



Reaching Across Illinois Library System

630.734.5050 | www.railslibraries.info

125 Tower Drive | Burr Ridge, IL 60527 | T: 630.734.5000 | F:



October 20, 2017

TO: RAILS Board

FROM: Jane Plass

ABOUT: Overlay Project

The packet for the September 2017 Board meeting contained a draft of the overlay question and answer document. The final version, which expands on the technical information, is attached.

The final Q & A document was also shared with the Consortia Committee for its meeting on October 16. The overlay project was on its agenda for discussion only, as the committee had three new members and a lot of information to review. However, following an extensive discussion of RAILS resource sharing priorities and the overlay project, committee members agreed to send the recommendation of the Overlay Software Search Working Group directly to the RAILS Board, as the committee will not meet again until January 2018.

At its final meeting on July 11, 2017, the RAILS Overlay Software Search Working Group recommended that RAILS staff be directed to enter into contract negotiations with Auto-Graphics for use of SHAREit to expand resource sharing among Illinois libraries. We ask that the Board approve this recommendation.

Overlay Project Q & A

Overview and Current Status

What is the overlay project?

Since 2013, RAILS has been researching a potential project to provide library users with seamless access to the catalogs of RAILS consortia and standalone libraries that choose to participate. RAILS chose to call this an overlay project to emphasize that the goal is to expand resource sharing by connecting, not replacing, existing integrated library systems.

The project will begin with a small pilot project of 10–20 libraries from three consortia and expand from there. The pilot is expected to last no more than two years. After the pilot, participation will be open to any interested library of any type—academic, public, school, or special. Participation will be voluntary, not required.

What is the current status of the project?

On July 11, 2017, following a thorough procurement process that began in August 2016, the Overlay Software Search Working Group recommended directing RAILS staff to begin contract negotiations with Auto-Graphics for use of its SHAREit software.

This recommendation was presented to the RAILS Consortia Committee on July 24, 2017. No vote was taken at that meeting, as committee members wanted additional information. The timeline for further approval of the recommendation is uncertain, but ultimately the RAILS Board will make the final decision.

Contract negotiations with Auto-Graphics can begin after RAILS Board approval. Because these will also take some time, it's likely that implementation of the pilot project will not begin until early 2018.

Research and Needs Assessment

Why is the overlay project part of the RAILS operational plan?

In March 2012, the Illinois Library Association published *The Future of Illinois Cooperation: Exploring Effective, Efficient Service Models*. This report contained recommendations from the Galecia Group, whose study was paid for with LSTA funds awarded through the Illinois State Library. While much of the report focused on standardizing and streamlining delivery (which has since been done), it also included several recommendations about shared catalog consortia and interlibrary loans. These included:

- Consolidation within RAILS into fewer shared integrated library systems (ILSs)
- Implementation of a state-of-the-art resource-sharing system for the state to improve staff workflow and to improve patron experience with self-service

At that time, any consolidation of the legally independent shared catalog consortia within RAILS seemed unlikely. (RAILS has since funded two consolidations [Illinois RiverShare libraries rejoining PrairieCat, which was effective in May 2016; LINC and most MAGIC libraries joining SWAN, which is planned for May 2018]). In addition, RAILS has many members with standalone integrated library systems, many of

which are unlikely to join a shared catalog consortium for various reasons. Interest in an overlay project also emerged during various focus groups held as part of the RAILS 2013 strategic planning process.

The RAILS strategic plan (available at <https://www.railslibraries.info/about/strategic-plan>) speaks to a broad, multipronged approach to resource sharing:

RAILS fosters and promotes a robust, holistic vision of resource sharing in Illinois that will enable and encourage all libraries to share materials as freely and widely as possible.

Rationale: Libraries are stronger together. Our primary role as a system is to promote, support and expand resource sharing among Illinois libraries. We support traditional resource sharing through library consortia, physical delivery and other methods of discovery and fulfillment; we facilitate and encourage the sharing of library and librarian expertise for the benefit of all members; we undertake innovative projects that expand existing resource sharing and provide access to digital content; we provide economies of scale for collaborative purchasing initiatives; we build cooperative relationships with and among member libraries and with other stakeholders in Illinois and beyond.

Therefore, RAILS' annual operational plans have consistently included exploration of a resource-sharing system (overlay) as a goal, in addition to support of the LLSAPs.

What research on the overlay project has been done?

The overlay project has had three phases so far, with work guided by the Overlay Project Working Group.

Phase one, completed in 2013, was an environmental scan of resource-sharing overlay products in use in other states. RAILS contracted with Lori Bowen Ayre of the Galecia Group to do this study, which focused on exploring resource sharing projects already in use in other states that linked libraries of different types and various integrated library systems.

Phase two was designed to gather input about what RAILS members would like to have in an overlay product and to identify organizational factors such as governance, administration, finance, staff workload, and resource sharing policies and viewpoints that might affect the success of the project. In 2015, RAILS contracted with Eric Craymer of Growth Management Consulting, Inc. to do this study. Mr. Craymer gathered input through multiple focus groups, webinars, and a survey. The in-person focus groups included separate meetings with the RAILS Consortia Committee, the Overlay Project Working Group, several RAILS staff, Illinois State Library (ISL) staff, Illinois Heartland Library System (IHLS) staff, Consortium of Academic and Research Libraries in Illinois (CARLI) staff, and representatives from LINKin and each of the shared catalog consortia. The webinar focus groups were open to interested persons from any library and were organized by type of library.

Final reports and other documents from phases one and two are available on the RAILS website at <https://www.railslibraries.info/services/overlay-project>.

In 2015, RAILS also contracted with Joe Mathews of JRM Consulting, Inc. for an environmental scan of OCLC alternatives. Although this study focused on cataloging, it also included some information and

recommendations on interlibrary loan. One recommendation stated that “a state-of-the-art RAILS regional catalog/ILL system should be created for interested member libraries as envisioned by the overlay project that will provide both discovery and fulfillment.” The final report is available at <https://www.railslibraries.info/services/cataloging-resources>.

In addition, Jane Plass, RAILS Associate Executive Director, conducted multiple interviews with staff from similar projects in other states in spring 2015 and summer 2017. In January 2016, the Overlay Project Working Group hosted a webinar for an informative discussion with staff from various interlibrary loan and resource sharing projects in other states.

One recommendation from Eric Craymer’s report was to begin with a small pilot project, and the Overlay Project Working Group agreed. The working group also asked Deirdre Brennan (RAILS Executive Director) and Jane Plass (RAILS Associate Executive Director) to meet with each shared catalog consortium to invite participation in the pilot project, beginning with participation in the software search. (LINC, MAGIC, SWAN, and RAILS representatives later mutually agreed not to extend the invitation to these three consortia, as discussions about their potential consolidation were already in progress.) The meetings with the consortia were held in early 2016, and CARLI, PrairieCat, and Rock River Library Consortium agreed to participate in the software search.

The Overlay Software Search Working Group first met in August 2016 and began developing a request for proposal (RFP). The RFP was released on January 30, 2017, with proposals due on March 3. Three vendors submitted proposals: Auto-Graphics for its SHAREit system, Innovative Interfaces for its Innovative Resource Sharing system (formerly called INN-Reach), and OCLC for Relais D2D. The evaluation process included:

- Scoring the business and technical proposals based on sections in the RFP
- Full-day demonstrations by each vendor in May 2017. These were open to staff from any Illinois library and were held at RAILS Burr Ridge with remote viewing by live streaming. The demonstrations were also recorded for later viewing for those who could not attend the live sessions. Participants were asked to submit their scores and comments.
- Requesting and reviewing clarifications on the vendor proposals
- Requesting, reviewing, and clarifying best and final offers from the vendors

At its final meeting on July 11, 2017, the Overlay Software Search Working Group recommended directing RAILS staff to begin contract negotiations with Auto-Graphics for use of its SHAREit software.

Goals

What are the goals of the overlay project?

On October 19, 2015, the RAILS Consortia Committee approved the following value proposition:

The RAILS resource sharing overlay project will enable

- Seamless discovery and delivery for patrons: click it, find it, get it
 - Fast and easy to use from anywhere
 - No need to re-enter searches

- Better interlibrary loan service, efficiency, and cost-effectiveness for libraries
 - Self-service for patrons reluctant to ask for interlibrary loan help
 - Reduction in staff time and effort
 - Lower-cost alternative to OCLC for libraries that want one
- Support for reciprocal borrowing service

The project aims to expand resource sharing and facilitate interlibrary loan by providing a single discovery interface that draws from the online catalogs of participating libraries. Patrons and staff who can't find materials in their local catalog can have their searches redirected to the overlay catalog and place interlibrary loan requests there. The overlay software will then direct each request to a library that has that item available. If for some reason the first library cannot fill the request, the request will then be passed on to the next library.

For libraries with a standalone integrated library system (ILS), the overlay catalog would be the next place to search after the local catalog. For libraries in a shared ILS consortium, patrons and staff would search the local catalog, then expand to the entire consortium's catalog, and then the overlay catalog.

SHAREit also includes the possibility of multistate resource sharing. SHAREit systems can opt into the Inter-System Sharing Initiative (ISSI). ISSI allows libraries that use SHAREit to perform ILL transactions with other libraries that use SHAREit but are not members of their own system, plus allowing use of those catalogs as a source of MARC records for cataloging. SHAREit systems with ISSI participants include the Kansas Library Catalog (Kansas State Library), JerseyCat (New Jersey State Library), WISCAT (Wisconsin Resource Sharing), British Columbia Electronic Library Network, and Alberta Government Library.

Reciprocal borrowing occurs when a patron physically goes to a library other than his/her own library, selects items from the shelves, and presents them at the circulation desk for checkout. The lending library wants to know if the patron is in good standing at the home library. Currently, unless both libraries are in the same ILS consortium, staff at the lending library must call the patron's home library to determine this. The support for reciprocal borrowing service is intended to streamline the workflow by allowing the lending library's staff to check the status online through the overlay software. No vendors that submitted proposals currently offer this functionality, so this is a stretch goal that will require additional software development by Auto-Graphics, which has indicated that it can do so. This software development will be part of contract negotiations.

The Auto-Graphics software also offers valuable functionality above and beyond the goals stated in the RAILS value proposition:

- *Bibliographic record source*. The Auto-Graphics proposal includes the ability for cataloging staff to search and download bibliographic (MARC) records. Millions of MARC records are available through reciprocity agreements with SHAREit customers in other states.

- *Participation by nonautomated libraries.* A nonautomated library could participate in the physical union catalog by using Auto-Graphics' web-based client to attach its holdings to the appropriate bibliographic records. (See the Overlay Model section below for more information.)

By facilitating both interlibrary loans and cataloging, the SHAREit resource sharing environment offers an alternative to OCLC for those libraries that want one. The more libraries that participate in the overlay project, the more resources that will be available. Of course, a library could choose to participate in both the overlay project and OCLC, depending on its needs and requirements.

How will the success of the project be measured?

As stated in Eric Craymer's final report on our research into organizational factors, the best case scenario is that:

An initial set of libraries participates and proves that it works. The software delivers on all of the desired benefits and capabilities; libraries and patrons love it, unique items are being discovered and borrowed and the RAILS resource-sharing environment is much richer. Because of the success, many more libraries (though still not all) decide to participate.

RAILS will track the growth and use of the overlay project over time, including but not limited to the number and type of participating libraries, borrowing activity, and lending activity. Qualitative feedback from libraries and patrons will also be requested.

Intended Audience

What is the audience for the overlay project?

The ultimate goal of the overlay project is to serve as many Illinois residents and libraries as possible, but we expect participation to grow over time.

Participation in the pilot project will be limited to some libraries in I-Share, PrairieCat, and Rock River Library Consortium and their patrons. (See Pilot Project section below for more details.) When the pilot ends and the project opens for full participation, all Illinois libraries that are system members, and their patrons, will be welcome to participate. These include libraries with standalone integrated library systems, libraries in shared ILS consortia, and nonautomated libraries. Individual libraries in a shared ILS consortium can participate; the software does not require an entire consortium to participate.

The current automation status of RAILS libraries is shown below. (These numbers show agencies, not branches. They were taken from Library Learning [L2] in August 2017 and are approximate, as some data is self-reported by libraries and may be out of date. The numbers include as standalones the three libraries currently in the process of exiting MAGIC. Union list members of an LLSAP are also considered standalones because they do not use the LLSAP to circulate their collections.)

LLSAP members (circulating)	316	24.6%
Members of non-LLSAP consortia	123	9.6%
Standalone libraries	704	54.7%
Nonautomated libraries	144	11.2%
Total RAILS member agencies	1,287	100.0%

Anyone will be able to search the SHAREit union catalog, but only patrons and staff of participating libraries will be able to place interlibrary loan requests.

What level of interest is there from the academic community in participating in this project?

CARLI is sufficiently interested to have devoted considerable staff time to the software search process. Ted Schwitzner, Library Services Coordinator at CARLI, served on the Overlay Software Search Working Group. RAILS staff also discussed the project multiple times with Susan Singleton (CARLI's previous executive director), Anne Craig (Senior Director), and Kristine Hammerstrand (Director, User Services). Further outreach to CARLI libraries will be done through CARLI's Resource Sharing Committee. LIBRAS, a consortium of 18 private college and university libraries in the Chicago metropolitan area, has also asked Jane Plass to speak about the overlay project at its next meeting on October 18, 2017.

Academic libraries do participate in similar multitype library resource-sharing projects in other states. SHAREit implementations with academic libraries include Indiana, Kansas, Massachusetts, Vermont, and Wisconsin. Prospector in Colorado, MOBIUS in Missouri, and MeLCat in Michigan also include academic libraries; although these projects use different software (Innovative Resource Sharing), their purpose is the same. MeLCat staff have commented that part of MeLCat's value is providing taxpayers with more access to university collections.

Impact on Resource Sharing

Based upon similar projects in other states, what percentage increase can we anticipate in resource sharing from the overlay project?

RAILS staff have had multiple conversations with staff working on similar projects in other states, and one of the discussion topics was the impact on overall interlibrary loan activity. However, this was not a question that could be easily answered, due to the complexity of library resource sharing environments. Also, a number of projects have been in existence for many years. In Michigan, MeLCat resulted in a large increase in patron-initiated requesting, while OCLC interlibrary loan activity dropped off. Indiana's SRCS project went live in August 2016; overall interlibrary loan requests are increasing gradually, while requests mediated through the state library have declined (which was one of the goals of the SRCS project).

Auto-Graphics has observed that generally there is a 50% increase in interlibrary loan activity within two years of SHAREit being put into place. This figure is based on a patron-centric model with SIP2 and/or NCIP being added to the ILL system.

Because RAILS is starting with a small pilot project, it's likely that the increase in resource sharing will start out small, but grow gradually as more libraries join the project.

What will be the impact on RAILS delivery?

Over the past few years, RAILS has streamlined delivery and made it more efficient, and a study with the Laboratory of Applied Spatial Analysis is underway to continue improvements. Routes and staffing can be and have been adjusted to meet changing needs. Delivery will be able to adapt as the project grows over time.

As collections see growth in e-resources, how are those resources surfaced? Can they be accessed in the overlay if license policies permit?

If MARC records for e-books or other e-resources are loaded into a library's catalog, the e-resources will be discoverable via the SHAREit interface as part of the library's collection. If MARC records are not loaded into the catalog, the e-resources can be accessed as a separate resource (Z39.50 target), which would be authenticated and validated using API or Z39.50 and SIP2 connectivity. SHAREit has the flexibility to make e-resources only visible or discoverable for authorized libraries. However, there are additional vendor charges for e-resource integration, as Auto-Graphics licenses third-party software for this.

Similar projects in other states take various approaches to e-books and other e-resources. Some include them to maximize discovery, even if not all patrons have access to them. Other projects have chosen to focus on returnable (physical) resources. Discovery and delivery of e-resources remains an evolving area. We will need to consider our approach as the pilot proceeds and the project evolves.

Can electronic articles/scanned documents be shared directly with patrons via the overlay?

SHAREit supports electronic delivery of articles and other files in response to ILL requests. The lending library can upload electronic files in response to any request. Those files are visible and available to the borrowing library through SHAREit's ILL Request Manager. Electronic files can be seen and downloaded by patrons through their ILL Tracking Account.

Will all libraries in the overlay project need to participate in reciprocal borrowing?

The reciprocal borrowing functionality to be developed is intended to ease staff workflow at libraries already providing reciprocal borrowing. This will include all public libraries participating in the overlay project, as all public libraries are required to provide reciprocal borrowing to registered patrons of other public libraries in the same library system.

Other types of libraries are not and will not be required to provide reciprocal borrowing. However, the software functionality may be of interest to them if they have reciprocal borrowing agreements with other libraries using different integrated library systems.

Pilot Project

How many consortia and libraries will be involved in the pilot project?

CARLI, PrairieCat, and Rock River Library Consortium agreed to participate in the Overlay Software Search Working Group. Libraries in those consortia are eligible to apply for participation in the pilot project. CARLI members should be RAILS member libraries participating in I-Share.

Ideally, the pilot project will include 2–5 I-Share libraries, 5–10 PrairieCat libraries, and 3–5 Rock River libraries. Preliminary recruitment for PrairieCat and Rock River began at the end of July 2017; as of October 9, five PrairieCat libraries (including two high schools in one district) and three Rock River libraries have expressed interest in participating. Outreach to I-Share libraries is underway.

What integrated library system (ILS) vendors will be used in the pilot?

I-Share uses Voyager from Ex Libris, PrairieCat uses Sierra from Innovative Interfaces, and Rock River Library Consortium uses Library•Solution from The Library Corporation (TLC).

What is the timeline for the pilot project?

An implementation timeline will be worked out with Auto-Graphics during contract negotiations, which cannot begin until the RAILS Board approves moving forward. It's likely that implementation will not begin until early 2018.

Major milestones in the pilot project include:

- Recruiting pilot participants (already in progress)
- Contract negotiations
- Review of current practices, ILL policy definitions, local needs review, and general key information for initial configuration of SHAREit (estimated at two months)
- Implementation (setup and training) for PrairieCat and Rock River libraries (estimated at one month)
- Evaluation period for PrairieCat and Rock River libraries (estimated at three months)
- Implementation (setup and training) for I-Share libraries (estimated at one month). (CARLI has recommended bringing in I-Share libraries in a second phase.)
- Evaluation period after all pilot participants are using SHAREit. (Estimated at three months)
- End pilot and open overlay project to other participants

What are the goals of the pilot project?

Goals of the pilot project include:

- Implementing the base platform that will allow future growth of the project
- Ensuring that the software works as described
- Identifying and resolving implementation and training issues to make it easier to bring on new participants
- Developing necessary rules, best practices, project documentation, marketing, and a pricing structure for after the pilot
- Evaluating impact on staff work flow in various library environments

- Evaluating potential impact on resource sharing
- Demonstrating the benefits of the project to potential participants

What data will be collected and analyzed during the pilot?

RAILS will track borrowing activity, lending activity, and the use of patron-initiated requesting. Pilot libraries will also be asked to calculate their cost to complete an interlibrary loan transaction (done outside their consortium) before starting the pilot and later when done on SHAREit. Qualitative feedback from libraries and patrons will also be requested.

What will a successful pilot look like?

A successful pilot will result in:

- Establishment of a tested base platform that will allow future growth of the project
- An increase in resource sharing through interlibrary loans, as compared to baseline activity of the participating libraries before the pilot
- An increase in patron-initiated requesting
- A more efficient staff workflow
- Greater awareness of the overlay project
- A desire by other libraries to join the overlay project

How closely can the pilot project model what the full project would look like?

The pilot project can expand patron-initiated requesting, streamline staff workflow, and model procedures and best practices. However, because it will be small, its overall impact on resource sharing will be much less than the full project.

Costs

How much will the overlay project cost?

Costs will depend on several factors, including contract negotiations, optional components that are selected, the number of libraries participating, and how many ILSs use NCIP. (For more information about NCIP, see the Software and Technical Issues section below.) The contract will be developed to allow for the expansion of the project as libraries decide to participate.

During the software procurement process, RAILS worked with consultant Rob McGee to develop six different scenarios to use for cost proposals. Vendors were also provided with sample data for e-resources and libraries to use in developing their best and final offers. (Library information was anonymized.) This process was used because different vendors have different price structures for their software, so it is necessary to provide a standardized framework to make apple-to-apple comparisons. However, it also means that quotes are only preliminary estimates.

The pilot project is relatively expensive, as it includes costs for the base system that will be used for the full project plus development costs for reciprocal borrowing functionality. The price quote also included SEARCHit for federated database searching, which is optional and relatively expensive. The following costs are a *preliminary estimate* for a 20-library pilot that connects three ILSs and that includes the

optional components. The maximum length of the pilot project will be two years, but may be shorter if it goes well. (The preliminary two-year cost estimate for a smaller 10-library pilot is only \$6,000 less.)

Preliminary Estimate for a 20-library Pilot Project before contract negotiation	
One-time costs	\$130,300
Annual costs—Year 1	\$265,400
Annual costs—Year 2	\$273,400
Total costs	\$669,100

For comparison, the preliminary estimate of total two-year costs for the pilot equates to about three weeks of RAILS average operational expenses (excluding reimbursable expenses for group purchases, etc.) and is slightly less than 15% of two years of RAILS support to LLSAPs. We expect actual costs of the pilot project after contract negotiations to be less.

One-time costs include SHAREit implementation, SEARCHit implementation (optional), NCIP implementation, and custom programming for the reciprocal borrowing functionality. Annual fees include SHAREit hosting, support, and system management; the copy cataloging module to copy and share bibliographic records with other SHAREit systems; NCIP; and SEARCHit (optional).

As libraries join the full project, costs will increase. However, costs do *not* scale proportionately. As more libraries join the project, the infrastructure costs per library will decrease.

[How will pricing be determined for individual libraries? One price fits all, or based on service population or something else?](#)

Pilot libraries will not be charged during the pilot period, as they will be contributing staff time for the feedback and reporting needed for the pilot.

Various pricing models for the full project will be explored during the pilot period. The price structure will likely be scaled, based on one or more factors, to make participation affordable for as many libraries as possible.

[Will there be a reduced price for having X% of a consortium signed up?](#)

This has yet to be determined. As with the eRead Illinois Axis 360 program, RAILS may consider an incentive for 100% participation by a consortium's members.

[What library expenses can be offset to support use of the overlay once the full project begins?](#)

RAILS will seek to keep the overlay participation fee as affordable as possible, but of course, it's ultimately up to each library to decide how to budget for it. Possible offsets include:

- Reduced expenses for traditional interlibrary loan. Libraries using similar projects have found that, even with increased ILL activity, efficiencies achieved through the resource sharing software have allowed them to shift much of the work to staff at lower salary levels. Picking

materials from the shelves and preparing them for delivery requires less expertise and experience than traditional ILL requesting.

- Savings on OCLC costs. Some libraries will likely find that the overlay meets their ILL and MARC records needs and will decide to drop their OCLC membership.
- Adjustments in collection budgets

What is the cost per ILL comparison, including infrastructure costs?

At this stage in the project, we need to rely on the experience of similar projects.

The Colorado Alliance of Research Libraries (CARL) has done the most work on estimating return on investment for its Prospector project, which includes both academic and public libraries. (Prospector uses Innovative Interfaces INN-REACH software but provides similar functionality as SHAREit.) Some years ago, Jefferson County Public Library estimated the cost of an interlibrary loan transaction through Prospector at \$1.50 each, as compared to an estimate of \$15–20 for a traditional ILL transaction. The estimate included staff, vendor, and delivery costs. Transaction costs for both Prospector and traditional ILL have likely increased by now, but the relative comparison should still be accurate.

When infrastructure costs are considered, the cost per transaction decreases as the number of ILL transactions increase. In his 2015 study for RAILS on OCLC alternatives, Joe Mathews looked at annual maintenance costs (excluding personnel costs) of statewide ILL systems. For SHAREit systems, he calculated an average of \$2.78 per transaction, with a range of \$1.10 to \$4.00 per transaction across the various systems.

Based on 2017 information received from the Massachusetts and Wisconsin projects, we estimated their software infrastructure costs between \$2.00–\$2.63 per SHAREit transaction.

Costs for an OCLC ILL transaction in Illinois are difficult to determine, as the Illinois OCLC Group Services contract bundles cataloging and ILL services into a single annual fee. However, in his 2015 study of OCLC alternatives, Joe Mathews included some comparisons for the LINKin consortium in Illinois. LINKin libraries in Illinois use a combination of Innovative Interfaces' INN-Reach product and OCLC for sharing resources. Mathews estimated the ILL transaction costs, including staff costs, as \$1.96 per INN-Reach transaction and \$7.81 per OCLC ILL transaction. Mathews also noted that Louisiana's cost per OCLC ILL transaction (excluding personnel costs) was \$11.36, as compared to \$1.59 per SHAREit transaction.

Published benchmarks for ILL costs are out of date. OCLC is working on a web-based tool for ILL cost comparison, but it is not yet available and the web page has not been updated since February 2016 (<http://www.oclc.org/research/themes/systemwide-library/interlibrary-cost-calculator.html>).

Overlay Model

What SHAREit model is recommended?

SHAREit is a flexible system that can be configured in three ways:

- Physical database. In this model, records are exported from the various integrated library systems and merged into a single union catalog. Availability information is not shown in the catalog in this model.
- Virtual union catalog. In this model, the Z39.50 protocol is used to search catalogs of participating libraries and return results, including availability information, on the fly in response to a search.
- Hybrid mode. SHAREit can combine a physical database with Z39.50 searching of other catalogs to create a single union catalog. This allows participation by nonautomated libraries and smaller libraries without an ILS that can support Z39.50 searching, while enabling real-time results from libraries with a more robust ILS.

Auto-Graphics recommended, and the Overlay Software Search Working Group agreed, that the hybrid model would be best for the overlay project due to the diversity of Illinois libraries and our complex automation environment.

Approximately 60% of SHAREit customers in North America use the hybrid model, while 20% are purely virtual and 20% are purely physical.

Was cost a factor in choosing a hybrid model?

No. Auto-Graphics did not submit pricing dependent on the model. In fact, Auto-Graphics pricing allows a transition from Z39.50 to physical union catalog or vice versa with no added cost or change in pricing. The hybrid model was chosen because it best fits our needs.

To participate in the overlay project, does a library have to reciprocate?

Yes, RAILS expects all libraries participating in the overlay project to reciprocate. Of course, membership in an Illinois regional library system requires compliance with the *ILLINET Interlibrary Loan Code*. The SHAREit software provides another way of placing and processing interlibrary loan requests.

Staff and patrons of libraries that don't participate in the overlay project will be able to search the union catalog, but will not be able to place interlibrary loan requests.

How would a nonautomated library participate in the overlay? How would its membership benefits compare to other libraries?

A nonautomated library could participate in the physical union catalog by using Auto-Graphics' web-based client to attach its holdings to the appropriate bibliographic records. The library would not be able to edit the MARC records. If the library was later ready to automate, it could export the MARC records and its holdings for use in its new ILS. RAILS staff would need to provide other options if the MARC record wasn't already in the catalog, such as obtaining it via Z39.50 from other catalogs or getting it from the Cataloging Maintenance Center if original cataloging were needed.

The nonautomated library would use the SHAREit software to process interlibrary loan requests.

Are there any rules for about circulation periods, long overdues, lost items, damaged items, notices, etc.?

One of the objectives of the pilot project is to develop necessary rules and best practices. The Overlay Project Working Group will work on this with input from libraries. The working group will include representatives from some participating libraries and from at least one library with a standalone ILS.

The SHAREit software is flexible and allows many parameters to be set at the local library level. However, several similar projects in other states have chosen to adopt more standardization than the software requires in the interest of improving the patron experience.

Of course, system resource sharing policies and the *ILLINET Interlibrary Loan Code* will still apply.

Software and Technical Issues

Will there be help to customize library/consortia websites and OPACs to include links and automatic redirects into the overlay for searches with no materials found?

RAILS has budgeted for a new project manager position, with the overlay project as a primary responsibility. Although the customization will need to be done by library or consortial staff, the RAILS project manager will be able to provide guidance and assistance. Support may also be needed from the library's or consortium's ILS vendor. Auto-Graphics staff can also provide documentation and assistance on setting up the passing of searches into SHAREit for those integrated library systems that support it.

How do extracts work when the entire consortium isn't signed up? Or if the connection is via Z39.50, are there any extracts required?

Record extracts are not required with Z39.50 connections. For a physical union catalog, the consortium could send a file containing just records for the participating libraries. Auto-Graphics could also use a full record file and strip out records for nonparticipating libraries during preprocessing based on exclusion specifications that would be developed.

What is required on the ILS end to set up Z39.50 harvesting?

The ILS must have Z39.50 server software configured, and the library or consortium must complete a Z39.50 profile. Auto-Graphics staff will use the Z39.50 profile to configure SHAREit as needed.

Is there a limit to the number of catalogs that can be connected by Z39.50 effectively and cost-efficiently?

Auto-Graphics has stated that there is not a system-based limit, but does recommend a practical limit of approximately 100 distinct Z39.50 targets being searched. An ILS consortium would most often be a single target, although this varies depending on the ILS software and implementation.

The practical limit refers to the estimated time that a patron may be willing to wait for search results to be returned. There is no technological limit to the number of targets that can be searched, but more time would be required to return results.

Note that the targets a patron selects to perform a search may be different than the targets that are searched to find valid lenders during the request process. A patron does *not* need to perform a search at

a particular target for potential lenders from that target to be added as valid lenders for the patron's ILL request. The workflow for virtual searching and SHAREit's design allows for one or more Z39.50 targets to be selected. If the item the user wishes to borrow is found and the user submits a request, SHAREit then conducts a set of Z39.50 searches in the background to identify potential lenders. Auto-Graphics designed this capability when it first built a large-scale virtual system for New Jersey in 2001.

During implementation, Auto-Graphics will work with RAILS to determine the best mix for a hybrid model using a physical union database and Z39.50 connections.

[What overhead does harvesting and availability checking via NCIP place on a catalog? Do large transaction-heavy consortia have the capacity to support another constant data pull?](#)

Harvesting and availability are done via Z39.50, not NCIP. Typically, a large consortium will have the capacity to support the Z39.50 connections.

While the capacity to support an adequate level of Z39.50 connections is worth considering, Auto-Graphics has found this to be a minimal issue with modern servers and does not currently face this issue with any of its statewide or regional customers.

[What is NCIP, and why will it be useful for the overlay project?](#)

NCIP (NISO Circulation Interchange Protocol), also known as Z39.83, is a standard that addresses the need for interoperability among different integrated library systems, interlibrary loan systems, and related applications. Because of the way ILS vendors have implemented NCIP, information can flow from an outside system into the ILS, but not vice versa. It saves staff time by automatically doing some steps in the ILS.

For example, if an ILS is using NCIP, when the borrowing library receives an ILL item, SHAREit sends an *AcceptItem* message to the ILS to create a temporary bibliographic record, place a hold on the item for the patron, and print a hold slip. When the item is returned, a staff member updates the ILL request in SHAREit to *Returned*. SHAREit then sends a *CheckInItem* message to the ILS, which checks in the item in the ILS and removes the temporary bibliographic record. Similar interactions between SHAREit and the ILS of the lending library also take place.

NCIP can result in considerable savings of staff ILL processing time. In a 2011 article, Mary E. Jackson used an estimated 50% reduction in staff time. (Mary E. Jackson, "Staff Cost Savings From Implementing the NCIP Circulation Interchange Protocol (NCIP)," *Information Standards Quarterly*, v. 23, issue 4 (Fall 2011):4–11, http://www.niso.org/apps/group_public/download.php/7745/FE_Jackson_isqv23no4.pdf)

For more information about NCIP, see <http://www.ncip.info/introduction-to-ncip.html>.

How does SHAREit work without NCIP?

Both systems must use NCIP to provide interoperability. Although a number of ILS vendors offer it, it is typically an additional cost, so many local ILSs do not have it implemented. However, SHAREit does not require NCIP to function.

If an ILS does not have NCIP, the library circulates interlibrary loan materials in the local ILS and updates the requests on SHAREit. This is usually done by creating a temporary record in the ILS for the ILL request so the item can be checked out to the patron. When the item is returned, a staff member checks it into the local ILS and updates the action to *Returned* in SHAREit when the item is sent back to the lending library. This workflow is what many libraries already do for items received through OCLC and traditional interlibrary loan procedures.

If only some libraries in a consortium participate in the overlay, what displays in the overlay catalog? Results from the entire consortium or only those of the participating libraries?

If the consortium participates via a physical union catalog for item discovery, then holdings of nonparticipating libraries are removed before holdings are added to the union catalog. Thus, holdings of nonparticipating libraries are not visible.

If the consortium participates via z39.50, the very nature of that protocol returns all holdings as part of the results set, so holdings of nonparticipating libraries are visible. That said, those locations can be configured to display any desired text and also indicate that those items are not lendable. Discovery is increased even though not all holdings displayed are requestable. SHAREit disregards nonparticipating libraries when configuring the potential lender list.

During the May 2017 SHAREit demonstration at RAILS, Auto-Graphics staff stated that eligibility (or requestability) of an item for ILL is determined based on location information in the ILS, not on item type. If a consortium relies on item type to determine holdability, will SHAREit see all materials in a given location as eligible for interlibrary loan if they're not already checked out? If not, is extensive per-library mapping needed?

For libraries participating in the virtual catalog, eligibility is determined by locations included in the Z-Map, which is created during initial configuration. In addition, SHAREit allows libraries to create detailed lending policies based on formats or types of records they will lend. For example, if a library indicates in its lending policy that it does not lend DVDs, SHAREit will automatically remove that library from any DVD request, and will not send the request to that library at all. Lending policies are created at the individual library level. SHAREit looks at both location codes and policy tables to determine request routing.

The Commonwealth Catalog in Massachusetts uses SHAREit for its virtual catalog and is managed by Fenway Libraries Online. Executive director Walter Stine has noted that circulation and hold processing vary a lot between ILSs. For example, Voyager is relatively simple, while Symphony's mapping is more

complex. Mr. Stine observed that mapping takes a while during implementation, but that SHAREit has the flexibility to handle various ILSs and works really well given the complexity of interactions.

Consortial Participation

What is the value an overlay project brings to a consortium? Most ILL requests are already covered by loans within the consortium. There is no guarantee that the remaining requests could be filled by overlay members, especially if academic, special, and our largest public libraries are not included in the project. What data is available or would be able to be gathered during a pilot to speak to the overlay project's ability to fill those requests?

RAILS will track fill rates during the pilot project, but the pilot will be small, so data will be limited. The ability of the overlay project to fill requests will grow as the number of participating libraries grows.

The Massachusetts experience is relevant to this question. Massachusetts has a similar library automation environment, with a number of shared catalog consortia. It also has the Commonwealth Catalog, which uses SHAREit to connect ten consortia plus three standalone libraries. Although most ILL requests placed in a consortium are filled within that consortium, the Commonwealth Catalog handles about 100,000 requests/year and is a highly valued service.

Wisconsin has found that WISCAT handles about 200,000 requests/year beyond the intrasystem sharing inside consortia. WISCAT is also a SHAREit system.

MeLCat in Michigan went live on Innovative Interfaces' INN-Reach in 2005 and has over 400 libraries participating. Approximately 50% of MeLCat libraries are also part of a shared catalog consortium. MeLCat handles one million requests/year with a 91% fill rate.

In addition, the expansion of discovery is valuable, as patrons don't always know exactly what they're looking for.

Does RAILS expect an entire consortium to sign up or individual libraries in a consortium to sign up individually?

Individual libraries in a consortium can participate. It is not necessary for all members of a consortium to participate.

How much would a consortium be required to pay?

Participation will be by individual libraries, so a fee to the consortium is not anticipated. However, if a consortium has a number of members participating in the overlay, it may want to budget for NCIP implementation and support, as NCIP makes the staff workflow more efficient. NCIP fees vary by ILS and ILS vendor.

Marketing and Branding

What will the overlay project be called?

A name has not yet been selected. Suggestions are welcome and will be considered by the Overlay Software Search Working Group and RAILS staff. To avoid confusion with other resource sharing projects

and consortia, both past and present, we prefer to avoid project names containing SHARE, LINK, and variations thereof.

Will marketing materials be available?

Auto-Graphics has a marketing group that can supply various supportive marketing and patron education pieces. Auto-Graphics and RAILS staff will work together to customize these for the RAILS overlay project.

How will the overlay project be advertised to the public?

Participating libraries will be primarily responsible for promoting the project to their communities using their existing channels of communication. However, RAILS staff can assist by providing recommendations, model press releases, marketing materials, etc.