Email Reference Services Recommendations

UCLA Library Special Collections

Contents

I. Project Overview

UCLA Library Special Collections (LSC) currently offers email reference services to users through a general inbox, spec-coll@library.ucla.edu. The need to optimize these services and the workflows that underpin them became clear given the remote service conditions created by COVID-19, in addition to the growing frustrations with workflow inefficiencies over the years. This report evaluates existing email reference systems and workflows, with the goal of making recommendations that:

- Benefit user needs
- Increase transparency
- Establish policies and boundaries
- Create sustainable workflows that reduce redundancies and minimize risk
- Improve work distribution so that requests are easier to triage between multiple people
- Facilitate tracking metrics (progress, turnaround time, satisfaction with answer), which can be leveraged to improve services
- Create a knowledge base to support future reference

Conducting both internal and external assessment was important for creating recommendations that would fit LSC's specific needs as well as benefit from the knowledge and practices of the LIS field more broadly. Looking internally, interviews were held with LSC stakeholders, to get an understanding of the pain points of the current email reference system. Looking externally, a professional literature review was completed concerning email reference best practices, and informational interviews were conducted with reference professionals at the UCLA Library and other special collections departments within the UC system.

Written recommendations are accompanied by SWOT analyses and workflow diagrams, to critically think through the implications of recommendations and demonstrate practicalities of implementation.

This project was conducted in spring 2020 as part of LSC's Center for Primary Research and Training. Savannah Lake (E-Reference Scholar) researched and drafted the report, with research support from Selina Portera (Reference Services Scholar) and consultation from Jet Jacobs (Head of Public Services, Outreach, and Community Engagement), Courtney Dean (Head of Center For Primary Research and Training), Neil Hodge (Public Services Coordinator), Amy Wong (Reference and Technology Services Coordinator), and Caroline Cube (Digital Services Specialist).

II. Current Model

The current model for email reference was developed by discussion, involving those available and willing to administer the service. It has been in place for over 10 years. More specifically, it involves:

Staff: Currently, reference requests come in through a centralized inbox managed by one LSC staff member, the University Archives Assistant. Sometimes other staff are CC'd or consulted on requests; this is at the University Archives Assistant's discretion and is not systematically defined (e.g. all requests about visiting the Reading Room should be forwarded to a Public Services staff member). The University Archives Assistant handles approximately 75% of reference emails directly, consulting with staff or forwarding on the remaining emails.

Workflow: All requests are triaged and largely handled by the University Archives Assistant. Sometimes other staff are CC'd at various points throughout the thread. There is no systemized way to know where a request is in the queue (i.e. under review, completed) or who is handling it if the request has been forwarded on to a different staff member.

Knowledge base: The University Archives Assistant has some templates to use for commonly asked questions. Some of these template answers are saved on the shared drive, and some Public Services staff have separately created their own template answers. As for tapping into research completed for past requests, the Outlook inbox is keyword searchable, but not the best suited for keyword search. It is difficult to extract information from previous answers, and if a keyword search in Outlook happens to be successful, finding relevant information can involve reading through complicated email threads.

Metrics: Metrics on the users and the types of questions being asked are not being collected. RefStats could be used to collect this information, but it is not being widely used or enforced for this purpose.

Assessment: No assessment is being conducted on the quality of the email reference. Users are not given a feedback survey after a request is completed. Senior staff are not conducting annual or regular reviews of email reference or checking practices against International Federation of Library Associations and Institutions (IFLA) or Reference and User Services Association (RUSA) reference guidelines for virtual reference services.

Software and systems: Outlook, RefStats (not widely or regularly used)

A full evaluation of the strengths and weaknesses of this model can be found in the SWOT analyses section (page 23). Successes include a straightforward, user-friendly process and capable and willing staff with an "all-hands-on-deck" mentality. Concerns include inefficient workflows, bottlenecks, duplicative work, a lack of transparency, the potential loss of institutional knowledge, and the unsustainability that comes from having only one staff member triaging requests.

III. Literature Review

Much of the professional literature on email reference dates back to the late 1990s and early 2000s, when email reference was emerging as a service and was first integrated into libraries and archives. These resources generally think through how to translate an in-person service virtually, and evaluate how user behavior and questions may change in a digital environment. More current literature covers other tools and software that can be used in conjunction with email to deliver more streamlined reference services, for both the user and library staff. Literature reviewed also includes best practice guidelines from the International Federation of Library Associations and Institutions (IFLA) and Reference & User Services Association (RUSA), along with case studies on how to assess services against said guidelines.

Significance of reference in archives and special collections

Reference plays a critical role in archives and special collections. Reference services connect users with collections, contributing to scholarly research and community engagement (Schwenk). Reference services within special collections and archives are especially important as materials are not physically accessible for shelf browsing or research. Accordingly, reference involves mediating search between users, collections, finding aids, and library catalog records (Schwenk).

Importantly, reference services are no longer limited temporally to business hours (Yakel 142). Users can review finding aids, catalog records, and even digital surrogates of collections online from home. It is important, then, to understand the reference impact a website can have, and think of how it fosters research across user bases (Yakel 145). Library websites can be the first point of interaction for email reference, and should work for both new and expert researchers (Martin 23). In addition to this more evergreen, static reference point, virtual staff reference can also take the form of email, chat, and video conferencing. This project and literature review focuses on email reference.

Translating in-person reference into a digital experience

A recurrent concern throughout the literature was how to effectively conduct reference in a digital context. A digital interaction has several disadvantages to an in-person reference interaction, including a lack of contextual clues, facial expression, and tone of voice, all of which could shed more light on the information need and establish an environment of welcome and comfort (Yakel 143; Tibbo 303). Without visual clues, users may hesitate to ask more questions, and the experience can feel less personal (Tibbo 302; RUSA 1.4.1). Differences in technology and technical literacy can also impact the interaction (RUSA 1.4.3). And finally, the asynchronous mode of communication can complicate conducting reference interviews and providing detailed instructions, if the email is forwarded amongst staff or context is forgotten during larger gaps between communication (RUSA 1.4.2). Conversely, there are some benefits to reference being taken online; the email format gives library staff more time and space to evaluate questions and prepare answers than an in-person or phone reference interaction (Tibbo 303).

Studies have been conducted as to whether email reference requests differ substantially from in-person reference requests. An analysis of remote reference for a large academic manuscript collection conducted as far back as 1999 found that email reference was becoming the dominant form of remote reference (over phone or letter), and that email reference requests tended to be less formal and detailed (Martin 36).

Digital reference services should meet the same standards of in-person service, showing professional courtesy, respect, and responsiveness when answering questions (IFLA 2.1). In person, libraries can set a tone of openness and helpfulness with an accessible reference desk, eye contact, and a welcoming demeanor. In an online context, they can accomplish this by clearly signposting virtual reference services on websites and responding quickly and warmly, even just to confirm that someone will contact the users soon (Tibbo 303; IFLA 1.5). Webforms can also work to set the tone for users by including a list of services the library can provide along with a privacy or confidentiality statement (Tibbo 304).

With regard to the reference interview, clarifying the information need can still take place via email. Whereas in person staff might ask several rounds of neutral and open-ended questions, online they can continue to do so, and even aid the conversation by linking to relevant finding aids and catalog records (Tibbo 305). Users should be notified if the question may be forwarded to other partners or departments (IFLA 2.2).

The body of a reference email should include a number of elements that provide context and clarity to the user:

- The Internet Public Library designates six elements as mandatory in a reference reply: salutation, acknowledgement of the question, answer, citations for sources provided, path(s) to show how the resources or answers were located, and some type of closing statement (Croft 123)
- IFLA designates three elements that are substantially similar: a heading (comprised of a greeting, a generic thanks for using the service, and an acknowledgement of the subject of the user's inquiry), a body (with sources cited fully and explanation of how relevant information was found), and a signature (including a statement that further assistance is available if needed) (IFLA 2.2)

Stylistically, emails should avoid jargon, acronyms, or informal "texting" acronyms (such as BTW or IMO) (IFLA 2.2). Hyperlinks should be validated to ensure they work, and authoritative sources used (IFLA 2.2). Including generous amounts of white space and clear formatting can help make the response clearer to the user (Croft 123).

Workflow

The literature covers several aspects of the software and staff workflow underpinning email reference, including:

<u>Webform versus free-text email request</u>

A webform is largely seen as the most effective way to have users initiate email reference requests, as the webform works better to ensure that users provide the necessary information. A reference webform can also automatically collect demographic information that can be helpful in understanding the user base, such as campus affiliation (Croft 120). Webforms encourage users to think more critically about their question (Croft 120; Martin 41). This can be especially helpful given studies that found that email requests are generally less formal than in-person or phone requests and have less detail (Martin 36). UC Berkeley's webform, for example, asks users if they have consulted the catalog or a finding aid ("Reference Email"). Common fields of information to include within a webform are email address, university affiliation, and resources already consulted (IFLA 1.5). However, a form can also be more intimidating to users than an email, and thus should be created so that it is long enough to gather essential data, but not so long that it discourages use (Croft 120; Martin 41).

Autoreplies

Autoreply emails can be an important way to establish friendliness and responsiveness to initial queries, assuring users that their request was received and providing a timeline for an expected answer. Such autoreplies can also include information on library policies, such as confidentiality statements, to further situate the user within the reference experience (Tibbo 303). In studies of library compliance with RUSA and IFLA email reference standards, staff struggled with best practices that can be addressed through autoreplies, including the initial greeting (as discussed above), thank you notes, and follow-up comments (Shachaf 136).

Templates and knowledge base

Creating templates for responding to common queries is important for reducing duplicative work amongst staff (Martin 40). Some literature suggests creating a database of completed reference requests, so that if different users ask similar questions, you have information to build off of. Potential uses of such a knowledge base also include referring to a user's history if they return with another related question (Martin 40). However, this latter use may not comply with an institution's privacy policy and practice of de-identifying reference requests once they are completed.

Collaboration

Several articles mentioned the importance of staff collaboration on a single reference request (Rozaklis 314; Burton 12). A study of collaborative communication among staff within email reference found that collaboration consisted of: content questions 47.5% (subject expertise); service 25% (checking on policies, status of responses); technology 16.5% (resolving quirks with answering system); community 11% (thanking colleagues for help) (Rozaklis 317). When building out an email reference workflow, it is thus important to build allowances for this type of communication in a way that is not burdensome or confusing (e.g. multiple email threads).

Change management

Morale

With regard to email reference generally, one article mentioned that many staff find in-person reference more fulfilling (Tibbo 306). It is important, then, to communicate the importance of email reference to staff to establish a positive attitude about email reference, as well as to actively hear concerns and improve the service for staff and users whenever possible. With regard to change management from one email reference model to another, the new model should directly address frustrations and inefficiencies of the previous model in order to create and sustain buy-in (Burton 14).

Training

Training staff on email reference is important, as there are factors that differ from in-person reference (RUSA 3.4.1). Best practices as outlined by IFLA and RUSA that staff often overlook within email reference include explaining search strategies, asking for more information, and rephrasing questions (Shachaf 136). Clear policies and training can help mitigate these oversights. Initial training to onboard staff should be provided, as well as ongoing training to ensure continued effectiveness and compliance with best practices (RUSA 3.4.6). In addition to in-person training, it is important to have a centralized, written document of best practices that staff can refer back to (Croft 127). Library staff should also be aware of how they react differently to different user groups; diversity training and clear policies can be helpful in facilitating equitable service (Shachaf 136).

Privacy

Email reference can create privacy issues with regard to information gathered through webforms or the emails themselves (RUSA 1.4.4). Institutions should establish clear retention and de-identification policies for emails, and make these policies publicly available for users to refer to (Tibbo 307; RUSA 6.2.3-4; IFLA 1.5). RUSA recommends that users' and colleagues' online communication should be treated as private and confidential, except as where required by law (RUSA 3.4.7, 6.1). Personally identifying information, including names and email addresses, should be stripped from emails (RUSA 6.2.1).

Metrics and assessment

User metrics

Literature supported the utility of collecting user metrics, both through webforms for the initial reference request and through surveys completed after reference requests (Croft 120; RUSA 5.6.1.2). Such metrics provide insight into the types of users, their needs, and the quality of the reference service, and can be used to develop improvements.

With regard to users, recommended metrics to collect include user affiliation, geographic location, unique users, returning users, and newly registered users, all of which can give insight into who users are and the repository's reach (ACRL Board of Directors and Society of American Archivists Council 12-13). With regard to reference interactions, recommended statistics to collect include number of questions, question purpose, time spent responding, number of collection items checked out by staff in order to respond, and question complexity, all of which can be analyzed by user group to get a better sense of staffing and user needs (ACRL Board of Directors and Society of American Archivists Council 14-21, 28).

Staff assessment

Much of the literature examined how to assess the effectiveness of email reference services. Assessment can include reaching out to users for feedback on their experience, or tracking metrics for each reference interaction, such as response time (IFLA 1.5, 1.8).

Assessment can also involve management measuring staff compliance with email reference best practices. Libraries have found that "monitoring of responses is essential to maintain the high quality of the service"; published checklists exist that correspond to either IFLA or RUSA guidelines and ask management to rank performance on a scale from 1 to 5 (Croft 124). These checklists evaluate responses in terms of quality, accuracy, audience, focus, depth, courtesy, clarity, and objectivity as well as spelling and grammatical errors, URL formatting, jargon-free language, visual clarity, cordial and open tone, and sufficient detail (Croft 124). One study of 324 transactions from 54 libraries showed low compliance with RUSA and IFLA email reference guidelines, and offers helpful coding tables for auditing compliance with both sets of standards (Shachaf 123-6).

In addition to RUSA and IFLA guidelines, there are a number of other best practices and resources institutions can refer to ("Virtual Reference: A Selected Annotated Bibliography"). The Virtual Evaluation Toolkit, for example, includes various checklists for evaluating both email reference service and more generally websites (Hirko). Specifically:

- Website evaluation, pages 6-9
- Policy evaluation, pages 10-12
- Reference transaction, pages 13-16
- Customer satisfaction, pages 17-23
- Usability testing for websites, pages 38-42

Results from assessment measures should be used to improve reference services, including adjusting staffing levels, service parameters, training, and professional development opportunities (RUSA 5.6.2-3; IFLA 1.8).

Use case: UK Libraries' Special Collections Research Center (Burton)
Of particular concern to LSC are the workflows and staffing supporting email reference. The UK Libraries' Special Collections Research Center (SCRC) was facing similar issues of duplicative work as well as redundant and inconsistent staff communication. SCRC transitioned from conducting reference solely through an email inbox to a more transparent, integrated, and collaborative workflow that used project management tools and webforms. Their case study could be instructive to LSC, should LSC have access to analogous technologies.

Initially, two staff monitored the SCRC reference inbox, assigning queries to a listserv of 8-10 staff. However, these staff members became inundated with emails related to the reference inbox; a six-month review of these emails found that 60% of the emails were spam, while 20-30% were internal staff emails irrelevant to most on the listserv. To minimize these burdens, SCRC transitioned to a reference workflow in which users filled out an online form (Jotform) instead of emailing the inbox. This online form would send a message to Outlook, which would automatically generate a task in the project management software Asana for that reference query. Staff thus interacted with the Asana platform only, reducing the irrelevant inter-staff emails as staff claimed requests and collaborated with each other directly on Asana instead of email blasting the entire listserv. Spam was also eliminated thanks to Jotform's strong spam filters. In addition to eliminating this email clutter, Asana provided more transparency as to who was handling a request and where it was in the process.

There are some significant limitations to SCRC's solution that would complicate implementation at LSC. Most notably, Jotcha caps form submissions at 100 per month; UCLA receives more email reference requests than that. The free version of Asana similarly caps team sizes at 15 people; this is more manageable, but perhaps duplicative as LSC already has a project management software, JIRA. Asana also does not allow filtered data exports, so progressively the CSV data export of responses (which could be a valuable knowledge base) could become large and unwieldy.

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IV. Informational Interviews

Librarians at UCLA Library as well as at other special collections libraries throughout the UC system were interviewed to have a better understanding of how peers approach email reference. Generally across all libraries, multiple staff have inbox access and actively answer reference emails. There are varied approaches to collecting metrics and using software designed for email reference.

While YRL is part of UCLA Library, the practices of other special collections libraries in the UC system are likely more relevant, as they receive reference questions more similar to those received by LSC.

UCLA Young Research Library
The YRL inbox receives approximately 4-6 emails a day. The majority of their email reference questions are known item requests. They rarely have questions about library policies or deep research questions. Accordingly, these emails are not time-intensive and normally can be resolved within 10 minutes. Emails that have an extended back-and-forth are referred onto a Zoom research consult, where a librarian can screen share and show how to use a database, for example.

Reference emails are answered during the hours that the reference desk is open (10am to 4pm) by the graduate students working the reference desk. There are 4 graduate students total, with 2 graduate students per shift. If the graduate students need help with a reference email, they can reach out to librarians through a Slack channel, but that is rarely necessary. All of the YRL librarians have access to the inbox and can assist with answering questions, but by and large they are answered by whoever is on shift at the reference desk.

Emails are tracked through RefStats, mostly for very basic data such as the volume of email. YRL is not tracking the user populations, types of questions, or the amount of time spent answering emails.

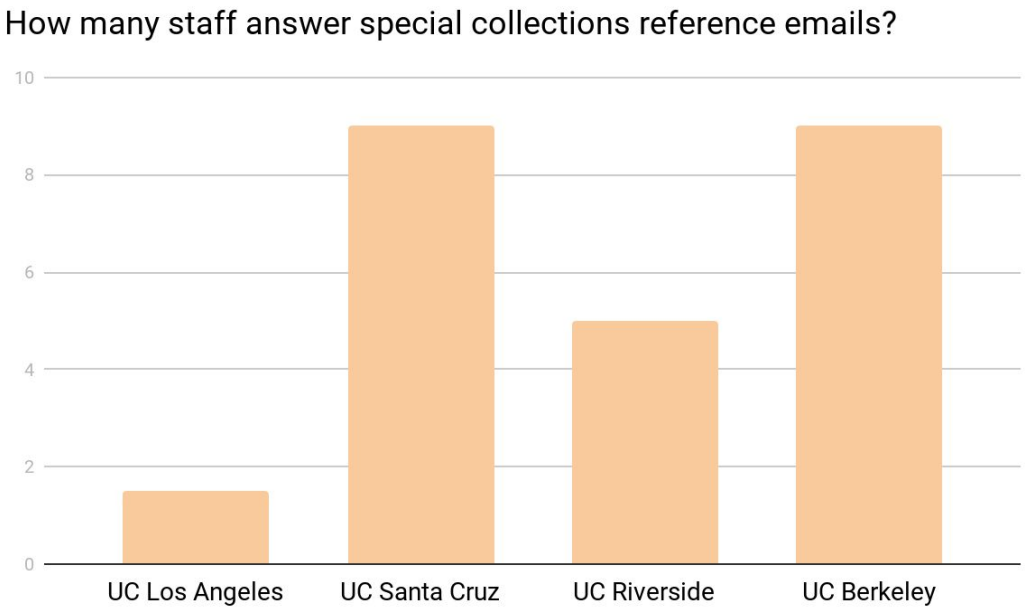
Special Collections across the UC system
UC Santa Cruz has been using LibAnswers since 2018, which has a queue for special collections reference queries; before they used Reference Tracker, which they found “cumbersome and impossible to search.” With LibAnswers, 9 special collections staff have access to answer queries. Questions are allocated to staff depending on subject matter, and LibAnswers has collaboration spaces within the system so staff can help each other answer questions. LibAnswers collects statistics on the interactions. While the staff likes the software, they note that it is expensive. Fortunately, it gets a lot of use, so the broader library can justify the expense. However, because it is expensive, not every department within the library can have its own queue.

UC Riverside has 5 full-time staff answering reference emails. They collect metrics on the user’s affiliation with UCR, the topic of the research question, the staff assigned to answer the email, and the time spent answering the email. They do not solicit user feedback about reference interactions.

UC Berkeley has one person who answers/triages their general email account, with 9 staff members total responding to reference emails. Curators and several other staff members also receive reference emails directly. UC Berkeley uses a reference webform, as well three different inboxes for reference (bancref@library.berkeley.edu), Aeon account questions (banc-aeon@berkeley.edu), and general

inquiries for Bancroft administration (bancroft@library.berkeley.edu). UC Berkeley uses LibInsight to collect statistics, but they do not collect user data.

Results
Most striking and common across all of the libraries is the high number of staff involved with answering emails. As demonstrated in the chart below, 5 to 9 staff answer reference emails across the special collections libraries in the UC system. At UCLA, one staff member primarily answers emails; an inbox audit conducted in spring 2019 found that one staff handled emails 75% of the time, looping in other staff as needed to on average have 1.5 staff members involved in answering reference emails.



An attempt at metrics collection can be seen with all of the special collections libraries, to varying degrees of intensity. UC Santa Cruz's approach to reference through LibAnswers seems the most systemized and transparent, but comes at a high price tag only made possible by widespread library support. UC Berkeley's email reference practices seem most similar to LSC's, but they have experimented with a reference query webform and have also devised multiple email accounts to try to route queries from the outset (most notably, the Aeon support email inbox).

Metrics collection examples
Below are a few examples of forms libraries have or are building out to collect metrics related to email reference interactions.

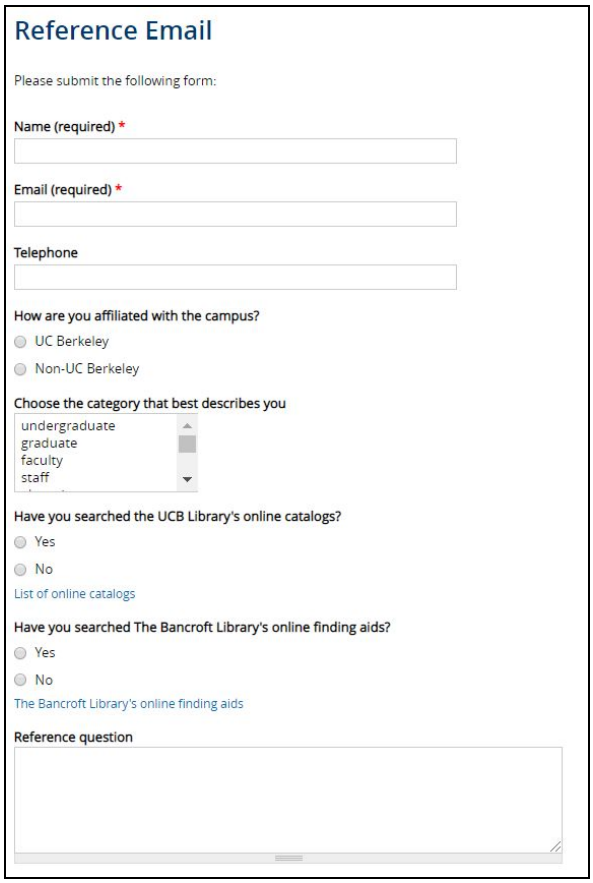
User form, UC Berkeley Bancroft Library https://www.lib.berkeley.edu/libraries/bancroft-library/reference-online

- *User metrics*:
    - campus affiliation (UCB or non-UCB)
    - type of user (undergraduate, faculty, K12, genealogist, etc)
- *Guiding questions*:
    - have you searched the UCB catalog (with hyperlinks to the catalog)

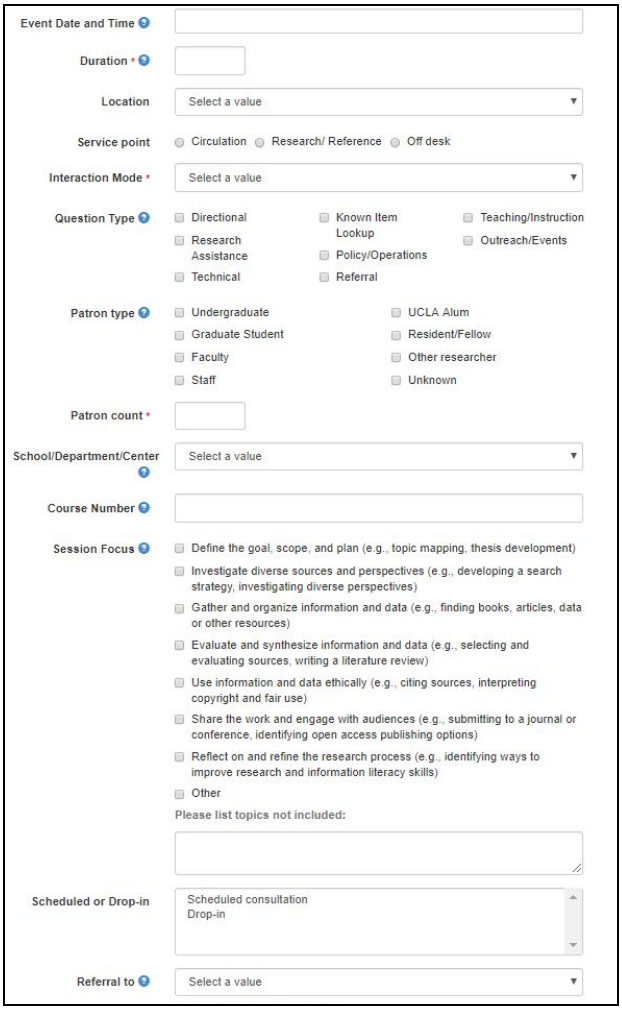
    - have you searched the UCB finding aids (with hyperlinks to the finding aids)
- *Required fields*:
    - name
    - email

Staff form, UCLA Library - LibInsights form, draft currently under testing, can see prototype here

- *User metrics*:
    - school/department/center
    - type of users (undergraduate, faculty, alum, etc)
- *Question metrics*:
    - question type (directional, research assistance, etc)
    - session focus (defining the scope, gathering resources, etc)
    - referral to
- *Required fields*:
    - duration
    - interaction mode (email, in person, etc)
    - patron count



UC Berkeley user form



UCLA staff form

V. Proposed Model

The proposed email reference model for LSC takes its lead from the best practices found in the literature as well as IFLA and RUSA guidelines. It seeks to benefit users and staff alike by improving services and creating sustainable workflows that promote transparency and efficacy.

In brief: the proposed model would integrate JIRA into email reference, to provide a more streamlined and transparent way to assign and track the progress of reference queries. Users would submit their queries through a webform instead of email; this would allow LSC to collect metrics on their users to better identify trends and improve service accordingly. The webform would route through JIRA, automatically generating a service ticket within the LSC reference queue. Queue administrators would assign JIRA tickets to reference staff, who would then use the JIRA ticket to consult with other staff on the query and record the results of any research conducted for the query. Then, staff would use Outlook to email the response to the user, following best practices for e-reference correspondence. Once a reference query is resolved, staff would de-identify and close out the JIRA ticket, and users would be sent a survey to provide feedback that could also be used to improve reference services. Staff would also complete a brief survey about the reference interaction to facilitate internal metrics tracking. And finally, regular assessment would be conducted, ensuring staff adherence to reference best practices outlined by IFLA and RUSA standards.

The transition to this model would involve meaningful training and transparency, to ensure service meets IFLA and RUSA standards and promote staff investment in the model. To support staff morale and the best service possible, staff should receive ongoing in-person training, be able to provide feedback through anonymous surveys, and have access to written training materials to refer back to.

More detailed explanations of components of the model follow, specifically covering:

1) **Service infrastructure**, including staffing and policies;
2) **Technology and workflows**, including the lifecycle of a reference query;
3) **Initial implementation**, including staff morale, in-person training, and written documentation; and
4) **Ongoing maintenance**, including staff assessment, feedback, and training.

1) Service Infrastructure

A thoughtful, deliberate, and committed approach to email reference services will set the service up for success by creating reasonable and clear goals, facilitating investment across departments, and ensuring alignment with the LSC's mission and other services. Building this infrastructure involves a number of elements:

Planning working group

Ideally, email reference should have commitment from diverse stakeholders—across departments, seniority, and identities—to shape and champion the service (RUSA 2.2.1). Creating such a working group or committee could be very helpful in facilitating the development of policies and the transition to a new model, as well as ensuring the service's ongoing efficacy. The group could meet more regularly initially (during the development and implementation stages), and then quarterly or annually thereafter.

Ideally, this working group would include:

- Head of Public Services
- 1-2 public services staff
- 1-2 curatorial staff
- Staff member with a legal background (perhaps most necessary during policy-setting stage and optional thereafter)
- Technical liaison (again, likely most necessary during policy-setting and implementation stages and optional thereafter)

Within the group or at a high level, budgetary and staffing requirements should be planned and accounted for, such as software or training costs, changes to job responsibilities, and ongoing expenses (RUSA 2.3).

Audit of current state

The planning group should conduct a thorough audit of current email reference services in order to develop a revised model that addresses shortcomings and staff concerns (IFLA 1.2). This document is a survey of professional best practices. Additional audits that should be conducted include:

- **An audit of the inbox contents**, to identify trends in the types of questions asked, turnaround times (which could inform internal policies), and strengths and areas for improvement in responses.
- **Staff interviews**, to get feedback on what works and what does not from the people currently supporting the service. This report solicited feedback on the current service from a number of public services staff, including the Head of Public Services. It is advised that the current inbox administrator be interviewed as well, as they are currently closest to the service and could give very meaningful advice. Listening to staff thoughts and concerns and incorporating them into the model will also increase buy-in and help with change management with the transition.
- **Staff survey**, sent to everyone currently affected by email reference, to hear and incorporate feedback into the model. The survey should ask staff what they like about the current system, what they dislike about the current system, and what they would like to see going forward.

Policy setting

Internal and external policies should be discussed and determined by the planning group, to ensure the service is adhering to the library's mission and professional best practices (IFLA 1.1; RUSA 3.1.4, 3.2). Such policies should be documented and accessible to their respective user groups. Policies that should be defined include:

External

- Scope of service, including users, mission, types of questions the service will answer, and response time (IFLA 1.1; RUSA 3.2.1.1)
- Types of questions the institution will not answer, such as medical or legal advice (IFLA 1.1)
- The amount of time staff will spend researching a request
- Privacy policies for reference requests, including de-identification and retention practices (Tibbo 307)
- Extent of collection of user data, and retention and sharing of said data
- Copyright compliance (IFLA 1.1)
- Compliance with collections-specific access restrictions (IFLA 1.1)
- Guidelines for appropriate user behavior (IFLA 1.1; RUSA 3.1.4)
- Whether copies of materials will be shared, and if there is a threshold to the number of items shared before it becomes a duplication request (RUSA 3.2.2)

Internal

- Respectful, courteous service on par with in-person reference (IFLA 2.1; RUSA 3.4)
- Effective, thorough service on par with in-person reference (IFLA 2.1; RUSA 3.4)
- Equitable and inclusive service (Shachaf 136)
- Ideal and absolute turnaround times for responding to a request
- Ideal and absolute time staff should spend researching and answering a request
- Policies for redirecting reference requests that do not come in through JIRA

2) Technology and Workflows

The new email reference model draws upon technologies already supported and in use by UCLA. Integrating these into email reference will streamline the triage process, increasing transparency as the progress of a query is clearly visible while still allowing staff to collaborate and consult on requests.

Staffing

Currently there is one inbox administrator who does the lion's share of email reference, including nearly all of the triage and answering approximately 75% of reference emails. This set-up puts the service at risk of bottlenecks, should the inbox administrator be out of the office, have other projects they need to prioritize, or is otherwise delayed. Increasing the number of staff involved will mitigate these risks while encouraging wider investment and participation in reference across LSC.

JIRA has some limitations on the number of people who can participate in a queue. "Agents" are staff who can directly correspond with users associated with tickets, and who can be assigned tickets. These are limited to 100 staff members throughout the UCLA Library; as of May 2020, 24 "agent" roles are available. JIRA, however, does not have limits on the number of collaborators on a queue; they can be tagged in a query and assist the "agent" handling the ticket, but cannot correspond with users.

Accordingly, the following staffing is recommended within the JIRA queues:

- *Agents*
    - 2 queue administrators, with at least one being from Public Services as reference is a function of that department.
    - 2 public services staff (for reading room policies, Aeon assistance)
    - 2 public services staff (for duplication)
    - 2 curators, ideally from subject areas that receive high amounts of requests
- *Collaborators*
    - All remaining curators (for their subject-matter expertise)
    - 1 public services staff (for reading room policies, Aeon assistance)
    - 2 managerial level staff (for ethics, legal, and other more fraught questions)
    - Any other staff (including graduate students) as long as they have completed the requisite training

Additionally, 1-2 managerial-level staff should complete the assessment measures described in "Assessment" in the "Ongoing Maintenance" section below.

Technology

UCLA Library already licenses the majority of the software needed for this model:

- **JIRA** will serve as the internal project management software through which requests will route, becoming tickets within a queue that can be assigned to staff. JIRA will also serve as the webform for the more specialized requests (see “Workflow” section below). JIRA is licensed and in use by UCLA Library; limitations on use include the agent versus collaborator roles, described in the “Staffing” section above.
- **Outlook** will be used to email responses and follow-up questions to users who have submitted a reference query.
- **Google Forms** will serve as the webform for the general reference requests (see “Workflow section below) as well as staff and user feedback surveys. Google Forms limits responses to questions (*not* each survey) to 5 million (e.g. one response to a survey of 10 questions would represent 10 responses). Accordingly, the form will need to be updated/cleared before reaching 5 million responses and in accordance with defined retention and de-identification policies.
- **Slack** will be used as a supplemental communication tool amongst staff, with a specific #lsc-ereference channel. Slack is already licensed and in use by UCLA Library.
- **Confluence** will house training documentation, policies, and templates staff can use when responding to requests. Confluence is already licensed and in use by UCLA Library.

Workflow

1. Receiving the reference request

The first significant workflow change from the current model is the method of query intake. Currently, users send an email to a general reference inbox. In the new model, users will instead submit reference queries through a webform that will automatically direct the query to the JIRA queue.

As described in the “literature review” section, collecting requests via a webform has several advantages over using email. Webforms can guide a user in providing the necessary information for a reference request. Webforms also have structured and standardized fields, enabling data collection so that LSC can better understand the users it is serving and improve services accordingly.

JIRA has a client-facing webform that directly links to the backend queue staff will use. However, in order to access this webform, users need to create an account. This prevents a barrier to access that could discourage using the reference service. Accordingly, this webform should only be used for reference requests that involve creating a prolonged relationship with LSC, such as requests to donate collections, LSC instruction requests from faculty, and requests to access an unprocessed collection.

For all other reference requests (such as general queries into LSC policies, known-item or research requests, questions about Aeon), users will use a public webform powered by Google Forms, which does not require users to create any additional accounts. This webform will generate an email that will be forwarded to JIRA, which will automatically generate a ticket within the queue.

If staff receive reference requests directly to their emails, staff should redirect the user to the webform and/or forward the request to the Outlook account tied to JIRA to generate a ticket. Templates for language to use should be available on Confluence.

Once a user submits a request through the webform, they should receive a friendly autoreply that confirms receipt of their request and states expected turnaround times (Tibbo 303). Another advantage of the webform is the personalization of the autoreply email. Currently, the LSC autoreply for reference emails is extensive and overwhelming, because it is impossible to know the subject of the user’s query (e.g. signing up with Aeon, using finding aids, etc). The current autoreply attempts to solve this by offering

as much information as possible. While well intentioned, it can feel overwhelming to a user. Within both the JIRA and Google Form webforms, we can include a question along the line of “what best describes your reference need” and offer options such as “using the catalog” and “setting up an Aeon account.” Depending on what the user selects, we can send a specific autoreply email that addresses that information need. Further, for the JIRA webform, there is a feature within Jira Service Desk that brings up FAQ “help” articles when submitting an issue; we could supplement this webform with relevant FAQ that might answer a user’s question immediately.

2. Assigning the reference request
Once the ticket enters the queue, one of the queue administrators will assign the ticket to a staff member according to staff expertise. For example, questions about Aeon or policies should be assigned to public services staff, while research questions about a specific topic should be assigned to a curator.

3. Researching the reference request
Once a request is assigned to a staff member, or “agent,” the staff member can begin answering the request by following up as necessary with the user or conducting research. Within the JIRA ticket, the “agent” can tag any “collaborators” that they need to consult in order to answer the request. The “agent” will need to use Outlook to communicate with the user, and JIRA to communicate with staff. Accordingly, it is very important that all information pertaining to the request be added to the JIRA ticket, and that it not live separately within an email, for example. All information needs to be centralized on the JIRA ticket in order to avoid communication inefficiencies with forwarding emails when collaborating with other staff. If the information is on the JIRA ticket, simply tagging a “collaborator” on the ticket will provide the collaborator with all the information they need to advise on the issue.

As the request evolves, “agents” can assign subject tags to the JIRA ticket, to help organize it thematically should staff in the future wish to refer back to old requests to gather information for new requests.

Several resources should be developed to assist staff with answering queries and prevent duplicative work. This includes template answers for commonly asked queries, which should be available on Confluence (Martin 40). Additionally, staff can use JIRA as a knowledge base, conducting keyword searches within the LSC reference queue to determine if this question has been answered previously or if there is any relevant research already conducted on the matter by LSC staff. Keyword searching within JIRA is not the best, but provides something of a resource until a more intentional, curated knowledge base is created. Further, if staff add subject tags to their JIRA tickets, browsing will also be available in addition to keyword search.

Staff can also use the #lsc-ereference slack channel for general questions about e-reference. Detailed collaboration with sustained back-and-forth should happen on the JIRA ticket, not in the Slack channel.

4. Answering the reference request
Once the staff member has completed their research, they can email the response to the user. Email responses to reference requests should be courteous and thorough, including a friendly greeting, acknowledgement of the question, answer, citations for sources provided, path(s) to show how the resources or answers were located, a closing statement asking if further help is needed, and an email signature to enable future contact (Croft 123; Shachaf 123-6). Emails should include generous white space and accessible language to ensure clarity. A full description of email best practices can be found in “Translating in-person reference into a digital experience“ in the “Literature Review” section.

5. Closing out a request
The “agent” or staff member in charge of the ticket is responsible for de-identifying the ticket in line with the established privacy policies.

Additionally, as part of closing the JIRA ticket, the staff member will send an anonymous survey to the user, where the user can provide feedback on their experience with the reference service.

And finally, it is recommended that staff complete a survey as well describing the reference request, so LSC can get more insight into the nature of the reference requests received. These surveys would be more robust than the intake webform initially completed by the user, and would be better at identifying types of questions and collections of interest. However, they are reliant on staff input, which could be spotty given the current inconsistent use of RefStats. It would be important to communicate the impact and significance of these surveys to staff, and inbox administrators could spot check compliance with completing these to help ensure full participation.

Both of these measures to collect metrics on the nature of reference requests and the user’s experience with the service could provide valuable insight into gaps and strengths in service and how LSC could improve.

6. Handling follow-up requests
Should a user return with a follow-up reference question to a previously closed ticket, it is important that the question formally re-enter the queue, either by reopening the closed ticket or creating a new ticket. This will create transparency around staff workloads, and help queue administrators better triage requests.

3) Initial Implementation
The proposed model involves the use of additional technology, an entirely changed and more transparent workflow, increased staff, and staff assessment. It is significantly different than the current model, and thus will require commensurate change management.

Morale
This proposed model was developed in part to support staff morale and prevent burnout by creating streamlined workflows that prevent duplicative work. That said, any transition can cause anxiety. Accordingly, it is important to be transparent about the new model, including why changes are being made and how that will affect staff. The following measures should be taken to support staff during this transition:

- **Hear concerns**. This includes the staff interviews and staff survey described in the “Audit of current state” in the “Infrastructure” section above. Additionally, if an in-person staff meeting feels appropriate (i.e. staff are interested and feel comfortable enough to contribute honestly), hold one so that you can get further staff feedback and offer in-person support.
- **Incorporate staff concerns**. After hearing staff concerns, incorporate these into the plan suggested here.
- **Introduce the new model**. Once a solution is decided upon, an in-person meeting should be held where the tone is open and empathetic. It should highlight the problems people were having with the old model (collected from the “hear concerns” bullet above), and show how the new

solution addresses these problems. Since the new solution includes technology that staff have had resistance to using in the past, it is important for morale and buy-in to drive home how much time and work this will save, in an empathetic way that does not diminish anxieties about using new technologies.

- **Actively solicit ongoing feedback**. An anonymous survey should always be available for staff to give feedback on the new system. The survey should be sent out proactively to staff during the initial implementation, and then remain available thereafter for any further feedback. This survey could be a good gauge of attitude and adoption as well as a source of potential improvements to the service. Further, it is recommended that monthly reference meetings be reinstated, where staff can voice concerns, collaboratively problem solve, and receive ongoing training.

Training

Training should cover the new workflow, technology, policies, and reference skills (IFLA 1.4; RUSA 4.0). Coding tables on IFLA guidelines and RUSA guidelines could be useful tools for developing these trainings (Shachaf 123-6).

With regard to technology, it is important that staff are comfortable with using JIRA and Slack. Training specifically on these tools should be held to ensure understanding. Ideally, all attending should have laptops so they can follow along instead of just watching a presenter; this will help increase comprehension. Given previous staff resistance to JIRA, it is important to make this training as un-tedious and engaging as possible. While Slack is more widely used and adopted, training should still be held that reviews best practices for communication (e.g. when to use the threads function versus posting on the channel at large).

With regard to reference, while most staff will have experience from working on the reference desk, it would still be helpful to go over some theory and best practices, since reference desk training to now has never been standardized or formalized. Concepts to cover include: reference interview basics, user interaction best practices, and how to reference forward when UCLA does not have the resources (Tibbo 307; Shachaf 136). Training should also cover how email reference differs from in-person reference, such as the lack of visual cues, the components of the reference email, and legal concerns intrinsic to email reference (Tibbo 303). See the “Translating in-person reference into a digital experience” within the “Literature Review” section for more details.

Because there is no formal or standardized training for staff working the in-person reference desk, these reference training sessions are an important opportunity to include training on diversity and equity. Staff should be aware of implicit bias and how they may react differently to different user groups (Shachaf 136). Reference training should include how to facilitate equitable service to all users.

And finally, all policies and training materials should be documented. Staff should be given this documentation at the time of training. Documentation should include the new workflow, relevant JIRA functions, and reference best practices. Said documentation should be saved on Confluence and accessible by all. Having written documentation allows staff to refer back to what they learned, helping ensure consistency of practice (Croft 127).

Communicating changes

The LSC website should clearly communicate the change from email reference to the webform. As the gateway for users attempting email reference, the webpage sets the tone for service and could encourage or prevent use of the service (Tibbo 303). The website should work for both first-time and regular users of

LSC (Martin 38; Yakel 145). The webform should be easily accessible from the LSC homepage, ideally with an icon that draws users' eye to the service (IFLA 1.5). The *Virtual Evaluation Toolkit* has some guidelines helpful for evaluating effective library website design (Hirko 6-9).

4) Ongoing Maintenance

Ongoing maintenance of the email reference system will involve assessment, metrics collection, training/staff development, technology maintenance, and policy setting.

User assessment

Assessment helps ensure that services are best serving users. Assessment practices can be both user- and staff-driven. From the user side, feedback surveys can be helpful for learning from the user's perspective what went well during a reference interaction, and what areas could be improved upon (IFLA 1.8). Feedback surveys can be conducted on platforms as simple as Google Forms. It is unclear if there is a mechanism within JIRA that could automatically send this form to the user once a reference request has been closed out; if this functionality is not available, the staff in charge of the request would be required to send the user an email to the survey, as part of the process of closing out a request.

The results from these user surveys should be reviewed on a regular basis to identify trends and areas for improvement—more frequently during the initial implementation of the service to help iron out any issues, and then on a six-month or quarterly basis thereafter. Google Forms limits responses to 5 millions questions (*not* 5 million surveys). Accordingly, the user feedback form would need to be updated/cleared before reaching 5 million question responses.

Staff assessment

There are a number of resources already available to help managerial staff assess email reference compliance with best practices, including checklists of IFLA and RUSA guidelines to measure service against (Shachaf 123-6; Croft 124). LSC can decide if the reference queue administrators should be responsible for assessment, or if this is a director-level responsibility. It is recommended that such assessment be conducted within 90 days of initial implementation, to ensure that staff are all on the same page with regard to the new system. Thereafter, staff assessments could occur on an annual basis. Such staff assessment should not be seen as punitive, but as an opportunity to learn more about how to implement reference best practices. In addition to one-on-one meetings to review assessment results and set relevant professional development goals, managers should update reference training given to all staff based on trends from the assessments.

In addition to this managerial feedback, staff should also have the opportunity to provide feedback on the system and how well it is working. In addition to regular reference meetings where concerns can be voiced, an evergreen Google Form survey should also be set up where staff can anonymously give feedback on the system (IFLA 1.8).

Other potential assessment measures to explore include those specific to JIRA, such as reports on turnaround times for requests.

User and interaction metrics

Collecting reference queries through a webform allows for structured data collection, which can help LSC learn more about its users and the questions they have. Best practices on webform design can be found within the "Workflow" section of the "Literature Review" in this report. With regard to ongoing

maintenance, it is important to regularly collect and analyze the structured data from these webforms, as the information can help inform policy decisions and offer improvements to services (IFLA 1.8). For example, if the webform shows that LSC receives a very high amount of questions about a particular collection, it may make sense to create a LibGuide or some documentation about how to navigate that collection.

Ideally, when a request is closed out, internally staff would also complete a survey about the nature of the request, such as time spent, type of research question, and collections consulted. Results from these interaction surveys should also be regularly collected and analyzed to understand staffing needs and improve email reference services.

As with the user assessment surveys described above, both the intake webform and staff survey would run off of Google Forms. Since Google Forms limits responses to 5 millions questions (*not* 5 million surveys), the form would need to be updated/cleared before that limit was reached.

Further, with regard to the intake webform, users' personal information should be regularly removed/de-identified, on a basis to be determined and made explicit within LSC privacy policies.

Training

In addition to the initial onboarding training staff receive when assigned to email reference services, ideally email reference staff should have ongoing team meetings where staff can discuss their experiences with email reference, any roadblocks, and new developments in the field (IFLA 1.4). Email reference staff should also receive ongoing training about email reference; training can be sourced from trends in the field, or common mistakes/issues identified in staff assessments.

As managers and champions of the service, reference queue administrators should keep up-to-date on reference literature and be active members of applicable professional groups devoted to this topic, both within UCLA Library and more broadly.

Technology maintenance

The proposed method was in part chosen because it uses technologies already supported by UCLA Library IT, better ensuring their continuity. However, it is still important to be aware of how these softwares evolve and how that may affect the integrated workflow.

Policy updates

The email reference working group should meet on an annual basis to review all policies related to email reference and ensure they are serving users and staff, changing and updating as necessary (IFLA 1.1).

VI. Next Steps

This project was a first step in understanding the strengths and pain points of current email reference service at LSC, and evaluating potential improvements. There are a few important measures not included in this report that should be considered when moving forward with email reference:

LibAnswers and the Springshare suite
The proposed model—involving JIRA, Outlook, Slack, and Google Forms—was proposed in part because UCLA Library already licenses these technologies. However, UCLA Library is evaluating the LibAnswers email reference software, along with the suite of other Springshare virtual reference tools (i.e. chat reference, appointment scheduling). If LSC is able to obtain its own queue, it is possible LibAnswers may provide a more integrated alternative to the proposed model, especially as LSC may need to implement social distancing measures in light of COVID-19 (such as scheduled reading room appointments or chat reference) that the Springshare suite of software also provides for.

Accordingly, it is recommended that LSC learn more about UCLA's potential LibAnswers license, and evaluate how such a model would work within LSC (by drafting a SWOT analysis and workflow diagrams, for example). It would also be helpful to follow up with UC Santa Cruz Special Collections, as they currently use LibAnswers. For this report, the public services coordinator at UCSC special collections, Luisa Haddad, was a helpful contact.

Systems infrastructure
It is recommended that LSC consults with the Head of Software Development and Library Systems, Joshua Gomez, regarding any email reference model. When considering the longevity and sustainability of the service, it is important to consider how its software integrates and complies with the library's long-term systems plans. The Head of Software Development and Library Systems will be able to give this bird's-eye view, and describe any preference between the proposed model in this document, Springshare, or any other systems.

Reference-wide policies and practices
This report was an opportunity to review professional best practices and standards against email reference services. It is recommended that the same treatment be given to LSC's in-person reference services, which currently lacks standardized training, documentation, written policies, and assessment. Aligning in-person and email reference services—so that they share the same goals, standards of practice, and policies—will strengthen LSC services.

Further, LSC should enact policies and practices that facilitate equitable and inclusive information access and services, across all of their departments. With regard to email reference specifically, LSC should, for example, consider how it will serve first-time and international users, how its website and email reference services will support users who do not speak English, diversifying online research guides and bibliographies, and how to address implicit bias within reference.

Knowledge base
A significant concern described at the outset of this project was the lack of documented institutional knowledge. Extended collections research is often conducted for email reference requests, but this research is not saved in a centralized space, preventing future staff from benefiting from this work. There is also collections-specific knowledge long-time staff members have that is also not documented, and

could be lost as staff retire. Centralizing email reference research within JIRA, per the proposed model, intends to mitigate these risks, by at the very least allowing for keyword search of research conducted for reference email requests. Staff can also tag tickets by subject, facilitating browse and better discovery.

However, this is more of a de-facto knowledge base, without especially sophisticated organization or deliberate construction. Further, keyword search within JIRA is not an especially robust functionality. It is recommended that a more comprehensive, intentional knowledge base be created within Confluence, with extensive consultation and collaboration from staff with deep institutional knowledge. The de-facto JIRA knowledge base resulting from this proposed workflow would be something of a placeholder in the interim.

Interdepartmental collaboration

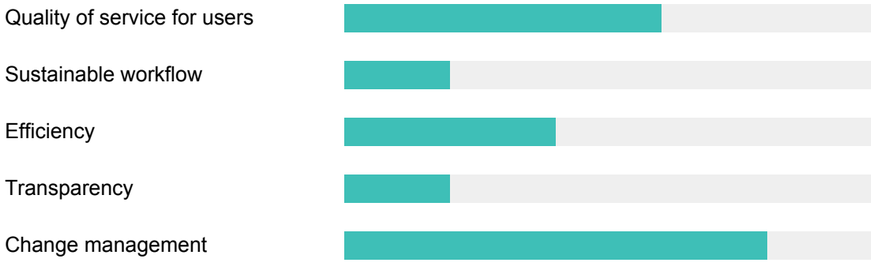
Additional workflows, best practices, and policies may need to be determined for when LSC staff collaborate with and/or forward on requests to other departments within UCLA Library. For example, the proposed workflow assumes LSC has agreed that to respect user privacy, LSC would want to de-identify completed tickets. LSC would need to address within their practices and privacy policy how to de-identify tickets reassigned to other library departments outside of LSC (e.g. do their privacy policies and practice come into play, etc). Other departments that already use JIRA to interact with non-library staff, such as Digital Initiatives and Information Technology (DIIT) and Library Human Resources, may have advice on this issue.

SWOT Analysis: Current E-Reference Model

OVERVIEW

- **Public interface**: Requests received through a general email address, which is posted on the LSC homepage.
- **Workflow**: Inbox administrator answers questions, CC'ing staff or forwarding requests when they feel it is appropriate. There is no systemized way of tracking the progress of a request or who is handling the request.
- **Metrics collection**: Very minimal. Some staff use RefStats, but this is not widely practiced or enforced.
- **Assessment**: No formal assessment of responses.
- **Template answers**: Inbox administrator has created their own. Other staff may or may not have created their own.
- **Knowledge base**: No systemized knowledge base. Inbox administrator has deep institutional and collections knowledge, but this has not been documented. Archive of past email responses exists, but Outlook is not especially suited for search.

PERFORMANCE



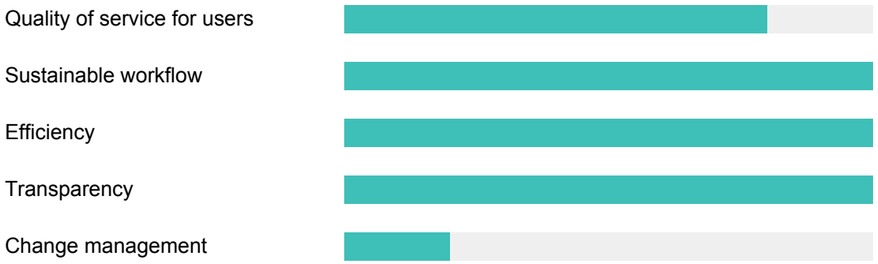
STRENGTHS	WEAKNESSES
Quality of service for users	**Quality of service for users**
Reference handled by staff with expert collections and institutional knowledge to deliver helpful, thorough reference services.	Sometimes requests are answered by the inbox administrator without consulting staff with deep knowledge about a collection or topic (e.g. the archivist who processed the collection). This can result in inaccurate responses.
Other staff are eager to help with reference when asked; "all-hands-on-deck" mentality.	No assessment or training means LSC may not be compliant with IFLA or RUSA standards.
Sending an email is a largely straightforward process most users are familiar with.	Without collecting metrics, LSC is unable to improve services by identifying user trends.
Reference email address is listed clearly on the LSC homepage, and is easy to print on materials.	No retention schedule for de-identification policy in place. This could violate user privacy.
Efficiency	**Sustainable workflow**
Inbox administrator has templates to expedite answering routine questions.	Staff are CC'd at different times, without full access to the email thread. Time is lost trying to recreate/retrieve relevant information.
Transparency	Bottlenecks, since the inbox is triaged by one person (no clear back-up if that person is sick or has other projects to prioritize).
Several Public Services staff have access to the inbox.	Too many pathways for requests to come in (via Aeon in special notes, staff directly, general inbox), which complicates triage.
Change management	No clear tagging/read system prevents most from taking initiative and proactively helping with pending requests.
No change management required until the inbox administrator retires.	**Efficiency**
	Time can be lost ensuring consistent messaging across different respondents.
	No templates or easily searchable history means staff are reinventing the wheel when answering questions.
	Users may not provide robust information in their requests because no particular guidance is given as to what to include.
	Staff have to handle emails about policies already published in FAQ because there is no auto-redirect for these types of questions.
	Transparency
	Unclear chain of command. Inbox is managed by one person not in the Public Services unit, despite the reference desk being run by Public Services. This can make handling coverage or anomalous cases difficult.
	If a request is forwarded to staff with better subject expertise, there is no way to know if the request is answered.
OPPORTUNITIES	**THREATS**
Several staff have deep collections and institutional knowledge. This could be documented and used to answer requests.	Loss of institutional knowledge since there is no documented, searchable knowledge base.
New technologies for project management and analytics could increase efficiencies and provide insight into the user base.	If the inbox administrator retires, there is no set, sustainable back-up option.
New LSC director can facilitate a more cohesive and planned solution that can span across departments.	Email approach to reference enables users who email blast 10+ staff to try to get a response, creating confusion in answering.
COVID-19 requires long-term planning for electronic services.	No assessment or consistent training leaves LSC more vulnerable to legal issues (e.g. copyright and privacy infringements)
	Disorganized workflows that involve duplicative work can create a loss in morale, frustration, and burnout.

SWOT Analysis: Proposed E-Reference Model

OVERVIEW

- **Public interface**: Requests would be received through a webform on the LSC homepage.
- **Workflow**: Requests would enter a reference queue as a JIRA ticket. Two reference administrators would assign tickets to staff and track progress. Staff would be able to add other staff to a ticket (via the @) if advice was needed. Each ticket would be tagged with its progress (i.e. under review, completed).
- **Metrics collection**: Basic metrics on the user would be collected from the JIRA webform. More detailed analytics would be entered by staff in a separate webform.
- **Assessment**: Users would be sent a feedback survey after their request is completed. Annual assessments would be conducted on the reference responses, measuring performance against RUSA and/or IFLA standards.
- **Template answers**: Template answers would be available on Confluence.
- **Knowledge base**: JIRA tickets would serve as a de-facto knowledge base.

PERFORMANCE



STRENGTHS	WEAKNESSES
Quality of service for users	**Quality of service for users**
More efficiencies and transparency in workflow can facilitate faster and more consistent responses.	New webform may be more confusing to users than an email.
Metrics collection on users and types of questions allows for LSC to improve services by identifying trends in questions.	Unsure if the link to webform would be short enough to easily put on material; need to collaborate with IT.
Assessment and standardized training better facilitates compliance with IFLA and RUSA standards.	**Sustainable workflow**
Sustainable workflow	Process will not eliminate the many pathways requests come in to LSC (Aeon, individual emails). Will still need to redirect users.
Through JIRA, each reference request will have a ticket from which staff can be tagged, so they will see the full history of the request and will not need to track down different emails/threads to catch up.	New method of assigning tickets to staff will require understanding staff's commitments and specialties in order to strategically and equitably assign work. Staff need to feel empowered to communicate when they are not able to take on the reference request.
Less bottlenecks as the queue will be handled by two staff and open tickets are also freely available to claim on JIRA.	**Efficiency**
Efficiency	Previous responses will be available, taggable, and searchable in JIRA, but not especially organized.
Templates of responses to frequently asked questions ensures consistency and reduces redundant work.	JIRA FAQ dashboard only available to users who create a JIRA account (as opposed to general Google Forms request).
JIRA knowledge base allows staff to review past answers when answering requests.	**Change management**
Reference can be more quickly administered as webform guides users on necessary information for a request.	Transition will require strong change management (training, buy-in) since it will rely on tools people are less comfortable with.
Staff waste less time answering questions already answered in FAQ because of specialized autoreply.	Additional assessment measures require more staff time than currently in use. Unsure of capacity or if a staff hire is required.
Transparency	
Clarity on status of a reference request as staff will mark the JIRA ticket as "in progress" or "completed"	
Clearer chain of command because of Public Services' involvement, as an extension of in-person reference services.	
OPPORTUNITIES	**THREATS**
Widespread staff investment in reference could make the department think in a more user-oriented way.	Sustainability of the software, in terms of pricing, patches/updates. Requires library and IT buy-in/support.
Solidifying institutional knowledge here may allow for it to be leveraged in other ways and by other departments (e.g. transforming JIRA ticket history into a more organized knowledge base in Confluence).	Building out staff responsibilities or even additional staffing can be a risk in a time of reduced funding. If a position is created, could it be vulnerable to a budget cut; and if so, what would the back-up plan be?
A more systemized workflow could allow for more collaboration/insight sharing with UCLA Library and other institutions.	
User metrics could be leveraged to improve user services and communicate impact to donors.	
New LSC director can facilitate a more cohesive and planned solution that can span across departments.	
COVID-19 requires long-term planning for electronic services.	

SWOT Analysis: Alternative E-Reference Model

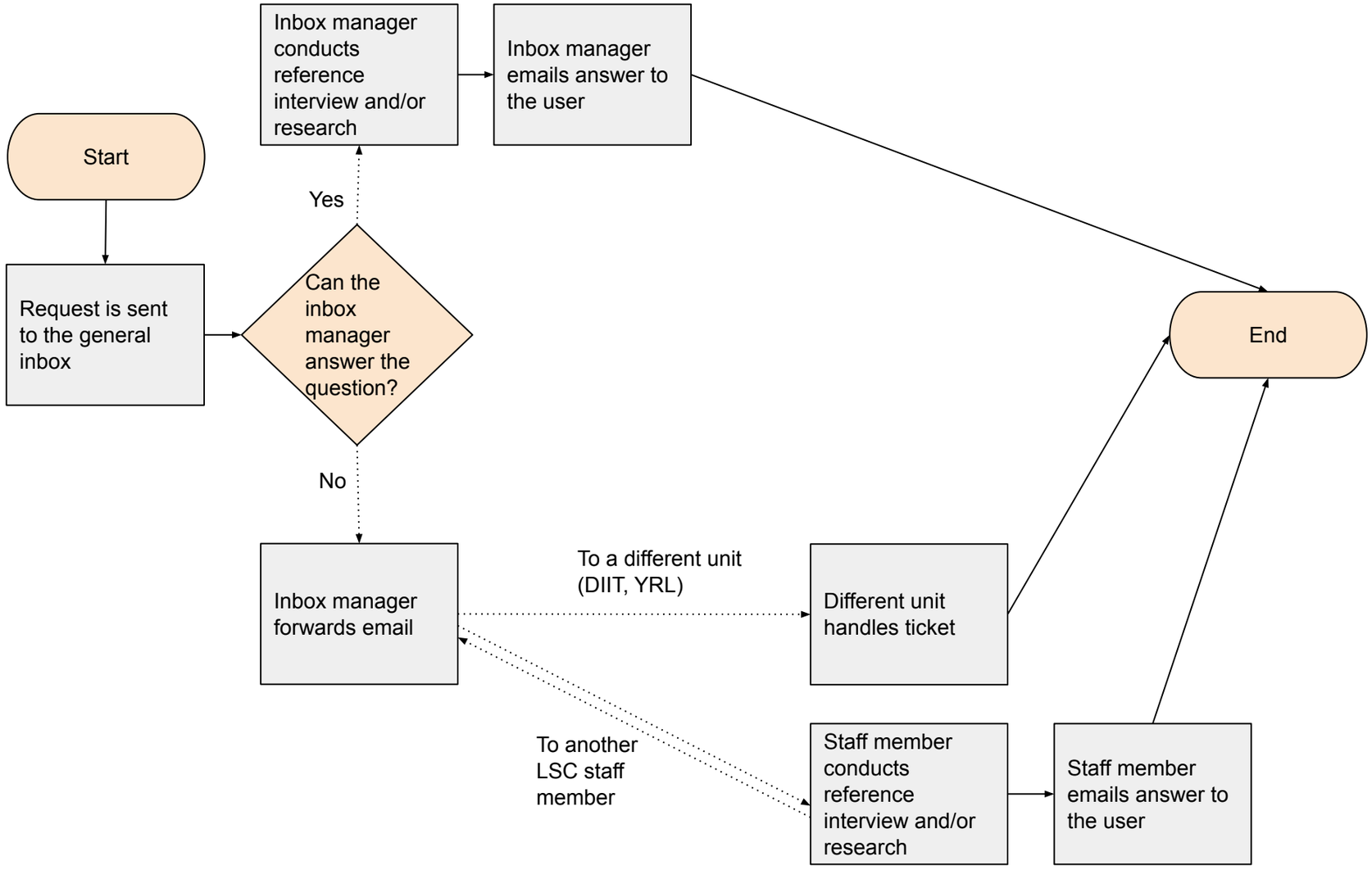
OVERVIEW

- **Public interface**: Requests received through a general email address, which is posted on the LSC homepage.
- **Workflow**: Inbox triaged/managed by two administrators, who assign emails out to 5-9 staff (curators, public services). There would be no systemized way of tracking the progress of a request or who is handling the request.
- **Metrics collection**: No metrics collection from users. Metrics on the interaction would be entered by staff in a separate webform.
- **Assessment**: Users would be sent a feedback survey. Annual assessments would be conducted on the reference responses, measuring performance against RUSA and IFLA standards.
- **Template answers**: Template answers would be available on Confluence.
- **Knowledge base**: No systemized knowledge base. Archive of past email responses exists, but Outlook is not especially suited for search.

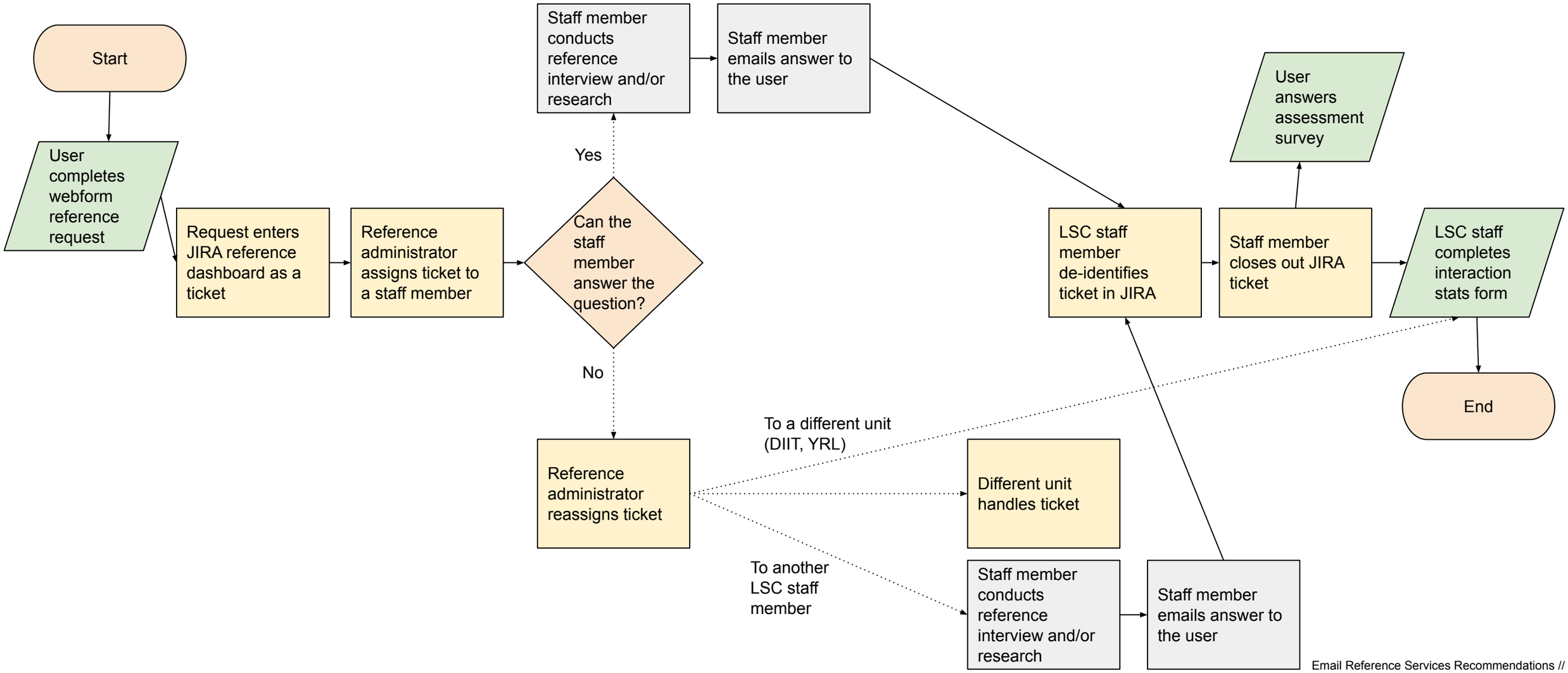
PERFORMANCE

STRENGTHS	WEAKNESSES
Quality of service for users	**Quality of service for users**
Sending an email is a largely straightforward process most users are familiar with.	No collection of user metrics from webform. Metrics collection would rely entirely on staff input, which will be less consistent.
Metrics collection (even if more limited than the “proposed model”) allows LSC to improve services by identifying trends.	No retention schedule and/or searching through the email archive as a knowledge base could violate user privacy.
Assessment and standardized training better facilitates compliance with IFLA and RUSA standards.	**Sustainable workflow**
Sustainable workflow	Issue could persist with being CC’d at different times and having trouble tracking down all relevant parts of the email thread.
Triaged by two administrators to prevent bottlenecks in workflow. Inbox is also open to all respondents to claim a question.	New method of assigning emails to staff will require understanding staff’s commitments and specialties in order to strategically and equitably assign work. Staff need to feel empowered to communicate when they are not able to take on the reference request.
Efficiency	Wouldn’t eliminate the many pathways requests come in to LSC. Staff would need to redirect them to the inbox.
Templates of responses to frequently asked questions ensures consistency and reduces redundant work.	**Efficiency**
Transparency	No strong knowledge base; while inbox has previous responses, Outlook is not well suited for keyword search.
Clearer chain of command because of Public Services’ involvement, as an extension of in-person reference services.	Users may not provide robust information in their requests because no particular guidance is given as to what to include.
While not systemized or efficient, widespread access to the reference inbox means that if someone is assigned a question, there is more transparency as to whether they answered it by checking the reference sent box.	Staff have to handle emails about policies already published in FAQ because there is no auto-redirect for these types of questions.
Change management	
Would require less change management than implementing a fully integrated, transparent JIRA workflow.	
OPPORTUNITIES	**THREATS**
Widespread staff investment in reference could make the department think in a more user-oriented way.	Email approach to reference enables users who email blast 10+ staff to try to get a response, creating confusion in answering.
User metrics could be leveraged to improve user services and communicate impact to donors.	Loss of morale and frustration from workflows that still feel a bit unwieldy and less transparent.
New LSC director can facilitate a more cohesive and planned solution that can span across departments.	
COVID-19 requires long-term planning for electronic services.	

Current Model

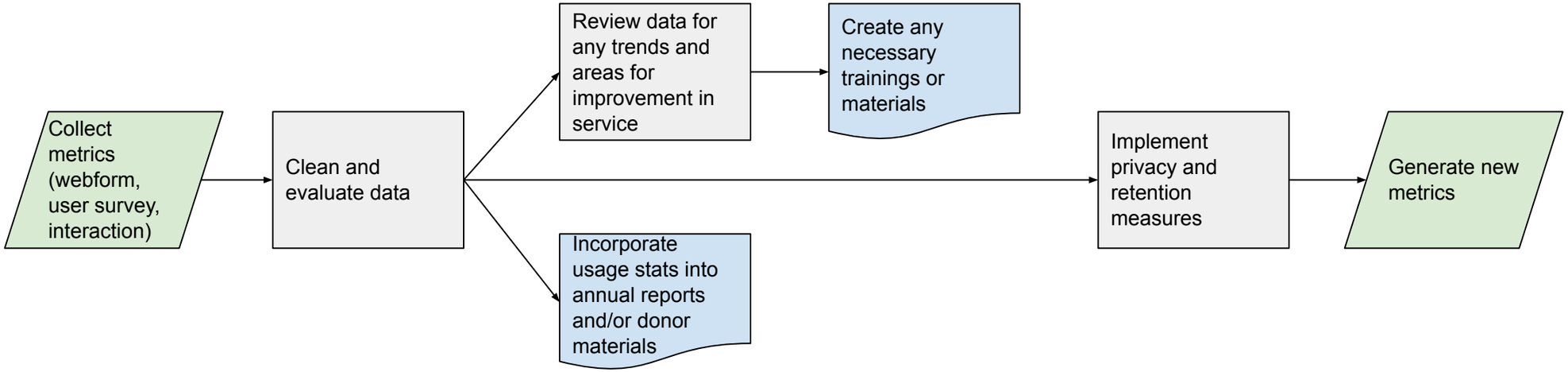


Proposed Solution



Assessment Measures

User metrics and assessment: every six months



Staff assessment: every year