

Deferred Maintenance and Repair at Civilian Agencies: Causes, Risks, and Policy Options

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SUMMARY

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Federal civilian agencies own more than 285,000 buildings and structures, which have been acquired over time to help the government achieve its objectives. As these assets age, their component systems, such as roofs and pipes, require ongoing maintenance to ensure they function properly and remain in service as long as possible. When needed maintenance and repairs are deferred to a future time, then the problem may become more costly, more severe, and shorten the life of the asset. In some cases, deferred maintenance and repairs (DMR) may place the health of employees or the ability of an agency to accomplish its mission at risk. DMR may also impact the public's ability to access public lands and historic locations owned by the federal government.

DMR has been a long-standing concern for stakeholders, and was one of the primary reasons that the Government Accountability Office (GAO) identified federal real property management as a high-risk issue in 2003. In an effort to improve DMR management and oversight, the government adopted new accounting standards which require agencies to include DMR estimates in their financial statements. In addition, GAO published a set of nine best practices for DMR management that, while not mandatory, have been adopted, at least in part, by many agencies. Congress has sought to direct additional funds towards DMR backlogs at several agencies.

Despite these efforts, the DMR backlog continues to grow: in FY2022, federal civilian agencies collectively reported a DMR liability of \$80 billion, an increase of 57% over five years. Some agency officials say that their DMR is largely a result of chronic underfunding. The General Services Administration (GSA), for example, has received billions less in appropriations in the past 15 years than were available in the Federal Buildings Fund (FBF), a revolving fund from which all of GSA's real property activities are supported. Some agencies note that their portfolios are aging rapidly, and that older assets need increasing amounts of maintenance to function adequately. Inflation has also increased the cost of DMR projects, as labor and material prices have risen sharply since 2019, and staff shortages have impacted the size and productivity of maintenance teams at some agencies. The increase in DMR liabilities may also be partially attributable to changes in the methods agencies use to collect data and develop cost estimates.

There are a variety of approaches that might be considered to address the DMR backlog. One strategy for reducing DMR is to dispose of assets that are not critical to an agency's mission, such as by sale, donation, or demolition. Agencies might be able to dispose of multiple properties with high DMR liabilities by including them in the expedited disposal program established under the Federal Assets Sale and Transfer Act, although that program is temporary and nearing the end of its authority. Agencies may also be able to reduce their DMR backlogs by expanding their use of public-private partnerships, particularly where a private sector company funds improvements to a federal property in exchange for use of that asset or a portion of the savings generated by the improvements the company made. Another option, which has been proposed by both parties and is included in GSA's FY2025 budget request, would be to establish a capital revolving fund for major civilian construction and renovation projects. Proponents of the revolving fund argue that if large-dollar projects were funded outside of agency capital budgets, then agencies would have more funds to apply to their DMR needs, although GSA did not provide details of how the fund would operate. GSA has also proposed statutory language that would give it the permanent authority to access all of the revenue paid into the FBF.

In addition, oversight of DMR might be enhanced if the government's central source of data on agency real property assetsthe Federal Real Property Profile (FRPP)—was expanded and revamped. The FRPP was established in legislation, with the express purpose of being a resource that stakeholders, including the public, could use to hold agencies accountable for how they spend taxpayer funds. However, the FRPP was not implemented as a database but as a massive spreadsheet with more than 100,000 rows—a format that may be cumbersome and deter some people from using it. Redesigning the FRPP so that it is easier to search for, sort, and download data might increase the ability of stakeholders to perform oversight and analysis of federal real property. If DMR data elements were included in the FRPP—such as the amount of DMR estimated for each asset and how much an agency expends each year on DMR projects—then policymakers would have an additional tool for making informed decisions.

Contents

| Background | 1 |
|---|----------|
| Cost Concerns | 2 |
| Mission Execution and Safety Concerns | 3 |
| Public Access to Federal Facilities | 4 |
| Efforts to Address DMR | 4 |
| Reporting Requirements | 4 |
| High-Risk Designation | |
| Best Practices | <i>6</i> |
| Hearings and Legislation | 7 |
| Factors that Contribute to DMR Growth | 8 |
| Funding Constraints | 8 |
| Aging Portfolios | |
| Inflation | |
| Staffing Issues | |
| Data Limitations | |
| Considerations for Congress. | 13 |
| Expedited Disposal Authority Under the Federal Assets Sale and Transfer Act | |
| Public Private Partnerships | |
| Federal Capital Revolving Fund (FCRF) | |
| Federal Buildings Fund | |
| Unobligated Balances in the FBF | |
| Concluding Observations | 18 |
| Conditions of the Availability of Appropriations | |
| Execution of Enacted Budgetary Legislation | |
| Unobligated Funds | |
| | |
| Figures | |
| Figure 1. The Alexander Hamilton U.S. Custom House | 1 |
| Tables | |
| Table 1. Average Useful Lifespan of Selected Building Component Systems | 2 |
| Table 2. Number and Median Age of Owned Assets at Selected Agencies | |
| Tuble 2. Ivalifor and Median rige of Switch ribbets at Science Tigenores | |
| Appendixes | |
| Appendix | 19 |
| Contacts | |
| Author Information | 21 |



Background

Federal civilian agencies own more than 110,000 buildings and 175,000 structures with a replacement value of more than \$1.2 trillion. These assets have been acquired over time to assist the government in accomplishing diverse objectives. Federal buildings provide space for courthouses, laboratories, museums, and program administration, among other things, while structures include parking lots, monuments, roads and bridges, and utility systems like hydroelectric dams. In addition to facilitating the work of federal agencies, government-owned buildings and structures may be considered important for their historic, cultural or architectural value. The National Park Service (NPS), for example, owns the Lincoln Memorial in Washington, D.C., and the General Services Administration (GSA) owns the Alexander Hamilton U.S. Custom House in New York, NY, which is considered a classic example of Beaux-Arts architecture.



Figure 1.The Alexander Hamilton U.S. Custom House

Notes: Beaux-Arts architecture is characterized by its incorporation of classical Greek and Roman design elements, such as stone construction, embedded statuary, and columns.

Agencies are obligated to ensure that these assets operate cost effectively, retain their functionality and character, and provide safe work environments that are conducive to productivity.⁴ Given that buildings and structures, including their component systems, have finite lives, maintenance and repairs are needed to keep each property performing at an acceptable level. Electrical systems, roofs, pipes, and elevators, for example, often must be repaired or replaced during the useful life of a building or structure. **Table 1** provides the estimated lifespan of selected building components.

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¹ Replacement value is defined by the General Services Administration as the cost to design, acquire, and construct an asset with the same functionality, size, and in the same location as the asset it would replace. This is not equivalent to fair market value, which estimates the sale price of the current property. Federal Real Property Council (FRPC), *FY2024 Guidance for Real Property Inventory Reporting*, April 2024, pp. 21-22, at https://www.gsa.gov/policy-regulations/policy/real-property-policy-division-overview/asset-management/federal-real-property-council/frpc-guidance-library.

² Ibid.

³ New York Landmarks Conservancy, "National Museum of the Indian and U.S. Customs House," at https://nylandmarks.org/explore-ny/national-museum-of-the-american-indian-u-s-custom-house/.

⁴ GAO, Federal Real Property: Government's Fiscal Exposure from Repair and Maintenance Backlogs Is Unclear, GAO-09-10, October 2006, p. 6, https://www.gao.gov/assets/290/282802.pdf.

Table I. Average Useful Lifespan of Selected Building Component Systems

| Component System | Useful Life |
|---------------------------------------|----------------|
| Fire alarm activation (pull stations) | 10 years |
| Ceiling tiles | 13 years |
| Elevator hydraulic power unit | 15 to 35 years |
| Rooftop air conditioners | 18 to 20 years |
| Asphalt roof shingles | 18 to 25 years |
| Light fixtures | 20 years |
| Windows | 30 years |
| Plaster or drywall ceilings | 30 years |
| Exposed outside paving | 30 years |
| Water pipes | 30 years |
| Wiring | 30 to 40 years |
| Glass curtain wall (exterior facade) | 50 years |

Source: Building Owners and Managers Association, International, "Preventive Maintenance Guidebook: Best Practices to Maintain Efficient and Sustainable Buildings," 2010, pp. 76-80, at https://icap.sustainability.illinois.edu/files/projectupdate/2289/Project%20Lifespan%20Estimates.pdf.

Notes: The actual useful life of a building component may be influenced by a number of factors, including the number of hours the system is used, the regularity of preventive maintenance, and the climate in which the asset is located.

When agencies provide timely maintenance and repairs, they extend the useful lives of their assets and preserve their value. For a variety of reasons—including a lack of funding, staff shortages, and ineffective property management practices—maintenance and repairs may not be completed on schedule. If agencies delay performing needed maintenance and repairs to a future time, they often see an increase in operating costs as their systems become less efficient, a decrease in asset functionality, and a fiscal liability that grows until the needed work is completed. Should a component system deteriorate significantly, then emergency repairs may be required, which may cost three to ten times more than preventive maintenance. Unaddressed maintenance and repair needs may also result in health and safety issues for those who use federal facilities.

Cost Concerns

The government's deferred maintenance and repairs (DMR) backlog is a substantial and growing fiscal liability. The most recent estimate for federal civilian agencies' DMR (FY2022) was \$80 billion,⁶ with several agencies reporting multi-billion-dollar backlog, including

• Department of the Interior (DOI) - \$30.1 billion,

⁵ GSA OIG, *Audit of Public Building Service's Effectiveness in Managing Deferred Maintenance*, Report A190066, September 30, 2021, p. 14, at https://www.gsaig.gov/sites/default/files/audit-reports/A190066%20-%20Final%20Report%20-

^{% 20} Audit % 20 of % 20 PBS % 20 Effectiveness % 20 in % 20 Managing % 20 Deferred % 20 Maint % 20-% 20 Issued % 20-% 2050 8% 20 Compliant % 20% 281% 29. pdf.

⁶ GAO, Federal Real Property: Agencies Should Provide More Information About Increases in Deferred Maintenance and Repair, GAO-24-105485, November 2023, p. 10, at https://www.gao.gov/assets/d24105485.pdf.

- Department of Energy (DOE) \$10.8 billion,
- Department of Health and Human Services (HHS) \$4.7 billion, and
- General Services Administration (GSA) \$3.7 billion.

Due to a number of factors discussed later in this report, civilian agencies' DMR estimates have increased sharply in recent years, jumping 57% from FY2017 through FY2022.⁷ Among the agencies with the fastest growing DMR estimates are DOE, whose estimate increased 35% from FY2018 to FY2019, and the Department of State, whose estimate increased 3,025% (\$96 million to \$3 billion) from FY2019 to FY2020.⁸ Writing about this rapid growth, GAO noted

These large backlogs influence agencies' abilities to carry out their missions and represent the cost the federal government may have to pay in the future to ensure the agencies' assets can support their infrastructure needs.⁹

Mission Execution and Safety Concerns

DMR may constrain an agency's ability to fulfill its mission. The risk of compromising mission execution due to severe deterioration tends to increase as facilities age. The National Aeronautics and Space Administration (NASA), for example, noted in its FY2023 budget request documents that

NASA's missions depend on a 60+ year old foundation of infrastructure that requires repairs and replacements to ensure safety, reliability, accountability, and readiness. ... [The agency's] degraded electrical systems and buildings pose imminent danger to the workforce. Arc flashes and crumbling facilities are routine problems in occupied and mission-critical buildings ... NASA's mission tempo to reach ... milestones and expand scientific discoveries is not possible with the current, antiquated electrical, water, and other utility systems.¹⁰

DMR has also caused safety concerns for some federal employees in GSA-controlled buildings. In 2024, the GSA Office of the Inspector General (OIG), acting on a tip from an agency employee, reported that GSA had not addressed asbestos in part of the St. Elizabeth's campus in Washington, D.C., nor had it notified building occupants of the presence and location of asbestos, in violation of Occupational Safety and Health Administration regulations. The report similarly found that the agency may have endangered the health of people at the Goodfellow Federal Complex in St. Louis, MO, by not adequately addressing environmental hazards at the complex, such as lead, asbestos, and other cancer-causing agents. These examples are part of the backlog of nearly 36,000 unresolved "risk conditions" at GSA buildings, including obstructions that block fire exits and the presence of hazardous materials.

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⁷ GAO, Agencies Should Provide More Information, p. 10.

⁸ GAO, Federal Real Property: Agencies Attribute Substantial Increases in Reported Deferred Maintenance to Multiple Factors, GAO-23-106124, October 2022, p. 7, at https://www.gao.gov/assets/gao-23-106124.pdf.

⁹ GAO, Agencies Should Provide More Information, p. 39.

¹⁰ NASA, "NASA Infrastructure Challenges and Priorities: Opportunities in the FY23 President's Budget Request," at https://www.nasa.gov/wp-content/uploads/2022/07/msd_nasa_pbr_priorities_factsheet_final_copy.pdf.

¹¹ GSA, Audit of PBS National Capitol Region's Asbestos Management in Building 40 of the St. Elizabeth's West Campus, May 2024, p. 5, at https://www.gsaig.gov/sites/default/files/audit-reports/A230046-2%20Final%20Report%20-%20508%20Compliance.pdf.

¹² Ibid., p. 4.

¹³ GSA OIG, Assessment of a Hotline Complaint: GSA's Public Building Service Faces a Significant Backlog of Open Occupational Safety and Health, and Fire Risk Conditions, August 2024, p. 3, at https://gsaig.gov/sites/default/files/audit-reports/A230075%20-%20Final%20Memorandum.pdf.

Public Access to Federal Facilities

The consequences of DMR backlogs may also directly impact the public. For example, a patient at an Indian Health Service (IHS) medical facility was injured when he fell across a gap between the emergency department entrance and the outdoors—a byproduct of the building's sinking foundation.¹⁴ Similarly, DOI has closed buildings at national parks due to the hazards posed by mold, including lodging and restaurants.¹⁵

Efforts to Address DMR

The longer the government's growing DMR backlog remains unaddressed, the more it will ultimately cost taxpayers to remedy, and the greater the risks to agencies in terms of mission execution and employee safety.

Notwithstanding the scale and growth of DMR estimates, key stakeholders in the government have taken steps to improve oversight and management and agencies' DMR backlogs. These stakeholders—including the Federal Accounting Standards Advisory Board (FASAB), GAO, and Congress—have set standards for the collection and reporting of DMR estimates, promoted best practices for DMR management, and proposed or implemented policies that seek to reduce DMR liabilities and preserve the value of federal buildings and structures.

Reporting Requirements

Agency financial statements are prepared and audited in accordance with guidance issued by FASAB¹⁶ and incorporated in OMB Circular A-136, *Financial Reporting Requirements*.¹⁷ In 1995, FASAB first issued guidance that required agencies to report DMR as part of their annual financial statements, beginning with FY1998.¹⁸ In this guidance, Statement of Federal Financial Accounting Standards (SFFAS) 6, FASAB noted that incorporating data on plant, property, and equipment (PPE) into agencies' financial statements—including real property DMR—would help stakeholders assess operating performance and asset stewardship.¹⁹ According to FASAB, PPE accounting standards facilitate the evaluation of operating performance if the standards result in:

- relevant and reliable cost information for decision-making by internal users, such as program managers and budget examiners;
- comprehensive, comparable cost information for decision-making and program evaluation by Congress and the public; and

¹⁴ GAO, *Indian Health Service: Many Federal Facilities Are in Poor or Fair Condition, and Better Data Are Needed on Medical Equipment*, GAO-24-105723, November 2023, p. 48, at https://www.gao.gov/assets/d24105723.pdf.

¹⁵ DOI Office of the Inspector General, *The National Park Service Faces Challenges in Managing Its Deferred Maintenance*, 2020-CR-066, September 2023, p. 19, at https://www.doioig.gov/sites/default/files/2021-migration/Final%20Evaluation%20Report_NPS%20Deferred%20Maintenance_Public.pdf.

¹⁶ FASAB submits proposed accounting standards to the Director of the OMB and the Comptroller General at GAO, and the Secretary of the Treasury. If neither OMB nor GAO objects—Treasury does not have the right to object—then the proposal is adopted by the government. See https://fasab.gov/about-fasab/fasab-history/the-history-of-fasab/.

¹⁷ OMB, Circular A-136: Financial Reporting Requirements, May 2023, p. 109, at https://www.whitehouse.gov/wp-content/uploads/2023/05/A-136-for-FY-2023.pdf.

¹⁸ FASAB "Statement of Federal Financial Accounting Standards 6," November 1995, p. 1, at https://files.fasab.gov/pdffiles/handbook_sffas_6.pdf. This guidance was amended by Statement of Federal Financial Accounting Standards 42, in 2012, at https://files.fasab.gov/pdffiles/handbook_sffas_42.pdf.

¹⁹ Ibid., p. 8.

• information to help assess the efficacy and effectiveness of asset management, specifically related to asset condition and DMR.

FASAB also states that PPE accounting standards are useful for evaluating stewardship—the management of assets with indeterminable value, such as national forests or historic monuments—if they result in reporting information on:

- asset condition;
- changes in the amount and service potential of assets;
- costs associated with assets; and
- spending for the acquisition of assets compared to non-capital expenses.

In 2012, SFFAS 6 was replaced by SFFAS 42,²⁰ which is still in effect. SFFAS 42 defines key terms and provides additional requirements for measuring and reporting DMR. It defines *maintenance* as

activities directed towards keeping fixed assets in an acceptable condition. Activities include preventive maintenance; replacement of parts, systems, or components; and other activities needed to preserve or maintain the asset. Maintenance and repairs, as distinguished from capital improvements, exclude activities directed towards expanding the capacity of an asset or otherwise upgrading it to serve needs different from, or significantly greater than, its current use.²¹

Deferred maintenance is defined as

maintenance and repairs that were not performed when they should have been or were scheduled to be and which are put off or delayed for a future period. ²²

Agencies have flexibility in how to implement federal accounting standards. For example, SFFAS 42 directs agencies to ascertain DMR amounts in one of three ways: (1) periodic condition assessment surveys, essentially a visual inspection of each asset; (2) life-cycle costing, a modeling technique that forecasts DMR over time; or (3) a method that is similar to assessment surveys or life-cycle costing. As a result of this flexibility, there is variation between and within agencies. For example, the Department of Veterans' Affairs (VA) hires an inter-disciplinary team of contractors to visually assess all of its buildings on a three-year cycle, while the DOE inspects its facilities on a five-year cycle. Within DOE, the National Nuclear Security Administration (NNSA), estimates its DMR costs by combining visual inspection data with a lifecycle costing program. ²⁵

Agencies are also allowed to define what they consider to be acceptable condition and establish their own criteria for prioritizing DMR projects. NASA, for example, prioritizes DMR based on mission need, health, safety, fire detection and protection, and environmental requirements.²⁶ The

²⁰ FASAB, "Statement of Federal Financial Accounting Standards 42," April 2012, at https://files.fasab.gov/pdffiles/handbook_sffas_42.pdf.

²¹ Ibid., p. 5.

²² Ibid., p. 5.

²³ VA, *FY2023 Agency Financial Report*, November 2023, p. 110, at https://department.va.gov/wp-content/uploads/2023/11/2023-va-afr-full-report.pdf.

²⁴ DOE, *FY2023 Agency Financial Report*, November 2023, p. 152, at https://www.energy.gov/sites/default/files/2023-11/fy-2023-doe-agency-financial-report_0.pdf.

²⁵ Ibid

²⁶ NASA, *FY2023 Agency Financial Report, November 2023*, p. 78, at https://www.nasa.gov/wp-content/uploads/2023/11/fy2023-afr-111323-version5-d-final-tagged.pdf.

Department of Labor immediately funds DMR projects related to life safety and health issues, and then funds additional projects based on their condition and programmatic considerations.²⁷

SFFAS 42 requires agencies to provide narrative descriptions of their methodologies and policies and explain any changes to them from year to year. Generally, agencies include this required supplementary information in their annual financial reports, which also include their financial statements.

GSA publishes some data related to DMR, but the data are not equivalent to the estimates that agencies report in their financial statement. GSA maintains the Federal Real Property Profile (FRPP), a governmentwide database of federally owned and leased buildings, structures, and land. The FRPP includes a "repairs" amount for each asset that is the sum of deferred maintenance and repair estimates.²⁸ However, the repair estimates in the FRPP represent the cost to bring an asset to its "originally intended and designed capacity, efficiency, or capability"—a higher standard than "acceptable condition," which is the basis for DMR reporting under FASAB.²⁹ The DMR data in agency financial statements are therefore not comparable to the repair data in the FRPP.

High-Risk Designation

At the start of each new Congress, GAO typically publishes a list of "high-risk" issues that diminish the ability of the government to operate efficiently and effectively. GAO argues that this list helps policymakers develop and implement reforms that will save money and provide better outcomes for the American people.³⁰ Federal real property management was first included on GAO's high-risk list in 2003, in part because of concerns over the deterioration of federal assets resulting from DMR.³¹ In the report, GAO recommended addressing (1) DMR management, (2) the lack of reliable real property data, (3) the inability of agencies to dispose of unneeded assets in a timely manner, and (4) agencies' overreliance on acquiring expensive leased space.³²

Best Practices

GAO has identified nine best practices for DMR management.³³ As with much government-wide guidance, the best practices are not detailed plans that agencies must implement but principles that they should consider when managing their real property portfolios.

1. Establish clear maintenance and repair investment objectives and set priorities among outcomes to be achieved. For example, an investment objective might be to maintain mission-critical assets that provide the greatest return on investment of DMR funds. An agency prioritization strategy might be to fund projects that lead to compliance with federal energy standards.

²⁷ DOL, FY2023 Agency Financial Report, November 2023, p. 137, at https://www.dol.gov/sites/dolgov/files/OPA/ reports/2023annualreport.pdf.

²⁸ FRPC, FY2024 Guidance for Real Property Inventory Reporting, p. 22.

³⁰ GAO, High-Risk Series: An Update, GAO-03-119, January 2003, p.1, at https://www.gao.gov/assets/gao-03-119.pdf.

³¹ Ibid., pp. 23-25.

³² Ibid.

³³ GAO, Federal Real Property: Improved Transparency Could Help Efforts to Manage Agencies' Maintenance and Repair Backlogs, GAO-14-188, January 2014, pp. 14-16, at https://www.gao.gov/assets/gao-14-188.pdf.

- 2. Identify types of facilities or specific buildings that are mission-critical and mission-supportive. Some agencies prioritize funding for assets that provide essential support for their missions and minimize investments in assets that are not mission-critical.
- 3. Conduct facility condition assessments (FCAs) as a basis for establishing the level of funding required to reduce or eliminate deferred DMR. Best practices for FCAs include establishing timeframes for when DMR projects should be completed, and performing FCAs more frequently at facilities that have a higher risk of serious consequences from DMR.
- 4. Establish performance goals, baselines for outcomes, and performance measures for DMR investments. For example, an agency might set a goal of increasing the number of buildings rated in "good" condition by 10% in three years.
- 5. **Identify the primary methods to be used for DMR activities**. An agency may seek to reduce its DMR backlog by disposing of unneeded assets (e.g., sale, demolition, public benefit conveyance³⁴) in a timely manner, replacing aging assets with new construction, upgrading systems through public-private partnerships (see "Public Private Partnerships" section) or traditional repair-or-replace projects, among other methods.
- 6. Employ models for predicting the outcome of investments, analyzing tradeoffs, and optimizing among competing investments. Some agencies, for example, use DMR models that identify the replacement needs of an asset over a 10-year time frame.
- 7. Align real property portfolios with mission needs and dispose of unneeded assets. For example, agencies may reduce DMR by demolishing buildings and structures that are not mission critical and need extensive repairs.
- 8. **Identify the types of risks posed by a lack of timely investment.** For example, some agencies choose to prioritize DMR projects that address unacceptable risks, such as health and safety issues or structural issues.
- 9. **Separately identify funding allotted to DMR.** Agencies are not required to provide DMR data in their budget requests. However, some agencies provide "crosswalk" budget exhibits that show the amount of funding requested and expended on DMR projects.

Hearings and Legislation

Congress has introduced legislation and held hearings on DMR backlogs at civilian agencies. In the 118th Congress, the House Committee on Natural Resources held a hearing on the National Park Service's DMR backlog,³⁵ and Senator Mazie Hirono introduced S. 2589, the Augmenting Research and Educational Sites to Ensure Agriculture Remains Cutting-Edge and Helpful (AG

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³⁴ Public benefit conveyance is when the government transfers surplus real property, for up to no cost, to state or local governments, or qualified non-profits, for statutorily defined public purposes. For more information, see GSA's guide to acquiring surplus property for public purposes, at https://disposal.gsa.gov/resource/1530028366000/AcquiringFederalRealEstateForPublicUses.

³⁵ Hearings, House Committee on Natural Resources, Joint Subcommittee on Oversight and Investigations and the Subcommittee on Federal Lands, "National Park Service's Deferred Maintenance Backlog: Perspectives from the Government Accountability Office and the Inspector General," January 10, 2024, at https://naturalresources.house.gov/calendar/eventsingle.aspx?EventID=415353.

RESEARCH) Act of 2023, which would provide funding for DMR at the Department of Agriculture. In the 117th Congress, the Restore and Modernize our National Laboratories Act of 2021 (S. 2232) would have provided funding for DMR at Department of Energy laboratories, and the Inflation Reduction Act (P.L. 117-169) included appropriations for DMR projects at several agencies. In addition, the Committee on Transportation and Infrastructure (T&I), Subcommittee on Economic Development, Public Buildings, and Emergency Management held a hearing in June 2022, "Capital Investment Program: Identifying Risk to GSA Facilities," that focused on DMR in GSA's real property portfolio. In the 116th Congress, the Great American Outdoors Act of 2020 (P.L. 116-152) established the Legacy Restoration Fund (LRF) to increase funding available for DMR the Bureau of Land Management, the U.S. Forest Service, the Fish and Wildlife Service, and the National Park Service.³⁶ Revolving funds like the LRF will be discussed later in this report.

Factors that Contribute to DMR Growth

Many agencies have stated that their growing backlogs are a consequence of years of inadequate funding, aging portfolios, and staff shortages. Agencies also suggest that the recent spike in DMR is linked to inflation and changes in the way they collect their DMR data. Auditors have also found that incomplete and inaccurate data and poor contract management hinder DMR management and oversight.

Funding Constraints

DMR funding is generally drawn from agency maintenance and repair (M&R) appropriations, although some agencies have unique accounts for DMR, such as the LRF. Agency officials have long argued that they do not receive sufficient funding to meet their M&R needs. As a consequence, some M&R projects are delayed, leading to further deterioration of systems and components, thereby escalating the costs of repair and increasing the risk of failure.³⁷

In a 2009 report, officials at all six of the agencies visited by auditors linked their backlogs to a shortage of M&R funding.³⁸ Fourteen years later, agency officials again identified limited M&R funding as a major factor in the growth of their backlogs.³⁹ For example, DOI and HHS characterized funding constraints as having "significantly contributed" to their DMR backlogs, and officials from DOE said they lack the funding to properly address DMR in their laboratories, including for critical systems and utilities.⁴⁰ Similarly, NASA has reportedly estimated that it has a \$250 million annual maintenance funding gap each year.⁴¹

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³⁶ For more information on the Great American Outdoors Act or DMR at land management agencies, see CRS Report R43997, *Deferred Maintenance of Federal Land Management Agencies: FY2013-FY2022 Estimates and Issues*, by Carol Hardy Vincent.

³⁷ GAO, Federal Real Property: Agencies Should Provide More Information, p. 13.

³⁸ GAO, *Federal Real Property: Government's Fiscal Exposure*, p. 19. The agencies were the Department of Defense, the Department of Energy, DOI, GSA, NASA, and VA.

³⁹ GAO, Federal Real Property: Agencies Should Provide More Information, p. 13.

⁴⁰ Ibid.

⁴¹ Space News, "Can Space Investment become Cool Again?," September 7, 2023, at https://spacenews.com/foust-forward-can-space-investment-become-cool-again/.

GSA noted that funding for its repairs and alterations (R&A) program, which supports DMR projects, has been less than requested every year for over a decade. In total, GSA received \$7 billion less than it requested for R&A from FY2011 through FY2023. GSA argues that chronic underfunding is the driving force behind the agency's growing DMR backlog, which reached \$4.6 billion in FY2023. For example, DMR associated with air handling units in one GSA building grew from about \$10 million in FY2008 to about \$29 million in FY2019—an increase of 192%. Similarly, DMR associated with substructure (e.g., foundations, beams, columns) in another GSA building grew from about \$47 million in FY2017 to about \$71 million in FY2019—an increase of 50% in two years.

Aging Portfolios

As previously discussed, assets need increasing amounts of maintenance and repair as they age. By the time a building is 30 years old, it may require expenditures for the repair or replacement of windows, wiring, paving, pipes, and/or air conditioning units, among other costs. Some civilian agencies have asset portfolios where the median age nears or exceeds the 30-year mark, as shown in **Table 2**.

Table 2. Number and Median Age of Owned Assets at Selected Agencies FY2022

| 2022 | | | | |
|----------------------------|--------|--------|-------|-------|
| | DOE | DOI | GSA | HHS |
| Number of Buildings | 11,802 | 41,818 | 1,596 | 2,675 |
| Median Building Age (yrs) | 37 | 58 | 51 | 43 |
| Number of Structures | 8,177 | 88,071 | 198 | 75 |
| Median Structure Age (yrs) | 40 | 51 | 27 | 32 |

Source: GAO, Federal Real Property: Agencies Should Provide More Information About Increases in Deferred Maintenance and Repair, GAO-24-105485, November 2023, at https://www.gao.gov/assets/d24105485.pdf.

Notes: These data from GAO are as reported in the Federal Real Property Profile for FY2022.

Several agencies own thousands of assets, many of which have aging systems that have reached or exceeded their expected service lives. ⁴⁷ Moreover, DMR at older assets may be more complicated and require additional expense. DOI, for example, has noted that repairs to dams built between 1900 and 1950 are complicated, and DOE has stated that maintaining labs originally built in the World War II era is particularly challenging. ⁴⁸

⁴⁴ GSA, FY2024 Congressional Justification, p. 11.

⁴⁷ GAO, Federal Real Property: Agencies Should Provide More Information, p. 16.

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⁴² GSA, *FY2024 Congressional Justification: Federal Buildings Fund*, March 2024, p. 10. at https://www.gsa.gov/system/files/02.%20FY2025%20CJ%20FBF%20Narrative_Final.pdf.

⁴³ Ibid., p. 11.

⁴⁵ GSA OIG, *Audit of the Public Building Service's Effectiveness in Managing Deferred Maintenance*, September 2021, p. C-2, at https://www.oversight.gov/sites/default/files/oig-reports/GSA/A190066-Final-Report-Audit-PBS-Effectiveness-Managing-Deferred-Maintenance.pdf.

⁴⁶ Ibid

⁴⁸ Ibid., p. 13.

DMR in aging buildings may diminish the ability of the agency to provide an environment conducive to productivity and safety. A study commissioned by the Veteran's Health Administration found that the advanced age and underlying condition of its medical centers many of which had been constructed over 50 years ago—and the lack of investment in DMR were root causes of the diminished quality of their facilities.⁴⁹

Inflation

Inflation can further degrade the ability of agencies to address their DMR backlogs. When core construction costs—materials, equipment, and labor—increase, then agencies have less purchasing power. By one estimate, inflation eroded the purchasing power of maintenance and repair funding by 26% between FY2017 and FY2022, meaning it would take \$1 million in FY2022 to accomplish what \$740,313 would have accomplished in FY2017.⁵⁰ Material costs have been particularly impacted by inflationary pressures, increasing 42% from October 2019 through September 2023.51

Some agencies have said that construction cost inflation has had a notable effect on their DMR estimates, particularly in the past five to seven years.⁵² Officials at DOE's Brookhaven National Laboratory, for example, identified material and labor cost increases as the driving force behind the growth of the lab's DMR, and HHS cited inflation as one of the causes of the \$1 billion increase in its DMR over FY2020 and FY2021.⁵³ Similarly, in its FY2023 annual financial report, NASA cited inflation as a leading cause of the 25% increase in its DMR estimate from the prior year.54

Staffing Issues

Some agencies have said that their DMR backlogs have grown in part due to the inability to recruit and retain qualified maintenance and engineering staff. Officials at VA noted that many medical centers have difficulty filling positions for electricians, painters, and engineers, with the result that DMR projects were slowed or delayed.⁵⁵ For example, half of the staff engineering positions at two VA medical centers were vacant, ⁵⁶ and three of seven electrician positions at another medical center were unfilled.⁵⁷ VA noted that medical centers in high cost of living areas have a difficult time competing for skilled employees, particularly engineers, due to the higher rates of pay in the private sector.⁵⁸

⁵¹ GAO, Deferred Maintenance: Agencies' Project Selection and Challenges, GAO-24-107234, January 2024, p. 5, at https://www.gao.gov/assets/870/865099.pdf.

⁴⁹ GAO, VA Medical Centers: VA Should Establish Goals and Measures to Enable Improved Oversight of Facilities' Conditions, GAO-19-21, November 2018, p. 11, at https://www.gao.gov/assets/gao-19-21.pdf.

⁵² GAO, Federal Real Property: Agencies Should Provide More Information, pp. 13-14.

⁵³ Ibid., p. 14.

⁵⁴ NASA, FY2023 Annual Financial Report, November 2023, p. 78, at https://www.nasa.gov/wp-content/uploads/2023/ 11/fy2023-afr-111323-version5-d-final-tagged.pdf.

⁵⁵ GAO, VA Real Property: Enhanced Communication and Performance Measurement Could Improve Capital Asset Management, GAO-22-103962, October 2021, pp. 14-15, at https://www.gao.gov/assets/d22103962.pdf. ⁵⁶ Ibid.

⁵⁷ GAO, VA Medical Centers: VA Should Establish Goals and Measures to Enable Improved Oversight of Facilities' Conditions, GAO-19-21, November 2018, p. 14, at https://www.gao.gov/assets/gao-19-21.pdf.

⁵⁸ GAO, VA Real Property: Enhanced Communication, p. 15.

IHS has also said it has challenges hiring qualified maintenance staff.⁵⁹ IHS officials stated that, at one location, they have been unable to fill more than half of the vacancies for staff that inspect, operate, and maintain essential building components, such as electrical systems and HVAC systems.⁶⁰ IHS noted that potential candidates are often uninterested in working in rural locations that are remote.⁶¹

To meet these staff shortages, which extend to contracting officers and other administrative positions, agencies often resort to hiring less experienced or less qualified personnel than they would prefer. As a consequence, the quality and quantity of DMR-related tasks may suffer. IHS stated that the lack of experienced contracting personnel can delay the acquisition process, leading to higher costs and extending the time it takes to complete DMR projects. ⁶² Officials at VA cited multiple negative impacts of hiring inexperienced or underqualified staff, such as a decline in the quality of the proposals written to justify funding for DMR—which may result in fewer projects being funded—and the inability to ensure that all building deficiencies had been corrected in a timely manner. ⁶³

Auditors at GSA determined that Contracting Officer's Representatives (CORs) had performed inadequate oversight of operations and maintenance (O&M) contracts, with the result that many maintenance and repair projects were completed late or not at all.⁶⁴ GSA auditors examined 49 completed work orders and found that in 21 instances (43%), contractors had not finished the project within the required time frame.⁶⁵ For example, a routine repair of an emergency lighting component in the main electrical room of one GSA building—which should have been completed in 24 hours—was not done for four months, and went unreported by the COR.⁶⁶ In another example, auditors found that O&M contractors did not complete 69% of the work orders in the sample, and sometimes marked unfinished work as completed.⁶⁷ In one example, a contractor was required to replace a leaking pipe in the Jacob K. Javits Federal Building in New York, NY, that was dripping water onto an electrical panel that routed power to all of the equipment in the building. Although the contractor marked the work order as completed on November 14, 2022, the COR did not verify the work. When GSA auditors inspected the building on January 19, 2023, they found water was still leaking onto the panel, which could cause the electrical components to short circuit and possibly start a fire.⁶⁸

Data Limitations

The quality of federal real property data has been an issue for more than two decades. When GAO placed federal real property management on its high-risk list in 2003, it did so in part due to

61 Ibid.

⁶² Ibid., p. 27.

⁶⁶ Ibid., p11.

⁶⁷ Ibid., p. 4.

⁶⁸ Ibid., p 7.

⁵⁹ GAO, Indian Health Services: Many Federal Facilities Are in Fair or Poor Condition and Better Data Are Needed on Medical Equipment, GAO-24-105723, November 2023, pp. 28, at https://www.gao.gov/assets/d24105723.pdf.

⁶⁰ Ibid.

⁶³ GAO, VA Real Property: Enhanced Communication, p. 14.

⁶⁴ GSA OIG, Building Maintenance Contractors Are Not Complying with Their GSA Contracts Due to Poor Performance and Ineffective Oversight, p. 4, at https://www.gsaig.gov/sites/default/files/audit-reports/A230032-1%20-%20Final%20Report.pdf.

⁶⁵ Ibid., p 8.

concerns over "a lack of reliable governmentwide data for strategic asset management." Since then, numerous audits and analyses have found ongoing problems with federal real property data. In 2012, GAO wrote that inaccurate and inconsistent data may mean that the FRPP does not "provide an adequate tool for decision-making." In 2016, GAO concluded that agencies inconsistent collection and reporting approaches may have populated the FRPP with data that are not comparable across agencies and do not accurately capture the intended metric (e.g., an asset's operating costs or condition). In 2020, GAO assessed the FRPP again and found that key data elements are often incomplete or otherwise unusable. In 2021, the Public Buildings Reform Board (PBRB)—an independent committee that develops recommendations to reduce the size and cost of the federal portfolio —reported that there are "extraordinary issues with data gaps and data integrity within the FRPP" that impede the board's ability to fulfill its mission. In 2024, GAO wrote that GSA should prioritize implementation of an FRPP data improvement program.

DMR data have limitations that may diminish stakeholder oversight and hinder effective policymaking. In some cases, agencies are collecting and reporting inaccurate data. GSA included \$280 million in duplicative costs in its FY2019 estimate, ⁷⁶ and an audit by the DOI IG found that 54% of the work orders managed by Indian Affairs (IA) were incorrectly categorized in IA's facility management system, thereby misrepresenting the DMR needs of the agency. ⁷⁷ In other cases, agencies are not collecting and reporting complete DMR data. BLM has stated that it has not always had the resources to perform all of the assessments of DMR on roads, and therefore it reported incomplete data in the past. ⁷⁸ Similarly, some officials have said that they did not log complete DMR data because they did not believe the full amount would be funded. ⁷⁹ Without complete and accurate information, stakeholders may not understand the full scale of DMR risks and liabilities at an agency and therefore may craft policies that provide more or less funding than

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⁶⁹ GAO, High-Risk Series, p. 24.

⁷⁰ GAO, Federal Real Property: National Strategy and Better Data Needed to Improve Management of Excess and Underutilized Property, GAO-12-645, June 2012, p. 17, at https://www.gao.gov/assets/600/591751.pdf.

⁷¹ GAO, Federal Real Property: Improving Data Transparency and Expanding the National Strategy Could Help Address Long-Standing Challenges, GAO-16-275, March 2016, pp. 13-21, at https://www.gao.gov/assets/680/676253.pdf.

⁷² GAO, Federal Real Property: GSA Should Improve Accuracy, Completeness, and Usefulness of Public Data, GAO-20-135, February 2020, pp. 7-27, at https://www.gao.gov/assets/710/704358.pdf.

⁷³ The PBRB was established by the Federal Assets Sale and Transfer Act of 2016 (P.L. 114-287) to develop recommendations for the sale, conveyance, disposal, reconfiguration, and consolidation of federal real property assets, in an effort to generate revenue and reduce costs.

⁷⁴ PBRB, *High Value Assets Report: Key Findings and Recommendations Pursuant to the Federal Assets Sale and Transfer Act of 2016*, December 2019, p. 13, at https://www.pbrb.gov/pbrb/files/2021/01/20191227-High-Value-Assets-Report-as-Required-by-FASTA.pdf.

⁷⁵ GAO, *Priority Open Recommendations: General Services Administration*, GAO-24- 107316, May 2024, p. 2, at https://www.gao.gov/assets/gao-24-107316.pdf.

⁷⁶ GSA OIG, *Audit of the Public Buildings Service's Effectiveness in Managing Deferred Maintenance*, September 30, 2021, p. 7, at https://www.gsaig.gov/sites/default/files/audit-reports/A190066%20-%20Final%20Report%20-%20Audit%20of%20PBS%20Effectiveness%20in%20Managing%20Deferred%20Maint%20-%20Issued%20-%20508%20Compliant%20%281%29.pdf.

⁷⁷ DOI OIG, *Indian Affairs is Unable to Effectively Manage Deferred Maintenance of School Facilities*, 2022-CR-036, March 2024, p. 14, at https://www.doioig.gov/sites/default/files/2021-migration/FinalEvaluationReport_BIEDeferredMaintenance_Public.pdf.

⁷⁸ In 2018 the agency began implementing a cost modeling system that reduced the amount of staff hours needed to develop estimates and improved the accuracy of its estimates. See GAO, *Deferred Maintenance: Agencies' Project Selection*, p. 5.

⁷⁹ Ibid., pp. 5-6.

they might have with better quality data, or direct funding to different options (e.g., DMR contracts vs. additional agency staff).

Another limitation of DMR data is the lack of comparability across agencies and over time. As discussed previously, agencies are permitted to implement a variety of methods for calculating their DMR backlogs, resulting in estimates that cannot be compared. Agency estimates may not be comparable over time because methodological changes can significantly affect the total amount of DMR reported year-to-year. For example, the NNSA said that by updating its building data and implementing a new software application for calculating DMR costs between FY2018 and FY2019, the agency's DMR estimate increased by \$2 billion. Billion in FY2020 as the result of implementing a new methodology, and VA reported that after increasing the scope of its facility assessments, the DMR estimates for its facilities significantly increase[d]. The fact that several large landholding agencies made methodological changes in the past five fiscal years helps to explain the relatively rapid increase in DMR during that time frame. While these changes in methodology are intended to provide more accurate information, they highlight the degree to which DMR estimates are dependent on the unique methodology in place in the year the data are collected.

Considerations for Congress

There may be opportunities for Congress to address the \$80 billion DMR backlog and other related issues. The disposal of certain assets with high DMR liabilities, for example, might be incorporated into an existing real property initiative. Re-examining the potential benefits of public-private partnerships—which require no federal capital—might yield solutions for replacing aging building systems. A capital revolving fund for major construction and renovation projects might allow agencies to direct more funds towards DMR, and a new budget rule for GSA might help the agency address its rapidly growing backlog.

Expedited Disposal Authority Under the Federal Assets Sale and Transfer Act

One element of the best practices for DMR management is the timely disposal of unneeded or underutilized assets. The National Academy of Sciences (NAS) has argued that disposition is an essential function of managing deferred maintenance, as agencies should not retain "underutilized or unnecessary" properties and instead must "avoid portfolios that are too large or antiquated and cannot be properly maintained, repaired or replaced with available resources." Similarly, the disposal of unneeded space was a central objective of the Obama Administration's "National Strategy for the Efficient Use of Real Property 2015-2020," in part for its beneficial effects on DMR. Similarly is the control of the Obama Administration of the Obama Administration's "National Strategy for the Efficient Use of Real Property 2015-2020," in part for its beneficial effects on DMR.

⁸⁰ GAO, Federal Real Property: Agencies Should Provide More Information, p. 7.

⁸¹ GAO, Federal Real Property: Agencies Attribute, p. 7.

⁸² Ibid.

⁸³ VA, FY2023 Agency Financial Report, p. 110.

⁸⁴ National Academy of Sciences, *Strategies to Renew Federal Facilities*, 2023, p. 98, at https://nap.nationalacademies.org/catalog/26806/strategies-to-renew-federal-facilities.

⁸⁵ Obama Administration, *National Strategy for the Efficient Use of Real Property 2015-2020*, March 2015, pp. 4-5, at https://obamawhitehouse.archives.gov/sites/default/files/omb/financial/national-strategy-efficient-use-real-property.pdf.

When an agency disposes of a building or structure—whether by sale, donation, demolition, or other method—then the DMR associated with that asset is eliminated. Moreover, when an agency disposes of an asset then the agency no longer needs to account for that property in its capital planning, thereby "freeing up" funds for other projects, including DMR. Selling unneeded properties may also generate revenue that agencies—when authorized—may reinvest in their portfolios, and some may choose to fund additional DMR projects as part of that process. Fewer properties in an agency's portfolio also reduces the burden on maintenance teams, which may be short-staffed.

Under the traditional disposal process, agencies continually survey their properties to identify assets they do not need—excess properties—and report those assets to GSA for disposal. GSA then follows these statutory steps.

- Transfer: Excess properties are offered first to federal agencies for purchase at fair market value.
- Public Benefit Conveyance: If no federal agency acquires them, they are declared "surplus" and may be conveyed at up to no cost to state and local governments and qualified non-profits, provided they use the properties for statutorily specific public purposes.
- Negotiated Sale: Properties that are not conveyed are offered at fair-market value to state and local governments for public purposes other than those defined in statute.
- Public Sale: Properties which have not been disposed of by transfer, conveyance, or negotiated sale are offered for sale to the public via auction or a broker.

The traditional disposal process may, at times, cost agencies millions of dollars and take months to years to complete in keeping with historic preservation, homeless assistance, and environmental requirements. ⁸⁶ Indeed, the inability of the government to dispose of thousands of unneeded and underutilized properties in a timely manner has been one of the primary reasons that real property management has been on the high-risk list for 20 years, according to GAO. ⁸⁷

In an effort to streamline and expedite the disposal process, Congress passed the Federal Assets Sale and Transfer Act of 2016 (FASTA, P.L. 114-287). FASTA established a pilot program for disposing of multiple federal properties at one time using a new streamlined procedure. Under FASTA, each agency is required to develop a list of disposal recommendations, which could include the sale, transfer, conveyance, consolidation, or reconfiguration of any space, among other options. These recommendations are then to be submitted to the GSA Administrator and the Office of Management and Budget (OMB) Director for review and revision. The revised list of recommendations is then vetted by the newly established PBRB and returned to the OMB Director for final approval or disapproval. If approved, the recommendations must be implemented immediately. If OMB disapproves the list, the process ends without any disposals or other actions.

FASTA requires three rounds of recommendations, the first of which was approved by OMB in January 2020, and the second of which was rejected by OMB in January 2022. The third and final set of recommendations is being developed and must be submitted to OMB by December 2024.

⁸⁶ GAO, Federal Real Property: GSA Should Leverage Lessons Learned from New Sale and Transfer Process, GAO-23-104815, October 2022, p. 7, at https://www.gao.gov/assets/730/723248.pdf.

⁸⁷ GAO, *High-Risk Series: Efforts Made to Achieve Progress Need to be Maintained and Expanded to Fully Address All Areas*, GAO-23-106203, April 2023, pp. 55-56, at https://www.gao.gov/assets/gao-23-106203.pdf.

The See CRS Report R47308, *The Federal Assets Sale and Transfer Act: Background and Implementation*, for more information.

If FASTA were amended to permit future rounds, one disposal strategy might be to target older and non-mission-critical properties with significant DMR needs. Some agencies have found demolition to be an effective method of disposing of multiple properties with high DMR liabilities. NPS, for example, demolished 44 structures that posed a "serious threat" to public safety, and the Fish and Wildlife Service incorporated demolition into its disposal strategy to consolidate and modernize its facilities.⁸⁸

Public Private Partnerships

A public private partnership (PPP) is an agreement whereby a nonfederal partner acquires the right to use a real property owned or controlled by a federal agency—typically through a long-term lease—in exchange for redeveloping or renovating that property. The nonfederal partner is usually in the private sector, although nonprofits and state and local governments are also eligible. Whether implemented for redevelopment or renovation, the contributions of each partner are generally the same: The federal government provides real property—buildings, space within buildings, land, or structures—and the nonfederal partner provides capital for improvements to the property. The agency receives new or renovated space, or upgraded building systems in return, often at no cost.

PPPs may be useful for obtaining discounted or no-cost improvements to aging federal assets or assets for which DMR funding has proven difficult to obtain. While aging federal properties are often in poor condition, they may be in desirable locations where rental rates are high. The nonfederal partner may renovate the property and be able to recoup its costs through subleasing the improved space. In other cases, a nonfederal partner might have expertise in a particular type of renovation, such as installing energy efficient building systems, and enter into an agreement that pays for the costs of such renovations through the savings in operating costs. The nonfederal partner might also be able to renovate unneeded space in an older building and make it more mission-effective for the agency that holds it. For example, if an agency lacks funds to upgrade the electrical system, a nonfederal partner might perform the upgrade as part of a renovation and retain the rights to sublease the unoccupied space while sharing the revenue with the landholding agency. In another example, a nonfederal partner might raze the existing federal building or structure and construct a new one that includes space for federal agencies and other tenants to lease. Additional examples of how a PPP might be structured include the following:

- A federal agency owns a historic building that is unoccupied and in disrepair. The
 property is in a desirable location, and public and private entities are expected to
 be interested in acquiring space. A developer leases the property and renovates it
 in accordance with historic preservation requirements. The first floor is subleased
 by retailers, and the city government subleases the office space on the floors
 above.
- A federal agency owns land with a deteriorating office building and a small parking lot. The property is in a market where there is moderate to strong demand for private sector office space. The developer demolishes the existing building and constructs a larger, modern office building in its place that is partially occupied by the lessor and backfilled by businesses. The developer also replaces

⁸⁸ GAO, Deferred Maintenance: Agencies Generally Followed Best Practices in Selection but Faced Challenges, GAO-24-106495, January 2024, pp. 18-20, at https://www.gao.gov/assets/d24106495.pdf.

the parking lot with a garage that has enough space for the tenants and for public parking.

A federal agency's utility costs are above average due to antiquated heating and cooling systems. A business installs new, more energy efficient equipment. In return, the business is repaid for the cost of the equipment and installation, and receives 50% of the energy savings.

While PPPs could represent an opportunity for the government to reduce its DMR backlog without investing additional capital, there are potential concerns. PPPs can be complicated arrangements, requiring knowledge of a range of disciplines: real property, architecture, civil engineering, contracting, and law. An agency that lacks a staff with expertise in those disciplines could enter into an agreement that does not represent the best value for the government. Agency officials have acknowledged that "negotiating successful public private partnerships requires unique expertise and organizational experience" that they lack. 89 In addition, PPPs sometimes fall through when the private sector partner sets a value on the federal property at significantly less than the independent appraisal obtained by the agency. 90 Aligning government valuations with those of the private sector could enable agencies to enter PPP negotiations with a better understanding of the nonfederal partner's perspective and needs.

Federal Capital Revolving Fund (FCRF)

Under capital scoring rules, an agency may not build or purchase space unless it has sufficient capital on hand to pay for the entire cost of the project. 91 This differs from operational lease scoring, where agencies are required only to have enough funding to cover one year of rent prior to entering into a contract. ⁹² Given that construction and acquisition projects often cost tens of millions to hundreds of millions of dollars, it may take years for an agency to obtain funding for new federally-owned space. In the meantime, agencies retain older assets with higher DMR liabilities to meet their needs.

To address the need for upfront funding of capital projects, GSA has proposed establishing a Federal Capital Revolving Fund (FCRF) in its FY2025 budget justification. 93 The proposed FCRF would fund a limited number of "large dollar" civilian agency purchases, renovations, and construction projects.⁹⁴ The FCRF, which GSA would manage, would provide full, upfront funding for selected projects, and agencies would have up to 15 years to repay the fund in equal annual installments. 95 In this way, agencies would meet the capital asset scoring rules, as the FCRF would transfer the required upfront funding to the agency. GSA's FY2025 budget justification seeks an initial appropriation of \$10 billion.⁹⁶

More information may be needed to evaluate the FCRF proposal. For example: Is there an application process? What criteria are used to evaluate and rank applications? Will the chosen

⁸⁹ GAO, Federal Real Property: Public Private Partnerships Have a Limited Role in Disposal and Management of Unneeded Property, GAO-16-776R, August 2016, p. 3, https://www.gao.gov/assets/680/679352.

⁹⁰ GAO, Federal Real Property: Public Private Partnerships, p. 9.

⁹¹ OMB, Circular A-11, Preparation, Submission, and Execution of the Budget, Appendix B, December 2019, pp. 1-11, https://www.whitehouse.gov/wp-content/uploads/2018/06/a11.pdf.

⁹² Ibid.

⁹³ GSA, FY 2025 Congressional Justification.

⁹⁴ GSA, FY 2025 Congressional Justification, FCRF-3.

⁹⁵ Ibid., FCRF-2.

⁹⁶ Ibid., FCRF-3.

projects need to seek congressional authorization prior to being funded? What rules govern the use and repayment of funds? Once more information is provided, Congress may consult with the Congressional Budget Office to assess the proposal's potential budget implications.

Federal Buildings Fund

In FY2023, GSA reported a DMR backlog of \$4.6 billion, an increase of \$1.5 billion (48%) from its FY2022 estimate. With an inventory of nearly 1,600 owned buildings, GSA attributes its growing backlog to several factors, including inflation, more accurate estimates, and—most of all—the inability to access all of the resources in the Federal Buildings Fund (FBF).

When GSA was initially established, it was authorized to receive direct appropriations to fund all of its real property activities, which includes acting as a leasing agent for federal agencies. ⁹⁷ To provide a more predictable source of revenue for its operating and capital expenses, the Public Buildings Act Amendments of 1972 established the FBF within GSA. ⁹⁸ The FBF was designed as a revolving fund: GSA pays lessors for the space it rents on behalf of other agencies, and agencies then repay GSA by depositing funds into the FBF. GSA then uses the rental payments it collects for all of its real property activities, such as the construction of new facilities, lease payments, and repairs to federally-owned properties (including DMR). Congress may deposit additional appropriations into the FBF, although it does not do so regularly.

Congress, through the appropriations process, sets annual limits on the amount of funds that GSA may obligate from the FBF, known as limitations on the availability of revenue. If Congress does not set GSA's limitations equal to revenue, then any revenue that GSA cannot access is carried forward to the next fiscal year as an unobligated balance. Due to budget rules, this creates an incentive for appropriators to not allow GSA access to the full balance of the FBF. (See the **Appendix** for additional information about unobligated balances.)

Unobligated Balances in the FBF

Since FY2011, Congress has generally set the limitation for the repairs and alterations (R&A) account within the FBF below the amount that GSA has requested. Appropriations data show that the cumulative difference between what GSA requested for R&A and what it was provided from FY2011 through FY2024 is roughly \$7 billion—and GSA says the creation of unobligated balances each year is what is driving the growth of its DMR backlog. ⁹⁹ In 2017, some House Members protested the level of R&A funding provided to GSA for FY2018:

Another particularly irresponsible cut targets the GSA, which functions as the Federal Government's developer and landlord. The bill decimates funding for the Federal Buildings Fund, forcing the agency to neglect high priority safety and security projects. This lack of sufficient funding for repair projects further exacerbates an already dire situation. Persistently inadequate appropriations for GSA in recent years have resulted in a \$1.1 billion backlog for GSA's repairs and alterations programs. Again, these decisions do not make long-term fiscal sense. Every dollar that GSA does not reinvest back into basic maintenance and repairs now leads to a long-term capital liability of four to five dollars in the future. ¹⁰⁰

⁹⁷ P.L. 81-152.

⁹⁸ P.L. 92-312; 40 U.S.C. §592.

⁹⁹ GSA, FY 2025 Congressional Justification, February 2024, FBF-10.

 $^{^{100}}$ U.S. House of Representatives, 115^{th} Congress, 1^{st} Sess., Financial Services and General Government (continued...)

The National Academy of Sciences has noted that this practice persists in part because the unobligated balances in the FBF can be applied as a credit to other accounts in the same appropriations bill. 101 This may serve as an incentive for appropriators to create unobligated balances. To address this concern, NAS has recommended introducing a budget rule that would require all funds in the FBF be made available to GSA for real property activities. 102 Taking a different approach, GSA has included language in its FY2025 congressional justification that would provide it with permanent statutory authority to access all of the funds in the FBF each year. 103

Concluding Observations

Currently, DMR information is limited to an agency's total DMR estimate and a few sentences about how it manages its backlog. Agencies typically do not provide data on how much funding they request for or expend on DMR—although doing so is one of GAO's best practices for DMR management—and agencies do not publicly report DMR liabilities associated with individual assets. Agencies could be required to report these data to the FRPP, which already contains assetlevel information on each building and structure they own. Stakeholders might gain a broader understanding of DMR within each agency's portfolio and look for commonalities across the government that might serve as a basis for policy. For example, is an agency's DMR largely concentrated among older properties in poor condition? If so, policymakers might look at funding additional disposals at that agency, perhaps by demolition for those properties that are also deemed unsafe or are unlikely to find a buyer if put on the market. If a large percentage of DMR is associated with mission-critical facilities, then policymakers might consider directing funds to maintenance contracts or additional staff at those locations.

In addition, revamping the design of the FRPP might increase its utility. FASTA required the establishment of a comprehensive, descriptive database with asset-level information on nearly all federal real property. 104 The database was required to use an open, machine-readable format that allows users to search, sort, and download data. 105 GSA launched the FRPP to meet these requirements, and it does contain valuable (if often inaccurate or incomplete) data on tens of thousands of individual assets. However, even if GSA improved the quality of data in the FRPP, its design may limit its usefulness. The FRPP is a massive Excel spreadsheet with more than 100,000 rows of data that one stakeholder described as "daunting for the layman." Revamping the FRPP might therefore enhance transparency and thus oversight of the entire federal portfolio.

Appropriations, 2018, July 2017, pp. 535-536, https://www.govinfo.gov/content/pkg/CRPT-115hrpt234/pdf/CRPT-115hrpt234.pdf.

¹⁰¹ NAS, Strategies to Renew Federal Facilities, p. 93.

¹⁰³ GSA, FY 2025 Congressional Justification, FBF-13.

^{104 130} Stat. 1477.

^{105 130} Stat. 1478.

¹⁰⁶ Meredith Somers, "GSA Releases Expansive Federal Real Property Inventory," Federal News Network, December 20, 2017, at https://federalnewsnetwork.com/management/2017/12/gsa-releases-expansive-federal-real-propertyinventory/.

Appendix. 107

Conditions of the Availability of Appropriations

When Congress provides funding in regular appropriations acts, budget authority is provided by *lump-sum appropriations*. Each lump-sum appropriation typically covers one or more specific purposes and related programs, projects, or items. ¹⁰⁸ Within regular appropriations acts, each lump sum takes the form of an unnumbered paragraph, which during budget execution corresponds to an *account*. ¹⁰⁹ Funding for each department and independent agency is organized in one or more accounts. Each account may generally include one or more related *programs*, *projects*, *or activities* (PPAs), which are typically specified in congressional documents. ¹¹⁰

An agency may, unless otherwise prohibited or directed by law, exercise some discretion in how to allocate and reallocate funding among certain organizational subunits, objects (e.g., salaries, rent, contracts), and policy priorities within the contours of the agency's statutory authorities and obligations. After enactment of a particular appropriation into law, agencies may obligate and expend funds, subject to several conditions addressed by appropriations statutes.¹¹¹

These conditions on the availability of appropriations include:

- the *purpose(s)* for which particular funds are appropriated, which may be expressed in statute in more or less detail and, in some cases, with certain restrictions;¹¹²
- the *time period* during which funds are available for obligation and expenditure, sometimes referred to as the *period of availability* or *duration* of appropriations;¹¹³ and
- the *amount* of appropriated funds that may be obligated and expended. 114

¹⁰⁷ This section was written by Taylor Riccard.

¹⁰⁸ U.S. Government Accountability Office (GAO), "Chapter 6, Availability of Appropriations: Amount," in *Principles of Federal Appropriations Law*, 3rd ed., vol. II, GAO-06-382SP, February 2006, p. 6-5, https://www.gao.gov/assets/210/202819.pdf#page=19.

 $^{^{109}}$ Unlike most authorizing legislation, regular appropriations legislation is drafted as unnumbered paragraphs that provide a lump-sum amount for each appropriations account.

¹¹⁰ The House and Senate Committees on Appropriations may specify programs, projects, or activities (PPAs) in report language to provide more detailed expectations or directions to agencies on the allocation of funding among various activities funded within their accounts. The term *report language* refers to information provided in reports accompanying committee-reported legislation as well as joint explanatory statements included in conference reports. Specifically, a report may include tables that break down each lump-sum appropriation into smaller sub-allocations for distinct PPAs. Appropriators may use these tables to establish expectations for agencies' allocations of funds. Oftentimes, the report language reacts to what agencies provided to the Appropriations Committees in their budget justification documents.

¹¹¹ Authorizing statutes may also prescribe how funds can be spent, especially with respect to the appropriation's purpose.

¹¹² GAO, *Principles of Federal Appropriations Law*, 4th ed., "Chapter 3, Availability of Appropriations: Purpose," 2017 Revision, GAO-17-797SP, 2017, https://www.gao.gov/assets/690/687162.pdf. Some appropriations paragraphs refer to separate authorizing statutes as defining purposes for which appropriations are provided.

¹¹³ GAO, *Principles of Federal Appropriations Law*, 3rd ed., Vol. I, GAO-04-261SP, January 2004, p. 558, https://www.gao.gov/assets/210/202437.pdf#page=558. For a discussion about duration of funds availability, see CRS Report R46417, *Congress's Power Over Appropriations: Constitutional and Statutory Provisions*, by Sean M. Stiff.

¹¹⁴ GAO, Principles of Federal Appropriations Law, 3rd ed., Vol. II, p. 18.

While executive agencies may have legal discretion to determine how to allocate and obligate the funds available to them, they are also legally required to execute spending legislation as enacted. 115

Execution of Enacted Budgetary Legislation

The Constitution provides that federal spending may occur only through appropriations passed by Congress and enacted into law. 116 Accordingly, agencies cannot begin to execute the budget until this occurs. 117 The President, the Office of Management and Budget (OMB), and agencies execute the budget in accordance with the budgetary laws that have been enacted. They possess limited authority to make spending adjustments.

Budget execution occurs in multiple steps.

- *Budget authority* is enacted into law by appropriations legislation. Budget authority provides agencies with the legal basis to incur obligations.
- *Apportionment* occurs when OMB subdivides the budget authority made available to agencies.
- Obligations are incurred when agencies enter into legally binding commitments, such as employing personnel or awarding contracts for the provision of goods or services.
- Outlays are payments made to liquidate these obligations. 118

Unobligated Funds

An unobligated balance is a portion of budget authority that has been apportioned to an agency, but not obligated for a particular agency expense. Examples of obligations include awarding contracts for the provision of goods or services and hiring personnel. Agencies are required to implement a system of administrative controls to restrict obligations from exceeding the apportionment or reapportionment of a given appropriation.¹¹⁹ Congress has passed into law numerous provisions that require public reporting of obligated funds.¹²⁰

An appropriation account usually provides funds with a defined period of availability (e.g., one fiscal year). When that period of availability ends, any remaining budget authority in the appropriation account expires. Expired funds are no longer available for incurring new obligations. For five fiscal years following the expiration of appropriated funds, the funds may still be available for the payment of obligations properly incurred during the period of

¹¹⁵ Title 31, Section 1301(a), of the *U.S. Code*, which is often referred to as the "purpose statute," states, "Appropriations shall be applied only to the objects for which the appropriations were made except as otherwise provided by law."

¹¹⁶ This section draws in part from CRS Report R47019, *The Executive Budget Process: An Overview*, by Dominick A. Fiorentino and Taylor N. Riccard.

¹¹⁷ In the event that an agency's regular appropriations act has not become law prior to the start of the fiscal year, a temporary continuing appropriations act (i.e., a continuing resolution or CR) may be enacted. This allows the agency to continue operating programs funded with annual appropriations for the period of time covered by the CR. See CRS Report R46595, *Continuing Resolutions: Overview of Components and Practices*, coordinated by James V. Saturno.

 $^{^{118}}$ GAO, A Glossary of Terms Used in the Federal Budget Process, GAO-05-734SP, September 2005, p. 78, https://www.gao.gov/assets/gao-05-734sp.pdf.

¹¹⁹ 31 U.S.C. §1514(a)(1).

¹²⁰ For additional information about various types of budgetary reporting, see CRS In Focus IF11610, *Federal Financial and Budgetary Reporting: A Primer*, by Dominick A. Fiorentino.

availability. 121 On September 30 of the fifth fiscal year after the period of availability for an appropriation account ends, "the account shall be closed and any remaining balance (whether obligated or unobligated) in the account shall be canceled and thereafter shall not be available for obligation or expenditure for any purpose." 122

An account with an indefinite period of availability (e.g., no-year funds), by contrast, may be closed and any remaining balance canceled under a different process. This closure and cancellation process occurs if "(1) the head of an agency concerned or the President determines that the purposes for which the appropriation was made have been carried out; and (2) no disbursement has been made against the appropriation for two consecutive fiscal years."¹²³

Congress may be grant an agency the discretion to reallocate unobligated funds that have not expired or been cancelled to help the agency achieve its mission or respond to changing circumstances. 124 Absent any statutory restrictions established by Congress, agencies may exercise obligation discretion by reallocating funds within a particular PPA in a given budget account among allowable purposes (as authorized by law) and objects (e.g., salaries, rent, programmatic expenses), or by reprogramming funds within an appropriations account to "use them for purposes other than those contemplated at the time of appropriation." Statutory provisions may prohibit reprogramming funds without advance congressional notification. In some circumstances, agencies may also transfer funds. Transfers are the shifting of funds from one appropriations account to another (either within or between agencies), which is generally prohibited unless an agency has specific statutory authorization to do so. There are statutory exceptions to this general restriction, and Congress may provide agencies with transfer authority either in authorizing statutes or appropriations measures. 126

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123 31 U.S.C. §1555.

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^{121 31} U.S.C. §§1552-1553.

^{122 31} U.S.C. §1552.

¹²⁴ This section draws in part from CRS Report R47600, *Transfer and Reprogramming of Appropriations: An Overview*, by Taylor N. Riccard and Dominick A. Fiorentino.

¹²⁵ GAO, Glossary, p. 85. See OMB, Circular No. A-11, §83.

¹²⁶ For discussion, see CRS Report R47600, *Transfer and Reprogramming of Appropriations: An Overview*, by Taylor N. Riccard and Dominick A. Fiorentino.

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