Date       September 29, 2023
To         Dr. Carla Hayden
           Librarian of Congress
From       Dr. Glenda B. Arrington
           Inspector General
Subject    Final Evaluation Report – Assessment of the Library of Congress’s Digital
           Strategy, Report No. 2022-SP-103

This transmits the final evaluation report for the Office of the Inspector General’s
assessment of the Library of Congress’s Digital Strategy performed by Cotton &
Company Assurance and Advisory, LLC (Cotton).

The executive summary begins on page i and the results of the Cotton’s evaluation begins
on page 1.

Based on management’s written response to the draft report, we consider all of the
recommendations resolved. Your responses provided an action plan for the
implementation of each recommendation, in accordance with Library of Congress
Regulation 9-160, Rights and Responsibilities of Library Employees to the Inspector
General, §6.A.

We appreciate the cooperation and courtesies extended by the Library Collections and
Service Group and the Office of the Chief Information Officer.

cc        Robin Dale, Deputy Librarian Library Collections and Services Group
           Judith Conklin, Chief Information Officer
           Natalie Buda Smith, Director, Digital Strategy
           Dianne Houghton, Senior Advisor for Organizational Performance
           Katherine Zwaard, Associate Librarian for Discovery and Preservation Services
           Trevor Owens, Director, Digital Services
           Moryma Aydelott, Supervisory Program Specialist
           Dina Najia, Management and Program Analyst
           Margaret Williams, General Counsel
           Meredith Skowronski, Senior Counsel
Summary

The Office of the Inspector General (OIG) engaged an independent contractor, Cotton & Company Assurance and Advisory, LLC (Cotton), to assess how the Library has strengthened its digital strategy in recent years.

October 2018 – The Library published its first agency-wide Digital Strategy. The Digital Strategy Directorate, which is positioned in the Office of the Chief Information Officer (OCIO), was responsible for authoring and executing the strategy. The Library supported this Digital Strategy with tactical objectives and initiatives outlined in the Digital Strategy Directional Plan, which the Library initially published in September 2019.

October 2021 – The Library published the Digital Collections Strategy Overview 2022-2026 (Digital Collections Strategy). This publication served as an update to the Library’s September 2017 Digital Collecting Plan, which had been limited to acquisitions. The Library intentionally designed its successor plan to cover all aspects of “born digital” collecting and curation.

May 2022 – OCIO’s Digital Strategy Directorate began its collaboration with the Strategic Planning and Performance Management Office (SPPM) to integrate the Library’s Digital Strategy into the Library’s Fiscal Years 2024-2028 Strategic Plan, the next stage in maturity for the Library’s digital transformation.

November 2022 – The Library published the Library of Congress Digitization Strategy: 2023-2027 (Digitization Strategy), which complements the Digital Collections Strategy. Specifically, the Digital Collections Strategy focuses on those items that were born digitally, while the Digitization Strategy focuses on digitizing holdings that were not born digitally. The Library Collections and Services Group (LCSG) owns and manages the Digitization Strategy and the Digital Collections Strategy.

What the Evaluation Found

The Library’s digital planning and execution activities have resulted in numerous accomplishments. Despite these achievements, more work remains to clearly connect the Digital Collections Strategy and Digitization Strategy to the Library’s overall strategic planning and governance processes. Not doing so puts the Library at greater risk of not meeting its overall strategic goals.

The Library Would Benefit from More Clearly Connecting Its Digital Collections Strategy and Digitization Strategy to Its Overall Strategic Planning Efforts

The Digital Collections Strategy and the Digitization Strategy play significant parts in the Library’s ability to meet its overall strategic goals, but LCSG has not followed SPPM’s strategic planning guidance and made the linkages clear. This includes linkages between the overall strategic goals, the performance goals in LCSG’s 2019-2023 directional plans, and the objectives in the Digital Collections Strategy and Digitization Strategy.

Recommendations

In summary, Cotton recommended the Library maintain a connection among the overall Library Strategic Plan goals and digital collections and digitization strategies and that LCSG more prominently share its processes to enable reporting on annual performance outcomes.

Management Comments

Management generally agreed with the recommendations in Cotton’s report. LCSG has taken additional action to refine its directional plans and ensure collaboration with other service units. In response to the recommendation, LCSG will continue to improve its efforts to coordinate technology work and participate in Library-wide processes at appropriate levels, and to report progress to Library management.
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Appendix A: Cotton & Company Assurance and Advisory Evaluation Report
ASSESSMENT OF DIGITAL STRATEGY
EVALUATION REPORT

SUBMITTED TO THE
LIBRARY OF CONGRESS
OFFICE OF INSPECTOR GENERAL

EVALUATION REPORT
SEPTEMBER 26, 2023
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Dr. Glenda Arrington  
Inspector General  
Office of Inspector General  
U.S. Library of Congress 

Dear Dr. Arrington,

Cotton & Company Assurance and Advisory, LLC (Cotton) is pleased to submit the attached evaluation report detailing the results of our assessment of the Library of Congress’ (Library’s) digital strategy.

The Library Office of Inspector General (OIG) engaged Cotton to conduct this evaluation pursuant to Contract Number LCOIG20D0004, Task Order OIG22T0006.

Cotton conducted this evaluation in accordance with the Council of the Inspectors General on Integrity and Efficiency’s (CIGIE’s) Quality Standards for Inspection and Evaluation, as well as the Statement on Standards for Consulting Services promulgated by the American Institute of Certified Public Accountants (AICPA). Cotton performed the work from August 2022 through June 2023.

Sincerely,

Cotton & Company Assurance and Advisory, LLC

Loren Schwartz CPA, CISA, CISSP  
Partner
I. Executive Summary

In the Library of Congress (Library) Office of Inspector General’s (OIG’s) March 2017 Semiannual Report to Congress, the OIG indicated that the Library needed to focus more on digital strategic planning and execution to ensure that the Library meets its business objectives and customer needs. The OIG has since listed digital strategic planning and execution as a top management challenge in each of its semiannual reports. In its September 2017 Semiannual Report to Congress, the OIG noted the following:

- For the Library to efficiently and effectively achieve its desired strategic digital business objectives, it needed to properly identify, prioritize, authorize, manage, and control all the necessary steps leading to an organization-wide digital strategic plan, then execute this plan.
- Senior leadership needed to institute an oversight process that incorporated planning, performance management, and reporting.
- To ensure that activities associated with the Digital Collection Plan, the eCollections Steering Group, and other relevant efforts were moving in the right direction, senior leadership needed to establish an overarching plan for the creation and implementation of an organization-wide digital strategic plan that defined the critical path, work breakdown structures, and milestones to be met in the short-, intermediate-, and long-term over a 5-year period.
- To implement an organization-wide digital strategic plan in 5 years, the Office of the Chief Information Officer (OCIO) needed to fill its knowledge and capability gaps. OIG believed that OCIO would need to obtain contractor support to build a team that had the right mix of qualified personnel.
- The Librarian and Executive Committee members should require all relevant actors involved in the digital area, along with OCIO, to deliver valid and verifiable performance metrics and to complement these metrics with a management apparatus that continually reviewed performance activity, identified performance variances, and consistently oversaw corrective activities.

Since the OIG issued its March 2017 Semiannual Report to Congress, the Library has made improvements in its digital strategic planning and execution. Significant accomplishments have included:

- **January 2018:** The Library appointed its first Director of Digital Strategy within the OCIO.¹
- **July 2018:** The Library established the Digital Strategy Working Group, chaired by OCIO. Members of the working group included OCIO, Chief Operating Officer (COO), U.S. Copyright Office (USCO), Congressional Research Service (CRS), Librarians Office, and Office of the Deputy Librarian for the Library Collections and Services Group (LCSG), which includes the Law Library, Researcher and Collections Services, and Discovery and Preservation Services.
- **October 2018:** The Library published its first agency-wide Digital Strategy. The Digital Strategy Directorate, which is positioned in OCIO, was responsible for authoring and executing the strategy. The Library supported this Digital Strategy with tactical objectives.

¹ This position still exists and was filled at the time of this evaluation.

- **October 2021**: The Library published the Digital Collections Strategy Overview 2022–2026 (Digital Collections Strategy). This publication served as an update to the Library’s September 2017 Digital Collecting Plan. The Digital Collecting Plan had been limited to acquisitions; however, the Library intentionally designed its successor plan to cover all aspects of “born digital” collecting and curation (i.e., collecting and curation of items that were never available in a non-digital format) from end to end. LCSG owns and manages the Digital Collections Strategy.

- **May 2022**: OCIO’s Digital Strategy Directorate began its collaboration with the Strategic Planning and Performance Management Office (SPPM) to integrate the Library’s Digital Strategy into the Library’s Fiscal Years (FYs) 2024–2028 Strategic Plan (Strategic Plan), the next stage in maturity for the Library’s digital transformation.

- **November 2022**: The Library published the Library of Congress Digitization Strategy: 2023–2027 (Digitization Strategy). The Digitization Strategy complements the Digital Collections Strategy. Specifically, the Digital Collections Strategy focuses on those items that were born digitally, while the Digitization Strategy focuses on digitizing holdings that were not born digitally. LCSG also owns and manages the Digitization Strategy.

These activities have resulted in numerous tactical accomplishments. For example:

- In FY 2019, the Library launched a crowdsourcing project, “By the People,” that allows public contributions to and interactions with the Library’s digital collections.

- In late 2020, the Library completed a multi-decade initiative to digitize its entire holdings of presidential papers.

- In 2021, the Library significantly increased its digital image production capabilities and post-production processes with the addition of a new, modern Digital Scan Center.

- In FY 2021, the Library added 36 new digital collections to https://www.loc.gov. It also significantly upgraded 53 digital collections and recorded 86 petabytes of digital storage in use.

- During the Coronavirus Disease 2019 (COVID-19) pandemic, the Library launched various digital initiatives to provide new ways for the public to find and use Library collections. These initiatives included projects such as the “LOC Collections” mobile app, digital events, development of the “Engage!” portal supporting the Teaching with Primary Sources program, the National Library Service for the Blind and Print Disabled (NLS) Braille and Audio Reading Download (BARD) app, and the innovator-in-residence projects “Newspaper Navigator” and “Citizen DJ.”

- In 2022, the Library released the Congress.gov API (application programming interface) to the public in September. The API allows users to securely download machine-readable data from the vast collection of U.S. legislative data on Congress.gov.

- To date, the Library has digitized more than nine million items in its collections, particularly in areas such as newspaper issues, manuscripts, and pictorial materials.

Despite these positive achievements, the Library recognizes that more work remains in carrying out its overall approach to digital strategic planning and execution. In its Digital Collections

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2 Not all of the Library’s collections are able to be digitized due to certain legal restrictions.
Strategy, the LCSG indicated that it needed to review its digital collections governance and stakeholder groups. Further, during this engagement’s fieldwork, OCIO’s Digital Strategy Directorate was working with SPPM to integrate OCIO’s authored and executed Digital Strategy into the Library’s Strategic Plan before the Library publishes the plan in October 2023. As part of completing its ongoing work, the Library would benefit from LCSG more clearly connecting its Digital Collections Strategy and Digitization Strategy to the Library’s overall strategic planning and governance processes.

II. Background

The Library is the world’s largest library, with nearly 170 million items in its collections and extensive expert services and programs. It is the main research arm of the U.S. Congress and has six primary components:

- Office of the Librarian
  - SPPM
- COO
- OCIO
  - Digital Strategy Directorate
- LCSG, which includes:
  - Law Library
  - NLS
  - Research and Collection Services
  - Discovery and Preservation Services
- USCO
- CRS

These components are organized as follows:
Strategic planning at the Library is led by SPPM. The Library’s planning, performance, and risk management cycle centers around the Service Unit (SU) directional plans. These plans are aligned with the Strategic Plan and establish the 5-year path for the Library’s SUs. As part of the Library’s strategic planning, each SU is required to set performance goals to manage its key work. The SU is responsible for tracking and reporting these goals. A subset of the SU performance goals is the agency-level performance goals (APGs), which are goals and targets that are associated with an SU’s priority initiatives and are tied to the Library’s strategic goals. The SUs include these APGs in their directional plans. The SUs track and report APGs internally on a quarterly basis, and SPPM presents the results to the Library’s Executive Committee through its summary reports.

OCIO chairs the Digital Strategy Working Group, which includes representation from across the Library. Within OCIO, the Digital Strategy Directorate partners with Library SUs to create innovative digital projects to engage the general public and support Library staff in their work with emerging methods and technologies. The Digital Strategy Directorate’s SU directional plan currently includes supporting the Library’s Digital Strategic Plan; however, the Library has determined that it no longer needs to maintain the Digital Strategic Plan as a standalone document. The Library instead intends to update its overall Strategic Plan to incorporate the objectives from the Digital Strategic Plan, as well as additional digital agency efforts.

LCSG is the SU responsible for overseeing the Digital Collections Strategy and the Digitization Strategy. In particular, the Digital Services Directorate located within LCSG’s Discovery and Preservation Services unit is responsible for coordinating digital content management, metadata systems, and information technology planning for LCSG.
III. Evaluation Results

The Library would benefit from more clearly connecting its Digital Collections Strategy and Digitization Strategy to its overall strategic planning efforts.

**Condition**

The Library, under the direction of SPPM, has developed and implemented a rigorous strategic planning process that provides clear links between the Library’s Strategic Plan and each of the SU directional plans. In addition, SPPM has developed and implemented an associated governance process that includes reporting on the progress of the implementation of directional plans.

LCSG is the SU responsible for overseeing the Digital Collections Strategy and the Digitization Strategy. The Digital Collections Strategy and the Digitization Strategy play significant parts in the Library’s ability to meet its overall strategic goals. The Digital Collections Strategy for example has an objective to expand and routinize acquisition and access of openly licensed and openly digital works. The Digitization Strategy has an objective to transition from one-off project-based digitization towards the systematic digitization of rare, distinctive, or unique materials in the Library’s collections that can be made openly available online. As such, both objectives generally support the overall strategic objective expand access, but LCSG has not followed SPPM’s strategic planning guidance and made the linkages clear. From top to bottom, this includes linkages between the overall strategic goal, the performance goals in LCSG’s 2019–2023 directional plans, and the objectives in the Digital Collections Strategy and Digitization Strategy.

Further, we reviewed the directional plans of two different LCSG organizational units: Discovery and Preservation Services and Researcher and Collections Services. Within Discovery and Preservation Services, the Digital Services Directorate is responsible for coordinating digital content management, metadata systems, and information technology planning for LCSG. We noted that both the Discovery and Preservation Services 2019–2023 Directional Plan and the Researcher and Collections Services 2019–2023 Directional Plan included an initiative to “Develop and implement the Digital Collections Strategy.” However, neither directional plan contained performance goals nor specific, measurable performance targets associated with the Digital Collections Strategy, making it difficult to determine what results each unit was responsible for to achieve in relation to the Digital Collections Strategy.

**Criteria**

According to Planning, Performance, & Risk Management Framework (February 14, 2023), page 7:

> Directional plans are an essential input into the annual performance planning process, as they are the basis for determining your performance goals, targets, and strategic and operational risks. Most, if not all, performance goals will be associated with the initiatives identified within units’ directional plans, especially initiatives designated as Agency-level. As well, annual performance targets should be set using the measures defined in the directional plans.

**Cause**

According to LCSG, its directional plan was not suitable for identifying, monitoring, and reporting on the types of broad objectives that are laid out in the Digital Collections Strategy and the Digitization Strategy. For example, the Digital Collections Strategy includes an objective...
to establish a multi-year plan for a user engagement and research program designed to
understand the collection needs of users and their behaviors in using the collection.
Additionally, the Digitization Strategy includes an objective to review and improve the
operational effectiveness, organizational structure, governance, and prioritization processes for
digitization efforts in support of the increasingly central role of digitization for access and
preservation.

**Effect**
While LCSG reports on quarterly targets elsewhere, by not including specific, measurable
targets and performance goals associated with the Digital Collections Strategy and the
Digitization Strategy into the SU Directional plans, the Library’s reporting on Directional Plans
progress and results is incomplete. This incomplete reporting puts the Library at greater risk of
not meeting its overall strategic goals.³

**Recommendations**
We recommend the Library maintain a connection among the overall Library Strategic Plan
goals and digital collections and digitization strategies through SU’s directional plans. We also
recommend LCSG more prominently share its processes to enable reporting on annual
performance outcomes established in LCSG’s directional plans that implement LCSG’s Digital
Collections Strategy and Digitization Strategy to facilitate ongoing awareness by Library
management and continued cooperation among Library SUs.

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³ OIG states that many of the Library’s management challenges over the years have flowed
from a historic lack of proper strategic planning and performance management. See the Library
of Congress Office of the Inspector General’s *Semiannual Report to Congress*, March 2023,
Appendix A – Objective, Scope, and Methodology

The objective of this evaluation was to assess how the Library has strengthened its digital collections strategy in recent years, in order to provide an updated assessment on this top management challenge that the Library OIG reported in its March 2017 Semiannual Report to Congress. In carrying out this objective, we:

- Inspected the Library’s Digital Collections Strategy and plans for the next 5-year period and determined how the strategy and plans aligned with the associated objectives, including Expand Access, Enhance Services, Optimize Resources, and Measure Impact.
- Identified and reviewed applicable prior Government Accountability Office (GAO) and OIG evaluations, performance audits, and inspections and, as appropriate, followed up on the status of identified findings and recommendations.
- Evaluated the Library’s approach to, and practices for, integrating its Digital Collections Strategy with business process stakeholders, including Library Services, the Law Library, OCIO, USCO, CRS, and SPPM.
- Evaluated the Library’s approach to implementing its current Digital Collections Strategy and determined whether project management processes contained critical elements, including (1) identification of risks and monitoring, and (2) reporting progress on projects and costs in accordance with the Library’s policy and other federal guidance and/or best practices.
- Assessed the Library’s digital transformation requirements and its business processes for implementing the goals and objectives of the Digital Collections Strategy.

Specific procedures performed included:

- Inquiring with the Chief Information Officer, Deputy Librarian for LCSG, Associate Librarian for Discovery and Preservation Services, representatives from the LCSG Digital Services Directorate, and SPPM.
- Inspecting Library documents, including:
  - Strategic Plan
  - Digital Strategy
  - Digital Strategy Directional Plan
  - Digital Collections Strategy
  - Digitization Strategy
  - Discovery and Preservation Services Directional Plan
  - Researcher and Collections Services Directional Plan

Cotton conducted this evaluation in accordance with the Council of the Inspectors General on Integrity and Efficiency’s (CIGIE’s) Quality Standards for Inspection and Evaluation, as well as the Statement on Standards for Consulting Services promulgated by the American Institute of Certified Public Accountants (AICPA). Cotton performed the work from August 2022 through June 2023.
Appendix B – Management Response

We provided Library management with our draft version of this report, and Library management provided the following responses. We have not evaluated management’s responses and therefore do not express an opinion on them.
MEMORANDUM

DATE September 20, 2023
TO Glenda Arrington, Inspector General
FROM J. Mark Sweeney, Principal Deputy Librarian of Congress
SUBJECT Management Response to OIG report 2022-SP-103, Assessment of the Library of Congress’ Digital Strategy


The Library has been in the process of updating its strategic plan over the last fiscal year. The Library acknowledges the prevalence and significance of digital across all Library service units. The Library’s digital strategies encompass the reliance on and use of digital initiatives and support for the collections as well as digital resources for Library staff, Congress, copyright holders, and patrons to support collaboration, inclusiveness, and resilience. In recognition of the Library’s continuing digital maturity, the Library will integrate the Digital Strategy into the 2024-2028 strategic plan. Accordingly, the Library envisions that digital strategies will inform and be infused throughout the work of all service units in driving progress to 2024-2028 strategic plan. Notably after commencement of this assessment, the prior Digital Strategy Directorate’s directional plan has been pulled into the Office of the Chief Information Officer’s directional plan.

The Library’s planning, performance, and risk framework allows for service unit- and Library-level designation of performance goals and targets. The Library’s central performance activities focuses on tracking performance of higher-level goals – i.e., agency-level performance goals. Therefore, service unit directional plans identify both agency-level goals and additional, specific goals of significance to the service unit in accomplishing their mission within the context of the Library’s overarching strategic priorities. The Library Collections and Services Group (LCSG) continues to identify, track, and report on agency-level performance goals in its directional plans relating to digital collections and digitization.

Because the focus of the OIG’s assessment is on the LCSG digital strategies, we observe that LCSG is consistent with other Library service units in having digital program performance metrics distributed across multiple interrelated and readily available Library-wide documents and processes. Along with other units, LCSG has
specific and high-level goals for priority initiatives within its directional plan, and has
goals and targets within shared Library-wide plans (such as the Digital Collections
Strategy).

During the period of this audit and in conjunction with updates to the Library’s strategic
plan, LCSG has taken additional action to refine its directional plans and ensure
collaboration with other service units. In response to the OIG’s recommendation, LCSG
will continue to improve its efforts to coordinate technology work and participate in
Library-wide processes at appropriate levels, and to report progress to Library
management.

cc: Robin L. Dale, Deputy Librarian for Library Collections & Services
    Judith Conklin, Chief Information Officer
    Dianne Houghton, Director, Strategic Planning and Performance Management
    Hannah Sommers, Associate Librarian, Researcher & Collections Services
    Katherine R. Zwaard, Associate Librarian, Discovery & Preservation
    Meg Williams, General Counsel