Oral Statement of Carla Hayden Committee on Senate Rules and Administration Oversight of Library of Congress Modernization Efforts

October 20, 2021

Madam Chairwoman, Ranking Member Blunt, and Members of the Committee:

Thank you for the opportunity to appear before you today to discuss the programs and priorities of the Library of Congress. As the head of the nation's oldest federal cultural institution, I want to begin by expressing my tremendous pride in this agency's mission¹ and the work of its dedicated staff, especially over the past eighteen months. The Library continued to operate and maintained productivity while managing the challenges of the pandemic. We are resuming on-site services as conditions allow, with new procedures to ensure the safety of visitors, patrons and employees. During this time, my management team and I have also ensured that our many modernization initiatives continue to move forward, and much progress has been achieved.

The Library of Congress embodies, as a whole and within its esteemed parts, a pre-eminent repository of knowledge. The Library is the home of the U.S. Copyright Office, the Congressional Research Service (CRS), the Law Library of Congress, and the National Library Service for the Blind and Print Disabled (NLS). As the main research arm of the U.S. Congress, we provide authoritative, nonpartisan information to Members of Congress and their staff. Scholars, researchers, and content creators draw inspiration from our collections. Our service units also supply reference services to the U.S. Courts, federal agencies, and libraries throughout the country.

Each day, we serve our users through our many programs, lectures, exhibitions, and online resources. Today, the Library holds more than 171 million items in all formats and languages and has the world's largest collections of legal materials, films, and sound recordings. According to our most recently compiled data, the Library welcomed more than 565,000 on-site visitors, putting us on pace to exceed our 2019 numbers until the building closed to the public. Our web pages attracted 174.8 million visits, an increase of more than 50% compared to FY19. More than 8,400 congressional participants attended 213 CRS seminars. In addition, CRS responded to over 75,000 legislative policy requests, which also represents an increase compared to FY 2019. The U.S. Copyright Office issued more than 443,000 copyright registrations. The Library responded to more than 802,000 reference requests from Congress, the public, and other federal agencies, including the direct use of Congressional Research Service reports, and nearly 20.3 million copies of braille, audio, and large-print items were circulated to blind and print disabled patrons.

I look forward to updating the Committee on the Library's activities. With this testimony, you will read about new appointees to Library leadership, the work of our service units and divisions, operations during the pandemic, the status of modernization initiatives, and our work to expand access, enhance services, and engage even more users.

¹ The Library's mission is to "engage, inspire, and inform Congress and the American people with a universal and enduring source of knowledge and creativity."

New Appointments

The Library recently welcomed several new leaders to management positions. The Committee will hear from two new leaders during this hearing– Register of Copyrights Shira Perlmutter and NLS Director Jason Broughton. Last October, Shira Perlmutter became the 14th Register of Copyrights and the Director of the U.S. Copyright Office. I congratulate her on her first year in the role and thank her for the leadership she displays in moving forward important policy and modernization initiatives for the office. The National Library Service for the Blind and Print Disabled (NLS) also has a new director following Karen Keninger's retirement in May. I thank Ms. Keninger for her nearly decade-long service to NLS. The Committee will have the pleasure of hearing from Jason Broughton, NLS' incoming director. He is a former Vermont State Librarian and is just a few weeks into the role. I welcome him to the agency and look forward to working with him as NLS continues to innovate.

Other changes impacting Library leadership include the retirement of Bud Barton from the position of Chief Information Officer (CIO) in September. Mr. Barton joined the Library in 2015. He and his capable team commendably took on the challenge to professionalize and modernize our information technology (IT) operation. With his retirement, I am pleased to elevate 24-year Library veteran and former Deputy CIO, Judith Conklin, to lead as we build upon the progress already made. The Library also saw the retirement of Inspector General (IG), Kurt Hyde, this year. Kimberly Byrd, former deputy to the IG, now serves as Acting Inspector General. Finally, the Library honors the life and service of Jane Sánchez, former Law Librarian of Congress, who passed away earlier this year. She is succeeded by Aslihan Bulut, the former deputy law librarian for collections. Associate Librarian Robin Dale has been appointed to fill the other role Ms. Sánchez held as Deputy Librarian for Library Collections and Services.

Responding to the COVID-19 Pandemic

The COVID-19 global health pandemic presented a unique challenge faced by no other Librarian except for perhaps Herbert Putnam, the 8th Librarian of Congress, who served during the 1918-1919 flu pandemic. When the pandemic struck the United States in March 2020, the Library of Congress quickly adopted new approaches to help carry out its mission of serving Congress and the American people while also keeping staff and visitors safe. As of mid-October, 92 percent of our staff is fully vaccinated. According to a 2020 survey of Library staff, 85 percent reported that management demonstrates a commitment to health and safety. I thank the Library's Health Services Division and also the Office of the Attending Physician for their coordination and guidance throughout.

Our readiness to transition to post-pandemic operations greatly benefitted from Congress' support and recent investment in our ongoing technical transformation. The Library's IT infrastructure sustained remote operations for as many as 4,000 concurrent teleworkers – an eight-hundred percent increase – with essential services including the Congressional Research Service (CRS) and the Copyright Office able to operate at capacity. Planned digital initiatives, such as the "LOC Collections" mobile app, were accelerated to provide new ways for Congress and the public to engage with the Library. Library divisions launched new initiatives to open the digital treasure chest and connect with users wherever they live in the country. For example, early in the pandemic, the Library created the new "Library of Congress: Engage!" webpage as a centralized hub to direct online visitors to concerts, book talks, resources for teachers and students, and other events reimagined and sustained as digital programs. More recently, we revamped our dedicated teacher's website (loc.gov/programs/teachers/). CRS launched a webpage that offered nearly 1,000 products and resources related to the pandemic. A new lunchtime lecture series for congressional offices utilized video conferencing to offer talks on current and historical events for Members of Congress and their staff. Expanding digital access is clearly more important than ever as people become accustomed to streaming and interacting with their favorite programming from home. Just a few weeks ago, the Library held its second National Book Festival since the pandemic began, with video-on-demand, online interactives, live in-person events and virtual programming tied to local communities, and a national PBS broadcast hosted by the legendary literacy champion LeVar Burton.

Research and reference services continued throughout the pandemic as well, via email, phone, and our "Ask a Librarian" online service. We have partially progressed through a phased return of inperson operations. In September 2020, a temporary on-site Electronic Resources Center (ERC) was established to provide by appointment service to allow researchers to utilize the wealth of econtent accessible only onsite. The ERC remained open for service through the end of May 2021. On June 1, we resumed on-site access to the Library's reading rooms with health and safety practices in place, leveraging appointments to allow social distancing and limit occupancy levels. Then, in July, we began welcoming public visitors to the Jefferson Building three days a week and recently increased service to four days a week (Wednesdays-Saturdays). Thus far, the Library has safely welcomed more than 2,700 unique researchers into its Reading Rooms and more than 30,000 visitors to the Thomas Jefferson Building. Other on-site functions will restart incrementally in phases and by building, subject to the health guidance in place at the time and local health conditions.

Moving Forward to Enhance the Visitor Experience

Work on the enhanced Visitor Experience in the Thomas Jefferson Building continued to move forward as well, despite some challenges posed by the pandemic. Elements of the Master Plan came to life through the design work for the spaces: a welcoming Orientation gallery, featuring Thomas Jefferson's Library – the heart of the Library of Congress - with an oculus view into the Main Reading Room; a Treasures Gallery to display the wonder and scope of our special collections; and a Youth Center to inspire learners of every age. The Youth Center will inspire learners of every age through engagement with Library Collections and prepare young people for the future by equipping them with civic and research skills. The work over the last year has been focused on design and content development for many spaces, and we're excited to be turning toward to fabrication and creation of many of these elements in the coming year. Throughout this project, we have worked collaboratively with the Architect of the Capitol's team, including ensuring life and safety requirements are met.

To date, \$30 million has been appropriated, and we anticipate receiving the final \$10 million of Federal funding in fiscal year 2022. With the recent release of \$10 million in FY21 funds, the Library will begin to fund the physical construction, fabrication and installation phases of the project. A robust private funding campaign has raised \$14.7 million in cash and pledges as of this summer, reaching over 73% of our goal of \$20 million. We thank David M. Rubenstein, our lead donor in this effort, for his support in helping us reach our goal.

Thanks to this generous funding of donors and the support of Congress, we will deliver an amazing experience for visitors, to broaden their understanding of the Library and its resources. This is your Library, your constituents' Library, a Library for the American people. We want to inspire them to learn, to create, to innovate, to become lifelong users of the largest Library in the world.

Modernizing Enterprise Information Technology

The Library continues to build on the work done in recent years to modernize its information technology operation. The Library has made tremendous progress over the last several years, and we thank the Committee for its strong support as we worked to stabilize, optimize, and now modernize our IT systems and processes. Keeping IT systems current is a process of continuous delivery and development, and I am committed to ensuring this is ingrained in the culture of the Library so that we never again fall behind.

Working very closely with the Government Accountability Office (GAO), the Library has addressed 98 percent of all public and non-public recommendations from 2015 reports on the agency's information technology, leaving only two that are not yet considered "closed as implemented." The final two recommendations require multi-year solutions to fully resolve, and the Library's technology professionals will continue to work with GAO to address them.

The Library successfully moved production IT systems out of the Madison Building at the end of FY20. The Library now has a hybrid hosting model in place that includes physical data centers, as well as internal and externally-hosted cloud solutions. We are already seeing the benefits of this new infrastructure with increased capacity and bandwidth supporting teleworking employees. It also means that the agency is better positioned to innovate moving forward. For example, this infrastructure is at the heart of the Enterprise Copyright System modernization and efforts to build out NLS's Braille and Audio Reading Download (BARD) system to support an increased user base.

We are committed to ensuring that Congress.gov fully meets congressional needs. As one of our major IT programs, we keep Congress.gov in continuous development, with new functionality added every three weeks based on user feedback. Significant site enhancements over the last year include the addition of the 'Century of Lawmaking' collection containing over 30,000 bills and

resolutions from some of the earliest congresses. We also added improved accessibility tools, a new citation tool, and improved email alerts for floor actions and committee activities.

While much work remains ahead of us, I am encouraged by the continuing progress made on IT modernization. The Office of the Chief Information Officer has made a necessary start in modernizing IT capabilities in support of more user-friendly customer experiences across the agency.

Cybersecurity

Cybersecurity threats to the Library and Legislative Branch data have escalated steadily over the last decade, with complex attacks regularly identified and prevented. As a confidential consultant to Congress, administrator of the national copyright system, and steward of the nation's cultural history, the Library of Congress takes its responsibility to ensure its IT security as a national priority. Like Congress, the Library is a target for increasingly advanced cyber threat actors. To stay ahead of the growing sophistication of the most advanced and persistent threats, the Library must be able to maintain and consistently mature a comprehensive suite of cybersecurity tools and training. Beginning in FY2017, the Library moved to centralize and enhance IT security protections, building on several factors such as industry best practices, government standards, and the recommendations made by GAO and the Library's Office of the Inspector General. The Office of the Chief Information Officer has implemented National Institute of Standards and Technology (NIST) security standards, multi-factor authentication for all employees, and enhanced protection for sensitive data including congressional information and Copyright e-deposits. In addition, the Library regularly participates in the Legislative Branch Cybersecurity Working Group, composed of representatives from all Legislative Branch agencies and staff representatives from the House and the Senate. The Working Group facilitates coordination and the inter-agency exchange of expertise in response to security threats. It is a vital resource for cybersecurity on Capitol Hill.

U.S. Copyright Office IT Modernization Update

Activities related to Copyright Office IT modernization have continued during the pandemic without interruption. We added to our public outreach by establishing a Copyright Public Modernization Committee, which met for the first time in July.

The Enterprise Copyright System (ECS), which is being developed in partnership by the Copyright Office and the Library's Office of the Chief Information Officer, includes four major components. Beginning in FY2019, Congress generously committed to providing \$60 million over five years to design and implement three components of the new enterprise IT system –registration, recordation, and public records. Initial work on licensing, the fourth component, is also underway.

Users of the Copyright Office deserve a modern, efficient copyright system that is easy to use. To date, our progress on building such a system includes the release of pilots for the recordation and public records systems; both are receiving positive feedback and are being further refined. In April

2020, we released a limited public pilot for the new recordation system which, for the first time, allows users to record documents related to copyright ownership using a digital platform rather than the current paper-based system. The Copyright Office has processed over 3,700 Basic Section 205 recordation filings as of September 28, 2021, from the first eight waves of pilot users. Based on this experience, online recordation will bring processing times down substantially. The new public records system allows the public to efficiently search for information for both registration and recordation data, provides enhanced search capabilities, and affords improved interfaces for both external public users and Office staff to use. A pilot version has been available to the public since December 2020, with additional updates issued in August 2021.

Progress to date also includes testing and development for the registration application, a key component of the ECS. The next-generation registration system will facilitate and automate the copyright registration process beyond what is possible in the existing electronic Copyright (eCO) system. Recent milestones include user testing for a limited clickable prototype of the standard application for registration.

Modernizing CRS Technology

The Congressional Research Service (CRS) serves Congress with the highest quality research and consultation to support the exercise of its legislative, representational, and oversight duties. The work of CRS is authoritative, confidential, objective, nonpartisan, and timely. It examines pressing legislative issues facing Congress and provides analysis to support Congress throughout the legislative process across the full range of public policy issues. In FY2020, the CRS website for Congress (CRS.gov) drew more than one million views, including nearly 382,000 views of the service's reports and general distribution products.

Technology enables the many services CRS provides Congress. For its modernization efforts, CRS is working closely with the Office of the Chief Information Officer to modernize its internal IT and client services system. The new Integrated Research Information System (IRIS) will leverage the latest advances in web-based technologies to upgrade the systems CRS uses to respond to Congress. We look forward to moving the IRIS project along as an ongoing multi-year project that will continue to be a top Library priority in the new fiscal year.

Projects Underway to Support Law Library Service to Congress and the Public

CRS and the Law Library often collaborate on providing service to Congress. Annually, the Law Library team provides over 400 in-depth, complex research reports for Congress and over 1,500 reference responses to Members, Committees, and staff. Recognizing that Congress and the American people increasingly using electronic resources, the Law Library has made digitization a modernization priority. Volumes of the U.S. Statutes at Large from the 1st – 81st Congresses (1789-1951) are fully accessible as a digital collection on LOC.gov. This fall, volumes for the 82nd – 92nd Congresses (1952 – 1972) will be added to Congress.gov. Individual laws for the 93rd – 103rd Congresses (1973-1994) have been integrated and made available in Congress.gov with additional phases to follow with a projected completion in 2022.

The Library's support to Congress will also be served by physical modernization in the Law Library, which in this case means new compact shelving for a vast collection of international, foreign, domestic, and comparative legal resources. The new shelving will not only replace physical library infrastructure at the end of its life; it will improve user access to an extensive collection that spans 75,000 square feet, or the equivalent of 1.5 football fields. The current obsolete shelving system must be replaced to address personnel safety, access, and storage. The Library has been working to upgrade Law Library compact shelving since Congress first funded the initiative in FY2017. Given the size of the Law Library collection, the replacement of the existing shelving will occur in quadrants (Quads A through D). The Quad A replacement is already complete. Quad C, the largest portion of the collection, is in its final phases, and the two remaining smaller quads are scheduled to be replaced in the coming years.

A 21st Century National Library Service for the Blind and Print Disabled

Program Expansion and Modernization

This year the National Library Service for the Blind and Print Disabled (NLS) celebrates 90 years of providing free braille and talking books to people who cannot read regular print due to visual impairments and other disabilities. In 2019, Congress formally expanded its universe of eligible users to include individuals with perceptual or reading disabilities.² This expansion is expected to grow NLS' patron base over the next several years. In anticipation of this growth and as a part of a long-term plan to transform NLS into a more digitally-enabled service, NLS is modernizing to meet 21st Century customer needs. While NLS always has and always will provide hard copy braille materials, the Library's technology office has played a key role in making downloadable digital products more accessible online. The Library has more than tripled the capacity of the NLS Braille and Audio Reading Download (BARD) system by moving it to the cloud. Patrons downloaded about 4.6 million books and magazines from BARD in FY2020.

NLS has also developed a multi-year plan to pilot braille eReaders. Currently, NLS is moving ahead with research and pilot programs to finalize the optimal eReader option. In FY2021, several thousand devices were tested by network libraries and patrons. We thank this Committee for its ongoing support of this program.

A New Headquarters for the National Library Service for the Blind and Print Disabled

Working with Congress and the Architect of the Capitol, the Library is exploring possibilities for relocating the NLS headquarters closer to the main Capitol Hill campus. NLS currently occupies a General Services Administration (GSA) leased facility in Northwest Washington, D.C. The

² See the LOC Technical Corrections Act that passed as a part of the FY2020 Further Consolidated Appropriations Act (P.L. 116-94), conforming NLS eligibility definitions with the Marrakesh Treaty Implementation Act (P.L. 115-261) of the prior Congress.

building needs renovations even though the government recently invested in required health and safety improvements.

Relocating NLS near the main Library campus would drastically improve synergies with other programs and infrastructure. The current headquarters is an approximate 30-minute drive from Capitol Hill. This can present a challenge for visitors or staff who are visually impaired, as well as impact the efficiency of coordinated IT activities between locations. In fact, the current location is particularly unsuited to NLS' 21st Century transformation. In the coming years, NLS will be expanding both its user base and patron outreach and looks forward to being able to engage with the user community in a patron-centric facility developed to support a low vision population. Being closer to the main campus will allow more operational coordination with the rest of the Library, eliminate duplicative support services, and encourage the use of even more shared services where possible.

Library Services Activities and Modernization

The Library Services service unit maintains the Library's unique and enduring collection. Activities include building the national collection, providing strong stewardship and preservation, creating and managing metadata to provide access to the collections, and sharing the national collection with a wide range of users. The Library took 6.8 million preservation actions in FY2020 to keep the Library's high-value, high-use, and at-risk items user accessible, and in FY2021, has continued to process millions of special collections items, such as manuscripts and photographs, reducing the arrearage in those areas by more than 2 million items over two fiscal years.

Storage and Preservation

Library Services professionals take great pride in stewarding the national collection, attentively addressing its preservation and storage needs. After items are acquired, specific steps must be taken to manage and preserve them for the long term. This includes providing proper physical storage to expand the life of collections for many generations to come. The Library works closely with Congress and the Architect of the Capitol in building its collections storage portfolio, which currently includes permanent and temporary leased facilities. Our goal for several years has been to modernize storage and make more efficient use of congressional investments by vacating expensive, outdated General Services Administration leased space in Landover, Maryland in favor of permanent preservation storage modules at Fort Meade as well as less expensive, more desirable leased space in Cabin Branch, Maryland.

A significant physical modernization milestone was reached when the Library and the Copyright Office recently vacated all temporary leased storage in Landover. Thanks to investments from Congress, the Library is making steady progress transitioning to collections to Ft. Meade and Cabin Branch. Last November, we opened a new, modern copyright deposit storage facility at Cabin Branch. While the stacks on Capitol Hill provide daily access to many of our most requested items, an increasing number of items are being stored off site in high-tech, environmentally controlled facilities. Ft. Meade Module 5 opened in October 2017 and is now more than 95% full

with collections. Contractors completed the construction of Ft. Meade Module 6 this summer, and it is already receiving collections. The latest Ft. Meade project – Module 7 – is a critical turning point for the Library's physical storage goals. Once built, it will alleviate the current shortage of collection capacity on Capitol Hill and will allow the agency to focus more attention on collections care. Environmentally optimized storage underpins the Library's long-term collections storage strategy and is now the industry standard. Advanced temperature and climate controls stave off deterioration and the effects of age. These facilities store thousands of items in densely planned spaces, making for more efficient use of square footage than is achievable in traditional library shelving. They also keep materials safe and secure and provide enhanced inventory control technologies that help staff quickly find and serve requested items.

The Library's preservation strategy to phase out the legacy mass deacidification program is yet another example of modernization and resource optimization. Rebalancing spending in this area, as supported by Congress in FY2021, will allow for smarter investment in a preservation strategy that supports the Library's diverse, 21st century collections and applies limited preservation funding to the most pressing collections needs, including digital collections management.

Library Services Technology Modernization

Similar to other technology initiatives taking place in the Library, the Chief Information Officer is working with Library Services to replace one of its most critical legacy technology systems. A new Library Collections Access Platform (L-CAP) will seamlessly integrate and modernize systems used to acquire, inventory, and circulate collections, as well as manage metadata for web access. L-CAP will be at the core of Library operations for the next generation and will be kept viable as both demand and technology evolve. L-CAP will also provide better management capabilities for the exponential growth in Library digital content. The Library's digital holdings, including digitized collections, Copyright deposits, and "born-digital" acquisitions are doubling approximately every 18 months, requiring continuous updates to support changes to metadata, new formats, and access. The agency's desire to move forward with this project is reflected in the FY2022 budget request.

Modernizing Financial Management Services

In FY2020, the Library received its 25th consecutive clean (unmodified) financial audit opinion from an independent auditing firm. We strive to maintain this status, and with that in mind, have taken several actions in recent years to enhance and modernize the operations of the Financial Services Directorate, the division charged with coordinating all budgetary and financial activities for the Library of Congress. The Financial Services Directorate also provides shared services for eight Legislative Branch agencies via its hosting of the Legislative Branch Financial Management System (LBFMS).

In FY2019, Congress provided funding to support an increase in LBFMS hosting costs driven by growth in the number of users; supported the funding of an e-travel interface for more streamlined business travel processing; and provided for the reengineering of business processes to standardize

them across the Legislative Branch agencies, an activity which is underway. In FY 2021, the Financial Services Directorate developed an online financial management training program and integrated it into the LBFMS. In addition, the Directorate hired staff capacity and capability in program analysis, budget, and systems accounting to support its work. The Library's Inspector General has identified financial management and reporting as one of agency's top management challenges. Last fiscal year (FY2021), the Directorate prioritized activities to develop an Integrated Master Plan that pulls together information on all current and future initiatives to modernize the directorate. The Directorate has recently completed a project in partnership with the Office of the Chief Information Officer and the Library's Human Capital Directorate to develop a solution to capture internal labor costs on projects.

Building on efforts to modernize the Financial Services Directorate, we hope to move forward with a new initiative to establish an Enterprise Planning & Management (EPM) program for the Library. EPM will lead the Library's development of lifecycle cost estimation and cost accounting, including Technology Business Management (TBM) cost accounting. We believe EPM will help enable more effective planning and execution of resources over time. The great benefit of EPM is that it will create a standardized Library-wide framework for data-driven reporting, evaluation, and decision-making.

Conclusion

The Library is moving forward in substantial ways to modernize. We are excited about the progress that has been made, the work that remains to be done, and the promise of the future innovations enabled by these efforts. As always, the Library remains committed to providing excellent service to Congress as your Library. I thank you again for your continued interest and support for the Library of Congress, and for inviting me to update the Committee on several important topics.