Project Summary
The University of South Carolina Libraries, in collaboration with the Partnership Among South Carolina Academic Libraries (PASCAL), received a Scholarly Communications grant from the Mellon Foundation to conduct a 12-month planning project for the creation of a statewide repository for shared print, manuscript and film materials, as well as other formats. In addition, the grant supports the development of a plan for the management of shared services among the 56-member libraries.

This initiative would enhance teaching and research by building an accessible regional collection that is more robust than individual institutions can develop or sustain. It would preserve this collection by providing a climate-controlled, state-of-the art storage environment. Also, it would provide the opportunity to explore improved access to print collections for students across the state through centralized scan and deliver or other digitization services. The collection would be shared by adding the unified catalog to global searchable databases like OCLC WorldCat and the Center for Research Libraries Print Archives and Preservation Registry.

The Mellon Planning team was organized to lead the project. The team includes Beki Gettys, Associate Dean, University of South Carolina Libraries; Miranda Bennett, Associate Dean for Collections, University of South Carolina Libraries; Rick Moul, Executive Director, PASCAL; Amy Trepal, Shared Content & Licensing Librarian, PASCAL; and Nelson Rivera, Library Annex Manager, University of South Carolina Libraries. The team hired Ben Walker, Associate Dean, University of Florida Libraries, as a consultant for this project. The team and consultant worked closely with PASCAL’s Common Collection Committee (CCC) on this project, and Derek Wilmott, Chair of the CCC, was added to the team. In October, 2018, the team organized regional meetings for PASCAL member libraries to learn about shared storage initiatives and share their input on the project. From November, 2018, to February, 2019, members of the CCC visited three other facilities in Maryland, Ohio and Georgia that house materials from multiple libraries in off-site storage. The consultant worked with the team and members of CCC to administer a needs assessment to member libraries and submitted a final report summarizing that data and detailing his recommendations for PASCAL in February, 2019.

Summary of Consultant’s Report
This section includes the executive summary of Ben Walker’s report as well as excerpts from the report that highlight the results of the needs assessment completed by PASCAL libraries in late
In June 2018, I was contracted to conduct a feasibility study to research a statewide library storage facility/collection for the University of South Carolina and the Partnership Among South Carolina Academic Libraries (PASCAL) Libraries. Collections have or soon will outgrow the available space. Additionally, there is demand for renovated public spaces aimed at providing users with increased opportunities for collaboration in modernized spaces. This feasibility study seeks to address these concerns, by laying the groundwork for a shared print collection in South Carolina. During the course of this grant period I have engaged in multiple activities designed to understand and bring clarity to the challenges and possibilities of a shared storage collection for South Carolina. This has included conference calls, regional meetings, site visits, and a needs assessment. The results of these activities will be detailed in this report, to assist decision makers in solving this problem. All available data considered in this report points to a need for a shared facility. There is a lack of space both for renovation and for current collections. Several PASCAL libraries are facing or have faced difficult deselection decisions. Coordinating 56 libraries is no small feat, and building trust should be the cornerstone of these efforts.

Results of Needs Assessment

The needs assessment was designed to provide feedback from respondents about their current shelving capacity, shelving occupied, and anticipated transfers and withdrawals. First a pre-assessment, designed to gauge interest in shared storage, was distributed at the town hall meeting in October. This pre-assessment indicated that of 43 respondents, 30 (70%) reported interest in using shared storage, with three more suggesting that they were unsure or needed more information. This suggests strong support for a shared collection, even if respondents may not anticipate donating materials.

While we did not achieve 100% participation on the needs assessment, the response rate was 96%, suggesting that members recognize the importance of this effort but also implying that the data accurately captures the situation for PASCAL libraries.

Lessons learned from the Needs Assessment:

1) The information from respondents are estimated, and as such there are potential errors. It can be used to make estimated guesses, but a more thorough assessment is needed.

2) Participants were encouraged to provide capacity figures in whatever format was easiest--either volume count or linear feet. All data were converted to volume count by applying a formula of 10 volumes per linear foot (Leighton and Weber 1999).

3) The average fill rate of 76% is already very close to the maximum recommended fill rate, leaving little room for incoming material or renovations without large scale weeding.
4) Many libraries have already or are preparing to conduct large weeding projects. From the responses, seven libraries are planning for this process, or have recently completed one.

5) Delays in funding or construction of a statewide storage facility may see potential partners drop their support as they seek local solutions or have those solutions dictated by the university. Several respondents commented that library spaces are already being considered for services like learning centers, meaning that materials will have to be weeded to accommodate those new services.

6) Based on the pre-assessment, the majority of the PASCAL members are interested in a statewide solution (70%). The needs assessment received a high participation rate, further suggesting interest in the concept. While not every school indicated that they would transfer materials, as more understanding of the project and its benefits are gained, other potential transfers could be discovered.

(excerpt, p. 15) Two critical factors are not accounted for in this needs assessment: the level of duplication (uniqueness) and the circulation of existing items. Both of these factors are important to consider when crafting collection policies for a shared collection. How many items will be allowed in the facility, as well as how many are necessary to keep throughout the state, can further impact the overall fill rate in libraries.

(excerpt, p. 20) Results indicate that currently, the average fill rate at the 54 libraries that responded is 76% (mode 80%, median 80%). The recommended maximum working fill rate, or the point at which effectively there is not enough room on the shelves to accommodate new titles, is between 80 -86% (Leighton and Weber 1999; Dill 2007). This average (and the other measures of central tendency) suggests that the libraries have minimal room for expansion. Further analysis shows that 30 libraries are already at or above 80% capacity, and the most common answer for fill rate is 80%. More concerning is that 20 libraries are already at or above 85%. Research suggests that even at a growth rate of only 3.5% annually all libraries would be at 86% capacity or more within four years unless consistent weeding is done to relieve those pressures (Leighton and Weber 1999). Of the ten largest libraries that responded, eight are already beyond working capacity, and the average fill rate for those ten libraries is 85%. The ten smallest libraries are in somewhat better shape with only four at or beyond 80%, with a 70% average fill rate. However, seven PASCAL libraries report a 95 – 100% fill rate, suggesting there is a potential for loss of items from the statewide collection due to deselection as well as significant overcrowding of the facilities. Overall, it is clear that there is a need for additional space. There is minimal capacity across the state to manage incoming new titles, and there is even less ability to implement renovations for new services or public spaces. From the data, PASCAL libraries appear to be stagnant, both regarding the ability to grow the collection or to provide more user-friendly spaces. Further, the anticipated decrease in shelving over the next six years is 17%, further crimping available space.

Data indicates that the overall print growth for the next two years is .94%. I question the accuracy of that figure, primarily since it is based on estimations. However, based on that data, if no weeding is undertaken, by 2024 the PASCAL libraries, on average, would be 97% full. The bulk
of this growth is in monographs (73%), with the remaining amount made of serials, microforms, audiovisual materials, other, and a minimal number of LPs (about 20). The average cut anticipated to print subscriptions is more complicated to measure from the data. Several respondents reported that they had canceled most of their subscriptions, and eight said that cancellations are higher than 50%. This suggests that significant belt-tightening has already occurred, which impacts the overall annual print growth increase. Several libraries reported significant weeding projects within that time frame, further enhance overall growth, but there is a potential for loss of items during deselection. Careful consideration of the number of copies available nationally and in the state should be one of the first criteria for any future weeding projects. Identification of unique titles, with a specified retention commitment, would ensure minimal loss of unique or rare materials. The Center for Research Libraries (CRL) reported in 2015 that the retention of print serials across the country represented as little as 2% of the entire print corpus (CRL 2015).

(executive summary, p.3)

Major findings and recommendations for this project:

1) The administrative storage operations should be centralized under PASCAL and as much as possible utilize existing governance structures and agreements.
2) A new Board of Trustees should be established, with oversight for final policy decisions, financial decisions, and communication to external stakeholders. This group would consist of provosts, presidents, and other senior university administrators.
3) The existing PASCAL Board of Directors should handle the policy recommendations and the practical matters around operating the facility and provide information for the Board of Trustees.
4) Various committees and subgroups, would develop operational procedures and policies, which would then be directed up to the Board of Directors.
5) The funding model should be based on weighted FTE and should be distributed among the PASCAL members.
6) Operating costs would include utilities, taxes, employee costs, supplies, software and licenses, equipment, and other related items.
7) A “Harvard” style, twelve-aisle facility should be built adjoining the University of South Carolina Annex. If a full twelve-aisle facility is not approved by the Legislature, the project could proceed in phases. Each phase could consist of a six-aisle facility. If a six-aisle and a four-aisle (ten total aisles) is the maximum that the Annex site can support, that would serve PASCAL for more than 20 years at the current growth rate. If there is no room for a second module, I have concerns about the long-term viability of this location.
8) The amount saved by transferring 2.6 million volumes to storage would be 23% of the total available stacks square footage, or approximately 133,221 square feet (see chart below for other options).
9) Ownership should be transferred to the facility, with its own OCLC symbol. There is an open question about transferring state property that requires more investigation.
Conversations with the appropriate individuals at the university or state level may help to resolve the concern quickly. Avoid utilizing multiple ILL symbols.

10) Interlibrary loan requests for journal articles should be delivered electronically. Scan on demand for books is impacted by copyright, but tools such as Durationator or participation in Hathi Trust as a statewide collaborative may offer options to provide greater access to digital books.

11) The existing courier service for consortial loaning should be used for deliveries, but there is mixed feedback about this service. This may mean renegotiating the contract or considering other vendors.

12) A union catalog with ILL request functionality should be utilized for storage items. There may also be additional functionality within Alma that facilitates access.

13) A statewide conservation facility should be located in the building and offer services for damaged materials. This could be designed as part of the operational costs for the shared facility.

Table 2. (p. 23)

<table>
<thead>
<tr>
<th>Facility size</th>
<th>Stack dimension (double-sided)</th>
<th>Stack dimension including 40” aisle</th>
<th>Books/double sided stack (10 vols/foot, 76% fill rate, 7 shelves)</th>
<th>Books to storage</th>
<th>Equivalent stack and aisle</th>
<th>Sq ft saved on campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six-aisle</td>
<td>3’ x 2’=6 sq ft</td>
<td>3’ x 5.5’=16.5 sq ft</td>
<td>322 vols</td>
<td>2.6m vols</td>
<td>2.6m/322=8,074 stacks</td>
<td>8,074 stacks x 16.5 sq ft=133,221 sq ft</td>
</tr>
<tr>
<td>Ten-aisle</td>
<td>3’ x 2’=6 sq ft</td>
<td>3’ x 5.5’=16.5 sq ft</td>
<td>322 vols</td>
<td>4.2m vols</td>
<td>4.2m/322=13,043 stacks</td>
<td>13,043 stacks x 16.5 sq ft=215,210 sq ft</td>
</tr>
<tr>
<td>Twelve-aisle</td>
<td>3’ x 2’=6 sq ft</td>
<td>3’ x 5.5’=16.5 sq ft</td>
<td>322 vols</td>
<td>5.2m vols</td>
<td>5.2m/322=16,149 stacks</td>
<td>16,149 stacks x 16.5 sq ft=266,459 sq ft</td>
</tr>
</tbody>
</table>
Next Steps for Mellon Planning Team

The next steps to fulfill the remaining obligations to the Mellon Foundation under the grant are 1) to complete a feasibility study to determine the size and cost of a facility, and 2) to develop marketing materials that will be used to provide information, garner support and solicit funding for the project. See below for the timeline of these next steps.

<table>
<thead>
<tr>
<th>Step/Action</th>
<th>Description</th>
<th>Responsibility</th>
<th>Key dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feasibility study to determine size and cost of facility</td>
<td>The consultant’s recommendation is to build a Harvard style high-density storage module adjoining University of South Carolina’s existing Library Annex at 750 Hinton St. in Columbia, SC. University of South Carolina has contracted with KSS Architects LLP to develop a conceptual design and masterplan for an expanded facility. This will include determination of the amount of space available for expansion and a comprehensive budget for the project.</td>
<td>USC Libraries</td>
<td>In progress - planned for May 2019</td>
</tr>
<tr>
<td>Marketing materials</td>
<td>Findings of the consultant’s report will be used to create print and digital presentation materials highlighting the project. These materials can be used by member institutions to garner support from their administrations and to secure funding to implement the planned shared storage facility from potential supporters, including the South Carolina legislature and private entities.</td>
<td>Mellon Planning team in consultation with additional PASCAL staff and PASCAL Board</td>
<td>April - July, 2019</td>
</tr>
</tbody>
</table>
PASCAL considerations
The consultant’s report can serve as a valuable resource for PASCAL member libraries to consider in creating a shared statewide facility. Mr. Walker’s recommendations were based on his interactions with PASCAL staff, member libraries, the Mellon Planning team, the CCC, and visits to other shared facilities. These are recommendations and not a road map. Decisions about governance, ownership, collection development and shared services will require consideration of the environment and resources available in our state. It is recognized these decisions will also take an investment of time and commitment to create a successful collaboration for all involved. The report does not constitute PASCAL’s plan, but it can go a long way to inform the process of creating a plan.

With the Mellon Planning Team completing grant activities in July, 2019, it will be up to the PASCAL Board to determine how to continue advancing the project. PASCAL will need to investigate possible collection analysis services, interim preservation solutions, a business model, and effective governance structure. The Mellon Planning Team and University of South Carolina Libraries administration are committed to participating in next steps in collaboration with the PASCAL Board.

Collection Analysis
The consultant’s report acknowledges that a deeper look at collection analysis is crucial to understand the level of duplication and circulation of existing items in the different collections. The CCC is currently looking at the shared collection and how PASCAL members can work together on collection development to build and support a statewide collection. As a potential next step, OCLC has offered to provide information on the statewide collection through a bib level rollup, an analysis of the statewide collection based on bib-level records in WorldCat. While this will not be a thorough analysis it will give PASCAL a beginning understanding of the shared collection.

Interim preservation solutions
The consultant’s report points out that space for print materials among the members will shortly be at a premium and weeding projects will be undertaken to deal with this. Helping members make informed weeding decisions through an organized PASCAL retention program or participating in national print retention programs is a potential way of moving forward in this area and making sure that valuable material is not lost.

Governance and business model
The governance issues raised by the consultant highlight the necessity for ensuring that there be substantial governance and business models in place in order to ensure a sustainable project. This project would be different from other PASCAL initiatives in that
it involves a physical facility. While mapping these requirements into the existing PASCAL governance structures might not look exactly like the recommendation, the requirement to guarantee long term investment in the program would be essential should it proceed.