House Committee on Appropriations, Subcommittee on the Legislative Branch
Fiscal 2021 Budget for the Library of Congress Mass Deacidification Program
Testimony by James Burd, CEO of Preservation Technologies, L.P.

Issue: The Library of Congress (the Library) has an ongoing program of mass deacidification, a major preservation initiative to stabilize 7.5 million high value books that will soon become brittle and unusable without treatment. The mass deacidification program was invented by Preservation Technologies in coordination with the Library and can add hundreds of years of life to the Library's collections (the Library has stated up to 1,000 years), including countless literary treasures and documents vital to preserving America's memory. We are now 20 years into a 30-year program and have preserved 5,000,000 books and 18 million unique manuscripts so far – on time and on budget. The program includes the preservation of one million unique manuscripts per year, including cherished works like Dr. Martin Luther King's papers held by the NAACP Archive.

Request to Congress: We respectfully encourage Congress to continue this program at or above current spending levels -- $5,500,000 -- in order to complete this program at the lowest cost and as soon as possible.

General Description: As part of the Library's FY 2021 Budget Justification, the Library relies upon highly flawed data and proposes to cancel the mass deacidification program at the end of FY 2020. The harmful effects of this action would include:

- Stopping the planned preservation of 2.5 million acidic books plus one million irreplaceable manuscripts per year and shortening their useable life by 70-80%.
- More than doubling the cost of a one-time treatment to preserve by deacidification.
- The immediate termination of 40 full-time private sector jobs and jeopardizing the viability of the only Library-approved deacidification vendor.

As recently as last year, the Library reported to Congress that mass deacidification would remain central to the Library's preservation efforts. The release of the FY21 budget justification documents to Congress was the first indication from the Library that it seeks to cease the mass deacidification program as soon as the end of FY2020. The Library proposes to redirect the funding to create 22 government jobs at the Library, with 80% of future funds moved into digital activities and away from preservation of physical collections. These redirected funds would touch only a small portion of the Library's assets and should be justified by the Library on their own merits and with their own separate funding from Congress. Mass deacidification is still the longest-lasting and most economical treatment method for the Library's paper collections.

Detailed discussion: The costs and harms of cancelling the mass deacidification program at the Library of Congress

The Library cites several inaccurate justifications to cancel the mass deacidification program:

- Reduced temperature storage in perpetuity in lieu of one-time preservation by deacidification is an effective way to protect acidic books and manuscripts.

- The "fully inclusive lifetime cost per unit" for reduced temperature storage is less expensive than the one-time cost of deacidification.
- Costs are increasing to locate the remaining acidic titles in the Library's stacks.
- The Library of Congress as a matter of policy wants to stop preserving the remaining unique manuscripts and 2.5 million high value books. The Library prefers to transfer $5.5 million in program funds away from continuing mass scale physical preservation to increase staffing at the Library by 22 FTE and increase spending for digital activities.

We respectfully disagree with each statement:

- Continuous reduced temperature storage does not provide the same preservation benefits as one-time deacidification. Acidic materials will still age more quickly than alkaline materials even at reduced temperatures, and the benefits are not permanent but lost if the books are removed from storage.
- The lifecycle cost of reduced temperature storage is ***much higher, not lower*** than the one-time cost of mass deacidification. A 3rd party study cited by the Library is seriously flawed with critical errors of assumptions, calculations, and conclusions.
- The cost to the Library of finding and selecting books has not increased beyond normal inflation adjustments for the past 20 years.
- The Library of Congress's collections include important and often unique books, many of which are the sole remaining copy. Its collection of manuscripts consists of material so unique and valuable that the materials cannot leave the Madison Building and must stay under locked security during deacidification in a space dedicated in the Library's Research and Testing laboratory. Digital initiatives are popular today and important, but they should be funded and justified on their own merits. The Library's mission to protect and preserve our cultural heritage and our physical records should not be sacrificed in order to divert these funds to staff and digital projects that ultimately jeopardize the physical record.

Finally, the Library's proposal includes the creation of 22 government jobs but does not address the private sector impact of this action. Preservation Technologies, located in western Pennsylvania, is the only company capable of providing this technology in the United States. Cancelling the mass deacidification program at the Library will lead to the immediate loss of 40 private sector jobs and will likely result in the closing of the company and the loss of an additional 45 jobs in Pennsylvania. It should be noted that this company was born out of its ability to create and solve a problem that vexed the Library for decades – how to preserve acidic paper. The need to preserve acidic paper still persists. The proposed budget cuts would make it nearly impossible for the Library and countless other libraries domestically and around the world to properly and economically preserve millions of books and manuscripts.

In order to properly evaluate the benefits and costs associated with the Library's mass deacidification program, several questions must be answered.

1. Have Congress's book preservation goals been achieved?

No. Congress charged the Library with developing a program to address the problem of acidic paper destroying the Library's collections, and the result was the "one generation" plan to preserve the books and manuscripts using mass deacidification within 30 years. Congress has consistently funded this program annually through FY20 under a series of four 5-year contracts. The Library of Congress is now 20 years into that 30-year plan to preserve the 7.5 million books determined by the Library to have high intrinsic value to the collection. As recently as last year, the Library reported to Congress that the mass deacidification program should continue at its current pace.

- The plan's goals were recently reviewed and reassessed by the Library to determine the accuracy of the target of 7.5 million books. This number is still recognized by the library as the priority target for preservation as shown in Appendix F of the FY21 budget request.
- To date, 1/3 of the project total, 2.5 million books, are still acidic and deteriorating. The quantity unfinished is greater than the entire research collection at major universities.
- Reaching a point of treating 90% of "top priority materials" is not a significant "milestone" in the project. The Library has never cited a distinction between high value items and "top priority materials", and there are still millions of books and manuscripts left to be preserved.
- The 18 million manuscripts preserved so far are only a small percentage of the total holdings at the Library. Important assets such as the WPA Writer's Project and the archives of the NAACP are examples of the work completed to date.

2. Is reduced temperature storage at Ft. Meade more cost effective than deacidification?

No. The onetime, upfront deacidification of a book gives the longest expected life at the lowest overall cost. Maximum lifetime is only achieved by deacidification, no matter the storage temperature. This is why the Library has been deacidifying their unique manuscript collection and other "Gold level" collections even though these materials are already kept in cold storage on Capitol Hill.

The Library commissioned a study by Forrester Research of Boston (the Forrester report) to compare the life cycle costs of reduced temperature storage at Ft. Meade with the cost to deacidify. The report was issued to the Library in April 2019 and asserts that the net lifecycle cost of deacidification is 2.8 times the storage cost at Ft. Meade, and storage at Ft. Meade instead of deacidifying would save the Library $80 million. These assertions are both wrong. A review of the Forrester report finds that the work is seriously flawed with critical errors of assumptions, calculations, and conclusions. When corrected, the most important findings are:

- Building special storage like modules at Ft. Meade to avoid deacidification is not economical. An outside review of the correct projected cost to build and operate a low temperature storage facility for 40 years is $30.20 per "standard storage unit" (roughly one book), which is 20% higher than the correct onetime cost to deacidify at $25.66 per book.

- The projected "fully inclusive lifetime cost" of reduced temperature storage at Ft. Meade is more than double the one-time cost for deacidification followed by standard storage conditions. The Forrester study does not consider a true lifetime cost, but only counts the first 40 years of costs to maintain reduced temperature storage. The report ignores that the benefits of one-time deacidification continue for hundreds of years. (The Library has previously asserted deacidification can add up to 1,000 years of life to a treated document.) There are large and continuing energy and maintenance costs but also increased managerial and logistics costs associated with tracking and managing the care of acidic titles mixed into controlled environmental storage.
- Future budgetary pressures that require lower utility costs would eliminate the planned lifetime benefits of temperature and humidity controls.
- The Forrester report uses an incorrect assumption about the work remaining and calculates a need for $145 million to finish the mass deacidification program. This is more than double the figure of $66 million shown in Appendix F of the Library's budget justification. Forrester uses the incorrect estimate as the basis for asserting a potential lifetime savings of $80 million when in fact no savings at all will result.
- Books will only benefit if they are stored in these modules for life without circulating, and there is no assurance that all acidic titles will be transferred there. The remaining acidic titles are intermingled in the stacks with alkaline books, duplicates, and other non-candidates. Just to identify and transfer these 2.5 million books to storage at Ft. Meade, 10 million books would need to be searched at the Library at a cost of more than $11 million, which is not included in the Library's budget or the Forrester report.

3. Are costs of the program increasing because it is harder to find materials?

No. The costs for book selection have been well controlled.

- Internal costs for the Library have decreased over time. The program originally involved several full-time Library professionals managing the program plus production staff. The program is now administered at the Library as part of the duties of one manager and part-time laboratory support for quality control monitoring.
- The contract prices for book selection have been adjusted annually only to reflect increases for wages and raw materials as required with any government contract.
- The Library gets significant additional benefits beyond deacidification because contract staff are checking four or more books for every one selected for treatment. Selected books in many cases are then rerouted by the Library to save space in the stacks.

4. Is mass deacidification a modern technology appropriate for the collection today?

Yes. The *Bookkeeper® Mass Deacidification Process* developed by Preservation Technologies and used for the Library of Congress's collection represents the only state of the art deacidification technology accepted worldwide for preserving paper-based original materials.

- Preservation Technologies worked closely with the Library of Congress for 8 years from 1992 to 2000 to develop a safe, efficient, reliable, and affordable technology. Over the

past 20 years, *Bookkeeper® Process* deacidification has continued to evolve and is now recognized as the leading mass preservation technology by research libraries and archives in North America, Europe, Asia, Africa, and the Middle East.

- Preservation Technologies' *Bookkeeper®* mass deacidification processing equipment has been installed in nine operating locations in seven foreign countries, including the national libraries of Poland, South Africa, South Korea, and Qatar as well as the National Archives of The Netherlands.
- The International Standards Organization (ISO) recognizes the importance of this growing technology and in 2016 developed a technical specification to be used worldwide for evaluating the effectiveness of deacidification.
- The Library of Congress standards are higher than the ISO specification, and Preservation Technologies is the only company capable of meeting these requirements.

Recommendations to Congress

Preservation of the remaining 2.5 million acidic books and unique manuscript materials via deacidification should remain a top priority for the Library. The economic study commissioned by the Library, suggesting a transition away from mass deacidification to Ft. Meade storage, has critical flaws. The correct result from the data is that mass deacidification is the most cost-effective program for preserving the Library's acidic materials. It is the only viable technology for preserving the Library's unique manuscript holdings. There is no economic justification, and the Library should not abandon the physical preservation of the remaining acidic books and manuscripts. The Library appears to be risking its collections to hire more full-time employees rather than asking Congress for additional funds to hire full-time employees.

1. We respectfully request Congress reaffirm its strong support for mass deacidification and direct the Library of Congress to finish the program of mass deacidification to preserve the Library's unique manuscript collection and the remaining 2.5 million acidic books.
2. We respectfully request Congress continue to appropriate a minimum of $5.5 million per year to fund this program of mass deacidification.

Who we are

Preservation Technologies, L.P. is the recognized worldwide leader in this field with the only technology capable of meeting the standards for preservation by deacidification set by the Library of Congress. From its headquarters location just north of Pittsburgh, Pennsylvania, Preservation Technologies provides preservation services, equipment, and supplies to institutions throughout the U.S. and internationally. **In 2017, the company won the *President's "E" Award for Export Service* presented by the U.S. Department of Commerce.**

The size of the Library's preservation program and the abruptness of the Library's plan to cancel will immediately result in the loss of 40 full time private sector jobs. The significant contract loss is likely to cause the full company to close with the loss of an additional 45 full-time positions in western Pennsylvania. Besides the loss to the collection at the Library, research libraries, archives, and other institutions throughout the U.S. and worldwide would lose a leading supplier of critical and cost-effective preservation technology.