000 from 28 physical locations. On behalf of all its members, MCFLS administers a shared automation system (CountyCat), featuring Innovative Interfaces Inc. library application software.

The MCFLS data communications network is a wide-area network (WAN) of 15 locations (14 suburban libraries and the MCFLS offices). The central site (MCFLS Main Office) hosts an ILS server, delivering Innovative Interfaces, Inc. library application software to each of 14 suburban library local-area networks (LANs) via 1 Gbps (as of 09/26/2019) WAN Service. The Innovative Interfaces, Inc. library application software is also delivered to the Milwaukee Public Library WAN via an ethernet connection running from the MCFLS office to the MPL computer room. From there the feed is forwarded to all Central Library departments and the 12 MPL Neighborhood facilities. Suburban locations receive Internet services from a MCFLS-contracted ISP via 1 Gbps (as of 09/26/19) Internet service. Email services are provided through the Outlook 360 cloud; website hosting services are provided by MCFLS Microsoft Windows Servers.

The newly revised system mission states that MCFLS provides collaborative leadership, advocacy, and support for high-quality resources and services to empower the capabilities and capacities of member libraries to deliver responsive and innovative library services to all residents of Milwaukee County. This plan was developed by MCFLS system staff to support those principles of collaboration and high-quality technical support for our members. The plan was written with feedback and critique provided by the Library Directors Advisory Council (LDAC), the MCFLS Board, and system staff.

The 2020-2024 MCFLS Strategic Plan includes technology as a major strategic direction for the system. Three major service goals were identified by MCFLS staff, member libraries and trustees: developing training opportunities, tools and resources; decreasing barriers to access and improving the user experience of online resources; and providing infrastructure and innovative support to member libraries to allow them to serve their communities both now and in the future. These goals have guided the development of this plan.

Background

Located in Milwaukee, MCFLS resides in the most populous area of the state and has ready access to state-of-the-art networking and technology services. The challenges posed to more rural areas of the state with regard to broadband access are not seen here as often, although addressing bandwidth needs is always a concern as newer services require more and more bandwidth.

As a one county system all member libraries are geographically very close which provides its own benefits and challenges with regard to technology. While MCFLS does not have a dire need for remote services to distant libraries, the close proximity of communities creates the public expectation that technology services will be consistent across all member libraries. The system advocates for consistent user experiences, but libraries also must consider the needs of their own communities. Striking this balance between member library autonomy and uniformity in user experiences informs this plan and many others at MCFLS. Additionally in recent years we have seen more communities run hybrid networks at libraries where the system and municipality networks run side-by-side. Keeping the MCFLS network secure while meeting the needs of these communities has become increasingly challenging. Maintaining and streamlining network services while optimizing the needs of our member libraries is a concept that also underlies much of this technology plan.

As mentioned in the Introduction, the 2020-2024 MCFLS Strategic Plan had a large influence on the development of this plan. Enhancing our technology offerings to member libraries and patrons was identified as a major priority throughout the planning process.

In 2019, the system invested heavily in updating its on premise hardware and disaster recovery capacity. All three servers used to support the ILS were replaced, giving MCFLS updated hardware using the Red Hat Enterprise Linux (RHEL) version 7 operating system. In addition, the system purchased a Unitrends backup appliance that provides daily offsite and cloud backups for all three servers and other mission critical hardware. This means central site hardware replacement is not a near-term priority for the system and it also provides system staff the time necessary to perform a review of other ILS options, a directive of the MCFLS Board also found in our strategic plan.

Needs and Assets Assessment

Introduction

The Milwaukee County Federated Library System serves member libraries with technology and resource sharing needs across the spectrum. The Milwaukee Public Library (MPL), for example, has a well-managed IT department along with its own WAN service. MPL connects to the MCFLS network via a simple Ethernet connection through the firewall and generally manages technology with occasional assistance from system staff. However, ten other suburban libraries rely heavily on MCFLS and system staff to purchase, implement and maintain technology hardware and services. In these instances the system can provide tailored and cost-effective solutions that meet the needs of members. MCFLS has the expertise and resources to serve both ends of the spectrum.

WAN and Central Site Hardware

The current WAN service exists as part of the Badgernet project and serves all 14 suburban member libraries with Internet, ILS and other system services. In 2019, the system upgraded its WAN and Internet Traffic lines from 500 Mbps to 1 Gbps service each, allowing the system to meet the current and future bandwidth needs of members. In 2019 MCFLS also purchased a Unitrends backup appliance to provide disaster recovery for mission critical hardware. The system hopes to continue support and collaboration with SCLS and other systems on a statewide backup solution, but the new appliance meets our current needs for backups and the system may not elect to take part in early iterations of the project. System staff have identified the need to replace primary gateway routers at all suburban locations and will start this process in 2020 and budget to replace 3 routers each year. A new web server is currently in development and will house a newly redesigned web presence for the system. As with other areas of our plan, the goals in this section are broad enough and largely unchanged, but the activities will evolve over the course of time.

ILS

The current Innovative Sierra ILS has been in place since 2014 and our relationship with Innovative goes back over 25 years. In 2019, the system researched and invested heavily in new hardware to support the ILS. This investment allows system staff to now focus primarily on the user experience and evaluating the ILS, a strategic plan objective. The system has already done work to research and procure a new vendor for the CountyCat Mobile app. Implementation for the app is well underway and will be completed in late 2019, but improving the user experience for patrons will be a major theme for the next five years. System agreements for 2020-2024 have already been adjusted to fund these priorities.

Resource Sharing

Resource sharing, both internal to the system and externally across the state and beyond, continues to be a high priority. An excellent delivery service established with a long-time logistics vendor provides 24-48 hour turnaround for all member libraries five days a week. This service is consistently rated high by member libraries during site visits. The Interlibrary Loan Service Grant through Milwaukee Public Library delivers cost effective service to allow patrons access to materials throughout the state. Although not stated directly within the strategic plan, changes to the current E-INFOPASS program which allows access to multi-type collections in Milwaukee County will most likely need to be addressed. The service is no longer heavily used by academic institutions although Milwaukee Public Library continues to field requests and provide resources through the service.

Electronic Resources

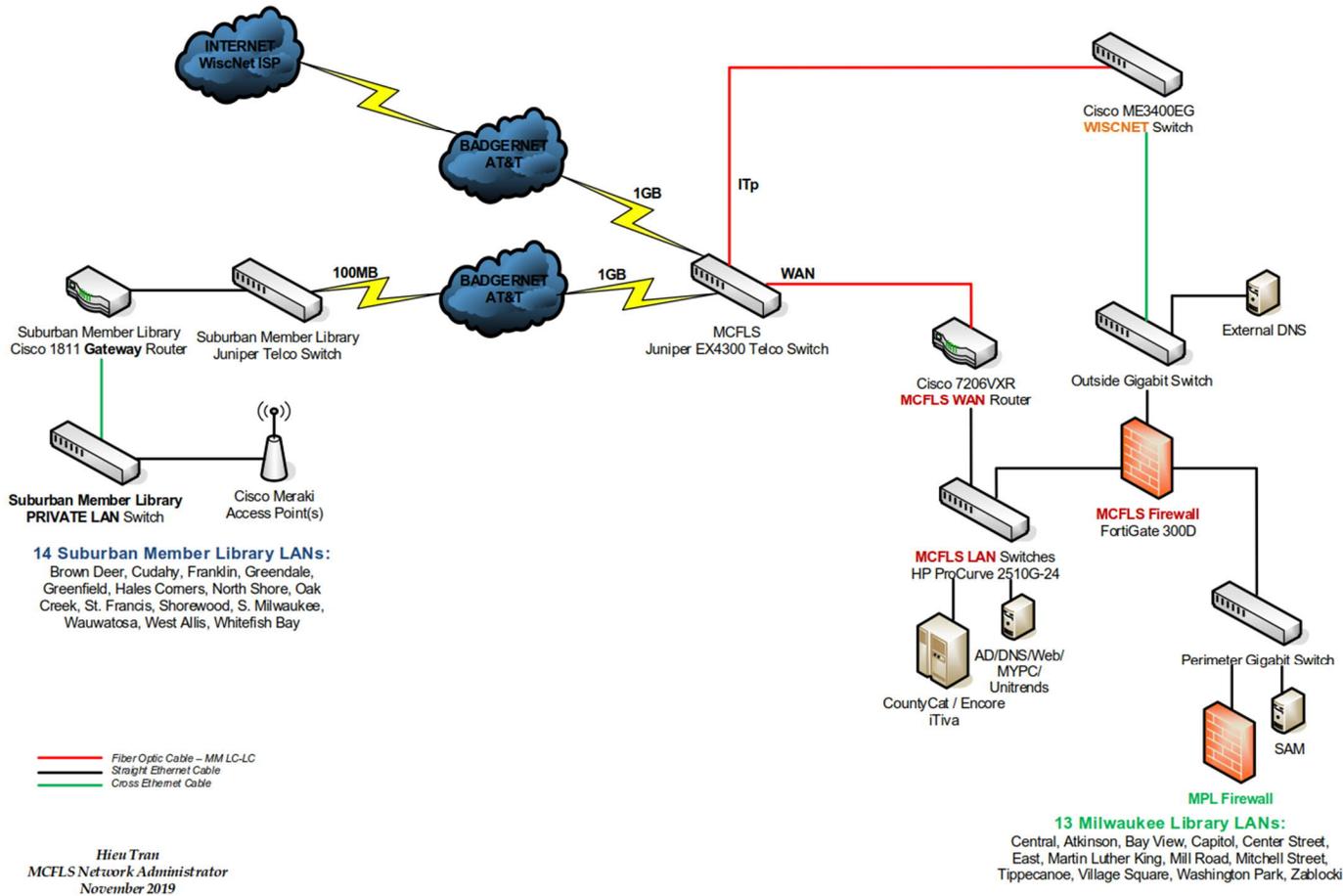
Throughout its history MCFLS has brokered access to electronic resources for member libraries to provide some measure of uniform access across the system and provide economies of scale to make them more affordable. Expansion of system-wide access to electronic resources was a major factor in the MCFLS 2015

strategic planning process and continues to be reflected in the 2019 plan. Because of the close geographic proximity of all members, there is a need for more resources allocated to electronic resources not only to provide uniform service but to aid in marketing and advocacy efforts on behalf of the system and member libraries. The current service used to meet this need, hoopla, is popular because of its ability to provide immediate content to users, but is also expensive because of its cost-per-circ model. Assets in the form of additional funding has been allocated to electronic resources through adjustments to 2020-2024 agreements. In 2020, an additional \$25,000 will be allocated (for a total of \$135,000) and current plans call for an additional \$5,000 allocation each year through 2024.

Training

Continuing education and training to increase system and member library staff technology competencies has been a consistent need at MCFLS and included in the current 2020-2024 strategic plan. While continuing education offerings through the SEWI CE group and local training in ILS and electronic resources have been a part of MCFLS offerings, members have identified new models for training that they'd like the system to pursue. One such model is providing shorter, more focused training pieces related to the ILS or electronic resources rather than full-blown exhaustive overviews. Another is to provide regular "Q&A" office hours for members to ask questions of system staff on specific topics. Both activities are part of the 2020-2024 strategic plan. Aligning and supporting the development of system staff skills and knowledge is also a stated service goal.

MCFLS NETWORK INFRASTRUCTURE



[Will also include an online link to inventory of MCFLS-owned equipment at member libraries].

Data

Data for the technology plan was collected as part of the 2020-2024 strategic planning process. Two surveys shared with MCFLS trustees, staff and member libraries were conducted in late 2018 to identify high priorities for an all-day development meeting that took place in February 2019. That meeting ultimately identified the goals and activities in the current strategic plan. Both surveys are included here as attachments, although it should be mentioned that not all of the data collected revolved around technology needs but focused instead on overall system needs.

Resource Sharing

ILS—MCFLS provides a high-quality ILS through an Innovative Interfaces Sierra installation. MCFLS has added a considerable amount of value-added features to the ILS, including text notification, online payment of fines, a mobile application, and an Innovative Interfaces “Encore” public interface with added Novelist content. The bibliographic information in the catalog is kept accurate and up to date through an ongoing contract with the Milwaukee Public Library. MCFLS staff are well trained on the ILS, are able to keep their knowledge up to date through conferences and training, and actively create training opportunities for MCFLS member library staff. The ILS is also used to support various third-party software products providing service to residents, including computer management, RFID circulation, and remote database access.

WAN—MCFLS provides member libraries with a robust and dependable Wide Area Network. As of 2019 all suburban member libraries have had upgrades to fiber connections, providing a 100 Mbps interface from the library to the MCFLS headquarters. The WAN serves suburban Milwaukee libraries at 1 Gbps. For the majority of member libraries, this connection provides internet service and the ILS. The Milwaukee Public Library has access to the ILS through an Ethernet connection in the main building.

ILL—Through the ILS and in-system delivery system, MCFLS provides daily delivery of holds, returned items, and new materials to all member libraries. These services directly support the more than 6.1 million circulation transactions in 2018. MCFLS also contracts with the Milwaukee Public Library to provide out-of-system interlibrary loan. Delivery is managed through a four-day-a-week contract with the South Central Library System.

Delivery—Primary in-system delivery is managed through a contract with Action Logistics, which sorts, transports, and delivers to all member libraries Monday through Friday. Out of system delivery is managed through a contract with the South Central Library System, and tubs are delivered four days a week.

Goals and Activities

- Goal 1** To insure that the wide area network (WAN) infrastructure of MCFLS and the network structure of its member libraries meet future growth demands in light of changing technological advancements.
- Goal 2** To expand and improve the integrated library system (ILS) functionality to meet the needs of users and staff.
- Goal 3** To facilitate and expand resource sharing among all libraries inside and outside of Milwaukee County.
- Goal 4** To enhance the MCFLS website as well as host member library websites.
- Goal 5** To facilitate MCFLS and member library participation in the Wisconsin Public Library Consortium's (WPLC) digital download media buying pool.
- Goal 6** To help purchase and/or broker purchases of online databases.
- Goal 7** To assist member library staff in becoming more technologically knowledgeable and proficient.
- Goal 8** To maintain and enhance MCFLS technology staff professional competencies.
- Goal 9** To organize and maintain all appropriate automation product licensing, technical documentation and assist members in technology life cycle planning.
- Goal 10** To insure adequate funding for the Technology Plan.

Objectives and Activities – Goal 1. To insure that the wide area network (WAN) infrastructure of MCFLS and the network structure of its member libraries meet future growth demands in light of changing technological advancements.

Goal 1: To insure that the wide area network (WAN) infrastructure of MCFLS and the network structure of its member libraries meet future growth demands in light of changing technological advancements.						Use to track goal progress	
Objectives and Activities	Person(s) Responsible for Ensuring Activities are Completed	Timeline for Completing the Objective and Activities	Resources Needed to Achieve Objective	Cost	Evaluation Method	Progress Toward Achieving Objective	Comments
Objective 1.1 Improve the current central site server environment							
Activities to Achieve Objective 1.1 Maintain and/or upgrade central site Windows servers (hardware and software) to the latest essential technology, i.e. identifying and implementing any required hardware, service packs, hot fixes, and new software releases.	Hieu Tran	2020-2024			Continuous evaluation of central site hardware status. Budget appropriately for any necessary changes.		
Activities to Achieve Objective 1.1 Maintain essential software to prevent virus, worm, and hacking attacks.	Hieu Tran	2020-2024			Up to date Symantec software and firewall firmware.		
Activities to Achieve Objective 1.1 Maintain essential hardware and software to provide an efficient methodology in controlling (remotely) central site Windows servers and network equipment.	Hieu Tran	2020-2024			Maintain current Remote Desktop Protocol standard and ensure security through firewall.		
Objective 1.2 Improve the MCFLS network connection and provide administrative oversight of the MCFLS network.							

Activities to Achieve Objective 1.2 Monitor network bandwidth usage, explore and implement essential solutions to improve network performance on the MCFLS wide area network (WAN) and the Internet.	Hieu Tran	2020-2024			Use PRTG software to provide monitoring and improve notification process.		
Activities to Achieve Objective 1.2 Serve as the point-of-contact for TEACH data lines and coordinate problem resolution with BadgerNet (Wisconsin's state-wide network services).	Hieu Tran	2020-2024			Ongoing.		
Activities to Achieve Objective 1.2 Monitor new data communications technology and, in consultation with the LDAC, implement desired changes.	Hieu Tran	2020-2024			Ongoing.		
Activities to Achieve Objective 1.2 Provide administrative support to the web-based email system used by member library staff.	Hieu Tran	2020-2024			Ongoing. Look to provide improvements to Outlook 365 when possible.		
Objective 1.3 Update central site disaster avoidance and preparedness plan, insuring the continuation of essential services in case of an emergency.							
Activities to Achieve Objective 1.3 Update plan documentation when there is a change in the following areas: personnel, equipment, software application, notification tree, security, etc.	Hieu Tran	2020-2024			Ongoing. Monitor and improve recent changes to allow member libraries to		

					add/change staff access.		
Activities to Achieve Objective 1.3 Maintain and/or upgrade data backup software application for all MCFLS servers and workstations.	Hieu Tran	2020-2024			Add remaining system servers to Unitrends backup solution. Upgrade Unitrends firmware as appropriate.		
Activities to Achieve Objective 1.3 Maintain and/or upgrade hardware equipment for data protection and recovery: onsite and offsite backup storage servers, uninterrupted power systems (UPS), etc.	Hieu Tran	2020-2024			Ongoing. Ensure all hardware equipment is maintained and upgraded as appropriate.		
Objective 1.4 Work with member libraries to improve the remote site network structure in order to maximize network functionality.							
Activities to Achieve Objective 1.4 As specified in the MCFLS Member agreement, maintain current MCFLS data communications hardware and software (e.g. routers, switches) located at local member library sites.	Hieu Tran	2020-2024			Maintain existing equipment and provide upgrades when necessary.		
Activities to Achieve Objective 1.4 Replace member library gateway routers to ensure network stability and future expansion capability.	Hieu Tran	2020-2024			Each year budget for replacement of 3 member library gateway routers.		

Activities to Achieve Objective 1.4 Implement MCFLS Board fiscal policy concerning locally funded data communications upgrade initiatives.	Hieu Tran	2020-2024			Continue to use Badgernet and explore opportunities to improve service to members.		
Activities to Achieve Objective 1.4 Provide consultation and technical assistance to any member library who initiates a request to move outside of the MCFLS WAN or to move back inside of the MCFLS WAN.	Hieu Tran	2020-2024			Document Whitefish Bay process to use as template for other members.		
Objective 1.5 As specified in the MCFLS Member Agreement, assist members with necessary technical assistance in order to maintain remote site hardware and software owned by local member libraries.							
Activities to Achieve Objective 1.5 (At the request of a member library), assist in coordinating purchases of PC and peripheral devices using the statewide collaborative purchasing agreement.	Hieu Tran	2020-2024			Show cost savings to members in technology annual report.		
Activities to Achieve Objective 1.5 (At the request of a member library), provide remote Help Desk services via telephone and email to help troubleshoot basic equipment problems for member libraries.	Hieu Tran, Jen Schmidt, Kate Strattner	2020-2024			Ongoing. Continue to investigate improved communication methods with member libraries.		
Activities to Achieve Objective 1.5 (At the request of a member library) and on a cost recovery basis, provide direct	Hieu Tran	2020-2024			Include cost savings and services rendered in an		

onsite hardware and software maintenance and support services for those member libraries that elect MCFLS as their vendor.					annual report to show value of this service to member libraries.		
Activities to Achieve Objective 1.5 Provide to member libraries annual report that includes activities related to technology and current equipment hardware lists and recommended settings.	Hieu Tran	2020-2024			Annual report issued to MCFLS Board and member libraries each June.		
Objective 1.6 On a cost-recovery basis provide a range of expert "special project" automation and consultation services to member libraries.							
Activities to Achieve Objective 1.6 (At the request of a member library) for new building construction, expansion, or large-scale upgrades, provide consultation services relating to Local-Area-Network design and configuration, equipment selection, connectivity to local municipal network resources, and/or movement outside the MCFLS network.	Hieu Tran	2020-2024			Include cost savings and services rendered in annual report to show value of this service to member libraries.		
Activities to Achieve Objective 1.6 (At the request of a member library), serve as the library's representative and coordinator in the planning and implementation of services involving third party	Hieu Tran Jen Schmidt	2020-2024			Ongoing.		

automation vendors and providers.							
Activities to Achieve Objective 1.6 (At the request of a member library), broker and/or implement large-scale local automation equipment purchases.	Hieu Tran	2020-2024			Ongoing		
Activities to Achieve Objective 1.6 (At the request of a member library), implement equipment warranty provisions and provide necessary follow-up during the warranty period.	Hieu Tran	2020-2024			Ensure warranty information is up-to-date and communicate regularly with members regarding pending expiration.		
Activities to Achieve Objective 1.6 Establish standards for equipment and assist members with technology life cycle planning.	Hieu Tran	2020-2024			Identify and share best practices for establishing a library technology plan.		
Activities to Achieve Objective 1.6 Provide leadership in trend spotting and technology project development by exploring and vetting new technologies and working with other systems to maintain up-to-date services for members.	Hieu Tran Steve Heser	2020-2024			Take advantage of any statewide technology projects and purchases. Monthly environmental scans.		

Objectives and Activities – Goal 2. To expand and improve the integrated library system (ILS) functionality to meet the needs of users and staff.

Goal 2: To expand and improve the integrated library system (ILS) functionality to meet the needs of users and staff.						Use to track goal progress	
Objectives and Activities	Person(s) Responsible for Ensuring Activities are Completed	Timeline for Completing the Objective and Activities	Resources Needed to Achieve Objective	Cost	Evaluation Method	Progress Toward Achieving Objective	Comments
Objective 2.1 Provide support assistance to member libraries regarding all aspects of ILS functionality.							
Activities to Achieve Objective 2.1 As point of first-contact, provide Help Desk services via telephone, email and/or an online form.	Kate Strattner Jennifer Schmidt	2020-2024			Annual feedback solicited from LDAC from their staff.		
Activities to Achieve Objective 2.1 Beyond first-contact, provide staff expertise to analyze software issues and open support tickets with Innovative Interfaces as appropriate. Follow-up as necessary to ensure prompt problem resolution.	Jennifer Schmidt Kate Strattner	2020-2024			Consult with other libraries on their successful use of the Innovative support site.		
Activities to Achieve Objective 2.1 With input from LDAC, maintain software tables, options selections and codes for the ILS. Identify and implement appropriate adaptations and modifications of the application software to fulfill member library requests.	Jennifer Schmidt	2020-2024			Consult with other library consortiums using Innovative software as appropriate.		
Activities to Achieve Objective 2.1 Identify and implement strategies and shortcuts to improve member library	Jennifer Schmidt	2020-2024			Identify other staff trainers in order to share		

knowledge and efficiency with regards to the ILS.					and compare practices with.		
Activities to Achieve Objective 2.1 Train member library staff on important ILS functionality by offering regular in-person and remote training opportunities as well as an option to schedule an appointment for one-on-one assistance.	Jen Schmidt	2020-2024			Annual feedback solicited from LDAC from their staff.		
Activities to Achieve Objective 2.1 Evaluate existing training content for any third-party products that work with the ILS and investigate the need for any new or improved content.	Jen Schmidt	2020-2024			Ongoing		
Activities to Achieve Objective 2.1 Move away from generalized training content that covers a full work department tied to the ILS (such as Circulation), and shift to creating short, task-based content of several areas within each ILS work area.	Jen Schmidt	2020-2024			Annual feedback solicited from member library staff and LDAC.		
Objective 2.2 Provide administrative leadership and support for software upgrades and enhancements to the integrated library system (ILS), identify possible new products for purchase and/or implement purchased products.							

<p>Activities to Achieve Objective 2.2 Relative to all standard (non-fee-based) ILS upgrades and enhancements (i.e. “new releases”), brief LDAC and other key member library staff in advance of implementing associated functionality changes, facilitate LDAC input and relevant decision-making, implement the software load of the new release during library closed hours, and provide all necessary post-implementation problem troubleshooting and follow-up training.</p>	<p>Jen Schmidt</p>	<p>2020-2024</p>			<p>Inquire with other libraries via the Innovative listserv and other online forums featuring libraries using Innovative products.</p>		
<p>Activities to Achieve Objective 2.2 Identify products offered by Innovative Interfaces Inc. and/or a third party vendor that might add value to the ILS. Research applicability to member library needs and provide recommendations for purchase to the LDAC and MCFLS Board.</p>	<p>Jen Schmidt</p>	<p>2020-2024</p>			<p>Inquire with other libraries via the Innovative listserv and other online forums featuring libraries using Innovative products.</p>		
<p>Activities to Achieve Objective 2.2 Implement enhancements from Innovative Interfaces, Inc. for the staff and/or public side of the ILS.</p>	<p>Jen Schmidt</p>	<p>2020-2024</p>			<p>Inquire with other libraries via the Innovative listserv and other online forums featuring libraries using Innovative products.</p>		

Activities to Achieve Objective 2.2 Implement a new mobile catalog app for all member libraries and work to introduce improvements as our ILS is upgraded. The mobile catalog app will include a more user-friendly design and improved functionality.	Jen Schmidt	2020-2021			Survey the feedback of staff and the public in 2020.		
Activities to Achieve Objective 2.2 Update the CountyCat catalog web page to support responsive design principles and offer enriched content that showcases member library collections. Assess the effectiveness of Innovative Interfaces catalog software and evaluate other third party products	Jen Schmidt	2020-2022			Survey the feedback of staff and the public in 2020.		
Activities to Achieve Objective 2.2 Streamline staff and public access to help information between CountyCat and the MCFLS web page through web design improvements.	Jen Schmidt	2020-2024			Survey the feedback of staff and the public in 2020.		
Activities to Achieve Objective 2.2 Perform a needs assessment of member libraries usage of the current ILS. Under the direction of LDAC, perform an ILS evaluation against detailed functionality criteria and make a long term decision on the best future ILS for MCFLS.	Jen Schmidt	2020-2024			Solicit and gather feedback on this process and the overall project from LDAC and the MCFLS Board		

Activities to Achieve Objective 2.2 Review and identify circulation policies to help identify areas where system-wide standardization may be possible to increase the ease of use of county libraries and their patrons.	Jen Schmidt Steve Heser	2020-2024			Survey the feedback of staff and the public in 2021.		
Objective 2.3: Expand knowledge of integrated library system (ILS) and its capabilities. Contribute to the Innovative Interfaces enhancement process and participate in statewide initiatives to improve patron access to materials.							
Activities to Achieve Objective 2.3 Participate in national, regional, and/or local Innovative User Group conferences, forums or meetings. Engage in communication with other Wisconsin library system staff making use of Innovative Interfaces products.	Jen Schmidt	2020-2024			Ongoing		
Activities to Achieve Objective 2.3 Seek out successful projects from other libraries that make use of Innovative's API and/or Sierra SQL with third party products in order to implement them to benefit one or more libraries in the system.	Jen Schmidt	2020-2024			Annual feedback solicited from LDAC.		
Activities to Achieve Objective 2.3 Be proactively involved in statewide discussions concerning the direction of the ILS. Vocalize the needs of our	Jen Schmidt Steve Heser	2020-2024			Solicit feedback from the System Director, LDAC and the MCFLS Board		

<p>system and/or contribute to any activities relating to an ILS taking place by the Department of Public Instruction or as a result of other statewide initiatives.</p>							
<p>Activities to Achieve Objective 2.3 Review any ILS settings with member libraries to identify any areas that could potentially be standardized system-wide to increase and/or ease the use of online information resources by the patrons of a member library.</p>	<p>Jen Schmidt</p>	<p>2020-2024</p>					

Objectives and Activities – Goal 3. : To facilitate and expand resource sharing among all libraries inside and outside of Milwaukee County.

Goal 3: To facilitate and expand resource sharing among all libraries inside and outside of Milwaukee County.						Use to track goal progress	
Objectives and Activities	Person(s) Responsible for Ensuring Activities are Completed	Timeline for Completing the Objective and Activities	Resources Needed to Achieve Objective	Cost	Evaluation Method	Progress Toward Achieving Objective	Comments
Objective 3.1 Offer access to the collections of all MCFLS member libraries to all Milwaukee County residents.							
Activities to Achieve Objective 3.1 Maintain an online catalog of holdings of all MCFLS member public libraries within an integrated and seamless online catalog.	Jen Schmidt	2020-2024			Increased use of desktop and mobile catalog. User feedback survey.		
Activities to Achieve Objective 3.1 Provide a 5-day per week delivery system to member public libraries to facilitate the efficient movement of items to end users.	Steve Heser	2020-2024			Ongoing evaluation. Use feedback from member libraries to determine performance.		
Objective 3.2 For Milwaukee County residents, offer access to materials not owned by MCFLS member libraries.							
Activities to Achieve Objective 3.2 Fund the costs associated with the Milwaukee Public Library's Interlibrary Loan Services, facilitating coordinated access to unique materials owned by libraries (public and non-public) outside of MCFLS, within the State of Wisconsin and beyond, if necessary.	Steve Heser	2020-2024			Ongoing. Budget appropriately to fund this service annually.		

<p>Activities to Achieve Objective 3.2 Fund an appropriate share of costs associated with the statewide delivery network in order to facilitate delivery of requested materials for Milwaukee County public library patrons from libraries inside Milwaukee County (non-public) and other libraries throughout the State of Wisconsin (public and non-public) .</p>	<p>Steve Heser</p>	<p>2020-2024</p>			<p>Ongoing. Budget appropriately to fund this service annually.</p>		
<p>Activities to Achieve Objective 3.2 Encourage and provide necessary information to MCFLS member libraries regarding the e-INFOPASS program. e-INFOPASS allows patrons access to the holdings of other participating e-INFOPASS libraries throughout the Milwaukee metropolitan area.</p>	<p>Jen Schmidt</p>	<p>2020-2024</p>					
<p>Objective 3.3 For patrons/institutions not residing in Milwaukee County and based on DPI Resources for Libraries and Lifelong Learning (RL&LL) Guidelines, facilitate appropriate interloan access to the unique holdings of MCFLS member libraries.</p>							

<p>Activities to Achieve Objective 3.3 Per MCFLS member agreement, participate in the lending of materials to patrons/institutions not residing in Milwaukee County via Interlibrary Loan.</p>	<p>Steve Heser</p>	<p>2020-2024</p>			<p>Monitor statistics from MPL regarding use of the service.</p>		
<p>Activities to Achieve Objective 3.3 Fund an appropriate share of costs associated with the statewide delivery network in order to facilitate access to MCFLS member holdings by users outside of Milwaukee County.</p>	<p>Steve Heser</p>	<p>2020-2024</p>			<p>Ongoing. Evaluate success of program in consultation with MPL ILL team and make changes when necessary.</p>		
<p>Activities to Achieve Objective 3.3 Participate, in meetings, conferences, and initiatives related to interloan issues.</p>	<p>Steve Heser Jen Schmidt</p>	<p>2020-2024</p>			<p>Full participation in opportunities related to interloan issues.</p>		

Objectives and Activities – Goal 4. To enhance the MCFLS website as well as host member library websites.

Goal 4: To enhance the MCFLS website as well as host member library websites.						Use to track goal progress	
Objectives and Activities	Person(s) Responsible for Ensuring Activities are Completed	Timeline for Completing the Objective and Activities	Resources Needed to Achieve Objective	Cost	Evaluation Method	Progress Toward Achieving Objective	Comments
Objective 4.1 Redesign and maintain a web presence for MCFLS.							
Activities to Achieve Objective 4.1 Replace the current web server hardware with new equipment utilizing current standards.	Hieu Tran	2020-2024			Completed, but required software yet to be installed.		
Activities to Achieve Objective 4.1 Implement an upgrade to the MCFLS website using WordPress templates and plugins.	Jen Schmidt	2020-2024			Completion of project by end of 2020.		
Activities to Achieve Objective 4.1 Semi-annually review the content of the MCFLS website implementing necessary improvements to the site in order to enhance the delivery of up-to-date information to MCFLS, member libraries, and the wider public.	Jen Schmidt Kate Strattner	2020-2024			Evaluation performed on an ongoing basis and integrated into work processes.		
Activities to Achieve Objective 4.1 Regularly maintain and update the MCFLS Libguides site, a source for Administrative and CountyCat procedural information.	Kate Strattner Jen Schmidt	2020-2024			Evaluation performed on an ongoing basis and integrated into work processes.		

Objective 4.2 Host and assist member library websites							
Activities to Achieve Objective 4.2 (At the request of a member library), host member library websites.	Hieu Tran Jen Schmidt	2020-2024			Ongoing.		
Activities to Achieve Objective 4.2 Provide reasonable assistance to those member libraries whose websites are hosted on a MCFLS server, e.g. uploading files, troubleshooting problems.	Hieu Tran Jen Schmidt	2020-2024			Ongoing.		
Activities to Achieve Objective 4.2 Facilitate integration of member library websites hosted by MCFLS with the Expression Web client.	Hieu Tran Jen Schmidt	2020-2024			Ongoing.		

Objectives and Activities – Goal 5. To facilitate MCFLS and member library participation in the Wisconsin Public Library Consortium’s (WPLC) digital download media buying pool.

Goal 5: To facilitate MCFLS and member library participation in the Wisconsin Public Library Consortium’s (WPLC) digital download media buying pool.						Use to track goal progress	
Objectives and Activities	Person(s) Responsible for Ensuring Activities are Completed	Timeline for Completing the Objective and Activities	Resources Needed to Achieve Objective	Cost	Evaluation Method	Progress Toward Achieving Objective	Comments
Objective 5.1 Keep current with all emerging technologies related to technology and digital downloads.							
Activities to Achieve Objective 5.1 Participate in statewide information sharing related to digital downloads, including attending Wisconsin Public Library Consortium (WPLC) Board meetings. Share new developments with the MCFLS Board and LDAC.	Steve Heser	2020-2024			Participation in all WPLC board meetings and regular communication with LDAC and MCFLS Board.		
Activities to Achieve Objective 5.1 Utilize blogs, trade publications, and other resources to stay current with technology related to digital downloads.	Steve Heser Jen Schmidt	2020-2024			Maintain professional development and subscriptions to trade magazines		
Activities to Achieve Objective 5.1 Facilitate system participation in the Digital Library Steering Committee and other WPLC subcommittees to ensure MCFLS member libraries have a voice in any future direction taken by the WPLC.	Steve Heser	2020-2024			Maintain MCFLS presence on all committees and participate in any funding discussions.		

Objective 5.2 Train MCFLS member library staff in serving patrons who use digital download services.							
Activities to Achieve Objective 5.2 Offer training to MCFLS member library staff on how to use digital download services. Provide training using methods and materials in accordance with the MCFLS strategic plan.	Jen Schmidt Kate Strattner	2020-2024			Creation of content and delivery to staff utilizing short, focused materials.		
Activities to Achieve Objective 5.2 Provide online resources dedicated to helping patrons troubleshoot and/or learn more about digital download services.	Jen Schmidt Kate Strattner	2020-2024					
Objective 5.3 Insure adequate funding for the digital download media buying pool.							
Activities to Achieve Objective 5.3 Coordinate with MCFLS member libraries to insure adequate funding is maintained.	Steve Hesper	2020-2024			Work with LDAC to maintain or increase funding as appropriate.		

Objectives and Activities – Goal 6. To help purchase and/or broker purchases of online databases.

Goal 6: To help purchase and/or broker purchases of online databases.						Use to track goal progress	
Objectives and Activities	Person(s) Responsible for Ensuring Activities are Completed	Timeline for Completing the Objective and Activities	Resources Needed to Achieve Objective	Cost	Evaluation Method	Progress Toward Achieving Objective	Comments
Objective 6.1 Purchase and/or broker purchases of online content delivery products for MCFLS libraries.							
Activities to Achieve Objective 6.1 Purchase and/or broker purchases of appropriate online content delivery products for member libraries	Steve Heser Jen Schmidt	2020-2024			Maintain current subscriptions; evaluate performance and identify new opportunities.		
Activities to Achieve Objective 6.1 Seek input and recommendations from the LDAC regarding product purchases.	Steve Heser Jen Schmidt	2020-2024			Perform annual reviews of hoopla and other system sponsored subscriptions.		
Activities to Achieve Objective 6.1 Integrate products within the library catalog as appropriate.	Jen Schmidt	2020-2024			Ongoing.		
Objective 6.2 Ensure adequate funding for purchase of online content delivery products.							
Activities to Achieve Objective 6.2 Adjust agreements and system budget to allow for additional funding.	Steve Heser	2020-2024			Maintain existing budget lines; increase funding each year.		

Objectives and Activities – Goal 7. To assist member library staff in becoming more technologically knowledgeable and proficient.

Goal 7: To assist member library staff in becoming more technologically knowledgeable and proficient.						Use to track goal progress	
Objectives and Activities	Person(s) Responsible for Ensuring Activities are Completed	Timeline for Completing the Objective and Activities	Resources Needed to Achieve Objective	Cost	Evaluation Method	Progress Toward Achieving Objective	Comments
Objective 7.1 Provide technology-related consultation and education to member library staff at all levels.							
Activities to Achieve Objective 7.1 With input from LDAC, MCFLS staff will annually provide a set of staff training opportunities.	Jen Schmidt	2020-2024			Production of annual calendar of staff training opportunities.		
Activities to Achieve Objective 7.1 MCFLS will regularly communicate with SEWI CE staff in order to relay topic ideas for future technology training and to identify potential speakers for MCFLS-specific committee meetings.	Jen Schmidt	2020-2024			Participation and regular communication with SEWI CE staff.		
Activities to Achieve Objective 7.1 MCFLS will stay current with access methods and issues relating to various information resources, and create training content for use by member libraries	Jen Schmidt	2020-2024			Use of library field and technology resources to stay abreast of current models and trends.		
Activities to Achieve Objective 7.1 MCFLS will stay abreast of technology trends relevant to member libraries on the local, state and national levels.	Jen Schmidt Steve Heser	2020-2024			Use of library field and technology resources to stay abreast of current models and trends.		

Objectives and Activities – Goal 8. To maintain and enhance MCFLS technology staff professional competencies.

Goal 8: To maintain and enhance MCFLS technology staff professional competencies.						Use to track goal progress	
Objectives and Activities	Person(s) Responsible for Ensuring Activities are Completed	Timeline for Completing the Objective and Activities	Resources Needed to Achieve Objective	Cost	Evaluation Method	Progress Toward Achieving Objective	Comments
Objective 8.1 Identify appropriate training and membership opportunities for MCFLS technology staff.							
Activities to Achieve Objective 8.1 Allocate funds for MCFLS staff conference/training needs as a separate line item within the annual MCFLS budget.	Steve Heser	2020-2024		\$6,500/yr	Maintain training budget line at current support.		
Activities to Achieve Objective 8.1 Encourage and fund MCFLS staff memberships in professional organizations as a vehicle for peer exchange and networking.	Steve Heser	2020-2024		\$5,000/yr	Maintain memberships in professional organizations. Support conference attendance.		
Objective 8.2 Analyze system staffing levels to support the Technology Plan							
Activities to Achieve Objective 8.2 Review and alter job descriptions where necessary.	Steve Heser	2020-2024			Review job descriptions by 2024.		

Objectives and Activities – Goal 9. To organize and maintain all appropriate automation product licensing, technical documentation and assist members in technology life cycle planning.

Goal 9: To organize and maintain all appropriate automation product licensing, technical documentation and assist members in technology life cycle planning.						Use to track goal progress	
Objectives and Activities	Person(s) Responsible for Ensuring Activities are Completed	Timeline for Completing the Objective and Activities	Resources Needed to Achieve Objective	Cost	Evaluation Method	Progress Toward Achieving Objective	Comments
Objective 9.1 Maintain all central site licenses and maintenance agreements and provide member libraries with all appropriate documentation for MCFLS controlled network equipment.							
Activities to Achieve Objective 9.1 Ensure that all appropriate central and remote site automation product licenses and maintenance agreements are current and up-to-date and maintain copies in a secure fireproof location.	Hieu Tran	2020-2024			Maintenance of product licenses and agreements.		
Activities to Achieve Objective 9.1 As specified in MCFLS ILS, Resource Sharing and Technology agreement, provide members annually an updated inventory list of MCFLS controlled network equipment, located at the participating library locations.	Hieu Tran	2020-2024			Annually share an updated inventory list.		
Objective 9.2 Establish standards related to technology equipment and life cycle planning.							

Activities to Achieve Objective 9.2 Develop and share equipment replacement schedules and lists of recommended hardware, browser, PC and printer settings.	Hieu Tran	2020-2024			Create and maintain lists on an annual basis.		
Activities to Achieve Objective 9.2 Create an annual report that includes system activities related to technology.	Hieu Tran	2020-2024			Create an annual report to share with member libraries.		
Objective 9.3 Provide leadership in trend spotting and technology project development.							
Activities to Achieve Objective 9.3 Identify and manage large scale project opportunities for scale shared technology projects.	Hieu Tran	2020-2024			Take advantage of state-wide opportunities as appropriate.		
Activities to Achieve Objective 9.3 Vet and test potential new technologies and performing regular environmental scans for member libraries.	Hieu Tran	2020-2024			Ongoing evaluation.		

Objectives and Activities – Goal 10. To insure adequate funding for the Technology Plan.

Goal 10: To insure adequate funding for the Technology Plan.						Use to track goal progress	
Objectives and Activities	Person(s) Responsible for Ensuring Activities are Completed	Timeline for Completing the Objective and Activities	Resources Needed to Achieve Objective	Cost	Evaluation Method	Progress Toward Achieving Objective	Comments
Objective 10.1 Budget for this plan within annual operating budget as well as capital outlays for future needs.							
Activities to Achieve Objective 10.1 Fund all ongoing components of this plan with appropriate budgetary line items.	Steve Heser	2020-2024			Maintain support for Technology plan goals.		
Activities to Achieve Objective 10.1 As appropriate, build up reserve funds over multiple years for anticipated capital replacement and/or upgrade expenditures.	Steve Heser	2020-2024			Identify and pursue reserve fund opportunities where appropriate.		