NATIONAL ACADEMY OF PUBLIC ADMINISTRATION

Assessment of the National Park Service Museum Collections Storage Management







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A Report by a Panel of the

NATIONAL ACADEMY OF PUBLIC ADMINISTRATION

for the National Park Service

December 2020

Assessment of Museum Collections Storage Management

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Foreword

The National Park Service (NPS) manages one of the world's largest museum systems. Of its 410 parks throughout the United States and its territories, 388 own museum collections, with holdings that exceed 49 million items and 85,000 linear feet of storage. Furthermore, this already enormous collection has been growing rapidly, placing significant strain on NPS financial resources and risking the safety and security of parts of the collection placed in storage.

The NPS contracted with the National Academy of Public Administration (the Academy) to perform an assessment of the current state of museum collection storage, and the NPS's progress in implementing plans and achieving objectives stated in its *2007 Park Museum Collection Storage Plan*. The report of the Academy Panel develops findings and recommendations to maintain and improve current and future efficiency of NPS museum storage management practices.

As a congressionally chartered, independent, non-partisan, and non-profit organization with over 950 distinguished Fellows, the Academy has a unique ability to bring nationally recognized public administration experts together to help government agencies address challenges. I am deeply appreciative of the work of five Academy Fellows who served on this Panel.

I also commend the Academy Study Team that contributed valuable insights and expertise throughout the project. We greatly appreciate the constructive engagement of NPS employees as well as many other individuals who provided important observations and context to inform this report.

Given both the importance and complexity of the National Park System, I trust that this report will be useful to the NPS as it considers how to shape and implement changes needed to enhance its ability to effectively both protect and provide public access to these national treasures.

Teresa W. Gerton
President and Chief Executive Officer
National Academy of Public Administration

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Acronyms and Abbreviations

Acronym or Abbreviation	Definition			
2007 Plan	2007 Park Museum Collection Storage Plan			
2016 update	2016 Draft Park Museum Facility Management Plan			
CAC	Collection Advisory Committees			
CR Investment Strategy	Cultural Resource Investment Strategy			
Cultural Resources Directorate	Cultural Resources, Partnerships, and Science Directorate			
DO	Director Orders			
DOI	Department of the Interior			
Facilities Directorate	Park Planning, Facilities, and Lands Directorate			
FCI	Facility Condition Index			
FIS	Facility Investment Strategy			
FIS	Facility Investment Strategy			
FY	Fiscal Year			
GSA	General Services Administration			
НРТС	Historic Preservation Training Center			
IMR	Legacy Intermountain Region			
MMP	Museum Management Program			
MRCE	Museum Resource Center			
NAGPRA	Native American Graves Protection and Repatriation Act of 1990			
NFRA	Non-Federal Repository Agreements			
NPS	National Park Service			

R-IRB Regional Investment Review Board

REIM Records and Electronic Information Management

RPRS Research Permit and Reporting System

S-IRB Service-wide Investment Review Board

SOCS Scope of Collection Statement

The Academy of Public Administration

The Council International Council of Museums

WACC Western Archeological and Conservation Center

WASO Washington Area Support Office

Executive Summary

Growing museum collections are straining the National Park Service

The parks and lands of the National Park Service (NPS or Service) are counted as one of the Nation's treasures. What may be surprising, however, is that the NPS manages one of the world's largest museum systems. There are 388 parks with museum collections located throughout the United States and its territories.¹ The NPS's "over 49 million natural, historic, and prehistoric items and 85,000 linear feet of archives tell powerful stories of this country, its diverse cultures, flora and fauna, and significant events and innovative ideas that inspire the world."² The NPS museum collection has been growing at a high annual rate, placing significant strain on NPS financial resources and posing challenges to adequately house its collections safely and securely.

The NPS requested a Panel of the National Academy of Public Administration (the Academy) perform an independent review of its museum collections storage management (also referred to as "collections management") practices and provide recommendations to enhance efficiencies and effectiveness. Effective collections management ensures the safe and efficient storage of all items in NPS museum collections.

The museum collection goals set out in 2007 will not be met

The baseline of this review is the Service's 2007 Park Museum Collection Storage Plan (the 2007 Plan). The 2007 Plan established five performance goals to be achieved by 2027. The Panel review concludes that the NPS will not achieve any of the 2007 Plan goals.

16 recommended actions could improve progress toward the goals

In order to significantly progress in efficiently and effectively managing museum collections, the Panel recommends the Service take 16 interdependent actions (listed below). The Panel believes careful planning and implementation of these recommendations will significantly improve the Service's performance in the near-term, and greatly benefit museum collections in the long-term.

The recommendations are organized by five National Park Service characteristics

The Panel report organizes the recommendations around five characteristics of NPS culture and practices that strongly influence collections management. This organization should make it easier

¹ There are technically more than 420 units (often referred to as parks) that are owned by the NPS. 62 of these are formally designated as a National Park. For purposes of this report, all units are called parks.

² National Park Service, Cultural Resources, Partnerships, and Science Directorate, *What We Do*, accessed September 10, 2020. https://www.nps.gov/orgs/1345/whatwedo.htm

to understand, communicate, and implement the recommendations. These five characteristics are:

- 1. Diffuse authority leads to lack of standardized policy interpretation and adherence.
- 2. It is difficult to establish service-wide policies.
- **3.** Siloed operations and a lack of collaboration hamper directorates and partnerships with outside groups.
- **4.** Feedback loops are underutilized.
- **5.** Access to collections can be challenging.

Greater collaboration, careful sequencing, an overall strategy, will aid implementation

An important theme reflected in a number of the recommendations is greater focus and active collaboration between two NPS directorates: Park Planning, Facilities, and Lands (also referred to as the "facilities directorate") and Cultural Resources, Partnerships, and Science (also referred to as the "cultural resources directorate").

In implementing these recommendations, the Panel suggests the Service identify a deliberate and realistic sequence of actions. The Panel does not presume to know what those actions should be or how they should be sequenced. It will be vital that the plan of action have the full support of NPS executive leadership, in the Washington Areas Support Office (WASO), Regional Offices, and parks. Leadership will need to decide the best means and methods the Service should employ in order to execute on the recommendations and achieve desired outcomes. The resulting action plan will need to include a communication plan that will result in an orderly transformation of the organization.

Overall, this report concludes the Service should take a more strategic approach to utilizing the skills and abilities of staff members within the facilities and cultural resources directorates through a focused and joint effort. Executive level support to such a task, and implementation of all the recommendations, will be vital to making progress in the metrics set out in the *2007 Plan*. All parts of the Service – WASO, Regional Offices, and parks – will need to work together, and with external parties, to foster collaboration, improve transparency, and increase accountability. Adopting these recommendations will inevitably result in improvements and provide a clear way forward for sustainable collections management in the long-term.

Recommendations

The following 16 recommendations are interdependent (the numbering protocol used for recommendations in the report provides a reference to the chapter and sub-section within the chapter where it is located). Each recommendation reflects best practices in public administration, as applied to collections management, but often depends on one or more other practices to be successful. A subgroup of this list should not be selectively embraced and implemented, while others go unaddressed.

Chapter 3: Updating and Implementing the 2007 Plan

Recommendation 3.1 – Update and implement the 2007 Plan with accountability and incentivizing mechanisms: WASO, Regional Offices, parks, and key stakeholders should update and implement the 2007 Plan. The updated plan should be aligned with the Service's strategic goals and implemented and funded with accountability and incentivizing mechanisms (see Chapter 7 for more details). As part of creating that strategy, each Regional Office should hold meetings that engage park staff in creating this vision and create buy in for the plan. The strategy should set annual goals and be reassessed on a continual basis.

- As a part of this updated Service-wide planning effort, each park should develop its own plan to maximize capacity of its museum facilities and meet museum standards.
- Regions and parks should consult Tribes and stakeholders on how to properly account for Indigenous and other location-specific items when consolidating.
- This plan should account for the cost-sharing that may be required for consolidation, including setting up consolidating facilities, moving collections, and potential storage fees from parks to the consolidated facility. Cost-sharing should include operation, maintenance, and staffing costs.

Chapter 4: Building A Service-wide Approach to Collections Storage

Recommendation 4.1 – Regions must review and sign Scope of Collection Statements: Regional Curators, or a designated full performance curator, must review Scope of Collection Statements (SOCS) and be included on the signature page for the SOCS. Regional Curators must work with parks, especially those with limited professional museum staffing, to ensure each SOCS meets minimum requirements for specificity and is location centric.

Recommendation 4.2.1 – Regions must ensure superintendents establish and utilize a Collection Advisory Committee: Superintendents must be held accountable by their supervisors for establishing and utilizing Collection Advisory Committees (CACs).

• If a superintendent overrides the decision of a CAC, that accessioning decision should be elevated to the Regional Director for approval.

Recommendation 4.2.2 – Create Service-wide guidance clarifying the difference between management of archives, Resource Management Records, and administrative records: WASO should create Service-wide guidance that clarifies the difference between the management of archival materials, Resource Management Records, and administrative records.

• Based on this guidance, parks should establish Records and Electronic Information Management (REIM) Councils and perform Resource Management Record upkeep on an ongoing basis. Superintendents should be held accountable for this action.

• Once Resource Management Records are better defined, NPS should consider establishing a funding source to assist parks with their archival processing backlogs, as most parks lack archival expertise. Funding is needed for contractors and agreements.

Recommendation 4.3.1 – Identify where there is the strongest need for professional museum staffing: Park superintendents, with support from WASO and Regional Offices, should work to identify where there is the strongest need for professional museum staff. Based on this need, there should be an emphasis on hiring professional museum staff and increasing staffing levels of the eight discipline career tracks across the Service.

Recommendation 4.3.2 – Fund at least one Records and Information Management position at each Regional Office: The NPS should fund at least one permanent Records and Information Management position at each Regional Office. As records management is not the sole responsibility of museum staff, these new positions would be established by Administration and not the Cultural Resources Directorate. These new positions should be filled by administrative personnel who can assist in training and consultation in records management issues at the park level.

Chapter 5: Building A Comprehensive Policy Set

Recommendation 5.1.1: Develop a specific policy for leasing collections storage facilities. Given the lack of specific leasing requirements and policy guidance for museum collections storage, the NPS should develop and disseminate a specific policy for leasing collections storage facilities in coordination with the General Services Administration (GSA). This policy should:

- set leased collections storage standards that align with the 2007 Plan and the NPS Facility Investment Strategy (FIS);
- set standards that reflect different types of protection and space needs (i.e. paper archives vs. textiles vs. ceramics);
- set standards that identify acceptable locations for storage facilities, so GSA can provide a long-term cost-benefit analysis to allow the NPS to consider whether to secure suitable leased buildings for the NPS or retrofit NPS-owned facilities in the region to make them suitable; and
- implement a check during the leasing process to ensure the proposed lease is meeting the goals and objectives outlined in the *2007 Plan*.

Recommendation 5.1.2 – Create design standard policies for a retrofit project: The NPS should create design standard policies for a retrofit project consistent with the aims of the *2007 Plan*. The list of policies to guide this work should be developed by WASO facilities and cultural resources personnel in coordination with the Historic Preservation Training Center (HPTC).

Recommendation 5.2 – Fill Senior Archivist Position: Fill the position of Senior Archivist at the national level.

• Task to work with the NPS Records Manager to create a workforce that directly examines the issues within Resource Management Records management and identify ways to alleviate the burden the Service faces with archival materials, Resource Management Records, and central files (see Recommendation 4.2.2). This work force should ultimately lead to an updated records and archives management system within the Service.

Chapter 6: Enhancing Collaboration Within and Outside of NPS

Recommendation 6.1 – Institute regular senior-level joint directorate meetings: Cultural resources, natural resources, facilities directorate leaders, and the Office of the Chief Information Officer, which oversees the NPS records management program should organize and attend regularly scheduled meetings (ex. biweekly, monthly, quarterly) to address concerns, problem solve, and jointly plan collections management. These meetings should be conducted at the WASO level and at each region.

Recommendation 6.2.1 – Establish formal collaborative networks between directorates: WASO should establish formal collaborative networks that create open lines of communication for NPS employees who are involved in collections management to share best practices, answer commonly asked questions, and share resources.

- These networks should be established at the regional level as well as a larger Service-wide network.
- All NPS employees should be invited to join these networks and Regional Curators should encourage parks to actively participate. These networks can be established within current NPS internal online platforms.
- Regional Offices should take actions to formally establish thematic networks between parks that share similar themes and missions and encourage parks with similar collection themes to collaborate in establishing non-repository agreements with similar institutions outside of NPS.

Recommendation 6.2.2 –Explore collaboration with other Department of the Interior collecting agencies. The NPS should explore options of partnering with other collecting agencies within the Department of the Interior to see if efficiencies could be gained in sharing resources for storage.

Chapter 7: Enhancing Transparency and Accountability

Recommendation 7.1 – Devise and implement a Cultural Resource Investment Strategy (CR Investment Strategy) that includes an accessioning moratorium: In order to effectively implement a successful strategy that holds a park accountable for complying with existing policies, NPS must impose a temporary Service-wide moratorium on collecting non-mandated collections.

• During this temporary moratorium parks must evaluate their accessioning, deaccessioning, and collection management practices.

- The Regional Director and Regional Curator are responsible for determining when a park can start collecting again. They may consult with the Chief Curator and Museum Management Program as appropriate.
- The NPS may want to establish an appeal process regarding decisions to continue imposing a temporary moratorium, with the expectation that the appeals process would only be used in extraordinary circumstances.

Recommendation 7.2 Develop Museum Collections Facilities Criteria and Incorporate into the NPS Facility Investment Strategy (FIS): The draft criteria and special requirements developed by WASO Museum Management Program in coordination with the Regional Curators should be finalized and approved by NPS leaders, incorporated into the NPS Facility Investment Strategy (FIS), and implemented by both the Service-wide Investment Review Board (S-IRB) and Regional IRBs (R-IRBs). Funding decisions for museum collections storage facility projects should align with the NPS's Service-wide approach to ensure the Service is allocating resources and investing in its highest priorities and is meeting the criteria outlined in the FIS.

• The S-IRB should distribute the museum collections facilities criteria and the 2007 Plan to WASO's Denver Service Center, Harper's Ferry Center, Regional Directors, and Facility and Cultural Resource leadership to ensure all relevant personnel are familiar with and utilize the criteria and 2007 Plan when considering and developing new or rehabilitated museum storage facility proposals. The R-IRBs should use the criteria and 2007 Plan to evaluate proposed projects at their delegated dollar thresholds, prior to approving funding.

Chapter 8: Enhancing Access to Collections

Recommendation 8.1 – Regions must assist parks in setting standards for monitoring and deciding on research requests. Museum collections will continue to be necessary in the NPS and addressing the management of collection size will not solve all of the issues related to the museum storage crisis.

- Part of setting this standard is creating training for park permit coordinators on how to properly review permits that result in museum collections.
- When setting these standards, WASO should revise current Service-wide policies that
 mandate the accessions of field collections. Updated policies should allow parks to refine
 items that are produced from research before formally accessioning these objects into a
 parks collection.
- Curators and archeologists should work together to develop sampling strategies to limit collections.
- WASO should create a Service-wide database that records the number of research requests that a certain collection/item receives.

Recommendation 8.2 – Implement pilot digitization programs where technological infrastructure and desire to expand digitization are present: WASO, in conjunction with Regional Offices, parks, and outside consultants, should implement pilot digitization programs at parks or regions where the level of technological infrastructure and desire to expand digitization are present. Following these pilot programs, the NPS should develop a Service-wide digitization strategy that provides an incremental, long-term plan for the digitized exhibition of high priority and frequently requested items. The NPS should explore new and existing partnership opportunities for financial and technological support, particularly in regards to the development of pilot programs.

Chapter 1: Project Background

Established by President Woodrow Wilson on August 25, 1916, the National Park Service (NPS) now has over 420 different parks in all 50 states and several U.S. territories, including national parks, national monuments, national historical sites, national memorials, and other designations. Some 388 of these units have museum collections. The NPS is staffed by approximately 20,000 permanent, temporary, and seasonal employees, and supported by more than 279,000 volunteers. A Department of the Interior agency, the NPS Mission Statement states: "The National Park Service preserves unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations." 3

This report focuses on items held in NPS museum collections. The NPS website states, "The NPS preserves items and specimens from a diverse range of subjects, as well as their associated documentation and archival collections. These collections tell the story of America, its peoples, cultures and events that shaped our history." The NPS is one of the world's largest museum systems with 388 parks with collections throughout the United States. Over 49 million natural, historic, and prehistoric items and 85,000 linear feet of archives tell powerful stories of this country, its diverse cultures, flora and fauna, and significant events and innovative ideas that inspire the world.

1.1 Study Origin and Scope

The NPS requested the National Academy of Public Administration (the Academy) perform an independent review of its museum collections storage management practices and provide recommendations to enhance efficiencies and effectiveness. The starting point for this review is the 2007 Park Museum Collection Storage Plan (the 2007 Plan) which contains specific performance goals to be achieved by the year 2027. These metrics, described in Chapter 2, measure the number of parks with storage facilities, and the number and quality of these storage facilities. The 2007 Plan was submitted to Congress and the NPS. The Academy report provides data and comments upon the progress of the 2007 Plan goals achieved thus far, as well as an integrated set of actionable recommendations directed to the NPS to enhance its efforts to meet the Plan's 20-year goals.

A key theme in this report is the imperative to actively enhance the interplay between separate, but related, directorates in order to improve collections management. "Collections management" is defined as work designed to enhance safe and efficient storage of all items in the NPS museum collection. This work is most often performed by two separate, but related, NPS Directorates – the Park Planning, Facilities, and Lands Directorate (referred to as the "facilities directorate") and

³ National Park Service. About Us. April 27, 2020.

⁴ National Park Service, *Museum Collections*, accessed September 10, 2020. https://museum.nps.gov/ParkIndex.aspx#.X1pL3nlKjIU ⁵Ibid.

the Cultural Resources, Partnerships, and Science Directorate (referred to as the "cultural resources directorate").

The Panel review includes treatment of the following issue areas:

- Roles, responsibilities and authorities pertaining to collections and storage between Washington Area Support Office of the NPS (WASO), Regional Offices, and parks.
- Data and the ability to track the number of items in collections.
- Accessioning, deaccessioning, and the growth of collections.
- Storage challenges and opportunities.
- Researcher access to collections.

1.2 Research Methodology

A five-member Panel of Academy Fellows is responsible for the content of this report. The Panel oversaw the work of a professional Academy study team, meeting with them on several occasions over an eight-month period. Two of the meetings included NPS senior staff. Appendix A contains additional information on the Panel members and study team.

With respect to methods, this report captures and distills both documentary research and an active engagement with more than 100 individuals, including current and former NPS employees, officials working in other museums and archives, friends and partner groups that work with NPS, representatives of museum associations, foreign park services, and congressional staff members. The Panel and study team express their deep appreciation to all those who provided their time and insights.

1.3 Principles Guiding Recommendations

The preparation of report recommendations is shaped by the following high-level guiding principles:

- 1. Identify and address the needs of the cultural resources and facilities directorates, in order to benefit both organizations.
- 2. Make each recommendation actionable, given resource constraints.
- 3. Connect each recommendation with the NPS Strategic Plan.
- 4. Provide appropriate incentives to motivate desirable actions.
- 5. Estimate how each recommendation might enhance future performance and minimize major operational disruptions.
- 6. Address each recommendation to the NPS.

1.4 Report Organization

Findings and recommendations are linked to five key characteristics which shape how the Service addresses collections management. These characteristics are introduced in the next chapter.

In addition to this chapter, the report contains the following six chapters:

Chapter 2: Collections Management: Organizational Context and Background – provides contextual and background information, and insights that frame the report's analyses and recommendations.

Chapter 3: Updating and Implementing the *2007 Plan* – emphasizes the need to increase and incentivize storage consolidation as a mechanism to implement the *2007 Plan*.

Chapter 4: Building A Service-wide Approach to Collection Storage – provides recommendations to address challenges of diffuse authority by appropriately introducing Service-wide policies that lead to greater standardization while also providing appropriate flexibility for parks and regions to adapt them to local norms and certain special conditions.

Chapter 5: Building A Comprehensive Policy Set – offers recommendations to build a more comprehensive set of implementation policies to address important topics and emerging challenges incumbent with managing the display and safe storage of NPS collections.

Chapter 6: Building Sound Internal and External Partnerships – highlights an imperative to enhance cross-directorate collaboration within the Service, and to build sound and reliable partnerships with external stakeholders and other museums to advance NPS objectives and serve as resource multipliers.

Chapter 7: Enhancing Transparency and Accountability – asserts the urgent necessity to establish an operating environment that links sound performance with funding by means of tracking specific metrics relevant to strategic outcomes.

Chapter 8: Enhancing Access to Collections – offers several initiatives to enhance access to collections for researchers, local communities, and park visitors.

Chapter 2: Collections Management: Organizational Context and Background

This chapter introduces an environmental context within which the NPS manages its collection as well as a discussion of the *2007 Plan*. The following segment introduces important high-level information about the two principal targets of the report's recommendations: the facilities and cultural resources directorates. Five characteristics, based on characteristics about the context and culture of the NPS, follow. Addressing certain challenges connected with each of the five areas serve as the structure for providing recommendations found in the remaining chapters of this report. Implementation of these recommendations will enhance the Service's performance as it pursues the *2007 Plan*.

2.1 Key Collection Management and Storage Issues Frequently Faced by All Collecting Institutions

There are several key issues collecting institutions across the world face regarding collections management and storage. The NPS experiences many of these challenges and opportunities. the issues, listed below, were developed through interviews (see Appendix B for the list of interviewees) and documentary reviews. It is not an exhaustive, list.

- **1. Accessioning** Increasing collections growth through transfers, exchanges, donations, loans, purchases, and field collection place a strain on current facilities and staff resources.
- **2. Deaccessioning** Removing items from a collection; a complex, time-consuming decision-making process that poses the additional challenge of physically removing some objects through, for instance, transfers, conveyances, sale, or destruction.
- **3. Professional Staff** Maintaining an adequate number of qualified, professional staff to support collections.
- **4. Inventorying** Identifying the location and condition of both backlogged and new collection items.
- **5. Cataloging** provides descriptive information about an object for both management and research purposes
- **6. Collections and Storage Planning** Cultivating a carefully crafted collection requires strategic planning to determine the type of items desired for the collection, as well as determining the available space for collections growth.
- **7. Ethics** Executing its missions in an ethical manner, including the stewardship of its collections, by going beyond the minimum standards set by laws and statutes.⁶

⁶ American Alliance of Museums. *Code of Ethics for Museums*. 2002, accessed September 10,2020. https://www.aam-us.org/programs/ethics-standards-and-professional-practices/code-of-ethics-formuseums/

- **8. Records Management** Managing museum activities in an organized, and accessible manner and determining the status and value of records and scheduling records for their ultimate disposition.
- **9. Preservation and Conservation** Reducing harm associated with agents of deterioration and restoring collection items, when applicable, are foremost concerns for collections care.
- **10.Agents of Deterioration** Threats to collections which may require mitigation throughout the life of the collection.⁷
 - Physical Force
 - Neglect
 - Water
 - Pollutants
 - Incorrect Temperatures

- Theft and Vandalism
- Fire
- Pests
- Light
- Incorrect Humidity
- Inherent Vice⁸
- **11. Research and Public Access** How the public accesses items on display (physically and digitally), as well as how stored items can be safely handled by researchers.

2.2 NPS Park Museum Collection Storage Plan (2007)

Background on the NPS Museum Collection

The NPS organizational structure is composed of over 420 parks, divided into 12 unified Interior Regions⁹ which are broadly overseen and supported by WASO. Prior to August 22, 2018, the NPS used a seven-region system (see Appendix C for maps of the past and present NPS Regions) and the majority of documents, including the *2007 Plan* (the basis of this report), used the old regional system. As such, this report will refer to "legacy regions" in order to identify regions used in the *2007 Plan* and the current regions referred to in this report.

Over 380 parks have museum collections. The NPS defines an item in the collection as "a material thing possessing functional, aesthetic, cultural, symbolic, and/or scientific value, usually movable by nature or design." The unique mission of each park often dictates the standard of museum collections management adopted at that location. Despite any potential changes to current collections management practices, as a resource management agency, the NPS collections will continue to grow since the NPS is legally mandated to collect certain types of collections and as new parks are added to the system.

⁷ National Postal Museum, Smithsonian Institution, *Agents of Deterioration*, accessed September 10, 2020.

⁸ Inherent vice is the tendency of material to deteriorate due to the essential instability of the components or interaction among components. For example, highly acidic paper suffers from inherent vice because it is chemically unstable. See: https://dictionary.archivists.org/entry/inherent-vice.html.

⁹ National Park Service. About Us.

¹⁰ National Park Service, Museum Collections, *Frequently Asked Questions*, accessed September 10, 2020. https://museum.nps.gov/ParkFaq.aspx

2007 Plan Origin

In May 2005, congressional appropriators faced additional requests from individual parks for new and retrofitted storage facilities to house museum collections. The House Committee on Appropriations noted in House Report 109-80, in reference to park museum collection storage facilities, that "it is obvious that decisions on these individual park facilities are being made *ad hoc* without any Service-wide analysis or plan," and "direct[ed] the Associate Director for Cultural Resources to work with the Associate Director for Park Planning, Facilities, and Lands to study the issue of collection storage in the parks and report findings and recommendations to the Committee by September 2006." Acting on this directive, the NPS conducted a 10-month study evaluating the current practices and conditions of museum storage facilities.

In addition to assessing the number and quality of these facilities, the 2007 Plan identified increasing collections growth as a major concern. Areas of particular interest included archeological collections, partnerships, archival collections, natural history collections, NPS acquisition policy, and deaccessioning. Based on its own 10-year projected growth estimates for collection items, the NPS developed the 2007 Plan to, "present a Service-wide approach to managing museum collections using consistent criteria that are cost effective and based on current asset management principles." ¹²

Each region committed to a set of goals, and, from these, the NPS developed a strategy and parameters for the twenty-year effort. The *2007 Plan* ultimately sought to best preserve NPS collections given the fiscal constraints at the time. Developing the *2007 Plan* required each legacy region to submit its own plan, with a focus on "establish[ing] the goals, strategies, guidelines, and criteria" approved by its Regional Director (see Appendix D for more information on the development of the *2007 Plan*). Per the *2007 Plan*, this was, "the first Service-wide review of museum storage needs that involve[d] park curatorial staff, superintendents, regional staff and the Washington Office."

As a Service-wide document, the NPS focused on the following recommendations. 14

- **Natural History Collection** "The regions will continue to (1) identify and provide proper accountability for all federally owned collections; (2) develop long-term agreements with current partners; and (3) establish agreements with new off-site facilities that provide the best options for the preservation of specimens and research."
- **Resource Management Records** "The regions will continue to (1) both properly manage and differentiate resource management records from other official park records; (2) support a comprehensive regional museum archives management program, including park archival surveys and training; (3) accession, catalog, and make accessible NPS resource management records as defined by Director's Order (DO) #28 and DO #24; and

¹¹ House Appropriations Committee, Department of the Interior, Environment, and Related Agencies Appropriation Bill, H.R. Rep. No. 109-80, (2006).

¹² National Park Service, U.S. Department of Interior, *Park Museum Collection Storage Plan,* March 15, 2007. Page 7

¹³ Ibid., Page 10.

¹⁴ Ibid., Page 15-16

- (4) commit to copying or otherwise making resource management records intellectually accessible to park staff while ensuring the long-term preservation of the documents at the individual park or in multi-park facilities."
- **Project Funding**; "In addition to meeting the Service-wide criteria for the project funding, the regions will augment the regional evaluation factors with additional weight given to project justifications that include (1) cataloging collections that parks will store in a shared facility while ensuring intellectual access through electronic means supporting remote access; (2) implementing interim and long-term storage recommendations from this plan, such as purchasing new storage equipment and moving collections; and (3) deferring projects that are not in compliance with the interim and long-term storage recommendations for a park. "Host Parks," with regional assistance, will develop interim and long-range requests for improving existing collection storage spaces, acquiring additional storage spaces, leasing spaces, or new construction, as appropriate."
- **Interim Recommendations** "The regions, in close consultation with the parks, will develop and implement interim recommendations that are required to preserve and protect, to the best extent possible, the museum collections at parks while awaiting long-term improvements."
- **Reporting Requirements** "The regions will continue to update and link data in the Automated Checklist Program and the Facility Management Software System in order to maintain current data for storage facilities and to track collection storage improvements."
- Implementation and General Agreements (Multi-Facility Operations) "During project-specific planning, the regions will assist parks with efforts to initiate plans for each multi-park operation and finalize agreements among the parties in shared facilities. Agreements will include articles and stipulations on (1) collections responsibilities; (2) staffing; (3) maintenance; (4) in-kind services; (5) space usage; (6) equipment; (7) funding; and (8) programming."
- **Long-Term Storage Locations** The Plan provided recommendations for the long-term storage locations for each park with collections.

Throughout the last 13 years, neither the Service nor the Regional Offices have systematically reviewed the 2007 Plan, aside from a ten-year update in 2016. The ten-year update provided regional summaries, including significant accomplishments, and identified continued deficiencies and newly identified areas for improvement. Designed to be used for the next ten years (2016-2026), this ten-year plan remains in draft form. Based on the Panel's review, neither the 2007 Plan nor the draft 2016 update were independently reviewed. Furthermore, neither the Regional Offices nor WASO appear to have regularly monitored implementation of the 2007 Plan. As such, regions and parks lack incentives and accountability in implementing the Plan's recommendations.

Plan Metrics

Along with identifying priority areas and providing recommendations, the 2007 Plan set Servicewide metrics for museum collections storage. Given the increasing growth of collections. and the desire to increase facility quality, while reducing the number of museum storage facilities, the 2007 Plan provided five different 20-year targets for effectively managing collections. The NPS noted that, "preservation of museum collections [was] the major force driving this strategy." ¹⁶

Table 2-1: 2007 Metrics Compared to 2007 Plan Target Metrics (Source: NPS)

Metric		2007	2027 Target
	Decrease the Number of Museum Storage Facilities	691	254
	Decrease the Number of Parks with at Least One Storage Facility	295	162
	Increase the Average Percent of Storage Facilities Meeting NPS Goal	73.9%	89.0%
	Decrease the Overall current average Facility Condition Index ¹⁷	0.11	0.06
	Increase current square footage for storage facilities*	1.05 million square feet	1.27 million square feet

^{*}Data on the current square footage for storage facilities is no longer collected.

Plan Performance

The following evaluation of the 2007 Plan begins with the assumption that successful collections storage management means the safe and efficient storage of all items in the NPS museum collection. Over the course of 13 years, collections growth, facility upgrades, and climate change are reflected in the data regarding key metrics. In addition, the decentralized authority, which is discussed in sub-section 2.4, has further constrained the Service's attempt to meet its 2027 targets. Using data provided by the 2016 update and using estimated 2020 targets developed by the study team, Table 2-2 shows the trajectory for each metric.

Assessing the performance trends over the past 13 years and the absolute figures as of this writing, the Panel concludes that the NPS will not achieve any of the goals set out in the 2007 Plan. As accessioning rates continue to increase (see sub-section 4.2.1), the inability of the NPS to meet its 2007 Plan targets will result in the Service running out of space to adequately house its collections. Regardless of collections growth, NPS facilities are currently near or at capacity with several in poor, and worsening, condition.

¹⁵ National Park Service, *Park Museum Collection Storage Plan*, Page 6. From 1996-2006, the number of items in NPS collections grew by 63 percent.

¹⁶ National Park Service Park Museum Collection Storage Plan, Page 10.

¹⁷ FCI is the measure (ratio) of the quality of the condition of a storage facility. The goal is to have the number as close to 0.00 as possible.

Table 2-2: 2007 Plan Metric Data 2007-2027 (Source: NPS)

			<u>Year</u>			
		2007	2016	2020	2020 IF ON TARGET	2027 TARGET
	# Museum Storage Facilities	691	503	541	407	254
. <u>)</u>	# of Parks with at least one storage facility	295	329	174 ¹⁸	209	162
Metric	Average Percent of Storage Facilities Meeting NPS Goal	73.9%	75.0%	77.0%	83.7%	89.0%
	Overall current average Facility Condition Index	0.11	0.088	0.13	0.0775	0.06
	Increase current square footage for storage facilities*	1.05 million sq. feet	N/A	N/A	N/A	1.27 million sq. feet

2.3 Challenging Characteristics Surrounding Collections Management

Every organization has characteristics created by context and culture that is established over time, containing both written and unwritten rules and norms. The NPS is no exception. As a starting point to this work, it is important to articulate some of these important and observable characteristics. In the following sub-section, the Panel briefly outlines five important features of collections management, using these to organize, and inter-relate, the Panel's recommendations.

There are risks to offering high-level observations about an organization as large and decentralized as the NPS. It is likely that one or more of the five characteristics outlined below will not be shared by everyone. These are qualified impressions based on research, but there may be notable exceptions to each characteristic.

It is within these features, created by norms, values, and operating culture, that this report takes shape. The recommendations that follow are organized to address each of the five characteristics. In some instances, a particular recommendation might address more than one attribute as

¹⁸ Per the NPS, in facility management and in NPS data systems, the Agency currently does not identify the sub-spaces in a building. The guidance for Federal Real Property Profile (FRPP) reporting is to identify the Predominant Use, so unless museum functions are over 50 percent for a two-function building (roughly 34 percent for a 3 way split), the museum function will be lost to the identified Predominant Use. Previous data for 2007 and 2016, as well as the targets for 2020 and 2027 counts include parks that use sub-spaces for museum collections.

collections management is a multi-disciplinary function, and certain recommendations may be relevant to more than one characteristic.

Organizing the recommendations around these characteristics, recognizable by many NPS employees, should facilitate an understanding of their content, their communication to others, and their ultimate implementation. Each recommendation reflects best practices in public administration, as applied to collections management.

Finally, there are a number of other features of the NPS context and culture that enhance the rigor and effectiveness of the collections management function. While not an exhaustive list below, there are several other characteristics identified in this research that must be stressed. These are strong contributors to the successful work that the collections management teams have achieved thus far and will help to produce improvements in the future.

- There is a strong employee loyalty, pride, and commitment to the overall highly respected mission of the NPS and its museum/facilities management purpose.
- NPS employees are highly professional and thoughtful in the complex work that makes up collections management. These individuals bring strong educational backgrounds and extensive work experience to the job.
- Employees elicit passion and care about how the Service can improve; and provide thoughtful ideas that reflect the consideration of the challenges the Service is facing and a zeal for continuous improvement.
- There is a sense of a valued trust and mutual respect shared by staff members from both
 the facilities and cultural resources staffs as it relates to safely preserving the millions of
 items in NPS collections.

Notwithstanding these organizational assets, there are important challenges described in the following paragraphs. By addressing these characteristics resolutely and appropriately, the Service can achieve more effective collections management.

Characteristic #1: Diffuse Authority Leads to Lack of Standardized Policy Interpretation and Adherence

NPS museum collections reside throughout the United States, and achievement of a common standard of collections management is fraught with challenges. Throughout its history, the Service has evolved in its approach to driving standardized policy interpretation and adherence.

There are three main tiers of authority in NPS with respect to collections management: WASO, regions, and parks. The authority structure places top-level policy-setting responsibilities in the hands of WASO-based leaders of the facilities and cultural resources directorates.

Given the large number and geographic diversity of parks, each NPS region is responsible for overseeing many individual park operations with regional leaders as the principal interlocutors with parks. Moving to the park level, each superintendent is responsible for carrying out Service-

wide policies and managing daily operations. Parks must actively engage with regional staff, with respect to reporting and accountability.

With such a decentralized organization with enormous geographic scale, the NPS management culture allows for flexibility and adaptation to local conditions, granting a degree of latitude in interpretation and implementation of some aspects of national collections management policies. As such, WASO plays an important role in setting high level direction, but WASO does not have authoritative control over regions and how they operate. This is particularly true with respect to the myriad of decisions connected with collections management. Project research reveals a varying degree of engagement and rigor captured in individual regional oversight at the park level. Some regional leadership teams heavily scrutinize collections management, while others consider it a lower priority. This difference in regional leadership is an important characteristic of the management system, leading to some important challenges addressed in this report. This report does not support establishing a strict command and control organizational culture directed at the headquarter level, but there are important opportunities to improve how the Service might achieve a more consistent application of its policies.

At the park level, regional authority is not seen as especially authoritative, but rather as providing guard rails between which to implement policies. Thus, the Service operates with a significant amount of flexibility and individual interpretation of collections management policies across the board. It appears that cultural resource professionals are asked to use their own judgement interpreting Service-wide policies. Given the diverse responsibilities that each park superintendent shoulders, some superintendents opt to focus on operational issues that are less connected with collections management. In some parks, cultural resources staff members reportedly have greater opportunity to adapt Service-wide policies to meet park-specific collections management preferences and practices. With over 380 park collections (see Table 2-3 below), the landscape is quite varied and collections management, and some collections management policies are not viewed as standardized.

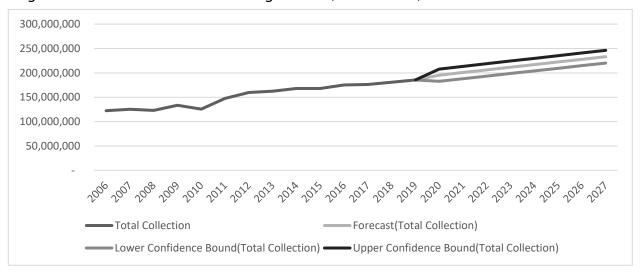
Additionally, it appears that the rigor and focus placed on overseeing park collections management practices vary across regions as well. As noted in Table 2-3, some regions have as many as 50-80 parks with museum collections, making it a challenging task to oversee such a large number of individual park museums. Furthermore, some regional leaders are more adept than others in monitoring and advancing collections management practices. Some regional leaders either have first-hand experience with collections management or may place a higher priority on this dimension of the Service's mission for other reasons.

Table 2-3: Number of Parks with a Museum in Each Legacy Region (Source: NPS)

Legacy Region	Total Number of Parks/Centers
Alaska	18
Intermountain	81
Midwest	60
National Capital	46
Northeast	59
Pacific West	55
Southeast	66
WASO	3
Total	388

With expectations that collections will continue to grow (see Figure 2-1), but that resources will remain finite, there is reason to adjust and adapt this characteristic of the Service to a more disciplined approach. Thus, the report will speak to recommendations that will support a greater connection between WASO, regions, and the parks with respect to key elements of collections management.

Figure 2- 1: Growth Forecast Through 2027 (Source: NPS)



Characteristic #2: It is Difficult to Establish Service-wide Policies

The *Museum Handbook*, Parts I-III provide the NPS with detailed guidance on managing museum collections. However due to its diffuse organization and preference to allow varied interpretation of, and application of, Service-wide collections management policies, there are several instances where there is an absence of policies to guide key actions relevant to the area of collections management. This lack of policy statements (these are discussed in Chapter 4), or in some cases incomplete policy statements, suggests a reticence in the Service to prepare guidance that might clarify and provide guard rails to channel efforts. This conclusion is supported by several interviews with NPS employees who readily described topics where the Service is thus far silent on how to approach them (see Chapter 5).

Characteristic #3: Siloed Operations and a Lack of Collaboration Hamper Directorates and Partnerships with Outside Groups

As noted in Chapter 1, collections management calls for the fusion of professional skills connected with both facilities and cultural resources directorates. The likelihood of optimal outcomes is strengthened when the two directorates actively collaborate and take a cross-directorate approach to policy setting, implementation, and performance monitoring. There has not been an adequate systematic effort to graft teams from each directorate together address collections management challenges.

Modeling optimal collaborative behavior between directorates must start at WASO where WASO leaders play the role of igniting an organizational pivot to display guiding practices for regional and park levels. It is also important to note that the Panel found that some regions already display close collaborative work between the two directorates, and thus serve as starting points for Service-wide change.

In addition to breaking through internal silos, there are other opportunities that could be exploited by partnering with external third parties such as other museums, universities, Friends/support groups, and individual donors. Existing efforts to enhance such partnerships should continue to be encouraged, particularly given the funding and other staffing and infrastructure resource challenges being faced by the NPS. (Note the Great America Outdoors Act, enacted in 2020, will provide new and additional funding to the NPS that may be the basis for more partnership opportunities).

Characteristic #4: Feedback Loops Are Underutilized

What is measured gets done. Feedback loops are important in improving performance. When it comes to collections management data, decision makers appear are often missing information but are sometimes averse to collecting or using data to guide decision making when allocating scarce resources across regions and parks. In short, the feedback loops that contribute to transparency of performance at park and regional levels fall short of being thorough and the Service misses an opportunity to hold parks and regions accountable for meeting operational objectives in resource allocation decisions. In addition, the Service misses an opportunity to use data to evaluate performance and employ them to guide regions and parks on how best to support effective change management and meet strategic objectives set by WASO. Overall, data collection and analysis are underutilized tools by which organizations can remain on course to achieve common objectives, even in an organization as diffuse and complex as the NPS.

Characteristic #5: Access to Collections Can Be Challenging

Many of the nation's treasures are in NPS museum collections. However, only a very small percentage of the collections is on display at any one time. With nearly the entire sum of the collections in storage and often in remote locations, the Service is challenged to provide access to documents and objects to researchers and the public. The Service must balance the need for increased access and utilization of collections with preserving the importance of retaining the connection many items have to a specific location and other special considerations that argue

against moving items from their site of origin. This natural tension presents a challenge for NPS to consider how to allow greater access to collections and create a 21st Century approach to its model of collections management.

Chapter 3: Updating and Implementing the 2007 Plan

As discussed in the previous chapter, the NPS is expected to fall short of the 2007 Plan target metrics in large part because regions and parks lack incentives and accountability in implementing the 2007 Plan recommendations. However, the 2007 Plan provides the Service a sound foundation to build upon to improve collections management and storage. The efforts put into developing the 2007 Plan prepare the Service to thoughtfully plan and create a sustainable solution to providing high quality, safe, and secure museum collection storage.

3.1 Increased and Incentivized Storage Consolidation

Consolidation is one of the main goals of the *2007 Plan*. A consolidated approach to collection storage shifts the responsibility of the care and housing of collections from parks to centralized locations. While the *2007 Plan* emphasizes that parks look to consolidate their collections, there is no current standard or Service-wide approach to implementing consolidation as presented in the *2007 Plan*. In fact, there are no measures articulated in the Plan to incentivize this behavior, nor are there accountability mechanisms included. Additionally, the *2007 Report* explicitly stated, "it is not the intention of this plan to generate new staff positions or to increase operational funding." Without additional staff and funding, the *2007 Plan* could not be fully implemented. While not thought to be an across-the-board solution, consolidation offers numerous benefits and addresses some of the growing collections management challenges facing parks.

Access to Collections

Parks are spread across the country and can be located in very remote areas. Locations can thus limit the public and researchers access to collections. Consolidating collections from remote parks can lead to increased access and utilization.

The Legacy Alaska Region (DOI Region 11) has found success with consolidation as a way to increase access to collections that would otherwise be too remote. Following the 2007 Plan, the Legacy Alaska Region took the initiative to consolidate collections within the region where possible. This region is home to some of the most remote and isolated parks within the Service, and this push for consolidation was, in part, driven with that in mind. This initiative resulted in most of the region's collections being relocated to a new consolidated location, moving collections from across the region 500 plus miles to a centralized facility in Anchorage, Alaska. Moving the region's collections to Anchorage, the region's most populated city, allows for increased access to the public and researchers who would otherwise have to travel across the region to be able to see and utilize these collections.

Storage Facilities

One of the goals that the *2007 Plan* aimed to achieve through consolidation was moving collections out of inefficient facilities into facilities better suited for long term collection storage.²⁰ Consolidating collections into central storage facilities can alleviate some of the burdens that

¹⁹ NPS, 2007 Report, page 8.

²⁰ National Park Service, Park Museum Collection Storage Plan

parks currently face with creating and maintaining adequate collection storage facilities on-site. While the costs and benefits of consolidation are varied dependent on location, consolidation can clarify the priorities of collection storage facility maintenance at a park site. Currently, many parks have multiple locations on-site that house and store collections. Consolidating collections and reducing the number of items that a park stores on-site can allow parks to maintain fewer on-site collection storage facilities.

Emergency Preparedness

Consolidation of collections can be a tool to combat growing concerns of the impact of climate change and other weather-related events that could potentially destroy NPS collections. A 2014 internal NPS vulnerability and risk assessment found that many storage facilities within NPS were at risk for weather-related damage. The assessment found that 66 facilities and portions of 50 other facilities that house collections need to be relocated because of these concerns, and that many museum facilities and staff are not prepared for emergencies. The 2016 update, elaborates on how emergency preparedness and risk assessments are growing collections management challenges within the Service.

Consolidation can alleviate some of the growing concerns about risk and emergency readiness by moving collections from facilities that may be at risk, or in areas that are at a higher risk, to a facility and location that is deemed lower risk. This can also act as an instrument of future cost saving, as NPS might not be obliged to cover costs for updates in emergency readiness systems to protect collections at multiple sites.

Facility Staffing

Consolidated facilities offer parks with limited professional museum staff an opportunity to receive expert collections care. Consolidated collection storage facilities often offer stronger professional oversight and more consistent application of standards on various collections. Consolidation also lifts some of the responsibilities of the collections off of individual park staff, such as annual reporting. In some cases, curatorial staff from these parks continue to carry out collections-related activities and support researchers as they access collections. However, collection care management still ultimately remains under the authority of the superintendent.

Despite this curatorial partnership between some parks and their consolidated facility, consolidated facilities generally face similar staffing challenges as new parks continue to send their collections to consolidated facilities that may not have additional curatorial staff. Most park curatorial staff members remain locally based at the park, limiting their regular interaction with the collections stored off-site. As a result, general collection care falls on a small staff. Although the collections are maintained by these experts, the sheer volume of items makes it incredibly challenging to adequately preserve and conserve the entire collection.

²¹ National Park Service, Vulnerability of NPS Museum Facilities to Climate Change, 2014.

²² The NPS completed a ten-year review of the *2007 Plan* in 2016. It provided regional summaries including significant accomplishments, and continued deficiencies and areas from improvement. Designed to be used for the next ten years (2016-2026), this plan has remained in draft form due to unforeseen circumstances, including changes in NPS leadership.

Limitations to Consolidation

While consolidation offers numerous benefits to the Service, there are limitations in the ability of NPS to implement this approach to storage. Many items within NPS collections are location sensitive, meaning that there are special considerations that prevent them from being moved from their place of origin. Many of these location-sensitive items originate from Indigenous groups and from the perspective of these groups, these items have a sacred connection to their place of origin. While it is not illegal to move these items, NPS strives to maintain favorable relationships with Indigenous groups and limits the consolidation of these items out of respect for the Indigenous groups.

There is also a long-observed hesitancy to consolidate items that can be attributed to the organizational culture of the NPS which often sees collections as a vital part of a park's site and mission. Although this idea is more abstract, it is nevertheless important. As mentioned in Chapter 2, NPS is not on track to reach the goals of the *2007 Plan* in regards to consolidation, which is clear evidence of a Service-wide hesitancy to consolidate. There is a clear shortfall in performance in achieving the Service-approved goals of the *2007 Plan* and have not been held accountable to adhere to the performance metrics.

While consolidation can be a cost saver in the long run, there is the initial cost of setting up consolidated facilities. This includes either leasing or building a new facility, creating and funding positions to staff the facility, and safely moving collections from parks to the consolidated facility. This initial cost can contribute to the hesitancy to consolidate, especially given that parks are already limited in budgetary resources.

Additionally, the issue of cost-sharing between parks and the consolidated storage facilities that house their collections. Some hold the view that it is necessary for parks to pay some kind of fee to store their collections in a consolidated facility and that that money is essential in the operation of these facilities. Parks that are already limited in their budget can be reticent to consolidate out of a fear of these potential cost-sharing fees. Currently there are no Service-wide standards on how to approach the cost-sharing that may be required in creating and operating a consolidated storage facility.

Accountability and Incentives in Implementing Consolidation

As noted above, while the 2007 Plan set the right path for the Service to improve collections management and storage, the effort was largely unsuccessful due to a lack of funding, accountability, and incentivizing mechanisms. These deficiencies should be corrected. Further, consolidation can also present the challenge of cost-sharing which can be a deterrent for individual locations adopting a consolidated storage model. This hindrance should also be addressed.

Recommendation 3.1: WASO, Regional Offices, parks, and key stakeholders should update and implement the *2007 Plan*. The updated plan should be aligned with the Service's strategic goals and implemented and funded with accountability and incentivizing mechanisms. As part of creating that strategy, each Regional Office should hold meetings that engage park staff in creating this vision and create buy in for the plan. The strategy should set annual goals and be reassessed on a continual basis.

- As a part of this updated Service-wide planning effort, each park should develop its own plan to maximize capacity of its museum facilities and meet museum standards.
- Regions and parks should consult Tribes and stakeholders on how to properly account for Indigenous and other location-specific items when consolidating.
- This plan should account for the cost-sharing that may be required for consolidation, including setting up consolidating facilities, moving collections, and potential storage fees from parks to the consolidated facility. Cost-sharing should include operation, maintenance, and staffing costs.

The following recommendations support the creation and implementation of an updated *2007 Plan*. Creating and implementing this updated plan in tandem with the other recommendations will provide a more integrated set of actions and help achieve a Service-wide standard in collections management and storage.

Chapter 4: Building a Service-wide Approach to Collection Storage

The decentralized nature of the NPS management structure leads to varied levels of collections management throughout the Service. This chapter speaks to challenges in collections management that stem from a lack of consistent application of Service-wide policies. Opportunities for improvement are outlined by addressing several key components of collections management, including the use of a Scope of Collection Statement (SOCS), accessioning and deaccessioning policies, and professional staffing.

4.1 Preparing a Quality Scope of Collections Statement

Per the NPS Museum Handbook, a SOCS is a museum planning document that defines the scope of a park's current and future collection and provides a basis for reviewing potential acquisitions. All parks are required to have an approved SOCS. According to NPS policies, a well-crafted SOCS:

- defines the park's mission;
- outlines the specific time period, location, and subject matter the items in the collection must relate to;
- takes into account limitations a park may have in accepting certain items; and
- identifies what types of items are essential to fulfilling the park's mission, enhancing interpretation and research at the site, and that legislation requires the park to preserve and maintain.²³

As mentioned in Chapter 2, park specificity is a critical element of cultural resources within NPS. As such, it is a vital component of a well-crafted SOCS. NPS currently mandates that each park update its SOCS every five years. Due to the regular update and adaptation of SOCSs, a park may have items in its collections from previous accessions that do not fit within the current version. In such cases, parks are encouraged to deaccession these items (see sub-section 4.2.2 for more discussion on deaccessioning).

While the *NPS Museum Handbook* outlines what a properly defined SOCS looks like, there is no evidence of a consistent application in the creation and application of a SOCS. Park SOCSs vary in their specificity and design across the Service. This is in part due to the different missions of each park, but there are other factors at play that reflect varying rigor and attention to Servicewide policies in preparing and adhering to a SOCS.

The unique focus of each park mission results in varied SOCSs across the Service. Due to the differences in individual park missions across the Service and the importance of place-based storytelling, it is understandable that parks would vary to some degree in the content of each SOCS. As such, a complete standardization of these documents is not advisable. However, developing basic guidelines and templates for how a SOCS is created, implemented, and overseen,

²³ National Park Service, *The Museum Handbook Part I: Museum Collections*, Chapter 2, 2003.

regardless of its content is an essential component of improving collections management across the Service.

The creation, implementation, and oversight of a SOCS is also dependent on the availability of professional museum staff members. Professional museum staff are trained to understand how a SOCS defines a park's collection and how a SOCS advances the mission of the park. Parks faced with a shortage of professional museum staff often lack the technical expertise needed to create and implement a high-quality SOCS.

The quality of a SOCS is often impacted, in part, by who serves as the superintendent of the park site. Along with a constellation of other non-collection management aspects connected with park leadership, a superintendent is the Accountable Officer of the park and charged with the responsibility to manage collections at the park.

Currently, the responsibility of the creation and implementation of a SOCS falls entirely on each park with no review required from the Regional Office. As the Accountable Officer of the park, a superintendent has the ultimate authority to approve a SOCS and any accessions (see sub-section 4.2.1 for further discussion on the accessioning process).

Recommendation 4.1: Regional Curators, or a designated full performance curator, must review Scope of Collection Statements (SOCS) and be included on the signature page for the SOCS. Regional Curators must work with parks, especially those with limited professional museum staffing, to ensure each SOCS meets minimum requirements for specificity and is location centric.

By approving the SOCS, Regional Offices will hold each park superintendent accountable to create a proper SOCS that contains requisite features as outlined in the Service's policy documents.

4.2 Consistency in Accessioning and Deaccessioning

The processes by which items enter and exit the NPS's legal possession are accessioning and deaccessioning. NPS is bound to follow the *Museum Properties Act of 1955* (as amended) as well as its own set of policies and guidelines, which dictate the proper way to carry out these processes.

Despite these policies, there is inconsistent Service-wide adherence to standardized accessioning and deaccessioning processes, exacerbating issues of collections management. Continual collections growth, noted in Chapter 2, puts a strain on already limited storage space at parks and in regional storage facilities and contributes to the existence of other issues of collections management within NPS. Targeted consideration of how items are added to NPS collections and whether items within a collection should be deaccessioned is increasingly important as collections continue to grow.

4.2.1 Accessioning Policy Compliance

Accessioning is the process of how both mandatory and non-mandatory items are added to NPS museum collections. Mandatory accessions are items that NPS is legally required to accession, including Resource Management Records and field collections. Non-mandatory accessions are

items that NPS is not legally required to collect, but that a park chooses to accession because they fall within the park's SOCS and contribute to the park's mission.

Continual accessioning compounds existing challenges of collections management within the Service, including increasingly limited storage space and limited professional staff. NPS accessioning rates have consistently increased and are projected to continue to grow as illustrated previously in Figure 2-1. Addressing museum collections management in regard to accessioning is imperative for NPS.

Contributing to the continual rise of accessioning is the lack of compliance with SOCSs, as discussed above. A poorly crafted SOCS can lead to repetitive items or items unrelated to the mission being accessioned into the park's collections. Outside of a SOCS, there are additional elements related to the accessioning process that lack Service-wide standardization and compliance, contributing to the growth of collections.

Three important aspects of the Service's accessioning process that lack consistent compliance with existing policies are highlighted in the following sub-sections: archival materials, Resource Management Records, and Collection Advisory Committee compliance.

Archival Management Compliance

NPS Archives include resource management records that the park needs to manage its cultural and natural resources effectively and donated materials such as photos and personal papers. Archives make up a large percentage of NPS collections and are, by far, the most commonly accessioned type of object (see Table 4-1). Given the sheer number of archives within NPS collections, proper archival management is critical to the success of collections management within NPS.

Table 4- 1: Collection Summary for FY2019 - Objects Accessioned by Type (Source: NPS)²⁴

Archeology	Ethnology	History	Archives	Art	Biology	Paleo	Geology	Total
57,407	14	3,985	1,125,634	460	66,337	2,477	324	1,256,638

Like all items within a museum's collection, archival materials help advance the NPS mission of education, management, preservation, and research.²⁵ However, archival materials are unique in their required care, which includes grouping related archives together in collections and creating detailed finding aids that assist in locating a specific document within a larger cluster of archives. This is different than conventional collection care where items, such as furniture objects, or artifacts are treated and cared for as individual items.

The appropriate care of archives requires technically trained archivists at the park level to properly process and manage these items. However, all professional museum staffing has decreased in the past 10 years, diminishing archival management capacity. Archivists now make up approximately eight percent of park museum staff (see Figure 4-1 below). Even parks that have

²⁵ National Park Service, *The Museum Handbook Part I: Museum Collections*, Chapter 1, 2006.

²⁴ Archives are estimated based upon 1,600 items per linear foot.

professional museum staff on-site might not have an archivist. The standardization of archival management across the Service has also been impacted by a lack of Service-wide senior-level administrative oversight. NPS has not had a Senior Archivist since 2018, leaving parks and Regional Offices to handle this specific element of collections management without overarching focused management or guidance (see sub-section 5.2 for more on lack of senior-level collections management positions within the Service).

Resource Management Records Compliance

Parks produce Resource Management Records in the process of preserving its cultural and natural resources. Resource Management Records are, "document research, preservation, and restoration work and provide 'baseline data' for ongoing management of resources."²⁶Resource Management Records, on average, make up more than one-third of park archival collections. It is necessary that the NPS have strong records management in order to fulfill the Service's mission of caring for natural and cultural resources so that they are "unimpaired for future generations."²⁷

It is important to note that Resource Management Records are not specific to museum collections or cultural resources. Resource Management Records are administrative records that include the information that a park needs to manage its cultural and natural resources effectively. These are records that are "mission-critical and required for the management of cultural and natural resources which will eventually become archival records." However, because such records are considered archival material, they are often mistakenly associated with other collection management issues.

Figure 4- 1: NPS Museum Staff by Job Series FY2019 (Source: NPS)

General Arts and Archivist (1420) Information (1001) 6% 2% Archives Technician Museum (1421)Specialist/Technician 2% (1016)16% Exhibits Specialist Museum Curator (1001) (1015)>1%26% Other/Collateral Duty 48%

NPS Museum Staff by Job Series FY2019

²⁶ National Park Service, Museum Handbook Part II: Museum Records, Chapter 2, Section N, 2000.

²⁷ National Park Service, *About Us*, https://www.nps.gov/aboutus/index.htm.

²⁸ National Park Service, *Director's Order #11D: Records and Electronic Information Management*, January 6, 2012. https://www.nps.gov/policy/DOrders/DO_11D.pdf

Resource Management Records should be managed in accordance with the NPS policies and guidelines that outline which records to retain and for how long. *Director's Order (DO) #11D: Records and Electronic Information Management* (REIM), attempted to standardize the management of these kinds of records. Published in January of 2012, *DO #11D* attempts to lay out the Service-wide expectations for proper records management, including special considerations for electronic records. The goal of *DO #11D* is to bring together:

"National Park Service activities and standards in maintaining and providing access to textual and electronic records at all levels of the agency insuring long-term information resource stewardship. Effective records management also requires an organized and continuous effort to improve the quality and availability of records to provide managers with needed information at the right time, in the best format and at the lowest possible cost."²⁹

While *DO #11D* attempted to standardize the Service-wide approach to records management, it was published without administrative oversight, resulting in Regional Offices and parks implementing records management on their own. The lack of administrative oversight resulted from the fact that *DO #11D* was released with no Chief Records Manager at the WASO level to guide execution and exacerbated the Service-wide, fundamental misunderstanding of proper records management.

A critical element of *DO #11D* is that every NPS staff member must act as his/her own records manager. This task can be challenging, given that Service employees lack an understanding of proper Resource Management Records management and have not received training in how to address these responsibilities. Due to these factors, it is not uncommon for non-cultural resources staff to try to turn over their Resource Management Records to a curator or other cultural resources staff at their park site. This exacerbates the challenges already facing cultural resources staff in properly managing cultural resources as well as their own records and perpetuates the misnomer that Resource Management Records are solely the responsibility of cultural resources.

Collection Advisory Committee Compliance

Parks look to add objects to their collection that enhances their mission through non-mandatory accessions. These additions can be donated to, or purchased by, parks, or added through transfers and exchanges. Collection Advisory Committees (CACs) are formal park-level committees that are tasked with evaluating the relevance of proposed, non-mandatory accessions. Guidelines for establishing a CAC can be found in Chapter 6 of the *NPS Museum Handbook, Part II*. The *2007 Plan* mandated that all parks formally establish a CAC to evaluate the appropriateness of new acquisitions, meaning an item both fits within a park's SOCS and can be managed according to DOI and NPS standards.³⁰

CAC's are considered a critical element to accessioning compliance, as evidenced by a 2017 internal memo to NPS Regional Directors. The memo reiterated the message of the *2007 Plan* and 2016 update that CACs provide subject matter expertise and an impartial evaluation of potential museum accessions, essential components of a strong museum program.

²⁹ National Park Service, *Director's Order #11D: Records and Electronic Information Management.*

³⁰ National Park Service, Park Museum Collection Storage Plan.

Despite formal mandates and encouragement from WASO and Regional Offices for parks to establish a formal CAC, Service-wide compliance and standardization of CACs is often lacking across the Service. Not all parks have a formally established CAC, and some of those that do only utilize them to consider parts of only certain potential accessions.

The lack of Service-wide standardization can be attributed to the fact that there is no existing formalized training for CACs or guidelines on how to select appropriate CAC members. CACs are designed to be tailored to the specific needs of a park, leading to each park to design its CAC in a slightly different way. CACs are especially helpful to parks that lack professional museum staffing or collection expertise. CACs ensure consistency and impartiality throughout the accessioning process over time regardless of staffing levels at the park. CACs create a "culture of dissent" and ask hard questions about why a should park accession an item into its collection. This helps ensure that all of the items within a park's collections fall within the current scope and contribute to the mission, saving on space and collection care in the long term.

However, while CACs are a critical element of the accessioning process and are designed to maintain consistent, objective views in upholding a parks SOCS and Service policies during the often-challenging accessioning process, their authority does not surpass a park superintendent's. Because the park superintendent is the Accountable Officer of a park's collection, he/she has the authority to override the decision of the CAC and accession items regardless of a CAC's recommendation. This can contribute to the growing number of items in NPS collections and weakens the authority of a CAC.

Cataloging

Cataloging items in NPS collections occurs after the accessioning process and is an important step in collections management. Accurate and understandable catalog records allow researchers, the public, and park staff to know what is in a park's collections. The NPS is currently facing a large backlog of uncatalogued items within its collections. This impacts collections management as a park cannot adequately manage its collections without knowing what items it has. Although there are policies surrounding the practices of cataloging items and NPS has actively been attempting to reduce the backlog of uncatalogued items, the backlog is largely due to limited staffing, which is discussed in further detail in sub-section 4.3.

4.2.2 Deaccessioning Policy Compliance

Deaccessioning is the process of how items exit NPS collections. There are strict legal requirements and policies dictating the steps in the deaccessioning process in order to protect the items within NPS collections from being discarded without thought and approval. These mandates make the deaccessioning process time and resource heavy which strains parks that are already limited resources. There is also a view shared across NPS that the best way to deaccession is to properly accession. The Panel agrees with this view.

Deaccessioning requires park staff to scrutinize collections to identify items that no longer fit under a park's scope and then go through the required process to legally remove the item from the collection. Since many parks are limited in their professional museum staffing levels some do not have the personnel resources nor the time to implement this rather cumbersome process.

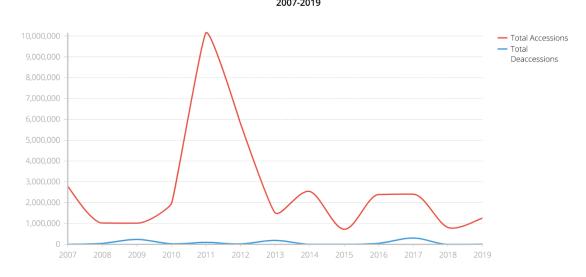
As a federal agency, the NPS is unlike many private sector museums. By law, the Service does not have authority to sell deaccessioned items. Thus, deaccessioned items must be relocated to another museum or collecting institution. If a park cannot find a suitable location to relocate a deaccessioned item to, the park may destroy the deaccessioned item. Such constraints can present a potential hidden cost. Some parks are challenged to allocate costs connected with item destruction. NPS must continue to house items that have been formally deaccessioned, but not yet destroyed, taking up valuable storage space. The fact that NPS must destroy items also contributes to a historical hesitancy to deaccession.

Currently, deaccessioning within NPS is largely reactive to parks running out of collection storage space. Between FY 2015 and FY 2019, approximately 7.5 million items were accessioned into NPS collections while only 370,000 items were deaccessioned. Figure 4-2 below further illustrates how accessioning rates overwhelmingly outpace deaccessioning rates. Note: the spike in accessions in 2011 resulted from the Archives Initiative that provided additional funding for archival work. While it is expected accessions will, Service-wide, typically outpace deaccessions, with the continual growth of collections and lack of consistent deaccessioning, parks will continue to face constraints on their ability to properly store and care for collections.

While improving the deaccessioning process would alleviate some of the burdens facing the NPS, deaccessioning, is not a singular viable solution for the long-term improvement of collections management across the Service. As noted above, the best way to deaccession is to properly accession.

Figure 4- 2: Comparison of Total NPS Accessions and Deaccessions 2007-2019 (Source: NPS)³¹

Comparison of Total NPS Accessions and Deaccessions



25

³¹ The spike in accessions in 2011 resulted from the Archives Initiative that provided additional funding for archival work.

The following four recommendations will enhance a more disciplined, strategic, and consistent Service-wide approach in accessioning and deaccessioning:

Recommendation 4.2.1: Superintendents must be held accountable by their supervisors for establishing and utilizing Collection Advisory Committees (CACs).

• If a superintendent overrides the decision of a CAC, that accessioning decision should be elevated to the Regional Director for approval.

Recommendation 4.2.2: WASO should create Service-wide guidance that clarifies the difference between the management of archival materials, Resource Management Records, and administrative records.

- Based on this guidance, parks should establish Records and Electronic Information Management (REIM) Councils and perform Resource Management Record upkeep on an ongoing basis. Superintendents should be held accountable for this action.
- Once Resource Management Records are better defined, NPS should consider establishing
 a funding source to assist parks with their archival processing backlogs, as most parks lack
 archival expertise. Funding is needed for contractors and agreements.

4.3 Hiring More Professional Museum Managers

Professional museum staff members are the cornerstone to high quality collections care. There are four occupational disciplines connected with professional museum management within the NPS: collections management, curation, archives, and conservation. Within these disciplines are eight career tracks:

1. Museum Technician

2. Museum Specialist

3. Museum Registrar

4. Museum Curator

5. Archives Technician

6. Archives Specialist

7. Archivist

8. Museum Conservator

The number of professional museum positions varies among parks. Some parks that house collections lack professional museum staff entirely, relying, instead, on collateral duty assignments to perform collections management, subordinate to the individual's primary duties and responsibilities. These employees are not required to have specialized collections management training. However, some on-the-job training can be provided.³² Since 2011, NPS has lost a net of 153 museum staff positions (see Figure 4-3), which has resulted in heavier reliance on collateral duty staff. Note: there was a spike in hiring in the early 2000s due to the Archives Initiative that funded temporary and term positions. As of FY2019, collateral duty positions made

³² National Park Service, The Museum Handbook Part I: Museum Collections, Chapter 12, 2003.

up 48 percent of NPS museum staff jobs (see Figure 4-2). Despite some training, many collateral duty staff lack comprehensive knowledge of necessary components of collection care.

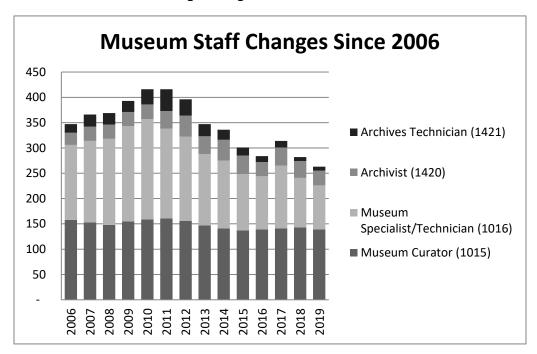


Figure 4- 3: NPS Museum Staffing Changes Since 2006 (Source: NPS)

Professional museum staff address a multitude of collections-care-related activities including:

- **Accessioning and Deaccessioning:** Tailors SOCSs to limit accessioning to the most relevant items and identifies current collection items to be deaccessioned.
- **Cataloging:** Identifies the item condition and location in storage so that researchers and the public alike can make use of the item.³³
- **Preservation:** Completes collection condition surveys and works to limit the negative effects from agents of deterioration like water and fire damage, inherent vice,³⁴ and vandalism.³⁵
- **Conservation:** Trained conservators stabilize and restore items to ensure long-term collections care. (Note: the *NPS Museum Handbook* states, "Untrained staff should not attempt to do treatments.")³⁶

The lack of professional museum staff at park sites can severely impact the ability of a park to properly fulfill these essential collections management activities. Of the activities listed above,

³³ National Park Service, Museum Handbook Part II: Museum Records, Chapter 3, 2000.

³⁴ Per the Dictionary of Archives Terminology, inherent vice is the tendency of material to deteriorate due to the essential instability of the components or interaction among components. Example: "Nitrate film and highly acidic paper suffer from inherent vice because they are chemically unstable." See: https://dictionary.archivists.org/entry/inherent-vice.html.

³⁵ National Park Service, *The Museum Handbook Part I: Museum Collections*, Chapter 3, 2012. ³⁶ Ibid.

cataloging is especially impacted by limited professional museum staffing. As previously mentioned, the NPS faces a major backlog of uncatalogued items and having adequate staffing levels is an essential component of managing and reducing this backlog. Without adequate staffing, the number of items in NPS collections that are uncatalogued will continue to grow.

Staffing levels beyond professional museum staff also impact a park's ability to properly fulfill collections management activities. Records and Information Management personnel are responsible for implementing policies, planning for, and conducting work involving the creation, dissemination, research, storage, and disposition of Federal records. They also work to ensure that Federal Records Management laws and regulations were followed.³⁷ Currently, there are no Records and Information Management positions at any of the regional support offices. The lack of this specific type of administrative support staffing within NPS perpetuates the challenges of records management previously discussed in sub-section 4.2.1.

Recommendation 4.3.1: Park superintendents, with support from WASO and Regional Offices, should work to identify where there is the strongest need for professional museum staff. Based on this need, there should be an emphasis on hiring professional museum staff and increasing staffing levels of the eight discipline career tracks across the Service.

Recommendation 4.3.2: The NPS should fund at least one permanent Records and Information Management position at each Regional Office. As records management is not the sole responsibility of museum staff, these new positions would be established by Administration and not the Cultural Resources Directorate. These new positions should be filled by administrative personnel who can assist in training and consultation in records management issues at the park level.

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³⁷ Office of Personnel Management, *Policy Classification Flysheet for Records and Information Management Series*, *0308*, March 2015. https://www.opm.gov/policy-data-oversight/classification-qualifications/classifying-general-schedule-positions/standards/0300/gs0308.pdf.

Chapter 5: Building A Comprehensive Policy Set

This chapter speaks to opportunities for the Service to enhance operational success in collections management by improving written policy guidance provided to WASO, regions, and parks. Even though the NPS has given careful attention to establishing a set of policies that can guide this complex work, there remain several important elements that can benefit from more specificity to advance the mission.

The Service's work is guided by a *Management Policy*, approved and released by NPS leadership. There have been five editions of this document since it first appeared in 1964 with the most recent edition prepared in 2006. In addition to the policies contained in *Management Policy*, there are Service-wide directives intended to interpret and clarify these policies.

This chapter contains several recommendations to expand and improve policy guidance to enhance collections management in several important and relevant areas.

5.1 Establishing Clear Policies Guiding Facilities Work in Collections Management

There are two important areas in which the facilities directorate can enhance its policy guidance in order to enhance the Service's ability to safely and securely store collections. The following subsections will address these two policy gaps that are critical to enhancing collections management.

- 1. Leasing facilities
- 2. Retrofitting existing structures to be used for storage purposes

At the outset, it is also important to note that the current Facility Investment Strategy (FIS) guidelines for park managers, superintendents, program managers, regional/national leaders connected with directing maintenance and investing in capital improvements for the Service. All building types are expected to follow the criteria and guidance described in the FIS, and the NPS recognizes that certain building types, including collections storage facilities, need to have additional criteria that is specific to their particular use. The FIS, however, currently does not expressly address the unique features related to museum collections storage. Safe and secure museum storage requires specialized storage space in order to accommodate sensitive cultural resources, natural history, and other collection items. As such, the current FIS does not provide structural guidance on how to plan, develop, and construct collections storage facilities. The WASO Museum Management Program in collaboration with the Regional curators, however, has developed draft criteria and requirements for museum collection storage facilities, which can be incorporated into the NPS Facility Investment Strategy (FIS). Given its importance, and the relevance of the criteria for the FIS in encouraging a more collaborative working relationship between directorates, the criteria is covered more extensively in Chapter 7 of this report.

5.1.1 Evaluating Leasing Arrangements

The NPS has a choice to own, lease, or partner with other museums to acquire space for its collections and it has arrangements covering each of these options.

With respect to leasing, there is currently no set of specific policies directed to guide collections management decisions. Due to the sensitive nature of its collections, the NPS requires leased facilities that have rigorous, and sometimes unique features, in order to safely and securely store its valuable collections according to standards set by the Service which are outlined in the 2007 Plan.

The NPS engages in two types of leasing arrangements for collections storage:

- 1. **Lease and retrofit a building or build to suit**. Two examples of these arrangements include the Museum Resource Center (MRCE) in Landover, Maryland which was leased then subsequently retrofitted, and the Western Archeological and Conservation Center (WACC) in Tucson, Arizona which was a build to suit.
- 2. **Rent or lease space from a specialized storage vendor**. Storage vendors can offer a wide variety of benefits including:
 - High quality storage for its collections;
 - Records management and digitization services for federal archives; and
 - Nationwide facilities that meet federal regulations including the National Archives and Records Administration facility standards (36 Code of Federal Regulations Part 1234).³⁸

Benefits and Challenges of Leasing

Benefits to NPS leasing arrangements include:

- Lower upfront costs. Leased space allows parks to accommodate storage space needs
 without large upfront costs and staff time (compared to construction) needed to build a
 storage facility or rehabilitate an existing structure. While leased facilities can require
 some retrofitting to ensure the facility meets appropriate standards, the upfront cost
 generally remains significantly lower than that of new construction or rehabilitating an
 existing NPS structure.
- 2. **Expedient accommodation of storage space needs**. Leased facilities can provide a faster solution compared to constructing a new facility in order to meet NPS storage needs. If a park or region is in urgent need of additional storage, a lease agreement can provide faster access to storage space compared to constructing or retrofitting a facility.

³⁸ A list of NARA-approved commercial records facilities by state can be found at: https://www.archives.gov/records-mgmt/storage-standards-toolkit/commercial-records-storage-facilities-by-state.

- 3. **High quality storage space.** Leased facilities can sometimes provide collections storage space that could be significantly better than a park's or region's existing space. Specialized leased facilities can come with high quality storage conditions and can accommodate complex requirements that might be unattainable by the park or region without significant upfront costs for construction or retrofitting new collections storage space.
- 4. **Wide range of leasing options**. Leased facilities can provide significant benefits to urban parks in particular, where there may be limitations on constructing new storage facilities.

While leased storage space offers a variety of potential benefits, there are also potential challenges that include:

- 1. **Ceding some facility-management control to the lessor.** When the NPS places their collections in a non-NPS facility, the Service may be challenged to assert change requests to the lessor, possibly resulting in substandard storage conditions.
- 2. Limited museum-quality storage. Museum-quality storage space is generally in short supply, sometimes leaving parks with few options, but to settle for lower quality leased space. This challenge can be especially prevalent in remote locations where parks have fewer lease options.
- 3. **Renewing a lease.** At the end of a lease term, a lessor may decide against renewing the lease. In these instances, the collections must be moved to a new location and such work can be both expensive and pose a risk to collection items during their transfer. Additionally, some leases can take several years to re-negotiate.
- 4. **Cost to Maintain Original Facility**. Moving collections to a leased facility does not relieve the park of the cost of maintaining the original facility although, presumably, the original facility may now be used for other functions or demolished.
- 5. **General Services Administration (GSA) leasing policy**. GSA's policy states that federal agencies "may lease space for terms, including all options, of up to 20 years."³⁹ This policy prevents the NPS from securing longer-term leases for its collections storage. Since the NPS is responsible for the care and stewardship of the collections indefinitely (or until deaccessioned), a lessor who does not wish to extend the lease obligates the NPS to find alternative space and move the collection, leading to expensive transportation costs and potential damage to items.

³⁹ General Services Administration, *Federal Management Regulation*, Part 102-73 Real Estate Acquisition §102-73.165, reviewed June, 17 2020.

https://www.gsa.gov/policy-regulations/regulations/federal-management-regulation-fmr/i450672

Table 5-1: Examples of Regional Leasing Engagements

Legacy Intermountain Region (IMR)	The Western Archaeological and Conservation Center (WACC) is a leased regional repository for 43 parks and serves as a backup for all other IMR parks. The facility still experiences challenges in the areas outside the two main repository spaces as these areas struggle to meet temperature and humidity requirements. The WACC is approaching the end of its lease agreement, and if the lease is not renewed, the move to another facility would be both costly and increase the risk of damaging the collections during transportation.
Legacy Pacific West Region	The San Francisco Maritime National Park successfully leased storage space, but the real estate market in the region has become relatively expensive as the supply of additional available facilities has become more limited.
Legacy Northeast Region	The superintendent of Western Pennsylvania's five National Parks recently secured a lease with a vendor to store park collections. The contracted vendor provides museum quality storage that would otherwise be impossible to access on-site at each park given current budget constraints.

GSA Involvement in the Leasing Process

GSA plays an important role in the NPS leasing process. GSA not only sets policies on the length of leasing engagements, as previously stated, but they also play a key role in identifying and securing suitable buildings for the NPS to lease. GSA, therefore, requires the expertise within NPS Cultural Resources and Facilities Directorates to identify and procure buildings that are satisfactory for museum collections storage. GSA additionally requires NPS expertise on identifying proper locations for the leased storage facilities. This, in turn, allows the NPS to acquire collections storage space that is not located in an area that poses risks to the collections. Without close coordination between the NPS and GSA, the NPS runs the risk of procuring inadequate leased museum storage space located in vulnerable areas.

Collections-Specific Leasing Policy

While leased space can meet the collections storage standards consistent with the 2007 Plan, the general NPS Service-wide leasing guidance for non-specialized office buildings and other facilities does not provide direction suited to address NPS requirements for collections storage. The 2007 Plan advises NPS personnel to seek collections storage space that has adequate temperature and humidity controls and is located in environmentally-low risk areas to prevent any potential degradation of the collections they are housing. There are, of course, leased storage facilities that fall within these suggestions, and NPS personnel often make good faith efforts to hold leased collections storage facilities to exacting museum standards, but there is no institutionalized policy or procedure that requires space leased for collections storage to do so. Additionally, the NPS Office of Property, Fleet, and Space Management has developed guidance establishing clear roles and responsibilities for park, regional, and WASO personnel that handle finding, engaging, approving, and funding leasing activities that will be released in the near future.

Recommendation 5.1.1: Given the lack of specific leasing requirements and policy guidance for museum collections storage, the NPS should develop and disseminate a specific policy for leasing collections storage facilities in coordination with the General Services Administration (GSA). This policy should:

- set leased collections storage standards that align with the 2007 Plan and the NPS Facility Investment Strategy (FIS);
- set standards that reflect different types of protection and space needs (i.e. paper archives vs. textiles vs. ceramics);
- set standards that identify acceptable locations for storage facilities, so GSA can provide a
 long-term cost-benefit analysis to allow the NPS to consider whether to secure suitable
 leased buildings for the NPS or retrofit NPS-owned facilities in the region to make them
 suitable; and
- implement a check during the leasing process to ensure the proposed lease is meeting the goals and objectives outlined in the *2007 Plan*.

5.1.2 Retrofitting Structures for Collections Storage

The NPS often uses existing modern or historic structures to store collections *in lieu* of leasing or building new facilities. The condition of these facilities varies greatly. The structures are often retrofitted to accommodate collections storage since space in an existing structure, either modern or historical, to provide additional collections storage space for parks. They are rarely originally intended for museum storage. Increasing collections growth, and the need to store items on-site, are encouraging many parks to use currently available space despite the fact existing structures may lack of museum-quality conditions.

As parks seek to retrofit historic structures for collections storage, it may also serve to improve the overall condition of the historic properties themselves. As often related in interviews, "the best way to care for historic structures is to use historic structures." This view helps to incentivize a park to include a retrofitted museum collections storage space as part of an overall updating of an historic structure. Yet the quality of the storage, and the cost to retrofit, do not always lead to the best options compared to alternate decisions, such as collections consolidation, leasing, or construction of new facilities.

Advantages and Challenges to Retrofitting

There are several benefits to the NPS pursuing retrofitting options for collections storage, including:

- 1. **Creating purpose for structures.** Some structures, particularly historic ones, lie empty and unused. Historic structures are best cared for when they serve a purpose. Using a historic structure for collections storage provides a double purpose: keeping the structure and the collections in good condition.
- 2. **Lower Costs.** Retrofitting structures that are currently owned by the NPS may be less expensive than a new structure.

- 3. NPS-Owned Buildings Offer a More Certain Long-Term Storage Solution. GSA's leasing policy states that federal agencies "may lease space for terms, including all options, of up to 20 years." This policy prevents the NPS from securing longer term leases for its collections storage. Since the NPS is responsible for the care and stewardship of the collections indefinitely (or until deaccessioned), a lessor who does not wish to extend the lease obligates the NPS to find alternative space and move the collection, leading to transportation costs and potential damage to items. Locating collections in NPS-owned buildings eliminates this problem and obviates the need for periodic lease renegotiation.
- 4. **NPS Controls Accessibility of NPS-Owned Buildings**. Locating collections in NPS-owned buildings allows for direct NPS control of accessibility, including potentially better availability of regional collections to regionally based researchers and academics.

Some parks have explored innovative ways to utilize existing structure space. For example, some parks use Bally Buildings which can be inserted into an existing structure. Bally Buildings have a 20 to 30-year lifespan and provide high quality museum storage.⁴¹ Since Bally Buildings do not require a retrofit of the external structure, they can be more cost effective. Bally Buildings can be well insulated, preventing external elements from degrading items stored within and addressing issues such as environmental control.

In contrast to the benefits above, there are challenges to successfully retrofitting existing and historic structures for museum collections storage.

- 1. **High costs**. Retrofitting a structure can be relatively expensive. Modifications to historic buildings are, understandably, tightly regulated and can greatly increase costs.
- 2. **Difficulty in meeting standards.** If an existing structure has not had improvements in HVAC or fire suppression prior to the retrofit, it can be incredibly difficult to meet the standards outlined in the 2007 Report due to certain restrictions on modifying historic buildings.
- 3. **Environmental risks.** Existing structures were generally not originally intended for collections storage, and as a result, the structure may be located in a high-risk area. Flooding and fire dangers are two of the primary environmental risks for a structure that was not built for the purpose of collections storage.

Retrofitting Strategy Moving Forward

Currently, there is no WASO or Regional criteria or guidance established in the development and planning process of a retrofit project to ensure the storage facility meets the standards outlined in the *2007 Plan*. As a result, retrofit projects can be approved for funding without taking into account proper collections storage protocols. Currently, the NPS does not have adequate design

^{40 41} CFR § 102-73.150

⁴¹ National Park Service, *Collection Storage – Making a Case for Microenvironments*, CRM, Supplement Volume 15, No. 4, 1992. http://npshistory.com/newsletters/crm/crm-v15n4s.pdf.

standards and criteria to hold retrofitting structures for collections storage purposes to the facility condition goals and objectives in the *2007 Plan*.

The NPS operates the Historic Preservation Training Center (HPTC) which is dedicated to the preservation and maintenance of historic structures. The HPTC has expertise in retrofitting historical structures and could serve as a helpful collaborator with the WASO and Regional Offices when determining the design standards and criteria.

In general, museum storage facility best practices for design standards and criteria include:

- Located in a low-risk area that is not vulnerable to fire or flooding;
- Heating and cooling equipment that can continuously operate, including when the building is closed to staff;
- Adjustable temperature and humidity levels to meet the needs of different types of items;
- Appropriate lighting fixtures to prevent degradation of collections;
- Smoke detection, fire suppression and other systems that prevent fire damage; and
- Security personnel or alert systems that prevent vandalism or theft.

Recommendation 5.1.2: The NPS should create design standard policies for a retrofit project consistent with the aims of the *2007 Plan*. The list of policies to guide this work should be developed by WASO facilities and cultural resources personnel in coordination with the Historic Preservation Training Center (HPTC).

5.2 Filling Senior Staff Positions

Filling all senior staff positions with permanent employees is key to successful collections management. Yet, some of these key positions have been unfilled, many for years, relying instead on other NPS employees to serve in "acting" roles for these positions. It is important to stress that the individuals who serve as acting leaders contribute in important ways in advancing collections management objectives. That said, there is uncertainty in administrative authority and oversight when positions remain unfilled. In these cases, long-time vacant senior positions can result in inconsistent application of policies and open gaps between policy and practice.

At present, the position of Senior Archivist is unfilled. This adversely impacts the Service's ability to create and enforce Service-wide policies that contribute to NPS success in proper collections management. The Senior Archivist is responsible for creating and helping to implement Service-wide policies and guidance's on proper archival material management. This position was created in 1996 and is under the cultural resource directorate of NPS.

Archives and records are components within collections management where there is inconsistent policy compliance (see sub-section 4.2). Filling this position would be a major step towards ensuring Service-wide compliance on policies and the establishment of a standard practice of collections management.

Recommendation 5.2: Fill the position of Senior Archivist at the national level.

• Task to work with the NPS Records Manager to create a workforce that directly examines the issues within Resource Management Records management and identify ways to alleviate the burden the Service faces with archival materials, Resource Management Records, and central files (see Recommendation 4.2.2). This work force should ultimately lead to an updated records and archives management system within the Service.

Chapter 6: Enhancing Collaboration Within and Outside of NPS

Collaboration between the facilities and cultural resources directorates is a vital component to the success of collections management. Best practices in collections management will draw on active engagement of various employees within NPS, including with its external stakeholders. This chapter explores establishing and enhancing formal collaboration mechanisms, both within the NPS, and with entities outside of NPS, that will contribute to creating a more holistic, Servicewide approach to collections management.

6.1 Enhancing a Collaborative Relationship Among NPS Disciplines

As previously discussed in Characteristic #3 in Chapter 2, the NPS facilities and cultural resources staffs are often siloed and lack consistent, active, formal mechanisms to enhance collaboration. The nature of the vast number of priorities and informal relationship networks among these two directorates result in varying levels of collaboration across the Service. The need to strengthen relationships between facilities and cultural resource staffs is not unique to the NPS, as the Smithsonian Institution has also addressed similar challenges in recent years with their Smithsonian Collections Space Framework Plan.⁴²

In 2010, following a severe winter storm that resulted in the collapse of a Smithsonian storage facility in Suitland, Maryland, the Smithsonian prioritized the development of a collections storage framework plan to identify and address its current and future museum storage needs. The Smithsonian's collection and facilities staffs, along with an outside consultant, jointly developed a survey to capture current conditions and storage needs. Subsequently, a 30-year incremental plan was developed to address both short- and long-term needs. Collaboration between Smithsonian collections and facilities staffs was critical to developing and implementing collection storage improvements (see Appendix F).

6.1.1. Mismatched Priorities

Despite the need for facilities and cultural resources staffs to work together to address collections storage concerns, there is often an inadequate meshing of priorities between the two groups. Facilities staff tend to focus on high-level, public-facing issues, such as life, safety, and accessibility. Collection storage often make up a small percentage of facilities priorities. Understandably, cultural resources staff focus on collections, exhibits, research requests, and interpretation. These divergent foci, which are reasonable and important in and of themselves, have historically provided some inevitable challenges to intentional, formal collaboration between facilities and cultural resources staffs.

⁴² Smithsonian Institution, *Smithsonian Collections Space Framework Plan*, February 2015. https://www.si.edu/Content/Pdf/About/2015-Collections-Space-Framework-Plan.pdf

6.1.2 Varying Levels of Collaboration

Across the Service, the amount of collaboration between cultural resources and facilities staff members varies significantly. Historically, the relationship between facilities and cultural resources at WASO has been described as cordial, but not always collaborative. Despite Congress' expectation that the *2007 Plan* would be a joint report between facilities and cultural resources directorates,⁴³ the burden fell primarily on the museum program to achieve its goals. Of the 24 employees on the Planning Team listed in the *2007 Plan*, 20 were cultural resources employees.⁴⁴

In recent years, there have been positive steps taken to enhance the relationship between these two directorates with demonstrable, deliberate, senior-level efforts to enhance the relationships at the WASO level. The relationship between the directorates has been strengthened, as collaboration has been prioritized, and as efforts to incorporate the special needs of museum facilities in the FIS, mentioned in Chapter 5 and further discussed in Chapters 6 and 7, demonstrates the strengthened relationship between the directorates at the WASO level.

At the region and park levels, collaboration between facilities and cultural resources directorates varies significantly. While no parks or regions described an adversarial relationship between cultural resources and facilities employees, interviewees described a range of collaboration from daily interactions to communication that occurred infrequently and only when necessary. For many interviewees, collaboration relies on personality-driven relationships rather than formal mechanisms, such as regularly scheduled meetings. When individuals leave their positions, the institutional knowledge and collaborative relationships are often lost, requiring employees to rebuild these relationships from the ground up.

The geographic and mission differences of the various regions and parks also impact the relationship strength between facilities and cultural resources staffs. For parks and regions that are more cultural resource-driven, like the Legacy Northeast Region, there is a stronger relationship between facilities and the cultural resources directorates due to the inherent role that cultural resources play in the mission of these parks. In other parks and regions throughout the NPS, where natural resources play a more significant role than cultural resources in their mission, the relationship between the directorates is less collaborative and less emphasized.

6.1.3. Collaboration with Natural Resources

Not only must cultural resource staff collaborate with facilities staff about museum collection issues, but the two directorates also need to work with staff from the NPS natural resource directorate. The natural resource directorate, "provides leadership and expertise to ensure understanding, awareness, representation, and stewardship of the natural resources of the NPS so that they remain unimpaired for future generations." Over 10 percent of NPS museum collections are natural resource based (see Table 4-1). Although these collections come out of the

⁴³ H. Rept. 109-80 - Department of The Interior, Environment, And Related Agencies Appropriation Bill, 2006.

⁴⁴ National Park Service, Park Museum Collection Storage Plan, Page 51.

⁴⁵ National Park Service, *Natural Resource Stewardship and Science Directorate*, https://www.nps.gov/orgs/1778/index.htm

jurisdiction of the natural resource directorate, it is the responsibility of the cultural resource directorate to work with the facilities directorate to house and care for these collections. Because of this, it is important that the three directorates collaborate so that the required standard of care is met and that these objects remain unimpaired for future generations. Similar to the partnership between cultural resources and facilities, the partnership between cultural resources, facilities, and natural resources has seen varying levels of collaboration across the Service. This relationship has improved in recent years as the Service has started to more rigorously examine its collection care practices.

Recommendation 6.1: Cultural resources, natural resources, facilities directorate leaders, and the Office of the Chief Information Officer, which oversees the NPS records management program should organize and attend regularly scheduled meetings (ex. biweekly, monthly, quarterly) to address concerns, problem solve, and jointly plan collections management. These meetings should be conducted at the WASO level and at each region.

6.2 Building Sound Internal and External Partnerships

In addition to increasing collaboration between the cultural resources and facilities directorates, the NPS should look to establish and enhance other formal networks and partnerships both inside and outside of the Service. While various partnerships currently exist within the NPS, many are informal and lack a Service-wide approach. Several discrete opportunities to build and strengthen internal and external partnerships are reviewed in the following pages.

While external partnerships can be advantageous to the NPS, it should be noted that a large number of collection institutions and museums have been adversely affected by COVID-19. A survey of 760 U.S. museums published by the American Alliance of Museums in July 2020 found that one-third of the respondents were facing some risk of permanently closing without "additional financial relief." The survey also found that over 60 percent of museums had furloughed or laid off more than a fifth of their staff. Some museums have requested the NPS provide them support, including requests to accession parts of their collections. This trend could further strain NPS collections management.

6.2.1 Expanding Internal Networks

According to the International Council of Museums (the Council), networks between collecting institutions are a critical element in the preservation of, study of, and access to museum collections. The Council encourages all museums to seek out and create networks at various levels to engage in supporting activities and elevate collections management.⁴⁷

Collections management networks currently exist within the Service but are informal and largely driven by personal connections. Curators and other professional museum staff members at parks will connect and collaborate with other NPS professional museum staff with which they have a

₄₆American Alliance of Museums. *A Snapshot of US Museums' Response to the COVID-19 Pandemic.* July, 22 2020.

⁴⁷"Networks", International Council of Museums, Committee for University Museums and Collections, accessed September 10, 2020.

personal relationship. Through these informal connections, NPS employees share best practices and answer questions about how to properly implement collections management policies.

There are also existing informal networks within the Service that connect cultural resources staff among parks with similar missions, such as parks related to a particular era, like the Civil War. Through these informal networks, parks can create a community in which they share experts for Collection Advisory Committees, discuss how to best utilize collections in a way that contributes to the park mission, and collaborate on the process of accessioning and deaccessioning items.

6.2.2 Expanding External Networks

Beyond internal networks, the NPS museum collection system sits within a larger constellation of museums and collecting institutions in the U.S. and around the world. Capitalizing on this larger community and establishing formal networks with outside museums could help alleviate some of the challenges currently facing the NPS, including limited professional staffing and the continual growth of collections.

Similar to internal networks, these external networks already exist to some extent within the Service. Some parks actively partner with various outside collecting institutions, museums, and other organizations for collections management (see sub-section 6.2.3 below). One example of this type of network is the relationship between a park within NPS that is Civil War-related and external Civil War-themed collecting institutions. Through such a network, the different members have created an open dialog in which they discuss using items in their collections to contribute to the missions of their respective organizations, and how to address challenges that collecting institutions commonly face. While the acts of accessioning and deaccessioning are inherently governmental activities and, legally, must be performed by a federal employee, these external networks can alleviate some of the burden that comes with those processes. Within these networks, different museums discuss potential accessions, share expert opinions, and find suitable homes for deaccessioned items.

These internal and external networks are informal and do not span across the entire Service. Formal networks could contribute to the standardization and efficiency of collections management across the Service. They also could help alleviate the strains of limited staffing (see sub-section 4.3) and limited administrative oversight (sub-section 5.2) and establish a collaborative community within the NPS that uplifts collections management across the Service.

6.2.3 Strengthening Existing Partnerships

The NPS places a priority on partnerships and collaboration with private and public partners.⁴⁸ Partnerships are different than networks. Networks are lines of communication and collaboration that create a community. Partnerships are formal agreements over the sharing and lending of support and resources. Better capitalizing on and strengthening existing partnerships, and building new ones, could ease some of the burdens the NPS currently faces regarding shortages of personnel, facilities, and infrastructure resources.

⁴⁸Mackintosh, Barry, *Philanthropy and the National Parks in the 20th Century*, National Park Service, July 6, 2018. https://www.nps.gov/articles/philanthropy-and-the-national-parks.htm

Partnerships are typically created by individual parks. Although NPS does have a Service-wide partnership portal that tracks philanthropic partners and partnership agreements, the portal does not track all partnerships that deal with museum collections. Partnerships between the NPS and external groups can manifest in different ways, as described below.

Friends Groups and Outside Partners

A NPS Friends Group is a nonprofit organization with the primary goal of assisting the NPS, either providing Service-wide support, or supporting a specific park or region.⁴⁹ NPS Friends Groups, and other similar outside partnerships, typically provide support through fundraising and education.

Partnerships with Friends Groups or other outside partners can mitigate some of the costs associated with collections management. For instance, outside partners can raise money for a new collection storage building or assist in providing funding for interns or seasonal staff to support NPS employees. However, financial resources provided by these groups may not be reliable or sustainable. There are also legal limits on how outside partners can interact with the NPS. Friends Groups and other partner organizations also tend to partner with the NPS for projects that are popular and visible to the public; characteristics not always shared by collection management needs.

Given the challenges and variability of support from Friends Groups, the Panel is reticent to make Service-wide recommendations on this topic. However, the Panel encourages the Service to opportunistically engage in these arrangements by more carefully identifying and scrutinizing possible opportunities to work with outside partners that could support improved collections management.

Non-Federal Repositories

Non-Federal Repository Agreements (NFRAs) are formalized collections management agreements focused partnerships. A NFRA is an agreement between a non-federal collecting institution, including private museums and research universities, and a federal collection site, such as a NPS park site. Through a NFRA, a federal site lends a non-federal institution some of the items in their collection and the non-federal institution takes care of those items while the federal site retains legal authority over the objects. As of September 2020, NPS has over 4.7 million collection-recorded items housed in non-federal repositories.⁵⁰

NFRAs offer many benefits. First and foremost, a NFRA alleviates the need for NPS to store all of the items in its collections, easing the need for greater storage space. Second, these repositories place items from NPS collections into capable care, which not only lessens the burden of NPS having to staff technically trained professional museum at a park site, but also allows for increased access and use of the items. For example, NPS has a NFRA with the Laboratory of Tree-Ring

⁴⁹ National Park Service, *Making Friends: An Introduction to Building National Park Service Friends Groups*, Chapter 1, March, 2008. http://npshistory.com/publications/rtca/making-friends.pdf

⁵⁰ The actual number of NPS collection items housed in non-federal repositories is estimated to be much higher than the reported number. This is due to many repositories not having done inventory of NPS materials.

Research at the University of Arizona, this partnership puts tree rings from NPS collections into the hands of tree ring specific researchers, allowing for increased study and use.

Offsetting these benefits, NFRAs do carry costs. While the non-federal repository has physical control over the items, NPS retains legal ownership. Thus, the Service must continue to pay for the care and storage provided. Some park officials fear that non-federal repositories will raise or implement fees associated with storing items through a NFRA. This presents a challenge to parks that are already struggling to handle the costs of collections management.

Non-federal repositories also struggle to reach the standard of care required by the NPS. As previously mentioned, NPS has set certain standards that outline the required level of care that collections need to be housed in. Many non-federal repositories do not meet this standard of care adding another challenge to the NPS when trying to create NFRAs.

Despite the challenges and risks, NFRAs can be a benefit to parks, especially to sites that are struggling with limited professional museum staffing, storage space, and access to park collections. However, for these agreements to be beneficial to NPS, the non-federal repository must reach NPS standards of care and provide quality conditions for storage without putting a strain on already limited NPS resources.

Currently, it is largely up to the individual park sites to forge these partnerships, with the Regional and WASO office's providing limited support in this area. Because of this, the implementation and adoption of these agreements have inconsistent application.

Additionally, the Park Service sits within a larger group of collecting agencies in the Department of the Interior. These agencies include the Bureau of Land Management and the United States Geological Survey. Collections from a variety of federal agencies are housed within the same Non-Federal Repositories, however, there are no formal agreements or partnerships between these federal agencies.

Recommendation 6.2.1: WASO should establish formal collaborative networks that create open lines of communication for NPS employees who are involved in collections management to share best practices, answer commonly asked questions, and share resources.

- These networks should be established at the regional level as well as a larger Service-wide network.
- All NPS employees should be invited to join these networks and Regional Curators should encourage parks to actively participate. These networks can be established within current NPS internal online platforms.
- Regional Offices should take actions to formally establish thematic networks between parks that share similar themes and missions and encourage parks with similar collection themes to collaborate in establishing non-repository agreements with similar institutions outside of NPS.

These networks will help connect employees at an individual park site with Regional Offices, WASO, and other parks across the Service to establish and promote a culture of a holistic, standard, approach to collections management.

Recommendation 6.2.2: The NPS should explore options of partnering with other collecting agencies within the Department of the Interior to see if efficiencies. could be gained in sharing resources for storage.

Chapter 7: Enhancing Transparency and Accountability

A challenge for any organization is to provide incentives to adhere to organizational operating policies. Policy compliance helps build an environment that features consistency and disciplined execution that is often necessary to achieve organizational goals. This is particularly important for NPS as the collections volume grows rapidly at a time when financial resources and other threats to the safe and secure storage of items proliferate.

This chapter addresses the opportunity for the Service to introduce greater rigor to monitoring operating performance with respect to collections management. In so doing, the Service can shape operational outcomes by strengthening feedback loops, knowing that, often, "what is measured, is done."

The NPS can improve performance by using positive incentives to channel park efforts to enhance collections management goals. Specifically, the Service may make a commitment to more actively support projects at parks and regions where there is greater policy adherence.

This chapter discusses what actions might be considered that can positively impact 2007 Plan objectives now and in the future. It is important that the following proposed strategies be considered in tandem as they complement and build on one another.

7.1 Developing a Comprehensive Cultural Resource Investment Strategy

While the NPS has existing policies on proper cultural resource management, there is a current inconsistency in the application of these policies across the Service. In order to enhance consistent application, the cultural resources directorate can consider how to adopt more effective policies that incent a more consistent performance outcome with respect to collections management. Cultural resources and facilities investments should be connected with measurable, data-driven, policy adherence at the park and/or regional levels.

This subsection features guidance on how the cultural resources directorate might consider an approach of linking performance with project approvals. This approach of focusing on a Cultural Resource Investment Strategy (CR Investment Strategy) provides a more data rich decision-making environment, connected to performance that is consistent with strategic objectives.

Senior officials in the NPS cultural resources directorate at WASO actively contributed to the ideas provided in the proposed CR Investment Strategy, aligning closely with the proposed museum storage criteria for the NPS Facility Investment Strategy approach, discussed in more detail below. After careful review, the Panel finds these to be sound and reasonable.

Table 7-1: Proposed Cultural Resource Investment Strategy (Source: NAPA)

Criteria	Action				
Has every effort been made to refine the accessioning practices?	 Review and tighten Scope of Collection Statement (SOCS) in accordance with updated programmatic guidance. (See Recommendation 4.1) Follow Service-wide and regional guidelines for the Collections Advisory Committees (CAC). The CAC will have regional representation and review all non-mandated acquisitions. (See Recommendation 4.2.1) Restrict non-mandatory collecting in accordance with updated SOCS. Implement systematic collection strategies for all projects to limit growth. Ensure there is no backlog of un-accessioned collections. 				
Has every effort been made to refine archives and Resource Management Records?	• Refine archival collections of Resource Management Records to match those records in category 1.B of the Records and Electronic Information Management (REIM) Guide. (See Recommendation 4.2.3)				
Has every effort been made to refine deaccessioning practices?	 Deaccession collections, in accordance with the Museum Properties Act and NPS guidelines, that do not meet the SOCS. Implement systematic collection strategies to plan for future deaccessioning. 				
Has every effort been made to manage and refine collection storage spaces?	 Evaluate the current collection size, projected collection growth, and projected deaccessions against current collection storage spaces to identify needs. Implement systematic collection strategies to identify items within collections that could be consolidated. 				

Recommendation 7.1: In order to effectively implement a successful strategy that holds a park accountable for complying with existing policies, NPS must impose a temporary Service-wide moratorium on collecting non-mandated collections.

• During this temporary moratorium parks must evaluate their accessioning, deaccessioning, and collection management practices.

- The Regional Director and Regional Curator are responsible for determining when a park can start collecting again. They may consult with the Chief Curator and Museum Management Program as appropriate.
- The NPS may want to establish an appeal process regarding decisions to continue imposing a temporary moratorium, with the expectation that the appeals process would only be used in extraordinary circumstances.

A moratorium on collections will send a strong message to the entire Service that collecting should be taken more seriously, be heavily scrutinized, and require justification.

7.2 Develop Museum Collection Facilities Criteria and Incorporate into the NPS Facility Investment Strategy

The Service-wide FIS (discussed in Chapter 5) describes guidance and criteria that all building types are expected to follow, and the NPS recognizes that certain buildings require additional criteria that are specific for their particular use, including collections storage facilities. While the FIS document does not currently address museum storage, the NPS is presently taking steps to build collections management enhancements into the FIS. Efforts are underway to develop specific museum collection storage criteria that would help ensure these facilities are more efficiently planned, designed, constructed, maintained, and operated in accordance with appropriate museum standards outlined in the *2007 Report*. The NPS intends to append these criteria to the Service-wide FIS.

A pre-decisional version of criteria w shared with the Panel. It describes four preconditions that should be taken into consideration as funding decisions are made:

- A park has refined its existing collections and accessioning practices;
- A park facility plan has requirements that accommodate current and future collections;
- A park facility plan meets the goals of the 2007 Plan; and
- A park facility plan has taken into account Tribal concerns, minimizes environmental
 threats, has appropriate curatorial staff, and has a business plan for continued operational
 costs for staffing and maintenance.

A fuller description of the criteria and related actions are provided below in Table 7-2.

Linking funding with performance outcomes is a good practice described in organizational and management literature. After review of the work already underway between cultural resources and facilities directorates, the Panel finds this effort to be commendable and important for continued work to enhance policy guidance in collections management. The draft criteria also make clear, and the Panel agrees, that exceptions to these criteria and decisions should be handled on a case-by-case basis.

The Panel finds this approach sound and reasonable. While the criteria might be further refined over time, the Panel endorses this approach.

Table 7- 2: Criteria for Museum Collections Storage Facilities (Source: NPS)

Criteria	Action
Has every effort been made to refine both existing collections and the accessioning practices?	 Review and tighten SOCS in accordance with updated programmatic guidance. (See Recommendation 4.1) Follow Service-wide and regional guidelines for the Collections Advisory Committees (CAC). The CAC will have regional representation and review all non-mandated acquisitions. (See Recommendation 4.2.1) Refine archival collections of Resource Management Records to match those records in category 1.B of the Records and Electronic Information Management (REIM) Guide. (See Recommendation 4.2.3) Deaccession collections, in accordance with the Museum Properties Act and NPS guidelines, that do not meet the SOCS. Restrict non-mandatory collecting in accordance with updated SOCS. Implement systematic collection strategies for all projects to limit growth. Ensure there is no backlog of unaccessioned collections.
Determine if the facility is needed or if current facilities suffice by evaluating current collections and future collections growth.	 Determine if the collections can be consolidated to an existing location for storage. Determine if there is a non-NPS repository with a valid repository agreement with any Department of the Interior bureau that could reasonably store the collection. Receive validation from the NPS Museum Facility Model, a Value Analysis, or site-specific Space Plan to ensure the proposed facility will meet current need and anticipated growth.
Will the new or rehabilitated facility meet the goals of the storage plans?	 Facilities must: Reduce the number of storage facilities. Accommodate the storage needs of more than one park, i.e., must be a multi-park facility.

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 $^{^{51}}$ The draft criteria were provided to the Panel by the NPS with permission for its reproduction in this Report.

- Contain climate-controlled zones for high efficiency and specific collection preservation needs.
- Result in a storage area of appropriate size for the current collection and anticipated growth of mandated collections.
- Maintain a safe work environment, Federal standards for museum collection storage and access, and operate efficiently.
- Meet the museum storage facility standards in the Checklist for the Preservation and Protection of Museum Collections with a rating of "Good" (at least 70% of applicable standards met).

If the planned facility aligns with the goals of the storage plans, determine where the facility should be located.

A facility must:

- Remain onsite, separate from a multi-park facility, only if retention of the collection onsite is mandated by law or necessary due to concerns of Tribes. If remaining onsite, every effort should be made to make the site a multi-park facility.
- Minimize or mitigate any environmental threats to the proposed facility. If this cannot be done, alternative locations should be explored.
- Include a qualified permanent GS-11 or above museum curator on site to manage the collection and have a plan to fund this position.
- Develop a business plan for determining how the park(s) will fund the ongoing costs of the facility, including staffing and maintenance.

Applying Museum Storage Criteria to the Service-wide Investment Review Board (S-IRB)

The S-IRB consists of "executive level NPS employees and external advisors who review design and construction projects for cost-effectiveness and responsible use of NPS construction monies." The NPS Director's Order Reference Manual 21 requires any project over \$1 million in net cost be sent to the S-IRB for review and, if approved, can proceed to design completion. The S-IRB acts as a checkpoint. This checkpoint would provide assurance that museum storage projects exceeding \$1 million in net construction cost are held to the standards and goals outlined in the 2007 Plan and the museum storage criteria in the FIS.

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⁵² National Park Service, Denver Service Center Workflows, *Definitions - D*, November 15, 2016, https://www.nps.gov/dscw/definitionsdc_d.htm#dab.

⁵³ Delegation thresholds are subject to change.

National Park Service, *Reference Manual 21*, Chapter 3, September 7, 2018, https://www.nps.gov/subjects/partnerships/rm-21-chapter-7.htm.

Applying Museum Storage Criteria to the Regional Investment Review Board (R-IRB)

R-IRBs act as a checkpoint to ensure any museum collections storage project not meeting the S-IRB dollar threshold is held to the standards and goals outlined in the *2007 Plan* and FIS. The R-IRBs can use the criteria and the *2007 Plan* to evaluate proposed projects at their delegated dollar threshold, prior to approving funding.

Recommendation 7.2: The draft criteria and special requirements developed by WASO Museum Management Program in coordination with the Regional Curators should be finalized and approved by NPS leaders, incorporated into the NPS Facility Investment Strategy (FIS), and implemented by both the Service-wide Investment Review Board (S-IRB) and Regional IRBs (R-IRBs). Funding decisions for museum collections storage facility projects should align with the NPS's Service-wide approach to ensure the Service is allocating resources and investing in its highest priorities and is meeting the criteria outlined in the FIS.

The S-IRB should distribute the museum collections facilities criteria and the *2007 Plan* to WASO's Denver Service Center, Harper's Ferry Center, Regional Directors, and Facility and Cultural Resource leadership to ensure all relevant personnel are familiar with and utilize the criteria and *2007 Plan* when considering and developing new or rehabilitated museum storage facility proposals. The R-IRBs should use the criteria and *2007 Plan* to evaluate proposed projects at their delegated dollar thresholds, prior to approving funding.

Implementing the museum specific criteria in the FIS will serve to incent greater park and regional adherence to directorate policies and positively impact implementation of *2007 Plan* objectives. The FIS can serve as an effective catalyst to build greater unity and accountability for achieving objectives among parks and regions to the Service's overall collections management strategy.

Chapter 8: Enhancing Access to Collections

A key component of the *2007 Plan* and the overall mission of the NPS Museum Management Program⁵⁵ is ensuring access to collections for both researchers and the public. While the public is able to enjoy a virtual park tour on a laptop computer, the same is not true when it comes to enjoying the richness of museum collections. Beyond examining the current opportunities for researcher access to NPS collections; this chapter explores opportunities for consolidation and digitization, two actions that might serve to improve access to NPS collections in the 21st Century. With the COVID-19 pandemic serving as a backdrop to this report, there is no better time to consider these important topics.

8.1 Researcher Access to Collections

Research is an important component of access to NPS collections. Park museum collections are remarkable assets in the complex history of natural and cultural resources in the U.S., and it is the duty of the NPS to preserve these assets while also providing access to the public for research and learning purposes. As only a small percentage of NPS collections are on display, researchers must request access a park's complete collection. Parks have formal guidelines provided by WASO to evaluate proposed research requests.⁵⁶ Research on NPS collections manifests in two primary ways, research of a park's existing collection at the site and research projects through the Research Permit and Reporting System (RPRS).

Research on Collections

The NPS museum collections contain a diverse range of items that help to illustrate the rich natural and cultural history of the United States. Historians and other academics conduct research utilizing NPS collections to investigate and discover new facets of this rich history. As previously mentioned, only a small percentage of NPS collections are on display at a given time. Researchers must request access to those collections that are not on display. Many park facilities and visitor centers have rooms for researchers to examine collections not on display. It is important for park staff to have a robust inventory of their collections so that they know what they have to offer researchers and how to assist researchers when they request access to a specific collection or item.

Research Projects Through the RPRS

⁵⁵ According to Part Three of the NPS Museums Handbook providing access to collections contributes to the fulfillment of a parks mission by: "attracting scholars to research and write about your park's history as well as your cultural and natural resources; encouraging publications, exhibitions, and similar works on your park or program; developing a constituency of scholarly, international, heritage tourism and other public supporters of your collections who will speak for increased park resources for preservation and access; helping you locate potential collaborators, cooperators, and partners in your work; raising the profile of the park in the public's mind in a positive fashion." National Park Service, Museum Handbook Part III: Museum Collection Use, Chapter 1, 1998.

⁵⁶ See the NPS Research Permit and Reporting System at www. https://irma.nps.gov/RPRS/.

The RPRS is the online system that manages the research application and reporting process for NPS.⁵⁷ Through this system, researchers can request to conduct studies on park property. A unique feature of some research on NPS collections is that in certain cases, research results in the growth of a park's collection. NPS is required by law to accession certain items into its museum collections, including field collections. Field collections are defined as "accessions of museum object/specimens and field records that are park property. Most field collections are archeology or natural history collections. The authority for collecting items is usually a permit or contract."⁵⁸ Field collections made up over 93 percent of how items were accessioned into NPS collections during FY 2019 as illustrated shown in Table 8-1 below.

Table 8- 1: Collection Summary for FY2019 - Type of Accession (Source: NPS)

Gifts	Exchanges	Purchases	Field Collections	Transfers	Incoming Loans	Total
57,966	0	122	1,174,146	204	24,200	1,256,638

Frequent research can result in a potentially large growth of a parks collections which can compound the collections management challenges faced by parks. However, given the importance of researcher access to NPS collections, it is important the NPS strike a balance between regulating potential growth and researcher access. This balance includes creating criteria on accepting and rejecting permits for research within the park. However, NPS parks have difficulty establishing such criteria. This is, in part, due to the lack of professional museum staff at the park level. Currently, it is the responsibility of individual parks to evaluate research requests and, without technical expertise at the park level, it is a challenge for staff to properly evaluate such inquiries.

In the process of field research, researchers often find or produce duplicative items. Parks are required to accession and store all field collections including repetitive items, which can add to the strain on proper collections management.

Related to the opportunities for the Service to increase utilization of performance data, which can impact transparency and accountability as discussed in Chapter 6, the Service could enhance its research and museum collections databases. Currently, there is no database or mechanism to track all research requests on collections across the Service. At present, an individual park may, or may not, track research requests received on items in its collections. Furthermore, tracking techniques vary across the Service. Because of this, the Service has no means to systematically track the usage of collections despite this being such an important service.

Recommendation 8.1: Regions must assist parks in setting standards for monitoring and deciding on research requests. Museum collections will continue to be necessary in the NPS and addressing the management of collection size will not solve all of the issues related to the museum storage crisis.

⁵⁷ See the NPS Research Permit and Reporting System at www. https://irma.nps.gov/RPRS/..

⁵⁸ National Park Service, Museum Handbook Part II: Museum Records, Chapter 2, Section N, 2000.

- Part of setting this standard is creating training for park permit coordinators on how to properly review permits that result in museum collections.
- When setting these standards, WASO should revise current Service-wide policies that mandate the accessions of field collections. Updated policies should allow parks to refine items that are produced from research before formally accessioning these objects into a parks collection.
- Curators and archeologists should work together to develop sampling strategies to limit collections.
- WASO should create a Service-wide database that records the number of research requests that a certain collection/item receives.

Updated policies will prevent duplicative items from entering NPS collections and the Service can then use the information provided by the database to further increase access to the collections with digitization or considerations for consolidation. This effort is directly related to the mission of the NPS, of "preserving unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations."59

8.2 Enhanced Access to Collections Through **Digitization**

Access to NPS museum collections is not just limited to researchers, the educators and others also utilize these collections. Museum collections help to teach people about the natural and cultural resources of the nation and increased access to these collections helps fulfill the NPS mission of providing "enjoyment, education, and inspiration" to the public now and for future generations.

Like many museums, the NPS looks at digitization as an opportunity to grant greater access to stored collections to both researchers and the public. Online learning has become a regular part of student life, particularly as the COVID-19 pandemic and other developments in shared learning has their impact on expectations and technological capabilities. There is no doubt: access to NPS collections provides enrichment opportunities for people of all ages and nationalities. Currently, the NPS does not have a Service-wide digitization strategy. That said, a handful of individual parks and regions have taken some steps to begin the process of considering how digitization enhances the NPS collection in a broader and profound sense. Already, parts of collections from 120 of parks are available online at the NPS Web Catalog.60

While the potential benefits to research access to collections are clear, the process of digitization is complex, expensive, and potentially can lead to some damage of items in a collection along the way. Even so, some of the costs incurred museums are defrayed by attracting interested organizations and companies developing the necessary technology. These often provide funding for specific projects or exhibits. Many companies view funding museum digitization efforts as an

⁵⁹ National Park Service, What We Do.

⁶⁰ National Park Service, NPS Web Catalog, https://museum.nps.gov/ParkIndex.aspx#.X16e-GhKjIU.

opportunity to conduct service testing for their platforms and can realize positive publicity as a motivating factor to partner with respected agencies such as the NPS.

The Smithsonian Institution has found success in utilizing partnerships with joint interests in the educational component of digitization. In the case of the National Archives for Black Women's History, even the NPS received some outside funding for the digitization of the collection, though time and infrastructure constraints limited the number of items that have been digitized.

From the United States Holocaust Memorial Museum to the Smithsonian and the Library of Congress, collections digitization continues to actively grow and evolve. For many museums, pilot programs provide an opportunity to test the digitization process on a smaller scale before attempting a larger digitization effort. Outside digitization experts and consultants are also a key factor in successfully bringing a museum's collections online.

For the NPS, digitization requires a high-quality digital infrastructure to support the millions of two- and three-dimensional objects spread across the United States. From reliable high-speed internet to the thousands of staff hours required to carefully catalog, scan, and upload digitized items, the process for Service-wide digitization will be costly and time consuming. Given the current financial and technology constraints, the NPS has not yet prioritized digitization, despite understanding its benefits.

Benefits

Digitization offers a wealth of benefits for both the care and access of the collections.

- **Preservation.** Digitization offers the opportunity for researchers and the public to see items without actually handling the items, potentially extending the life and quality of an item.
- **Remote Parks.** Digitization provides researchers and the public access to museum collections without the expense and challenge of traveling to parks that are not easily accessible.
- **Indigenous Items.** Due to the significance of some Indigenous items, the repatriation of these items back to tribes through NAGPRA may result in their burial (or reburial), especially in the case of funerary items. ⁶¹ With approval from the tribe, digitizing these collections prior to repatriation preserves researcher access to them.
- **Organization.** The process of digitization requires cataloging items, leading to a more organized and well-defined understanding of the items in the collection.
- Native Digital Items. Over the last three decades, in addition to paper documents, digital-native items, including Resource Management Records, have become part of NPS collections leading to an increased need for a Service-wide digital strategy. Historically, paper documents have utilized valuable NPS collections space, but native digital items

⁶¹National Park Service, Archeology Program, *The Native American Graves Protection and Repatriation Act (NAGPRA)*, 2000. https://www.nps.gov/archeology/tools/laws/nagpra.htm.

offer an opportunity to organize and store records virtually, freeing up physical collections storage space.

Costs

Despite the benefits, a digitization project is not without significant costs.

- **Digital Infrastructure Development.** Currently, the NPS does not have the digital infrastructure, including server capacity, reliable internet, technology required to photograph and digitize items, online exhibit platforms, etc., necessary to fulfill a Servicewide digital strategy.
- **Financial Cost.** At all levels (WASO, regions, parks), the NPS lacks enough funding to support the development of a digital infrastructure.
- **Staffing.** Professional museum staffing levels have continued to fall since 2011, and an additional digitization effort would require a shift in staff duties. NPS does not currently have the staff to launch a full, Service-wide digital strategy effort.
- **Organization.** NPS collections are not currently catalogued and prepared for digitization, adding to the time and cost associated with digitization.

Recommendation 8.2: WASO, in conjunction with Regional Offices, parks, and outside consultants, should implement pilot digitization programs at parks or regions where the level of technological infrastructure and desire to expand digitization are present. Following these pilot programs, the NPS should develop a Service-wide digitization strategy that provides an incremental, long-term plan for the digitized exhibition of high priority and frequently requested items. The NPS should explore new and existing partnership opportunities for financial and technological support, particularly in regards to the development of pilot programs.

Appendices

Appendix A: Panel Biographies and Study Team Members

Panel of Academy Fellows

Marcus Peacock* Chair – Chief Operating Officer, Business Roundtable. Former Distinguished Research Professor, Regulatory Studies Center, George Washington University. Deputy Director for Policy, Jeb 2016 Presidential Campaign; Minority Staff Director, Senate Budget Committee; Project Director, The Pew Charitable Trusts; Deputy Administrator of the Environmental Protection Agency. Former positions with U.S. Office of Management and Budget: Associate Director for Natural Resources, Energy, and Science; Deputy Chief/Natural Resources Branch, Office of Information and Regulatory Affairs. Former positions with the U.S. House of Representatives Committee on Transportation and Infrastructure: Subcommittee Staff Director, Oversight and Emergency Response Subcommittee; Professional Staff Member, Water Resources and Environment Subcommittee. Former positions with R.R. Donnelley & Sons: Manufacturing Supervisor, Bindery Department; Industrial Engineer, Engineering Department.

Donald Bathurst* – Former Executive Director for Emergency Preparedness, Management Directorate, Department of Homeland Security; Senior Advisor to the Under Secretary, Management Directorate, Department of Homeland Security; Director & Chair, Board of Directors, Senior Executives Association; Chief Administrative Officer, Management Directorate, Department of Homeland Security; Director, Asset Management, Management Directorate, Department of Homeland Security; Director, Facilities Management and Services Division, Federal Emergency Management Agency; Deputy Associate Director, Operations Support Directorate, Federal Emergency Management Agency; Acting Director, Program Assessment and Outreach, Mitigation Directorate, Federal Emergency Management Agency; Deputy US Fire Administrator, US Fire Administration, Federal Emergency Management Agency; Adjunct Lecturer, Fire Protection Engineering, University of Maryland; Director & Chair, Board of Directors, GSA Federal Credit Union; Chief Fire Protection Engineer, Public Buildings Service, General Services Administration; Fire Protection Engineer, National Capital Region, General Services Administration; Firefighter, Volunteer, Prince William and Prince Georges Counties.

Dr. Linda Bilmes* – Daniel Patrick Moynihan Senior Lecturer in Public Policy, Harvard Kennedy School; former Assistant Secretary and Chief Financial Officer of the US Department of Commerce; Served on bipartisan National Parks Second Century Commission (2009-2011); Congressionally-mandated National Parks Service Advisory Committee (2011-2017); authored numerous academic studies on the economics of the National Park Service; Co-author of *Valuing US National Parks and Programs: America's Best Investment* (Routledge, 2019). United Nations Committee of Experts on Public Administration (sole US member); Board member, Institute for Veterans and Military Families at Syracuse University; Board member, Belfer Center for Science and International Affairs; former Principal, the Boston Consulting Group.

Sheila Burke* – Strategic Advisor, Baker Donelson Law Firm; Chair, Government Relations and Public Policy Group, Baker Donelson Law Firm; Adjunct Lecturer in Public Policy; Faculty Research Fellow, Malcolm Wiener Center for Social Policy, John F. Kennedy School of Government, Harvard University and Distinguished Visitor and Research Professor, Georgetown University. Former Deputy Secretary and Chief Operating Officer, Smithsonian Institution; Under Secretary for American Museums and National Programs, Smithsonian Institution; Dean and Lecturer in Public Policy, John F. Kennedy School of Government, Harvard University; Secretary of the Senate; Chief of Staff to the Senate Majority Leader; Deputy Chief of Staff to the Senate Majority Leader; Deputy Staff Director, Committee on Finance, U.S. Senate; Professional Staff Member, Committee on Finance, U.S. Senate.

Margaret (Peggy) Sherry* – Deputy Chief Financial Officer, Office of Finance, Office of Management, Office of the Comptroller of the Currency, Department of the Treasury; Deputy Chief Financial Officer, Chief Financial Officer, National Credit Union Administration; Deputy Commissioner, Operations Support, Internal Revenue Service, Department of the Treasury; Chief Financial Officer (previously Deputy CFO, Director Financial Management), Chief Financial Officer, Department of Homeland Security; Deputy Chief Financial Officer (previously Director of Reporting), Finance, U.S. Holocaust Memorial Museum; Senior Auditor, Kearney & Company; Assistant Director, Accounting and Finance Management, Government Accountability Office.

*Academy Fellow

Study Team

Brenna Isman, Director of Studies: Ms. Isman has worked for the Academy since 2008 and provides oversight across the Academy's studies. She recently served as the Project Director for the Academy's project that assisted a national regulatory and oversight board in developing and implementing its strategic plan. She also recently directed the Academy's statutorily required assessments of the NASA's use of its Advisory Council and the Environmental Protection Agency's practices for determining the affordability of regulatory mandates, as well as the Academy's organizational assessments of the U.S. State Department's Office of Inspector General and the Amtrak Office of the Inspector General. Ms. Isman has served as a Senior Advisor on strategic plan development for the Postal Regulatory Commission (PRC) and Social Security Administration (SSA), and organizational change consulting support for the Coast Guard. Her prior consulting experience includes both public and private sector clients in the areas of communication strategy, performance management, and organizational development. Prior to joining the Academy, Ms. Isman was a Senior Consultant for the Ambit Group and a Consultant with Mercer Human Resource Consulting facilitating effective organizational change and process improvement. She holds an MBA from American University and a Bachelor of Science in Human Resource Management from the University of Delaware.

Roger Kodat, *Senior Project Director:* Mr. Kodat has led more than 30 projects at the Academy. These include the Academy's recent Congressionally directed study on space traffic management and one exploring science and technology policy advisory capabilities needed by the Congress. Mr. Kodat was appointed and served as Deputy Assistant Secretary of the Treasury, responsible for Federal Financial Policy, from 2001 to 2007. His responsibilities at Treasury included leading

reforms of the U.S. Postal Service and oversight of the Federal Finance Bank. Prior to joining government, Mr. Kodat had an extensive career in commercial finance and investment banking with JPMorgan and its predecessor banks, including serving as Senior Country Officer for both Chase Manhattan Bank and Manufacturers Hanover Trust in Eastern Europe. He holds a B.S. from Northwestern University and both an MBA in Finance and M.A. in Political Science from Indiana University, Bloomington.

Kate Connor, *Research Analyst* — Ms. Connor joined the Academy in 2018 and has served on several Academy studies, including work for the U.S. Forest Service and the Defense Nuclear Facilities Safety Board. Prior to joining the Academy, she served as a Public Policy and Government Relations Intern with the American Association of University Women and as an intern on the U.S. Senate Committee on the Budget. Ms. Connor taught high school social studies for several years before graduating from Georgetown University with a Master's in Public Policy. Ms. Connor also holds a Bachelor of Arts in History and Political Science and a Master's in Teaching from the University of North Carolina at Chapel Hill.

Sean Smooke, *Research Associate* – Mr. Smooke has worked for the Academy as a Research Associate since August of 2019. He has served on several Academy studies, including the *Montgomery County Council: Legislative Branch Operations Assessment* concluding in November of 2019, and interim Report 4 and the Final Report on *Tracking and Assessing Governance and Management Reform in the Nuclear Security Enterprise* in the spring and fall of 2020 respectively. He provides additional support to the Academy's Quarterly Working Capital Fund Symposium. Mr. Smooke holds a B.A. from Claremont McKenna College in Government and Legal Studies.

Gillian Townsend, *Research Associate* – Ms. Townsend joined the Academy in November 2019 as a Research Associate. She has served on several Academy studies, including work with the National Oceanic and Atmospheric Administration and the Department of Commerce Office of Inspector General. Prior to joining the Academy, Ms. Townsend held numerous internships and volunteered with several organizations with a focus on community engagement including work with The Lemon Project Society. Ms. Townsend holds a Bachelors of Arts in Government Studies from The College of William & Mary.

Appendix B: Interview List

Department of the Interior

Ryan Hambleton, Deputy Assistant Secretary for Fish, Wildlife, and Parks

The National Park Service

Washington Support Office

Ann Hitchcock, Senior Advisor for Scientific Collections

Bill Thompson, Acting Chief, Construction Program Management Division, Chief of Facility Planning, WASO Park Planning & Special Studies

Cari Kreshak, Cultural and Natural Resources Learning Experience Coordinator

Catherine Dewey, Chief, Resource Management and Acting Chief, Professional Services

Guy Adema, Deputy Associate Director, Natural Resources

Jessica Bowron, Comptroller, National Park Service

Joy Beasley, Associate Director, Cultural Resources, Partnerships, and Science

Karyn Ferro, Acting Program Manager, Office of Partnerships & Philanthropic Stewardship

Kathleen Byrne, Acting Chief Curator, Museum Registrar

Linda Neal, WASO PPFL, Coordinator, Partnership Construction

Mike Caldwell, Acting Associate Director – Park Planning, Facilities and Land

Mike Seibert, Park Facilities Management Division

Ray Sauvajot, Associate Director, Natural Resources

Stephanie Stephens, Acting Deputy Associate Director, Park Programs and Heritage Areas Stephen Damm, Museum Specialist

Timothy Bailey, Division Chief, Office of Property, Fleet, and Space Management

Turkiya Lowe, Chief Historian, Park History Program, Acting Federal Preservation Officer

Regional Offices

Aaron Dowe, Acting Associate Regional Director, Interior Regions 8, 9, 10, and 12

Aaron Roth, Associate Regional Director for Facilities and Lands

David Kruse, Chief of Facilities Management, Pacific West Region

David Louter, Chief of the Cultural Resources Program for the Pacific West Region

Gay Vietzke, Regional Director, Region 1

Giles Parker, Regional Curator, Director, Northeast Museum Services Center

Heather Young, Museum Program Manager, Omaha Regional Office

Kelsey Lutz, Regional Curator for Region 11

Kirstie Haertel, Regional Curator, Regional Office Archaeology and Museum Programs, Regions 8, 9, 10, 12

Laura Anderson, Director, Museum Resource Center and Regional Curator, Interior Region 1 Liz Banks, Senior Archivist, Northeast Museum Services Center

Mary Troy, Chief of Museum and Archival Services, Interior Region 2, South Atlantic Gulf

 ${\it Richard\ Vernon}, {\it Collections\ Manager}, {\it Southeast\ Archeological\ Center}$

Shaun Eyring, Manager, Cultural Resources Division, Region 1: North Atlantic-Appalachian *Tef Rodeffer*, Museum Services Program Manager, Regional Office, Western Archeological and Conservation Center

Teri DeYoung, Museum Specialist, Northeast Museum Services Center

National Park Site Staff

Allison Powell, Park Ranger/Acting Site Manager, James A. Garfield National Historic Site Anthony Reed, Archivist, Frederick Law Olmsted, National Historic Site

Baird Todd, Museum Curator, Collections Preservation Center, Great Smoky Mountains National Park

Christopher Finlay, Chief, Facility Management, Grand Teton National Park & John D Rockefeller, Jr Memorial Parkway

Cliff Spencer, Superintendent, Mesa Verde National Park

Colleen Curry, Cultural Resources Program Manager, National Parks of Western Pennsylvania Craig Kenkel, Superintendent, Cuyahoga Valley National Park, First Ladies National Historic Site, James A. Garfield National Historic Site

Ethan P. Bullard, Museum Curator, Richmond National Battlefield Park & Maggie L. Walker National Historic Site

Jeannine McElveen, Superintendent, Petrified Forest National Park

Jill Trebbe, Supervisory Archivist, Frederick Law Olmsted National Historic Site

Jonena Hearst, Geologist, National Park Service, Guadalupe Mountains National Park

Karie Diethorn, Chief Curator Independence National Historical Park

Kathleen Bond, Superintendent, Natchez National Historical Park

Kym Hall, Superintendent, Colonial National Historic Park

MaryAnne Maigret, Supervisory Archeologist/Integrated Resources Program Manager,

Pu'uhonua o Honaunau National Historic Park

Matthew Smith, Curator, Petrified Forest National Park

Michael Aday, Librarian-Archivist, Great Smoky Mountains National Park, Collections Preservation Center

Michele Clark, Archivist, Frederick Law Olmsted National Historic Site

Moss Rudley, Superintendent, Historic Preservation Training Center

Nancy Russell, Archivist, Harpers Ferry Center

Paul Rogers, Archivist, Yosemite National Park

Ryan Polk, Museum Curator, Marsh-Billings-Rockefeller National Historical Park, Associate Curator, Northeast Museum Services Center

Stephen Clark, Superintendent, Western Pennsylvania Parks

Teresa Langford, Cultural Resources Program Manager, Fort Vancouver National Historic Site

Tim Hudson, Superintendent, Katahdin Woods and Waters National Monument

Tracy Fortmann, Superintendent, Fort Vancouver National Historic Site

Tricia Miller, Museum Curator, Grant-Kohrs Ranch

National Park Foundation

Dieter Fenkart-Froeschl, Chief Operating Officer Julie Seger, Senior Manager, Government Relations Michelle Lane, Vice President, Government Relations

National Parks Conservation Association

Jackie Crucet, Associate Director, National Partnerships

Smithsonian Institute

Daniel Davies, Facilities Manager, Office of Facilities Management

Diane Zorich, Director, Digitization Program Office

Effie Kapsalis, Senior Digital Program Officer, American Women's History Initiative

Michael Carrancho, Director, Engineering, Design, and Construction

Nancy Bechtol, Director, Smithsonian Facilities

Rebecca Kaczkowski, Preventative Conservator

Walt Ennaco, Deputy Director, Smithsonian Facilities

William Tompkins, Director, National Collections Program

United States Holocaust Memorial Museum

Michael Levy, Director, Digital Assets Management and Preservation, National Institute for Holocaust Documentation

Harvard Art Museums

Jennifer Atkinson, Director of Collections Management

9/11 Memorial & Museum

Bethany Romanowski, Head Registrar

University of Arizona

Peter Brewer, Curator, Laboratory of Tree-Ring Research

Library of Congress

Thomas Rieger, Manager, Digitization Service Station, Library of Congress

The Protect Heritage Corp

Robert Waller, President and Senior Risk Analyst

English Heritage

Amber Xavier-Rowe, Head of Collections Conservation

U.S. Senate Appropriations Committee

Emy Lesofski, Majority Clerk, Subcommittee on Interior, Environment and Related Agencies

U.S Army Center of Military History

Maria Angela Capozzi, Deputy Chief, Northeast and OCONUS Region, Army Museum Enterprise, US Army Center of Military History, Fort Belvoir, VA

Historic New England

Julie Solz, Team Leader, Collection Services

Museum of Northern Arizona

Elaine Hughes, Collections Director

National Czech and Slovak Museum and Library, Cedar Rapids, IA

Cecilia Rokusek, President and CEO

Parks Canada

Carla Morse, Manager of Engagement, National Collections
Frank Brosseau, Senior Project Manager, Consolidation Project
Louise Ranger, Manager, Collections and Curatorial, Indigenous Affairs and Cultural Heritage
Directorate

TJ Hammer, Director of Collections, Curatorial and Conservation Branch

Upcountry History Museum, Greenville, SC

Kristina Hornback, Curator of Collections

American Alliance of Museums

Danyelle Rickard, Accreditation Officer Julie Hart, Senior Director, Museum Standards & Excellence

Marble Fairbanks

Karen Fairbanks, Partner Tanya Gershan, Project Manager Diego Arango, Designer

Other

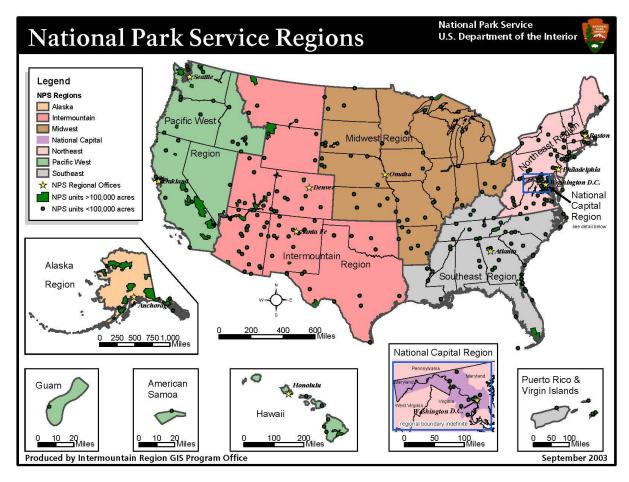
Denis Galvin, (Retired) National Park Service, NAPA Fellow John Roberts, (Retired) Senior Archivist, National Park Service Jon Jarvis, (Retired) Director, National Park Service Rick Cronenberger, (Retired) Historical Architect, National Park Service Sue Masica, (Retired) National Park Service Vic Knox, (Retired) Deputy Regional Director, Alaska Region, National Park Service

Appendix C: Past and Present NPS Regional Maps

Current DOI Regional Map



Former NPS Legacy Regions



Appendix D: 2007 Plan Development

All regions agreed to the following set of goals to produce a standardized planning approach:

- The plan must achieve sustainable and maintainable preservation of the collections that the NPS is mandated by law to protect for the public benefit.
- The plan must promote and provide opportunities for research, education, and interpretation of park collections as part of collections management facilities.
- The plan must provide a portfolio of collection management facilities that are efficiently planned, designed, constructed, maintained, and operated, in accordance with appropriate collection standards, asset management plans, and in consideration of the total cost of ownership for the long-term management of both the collection and the asset.

Each region also has additional goals that are listed in the regional sections in Appendix E.

Strategy and Parameters

The preservation of museum collections is the major force driving the strategy for the plan. All decisions must be made in the best interest of the collections and with fiscal responsibility. To achieve the goals of the plan, the regions developed an overall storage strategy that consists of the following elements:

- In general, the NPS will retain and continue to manage functioning park, cluster (or zone), and regional facilities that meet standards and efficiency measures.
- The NPS will consolidate facilities where efficiencies are gained and underlying principles are supported.
- The NPS will consolidate facilities using a variety of methods based on the type of collection, including but not limited to multi-park facilities, centers, and partnerships.
- While all new facilities will not necessarily be consolidated, all new facilities will be evaluated for consolidation based upon Servicewide criteria.
- The implementation of this strategy will reduce the number of storage deficiencies and the number of substandard storage facilities.
- It is not the intention of this plan to generate new staff positions or to increase operational funding. Consideration will be given to the reallocation of FTE or operations funding within the regions.
- Superintendents will review and comment on the regional plan. The plan must be approved by the Regional Director.

Each region also has additional factors to supplement the Servicewide strategy that are listed in the regional sections in Appendix E.

In determining an overall plan for museum storage, all regions adhered to the following parameters:

- The plan is a long-term commitment, implemented over a twenty-year period.
- All museum collections facilities will meet NPS standards, with the goals of reducing ACP deficiencies, minimizing risk, and adhering to prudent asset management principles.
- Access to collections and related information for study and research is required.
- All proposed actions are dependent on adequate site-specific planning and support.
- Total cost of ownership of the facility will influence the decision whether to keep facilities together or separate.
- All facilities are to be appropriately staffed, based on OPM standards. Each region will apply its own specific policies.



- All new facilities are to be appropriately sized, based upon the NPS Museum Collection Facility Planning Model.⁹
- Parks are responsible and accountable for collections, wherever they are located.

Decision-Making Criteria

To determine where park collections will be located, the regions developed a list of criteria on which to base decisions. By answering the questions for each park, the regions have collected a consistent set of data for supporting the recommendations in this plan.

- Is retention of the collection on site mandated by law or donor agreement?
- Are the collections directly associated with the park or core to the mission of the park?
- Are there adverse effects on other resources by storing the collections on site? If yes, can the risk be effectively mitigated?
- What percentage of storage standards are met in the park Automated Checklist Program submission?
- What percentage of storage standards are met for the twelve identified sizeable deficiencies?
- What percentage of the park's collection is on site?
- What is the Facility Condition Index of the facility housing the collection?
- What is the dollar amount of deferred maintenance?
- What is the Asset Priority Index of the facility housing the collection?
- What is the total cost of ownership of the facility?
- What percentage of an FTE at what grade level and series is managing the collection?
- What percentage of ACP procedural standards is being met?
- Is there adequate study, research, and/or work space at the park?
- What is the number of in-park researchers per year?
- What is the number of outside researchers per year?
- What is the current square footage? What square footage does the Museum Collection Facility Planning Model predict?

The Planning Process

The NPS Washington Office establishes the policy, procedures, and standards for museum storage and facility planning, and the regions manage storage strategies at the regional level. Each region produced a plan with input from the superintendents and the approval of the Regional Director. Cross-regional planning was encouraged. The plan is the first Servicewide review of museum storage needs that involves park curatorial staff, superintendents, regional staff, and the Washington Office.

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⁹ The Model is a computer program for predicting realistic project size. It was developed to establish consistent facility development practices.

To begin the planning process, each region sent a representative who could speak for the Regional Director to an August 2005 workshop coordinated by the Park Museum Management Program, in Washington, DC.¹⁰ The workshop participants established the goals, strategies, guidelines, and criteria for the plan. They determined which data to collect and worked with the parks and the Washington Office to collect, aggregate, and verify the data. This resulted in the first Servicewide interface between FMSS data (facility data) and ACP data (museum collection storage data).

Regional planners ran the Museum Collection Facility Planning Model for each park's collection. The Model is a benchmarking tool used to predict the facility size needed to store the park's collection and to produce results customized to the needs of a specific park collection. It is also an important tool developed by the NPS to respond to congressional and other concerns about the size, scope, and cost of proposed museum facilities.

The planning team participated in monthly teleconferences to discuss issues and chart progress and kept the regional leadership apprised of the planning process. Regions notified park managers of the plan and the need for data. Park staff with curatorial responsibilities provided supporting information and verification of existing conditions.

All parks had the opportunity to review their regional plans and submit comments and concerns. Upon completion of park and regional review, the plans were presented to the Regional Directors for signature. All plans were signed by June 2006.

Appendix E: Duties and Responsibilities for Collections Management, Curation, Archives, and Conservation⁶²

Collections Manager: Collections managers provide front-line management of collections at parks and centers. Collections managers often begin their careers as museum technicians, and may eventually move on to the:

- curator track
- conservator track

Occasionally, this path can lead to the archivist track. Typically, the collections manager will have an academic degree in museum studies, museology, archeology, natural science, or a related field.

Curator: Curators are responsible for the acquisition, documentation, preservation, and use of collections. Typically, the support office, regional, or center curator will provide technical assistance to field staff in carrying out their responsibilities. Within this track there are three separate sub-tracks or specializations:

- o program management
- exhibit development
- subject matter expert

Typically, the curator will have an academic background in American studies, anthropology, history, a natural science discipline, museum studies, or a related field. Experience in addition to education is necessary at the developmental level. As their careers progress, curators should obtain additional education and experience in museum management, exhibit development, or their subject matter specialization.

Archivist: Archivists evaluate, survey, acquire, preserve, arrange, describe, use, and manage archival and manuscript collections. Such collections can include audio-visual, electronic, and textual records. Typically, archivists at the entry or developmental level have a master's degree in library science or history with a specialization in archives management. Archivists gain extra training through a combination of education and experience. They also will have considerable additional experience under the tutelage of another professional. The Society of American Archivists (SAA) and the Academy of Certified Archivists (ACA) both formally endorse archival certification and the hiring of certified archivists.

Conservator: Conservators provide specialized experience in preventive conservation and treatment of collections. Typically, conservators have graduated from a recognized conservation training program. At the entry level, conservators will have both academic training and considerable experience in either a broad range of conservation issues or a narrowly focused group of materials.

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⁶² Taken directly from NPS Museum Handbook, Part I (2003), 12:19

Appendix F: Smithsonian Collections Space Framework Plan Overview







Smithsonian Collections Space Framework Plan

Although the Smithsonian had made significant improvements in collections care and space through major Facilities Capital projects in recent years, the collapse of Building 21 at the Paul E. Garber Facility of our Suitland campus in Maryland on February 10, 2010 during the "Snowmageddon" winter storm served as a wake-up call and catalyst for our collections space planning initiative – recognizing substandard conditions existed in some facilities housing collections and the need for short and long-term planning to address current and future Smithsonian collections space needs.

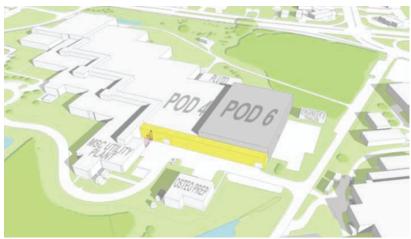
In September 2010, the Smithsonian launched a multi-year, highly collaborative pan-Institutional collections space planning initiative to document, analyze, and plan for addressing the Institution's current and future collections space needs in a pragmatic, strategic, and integrated manner. With these goals in mind, the Smithsonian established an interdisciplinary Collections Space Steering Committee, co-chaired by the National Collections Program and Smithsonian Facilities, to assess current collections space conditions and to develop a framework plan with near, intermediate, and long-term recommendations for addressing current and projected pan-Institutional collections space requirements. The planning initiative was conducted by Smithsonian collections and facilities staff with assistance from a team of consultants led by the architecture and planning firm of Ayers Saint Gross.

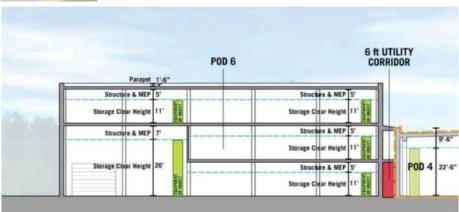
As part of this initiative, the Smithsonian completed a first-of-its-kind survey of existing collections space (owned and leased space) — representing more than 2.1 million square feet of space, or 17.5% of total Smithsonian building space. The survey provided a snapshot of current collections space conditions and characterized the quality of collections space, storage equipment, accessibility, environmental conditions, security, and fire safety. The resultant Smithsonian Collections Space Framework Plan (CSFP), issued in FY 2015, serves as a roadmap to guide short- and long-term facilities capital, real estate, and collections care projects, providing renovation and new construction strategies that address unacceptable collections space conditions, allows for decompression of overcrowded collections to make them more physically accessible, anticipates future collections growth, and eliminates reliance on lease space for collections storage.

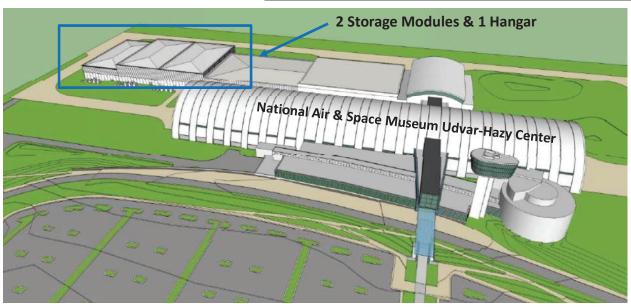
The Framework Plan has transformed the future of Smithsonian collections space. Existing conditions have been documented in a collections space database which is routinely updated and analyzed to identify future projects to improve overall conditions. Projects include renovations to existing facilities, new construction and equipment procurements all incorporated into a 30-year implementation plan. The Framework Plan has already had a major impact by programming and securing funding for critical space improvements at the Paul E. Garber Facility, the Museum Support Center, the Dulles Collections Center, and on the Mall.

To address near-term space requirements, the implementation of the Framework Plan includes (1) the completion of the decontamination of collections in Garber Buildings 15, 16, and 18 (two of the buildings are now complete, while the third building is on hold until we secure more swing space) including processing, rehousing, and temporary storage in Building 37; (2) the construction of Pod 6 at

MSC to address the critical need to relocate at-risk collections from the Paul E. Garber Facility and several Mall museums; (3) the construction of two new storage modules (Module 1 is 98% complete) and a hangar adjacent to the Udvar-Hazy Center to support the continued move of Air and Space Museum collections from substandard conditions at the Garber Facility and the immediate need for temporary collections swing space during the NASM Mall Building revitalization, and (4) the completion of the Suitland Collections Center Master Plan. To address intermediate and long-term collections space needs, the Framework Plan supports a phased development of the Garber Facility and Dulles campus. The summary report of the Collections Space Framework Plan is available at https://www.si.edu/Content/Pdf/About/2015-Collections-Space-Framework-Plan.pdf







Appendix G: Bibliography

115th Congress, 2d Session. "Department of the Interior, Environment, and Related Agencies Appropriations Bill, 2019." Washington, DC: United States Senate, 2018. Report 115-276.

Actionable Science Work Group Advisory Committee on Climate Change & Natural Resource Science. "Guiding Principles and Recommended Practices for Co-Producing Actionable Science: a How-To Guid for DOI Climate Science Centers and the National Climate Change and Wildlife Science Center." 2015.

American Alliance of Museums. *A Snapshot of US Museums' Response to the COVID-19 Pandemic.* July, 22 202,

American Alliance of Museums. *Code of Ethics for Museums*. 2002 (accessed September 10, 2020). https://www.aam-us.org/programs/ethics-standards-and-professional-practices/code-of-ethics-for-museums/

American Association for the Advancement of Science. "Connecting Scientists to Policy Around the World: Landscape Analysis of Mechanisms Around the World Engaging Scientists and Engineers in Policy." 2017.

Department of the Interior. *Unified Interior Regional Boundaries*. https://www.doi.gov/employees/reorg/unified-regional-boundaries (accessed July 15, 2020).

General Services Administration. *Federal Management Regulation*. Part 102-73 Real Estate Acquisition §102-73.165. reviewed June, 17 2020.

https://www.gsa.gov/policy-regulations/regulations/federal-management-regulation-fmr/i450672.

Mackintosh, Barry. *Philanthropy and the National Parks in the 20th Century*. National Park Service. July 6, 2018. https://www.nps.gov/articles/philanthropy-and-the-national-parks.htm.

National Park Service. *About Us.* April 27, 2020. https://www.nps.gov/aboutus/index.htm (accessed July 12, 2020).

National Park Service. "Collection Storage – Making a Case for Microenvironments. Cultural Resources Management. Supplement Volume 15, NO. 4. 1992. http://npshistory.com/newsletters/crm/crm-v15n4s.pdf.

National Park Service. *Director's Order #11D: Records and Electronic Information Management*. January 6, 2012. https://www.nps.gov/policy/DOrders/DO_11D.pdf.

National Park Service. *Making Friends: An Introduction to Building National Park Service Friends Groups*, Chapter 1. March, 2008. http://npshistory.com/publications/rtca/making-friends.pdf.

National Park Service. *Museum Collections*. accessed September 10, 2020. https://museum.nps.gov/ParkIndex.aspx#.X1pL3nlKjIU.

National Park Service. "Museum Handbook Part I Chapter II: Scope of Museum Collections." *NPS.gov.* https://www.nps.gov/museum/publications/MHI/Chapter%202.pdf (accessed July 10, 2020).

National Park Service. *Museum Management Program*. May 18, 2020. https://www.nps.gov/orgs/1454/index.htm#:~:text=There%20are%20388%20parks%20with,continue%20to%20inspire%20the%20world (accessed July 12, 2020).

National Park Service. "The Museum Handbook Part II Chapter II: Accessioning.". https://www.nps.gov/museum/publications/MHII/mh2ch2firstfile.pdf (accessed July 10, 2020).

National Park Service. *Organizational Structure of the National Park Service*. accessed September 10, 2020. https://www.nps.gov/aboutus/organizational-structure.htm.

National Park Service, Archeology Program. *The Native American Graves Protection and Repatriation Act (NAGPRA)*, 2000. https://www.nps.gov/archeology/tools/laws/nagpra.htm.

National Park Service, Cultural Resources, Partnerships, and Science Directorate. *What We Do.* accessed September 10, 2020. https://www.nps.gov/orgs/1345/whatwedo.htm.

National Park Service U.S. Department of Interior. *Park Museum Collection Storage Plan*. March 15, 2007.

National Postal Museum, Smithsonian Institution. *Agents of Deterioration*. accessed September 10, 2020. https://postalmuseum.si.edu/collections/preservation/agents-of-deterioration.html.

"Networks", International Council of Museums, Committee for University Museums and Collections, accessed September 10, 2020,

http://umac.icom.museum/resources/networks/#:~:text=Networks%20%E2%80%93%20Inter national%20Council%20of%20Museums%20Committee%20for%20University%20Museums%20and%20Collections&text=There%20are%20many%20formal%20and,and%20collections%20in%20the%20world.&text=UMAC%20strongly%20encourages%20academic%20museums,university%2C%20regional%20and%20national%20levels.

Office of Personnel Management. *Policy Classification Flysheet for Records and Information Management Series, 0308.* March 2015. https://www.opm.gov/policy-data-oversight/classification-qualifications/classifying-general-schedule-positions/standards/0300/gs0308.pdf.

Smithsonian Institution. *Smithsonian Collections Space Framework Plan*. February 2015. https://www.si.edu/Content/Pdf/About/2015-Collections-Space-Framework-Plan.pdf.

United States General Services Administration. *Federal Management Regulations*. Part 102-73 Real Estate Acquisition §102-73.165. Reviewed June 17, 2020. https://www.gsa.gov/policy-regulations/regulations/federal-management-regulation-fmr/i450672

United States Office of Management and Budget. *OMB Circular No. A-11: Section 230-2*. Washington, DC: Executive Office of the President, 2020

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