



MCPL Task Force Questions

Technology and ILS Questions and Responses

3/2/2020

Please see below for responses to the questions from MCPL Task Force Chairman Mark Arend.

Technology Questions

1. MCPL will have to replace their RFID system over the coming 12-18 months.

○ **What experience does your staff have in RFID?**

Radio Frequency Identification (RFID) technologies are used across a variety of industries, especially those which need to track the movement and storage of many individual items. The technology is meaningful to public libraries, enabling advanced automation of check-in and check-out processes among other benefits. The consultation and project support team MCPL has access to as a member of WVLS includes team members with this experience:

- Engineering appliance and controller software products inclusive of passive and active RFID tags and integrating with third party RFID tag/reader/controller systems.
- Installing and configuring RFID reader technologies in 24/7 industrial operational environments.
- Supporting installation projects in public libraries including Marathon County Public Library (MCPL) and Antigo Public Library.

○ **How can you assist them with this project?**

- MCPL's consultation and project support team at WVLS can assist MCPL with the development of a comprehensive needs and goals assessment to set the stage for a successful project.
- The team can subsequently assist MCPL with:
 - vendor and product discovery relevant to MCPL's needs/goals.
 - RFI and RFP process management.
 - project scoping and vendor negotiations.
 - product selection and/or RFP vetting.
 - project development and implementation coordination with selected vendor.
 - ILS integration coordination and support.
 - addressing all other aspects of RFID tag and reader system replacement efforts.

2. How do you support libraries' experimentation with new technology services?

If a library is experimenting with technology services for which we already have direct production support, we work with them to understand their needs and goals, and then ensure they have access to the service in a meaningful way.

If a library intends to experiment with new technology services unique within WVLS, we will work with them to understand the needs or goals driving the experiment(s), to understand the desired outcomes, to identify how WVLS can assist and learn along with the library, and to determine how WVLS can provide or secure either one-time or long term support resources.

3. If only one library is interested in a new technology, to what extent are you able to assist that library?

The extent WVLS is able to assist is defined by the specific project and whether expectations are realistic, idealistic, or under-informed. WVLS can assist the library in its efforts to:

- clearly frame its up-front expectations.
- assess the viability of those initial expectations
 - choose to pursue realistic goals with historically successful experimentation patterns
 - choose to pursue ideal goals toward innovative breakthroughs with the understood risk that there may be no clear measure of success
 - work to establish a balance of both
- establish the scope of effort and appropriate metrics to pursue identified viable goals, and measure success to the extent possible.

For most pursuits of new technology by a single library within the system, we can directly provide appropriate technology consultation and project support assistance as needed at no additional cost to the library. For projects requiring deeper, more focused expertise than is available among library systems in Wisconsin, WVLS can assist the library by connecting with an appropriate third party.

4. How do you balance one library's desire to innovate with the need to continue to provide services to other member libraries?

The desire of all WVLS member libraries to innovate to varying degrees has informed WVLS technology consultation and support operations over the past 10 years. WVLS seeks to enable, support, and partner in both individual and group innovation efforts, while leveraging project results to the benefit of all members. One library's desire to innovate does not detract from providing continuing services to other member libraries. Providing continuing services to other members libraries does not preclude assisting one library's innovative goals.

5. How do you decide what technology products or services to support or not support?

Technology Services are driven by customer needs. If a single library commits resources to the pursuit of a service not already available or supported, we will work with that library to ensure its own needs and goals are met while assessing the potential for additional interest from other members. If a one or more libraries seeks a service not already available, or a critical mass of libraries independently engaging the same or like services is met over time then WVLS will commit the resources to testing feasibility and implementing those services in a centrally maintained and supported manner. Sustainability is the key factor in determining how many library participants any given service needs to be supported long term.

Technology products are selected to meet the service needs and demands of our membership in the most cost-efficient high-quality infrastructure available to Wisconsin libraries.

6. What do you see as new or emerging technology that will affect libraries in the next few years?

Cybersecurity management will remain crucial.

The cybersecurity race will likely remain at the forefront of the backend. That is, the users will continue to consume digital resources while the network and application support teams will be ever more burdened with threat mitigation and management efforts. Artificial Intelligence (AI)-driven threat detection and mitigation tools will likely see more prominence.

Libraries will need to embrace and enable technologies implemented by other public institutions and the communities they serve.

Al anything/everything in conjunction with the '[Smart City](#)' trends percolating down from the largest cities to smaller and smaller communities will put pressures on the library to be integrated in such efforts or at least to be a support hub enabling citizens to better utilize the technologies being implemented and promoted by their communities. In communities not yet engaged in Smart City type projects and technology integrations, the library will be a beacon of technology capabilities by example or pragmatic use and by promotion of efficiency and lifestyle improvement enabling technologies.

5G will be an increasingly driving factor in community and individual public sector decision making though most people will not be entirely sure why.

There will be a disconnect between the understanding of the technology and its relevance in policymaking as mobile service providers utilize the buzzword to push deregulation agendas. The unintended consequences will manifest in unpredictable ways in each community as more right-of-way and micro real estate leasing agreements consume the limited space resources in urban and rural communities.

Continued improvements with existing technologies will influence library programming.

Technologies already years (even decades) old such as augmented reality, virtual reality, makerspace ecosystems and Minecraft (along with Minecraft-like managed learning video game platforms) will continue to see small dips and large surges in popularity and their collective influences on library programming will continue to grow significantly. Programming relevancy over the next five years will demand a lot of shallow specialization across a wide pool of maker and coding-oriented subjects.

The Digital Divide will get worse before it gets better.

The gap in the digital divide will continue to widen, and the populations of those on either side will be shifting as the rate of acceleration of technology development continues to increase and the national communications infrastructure capabilities remain stalled at the fringes. The most prominent examples of the widening divide will be found in the most rural parts of the country, like Northcentral Wisconsin.

Financial questions

1. **Please list payments and amounts that MCPL is or would be expected to pay as a system member in 2020.**

and

2. **How are these shared costs determined?**

ILS V-Cat Maintenance: \$74,737.84

The V-Cat Maintenance Formula is the average of relative percent of circulation and holdings:

(percent circulation + percent holdings) / 2

(39.5% [circ] + 31.3% [holdings]) / 2 = 35.4%

MCPL was 35.4% of the total 2020 V-Cat Maintenance (\$210,975) for a cost share of \$74,737.84. Cataloging services (both original cataloging and copy cataloging) are included.

Cataloging: \$0.00

WVLS provides original and copy cataloging services for V-Cat.

Thirty-two (32) Delivery

Stops per Week: \$0

Additional Delivery Stops: \$1,100 per additional stop

WVLS pays for twenty-four (24) stops, three (3) per branch location. Each branch receives one stop for drop-off and pickup three days per week. MCPL does not currently subscribe to additional stops for the branches.

WVLS pays for three (3) stops for MCPL Wausau location. MCPL pays for two additional stops at the Wausau location. WVLS pays for an additional five (5) stops at the Wausau location to support vendor-sort services. The total of ten (10) stops for the Wausau location enables a two stops per weekday regular schedule of morning drop offs and afternoon pick up. In total, WVLS pays for thirty-two delivery service stops to MCPL locations and MCPL pays for two additional stops to the Wausau location.

MCPL branches:

- WVLS pays for 3 stops per week at each location for drop off and pickup.
- MCPL does not currently pay for additional stops at any of the branches.

Downtown Wausau location:

- WVLS pays for 3 stops per week at the Wausau location.
- MCPL pays for two additional stops in Wausau.
- WVLS pays for an additional 5 stops per week in Wausau for vendor sort support.

Overdrive fees: \$28,751.02

The Digital Library cost sharing formula is the average of the relative percent of usage and service population:

(percent usage + percent svc population) / 2

(50.13% [usage]) + (46.4% [population]) / 2 = 48.3%

MCPL was 48.3% of the total cost share (\$59,571) for 2020.

Technology Services: \$6,900

This is a composite of infrastructure support required for ILS network access and for WVLS managed antivirus, the only core technology service utilized by MCPL. MCPL has chosen to self-manage its own independent networking, server, and computer environment. WVLS supports this model as well as the full services model chosen by other member libraries. Along with the low-cost managed antivirus licensing, MCPL leverages WVLS centralized equipment procurement services.

One potential area for MCPL to explore significant cost efficiency gains would be to leverage the robust network, server, and data storage infrastructure it has access to as a WVLS System Member. Rough calculations place the cost saving estimates at more than 85% of current server, storage, and network capital procurement and maintenance costs. This would also free up a sizable percentage of the MCPL technology support FTE dedicated to managing those components, and significantly expand MCPL's server and networking support depth.

As a system member benefit (no cost), consultation and strategic planning services are available to all WVLS member libraries. WVLS does not charge for these consultation services whether a member library uses a few hours or a few weeks of consultation time.

MCPL maintains a service relationship with the City County IT Commission (CCITC) in Wausau for various networking and application services. Due to the integral nature of some of those services (e.g. Microsoft Outlook Address Book integration with phone services), it is understandable for MCPL to maintain these services and that relationship even though some of them are available to MCPL through WVLS at no additional cost or at a fraction of MCPL's current operational costs. We support that mode of operation as one that makes the most sense for MCPL at this time.

3. Do you give cash grants to libraries? Please describe amounts, purpose, and how you determine the amount each library gets.

WVLS does not provide cash grants to libraries within the scope of Technology. WVLS does work with the Library Advisory Committee and member libraries to leverage external funding opportunities, including grants like the Library Systems and Technology Act (LSTA) funding managed by the Wisconsin Department of Public Instruction (DPI), to the benefit of the whole system. WVLS welcomes project proposals and requests to experiment with alternative approaches to current operations (eg testing new receipt printer models when the models in use are end-of-sale).

WVLS provides a \$10,000 grant to MCPL for collection development within the scope of ILS.

WVLS also provides grants to libraries, including MCPL, in other budget/service areas which will likely be addressed while the Task Force investigates the full slate of services across the systems.

Questions for SCLS only:

1. Can you estimate what MCPL would have paid in ILS, technology & other fees if it were a SCLS member in 2020?

Though this question was asked only of SCLS, it is meaningful to ask it of both systems. Research, discovery, and assessment are among the consultation and project services available to MCPL as a WVLS system membership benefit.

Based on published documentation on the SCLS website, WVLS calculated that the SCLS total operational cost per capita (number of borrowers) is \$4.01 per year. For equivalent or better services WVLS total operational cost per capita is \$1.76 per year and MCPL's cost share of that is \$1.10 per year.

The total operational costs for SCLS are about \$1,944,500. The total operational costs for equivalent or better services in WVLS is about \$278,500.

The statistical pressures informing the flow of inter-loan materials in WVLS significantly favor MCPL, enabling Marathon County residents to consistently benefit as net borrowers of materials owned across the membership from year to year. However, those pressures are reversed by more than 100% when considering MCPL metrics in combination with SCLS data. It is worth noting that although SCLS has more libraries and a larger total collection (with the breadth of that collection likely quite similar to the breadth of the WVLS collection), the depth per capita is lower in SCLS than WVLS (6.9 items per SCLS borrower vs 7.1 items per WVLS borrower) and the per resident ratios are almost identical at 3.99 items per resident in each system.

Another notable pressure on material flow is that of items available in the system relative to the total circulation of the system. WVLS has a .57 items per circulation ratio and MCPL's individual ratio is .45 items per circulation, indicating more items available within the collections of other WVLS members in relation to Marathon County borrowers. SCLS has a .35 items per circulation ratio, indicating MCPL's collection would experience more pressure to supplement SCLS libraries and their patrons than MCPL would to be supported by other SCLS members. These pressures that go

against MCPL's favor in cases of a migration to SCLS or a withdrawal from the V-Cat ILS consortium to self-host need to be considered during the decision-making process.

WVLS estimations, based on available information on the SCLS website, put the costs for equivalent or lower minimum required technology services and ILS services from SCLS between 248% and 307% higher than 2020 WVLS. Initial indications suggest that MCPL would see even higher cost increases in a scenario where it withdraws from the V-Cat ILS Consortium to self-host its own ILS.

These cost research efforts and calculations are limited primarily to technology, ILS, and delivery. The trend of higher cost per unit of service in SCLS is likely to map across most or all of the other service areas. A thorough discovery process and cost difference analysis by an independent third party is recommended.

2. Can you estimate the costs for MCPL to migrate to LINKcat?

Not applicable to WVLS.

3. What services do you offer that are primarily used by your larger libraries?

Though this question was asked only of SCLS, it is meaningful to ask of both systems.

Although available to all members, the technology services primarily used by the larger libraries in WVLS are generally related to recent replacements of physical servers, previously independently managed Active Directory environments, and localized data storage. The trend has been to eliminate the third-party service maintenance expenses for self-hosted Active Directory (user account management) environments, reduce server and data storage capital expenses, and integrate into the centralized WVLS managed and supported Active Directory environment and virtualization infrastructure.

Questions for WVLS only:

1. What services does MCPL receive that your smaller libraries do not?

and

2. What services do the smaller libraries in the consortium receive that MCPL does not?

The agile and adaptable nature of the WVLS model is such that all members from smallest to largest can benefit from our consultation services, core application services, standards-based and custom support services. All services are available to all members, but their opt-in/opt-out nature (sometimes referred to as "a la carte") means a library can choose to use some or all available services. MCPL may choose to opt into the additional services available at its prerogative.