



January 2024

DEFERRED MAINTENANCE

Agencies Generally Followed Leading Practices in Selections but Faced Challenges

Accessible Version

GAO Highlights

Highlights of [GAO-24-106495](#), a report to congressional committees

Why GAO Did This Study

The federal government manages public lands and assets, such as buildings and roads, that require billions of dollars annually to maintain and operate. Deferred maintenance can diminish the quality of an asset and pose safety hazards, such as unsafe dams and structural deterioration of buildings.

In 2020, the Great American Outdoors Act established the LRF, which provides additional funding to address deferred maintenance during fiscal years 2021 through 2025.

The act includes a provision for GAO to review the implementation of the LRF. This report describes (1) how the amounts and compositions of deferred maintenance for the agencies changed from fiscal year 2019 through 2022, (2) how the agencies selected projects for LRF funding and the extent to which the selection approaches followed leading practices for managing deferred maintenance, and (3) challenges the agencies reported facing in reducing deferred maintenance and how the LRF program design helps to address any challenges.

GAO examined agency data on deferred maintenance and LRF projects and interviewed agency officials. The leading practices GAO used to examine agencies' processes for selecting LRF projects were derived from research by the National Research Council.

View [GAO-24-106495](#). For more information, contact Cardell Johnson at (202) 512-3841 or JohnsonCD1@gao.gov.

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Agencies Generally Followed Leading Practices in Selections but Faced Challenges

What GAO Found

When available funding does not cover the costs of all needed maintenance, a backlog develops, referred to as deferred maintenance. From fiscal years 2019 through 2022, reported deferred maintenance of assets, such as campgrounds and roads on public lands, increased for all five federal agencies that were eligible for the National Parks and Public Land Legacy Restoration Fund (LRF). It increased the most for National Park Service and Bureau of Land Management (BLM), in part due to changes in how agencies reported their data, such as adding a markup to account for project execution costs. For fiscal year 2022, roads and other transportation assets accounted for the most deferred maintenance at BLM and Forest Service.

Road Repair Project at BLM's Las Cruces District in New Mexico



Source: U.S. Department of the Interior. | GAO-24-106495

The LRF provides up to and including \$1.9 billion per year for fiscal years 2021 through 2025. The agencies' processes to select LRF projects considered factors such as whether they would be too costly to fund using annual appropriations. For example, Bureau of Indian Education had a project with a cost estimate of approximately \$70.9 million. This would have amounted to most of the agency's non-LRF funding of \$95.3 million for facility improvement and repair in the same year. GAO compared agency processes for selecting projects for LRF funding with six leading practices for managing deferred maintenance and found that these agencies generally followed all six. For example, all agencies identified as part of their processes for selecting projects the risks of not addressing deferred maintenance in a timely manner, such as threats to safety.

Agencies reported they faced challenges to reducing deferred maintenance, such as construction supply chain issues and inflation, which raised costs and delayed projects. However, aspects of LRF program design helped address some challenges. For example, agency officials said contingency funds available for LRF projects allow for more flexibility for agencies to deal with inflation.

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Abbreviations

BIE	Bureau of Indian Education
BLM	Bureau of Land Management
FBMS	Financial and Business Management System
FWS	Fish and Wildlife Service
LRF	National Parks and Public Land Legacy Restoration Fund
NPS	National Park Service
the act	Great American Outdoors Act

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January 8, 2024

Congressional Committees

The federal government manages public lands and other assets (e.g., buildings, roads, and other infrastructure) that require billions of dollars to maintain and operate annually. The land management agencies—Bureau of Land Management (BLM), U.S. Forest Service, Fish and Wildlife Service (FWS), and National Park Service (NPS)—and the Bureau of Indian Education (BIE) are generally responsible for the maintenance and repairs to their lands and assets. However, available funding does not cover the cost of all needed annual and preventive maintenance and repairs. The resulting backlog, referred to as deferred maintenance, comprises maintenance and repairs that were not performed when they should have been or were scheduled to be and which are delayed for a future period. Collectively, these agencies have reported tens of billions of dollars in deferred maintenance.

Accumulating deferred maintenance on federal property has been a concern for decades. We have previously reported that owning an asset creates an implicit fiscal exposure for the federal government because there is an expectation that the government will incur costs associated with operating and maintaining the assets it owns.¹ We have also previously found that deferring or delaying maintenance can diminish the quality of an asset and, in the long term, can shorten the life and value of an asset. Deferred maintenance may also result in significantly higher maintenance and repair costs.

As we and others have reported, deferred maintenance can have negative consequences, including limiting the agencies' ability to carry out their missions and prematurely worsening the condition of assets.² Agencies have annually reported billions of dollars in estimated deferred maintenance costs on their real property assets, representing substantial

¹GAO, *Federal Real Property: Government's Fiscal Exposure from Repair and Maintenance Backlogs Is Unclear*, [GAO-09-10](#) (Washington, D.C.: Oct. 16, 2008).

²GAO, *Federal Real Property: Agencies Attribute Substantial Increases in Reported Deferred Maintenance to Multiple Factors*, [GAO-23-106124](#) (Washington, D.C.: Oct. 28, 2022).

costs the federal government may have to pay.³ For example, we found in 2016 that NPS's deferred maintenance in current dollars had increased from roughly \$10.2 billion in fiscal year 2009 to \$11.9 billion in fiscal year 2015, about a 3 percent increase per year.⁴

In 2020, the Great American Outdoors Act (the act) established, among other things, the National Parks and Public Land Legacy Restoration Fund (LRF) to provide additional funding to address deferred maintenance during fiscal years 2021 through 2025.⁵ The act allows for an amount up to and including \$1.9 billion based on energy development revenues to be deposited in the LRF each fiscal year.⁶ Of the total annual funds deposited, the act requires that 70 percent go to NPS, 15 percent to Forest Service, and 5 percent to each of the remaining three agencies.⁷

The act includes a provision for us to review the implementation of the LRF.⁸ This report describes (1) how the amounts and compositions of deferred maintenance at each of the five agencies changed from fiscal year 2019 through 2022; (2) how these agencies selected projects for LRF funding and the extent to which the selection approaches followed leading practices for managing deferred maintenance; and (3) any challenges the agencies reported facing in reducing deferred maintenance and how the LRF program design helps to address any challenges.

³We added federal real property management to our High Risk List in 2003, due, in part, to challenges related to deferred maintenance. GAO, *High-Risk Series: An Update*, [GAO-03-119](#) (Washington, D.C.: Jan. 1, 2003).

⁴GAO, *National Park Service: Process Exists for Prioritizing Asset Maintenance Decisions, but Evaluation Could Improve Efforts*, [GAO-17-136](#) (Washington, D.C.: Dec. 13, 2016).

⁵Pub. L. No. 116-152, § 2(a), 134 Stat. 682, 682-685 (2020) (codified at 54 U.S.C. §§ 200401-200402).

⁶54 U.S.C. § 200402(b)(2). Specifically, for each of fiscal years 2021 through 2025, an amount up to and including \$1.9 billion equal to 50 percent of all energy development revenues due and payable to the United States from oil, gas, coal, or alternative or renewable energy development on federal land and water credited, covered, or deposited as miscellaneous receipts in the previous fiscal year are to be deposited into the LRF. 54 U.S.C. § 200402(b)(1).

⁷54 U.S.C. § 200402(e)(1).

⁸Pub. L. No. 116-152, § 2(c), 134 Stat. 682, 685-686 (2020).

To address the first objective, we analyzed agency data on amounts of deferred maintenance per year per agency for fiscal years 2019 through 2022, the most recent year available.⁹ We also analyzed data on the composition of deferred maintenance amounts by asset type (such as buildings, roads, or utilities) and state. To assess the reliability of the data, we interviewed officials who maintain the data, reviewed documentation on the data systems, and tested the data for missing or erroneous values. When we found discrepancies (such as missing data, duplicate records, or data entry errors), we brought them to agency officials' attention. The officials provided more reliable data before we conducted our analyses. We determined that the data were sufficiently reliable for the purpose of describing general trends in the agencies' recorded deferred maintenance.

To address the second objective, we reviewed agency documentation and interviewed agency officials about how their agencies prioritized LRF projects. In January 2014, we identified nine leading practices recognized as effective strategies for managing deferred maintenance.¹⁰ We based our leading practices on more than 15 years of research conducted by the National Research Council on federal facilities, including research on facility maintenance and deferred maintenance.

We selected six of the nine practices, including establishing goals and performance measures as well as risk and project characteristic identification, because these were relevant to and sufficient and appropriate for our research objectives. We did not include the three practices on conducting condition assessments as a basis for establishing appropriate levels of funding, employing models for predicting the outcome of investments, and separately identifying funding allotted to manage deferred maintenance. We determined that these three practices

⁹Departments report department-wide deferred maintenance through their annual financial reports. However, we used data from agency asset management databases in this report because these data allowed us to report on individual agencies' deferred maintenance.

¹⁰For more information on our methodology for developing these leading practices, see GAO, *Federal Real Property: Improved Transparency Could Help Efforts to Manage Agencies' Maintenance and Repair Backlogs*, [GAO-14-188](#) (Washington, D.C.: Jan. 23, 2014).

were less relevant to our review.¹¹ Specifically, the amount each agency receives from the LRF for deferred maintenance is determined by statute, and we have determined that the agencies have used other methods to optimize among competing investments. Therefore, it is not necessary for modelling to be used in this context.

We compared information about agency efforts with the six practices we had selected. We made our assessments in two steps. First, two analysts reviewed all the evidence and determined the extent to which the agency's efforts conformed to the criteria. Next, a supervisor independently reviewed the assessments for concurrence.

To address the third objective, we interviewed agency officials from all five agencies who were involved in managing deferred maintenance and implementing the LRF.

We conducted this performance audit from January 2023 to January 2024 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Agency Missions and Scopes

The land management agencies are primarily responsible for managing federal lands, which comprise roughly one-third of the land in the United States and are largely concentrated in 12 western states. The Department of the Interior oversees three of the four land management agencies that receive funding from the LRF—BLM, FWS, and NPS—as well as BIE. BIE's mission is to provide quality education opportunities generally on or near American Indian reservations across the United States. The U.S. Department of Agriculture oversees the Forest Service,

¹¹For a recent GAO review on all federal civilian agencies' deferred maintenance issues, which included evaluation of Interior policies against two of these three excluded criteria, see GAO, *Federal Real Property: Agencies Should Provide More Information About Increases in Deferred Maintenance and Repair*, [GAO-24-105485](#) (Washington, D.C.: Nov. 16, 2023).

the remaining land management agency. Core missions of the land management agencies revolve around preserving the health and productivity of the lands within their jurisdictions.

Each agency's area of responsibility varies in scope and size:

- **BLM** administers 245 million acres of U.S. lands, more than any other federal agency. BLM lands receive roughly 80 million visitors each year.
- **FWS** manages hundreds of National Wildlife Refuges, as well as Marine National Monuments, wetland management districts, and other areas on 830 million acres of lands and waters across the country. There were a record-breaking 67 million visitors to more than 560 National Wildlife Refuges in fiscal year 2022. Refuges offer a wide variety of recreational and wildlife-viewing opportunities.
- **NPS** manages 425 individual park units on more than 85 million acres in all 50 states, the District of Columbia, and U.S. territories. NPS parks attracted nearly 312 million visitors in 2022.
- **BIE** offers educational opportunities for approximately 45,000 students in 183 elementary and secondary schools on or near 64 reservations in 23 states.¹² BIE also directly operates two postsecondary institutions.
- **Forest Service** manages 193 million acres of national forests and grasslands that drew more than 200 million visitors in fiscal year 2022.

How Agencies Address Deferred Maintenance

The five agencies each maintain a variety of assets. Examples of these assets include buildings, roads, bridges, dams, trails, campgrounds, marinas, drinking water systems, and wastewater systems. The agencies are responsible for repair work and maintenance on these assets. When needed maintenance and repairs are not conducted when scheduled and are delayed for a future period, that maintenance becomes deferred maintenance.

Interior agencies and Forest Service have historically conducted recurring assessments on their constructed assets to determine the condition of

¹²According to BIE, 54 of the schools are BIE-operated and 129 are tribally controlled under BIE contracts or grants. The information on deferred maintenance in this report includes deferred maintenance for all BIE-funded schools.

their assets. Interior assigns its assets a Facility Condition Index score, indicating the asset's overall condition, and an Asset Priority Index score, showing the criticality of that asset to the organization's mission. Forest Service uses in-person assessments of bridges and non-transportation assets and a sampling methodology and statistical analysis to estimate condition and deferred maintenance for all passenger car roads. All five agencies must generally conduct inspections at least every 2 years for bridges and have guidance to assess other non-transportation assets at least every 5 years to determine their condition.

Agency Funding through Annual Appropriations Acts and Other Sources

The four land management agencies and BIE generally receive funding for their activities through annual appropriations acts. These acts provide lump sum appropriations to the agencies for a variety of activities, such as operation of agency programs and construction. Some of these appropriations can be used to pay for deferred maintenance. Forest Service is the only one of the five agencies that receives a specific appropriation for capital improvement and maintenance. However, sometimes congressional committees direct the agencies to spend a certain amount of their appropriations on maintenance.

BLM, Forest Service, FWS, and NPS also collect and reinvest revenues generated by recreation fees to improve visitor amenities and services.¹³ If authorized by statute, the agencies can solicit, receive, and use donations for agency operations, programs, and activities. All five agencies also receive funding from the LRF. These various sources are known as budget authority.¹⁴ Table 1 shows the budget authority

¹³BLM, FWS, NPS, and Forest Service collect recreation fees at some units. Those fees are used to fund a wide range of operations and maintenance investments. Specifically, the units can only use recreation fees to fund: repair, maintenance, and facility enhancement related directly to visitor enjoyment, visitor access, and health and safety; interpretation, visitor information, visitor service, visitor needs assessments, and signs; habitat restoration directly related to wildlife-dependent recreation that is limited to hunting, fishing, wildlife observation, or photography; law enforcement related to public use and recreation; direct operating or capital costs associated with recreation fee program; and visitor reservation service or fee management agreements with governmental or nongovernmental entities. 16 U.S.C. § 6807(a)(3).

¹⁴Budget authority is authority provided by federal law to enter into financial obligations that will result in immediate or future outlays involving federal government funds. Budget authority includes appropriations, borrowing authority, contract authority, and authority to obligate and spend offsetting receipts and collections.

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available for infrastructure management, including deferred maintenance, apart from the LRF.

Table 1: Non-LRF Budget Authority Available for Infrastructure Management by Agency, Fiscal Years 2018–2022
(Dollars in thousands)

Agency	Fiscal year				
	2018	2019	2020	2021	2022
Bureau of Indian Education	108,806	108,811	108,818	123,838	123,891
Bureau of Land Management	86,407	82,459	82,819	42,447	41,200
Forest Service	509,570	555,300	509,220	228,950	265,455
Fish and Wildlife Service	133,560	123,040	99,600	94,370	95,568
National Park Service	1,967,330	1,860,550	1,731,560	1,701,140	2,008,380

Source: GAO analysis of Department of the Interior and Forest Service data. | GAO-24-106495

Notes: The budget authority totals listed are utilized to address many infrastructure maintenance and modernization requirements and are not exclusively focused on deferred maintenance.

This table excludes funding from the National Parks and Public Land Legacy Restoration Fund. The table also excludes Wildland Fire Maintenance funding allocations to the Interior agencies.

Approximately 75 percent of Forest Service facility funding goes to leases, and approximately 90 percent of recreation fees collected go to site operations and annual maintenance, according to Forest Service officials; the numbers shown in this table reflect the approximate remaining amount available for infrastructure management. In fiscal year 2021, Forest Service underwent budget modernization, according to agency officials. Therefore, the budgets before and after that change are not comparable.

Great American Outdoors Act and the Legacy Restoration Fund

The act established the LRF, a new fund to help reduce deferred maintenance across the four land management agencies and BIE. The act requires the agencies to use the LRF for “priority” deferred maintenance projects, and agencies must spend at least 65 percent of the funds received from the LRF on non-transportation projects. (See app. I for information on LRF projects.) The agencies cannot use the funds for land acquisition or to supplant annual discretionary funding for recurring facility operations, maintenance, and construction needs.¹⁵

Each fiscal year from fiscal year 2021 through 2025, the LRF receives amounts equal to half of all federal energy development revenues

¹⁵In addition, the LRF cannot be used for bonuses for federal government employees implementing the Fund. 54 U.S.C. § 200402(f)(3).

credited from the previous fiscal year up to and including \$1.9 billion.¹⁶ This cap for annual LRF deposits is not adjusted for inflation. See table 2 for the maximum amount each agency can receive from the LRF in a fiscal year if this cap on deposits is reached.

Table 2: Maximum Authorized Amount from the National Parks and Public Land Legacy Restoration Fund (LRF) Per Year Per Agency for Each of Fiscal Years 2021 Through 2025

Agency	Dollars in thousands per year
Bureau of Indian Education	95,000
Bureau of Land Management	95,000
Forest Service	285,000
Fish and Wildlife Service	95,000
National Park Service	1,330,000

Source: GAO analysis of the Great American Outdoors Act. | GAO-24-106495

Note: LRF was established by the Great American Outdoors Act to provide additional funding to address deferred maintenance during fiscal years 2021 through 2025. These are the maximum amounts the five agencies can receive if \$1.9 billion based on federal energy development revenues is deposited into the fund. These amounts do not reflect any additional LRF deposits, such as donations to, or returns made on investments of, the fund.

Each year until the LRF is expended, the five agencies must provide Congress with a list of priority deferred maintenance projects to be funded by the LRF in their annual budget request.¹⁷ The process agencies use to select projects to include in this list is described below. Since fiscal year 2021, the agencies' annual appropriations acts have required the agencies to allocate the amount they received from the LRF to projects and activities specified in the explanatory statements accompanying the acts.

¹⁶Federal energy development revenues are oil, gas, coal, or alternative or renewable energy development on federal lands and waters credited, covered, or deposited as miscellaneous receipts under federal law in the preceding fiscal year. 54 U.S.C. § 200402(b)(1). In addition, income on any investments of the LRF and donations to reduce the deferred maintenance backlog and encourage relevant public-private partnerships are also deposited into the fund.

¹⁷54 U.S.C. § 200402(h).

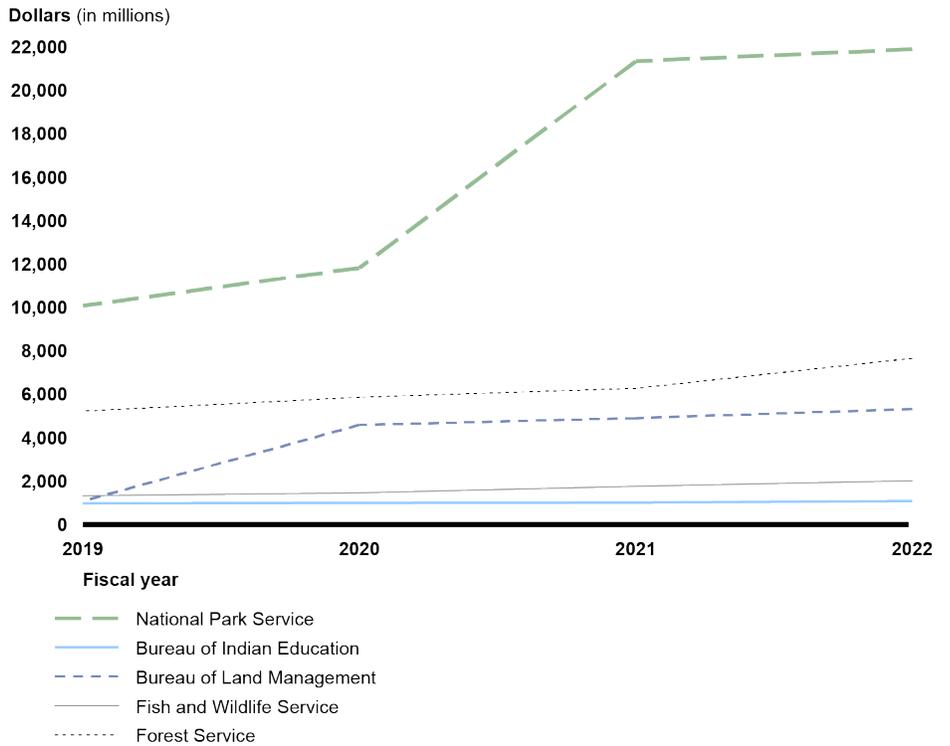
Reported Deferred Maintenance Increased for the Agencies, in Part Due to Changes in Approaches for Estimation

Deferred Maintenance Increased from Fiscal Year 2019 through 2022, with Roads Accounting for the Majority

Reported deferred maintenance increased for all five agencies from fiscal year 2019 through 2022, according to our analysis of agency data (see fig. 1).¹⁸ NPS and BLM had the largest increases, while BIE, Forest Service, and FWS experienced smaller increases.

¹⁸This is consistent with government-wide increases in deferred maintenance over the past 5 years. [GAO-23-106124](#).

Figure 1: Total Deferred Maintenance at Each Agency, Fiscal Years 2019–2022



Source: GAO analysis of data from the Bureau of Indian Education, Department of the Interior, and Forest Service. | GAO-24-106495

Accessible Data Table for Figure 1: Total Deferred Maintenance at Each Agency, Fiscal Years 2019–2022

Fiscal Year	NPS	BIE	BLM	FWS	Forest Service
2019	10,084	980	1,079	1,326	5,223
2020	11,818	1,000	4,586	1,460	5,864
2021	21,342	1,013	4,903	1,763	6,275
2022	21,889	1,082	5,321	2,017	7,658

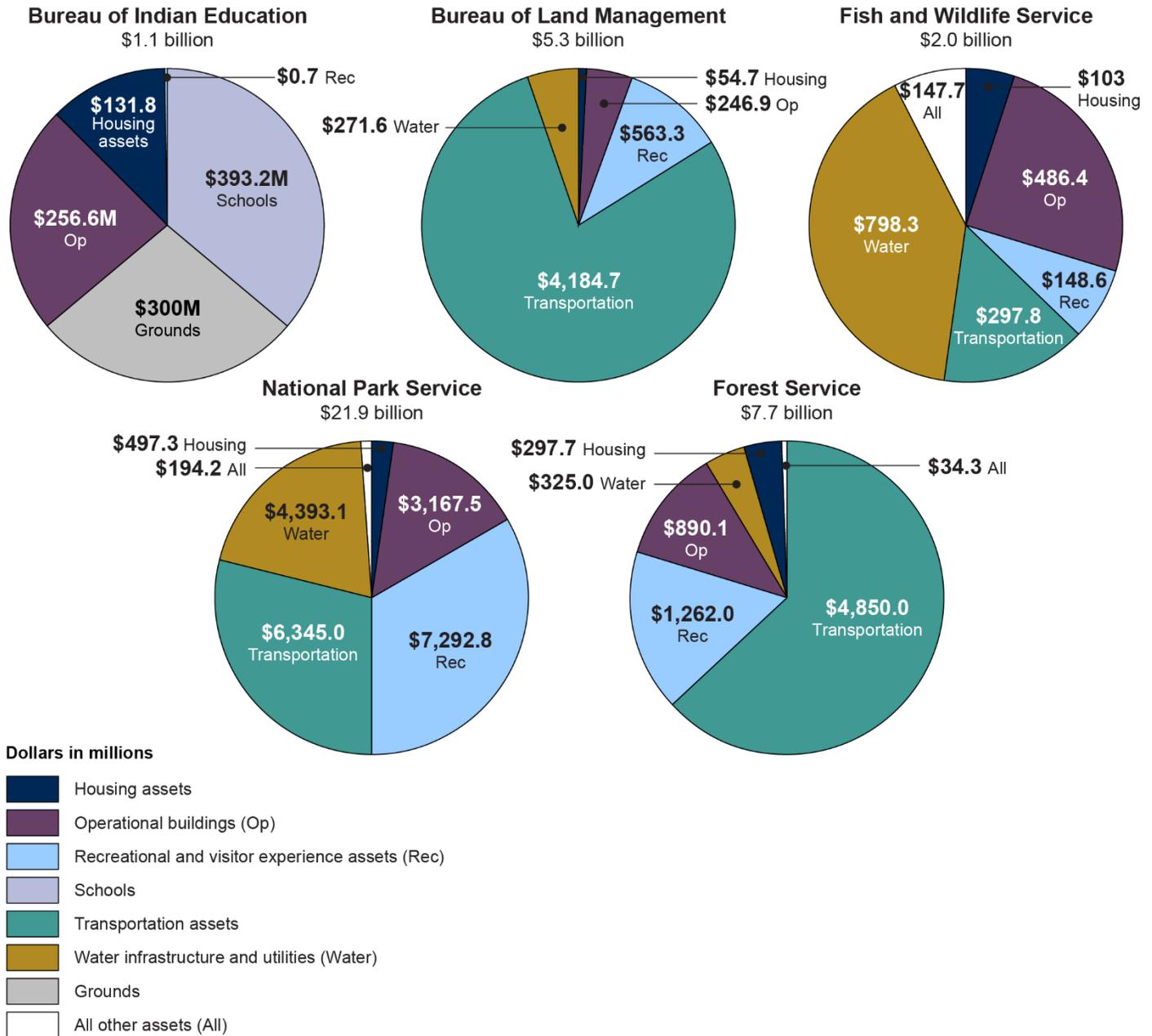
Source: GAO analysis of data from the Bureau of Indian Education, Department of the Interior and Forest Service. | GAO-24-106495

The composition of deferred maintenance at each agency has mostly remained the same during fiscal years 2019 through 2022, according to our analysis of agency data.¹⁹ For fiscal year 2022, roads and other transportation assets accounted for most deferred maintenance for BLM

¹⁹For NPS, transportation assets went from the largest category at \$8,413 million (39 percent) in fiscal year 2021 to the second largest category at \$6,345 million (29 percent) in fiscal year 2022. In those same years, recreational and visitor experience assets went from \$4,977 million (23 percent) to \$7,293 million (33 percent) of deferred maintenance.

and Forest Service (see fig. 2). Schools accounted for most deferred maintenance for BIE; recreational and visitor experience assets for NPS; and water infrastructure and utilities for FWS.

Figure 2: Amount of Deferred Maintenance at Each Agency by Asset Type, Fiscal Year 2022



Source: GAO analysis of Bureau of Indian Education (grounds), Department of the Interior, and Forest Service data. | GAO-24-106495

Accessible Data Table for Figure 2: Amount of Deferred Maintenance at Each Agency by Asset Type, Fiscal Year 2022

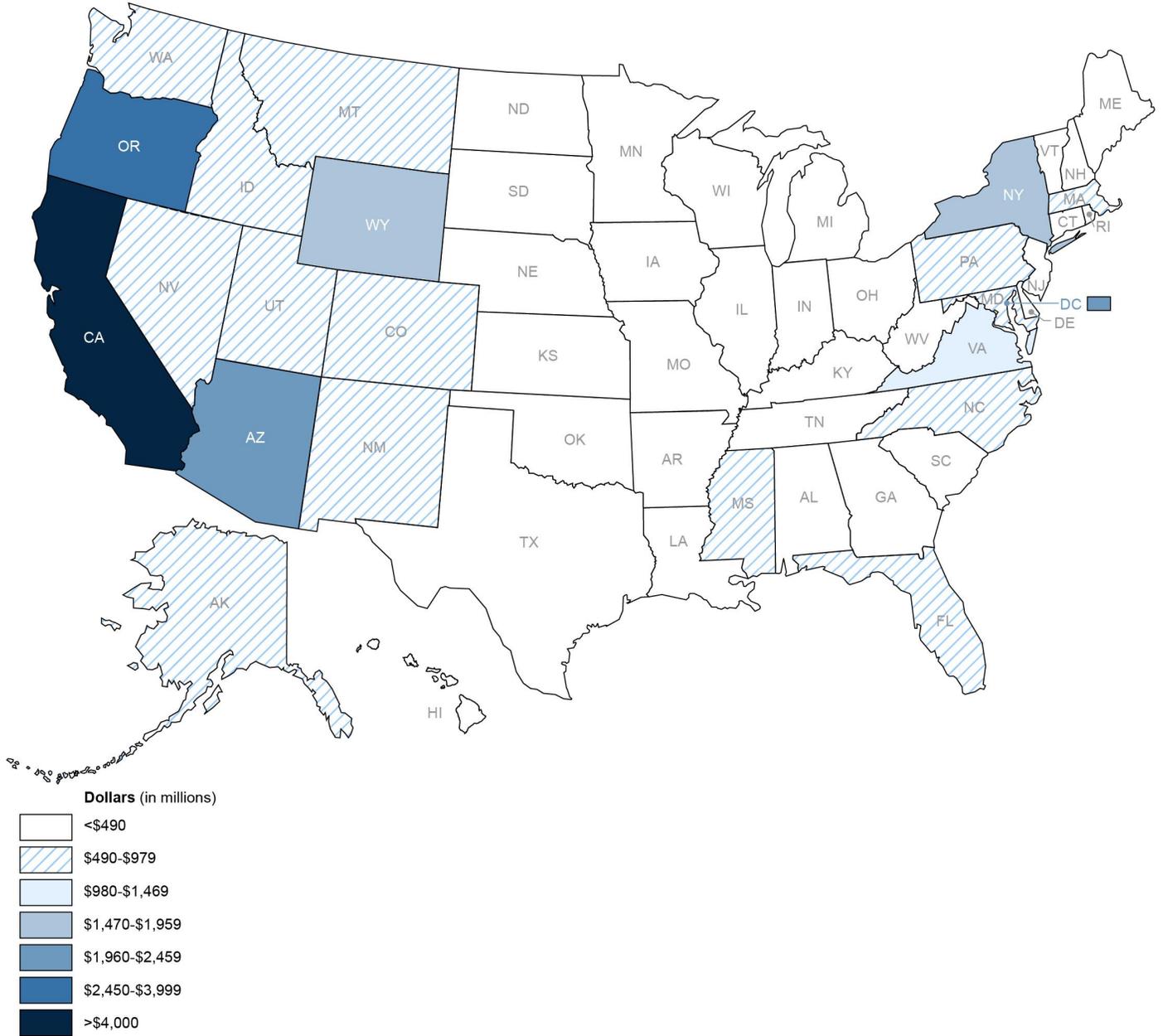
Agency	Asset Type	Amount
Bureau of Indian Education	Schools	393.2 million
	Grounds	300.0 million
	Operational Buildings	256.6 million
	Housing Assets	131.8 million
	Recreational and Visitor Experience Assets	0.7 billion
	Total	1.1 billion
Bureau of Land Management	Housing Assets	54.7 million
	Operational Buildings	486.4 million
	Recreational and Visitor Experience Assets	148.6 million
	Transportation Assets	297.8 million
	Water Infrastructure and Utilities	271.6 million
	All Other Assets	0
Total	5.3 billion	
Fish and Wildlife Service	Housing Assets	103 million
	Operational Buildings	516.5 million
	Recreational and Visitor Experience Assets	118 million
	Transportation Assets	298.4 million
	Water Infrastructure and Utilities	798.3 million
	All Other Assets	147.7 million
Total	2 billion	
National Park Service	Housing Assets	497.3 million
	Operational Buildings	3167.5 million
	Recreational and Visitor Experience Assets	7292.8 million
	Transportation Assets	6345.0 million
	Water Infrastructure and Utilities	4393.1 million
	All Other Assets	194.2 million
Total	21.9 billion	
Forest Service	Transportation Assets	4,850.0 million
	Recreational and Visitor Experience Assets	1,262.0 million
	Operational Buildings	890.1 million
	Water Infrastructure and Utilities	325.0 million
	Housing	297.7 million
	All Other Assets	34.3 million
Total	7.7 billion	

Source: GAO analysis of Bureau of Indian Education (grounds), Department of the Interior and Forest Service data | GAO-24-106495

Note: Interior has recently established a set of common asset categories for reporting on the program's website. However, BIE's grounds category is not one of them, so Interior officials are working with BIE to include those assets in the other categories. Interior officials were examining and validating the \$300 million grounds category amount as of September 2023. BIE officials had placed most of its outdoor assets, such as athletic fields, into this category. According to Interior officials, assets in this category will likely end up in the transportation and water infrastructure and utilities categories.

The most deferred maintenance was in California, Oregon, and Arizona in fiscal year 2022, according to our analysis (see fig. 3). (See app. II for the agencies' deferred maintenance in each state.)

Figure 3: Total Reported Deferred Maintenance for All Five Agencies by State, Fiscal Year 2022



Sources: GAO analysis of Department of the Interior and Forest Service data; Map Resources (map). | GAO-24-106495

Accessible Data Table for Figure 3: Total Reported Deferred Maintenance for All Five Agencies by State, Fiscal Year 2022

Year	State	Dollars(in millions)
2022	Alabama	\$91
2022	Alaska	\$491
2022	Arizona	\$1,980
2022	Arkansas	\$224
2022	California	\$4,900
2022	Colorado	\$695
2022	Connecticut	\$12
2022	Delaware	\$16
2022	District of Columbia	\$2,021
2022	Florida	\$719
2022	Georgia	\$213
2022	Hawaii	\$439
2022	Idaho	\$756
2022	Illinois	\$102
2022	Indiana	\$110
2022	Iowa	\$30
2022	Kansas	\$86
2022	Kentucky	\$215
2022	Louisiana	\$132
2022	Maine	\$198
2022	Maryland	\$758
2022	Massachusetts	\$578
2022	Michigan	\$229
2022	Minnesota	\$121
2022	Mississippi	\$503
2022	Missouri	\$192
2022	Montana	\$623
2022	Nebraska	\$27
2022	Nevada	\$978
2022	New Hampshire	\$41
2022	New Jersey	\$428
2022	New Mexico	\$811
2022	New York	\$1,614
2022	North Carolina	\$625
2022	North Dakota	\$185

Year	State	Dollars(in millions)
2022	Ohio	\$300
2022	Oklahoma	\$87
2022	Oregon	\$3,415
2022	Pennsylvania	\$664
2022	Rhode Island	\$5
2022	South Carolina	\$203
2022	South Dakota	\$333
2022	Tennessee	\$449
2022	Texas	\$415
2022	Utah	\$774
2022	Vermont	\$25
2022	Virginia	\$1,287
2022	Washington	\$966
2022	West Virginia	\$251
2022	Wisconsin	\$198
2022	Wyoming	\$1,621

Sources: GAO analysis of Department of the Interior and Forest Services data Map Resources (map). | GAO-24-106495

Note: We totaled deferred maintenance reported by the Bureau of Land Management, U.S. Forest Service, Fish and Wildlife Service, National Park Service, and Bureau of Indian Education. Forest Service does not record precise location information for deferred maintenance on roads or trails. We included data on Forest Service roads approximated by multiplying a national average deferred maintenance per mile by the number of miles of road in each state.

Changes in How Agencies Managed Their Data Contributed to Increases in Deferred Maintenance at Two of the Agencies

Agency officials at NPS and BLM attributed some of their increases to changes in data management.²⁰

- **NPS.** NPS changed its approach to determining total deferred maintenance in fiscal year 2022. Previously, NPS conducted

²⁰BIE's, FWS's, and Forest Service's deferred maintenance did not increase significantly over this same period. BIE began using a new contractor to complete in-person assessments in late fiscal year 2020. As a result, the agency has been capturing the needed data to estimate deferred maintenance since late fiscal year 2020. Additionally, Forest Service officials said they are in the process of changing the way the agency calculates deferred maintenance for roads by increasing the miles of road sampled and moving toward looking at 3 years of data. However, Forest Service officials stated these changes did not play a role in changes to the agency's deferred maintenance.

comprehensive in-person assessments of its assets. In 2022, the agency began using a modeling method for non-transportation assets, where staff conduct rapid visual assessments of assets to model deferred maintenance.²¹ This change allowed NPS to more consistently develop and track deferred maintenance data for these assets in its data system, according to NPS officials. Additionally, in fiscal year 2021, NPS added a 35 percent markup to deferred maintenance estimates for non-transportation assets to account for project execution costs (such as design, construction management, compliance, and project management). NPS's previous assessment methodology only considered construction costs.

- **BLM.** Starting in 2018, BLM began implementing a modeling methodology while performing in-person assessments for deferred maintenance on paved roads.²² For unpaved roads, BLM moved to a modeling method, where officials use a sample of unpaved road assessment data to estimate total deferred maintenance for all their unpaved roads. Under its previous method, BLM did not have the resources to perform all the required assessments and corresponding data entry, and many assessments were not completed. Therefore, condition data were inaccurate, according to BLM officials.

Agency officials also said deferred maintenance increased in part because inflation drove up costs to address deferred maintenance. From October 2019 through September 2023, the construction material price index increased 42 percent, according to our analysis of Federal Reserve data. Additionally, agency officials said increases were due in part to agency staff putting in more effort to log all deferred maintenance because of the increased funding available from the LRF. The officials told us that when funding was limited, there was not an emphasis on logging complete data on all deferred maintenance needs because so much of it would not be funded. As a result, they did not dedicate many resources to inputting data. The LRF's creation led the agencies to reevaluate their asset management approach and fostered a cultural change toward maintaining better data on deferred maintenance, according to agency officials.

²¹Deferred maintenance estimates for the agency's transportation assets are based on assessments and modeling conducted by the Federal Highway Administration, according to NPS officials.

²²Specifically, BLM implemented the Pavement Surface Evaluation and Rating system in alignment with the other land management agencies.

Interior Has Taken Recent Actions to Improve Completeness and Accuracy of Deferred Maintenance Data

In fiscal years 2019 and 2020, Interior had incomplete and inaccurate data on deferred maintenance for BIE and FWS in its data system—the Financial and Business Management System (FBMS). For example, for fiscal year 2020, Interior reported that FWS had \$821 million less than, or 56 percent of, the deferred maintenance that FWS reported in its maintenance management system. In fiscal year 2019, FWS started to revise its asset data in its database to align how it reports with how it manages its asset portfolio. However, in the process of this realignment, officials found that steps were missed to reconcile the records between the agency database and Interior’s data system. This resulted in the deferred maintenance values not importing properly to FBMS. In 2023, FWS hired a new employee to ensure they have adequate oversight and quality control over future reporting. Officials also told us they have begun implementing quarterly review of the two databases in 2023 to ensure alignment and prevent future errors.

BIE officials could not identify exactly the difference in reporting in fiscal years 2019 and 2020. However, based on our review of Interior’s data and information from BIE officials, Interior appears to have reported that BIE had around \$2 million less than the deferred maintenance that BIE reported in its maintenance management system. The cause of this was interface and reporting issues between BIE’s agency databases and FBMS, according to agency officials. BIE officials told us that, in fiscal year 2021, they identified the error and adjusted the data coding to correct it moving forward.

In addition to working to address these internal controls issues, Interior established a comprehensive policy in August 2023 that standardized a definition for deferred maintenance for its agencies to use. This policy will help ensure Interior has more complete and accurate information on deferred maintenance to guide its resource allocation decisions, according to our analysis of the policy. Prior to this policy, Interior agencies used different interpretations for the definition of deferred maintenance. For example, some of the agencies, such as BLM, have some minimal service roads—roads that are used occasionally by four-wheel drive or high-clearance vehicles—that they use so infrequently that they do not schedule or perform annual maintenance on them when not in use. Therefore, these agencies did not include deferred maintenance on

these roads in their measure of deferred maintenance. On the other hand, FWS did include these roads in its measure of deferred maintenance but had a different standard of maintenance from that used for more commonly used roads.

Similarly, BIE officials did not include deferred maintenance on school grounds—a category unique to BIE that has traditionally included outdoor assets such as athletic fields, transportation-related assets, and water and utilities structures—in its deferred maintenance figures provided to Interior.²³ This resulted in an underreporting of \$300 million, or 28 percent, of deferred maintenance at BIE. To better capture those assets in Interior’s standardized definition, Interior officials are examining and validating the grounds category amount as they work with BIE to include those assets in the deferred maintenance figures it provides to Interior.

Agencies’ Processes to Select Deferred Maintenance Projects for LRF Funding Generally Followed Leading Practices

Agencies Generally Considered Similar Factors When Selecting Projects for LRF Funding

All five agencies used a set of metrics to help them determine which deferred maintenance projects to fund. For example, FWS officials told us they used the Interior Scoring Methodology as a starting point for selecting their projects for LRF consideration, before considering additional factors. The Interior Scoring Methodology evaluates individual projects for potential funding by summing the weighted scores of four key criteria. Specifically, the methodology measures projects against criteria that measure (1) a project’s benefit, (2) a project’s importance to the bureau’s mission relative to the condition of the assets, (3) the extent to which the project can provide a positive return on investment, leverage outside resources, and reduce costs, and (4) whether failing to complete the project would pose risks to public or employee health and safety as well as long-term natural or cultural resource damage. NPS officials told us they used components of the Interior Scoring Methodology, while BLM officials told us they used their own weighted evaluation system that

²³The other Interior agencies were reporting deferred maintenance on similar types of assets.

measured potential projects against a set of LRF-specific criteria and Administration priorities. BIE used a different type of data-driven approach in which BIE-funded schools are selected for a comprehensive site assessment primarily based on whether assets are in poor condition or are 50 years or older and educating at least 75 percent of students in portable units. The results of the site assessment are then used to develop a project plan.

Forest Service used a process called the National Asset Management Program, wherein officials measure individual projects against more than 30 metrics to measure a project's benefits to Forest Service's mission relative to project cost. Forest Service then considered a project's risk and readiness to ensure those projects were prepared to move forward. According to Forest Service officials, the agency allocated 60 percent of its annual LRF funding to projects selected through this process and allocated the remaining 40 percent to regional offices for selection based on region-specific priorities.²⁴

Factors considered when selecting LRF projects include the examples below.²⁵

Amount of deferred maintenance addressed. All five agencies' processes for selecting LRF projects included considering projects that addressed the most deferred maintenance possible, and the four land management agencies set quantifiable objectives related to the amount of deferred maintenance that a project addressed, according to agency documentation and interviews with agency officials. For example, Forest Service aimed to reduce deferred maintenance by 75 cents for every LRF dollar spent and BLM by at least one dollar for every LRF dollar spent.

- Some projects may address a lower amount of deferred maintenance than the actual cost of the project. According to Forest Service officials, deferred maintenance estimates may not include some project development costs such as those related to environmental approvals, planning requirements, or design costs. Additionally, projects might involve construction that is not classified as deferred

²⁴According to Forest Service officials, the funding distribution for regional offices is based on estimated deferred maintenance and visitation in each region.

²⁵Interior's agencies prioritized some of these factors based on a department-wide plan that established high-level goals and objectives for its LRF investment strategy. For more information see U.S. Department of the Interior, *Great American Outdoors Act National Parks and Public Land Legacy Restoration Fund Strategic Plan* (Oct. 21, 2022).

maintenance, according to Interior officials; instead that part of the project might modernize the asset to reduce future maintenance costs or bring it up to modern building code.²⁶ For example, an NPS project at the Mammoth Cave Hotel includes removing the flat roof structure and rebuilding a pitched roof structure. This alteration is more costly than a simple replacement, but it is designed to reduce long-term maintenance costs. In addition, some assets may require hazardous material remediation or design corrections, such that the cost to rehabilitate the asset exceeds the cost of a new asset. In these cases, the percentage of deferred maintenance directly addressed in a project will be lower, but the long run cost of maintaining the new asset will be less than that of the existing asset.

- By contrast, some projects can address more deferred maintenance costs than the actual cost of the project. For example, Forest Service had a project on the Borax Tunnel in the Lolo National Forest in Montana, which entails the installation of permanent barricades at the tunnel and the construction of a rerouted road. This project is expected to address \$1 million of deferred maintenance while costing \$150,000. According to agency officials, demolishing an asset or replacing an asset with one that will require less maintenance in the long term can eliminate deferred maintenance at a lower cost than repairing all components of an existing, aging asset.

Relevance to core mission. All five agencies' processes for selecting LRF projects included enhancing their ability to carry out their core missions. For example:

- All agencies prioritized improving safety. For example, NPS selected an LRF project that includes the demolition of 44 non-historic structures that pose a serious threat to public safety due to hazardous building materials or structural deterioration.
- Many of BIE's projects focused on replacing aging school facilities. For example, BIE's LRF program provided funding for campus replacements at two schools in Arizona, and a district school campus in South Dakota.

²⁶Interior officials noted that a comprehensive approach to lifecycle investment planning allows the agencies to make all the necessary improvements to address deferred maintenance repairs in addition to capital improvements. The act requires that any priority deferred maintenance project funded by the LRF must be consistent with an applicable transportation, deferred maintenance, or capital improvement plan developed by the applicable covered agency. 54 U.S.C. § 200402(e)(2)(C).

- Forest Service's priorities included a focus on improving public access to its lands by restoring and repairing assets that had fallen into disrepair. For example, Forest Service selected an LRF project in Huron-Manistee National Forests that includes the replacement of failing stairs, boardwalks, and other amenities that provide free public access to Largo Springs.

Visitation to site. Three of the five agencies selected projects that address deferred maintenance at their high visitation sites, according to agency documentation. For example, NPS selected projects at high-visitation locations such as the Golden Gate National Recreation Area, Great Smoky Mountains, and Grand Canyon. FWS officials stated that visitation was one criterion they used to select projects and focused LRF funding on the top 10 percent of most visited field stations. According to Interior officials, increased visitation leads to increased asset degradation. Interior officials told us that this factor was a larger consideration early in the LRF program and they now place less emphasis on it. NPS and FWS have also established internal maintenance teams to more efficiently and cost-effectively address deferred maintenance at small and medium-sized units.²⁷

Cost and scope of project. All five agencies' processes to select projects considered prioritizing projects with high costs and large scopes. Such large projects were generally too costly to fund using annual appropriations. For example, BIE had a project in 2021 to consolidate education programs housed in multiple buildings into a single facility at a high school in the Navajo Nation. The project cost estimate was approximately \$70.9 million, which would have amounted to most of the agency's annual non-LRF funding of \$95.3 million for facility improvement and repair in fiscal year 2021.²⁸ Projects that have large scopes may be more cost-effective because they may reduce overhead costs, such as contract administration. These large projects can also create longer term improvements by thoroughly addressing maintenance issues rather than

²⁷At Interior, these internal teams are called Maintenance Action Teams. NPS and FWS have used the LRF to fund these teams to conduct maintenance, repairs, and replacement of critical systems of an existing asset. However, outside contractors generally conduct large projects to alter or replace an existing asset altogether.

²⁸BIE's fiscal year 2021 education construction appropriation was approximately \$264.3 million. The explanatory statement accompanying the appropriations act directed approximately \$95.3 million of that appropriation for facility improvement and repair. Pub. L. No. 116-260, 134 Stat. 1182, 1493 (2020); 166 Cong. Rec. H8311, H8536 (Dec. 21, 2020).

performing minimal work that will then need additional maintenance soon thereafter, according to agency officials.

Speed of implementation. Officials from two of the five agencies said they selected projects for the LRF that were ready to be implemented and moved quickly to the project execution phase. They said that this was an especially important factor when the program was first implemented. For example, NPS and FWS officials told us they prioritized projects that were ready to be implemented. FWS officials also told us that if more work needs to be done on project proposals before the project can be implemented, the agency may lower those projects on the priority list.

Agencies Generally Followed Leading Practices for Managing Deferred Maintenance in Their Processes for Selecting Projects for LRF Funding

Our review of the agencies' processes for selecting LRF projects found that they generally followed all six of the selected leading practices for managing deferred maintenance.²⁹

- **Establish clear maintenance and repair investment objectives and set priorities among outcomes to be achieved.** As described above, all five agencies identified objectives that establish how they will use LRF funding to address deferred maintenance, such as establishing an objective of addressing the most deferred maintenance possible. The agencies used the outcome-based, priority-setting processes outlined above to select LRF projects. For example, BIE identified objectives to (1) improve the safety and overall condition of educational facilities, (2) reduce the deferred maintenance backlog, (3) protect and enhance relationships with sovereign Tribes across Indian Country, and (4) provide an educational environment conducive to student learning. BIE relied heavily on a measure of facility condition to prioritize projects.
- **Establish performance goals, baselines for outcomes, and performance measures.** Agencies established performance goals and objectives for LRF projects, such as maximizing return on LRF investments and minimizing overhead costs. Agencies used performance measures to inform their LRF project selection process,

²⁹In January 2014, we identified leading practices, derived from the National Research Council, for effective strategies for managing deferred maintenance. For more information on our methodology for developing these leading practices, see [GAO-14-188](#).

such as the amount of deferred maintenance addressed for each dollar spent. Performance goals set specific targets to define the level of performance or results an agency expects its program to achieve. Performance measures allow management to assess progress toward its goals by measuring the program's performance in objective, quantifiable, and observable ways. For example, Forest Service's performance goals included a 75-cent reduction in deferred maintenance per dollar spent and at least 40 percent of project spending in counties identified as having a high social vulnerability.

- **Identify the primary methods to be used for delivering maintenance and repair activities.** The agencies generally have multiple methods available to address their deferred maintenance activities while implementing LRF projects. These methods were identified in agency documentation, and included using outside contractors, partnerships, flexible contract vehicles, and internal maintenance staff to conduct maintenance activities. The agencies used these delivery methods to carry out activities such as repairs, replacements, renovations to existing assets, and disposal of assets. For example, to complete historic restoration and preservation projects, FWS and NPS have used internal maintenance staff to complete smaller projects with a mobile workforce.
- **Align real property portfolios with mission needs and dispose of unneeded assets.** All five agencies used LRF projects to align their asset portfolios with mission needs through actions such as renovation of existing assets, replacement of assets, and disposal of some assets to meet their mission needs. For example, FWS had a project to consolidate and modernize public use facilities and improve recreational access at Wichita Mountains Wildlife Refuge. Specifically, this involved demolition of excess structures, infrastructure replacements, and consolidation of Refuge functions into replacement buildings.
- **Identify the types of risks posed by lack of timely investment.** Agencies' processes to select LRF projects identified risks of not addressing deferred maintenance in a timely manner. For example, they selected LRF projects that addressed identified risks, such as threats to health and safety, which are prioritized as part of the agencies' core missions. For example, as part of its weighted evaluation process for project selection BLM considered whether a project would address safety issues. Safety-related work was a key component of some BLM projects, such as LRF-funded work to repair high hazard dams in Wyoming at Little Sage Creek, Litter Robber, and Snyder Creek. This project would address safety problems with

spillways, gates, outlet structures, and other deteriorating infrastructure.

- **Identify types of facilities or specific buildings (i.e., assets) that are mission critical and mission supportive.** Agencies' processes to select LRF projects included identifying assets that are mission critical and generally prioritizing projects that address deferred maintenance for these assets. Mission-critical assets are those that are essential to the support of the mission of the agency, while mission-supportive assets are not critical to fulfilling the core mission, such as assets being considered for disposal. For example, according to Forest Service documentation, the agency's process assesses, selects, and approves potential decommissioning projects based on standardized factors including how critical the asset is to the agency's mission.

Agencies Reported Facing Several Challenges to Reducing Deferred Maintenance, and the LRF Program Design Helps to Address Certain Challenges

Officials from the five agencies reported facing several challenges to reducing deferred maintenance. These included:

- **Construction supply chain issues and inflation.** Agencies face challenges to reducing deferred maintenance related to construction supply chain issues and inflation, according to officials at all five agencies. Recently, due to COVID-19, a shortage of materials necessary for construction has contributed to project delays and higher-than-expected construction bids.
- **Remote locations.** Agencies face a challenge to reducing their deferred maintenance when they have deferred maintenance at a remote location, according to officials at the four land management agencies. Some project locations are far away from the closest available living quarters for crews, which means workers can face long workdays with travel back and forth to the site. Agency officials said contractors are often hesitant to accept jobs in remote locations as a result.
- **Extreme weather.** Some locations inherently have extreme weather, such as an extended season of very hot or cold weather, which can limit the amount of time that construction work can occur during the

year. This can limit agencies' abilities to reduce deferred maintenance. Certain extreme weather events like wildfires or floods are becoming more frequent and intense due to climate change, according to agency officials. Projects to address damages related to these events and the associated costs hinder the ability to reduce deferred maintenance, according to officials from the four land management agencies.

- **Contractor capacity or competition.** Agencies face challenges related to limited contractor capacity and limited competition—specifically, not having enough contractors to bid on or perform the work, according to officials at three of the agencies. Agencies often hire outside contractors to oversee and conduct maintenance projects. Officials said that sometimes agencies receive no bids from contractors because there are so few contractors available to compete for a project. If there is limited contractor capacity and limited competition in the bidding process, this can lead to higher costs when the agencies do get bids, according to agency officials.

In addition to general challenges related to reducing deferred maintenance, agencies also face challenges specifically related to the LRF. According to officials at the four land management agencies, the short-term nature of the LRF can create challenges with hiring. The LRF is designed as a 5-year program through 2025; however, construction projects to address deferred maintenance may take longer. Therefore, agencies could face difficult decisions on whether to hire (1) an employee to serve a 5-year term that might end during the project, or (2) a permanent employee they might not be able to justify in their budgets after the LRF funding ends.

However, some aspects of the LRF program design have helped with challenges related to project uncertainty and inflation. For example, agency officials told us having the LRF funding specified for 5 years allows them to know in advance that they will have steady funding, compared with having less predictable surges of annual funding. As a result, agencies can plan better for the coming years, according to agency officials. Similarly, the LRF funding does not expire or need to be spent in a particular time frame. This assists agencies because projects generally take place over a long time frame. Lastly, the agencies' ability to use the LRF funds to maintain, train, and expand internal maintenance teams have helped NPS and FWS tackle smaller projects more quickly and at a lower cost than through contracted work, according to agency documents.

Another benefit of the LRF's program design is the inclusion of contingency funds. Since fiscal year 2022, the explanatory statements accompanying the five agencies' annual appropriations acts have included an amount for contingency funds for each agency.³⁰ The agencies can use these contingency funds for any project funded by the LRF that experienced a funding deficiency due to unforeseen cost overruns if certain requirements are met.³¹ These contingency funds allow agencies more flexibility to deal with inflation and other challenges and address deferred maintenance, according to agency officials.

Agency Comments

We provided a draft of this report to Interior and Forest Service for review and comment. Interior provided technical comments, which we incorporated, as appropriate. Forest Service did not have any comments on this report.

We are sending copies of this report to the appropriate congressional committees, the Secretary of the Interior, the Secretary of Agriculture, and other interested parties. In addition, the report is available at no charge on the GAO website at <https://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-3841 or JohnsonCD1@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix III.



³⁰See Pub. L. No. 117-103, div. G, tit. IV, § 431(c), 136 Stat. 49, 417-18; 168 Cong. Rec. H2477, H2538 (Mar. 9, 2022); Pub. L. No. 117-328, div. G, tit. IV, § 431(c), 136 Stat. 4459, 4828-29 (2022); 168 Cong. Rec. S8553, S8716-S8717 (Dec. 20, 2022).

³¹For example, agencies can use the contingency funds only if there is a risk to project completion resulting from unforeseen cost overruns. In addition, the contingency funds can only be used for costs of adjustments and changes within the original scope of effort for projects funded by the LRF. Pub. L. No. 117-103, div. G, tit. IV, § 431(c)(1), (2), 136 Stat. 49, 417-18; Pub. L. No. 117-328, div. G, tit. IV, § 431(c)(1), (2), 136 Stat. 4459, 4828-29 (2022).

Letter

Cardell Johnson
Director, Natural Resources and Environment

List of Committees

The Honorable Joe Manchin
Chairman
The Honorable John Barrasso
Ranking Member
Committee on Energy and Natural Resources
United States Senate

The Honorable Thomas R. Carper
Chairman
The Honorable Shelley Moore Capito
Ranking Member
Committee on Environment and Public Works
United States Senate

The Honorable Brian Schatz
Chairman
The Honorable Lisa Murkowski
Vice Chairman
Committee on Indian Affairs
United States Senate

The Honorable Jeff Merkley
Chair
The Honorable Lisa Murkowski
Ranking Member
Subcommittee on Interior, Environment, and Related Agencies
Committee on Appropriations
United States Senate

The Honorable Bruce Westerman
Chairman
The Honorable Raúl M. Grijalva
Ranking Member
Committee on Natural Resources
House of Representatives

The Honorable Mike Simpson
Chair
The Honorable Chellie Pingree
Ranking Member
Subcommittee on Interior, Environment, and Related Agencies

Letter

Committee on Appropriations
House of Representatives

Appendix I: LRF Project Funding

Table 3: Cumulative Legacy Restoration Fund (LRF) Project Funding, by State, Fiscal Years 2021–2023

(in USD)

State	BIE	BLM	FWS	Forest Service	NPS	Total
Alabama	0	0	3,688,164	3,469,240	7,451,000	14,608,404
Alaska	0	21,322,000	20,826,000	42,677,027	19,267,710	104,092,737
Arizona	177,701,989	21,077,913	14,760,000	31,769,637	119,914,500	365,224,040
Arkansas	0	0	10,070,000	23,202,707	16,729,000	50,001,707
California	0	22,425,000	21,059,000	102,165,227	363,312,829	508,962,056
Colorado	0	15,042,967	0	60,068,411	54,945,000	130,056,378
Delaware	0	0	5,480,000	0	0	5,480,000
District of Columbia	0	0	0	0	135,276,284	135,276,284
Florida	0	7,155,000	0	3,712,528	56,751,019	67,618,547
Georgia	0	0	1,800,000	5,786,873	5,666,000	13,252,873
Hawaii	0	0	0	0	30,539,000	30,539,000
Idaho	0	28,291,000	7,883,118	47,444,388	9,932,000	93,550,506
Illinois	0	0	25,279,644	6,460,516	0	31,740,160
Indiana	0	0	0	2,101,641	14,812,000	16,913,641
Iowa	0	0	10,620,000	0	0	10,620,000
Kansas	0	0	0	329,000	0	329,000
Kentucky	0	0	0	20,484,259	18,781,026	39,265,285
Louisiana	0	0	2,456,000	403,107	0	2,859,107
Maine	0	0	0	908,819	45,883,178	46,791,997
Maryland	0	0	0	0	42,928,784	42,928,784
Massachusetts	0	0	0	0	101,936,993	101,936,993
Michigan	0	0	13,368,360	13,664,786	6,625,000	33,658,146
Minnesota	0	0	0	5,198,919	0	5,198,919
Mississippi	0	0	0	1,013,616	107,458,000	108,471,616
Missouri	0	0	0	11,238,410	15,156,000	26,394,410
Montana	0	17,477,000	0	57,995,637	49,458,630	124,931,267
Nebraska	0	0	0	1,890,000	0	1,890,000
Nevada	0	21,875,000	0	3,706,286	35,972,361	61,553,647
New Hampshire	0	0	0	2,483,249	0	2,483,249
New Jersey	0	0	0	0	52,637,749	52,637,749

Appendix I: LRF Project Funding

State	BIE	BLM	FWS	Forest Service	NPS	Total
New Mexico	8,557,053	13,929,429	19,376,000	35,724,900	29,089,000	106,676,382
New York	0	0	7,071,000	285,788	97,482,713	104,839,501
North Carolina	0	0	0	16,122,037	198,308,000	214,430,037
North Dakota	262,136	0	0	1,519,158	51,226,561	53,007,855
Ohio	0	0	0	3,027,459	53,366,071	56,393,530
Oklahoma	0	0	30,466,814	323,107	0	30,789,921
Oregon	0	44,214,950	0	63,613,840	45,200,000	153,028,790
Pennsylvania	0	0	0	17,360,124	73,700,248	91,060,372
South Carolina	0	0	0	3,891,533	0	3,891,533
South Dakota	66,362,136	3,267,000	9,750,000	7,934,801	0	87,313,937
Tennessee	0	0	0	19,176,787	46,365,000	65,541,787
Texas	0	0	8,374,000	3,252,500	86,106,000	97,732,500
Utah	2,001,939	17,637,000	15,472,240	46,159,455	47,497,500	128,768,134
Vermont	0	0	981,000	1,312,078	0	2,293,078
Virginia	0	400,000	0	5,734,707	411,064,273	417,198,980
Washington	0	1,016,000	0	46,203,581	79,269,304	126,488,885
West Virginia	0	0	250,000	9,668,135	1,237,000	11,155,135
Wisconsin	0	0	0	12,367,514	0	12,367,514
Wyoming	0	13,925,833	0	22,766,298	431,403,941	468,096,072

Source: GAO analysis of Department of the Interior and Forest Service data. | GAO-24-106495

Notes: These data represent fiscal years 2021 through 2023 funding as of the second quarter of fiscal year 2023. Where projects affected multiple states, we equally divided the LRF funding among the states.

Not all agencies have assets in all states. Bureau of Indian Education (BIE) did not have assets in Alabama, Alaska, Arkansas, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Virginia, or West Virginia. Bureau of Land Management (BLM) did not have assets in Arkansas, Connecticut, Delaware, Georgia, Hawaii, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, or West Virginia. BLM had four assets in Nebraska, Mississippi and Wisconsin that did not have deferred maintenance data available for the period examined in this report. Forest Service did not have assets in Delaware, Iowa, Maryland, Massachusetts, or Rhode Island.

Contingency funds and administrative costs are not associated with a location and so are excluded from this table. Fish and Wildlife Service (FWS) and National Park Service (NPS) also had some LRF funding that went toward hiring additional maintenance workers, excluded for the same reason. FWS, Forest Service, and NPS also had some LRF projects in Puerto Rico, which are not included above. Finally, FWS has also had a \$7.4 million project in Midway Atoll National Wildlife Refuge.

Appendix II: Reported Deferred Maintenance, by Agency and State

Table 4: Reported Deferred Maintenance, by Agency and State, Fiscal Years 2019–2022

(in USD)

Agency	State	2019	2020	2021	2022
Bureau of Indian Education (BIE)	Arizona	456,845,454	466,967,542	473,368,068	502,647,750
	California	33,507,789	33,515,789	33,515,789	39,675,585
	Florida	367,202	343,280	309,800	309,800
	Idaho	3,107,814	3,112,014	3,100,025	3,584,573
	Iowa	1,333,822	1,262,690	1,262,690	1,349,653
	Kansas	39,331,602	39,154,371	39,154,371	39,411,236
	Louisiana	316,860	323,719	323,719	323,719
	Maine	2,544,353	3,365,711	3,960,106	4,185,601
	Michigan	442,223	143,284	143,284	538,602
	Minnesota	6,825,356	6,547,682	6,571,443	6,472,166
	Mississippi	5,730,178	5,775,776	5,757,335	5,757,335
	Montana	9,944,228	10,021,668	10,045,271	10,085,894
	Nevada	233,541	258,941	236,248	260,097
	New Mexico	151,552,877	156,744,613	163,601,323	165,338,237
	North Carolina	0	72,250	143,911	205,730
	North Dakota	56,685,309	57,957,935	57,129,367	63,603,144
	Oklahoma	13,672,369	13,787,266	14,619,663	14,832,782
	Oregon	5,201,236	5,282,436	5,282,436	16,234,863
	South Dakota	151,168,833	155,286,773	151,991,024	162,074,162
	Utah	15,407,743	15,405,682	15,928,863	16,155,188
Washington	4,074,359	4,134,403	6,164,585	6,120,186	
Wisconsin	19,391,437	19,034,857	19,090,857	20,658,948	
Wyoming	1,899,303	1,904,103	1,430,343	2,500,814	
Bureau of Land Management (BLM)	Alaska	77,334,827	99,934,765	93,059,864	119,756,618
	Arizona	52,231,625	129,108,441	118,381,270	127,871,389
	California	86,494,534	253,273,710	288,289,167	316,182,878
	Colorado	22,108,635	88,452,203	102,858,617	114,047,460

**Appendix II: Reported Deferred Maintenance,
by Agency and State**

Agency	State	2019	2020	2021	2022
	Florida	1,836,772	8,843,944	8,844,874	7,811,932
	Idaho	154,154,562	333,544,851	330,125,172	387,254,897
	Maryland	0	43,245	0	0
	Montana	50,017,763	131,691,484	153,676,424	201,041,326
	Nevada	26,730,756	332,758,481	332,181,788	383,912,525
	New Mexico	37,676,201	304,108,049	311,907,270	357,873,747
	North Dakota	403,820	1,069,437	1,045,933	862,639
	Oregon	495,807,039	2,463,354,031	2,712,808,284	2,801,942,940
	South Dakota	1,737,179	4,552,006	4,568,711	4,882,417
	Texas	5,303	5,369	5,639	6,231
	Utah	37,057,409	205,064,703	200,568,612	209,799,999
	Virginia	724,239	1,434,385	1,236,030	1,382,227
	Washington	5,913,952	11,185,784	13,945,515	15,611,819
	Wyoming	29,573,442	218,559,096	230,013,226	270,843,037
Fish and Wildlife Service (FWS)	Alabama	8,244,816	6,307,799	19,634,604	18,954,384
	Alaska	29,448,545	28,121,446	60,363,269	59,902,585
	Arizona	19,787,145	13,472,668	37,931,999	34,711,944
	Arkansas	19,783,226	13,394,314	80,710,927	75,326,757
	California	96,257,260	79,075,375	159,019,440	169,217,938
	Colorado	15,802,942	11,390,227	22,804,130	36,114,216
	Connecticut	493,100	493,100	485,600	427,000
	Delaware	480,800	355,800	6,036,686	6,436,432
	Florida	19,449,360	14,376,706	105,017,654	101,403,225
	Georgia	14,680,889	14,326,518	37,324,929	38,924,906
	Hawaii	19,033,144	18,101,226	25,494,137	27,059,686
	Idaho	12,074,072	8,669,385	75,421,978	74,571,555
	Illinois	40,774,303	21,346,353	53,206,746	56,693,927
	Indiana	3,041,113	2,435,616	12,636,545	17,007,477
	Iowa	6,982,724	4,878,959	15,587,322	17,363,762
	Kansas	8,576,333	3,452,924	26,315,949	30,111,711
	Kentucky	1,111,504	1,015,307	1,570,277	2,397,640
	Louisiana	31,530,736	29,349,763	89,661,973	87,187,339
	Maine	3,319,014	835,714	12,514,566	13,401,327
	Maryland	12,746,885	7,529,933	10,812,683	5,413,878
	Massachusetts	1,548,229	917,429	17,353,570	17,735,492
	Michigan	17,205,933	12,971,349	46,111,306	40,796,626
	Minnesota	11,429,884	8,141,880	20,668,485	42,476,348

**Appendix II: Reported Deferred Maintenance,
by Agency and State**

Agency	State	2019	2020	2021	2022
	Mississippi	15,680,620	12,905,309	36,102,444	30,961,839
	Missouri	6,682,079	3,564,567	25,340,551	36,997,179
	Montana	20,343,762	3,142,836	42,480,842	41,651,931
	Nebraska	7,606,024	4,590,280	8,671,147	10,617,565
	Nevada	19,994,633	12,451,710	44,394,718	45,689,422
	New Hampshire	2,342,141	2,342,141	2,999,622	4,590,677
	New Jersey	3,128,604	2,467,704	6,074,090	10,836,810
	New Mexico	6,108,161	1,580,977	27,569,385	34,868,860
	New York	3,008,566	2,825,387	4,856,525	8,730,273
	North Carolina	16,736,145	11,966,333	67,357,307	44,491,735
	North Dakota	18,843,128	15,082,388	34,180,594	38,924,760
	Ohio	4,533,930	208,110	12,070,294	11,692,375
	Oklahoma	8,888,956	3,378,625	52,101,169	37,580,836
	Oregon	35,689,244	34,348,337	81,351,625	90,191,897
	Pennsylvania	602,300	429,300	9,181,919	10,974,278
	Rhode Island	1,234,277	1,234,277	1,328,399	1,568,137
	South Carolina	16,481,124	10,119,565	49,499,709	60,584,295
	South Dakota	9,499,412	5,492,100	40,497,766	37,083,622
	Tennessee	21,180,737	18,593,295	28,094,435	29,085,172
	Texas	20,063,512	10,998,131	45,946,821	72,604,088
	Utah	8,149,004	7,925,385	46,176,575	70,875,712
	Vermont	4,644,000	2,167,500	5,171,331	16,267,287
	Virginia	6,616,899	1,786,949	4,064,178	4,059,061
	Washington	30,831,683	28,811,759	81,578,387	95,422,803
	West Virginia	22,776,725	22,571,725	13,001,066	12,832,997
	Wisconsin	11,301,642	10,733,987	25,941,413	30,124,735
	Wyoming	4,525,281	4,054,865	10,295,810	10,815,702
Forest Service	Alabama	6,775,459	5,827,007	7,631,796	9,204,595
	Alaska	65,011,507	77,877,542	117,578,632	119,010,268
	Arizona	43,017,091	52,463,400	78,446,103	99,379,928
	Arkansas	11,164,060	13,113,355	28,004,342	67,578,994
	California	473,444,543	499,898,539	538,670,043	570,904,743
	Colorado	103,789,668	118,461,530	128,717,254	140,508,051
	Connecticut	2,424,553	2,424,553	2,362,031	1,906,567
	Florida	8,202,853	9,481,491	15,385,878	14,029,708
	Georgia	11,671,703	14,892,683	21,246,965	22,092,859

**Appendix II: Reported Deferred Maintenance,
by Agency and State**

Agency	State	2019	2020	2021	2022
	Hawaii	577,144	577,144	707,660	905,372
	Idaho	181,977,120	196,358,765	227,774,255	239,235,204
	Illinois	25,295,541	25,332,422	25,357,981	26,718,487
	Indiana	2,288,253	3,633,206	3,995,770	3,767,332
	Kansas	1,272,472	1,525,525	1,527,588	1,598,671
	Kentucky	14,690,655	16,765,952	35,677,925	51,118,217
	Louisiana	19,011,749	23,229,505	22,176,543	22,554,577
	Maine	3,045,164	3,064,587	3,112,338	2,649,281
	Michigan	18,093,315	28,580,292	37,417,667	41,717,597
	Minnesota	19,223,782	22,145,123	29,991,938	28,889,703
	Mississippi	9,081,032	16,561,375	22,289,882	24,449,335
	Missouri	8,532,379	12,858,445	15,441,104	21,325,532
	Montana	132,992,491	138,964,061	152,764,109	164,134,403
	Nebraska	2,770,362	2,819,832	2,802,836	3,561,134
	Nevada	14,080,639	15,326,839	14,962,088	16,775,749
	New Hampshire	24,638,501	27,264,536	26,509,162	28,159,896
	New Jersey	513,768	513,768	513,768	513,768
	New Mexico	32,756,391	34,580,783	46,307,901	52,937,255
	New York	38,862	126,200	228,972	264,534
	North Carolina	18,611,907	24,556,095	30,966,807	36,471,677
	North Dakota	1,069,481	1,216,819	3,888,346	4,003,032
	Ohio	6,038,821	7,170,246	12,305,995	13,227,337
	Oklahoma	660,387	528,487	2,148,369	4,772,405
	Oregon	203,446,538	225,565,767	250,576,786	268,553,337
	Pennsylvania	15,344,165	17,887,276	19,136,348	24,791,349
	South Carolina	7,148,115	11,128,274	13,944,511	13,852,332
	South Dakota	14,203,294	14,660,211	19,425,658	24,564,491
	Tennessee	6,403,676	8,457,500	19,736,504	21,551,645
	Texas	9,458,050	9,932,476	11,286,956	10,818,282
	Utah	54,534,440	79,137,480	94,952,985	99,640,760
	Vermont	1,508,229	3,258,025	5,628,879	5,476,390
	Virginia	12,346,168	15,677,243	35,916,613	74,684,925
	Washington	145,457,483	160,147,444	173,363,818	177,330,363
	West Virginia	17,662,797	22,487,775	26,400,563	23,215,416
	Wisconsin	24,335,530	42,577,231	66,622,108	67,410,848
	Wyoming	33,359,926	35,870,998	42,976,765	49,670,616

**Appendix II: Reported Deferred Maintenance,
by Agency and State**

Agency	State	2019	2020	2021	2022
National Park Service (NPS)	Alabama	21,788,294	470,946,972	57,555,794	62,846,743
	Alaska	97,258,208	104,701,905	169,841,378	192,141,096
	Arizona	486,898,201	610,779,873	1,156,299,164	1,215,280,196
	Arkansas	34,789,251	36,046,624	74,488,633	81,223,909
	California	1,627,219,407	1,696,931,376	3,576,271,429	3,804,247,099
	Colorado	192,533,063	269,720,547	415,893,762	403,973,353
	Connecticut	1,066,167	1,812,786	2,794,433	10,010,562
	Delaware	3,454,609	3,173,047	5,678,353	10,026,228
	District of Columbia	868,979,493	1,485,499,538	1,591,846,492	2,020,976,473
	Florida	159,184,020	181,776,412	331,614,988	595,311,997
	Georgia	80,022,169	176,396,245	128,666,489	151,888,104
	Hawaii	140,107,208	167,233,479	329,042,070	410,894,763
	Idaho	10,289,384	956,525,117	25,266,825	51,260,651
	Illinois	34,305,888	33,085,503	45,881,841	18,569,779
	Indiana	27,529,503	31,648,509	57,321,865	89,619,782
	Iowa	5,666,487	8,081,087	10,064,355	11,061,919
	Kansas	10,189,470	11,810,687	15,282,302	15,370,159
	Kentucky	105,857,085	32,376,027	158,477,782	161,233,579
	Louisiana	15,932,760	36,903,656	32,764,640	22,273,921
	Maine	73,846,665	91,690,399	138,052,170	177,298,802
	Maryland	278,089,468	91,715,934	573,808,082	752,117,795
	Massachusetts	208,636,178	252,681,722	485,146,657	560,219,658
	Michigan	42,140,662	44,442,120	78,333,426	146,446,734
	Minnesota	17,868,910	23,422,600	23,987,042	43,332,821
	Mississippi	367,877,361	13,175,857	686,927,146	441,783,209
	Missouri	76,067,584	89,149,177	133,469,761	133,862,927
	Montana	190,570,038	200,123,072	439,557,727	206,299,421
	Nebraska	5,604,014	5,623,440	7,048,576	13,188,594
	Nevada	172,717,829	206,334,365	531,799,618	531,461,938
	New Hampshire	4,844,490	5,051,817	7,554,087	8,597,771
	New Jersey	119,879,613	767,009,173	381,413,330	416,968,128
	New Mexico	122,430,925	136,664,430	197,659,804	199,949,749
	New York	560,944,051	248,801,055	1,296,340,945	1,605,026,602
	North Carolina	439,809,879	815,103,715	753,828,806	543,938,023
	North Dakota	36,078,506	52,873,013	90,537,565	77,927,359
	Ohio	85,792,913	87,932,172	187,961,818	274,977,002

**Appendix II: Reported Deferred Maintenance,
by Agency and State**

Agency	State	2019	2020	2021	2022
	Oklahoma	17,494,692	19,884,774	27,642,814	30,268,581
	Oregon	122,879,533	177,266,905	261,818,149	238,327,665
	Pennsylvania	239,889,980	241,057,703	472,803,075	628,254,349
	Rhode Island	848,225	1,028,573	1,386,972	3,352,962
	South Carolina	27,757,369	36,517,809	102,486,936	128,216,056
	South Dakota	63,493,233	67,138,626	135,508,515	104,451,195
	Tennessee	299,366,266	11,006,583	331,337,151	398,305,864
	Texas	203,463,863	207,328,549	320,666,123	331,676,078
	Utah	185,607,884	122,350,667	394,593,606	377,111,645
	Vermont	2,556,227	2,671,549	3,847,031	3,287,519
	Virginia	854,158,118	540,516,119	1,722,220,106	1,206,936,261
	Washington	317,137,230	375,898,512	913,640,223	671,027,340
	West Virginia	54,028,147	39,563,076	90,441,316	214,583,022
	Wisconsin	20,865,341	20,188,166	43,314,966	79,753,852
	Wyoming	655,880,270	171,386,024	1,751,154,834	1,286,790,048

Source: GAO analysis of BIE, Department of the Interior, and Forest Service data. | GAO-24-106495

Notes: Not all agencies have assets in all states. BIE did not have assets in Alabama, Alaska, Arkansas, Colorado, Connecticut, Delaware, Georgia, Hawaii, Illinois, Indiana, Kentucky, Maryland, Massachusetts, Missouri, Nebraska, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Virginia, or West Virginia. BLM did not have assets in Alabama, Arkansas, Connecticut, Delaware, Georgia, Hawaii, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, or West Virginia. BLM had four assets in Nebraska, Mississippi, and Wisconsin that did not have deferred maintenance data available for the period examined in this report. Forest Service did not have assets in Delaware, Iowa, Maryland, Massachusetts, or Rhode Island. Forest Service does not have statistically defensible deferred maintenance location data for heritage assets or trails, so deferred maintenance on those assets is not included in this table. Forest Service similarly does not have statistically defensible deferred maintenance location data for roads, but in this case, we included data on Forest Service roads approximated by multiplying a national average deferred maintenance per mile by the number of miles of road in each state.

Interior officials are examining and validating the \$300 million grounds category as of September 2023, as they work with BIE to include those assets in the deferred maintenance figures it provides to Interior. We included all \$300 million, but in the future, that amount could change.

Appendix III: GAO Contact and Staff Acknowledgments

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Staff Acknowledgments

In addition to the contact named above, Elizabeth Erdmann (Assistant Director), Jaci Evans (Analyst-in-Charge), Serena Lo, Drew Parent, Dan Royer, Caitlin Scoville, Jeanette Soares, and Sara Sullivan made key contributions to this report.

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