



May 2026

NUCLEAR WASTE CLEANUP

Better Data and
Project Prioritization
Vital to Managing
Aging Infrastructure
and Communicating
Needs



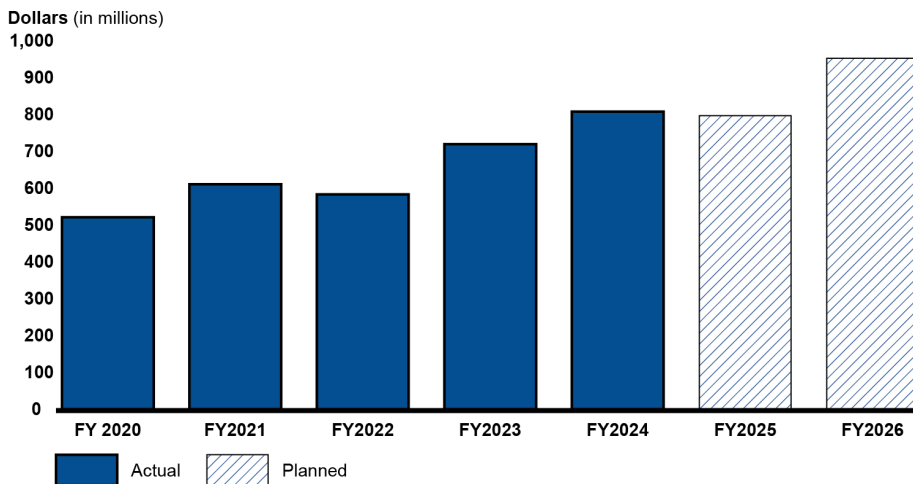
A report to congressional committees

Contact: Nathan Anderson at andersonn@gao.gov

What GAO Found

The Department of Energy’s (DOE) Office of Environmental Management (EM) reported over \$1.5 billion in repair needs across its about 4,300 operating facilities, as of June 2025. EM’s budget request included over \$950 million in maintenance spending in fiscal year 2026, an 80 percent increase since fiscal year 2020.

EM Direct-Funded Maintenance and Repair Spending, Fiscal Years (FY) 2020–2026



Source: GAO analysis of Department of Energy (DOE) Office of Environmental Management (EM) congressional budget justification data. | GAO-26-107957

EM sites and headquarters use data from condition assessments of facilities to make maintenance decisions. EM validates these data for accuracy using scorecards. According to GAO’s analysis, some scorecards included inaccurate or unsupported data and did not have completed corrective action plans. Also, GAO’s review of site responses to a questionnaire found that some sites used different methods to generate data elements categorized as performance measures by a DOE order. As EM uses these data to make decisions for funding repairs, accurate and comparable data would help EM to better plan, prioritize, and fund the continued reduction of its maintenance needs.

EM headquarters uses the Master Asset Plan—a document that outlines the infrastructure necessary to meet EM’s current mission requirements—to document its maintenance needs. Eight of 13 EM sites reported that this plan does not capture their maintenance needs, in part because sites have more granular data about their maintenance needs than headquarters uses in this plan. This plan also contains 19 projects identified in a cost savings model that could use surplus funds to produce about \$120 million in savings for EM. However, EM has not communicated the benefits of completing these unfunded maintenance projects to Congress. Aligning its plan with EM site needs and communicating potential benefits would help EM to manage its maintenance needs and save millions of dollars in the long term.

Why GAO Did This Study

EM is responsible for addressing hazardous and radioactive waste at sites contaminated from decades of nuclear weapons production and nuclear energy research. EM has reported significant repair needs and deferred maintenance, which increase safety, cost, and mission risks. EM sites reported that these costs will further increase over the next 5 years.

Senate Report 118-188 accompanying a bill for the fiscal year 2025 National Defense Authorization Act includes a provision for GAO to evaluate the status of EM’s infrastructure and how EM completes and prioritizes maintenance of its infrastructure. This report (1) describes the status of EM’s infrastructure, (2) examines the extent to which EM maintenance practices align with DOE policies and guidance, and (3) examines how EM prioritizes maintenance in its budget planning. GAO reviewed data on EM facilities and interviewed EM headquarters, site officials, and contractor staff. GAO also analyzed responses from EM sites to a questionnaire on their infrastructure maintenance and reviewed EM budget materials.

What GAO Recommends

GAO is making four recommendations to DOE. Two recommendations are related to improving data accuracy and comparability for facility data from EM sites. GAO is also recommending EM headquarters incorporate additional information from EM sites in its planning to better communicate maintenance needs, and that EM communicate benefits from its own cost-saving recommendations to Congress. EM concurred with the first two recommendations and partially concurred with the last two recommendations, as discussed in the report.

Contents

Letter		1
	Background	4
	EM's Data Show Its Infrastructure Is Generally in at Least Good Condition, with Repair Needs for Operating Facilities of About \$1.5 Billion	12
	EM Sites Did Not Consistently Follow Data Validation and Reliability Requirements	21
	EM Headquarters Does Not Consistently Use Facility Condition and Maintenance Needs Data to Inform Activities	26
	Conclusions	31
	Recommendations for Executive Action	32
	Agency Comments	32
Appendix I	Objectives, Scope, and Methodology	36
Appendix II	Site Facility Infrastructure and Maintenance Status as of June 2025	41
Appendix III	Comments from the Department of Energy	51
Appendix IV	GAO Contact and Staff Acknowledgments	54
Table		
	Table 1: Infrastructure Terms and Definitions Used by the Department of Energy (DOE)	9
Figures		
	Figure 1: Locations of the Department of Energy's Office of Environmental Management (EM) Activities	5
	Figure 2: Components of Agency Deferred Maintenance and Repair Backlogs and Methods of Addressing Them	8
	Figure 3: Strategy for Use of Information and Models in EM's Master Asset Plan	11

Figure 4: EM Personnel and Contractors' Comment Notes on Areas of Improvement from Condition Assessments of EM Facilities	14
Figure 5: Condition Index of EM Facilities, as Assessed by EM, as of June 2025	15
Figure 6: Repair Needs and Deferred Maintenance of Environmental Management (EM) Operating Facilities, by Site	17
Figure 7: Repair Needs and Deferred Maintenance of Environmental Management (EM) Non-Operating Facilities, by Site	18
Figure 8: EM Direct-Funded Maintenance and Repair Spending, Fiscal Years (FY) 2020–2026	19
Figure 9: Shares of Planned Fiscal Year 2026 Direct-Funded Maintenance and Repair Spending at EM Sites and Numbers of Facilities	20
Figure 10: EM Site Statements on Differences Between Master Asset Plan (MAP) and Site-Level Infrastructure Needs	28
Figure 11: Wiring Diagram That Identifies Risk to Mission from Infrastructure at the Idaho Cleanup Project Site	30

Abbreviations

DOE	Department of Energy
EM	Office of Environmental Management
FIMS	Facilities Information Management System
FY	Fiscal year
MAP	Master Asset Plan

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.



May 5, 2026

Congressional Committees

The Department of Energy’s (DOE) Office of Environmental Management (EM) is responsible for addressing hazardous and radioactive waste at sites contaminated from decades of nuclear weapons production and nuclear energy research. We previously reported that EM’s cleanup efforts will cost hundreds of billions of dollars and involve facilities and support infrastructure across its cleanup sites. Many of EM’s facilities were built 50 to 70 years ago and are operating well beyond their design life. For example, as we reported in June 2025, the Carlsbad site’s salt hoist—a mission-critical asset more than 40 years old and beyond its life expectancy—repeatedly required unplanned maintenance throughout 2024.¹

EM spends approximately \$781 million per year maintaining about 2,200 buildings; 2,500 other structures and facilities; 1,200 trailers; and support elements such as roads and utilities across its sites,² according to EM officials and data. EM reported that its deferred maintenance and repair needs have trended downward since 2022 with respect to the quantity of facilities. However, EM has billions of dollars of deferred maintenance and repair needs at its operating facilities. In some instances, piecemeal approaches to infrastructure maintenance have resulted in maintenance costs exceeding replacement costs.

EM headquarters directs EM’s infrastructure spending through the budget process. EM’s Master Asset Plan, first implemented in 2023, helps inform EM headquarters about sites’ prioritization of infrastructure projects, among other elements, by summarizing site infrastructure data from the prior year’s budget requests. The Master Asset Plan is an enterprise-wide strategic plan that articulates EM’s current infrastructure condition, maintenance requirements, and work priorities. The sites, separately,

¹GAO, *Nuclear Waste Cleanup: DOE Needs to Improve Contractor Oversight at the Waste Isolation Pilot Plant*, [GAO-25-107333](#) (Washington, D.C.: June 24, 2025).

²Site infrastructure, known as real property assets by DOE, includes land, buildings, trailers, and other structures. We use the term “site infrastructure” throughout the report to describe real property assets.

build their list of maintenance needs from inputs by the contractors managing and operating each site.

We and others have reported on DOE's aging infrastructure, which falls under federal real property management on our High Risk List.³ Specifically, deferred maintenance and repair needs contributed to the placement of federal real property management on the High Risk List in 2003 due to concerns about deterioration of agencies' assets and the size of their deferred maintenance and repair backlogs.⁴ We previously reported that DOE's estimated deferred maintenance and repair needs backlog increased from about \$6 billion in fiscal year 2017 to over \$10 billion in fiscal year 2022.⁵ In that report, we recommended that DOE should, among other things, provide information to Congress on the agency's deferred maintenance and repair needs backlog. We have also identified several open priority recommendations for EM. One recommendation is to improve reporting of details related to the increase of deferred maintenance on its real property by developing a plan to address its deferred maintenance and repair needs backlog and share the funding and time frames needed to reduce the backlogs in congressional budget requests or other external documents.⁶

Senate Report 118-188 accompanying a bill for the National Defense Authorization Act for Fiscal Year 2025 included a provision for GAO to evaluate the status of EM's infrastructure and how EM completes and prioritizes maintenance of its infrastructure. This report (1) describes the status of EM's infrastructure, (2) examines the extent to which EM maintenance and related data management practices align with DOE policies and guidance, and (3) examines how EM prioritizes maintenance in its budget planning.

³GAO, *High-Risk Series: Heightened Attention Could Save Billions More and Improve Government Efficiency and Effectiveness*, [GAO-25-107743](#) (Washington, D.C.: Feb. 25, 2025).

⁴GAO, *High-Risk Series: An Update*, [GAO-03-119](#) (Washington, D.C.: Jan. 1, 2003).

⁵GAO, *Federal Real Property: Agencies Should Provide More Information about Increases in Deferred Maintenance and Repair*, [GAO-24-105485](#) (Washington, D.C.: Nov. 16, 2023).

⁶GAO, *Priority Open Recommendations: Department of Energy*, [GAO-25-108093](#) (Washington, D.C.: Apr. 11, 2025).

To address these objectives, we

- reviewed DOE and EM documents, relevant DOE orders, GAO reports, and other documents relevant to the maintenance and repair of EM facilities;
- reviewed responses to a questionnaire we developed for all 13 EM sites with facilities recorded in the facility data we received as of the end of fiscal year 2024, the most recently available data at the time of our review;⁷
- analyzed data from DOE's Facilities Information Management System (FIMS), the DOE system of record for real property management data as of June 2025, including elements such as the age, condition, risk level, and cost of replacement, repair, and deferred maintenance for each facility;⁸
- interviewed officials from EM headquarters and EM sites selected based on the number of EM facilities in FIMS, amount of total annual maintenance and deferred maintenance costs recorded in FIMS,

⁷EM sites included in our review were (1) Carlsbad – Waste Isolation Pilot Plant, (2) Energy Technology Engineering Center, (3) Environmental Management Consolidated Business Center, (4) Hanford Site, including the Pacific Northwest National Laboratory, (5) Idaho Site, including Fort St. Vrain, (6) Los Alamos National Laboratory, (7) Moab Uranium Mill Tailings Remedial Action Project Site, including the Crescent Junction Site, (8) Nevada National Security Site, (9) Oak Ridge Office of Environmental Management, including the East Tennessee Technology Park, (10) Paducah Site, (11) Portsmouth Site, (12) Savannah River Site, and (13) the West Valley Demonstration Project. We did not include Lawrence Livermore National Laboratory, Sandia National Laboratory, and EM Consolidated Business Center – New York in our review as the facilities at the sites were not managed by EM or had no facilities in FIMS at the time of our review.

⁸Information on DOE data for FIMS are publicly available at Department of Energy, *Facilities Information Management System* (Washington, D.C.: n.d.), <https://fims.doe.gov/fimsinfo>. Within the FIMS data, we analyzed all facilities categorized in the headquarters Program Office category as managed by EM. In addition, for the purposes of reporting, we combined facilities in the Site Name category based on the site management office. For example, we included those facilities categories in the headquarters Program office category as managed by EM in the Site Name categories of Depleted Uranium Hexafluoride-Paducah and Paducah Gaseous as the Paducah Site. We determined that these data were sufficiently reliable for the purposes of describing and analyzing EM's facilities and maintenance and repair needs.

number of EM facilities in FIMS in poor or very poor condition, and geographic location as of June 2025;⁹

- conducted site visits to two sites with a significant number of EM facilities to better understand their site-specific successes and challenges related to the maintenance and repair of their EM facilities;
- reviewed the output of EM headquarters' annual review of site FIMS data for EM sites for fiscal years 2022, 2023, and 2024 for their accuracy and completeness;
- reviewed EM's annual budget requests for fiscal years 2020 through 2026 to understand how EM communicates its spending needs generally and for direct-funded maintenance and repair; and
- compared our findings against criteria identified in DOE orders, including the requirements in DOE Order 430.1C: Real Property Asset Management, which, among other things, provide direction to EM for the management of their federal real property.

See appendix I for additional information about our objectives, scope, and methodology.

We conducted this performance audit from November 2024 to May 2026 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

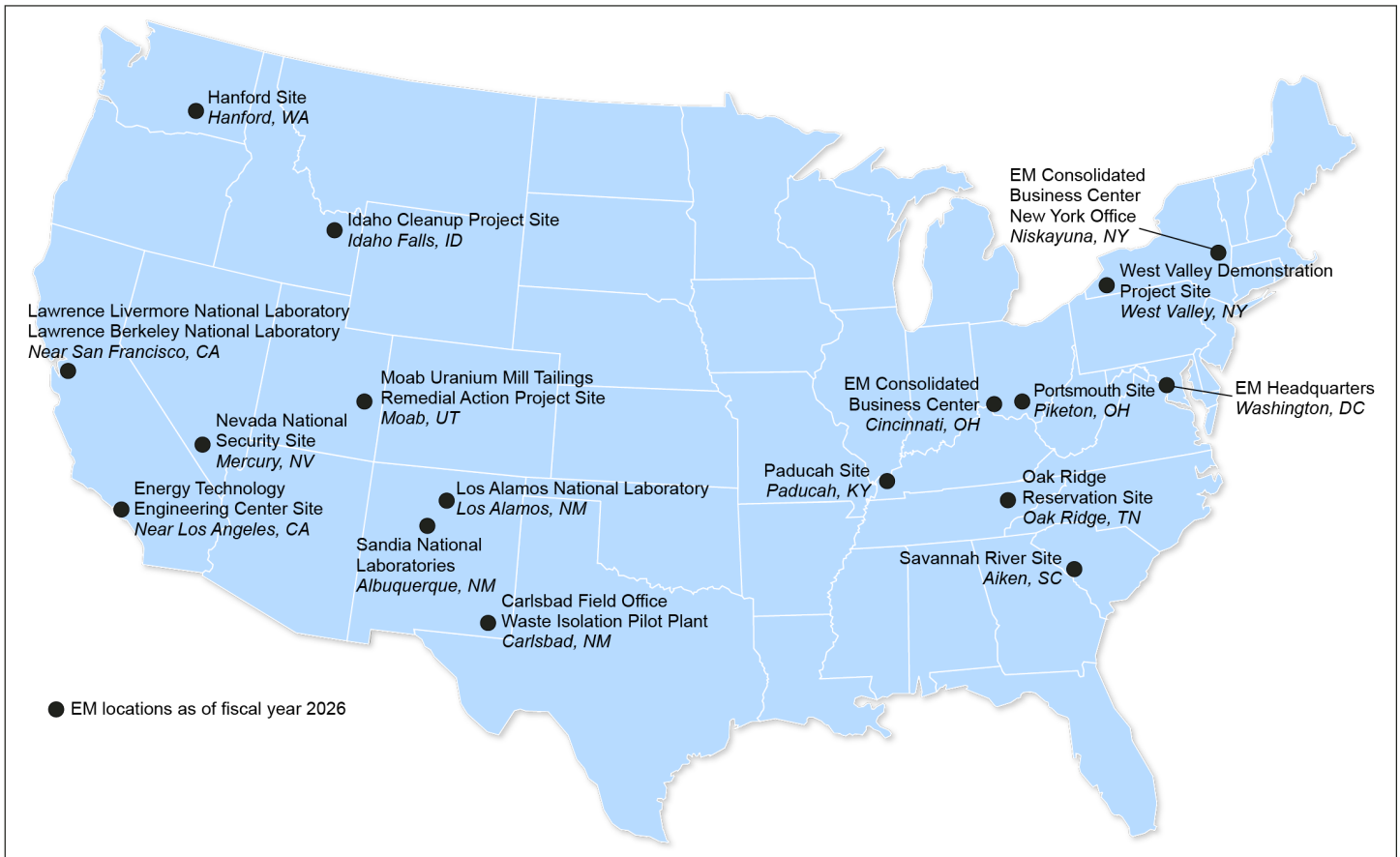
EM's Roles and Responsibilities Within the EM Complex

EM oversees 15 cleanup sites across the U.S., a network known as the EM complex, from its headquarters in Washington, D.C. EM headquarters provides management oversight of activities, operations, and program integration across the EM complex, including coordination, oversight, and leadership on scope, cost, and schedule components. At each of EM's cleanup sites, the site manager is responsible and accountable for

⁹DOE uses FIMS to assist in managing its real property assets. FIMS is DOE's corporate real property database as specified by DOE Order 430.1C. Department of Energy, *Real Property Asset Management*, DOE Order 430.1C (Change 2) (Washington, D.C.: Sept. 17, 2020). According to DOE, FIMS offers DOE a management and planning tool that provides an accurate inventory of all real property assets that DOE has a legal interest in or right to use.

management and integration of all site-level activities. The site manager relies on a federal team to manage and integrate work performed by contractors. Figure 1 shows the locations of the EM complex.

Figure 1: Locations of the Department of Energy’s Office of Environmental Management (EM) Activities



Sources: GAO analysis of agency documentation; Map Resources (map). | GAO-26-107957

Note: EM Headquarters and EM Consolidated Business Center, both shown on the map, are office locations and do not have any nuclear cleanup activities on site. EM does not own assets at all DOE sites, for example at the EM Consolidated Business Center New York Office, the Office of Naval Reactors owns all real property assets. EM sites included in our review were (1) Carlsbad – Waste Isolation Pilot Plant, (2) Energy Technology Engineering Center, (3) Environmental Management Consolidated Business Center, (4) Hanford Site, including the Pacific Northwest National Laboratory, (5) Idaho Site, including Fort St. Vrain, (6) Los Alamos National Laboratory, (7) Moab Uranium Mill Tailings Remedial Action Project Site, including the Crescent Junction Site, (8) Nevada National Security Site, (9) Oak Ridge Office of Environmental Management, including the East Tennessee Technology Park, (10) Paducah Site, (11) Portsmouth Site, (12) Savannah River Site, and (13) the West Valley Demonstration Project. We did not include Lawrence Livermore National Laboratory, Sandia National Laboratory, and EM Consolidated Business Center – New York in our review as the facilities at the sites were not managed by EM or had no facilities in FIMS at the time of our review.

EM staff and contractors across the EM complex are responsible for advancing EM's cleanup mission. This mission includes deactivating and decommissioning contaminated buildings; remediating contaminated soil and groundwater; and designing, constructing, and operating facilities to treat millions of gallons of radioactive liquid waste at EM's 15 cleanup sites. To carry out its mission, EM received approximately \$7.4 billion on average annually from 2017 through 2023, according to DOE budget documents.

Relevant DOE Orders on Real Property Management

The following orders describe EM's activities and responsibilities for managing its real property, according to EM headquarters staff:

- DOE Order 430.1C: Real Property Asset Management.¹⁰ This order, among other things, aims to establish a data-driven, risk-informed, and performance-based approach to the life cycle management of real property assets that aligns with mission needs, according to the order. For example, it requires EM to assess the condition of all real property assets at least every 5 years, categorize which deficiencies should also be flagged as deferred maintenance (including the estimated cost of their repair needs), report data annually in FIMS, and validate FIMS data annually.¹¹
- DOE Order 433.1B: Maintenance Management Program for DOE Nuclear Facilities.¹² Among other things, this order defines the safety management program for maintenance of hazard category 1, 2, and 3 nuclear facilities.¹³ For example, the order requires EM to identify which real property assets are hazard category 1, 2, and 3 nuclear facilities; contractors to create nuclear maintenance management

¹⁰Department of Energy, *Real Property Asset Management*.

¹¹DOE Order 430.1C directs inspections of real property assets at a minimum of every 5 years, or more frequent annual or specialized inspections for critical high-risk or nuclear infrastructure, bridges, culverts, or tunnels based on other DOE order requirements.

¹²Department of Energy, *Maintenance Management Program for DOE Nuclear Facilities*, DOE Order 433.1B (Change 1) (Washington, D.C.: Apr. 21, 2010).

¹³According to DOE Standard 1027-2018, hazard category 1 facilities have a hazard analysis that shows the potential for significant off-site consequences, hazard category 2 facilities have a hazard analysis that shows the potential for significant on-site consequences, and hazard category 3 facilities have a hazard analysis that shows the potential for significant localized consequences. A nuclear facility below hazard category 3 is defined as a nuclear facility with radiological materials, but in quantities determined as part of an initial or final hazard categorization to be less than hazard category 3 thresholds. Department of Energy, *Hazard Categorization of DOE Nuclear Facilities*, DOE Standards 1027-2018 (Chg Notice 1) (Washington, D.C.: Jan. 22, 2019).

programs for these facilities; and EM to validate the contractors' programs on a regular basis.

- DOE Order 420.1C: Facility Safety.¹⁴ This order establishes facility and programmatic safety requirements for nuclear safety design criteria, fire protection, and other safety areas, among other things. For example, the order outlines contractor facility safety requirements for design, construction, operation, and management of DOE sites and facilities.

Deferred Maintenance and Repair Needs

Agencies that hold real property are generally responsible for the cost of maintaining and repairing their real property assets, which include buildings and structures.¹⁵ Buildings, structures, and their component systems (e.g., structural, electrical, or ventilation) have finite, expected useful lives. These systems should be maintained and repaired during their useful lives, after which they can be reasonably expected to need replacement.¹⁶ Delaying or deferring routine maintenance and repairs may, in the short term, diminish the performance of these systems and, in the long term, shorten their useful lives. We have previously reported that deferring maintenance and repair can ultimately result in significantly higher maintenance, repair, and operating costs, or premature replacement.¹⁷

Federal agencies typically have backlogs of deferred maintenance and repair needs, which can include projects deferred due to insufficient funding or because a project is not needed to support a current mission need. Agencies can manage their backlogs through activities such as

¹⁴Department of Energy, *Facility Safety*, DOE Order 420.1C (Change 3) (Washington, D.C.: Nov. 14, 2019).

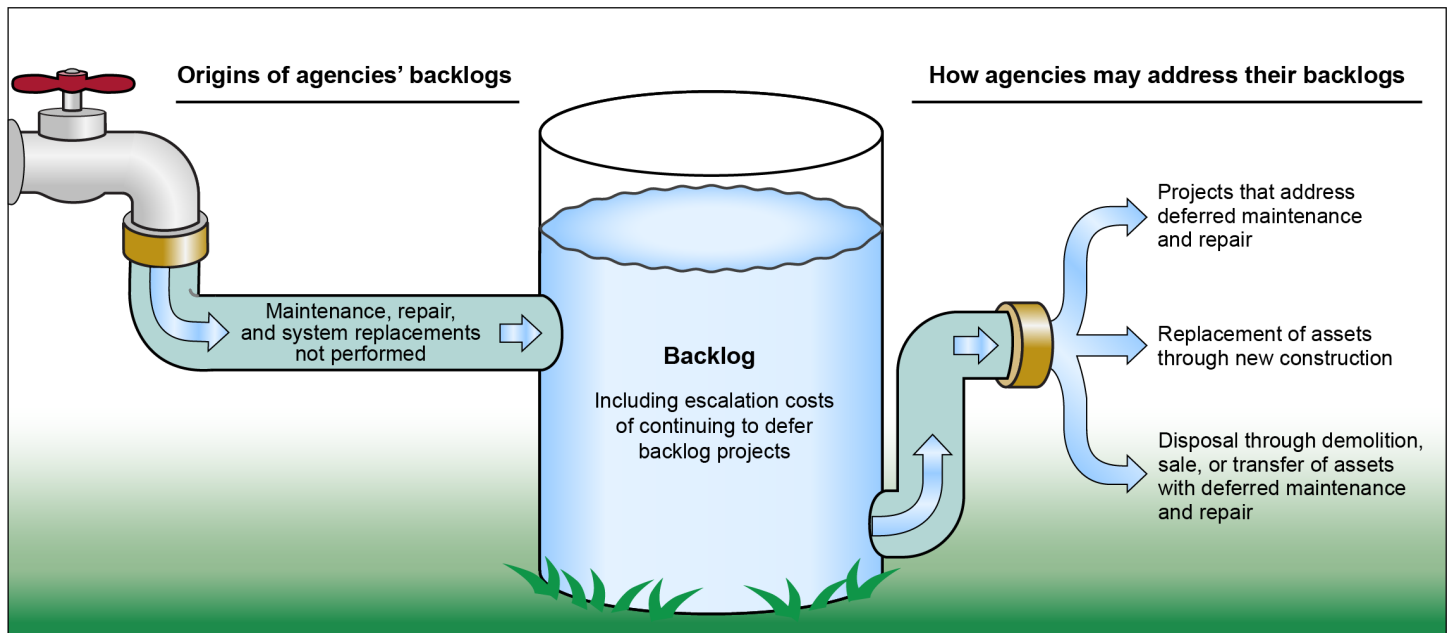
¹⁵The Federal Real Property Council, an interagency council that promotes the efficient and economical use of real property assets, among other things, separates real property assets into three categories: (1) buildings, (2) structures, and (3) land. Buildings are defined as constructed assets that are enclosed with walls and a roof that provide space for agencies to perform activities or store materials as well as provide space for people to live or work in. Structures are assets that are categorized as neither buildings nor land, and include assets such as harbors, parking structures, dams, utility systems, monuments, roads, and bridges.

¹⁶According to EM staff, in some cases, instead of replacement, facilities are decommissioned at the end of their useful lives.

¹⁷GAO, *Federal Real Property: Government's Fiscal Exposure from Repair and Maintenance Backlogs Is Unclear*, [GAO-09-10](#) (Washington, D.C.: Oct. 16, 2008); *Federal Real Property: Improved Transparency Could Help Efforts to Manage Agencies' Maintenance and Repair Backlogs*, [GAO-14-188](#) (Washington, D.C.: Jan. 23, 2014).

projects to specifically address deferred maintenance and repairs; projects to repair or replace assets (e.g., new construction); or disposing of assets (see fig. 2).

Figure 2: Components of Agency Deferred Maintenance and Repair Backlogs and Methods of Addressing Them



Source: GAO. | GAO-26-107957

Agency budgets do not request amounts specifically for deferred maintenance. Instead, agencies typically address deferred maintenance through funding provided for operations and maintenance of facilities and for capital projects. In November 2023, we previously recommended that DOE develop plans to address its deferred maintenance and repair backlogs and identify the funding and time frames needed to reduce them in congressional budget requests.¹⁸ DOE neither agreed nor disagreed with this recommendation and has yet to address it.

DOE's Data to Assess Deferred Maintenance and Repair Needs

DOE relies on functional site infrastructure to support each site's mission. To keep track of its infrastructure, EM assigns each facility a property ID and level of mission dependency, among other descriptors, in the FIMS database. FIMS serves as DOE's corporate real property database, as

¹⁸[GAO-24-105485](#).

specified by DOE Order 430.1C, Real Property Asset Management.¹⁹ As such, our review of DOE's process found that EM headquarters uses FIMS data, among other information, for making daily management decisions related to condition, utilization, mission, status, maintenance and operations costs, and dispositions and future acquisitions of real property. EM uses the condition assessment section in FIMS to log the condition and generate a cost estimate to repair or replace aspects of each facility.

We also found that EM sites use multiple metrics to capture the condition of their facilities and to estimate potential costs for repairs and maintenance. These metrics include condition index and overall asset condition. Data are recorded in FIMS according to specific definitions outlined in table 1.

Table 1: Infrastructure Terms and Definitions Used by the Department of Energy (DOE)

Key term	Definition
Real property asset	Distinct parcel; building; real property trailer; or other structure, facility, or interest acquired by or operated for the benefit of DOE. Equipment or fixtures that are installed in a building in a more or less permanent manner are usually held to be part of the real property.
Mission dependency	The value a real property asset brings to the performance of the mission as determined by DOE. Categorized in one of three categories:
1) Mission critical	1) A real property asset deemed necessary to perform the primary missions assigned to a site. Loss would disrupt or pose a risk to operations.
2) Mission dependent, not critical	2) A real property asset that plays a supporting role in meeting the primary mission assigned to a site. Loss would not immediately disrupt operations.
3) Not mission dependent	3) A real property asset that is not in support of the primary missions assigned to a site but rather supports secondary missions or quality of workplace initiatives. Loss would result in inconvenience or indirectly affect operations.
Condition	
1) Condition index	1) Condition index describes an asset's current physical condition, according to DOE documentation. It is a ratio that compares an asset's repair needs cost against the cost to replace it. DOE's Master Asset Plan categorizes the condition index values on a scale ranging from very good to very poor. A low condition index value, represented as very poor, indicates that the cost of repairing an asset is approaching or exceeding the cost of replacing it. A high value, represented as very good, indicates that few repairs are needed.

¹⁹Department of Energy, *Real Property Asset Management*.

Key term	Definition
2) Overall asset condition	2) Overall asset condition is based on a condition assessment survey, functionality assessment, and other real property indicators that may put the mission at risk. An asset in adequate condition is considered fully capable of performing its mission, while an asset in substandard or inadequate condition has risk to the mission that may need to be addressed.
Cost of maintenance	
1) Repair needs	1) The estimated cost to restore all deficiencies identified, for a real property asset during a condition assessment survey, to a state substantially equivalent to the most recently configured capacity, efficiency, or capability as required by the mission.
2) Deferred maintenance	2) Maintenance that was not performed when it should have been or was scheduled to be and which, therefore, is put off or delayed for a future period. As defined by the FIMS user guide, "deferred maintenance" costs should always be lower than "repair needs."

Source: DOE Facilities Information Management System (FIMS) user guide and agency documentation. | GAO-26-107957

EM's Master Asset Plan

The Master Asset Plan is EM's enterprise-wide strategic plan covering the infrastructure necessary to meet current, planned, and future mission requirements. The plan uses FIMS data to create a "snapshot" of EM's infrastructure and maintenance needs at the time of release. It also provides an integrated view of EM's owned infrastructure and a prioritized list of investments to reduce risk to mission.²⁰ The plan also addresses new infrastructure needed at the sites to reduce risk and support mission needs. According to the plan, it is intended to demonstrate how EM maintains the infrastructure needed to accomplish its missions across the complex, evaluate infrastructure critical to EM's mission, and identify areas of risk to the mission.

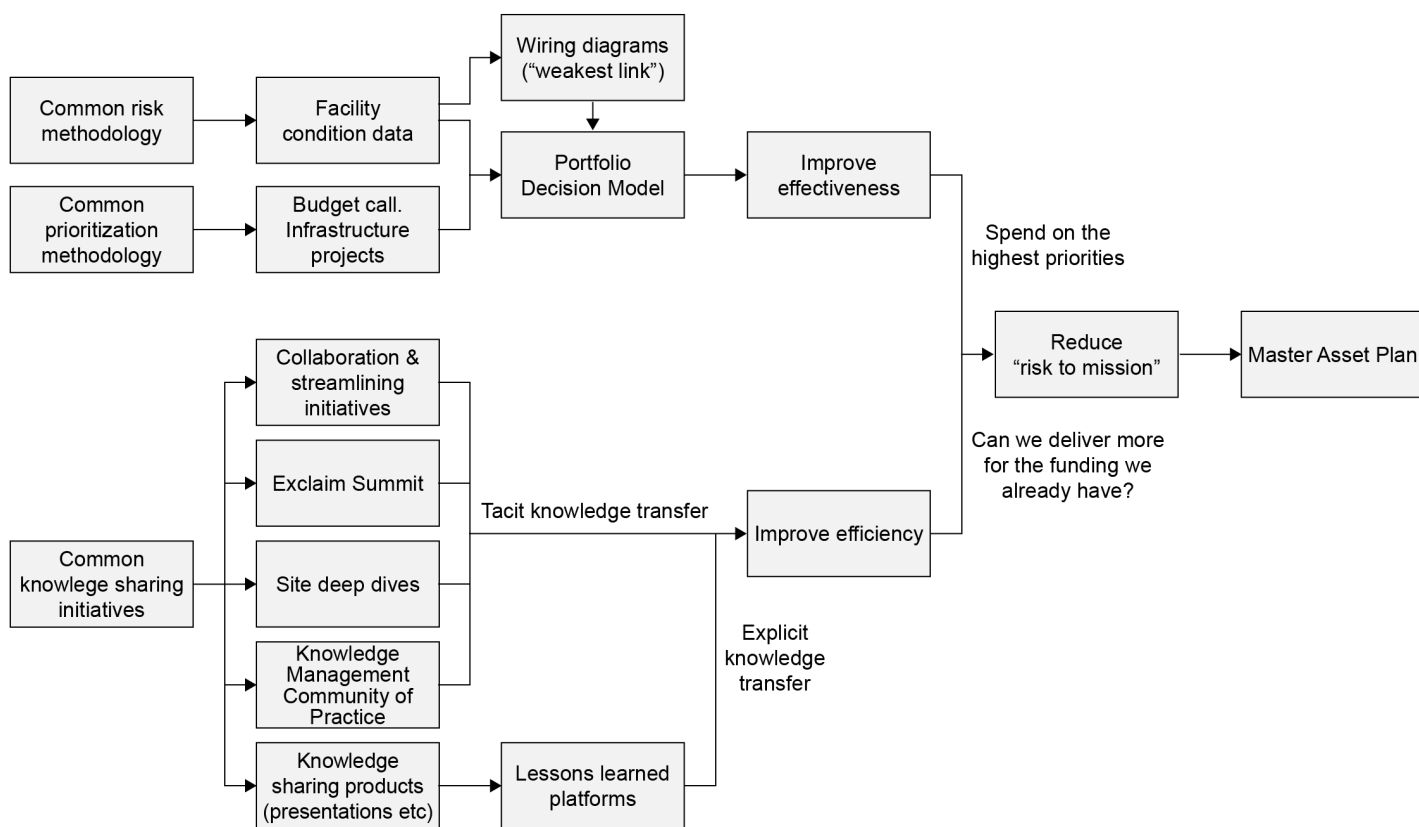
The Master Asset Plan uses and contains data from each of EM's sites and attempts to improve effectiveness of investments across EM's sites by using common risk and prioritization methodologies for unfunded projects that could be completed with surplus funding, as shown in figure 3.²¹ For example, the Master Asset Plan includes information from EM headquarters' communication with EM sites about their needs and "deep dive" visits to several sites by EM headquarters staff to discuss

²⁰EM first produced a Master Asset Plan in 2023 and updated the plan in 2024. The Master Asset Plan supplants the 2021 Strategic Infrastructure Management Plan.

²¹The prioritization model in the Master Asset Plan contains a step where the model identifies funded and unfunded projects from the site's integrated priority lists. Funded projects are projects which are funded for the next fiscal years, and unfunded projects are projects that could be carried out if additional funding was available. According to the plan, not all the funding requests from the original funded list are funded by the budget, and those projects are moved onto the unfunded list for the purpose of the prioritization model.

maintenance. The Master Asset Plan also includes EM site-specific information. For example, the plan includes site-specific strategic infrastructure priorities, dashboards on each site's facility data, and wiring diagrams that indicate types of supporting infrastructure that present the greatest risk to the site's mission.

Figure 3: Strategy for Use of Information and Models in EM's Master Asset Plan



Source: Department of Energy (DOE) Office of Environmental Management (EM) 2024 Master Asset Plan. | GAO-26-107957

The Master Asset Plan reported that although there has been significant progress in recent years, some facilities remain in poor condition. The plan notes that infrastructure failures will affect the mission, possibly through increased mission duration and overall cost. Modeling in the plan shows that relatively small increases in funding for currently unfunded projects, specifically for supporting infrastructure, could make a significant difference in reducing sites' risk to mission based on its current infrastructure needs as identified in FIMS.

EM's Data Show Its Infrastructure Is Generally in at Least Good Condition, with Repair Needs for Operating Facilities of About \$1.5 Billion

Assessment of each facility's condition helps EM determine whether the cost of maintenance needs is low or high relative to the cost to replace the facility. As of June 2025, EM data showed that about 80 percent of all EM facilities were considered to be in "good" or "very good" condition. Also, as of June 2025, EM reported about \$1.5 billion in operating facility repair needs.²² Budgets for direct-funded maintenance and repair spending across EM have nearly doubled since 2020, to over \$950 million in the EM 2026 budget request.

Sites Conduct Facility Condition Assessments at Various Levels to Estimate the Cost of Needed Maintenance

Sites conduct facility condition assessments in a variety of ways. According to sites' responses to our questionnaire, contractors and DOE site managers conduct facility condition assessments and track the results using FIMS and contractors' tracking systems. DOE Order 430.1C requires condition assessments of each facility at least once every 5 years, unless another risk-based interval has been approved, though some sites perform assessments more often. Assessment data are to be entered into FIMS for use by EM headquarters.

Through our analysis of EM documents and interviews with site officials, we found that EM assesses the condition of its facilities in three ways:

1. Visual and technical assessment. EM or contractor personnel conduct visual and technical assessments of the condition of facilities or portions of facilities on site. These aspects are called "inspection units." Each inspection unit is given a rating of excellent, good, adequate, poor, or fail. The condition assessment also often includes a corresponding dollar value of repairs needed within a particular inspection unit.
2. Condition index. This metric describes a facility's overall physical condition rather than discrete aspects of it. Condition index is tracked in FIMS and is a number from 1 to 100 derived from two dollar amounts: (1) the cost of repair needs of a facility as tracked in FIMS and (2) the replacement plant value, which is the cost of replacing an existing facility with a comparable new facility. These index values are then grouped into five condition categories: very good, good, fair, poor, and very poor. A good rating implies that repair needs are

²²Repair needs can be addressed through methods other than maintenance and repair, such as replacement or disposal.

relatively low compared to replacement costs, and a poor rating implies repair costs approach or exceed replacement costs.

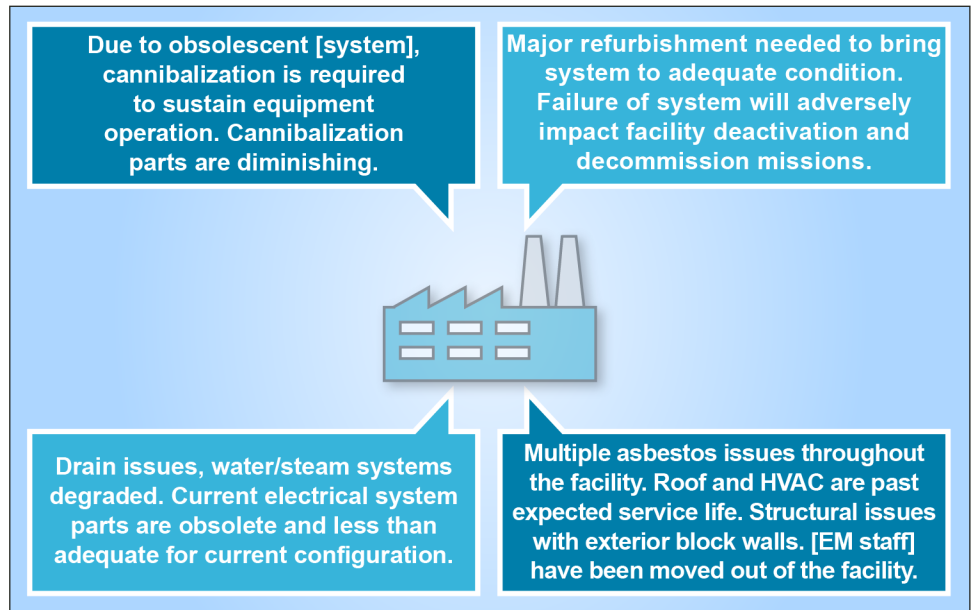
3. Overall asset condition. This metric portrays the extent to which a facility can perform its current or future mission, and rates a facility as adequate, substandard, or inadequate. A site will review data from the Condition Assessment Survey, Functionality Assessment, and other real property indicators to Determine if the asset is: Adequate means that a facility is fully capable of meeting its mission, Substandard means that a facility has deficiencies that interfere with the mission, or Inadequate means that a facility has major deficiencies that significantly impair or put performance of the mission at risk.

In addition, EM categorizes the operating status of its facilities. Of EM's nearly 6,000 facilities, 4,655 are considered operating at the time of our review. We categorized the remaining facilities as non-operating.²³ EM officials reported that the operating status of facilities impacts the planning and prioritization of maintenance for that facility. For example, a mission critical operating facility may be prioritized over a shutdown facility. According to EM officials, non-operational facilities may be prioritized when they impact other operating facilities or when the lack of maintenance poses an environmental risk.

EM personnel and contractors document their comments on repair needs or details about a facility's condition as part of condition assessments in the FIMS database. These descriptions offer additional context about what the various condition data elements mean in practical terms. The descriptions are required according to the FIMS Data Element Dictionary when the overall asset condition is "inadequate" or "substandard" but not when the condition is "adequate." Figure 4 shows a selection of comments recorded as part of facility assessments across the EM complex.

²³EM facilities we categorized as operating included those in the operating and standby status categories, EM facilities we categorized as non-operating included those in the shutdown, undergoing decommissioning, undergoing disposition, and undergoing stabilization/deactivation status categories,

Figure 4: EM Personnel and Contractors' Comment Notes on Areas of Improvement from Condition Assessments of EM Facilities



Source: Department of Energy (DOE) Office of Environmental Management (EM) facility condition assessments. | GAO-26-107957

EM Reports About \$1.5 Billion in Repair Needs for Operating Facilities; Most Facilities Are in Good or Very Good Condition

Our analysis of FIMS data, as of June 2025, shows that about 80 percent of all 5,893 EM facilities had a condition index considered “good” or “very good,” and about 1.5 percent were considered “mission critical” and had “poor” or “very poor” condition indexes.²⁴ The following are examples of facilities that have critical missions and need repair:

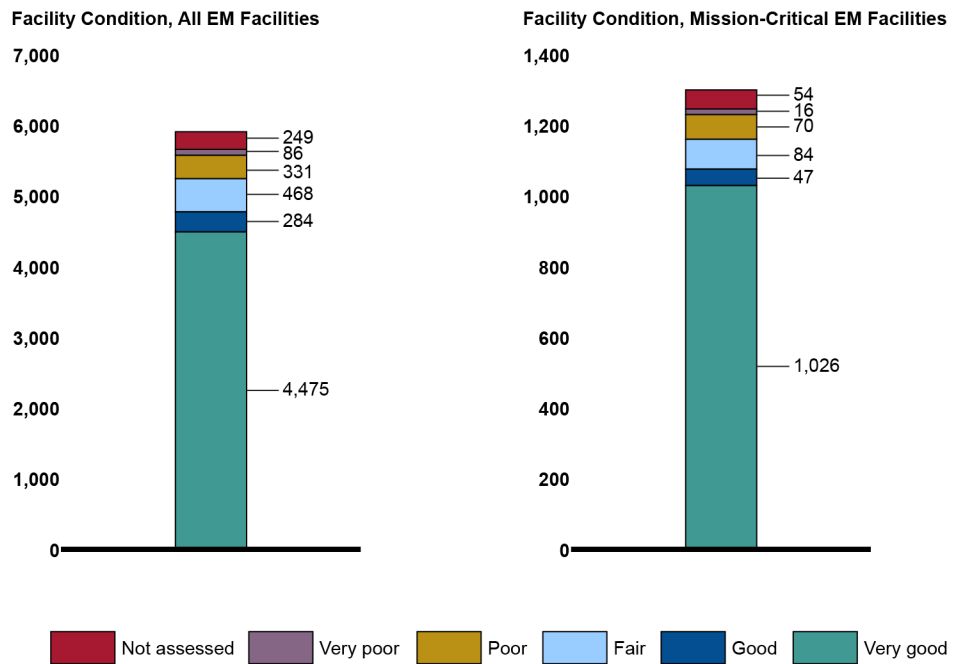
- Savannah River Site crane at H Canyon: One infrastructure challenge highlighted by staff is a mission-critical crane that allows H Canyon to complete key steps of its mission. In 2025, Savannah River Site was updating the crane’s control and monitoring systems, which had components that were 70 years old.
- Electrical distribution systems at Idaho: Among other facilities, staff identified transformers and substations—some exceeding 50 years in use—as mission-critical facilities that could have significant effects on

²⁴DOE categorizes site infrastructure by its mission dependency, which is the value a real property asset brings to the performance of the mission, as determined by DOE. Site infrastructure is divided into three categories of mission dependency: (1) mission critical; (2) mission dependent, not critical; and (3) not mission dependent.

both cost and schedule due to the potential lack of commercial availability of replacement parts and potential redesign efforts.

Although relatively few facilities are considered to be both mission critical and in poor or very poor condition, the failure of any one of them may pose high risk to the cleanup mission, site safety, or both. Figure 5 shows EM facilities by their assessed conditions.

Figure 5: Condition Index of EM Facilities, as Assessed by EM, as of June 2025



Source: GAO analysis of Department of Energy (DOE) Office of Environmental Management (EM) Facilities Information Management System (FIMS) data. | GAO-26-107957

The number of facilities with a condition index of good or very good means that the billions of dollars in repair needs and deferred maintenance EM reports are more cost effective than constructing capital

projects to replace them at potentially higher cost.²⁵ As of June 2025, EM reported \$1.5 billion in operating facility repair needs, and \$510 million in deferred maintenance for operating facilities. The Oak Ridge Site reset its deferred maintenance data to \$0 in June 2025 as the site works to reevaluate and update how it determines which deficiencies with repair needs should also be classified as deferred maintenance. Therefore, Oak Ridge's costs are not represented in the overall deferred maintenance figure.

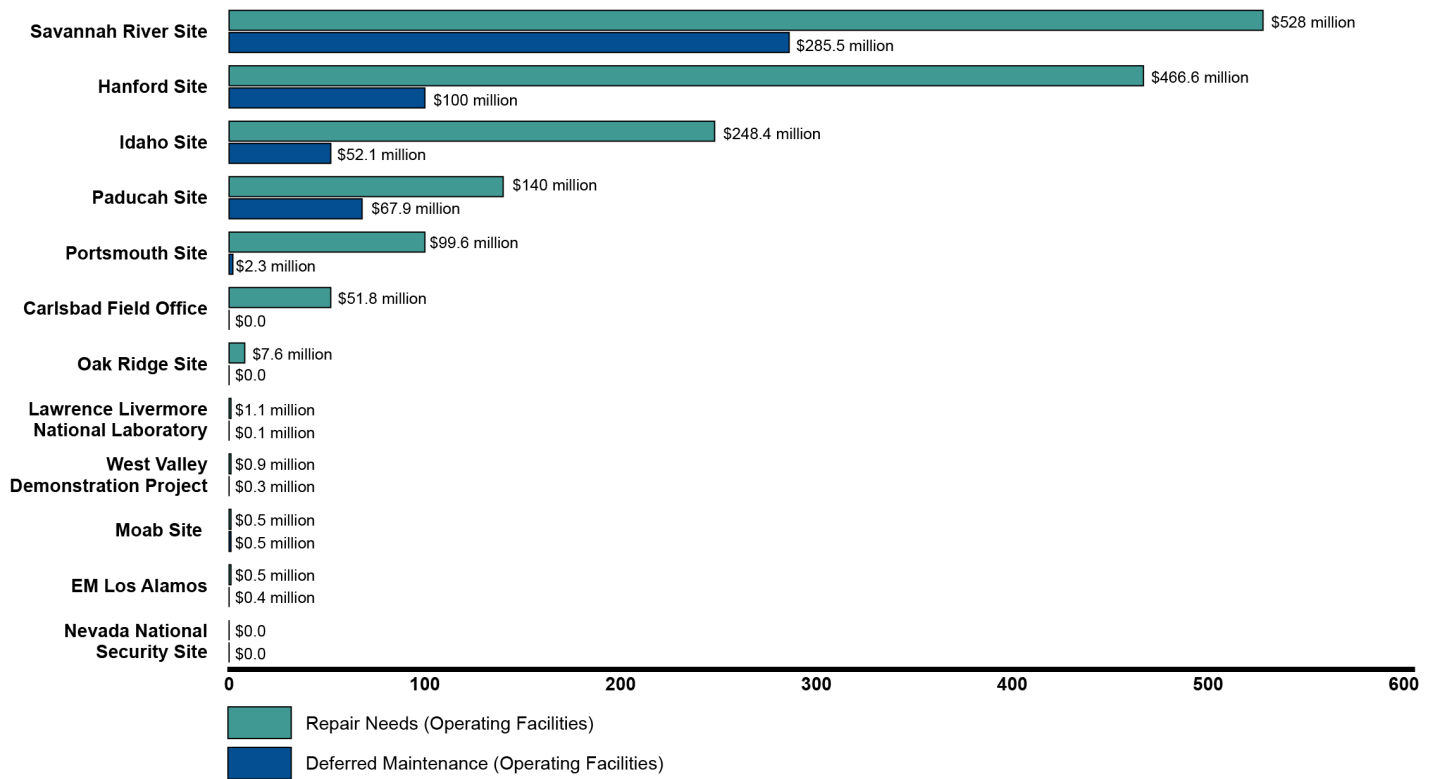
The number of EM facilities at each site as of June 2025 varied from one at the Nevada National Security Site and three at Lawrence Livermore National Laboratory to 1,547 at Hanford and 1,842 at the Savannah River Site.²⁶ Site-level details about facilities and their conditions can be found in appendix II.

EM reported varying levels of facility repair needs and deferred maintenance at the site level as well. Two sites had the majority of repair needs and deferred maintenance for operating facilities: Hanford and the Savannah River Site. In contrast, many of the sites with relatively fewer facilities under EM responsibility showed low or no repair needs and deferred maintenance. Many of these sites have onsite assets managed by other DOE programs. Figure 6 shows estimated repair needs and deferred maintenance amounts at the sites.

²⁵Repair needs are defined as the estimated cost to restore a real property asset's component system failures noted during a condition assessment survey to a state substantially equivalent to the most recently configured capacity, efficiency, or capability. Deferred maintenance is defined as maintenance that was not performed when it should have been or was scheduled to be and which, therefore, is put off or delayed for a future period. Repair needs generally include deferred maintenance, so repair needs will always equal or exceed the cost of deferred maintenance.

²⁶According to EM staff, during fiscal year 2025, EM transferred over 1,000 facilities at the Savannah River Site to the National Nuclear Security Administration as it assumed control over mission support functions at the site. EM's 2024 Master Asset Plan includes these facilities, while our review of EM's FIMS data as of June 2025 does not.

Figure 6: Repair Needs and Deferred Maintenance of Environmental Management (EM) Operating Facilities, by Site

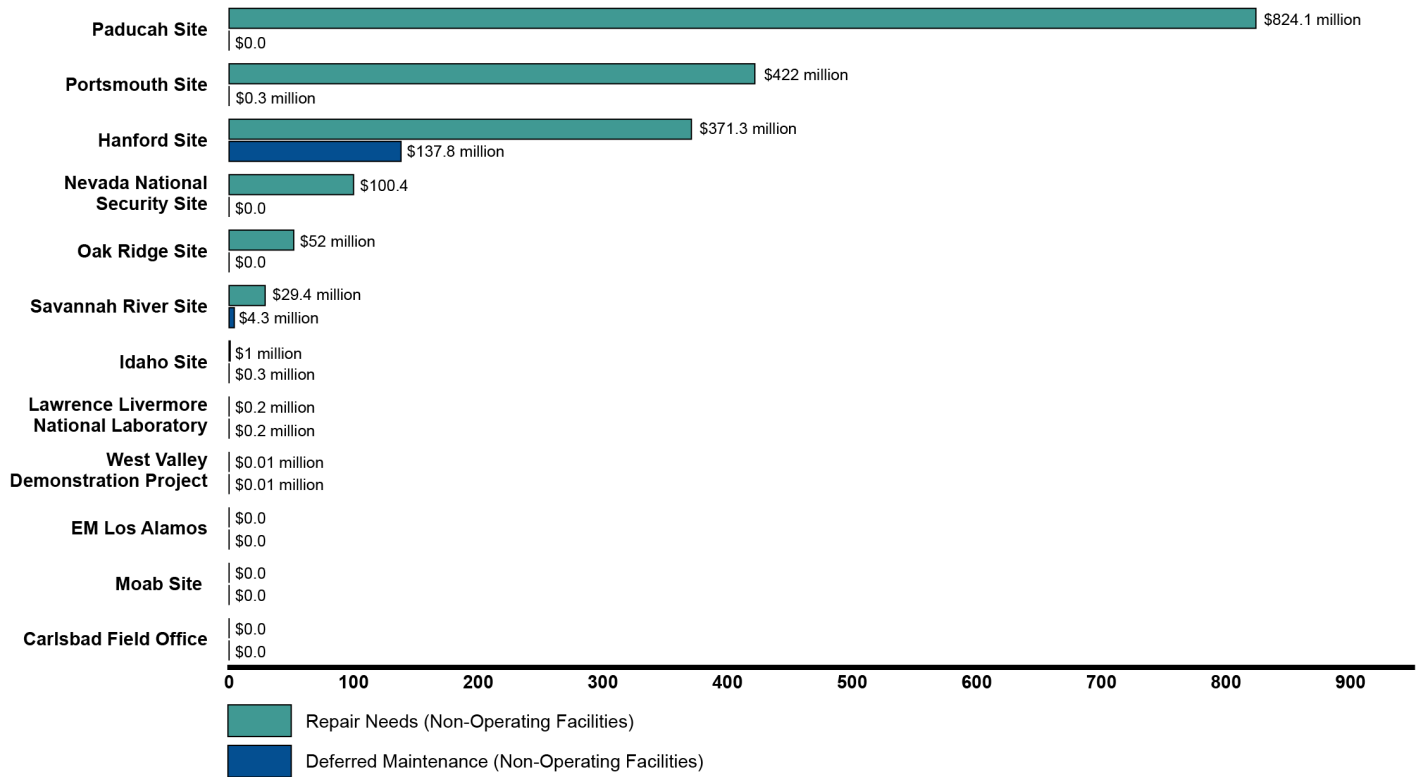


Source: GAO analysis of Department of Energy (DOE) Facilities Information Management System (FIMS) data. | GAO-26-107957

Note: As of June 2025, Energy Technology Engineering Center and EM Consolidated Business Center had \$0 for both deferred maintenance and repair needs, therefore we omitted these sites from the chart. This figure displays \$0 for deferred maintenance for Oak Ridge where there should be data because the Oak Ridge Site reset its deferred maintenance data to \$0 in June 2025 as managers reevaluated and updated how the site determines which deficiencies with repair needs should also be classified as deferred maintenance. The Hanford Site includes those facilities at the Pacific Northwest National Laboratory, the Idaho Site includes those facilities at Fort St. Vrain, the Moab Site includes those facilities at the Crescent Junction Site, and the Oak Ridge Site includes those facilities at the East Tennessee Technology Park. In addition, we categorized all operating facilities as those with the FIMS status category of operating or standby.

In addition, EM reported \$1.8 billion in non-operating facility repair needs, and \$142 million in deferred maintenance for non-operating facilities, as seen in figure 7. According to EM officials, non-operating facilities are typically prioritized below operating facilities for maintenance.

Figure 7: Repair Needs and Deferred Maintenance of Environmental Management (EM) Non-Operating Facilities, by Site



Source: GAO analysis of Department of Energy (DOE) Facilities Information Management System (FIMS) data. | GAO-26-107957

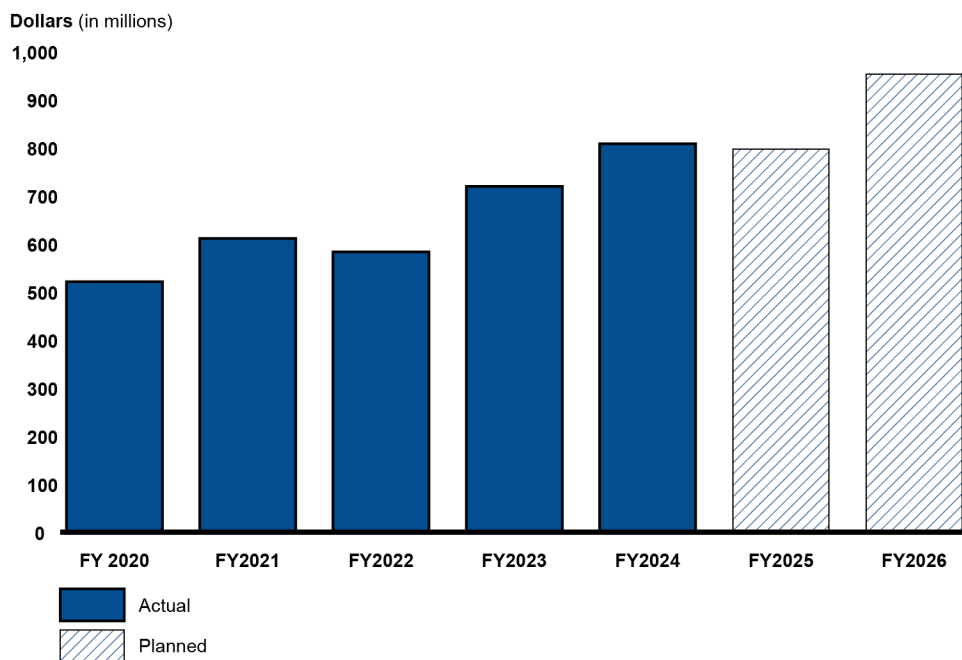
Note: As of June 2025, Energy Technology Engineering Center and EM Consolidated Business Center had \$0 for both deferred maintenance and repair needs, so we omitted these sites from the chart. This figure displays \$0 for deferred maintenance for Oak Ridge where there should be data because the Oak Ridge Site reset its deferred maintenance data to \$0 in June 2025 as managers reevaluated and updated how the site determines which deficiencies with repair needs should also be classified as deferred maintenance. Therefore, this figure displays \$0 for deferred maintenance for Oak Ridge where there should be data. The Hanford Site includes those facilities at the Pacific Northwest National Laboratory, the Idaho Site includes those facilities at Fort St. Vrain, the Moab Site includes those facilities at the Crescent Junction Site, and the Oak Ridge Site includes those facilities at the East Tennessee Technology Park. In addition, we categorized all non-operating facilities as those with the FIMS status category of shutdown, undergoing decommissioning, undergoing disposition, and undergoing stabilization/deactivation.

EM's Budget Request Included About \$950 Million in Direct-Funded Maintenance and Repair Spending in 2026

EM's budget request for fiscal year 2026 anticipates spending about \$950 million in direct-funded maintenance and repair, an 83 percent increase since fiscal year 2020's actual spending level of \$521 million in this

category, as shown in figure 8.²⁷ Direct-funded maintenance and repair spending in fiscal year 2026 represents nearly 12 percent of EM's total budget request, up from 7 percent in fiscal year 2020.²⁸

Figure 8: EM Direct-Funded Maintenance and Repair Spending, Fiscal Years (FY) 2020–2026



Source: GAO analysis of Department of Energy (DOE) Office of Environmental Management (EM) congressional budget justification data. | GAO-26-107957

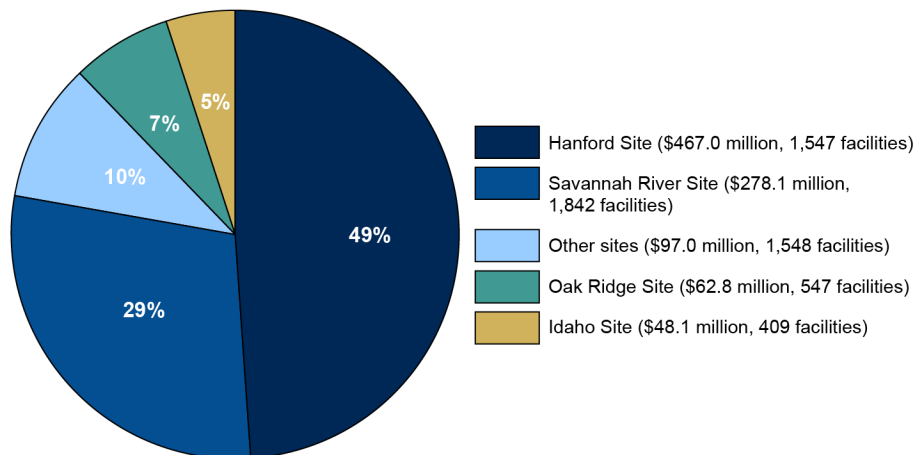
EM sites vary in the amount planned for direct-funded maintenance and repair spending in fiscal year 2026. As shown in figure 9, EM plans to direct nearly half of all such funding to the Hanford Site. Changes in EM sites' direct-funded maintenance and repair spending also varied from fiscal years 2020 through 2026. The Waste Isolation Pilot Plant, with 138 facilities, was the only site to reduce actual spending on maintenance and repair from 2020 through 2025, with reduced spending anticipated to

²⁷According to EM's fiscal year 2026 budget request, direct-funded maintenance and repair activities are tied to programmatic missions, goals, and objectives. These activities are intended to halt asset condition degradation.

²⁸According to EM officials, deferred maintenance can increase when the actual funding received for direct-funded maintenance does not match the funding requested by EM.

continue in 2026, according to EM’s annual requests. Conversely, Hanford, with 1,547 facilities, anticipates more than doubling its spending on maintenance over the same period.

Figure 9: Shares of Planned Fiscal Year 2026 Direct-Funded Maintenance and Repair Spending at EM Sites and Numbers of Facilities



Source: GAO analysis of Department of Energy (DOE) Office of Environmental Management (EM) congressional budget justification and Facilities Information Management System (FIMS) data. | GAO-26-107957

Eight out of 13 sites that responded to our questionnaire reported that they anticipate increasing infrastructure and repair spending over the next 5 years.²⁹ Those eight sites incur the majority of EM’s total spending on facilities and infrastructure and repair.³⁰

²⁹We requested and received responses to our questionnaire from any EM sites that showed facilities tracked in FIMS as of March 2025. Some sites did not contain facilities in FIMS at that time and were therefore unable to answer our questionnaires. For example, the facilities at Sandia National Laboratory are not maintained by EM and therefore were not tracked in FIMS under EM.

³⁰The following sites recorded responses to our questionnaire indicating that they anticipated increasing infrastructure and repair spending over the next 5 years: Carlsbad, Hanford, Idaho, Oak Ridge, Paducah, Portsmouth, Savannah River Site, and West Valley Demonstration Project. Two sites scheduled for closure in the near future—the Moab Uranium Mill Tailings Remedial Action Project and the Energy Technology Engineering Center—anticipate reducing infrastructure and repair spending in the next 5 years. The remaining three sites—the EM Consolidated Business Center, Nevada National Security, and Los Alamos—recorded responses indicating that they anticipated infrastructure and repair spending over the next 5 years to neither increase nor decrease.

EM Sites Did Not Consistently Follow Data Validation and Reliability Requirements

EM sites did not consistently follow requirements in DOE Order 430.1C regarding data validation, accuracy, and comparability, according to our analysis of sites' responses to our questionnaire and interviews with EM sites. EM, in documents and interviews, stated the importance of FIMS data in decision-making, such as in required data reporting, DOE-wide strategic plans, and responses to congressional inquiries. Yet, we found that some EM site validations included inaccurate or unsupported data in their FIMS data reviews or did not report performance measures that are accurate and comparable across EM sites, in particular for deferred maintenance and annual actual maintenance.

Some EM Sites Failed Data Validations and Do Not Have Corrective Action Plans

DOE uses scorecards and corrective action plans to track FIMS data validation issues and the EM sites' plans to resolve them. However, our review of EM sites' scorecards showed that 15 of 35 scorecards from fiscal years 2022 through 2024 failed due to inaccurate or unsupported data. In addition, we found that seven of 15 of the scorecards with inaccurate or unsupported data did not have a corrective action plan.

DOE Order 430.1C, one of the orders DOE identified as related to maintenance (see sidebar), requires EM to conduct annual data validations for all sites. This validation consists of EM headquarters, with support from the EM Consolidated Business Center and the site, reviewing a random subset of facilities to determine if the data entered into FIMS by the sites' contractors were accurate and supported by sufficient documentation. For each data element and facility, the review applies a green, yellow, or red outcome depending on the site's performance. The scores for all the facilities reviewed at a site are used to produce a site scorecard, which also includes a green, yellow, or red outcome for the site review as a whole, with red meaning the site failed.

EM Sites Align Nuclear Maintenance Management Programs with DOE Requirements

DOE Order 433.1B requires EM sites with DOE hazard category 1, 2, and 3 nuclear facilities to have a nuclear maintenance management program. This program includes 17 elements such as types of maintenance, maintenance procedures, training and qualifications, and configuration management, among other elements. For example, the Nuclear Maintenance Management Program for the Paducah Gaseous Diffusion Plant at the Paducah Site, outlines who is responsible for maintenance, the types of needed maintenance, and the maintenance procedures, among other things. In addition, DOE Order 433.1B requires EM to assess implementation of the nuclear maintenance management program at least once every 3 years, unless otherwise directed by EM headquarters. Typically, EM sites will have a single nuclear maintenance management program document for all of its DOE hazard category 1, 2, and 3 nuclear facilities under a single prime contractor.

According to EM sites' responses to our questionnaire, all EM sites that have DOE hazard category 1, 2, and 3 nuclear facilities have active nuclear maintenance management programs. In addition, each of these programs has been assessed for implementation in the last 3 years. Our analysis of FIMS data as of June 2025 found that EM sites provide maintenance for 680 DOE hazard category 1, 2, and 3 nuclear facilities, which is approximately 11 percent of all EM facilities. Nine of the 13 EM sites with facilities in FIMS have at least one DOE hazard category 1, 2, or 3 nuclear facility. For example, one of the Hanford Site's nuclear maintenance management programs is for the 222-S laboratory complex, a hazard category 3 nuclear facility. In its nuclear maintenance management program document, the prime contractor outlines its periodic, preventative, predictive, and corrective maintenance activities and its monitoring of maintenance outcomes, among other things. The Savannah River Site has the most DOE hazard category 1, 2, or 3 nuclear facilities, with nearly 200 such facilities.

Source: GAO analysis of Department of Energy (DOE) Office of Environmental Management (EM) site questionnaire responses. | GAO-26-107957

EM sites with scorecards that failed validation due to inaccurate or unsupported data then submit corrective action plans, according to DOE guidance for implementing DOE Order 430.1C.³¹ After successfully completing a corrective action plan, EM headquarters issues a new passing scorecard, unless additional errors are found.

In many cases, the scorecards and the associated corrective action plans, if they existed, failed validation because they were missing planned or actual dates for updating the data, according to our review of EM scorecards. For example, one site's data failed to meet accuracy standards for annual actual maintenance, deferred maintenance, and operating cost, among other data elements. Another site was had not provided sufficient information to make cost estimates, and another site did not revalidate as they lacked the ability to do so by the deadline, according to comments made on the FIMS scorecards.

³¹Department of Energy, FY 2026 Facilities Information Management System Reporting Deadlines and Validation Guidance, Memorandum for Distribution (Washington, D.C.: Nov. 19, 2025).

Oak Ridge Faces a Variety of Infrastructure Needs



The Department of Energy's (DOE) Office of Environmental Management's (EM) Oak Ridge Site is located in eastern Tennessee and is one of the three original sites in the Manhattan Project. The site faces a variety of challenges related to cleanup of past nuclear missions and DOE's other ongoing nuclear missions at the site. For example, according to officials from Oak Ridge:

- Maintenance operations at the site involve support infrastructure with ongoing missions of several other DOE units: National Nuclear Security Administration, Office of Nuclear Energy, Office of Science, and the Office of Legacy Management.
- Coordinating ongoing missions and cleanup operations can be difficult. For example, when a set of evaporators used for treating toxic waste became irradiated and costly to repair, the site had to install and operate new units before demolishing the old evaporators.
- Budget and mission needs can force the site to delay certain maintenance despite potential for increased long-term costs. For example, the scheduled demolition of an air release stack was delayed even though replacing it with modern air scrubbers would reduce maintenance costs.

Source: GAO analysis of interviews with EM site officials (information); DOE (photo). | GAO-26-107957

FIMS validation scorecards typically include reasons for data elements that were inaccurate or unsupported, which can vary widely. For example, one FIMS scorecard that included inaccurate or unsupported data also contained comments stating that the FIMS administrator did not have the time to devote to FIMS that would be required to improve scores and that the contractor did not provide sufficient information on adjustments, site operations costs, and other elements.

EM officials reported that having information about facility status is important—for facilities anticipated to be demolished, life cycle costs can be significantly reduced by completing maintenance rather than letting the facility degrade over time. For example, staff at the Oak Ridge Site (see sidebar) reported that completing maintenance on a building planned to be demolished can reduce demolition costs and significantly reduce risks to staff.

If EM finds deficiencies that affect the quality of the FIMS data, sites must develop corrective action plans and correct the data so EM may revalidate them. Our analysis found that nearly half of the scorecards with inaccurate or unsupported data—those with yellow or red ratings by EM—also did not have corrective action plans at the time of our review. Both the scorecards and corrective action plans have fields to track the sites' timelines and planned steps to resolve the identified issues. Without accurate data from scorecards or corrective actions to address errors, EM officials may be unable to rely on their FIMS data for site scorecards. This may result in DOE using inaccurate data, among other elements, for its planning and investment prioritization, as well as for its evaluations of site contractors.

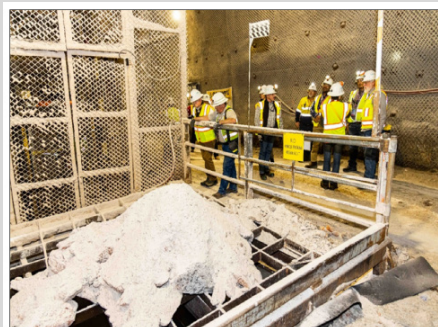
EM Deferred Maintenance and Annual Actual Maintenance Data Fields Had Inaccuracies and Were Not Always Comparable

EM headquarters relies on FIMS data, among other elements, for making management and prioritization decisions, but the deferred maintenance and annual actual maintenance data fields in FIMS often were found to be inaccurate or unsupported or are not comparable across EM sites, according to our analysis of FIMS data scorecards from fiscal years 2022 through 2024 and responses from our questionnaire. From 2022 through 2024, about one in seven deferred maintenance and one in three annual actual maintenance data fields were marked as inaccurate or unsupported during the validation process in sites' final FIMS validation scorecards. DOE Order 430.1C requires DOE elements to report asset-level annual required maintenance, including the estimated fully burdened costs of predictive and preventive maintenance and repair activities. This order also states that EM must establish methods for categorizing which deficiencies with their estimated repair needs cost should be flagged as either deferred maintenance or repair needs and include such categorizations in its facility condition assessments. It also requires FIMS data to be consistent across DOE to enable comparable reporting and trend analysis.

According to EM officials and sites' responses to our questionnaire, some EM sites reported using different methods to develop the deferred maintenance FIMS data elements, which can create incomparable data across the sites. Sites have different methods for determining FIMS data elements because sites' contractors complete condition assessments and use their own data collection systems that generally do not correlate directly to FIMS. For example, staff responsible for conducting condition assessments at one site reported that, as the deferred maintenance total increased, they decided to revise their criteria for this data element to decrease the total amount reported in FIMS, as FIMS does not allow the deferred maintenance total to be above the repair needs total.

Another site is in the process of updating its deferred maintenance estimating procedure after it found the previous definition to estimate a deferred maintenance total was above what it was allowed to enter into the FIMS system. While developing this alternative approach, the site entered \$0 total for all deferred maintenance of their facilities until the new approach was completed.

Age of Key Infrastructure at Waste Isolation Pilot Plant Causing Delays



The Waste Isolation Pilot Plant in Carlsbad, New Mexico, is the nation's only geologic repository for disposing of certain nuclear waste from defense-related activities. Current contractor representatives at the site stated that since the facility's life has been extended, there is a need to upgrade the infrastructure for longer duration service. Site officials stated in questionnaire responses that they anticipate annual maintenance costs will increase over the next 5 years as the site seeks to replace buildings, utilities, and supporting infrastructure in use beyond their design lives.

The representatives told us that the hoist, used to transport transuranic waste from the surface to the underground facility, is designated as a mission-critical asset. The hoist repeatedly required unplanned maintenance throughout 2024, according to officials from the Defense Nuclear Facilities Safety Board. In June 2024, the hoist stalled while transporting nuclear waste underground. The hoist was built in 1924 and installed at the Waste Isolation Pilot Plant in 1984, and, according to site officials, its motor is 40 years old and likely past its design life.

Source: GAO analysis of interviews with Office of Environmental Management site officials (information); DOE (photo). | GAO-26-107957

In addition, EM staff reported that some of the FIMS data comparability issues may have arisen as contractor requirements have changed over time. The current DOE Order 430.1C has fewer FIMS related requirements for contractors than the previous DOE Order 430.1B. However some of the requirements from the previous order are now included in the base template used for new contracts under EM's End State Contracting Model.³² For example, the original contractor requirements document in DOE Order 430.1B, which was removed from DOE Order 430.1C in 2016, was included in the base template, which DOE has used over the last 5 years. The base template includes requirements that the contractor completing the condition assessments base their deferred maintenance estimates on a nationally recognized cost estimating system and that it include certain costs, such as indirect costs, in its annual actual maintenance totals. However, in the comments on one site's failed scorecard with a red rating, the reviewer found that the site did not provide sufficient information for cost estimates and did not use a nationally recognized cost estimating system. Furthermore, in comments on a different site's failed scorecard, the reviewer found that the site did not include labor, materials, and warehousing costs in its annual actual maintenance totals.

In June 2025, we reported ongoing data inaccuracies at the Carlsbad Field Office for the Waste Isolation Pilot Plant (see sidebar).³³ We found that the results of the data validations, in particular for annual actual maintenance, showed repeated inaccuracies in some fields due to incomplete costs within the source data. Additionally, the data validation results did not contain the steps that officials at the site planned to take to correct the inaccuracies. We recommended that the site monitor improvements to accurately capture the annual actual maintenance data. EM has yet to report actions taken to implement this recommendation.

EM needs complete and accurate data to compare potential infrastructure projects across EM's cleanup efforts, manage facilities, and report progress made to reducing EM's deferred maintenance and repair needs to Congress and others. Without accurate and comparable FIMS data related to deferred maintenance and actual annual maintenance, EM

³²For more information on EM's End State Contracting Model, see GAO *Nuclear Waste Cleanup: Actions Needed to Determine Whether DOE's New Contracting Approach is Achieving Desired Results*, [GAO-22-105417](#) (Washington, D.C.: Sept. 28, 2022).

³³[GAO-25-107333](#).

cannot ensure that its Master Asset Plan reliably informs DOE headquarters of sites' status of infrastructure projects.

EM Headquarters Does Not Consistently Use Facility Condition and Maintenance Needs Data to Inform Activities

EM sites reported that the Master Asset Plan does not capture all site-level needs that may affect the complex's mission, in part because it uses a "snapshot" of FIMS data from the previous year to develop recommended projects. Furthermore, EM headquarters has used the Master Asset Plan to identify potential savings in case of surplus funds but has not communicated to Congress these potential cost savings or reductions to risk to mission.

EM's Maintenance Needs Continue to Increase as EM Headquarters and Sites Approach Maintenance Activities Differently

DOE Order 430.1C requires that the life cycle management of real property must be data-driven, risk-informed, and performance-based. EM uses its Master Asset Plan and site-specific integrated priority lists, among other documents, to meet these requirements. EM headquarters relies on FIMS data when producing the Master Asset Plan, while EM sites typically use different facility and maintenance tracking systems when developing their site-specific integrated priority lists.³⁴

³⁴According to EM staff, EM sites have varying priorities based on mission needs, funding, state of infrastructure, and time until site closure. Each of these, along with age of infrastructure, mission activities, and health and safety concerns are also considered in determining investment priorities.

Savannah River Site National Laboratory Faces a Variety of Infrastructure and Maintenance Related Challenges



The Savannah River Site National Laboratory is a multidisciplinary research and development center with scientific and technical expertise in nuclear, chemical, and materials manufacturing, among other things. According to Laboratory staff, the key challenge they face is having sufficient space. The laboratory requires significant maintenance activities to clean out and update old, unusable space that is highly dangerous due to past radiation. By clearing out this space, they can then make the choice to assist in speeding the closure of other parts of the EM mission or adding new capabilities, according to laboratory staff.

Other challenges include maintenance on the air filter system, effluent drains, and the cooling water system, according to site officials. The laboratory's air filter systems contain older filters held in place by wood, which is a higher safety risk. The drains, which are used to safely move high radiation effluent, are rotting and leaking. The laboratory had to shut down many of the drains, which means that the high radiation effluent had to be moved manually around the facility. Finally, the cooling water system pipe support system has long-term water damage, increasing the risk of the system failing and flooding parts of the facility.

Source: GAO analysis of interviews with Office of Environmental Management site officials (information); DOE (photo). | GAO-26-107957

At the Savannah River Site, for example, the site's Infrastructure Planning and Prioritization Process produces the site's integrated priority list. The site's process looks at non-routine maintenance and repair needs, major restorations, and other needs; and ranks them based on a variety of risk and business factors. Risk factors include safety, security, and environmental; and business factors include timeliness and cost ratio. Through this process, staff found that the highest infrastructure priority for the site was the 221-H Canyon building roof restoration, which would cost \$13 million and prevent major structure damage to the building. As of February 2026, the site has completed replacement of three of 18 sections of the roof, with the next scheduled for late 2026. Please see the sidebar for more information about this site.

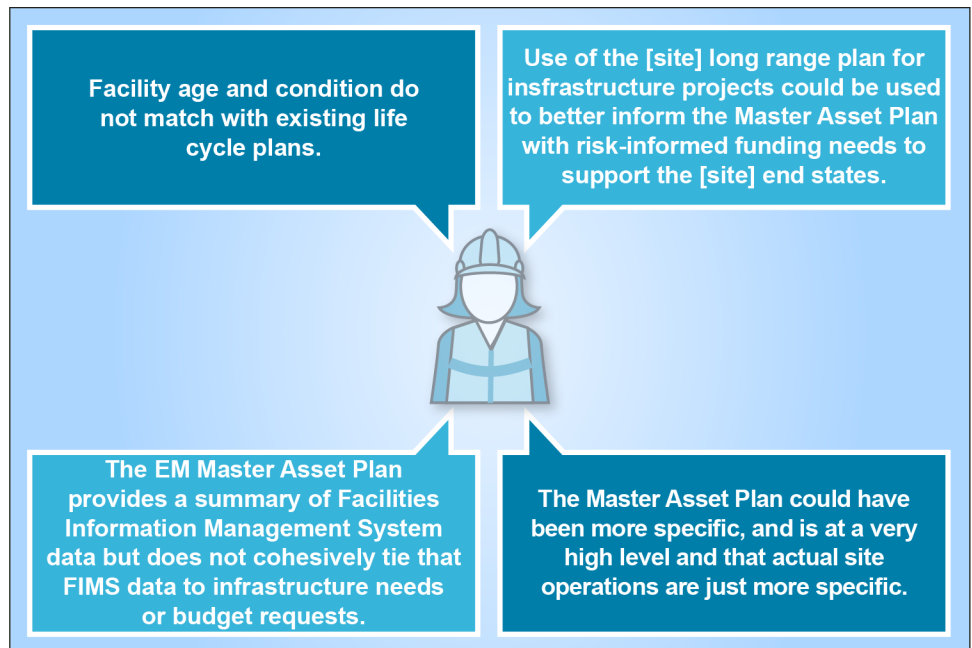
Site officials we interviewed at the Savannah River Site and Oak Ridge Site stated that their integrated priority lists and the supporting data tend to be more granular than FIMS facility-level data. Specifically, a large facility may be treated as a single item in FIMS but as many smaller assets by the site. For example, officials at the Savannah River Site told us that the industrial melter in the Defense Waste Processing Facility—just one piece in a multibillion-dollar building—is not individually tracked in FIMS, though it is larger and more costly than many other facilities in the database. In addition, EM site officials stated that additional context beyond FIMS data can be helpful for making maintenance decisions.

We found that differences in the data between the Master Asset Plan and sites' integrated priority lists can create competing priorities. EM sites reported competing priorities and aging infrastructure as key maintenance challenges, according to EM site responses to our questionnaire and interviews with EM officials. EM officials expressed concerns about maintaining infrastructure well beyond its design life, without easy paths for repair or replacement. For example, some components, such as specialized electrical or radiation protection equipment, are so aged that the original manufacturers no longer exist, meaning that parts must be machined at the site at high cost, or the entire system must be replaced. EM officials stated that as infrastructure ages, costs associated with maintenance rise rapidly, as seen with the increases in spending over the last 5 years.

Eight of 13 EM sites reported in our questionnaire that the Master Asset Plan, which primarily uses FIMS data to identify areas of risk and infrastructure status at the time of its release, captures few to none of the maintenance needs of their site. The Master Asset Plan and the site's priorities can be different, according to site staff because the FIMS data

used to generate the Master Asset Plan does not include the needs of other EM programs at the sites, sequence of work on facilities, or minor upgrades, among other things. Figure 10 highlights statements we heard from site officials on differences between the Master Asset Plan and site-level infrastructure needs.

Figure 10: EM Site Statements on Differences Between Master Asset Plan (MAP) and Site-Level Infrastructure Needs



Source: Department of Energy (DOE) Office of Environmental Management (EM) site questionnaire responses. | GAO-26-107957

EM headquarters officials stated in February 2026 that they are working to update the next Master Asset Plan to better integrate site maintenance needs. EM officials stated that they could not provide information on what changes would be made or when but would include considerations from our report, such as how to better support site requests. Without more reliable and relevant information from EM sites, the Master Asset Plan remains a powerful but disconnected tool that does not properly reflect emerging maintenance needs at EM sites.

EM Identified Projects to Save Money on Maintenance over 5 Years But Has Not Communicated Potential Benefits

The Master Asset Plan includes a project prioritization model to produce benefits such as cost savings and reduction of risk to mission. The model generates recommendations for how EM could utilize surplus funding received for maintenance based on FIMS data at the time of its release. Modeling has shown that relatively small increases in budgets, set aside for supporting infrastructure, will make a significant difference in reducing risk to mission, according to the plan. However, EM has not communicated these projects to Congress.

Department of Energy Office of Environmental Management (EM) Master Asset Plan Identifies a Variety of Complex-Wide Real Property Vulnerabilities

EM's Master Asset Plan demonstrates how EM maintains infrastructure needed to accomplish its missions across the complex, evaluates infrastructure critical to EM's mission, and identifies areas of risk to EM's mission. The Master Asset Plan reported that much of EM's infrastructure was constructed 50 to 70 years ago and is beyond its design life. This document also reported that, while facility conditions across EM's cleanup efforts have improved dramatically since 2022, several facilities remain in poor condition. Failure of supporting infrastructure will raise the likelihood of increased mission duration and overall cost, according to the Master Asset Plan.

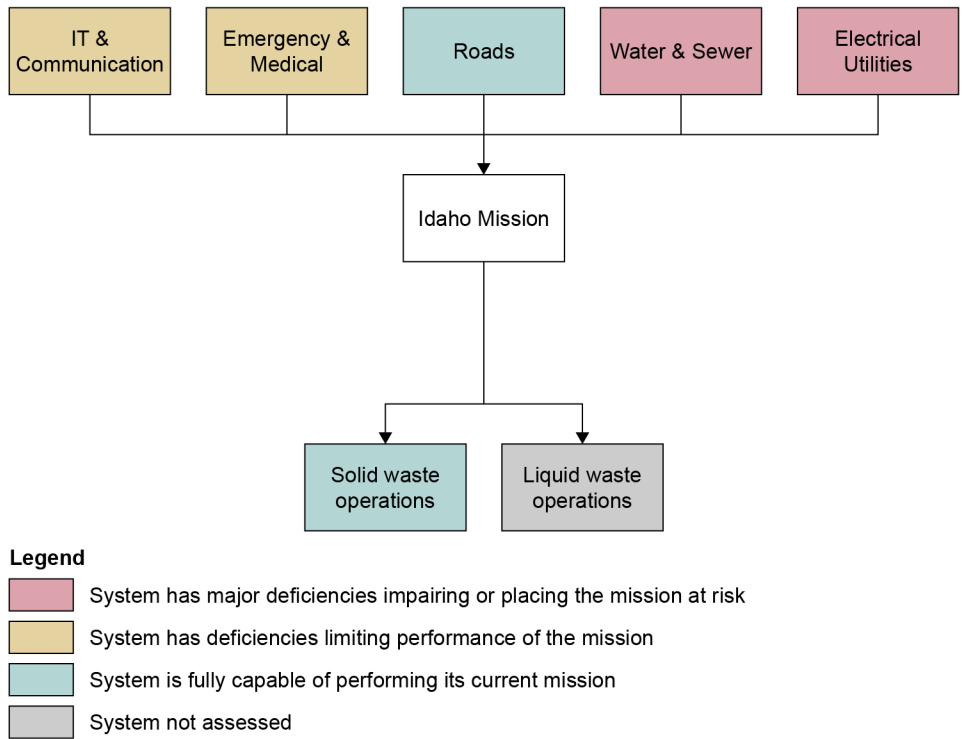
EM's Master Asset Plan identified a variety of steps EM can take to reduce infrastructure vulnerabilities. Examples of vulnerabilities the plan noted include the following:

- Nearly 300 mission-critical facilities across the EM complex are in poor or fair condition, as of February 2024.
- Deficiencies in electrical utilities and emergency and medical response place the mission at risk.
- Deficiencies in solid waste operations, IT, and communications limit mission performance.

Source: GAO analysis of EM documentation. | GAO-26-107957

The Master Asset Plan includes information on EM's maintenance and infrastructure needs on both complex-wide and site-specific levels, among other things (see sidebar). The Master Asset Plan is based on FIMS data and "deep dive" site visits to EM sites, which include EM headquarters staff meeting with various site officials for multiple days. Using this "snapshot" data, the Master Asset Plan provides FIMS data summaries, wiring diagrams to identify weak points in EM's infrastructure as shown in figure 11, and a prioritization model for the use of surplus funding for unfunded projects at the time of its release.

Figure 11: Wiring Diagram That Identifies Risk to Mission from Infrastructure at the Idaho Cleanup Project Site



Source: Department of Energy (DOE) Office of Environmental Management (EM) 2024 Master Asset Plan. | GAO-26-107957

The goal of the Master Asset Plan’s project prioritization model is to maximize the expected return from a limited budget, based on FIMS data at the time of its release. According to the plan, spending \$20 million to complete 19 projects from its issuance in 2023 through 2028 will significantly reduce EM’s infrastructure risk to mission and save approximately \$120 million. For example, EM identified generator replacements for critical networks at the Hanford site, exhaust fan replacements at the Carlsbad–Waste Isolation Pilot Plant Site, and updates to direct buried utilities at the Idaho site among those shovel-ready projects that can make a significant difference in reducing risk to mission. Nevertheless, EM has not communicated these potential cost savings and risk reductions to external parties, such as Congress.

In November 2023, we found that DOE met some but not all aspects of a leading practice related to deferred maintenance and repair—structuring budgets to specifically identify the funding allotted (1) for maintenance

and repair and (2) to address any backlog of deferred maintenance and repair deficiencies.³⁵ In the report, we recommended that DOE ensure its budget materials provide more information to Congress and the public on the agency's deferred maintenance and repair backlog. DOE neither agreed nor disagreed with this recommendation but has yet to address it. Additionally, the Defense Nuclear Facilities Safety Board held a hearing in 2024 highlighting concerns with EM's aging infrastructure. Board officials told us that they were concerned that requirements or guidance for major life extensions of facilities do not exist in EM, and there are no DOE requirements for EM sites to systematically evaluate and manage safety mechanisms in aging infrastructure. Further, the National Academies of Sciences, Engineering, and Medicine recently emphasized that communication with Congress and other stakeholders is critical to effectively implement federal facility renewal strategies.³⁶

DOE Order 430.1C requires that the life cycle management of real property be data driven, risk informed, and performance based, and that real property planning be implemented through financial investments relayed in associated budget requests. The Master Asset Plan includes recommendations with the aim of ensuring cost savings and risk to mission reduction with an increase in current year funding. Without including outputs for unfunded projects from models that identify long-term cost savings and reduce risk to mission in EM's external communications, EM may miss opportunities for investments that will reduce costs and risk to mission.

Conclusions

EM faces longstanding challenges with managing and maintaining the aging infrastructure it needs to accomplish its site cleanup mission. EM reported making significant progress in reducing the number of mission-critical facilities in poor or very poor condition. However, FIMS data show and agency officials stated that a significant amount of deferred maintenance and repair needs of aging facilities remains. EM, through its sites and their contractors, gathers a significant amount of data on the type, age, maintenance needs, and condition of its facilities in FIMS. These data are used to produce the Master Asset Plan. These data also inform, along with site-specific data from EM site contractors and other factors, maintenance and repair expenditures. Taking action to improve the accuracy and comparability of its FIMS data—both at the scorecard

³⁵[GAO-24-105485](#).

³⁶National Academies of Sciences, Engineering, and Medicine, *Strategies to Renew Federal Facilities* (Washington, D.C.: The National Academies Press, 2023).

and individual data field levels—would better equip EM to address its nearly \$1.5 billion in repair needs at its aging operating facilities that threatens its ability to meet its mission.

EM's budget for direct-funded maintenance and repair spending has nearly doubled over the last 5 years, and the majority of EM sites reported that they anticipate further increases over the next 5 years. The Master Asset Plan identifies both potential risks to its mission and cost savings of tens of millions of dollars based on currently unfunded projects. While some EM sites reported disconnects between their site-specific needs and the EM-wide Master Asset Plan, the plan contains a robust prioritization system that identifies cost saving projects that, if communicated to Congress and executed using surplus funding, could greatly reduce both the risk to mission and future maintenance and repair costs across the EM complex. By better incorporating site-specific information into the Master Asset Plan and communicating potential cost-saving projects to decision-makers, EM can shift towards a more proactive approach to reducing both risk to mission and life cycle costs from maintenance and repair.

Recommendations for Executive Action

We are making the following four recommendations to DOE:

The Assistant Secretary for EM should ensure sites create and complete corrective action plans to correct data validation issues identified in the FIMS validation scorecard process. (Recommendation 1)

The Assistant Secretary for EM should ensure EM sites have procedures to accurately and comparably capture deferred maintenance and annual actual maintenance FIMS data elements, as required in DOE Order 430.1C. (Recommendation 2)

The Assistant Secretary for EM should better incorporate more reliable information from EM sites in the Master Asset Plan, such as site project prioritization decisions for infrastructure maintenance projects, to better reflect site maintenance needs. (Recommendation 3)

The Assistant Secretary for EM should communicate to Congress the reductions in cost and risk to mission that can be achieved by specific projects identified by their prioritization model. (Recommendation 4)

Agency Comments

We provided a draft of this report to DOE for review and comment. In its comments, reproduced in appendix III, DOE concurred with two of the four recommendations and partially concurred with the other two

recommendations. Specifically, DOE concurred with Recommendation 1 and Recommendation 2, describing actions it will take to address these recommendations and estimated completion dates.

DOE partially concurred with Recommendation 3. DOE stated that the Master Asset Plan is a report on the status of its infrastructure and that EM will evaluate existing internal reporting to determine if there is a need for additional guidance on reiterating site prioritization requirements. After the evaluation, EM will issue a memo to field office reiterating prioritization requirements for infrastructure maintenance and implementing any additional guidance. We note that the Master Asset Plan is EM's enterprise-wide strategic plan covering the infrastructure necessary to meet current, planned, and future mission requirements. While the plan provides a snapshot of EM's infrastructure and maintenance needs at the time of release, it is also intended to provide an integrated view of EM's infrastructure and a prioritized list of investments to reduce risk to mission, according to EM. EM stated in its comments that the plan does not prioritize EM-wide funding needs or provide direction to the sites. We recognize that the plan is not a prioritization tool, but it is intended to communicate site prioritization decisions. Given the differences we found in the data between the Master Asset Plan and sites' integrated priority lists, as well as site officials' views that few to none of the maintenance needs are reflected in the Master Asset Plan, more reliable information is needed for it to function as intended. As the Master Asset Plan is EM's enterprise-wide plan for infrastructure, we continue to believe that EM should incorporate more reliable information from EM sites into the Master Asset Plan.

DOE also partially concurred with Recommendation 4. DOE stated that EM tracks the status of funded projects and includes the appropriate level of detail in its budget request. DOE also said that EM will issue a memo to the sites to emphasize the importance of including additional information to support funding requests. As we described, the Master Asset Plan, though a snapshot of EM's infrastructure and maintenance needs at the time of release, includes a project prioritization model that generates recommendations for how EM could utilize small increases in funding to make significant differences in reducing risks. According to EM, the goal of the project prioritization model is to maximize the expected return from a limited budget, based on data at the time of its release. The model showed, for example, that spending \$20 million to complete 19 unfunded projects from 2023 through 2028 would significantly reduce EM's infrastructure risk to mission and save approximately \$120 million. Yet, EM has not communicated these potential cost savings and risk

reductions to Congress. A model that shows how to save millions of dollars while reducing risk is a powerful tool, but EM will not realize the goal of its model—to maximize the expected return from a limited budget—if it does not inform those who can help EM achieve its goal. Therefore, we continue to believe that EM should communicate to Congress the unfunded projects identified by the Master Asset Plan and the reductions in cost and risk to mission that can be achieved if they are prioritized.

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

If you or your staff members have any questions about this report, please contact Nathan Anderson at andersonn@gao.gov. Contact points for our Offices of Congressional Relations and Media Relations may be found on the last page of this report. GAO staff who made significant contributions to the report are listed in appendix IV.

//SIGNED//

Nathan Anderson
Director, Natural Resources and Environment

List of Committees

The Honorable Roger Wicker
Chairman
The Honorable Jack Reed
Ranking Member
Committee on Armed Services
United States Senate

The Honorable John Kennedy
Chair
The Honorable Patty Murray
Ranking Member
Subcommittee on Energy and Water Development
Committee on Appropriations
United States Senate

The Honorable Mike Rogers
Chairman
The Honorable Adam Smith
Ranking Member
Committee on Armed Services
House of Representatives

The Honorable Chuck Fleischmann
Chairman
The Honorable Marcy Kaptur
Ranking Member
Subcommittee on Energy and Water Development, and Related Agencies
Committee on Appropriations
House of Representatives

Appendix I: Objectives, Scope, and Methodology

Our review (1) describes the status of the Department of Energy (DOE) Office of Environmental Management's (EM) infrastructure, (2) examines the extent to which EM maintenance practices align with DOE policies and guidance, and (3) examines how EM prioritizes maintenance in its budget planning.

To address all objectives, we reviewed DOE and EM documents, relevant DOE orders, GAO reports, and other documents relevant to the maintenance and repair of EM facilities. We reviewed EM complex-wide documents, such as the Master Asset Plan, to understand EM headquarters' actions to support EM site maintenance and repair of facilities. We also reviewed DOE and EM documents related to management of the Facilities Information Management System (FIMS), such as FIMS user guides, FIMS data dictionary, and FIMS validation training, among others, to understand how EM manages its facility data. We also reviewed EM site documents, such as site nuclear maintenance management programs, system health reports, and maintenance manuals, to understand site-specific successes and challenges related to the maintenance and repair of EM facilities. We also reviewed DOE Orders 430.1C and 433.1B, which, among other DOE orders, provide direction to EM for the management of its federal real property. We also reviewed our previous reports, such as [GAO-24-107173](#) and [GAO-25-107333](#), concerning real property management and EM.

To address all objectives, we held interviews with officials from EM headquarters and select EM sites with facilities recorded in the FIMS data we received as of the end of fiscal year 2024. We selected EM sites for interviews based on a range of criteria such as numbers of EM facilities in FIMS, amounts of total annual maintenance and deferred maintenance dollars recorded in FIMS, numbers of EM facilities in FIMS in poor or very poor condition, and geographic locations. We interviewed officials from the following seven EM sites: the Hanford Site, Idaho Cleanup Project Site, Los Alamos Field Office, Oak Ridge Reservation Site, Paducah Site, Portsmouth Site, and the Savannah River Site. We also interviewed staff from the EM Consolidated Business Center and representatives from the Defense Nuclear Facilities Safety Board. During these discussions, we asked officials and representatives for details about maintenance and repair of EM's facilities. In addition, we visited two sites with a significant number of EM facilities to better understand their site-specific successes and challenges related to the maintenance and repair of their EM facilities. The information gathered during these site visits is not generalizable to all sites.

To address all objectives, we sent a fillable PDF questionnaire to 13 EM sites with facilities recorded in the FIMS data we received as of the end of fiscal year 2024.¹ While we did not independently verify information that program officials reported in their questionnaires, we took steps to improve the quality of information gathered. Specifically, we pretested a draft version of the questionnaire in interviews with officials from two EM sites prior to distributing the final questionnaire to the 13 sites. We also interviewed three additional sites after receiving their completed questionnaires to better understand their responses.

We received completed questionnaires from all 13 sites. We summed closed-ended responses to derive reported counts. For explanatory examples, we completed site visits and follow-up interviews to better understand site-specific successes and challenges related to infrastructure and maintenance. To generally describe EM site actions and perspectives, two analysts independently reviewed open-ended responses to the questionnaire, and discussed and reached agreement on how to summarize and report the categories. For example, we reviewed sites' responses describing challenges in collecting data for FIMS and summarized and reported themes noted across multiple sites.

To address our first objective, in addition to the steps previously described, we reviewed data from DOE's FIMS, the DOE system of record for real property management data.² Real property includes land and anything permanently affixed to it, such as buildings, fences, bridges, etc. Building fixtures and equipment, such as plumbing, electrical, heating and elevators, that are installed in a building in a more or less permanent manner usually are held to be part of the real property. FIMS provides an

¹EM sites included in our review were (1) Carlsbad – Waste Isolation Pilot Plant, (2) Energy Technology Engineering Center, (3) Environmental Management Consolidated Business Center, (4) Hanford Site, including the Pacific Northwest National Laboratory, (5) Idaho Site, including Fort St. Vrain, (6) Los Alamos National Laboratory, (7) Moab Uranium Mill Tailings Remedial Action Project Site, including the Crescent Junction Site, (8) Nevada National Security Site, (9) Oak Ridge Office of Environmental Management, including the East Tennessee Technology Park, (10) Paducah Site, (11) Portsmouth Site, (12) Savannah River Site, and (13) the West Valley Demonstration Project. We did not include Lawrence Livermore National Laboratory, Sandia National Laboratory, and EM Consolidated Business Center – New York in our review as the facilities at the sites were not managed by EM or had no facilities in FIMS at the time of our review.

²Information on DOE data can be found publicly available for FIMS at Department of Energy, *Facilities Information Management System* (Washington, D.C.: n.d.), <https://fims.doe.gov/fimsinfo>.

inventory of all real property assets that DOE has a legal interest in or right to use.

We requested FIMS data for all EM facilities as of June 2025. Requested elements include the age, condition, risk level, and cost of, among other things, replacement, repair, and deferred maintenance for each facility. The datasets were used to generate descriptive statistics describing EM's facilities and maintenance and repair needs. For each of the datasets used in our analyses, we reviewed documentation, interviewed and corresponded with officials responsible for the data, tested for outliers and missing data or variables, and cleaned the data as necessary.³ For some data elements, we analyzed the data separately for operating and non-operating facilities.⁴ EM also completes a data validation process, which we also analyzed, and is described below. We determined that these data were sufficiently reliable for the purposes of describing and analyzing EM's facilities and maintenance and repair needs.

We reviewed EM annual budget requests from fiscal year 2020 to fiscal year 2026 to understand how EM communicates its spending needs generally and for direct-funded maintenance and repair. We totaled EM complex-wide and EM site-specific total spending and spending for direct-funded maintenance and repair across the time period and used those totals to compare spending across time and EM sites.

To address our second objective, in addition to the steps previously described, we reviewed the output of EM headquarters' annual review of site FIMS data. DOE Order 430.1C—which directs EM's actions related to FIMS data—requires that DOE use FIMS for real property reporting, the use of FIMS definitions included in that order or the FIMS data element dictionary, the performance of physical inspections of DOE EM facilities, and the collection of asset-level data for certain data elements. This order requires that, among other things, the life cycle management of real property must be data-driven and use FIMS data. The order also requires

³Within the FIMS data, we analyzed all facilities categorized in the headquarters Program Office category as managed by EM. In addition, for the purposes of reporting, we combined facilities in the Site Name category based on the site management office. For example, we included those facilities categories in the headquarters Program office category as managed by EM in the Site Name categories of Depleted Uranium Hexafluoride Paducah and Paducah Gaseous as at the Paducah Site.

⁴EM facilities we categorized as operating included those in the operating and standby status categories. EM facilities we categorized as non-operating included those in the shutdown, undergoing decommissioning, undergoing disposition, and undergoing stabilization/deactivation status categories.

that FIMS data be reviewed annually for completeness and accuracy. EM uses a FIMS data validation process to annually review all submissions.

For this FIMS data validation process, EM and the site select a random subset of representative facilities at the site for each type of facility in the database aiming for a desired confidence level of 90 percent, with a maximum of 25 randomly selected facilities for each category of facility.⁵ EM and the site review the FIMS data for this subset for completeness and accuracy. This process results in a scorecard that grades each data item as red, yellow, or green based on the frequency of variance. The scorecard as a whole is also given a red, yellow, or green score based on the scores given to the other data items. For example, yellow indicates one or more performance measures are yellow or no more than one of the remaining data elements are red. Some data items are designated as performance measures and given a larger weight in the scoring.⁶

Once EM headquarters completes the annual scorecards and provides them to the EM sites, the EM sites have the opportunity to complete corrective action plans. These typically are used to revalidate the data through EM headquarters. The process of revalidation can result in a new scorecard and a new score for individual data elements and the site overall.

We requested all available scorecards from DOE EM sites with FIMS facilities from fiscal years 2022, 2023, and 2024. We received scorecards for the following 11 sites for all 3 years: Carlsbad–Waste Isolation Pilot Plant, Energy Technology Engineering Center, Environmental Management Consolidated Business Center, Hanford Site, Los Alamos National Lab, Moab and Crescent Junction Sites, Oak Ridge Environmental Management, Paducah Site, Portsmouth Site, Savannah River Site, and West Valley Demonstration Project. We received the data in individual scorecards for each site, year, and type of facility, in addition to, in some cases, revalidated scorecards for some sites and facility

⁵Different scorecards are used for different types of EM facilities, as different types of EM facilities have different data element requirements. Different types of EM facilities include DOE-owned facilities, DOE-leased and contractor-leased facilities, DOE land, DOE disposition, and DOE bridges. For the purposes of our analysis, we focused on and reviewed validations for DOE-owned facilities.

⁶DOE performance measures are held to a higher standard of reliability by weighting them more in the validation process. Performance measures for DOE-owned facilities include size, repair needs, deferred maintenance, asset percentage utilized, replacement plant value, annual actual maintenance, and operating cost.

types, corrective action plans for some sites and facility types, and worksheets. We recorded for each site, year, and type of facilities, and the green, yellow, and red scores for the final validated FIMS validation report we received.

We conducted this performance audit from November 2024 to May 2026, 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.

Appendix II: Site Facility Infrastructure and Maintenance Status as of June 2025

The following summaries describe the site facility infrastructure and maintenance status, such as the number and type of facilities, at each of the Department of Energy (DOE) Office of Environmental Management (EM) sites with facilities in the Facilities Information Management System (FIMS) as of June 2025. These summaries are based on our review of EM documentation, facility data, and interviews with agency officials. For some data, we describe only those facilities that are currently operating or in standby. EM facilities we categorized as non-operating included those in the shutdown, undergoing decommissioning, undergoing disposition, and undergoing stabilization/deactivation status categories. Key terms related to the FIMS elements found in the following summaries are defined below:

Annual actual maintenance: The actual, burdened costs of all maintenance and repair activities in a given fiscal year for a building, real property trailer or other structure, and facility.

Annual required maintenance: Estimated, fully burdened costs for predictive, preventive, and corrective maintenance or surveillance and maintenance for which the budget year (2 years beyond the current fiscal year) is the optimum period of accomplishment as determined by condition assessment surveys, site maintenance management plans, vendor maintenance schedules, or life cycle or condition modeling. This figure is also to incorporate the prevailing wage and cost burden rates, and any ancillary services or work necessary to resolve deficiencies.

Deferred maintenance: Maintenance that was not performed when it should have been or was scheduled to be and, therefore, was delayed for a future period.

Repair needs: The estimated cost to restore all deficiencies identified, for a real property asset during a condition assessment survey, to a state substantially equivalent to the most recently configured capacity, efficiency, or capability as required by the mission. The “needs” originate from the real property asset, not necessarily management.



Hanford Site

Richland, Washington

The Hanford Site, a 580-square-mile section of semi-arid desert in southeast Washington, was established in 1943 to produce plutonium as part of the Manhattan Project. Cleanup of the Hanford Site is managed by the Hanford Field Office.

Source: Office of Environmental Management (EM). | GAO-26-107957

Mission-Critical Facilities

As of June 2025:

322 of 1,547 facilities were considered “mission critical”

5 of 322 mission-critical facilities had a condition index of “poor” or “very poor”

5 of 322 mission-critical facilities were given an overall asset condition of “inadequate”

Hanford Facility Statistics

As of June 2025, out of 1,547 total facilities:

- Property types:
 - 741 buildings
 - 372 trailers
 - 434 other structures and facilities
- Operating status:
 - Operating: 1,057 facilities
 - Shutdown: 341
 - Standby: 104
 - Undergoing decommissioning, disposition, or deactivation: 45
- Facility condition:
 - Very good: 1,137 facilities
 - Good: 97
 - Fair: 139
 - Poor: 91
 - Very poor: 17
 - Not assessed: 66

Hanford Site Infrastructure Maintenance Examples of Challenges and Site-Specific Practices

Challenges

Examples of aging facilities with systems, structure, or components that are obsolete, have been run to failure, or are in a degraded condition include:

- 222-S Laboratory does not have the ability for timely, on-site analytical sample analysis.
- All of these facilities are beyond design life in maintenance: (1) Central Waste Complex facilities, such as storage for Transuranic waste pending shipments to the Waste Isolation Pilot Plant; (2) Canister Storage Building for storage of spent nuclear fuel pending availability of national repository; and (3) Canyon facilities, such as the Plutonium Uranium Extraction Plant and B Plant.

Site-Specific Practices

A practice that the Hanford Site has implemented is hiring a contractor to manage cross-cutting infrastructure at the site. According to site staff, although each of the prime contractors has maintenance efforts within their contract baselines for the facilities required to perform contracted scope, the Hanford Site employs a singular contractor (Hanford Mission Integration Solutions, LLC) as the mission integrator and support contractor to coordinate at the site-wide level, performing infrastructure and maintenance work for the site not specific to an individual prime contractor.

Hanford Site Maintenance Needs of Operating Facilities, as of June 2025

Annual actual maintenance	\$230.2 million
Annual required maintenance	\$318.3 million
Deferred maintenance	\$100.6 million
Repair needs	\$466.6 million

Source: GAO analysis of Department of Energy and EM information. | GAO-26-107957

Note: “Operating Facilities” in this case includes the status categories of “operating” and “standby”.



Carlsbad Field Office – Waste Isolation Pilot Plant

Carlsbad, New Mexico

The Waste Isolation Pilot Plant is the nation’s only repository for transuranic waste. Waste is disposed of in a set of panels located nearly one-half mile below the surface in a deep geologic salt bed formed 250 million years ago. As of January 2024, the Waste Isolation Pilot Plant had received over 13,000 shipments.

Source: Office of Environmental Management (EM). | GAO-26-107957

Mission-Critical Facilities

As of June 2025:

44 of 138 facilities were considered “mission critical”

2 of 44 mission-critical facilities had a condition index of “poor” or “very poor”

2 of 44 mission-critical facilities were given an overall asset condition of “inadequate”

Waste Isolation Pilot Plant Facility Statistics

As of June 2025, out of 138 total facilities:

- Property types:
 - 68 buildings
 - 10 trailers
 - 60 other structures and facilities
- Operating status:
 - Operating: 134 facilities
 - Shutdown: 0
 - Standby: 4
 - Undergoing decommissioning, disposition, or deactivation: 0
- Facility condition:
 - Very good: 100 facilities
 - Good: 11
 - Fair: 3
 - Poor: 3
 - Very poor: 3
 - Not assessed: 18

Waste Isolation Pilot Plant Infrastructure Maintenance Examples of Challenges and Site-Specific Practices

Challenges

The Waste Isolation Pilot Plant site anticipates that it will be increasing its real property significantly over the next 5 years. Staff reported that buildings, utilities, and supporting infrastructure are all beyond design life and their condition warrants replacement.

Site staff reported that facility age and condition do not match with existing life cycle plans. The site’s facilities are running at risk relative to mission-critical assets and facilities. Staff believed that accelerated funding could lower risk and increase mission support.

Site-Specific Practices

The FIMS administrator at the site, along with engineering and safety staff, inspect facilities at least once every 5 years.

Site staff reported that the 534 U/G Area, 411 Waste Handling Building, 413 Exhaust Filter Building, and 311 Waste Shaft facilities are currently all single-point failures in their process of emplacing waste, and they are all approaching 40 years of age. These facilities’ combined annual actual maintenance is \$1.36 million, and their repair needs are \$8.5 million.

Waste Isolation Pilot Plant Maintenance Needs of Operating Facilities, as of June 2025

Annual actual maintenance	\$2.9 million
Annual required maintenance	\$3.1 million
Deferred maintenance	\$0
Repair needs	\$51.8 million

Source: GAO analysis of Department of Energy and EM information. | GAO-26-107957

Note: “Operating Facilities” in this case includes the status categories of “operating” and “standby”.



Paducah Site

Paducah and Lexington, Kentucky

The Paducah Site features a gaseous diffusion uranium enrichment plant undergoing environmental cleanup. The site is managed by the Portsmouth Paducah Project Office in Lexington, Kentucky, which performs project, risk, contract management, and other business support services to both the Paducah and Portsmouth sites.

Source: Office of Environmental Management (EM). | GAO-26-107957

Mission-Critical Facilities

As of June 2025:

130 of 582 facilities were considered “mission critical”

3 of 130 mission-critical facilities had a condition index of “poor” or “very poor”

5 of 130 mission-critical facilities were given an overall asset condition of “inadequate”

Paducah Site Facility Statistics

As of June 2025, out of 582 total facilities:

- Property types:
 - 186 buildings
 - 74 trailers
 - 322 other structures and facilities

- Operating status:
 - Operating: 392 facilities
 - Shutdown: 112
 - Standby: 53
 - Undergoing decommissioning, disposition, or deactivation: 25

- Facility condition:
 - Very good: 423 facilities
 - Good: 32
 - Fair: 53
 - Poor: 39
 - Very poor: 22
 - Not assessed: 13

Paducah Site Infrastructure Maintenance Examples of Challenges and Site-Specific Practices

Challenges

Staff from the Paducah Site noted the age of the equipment as a key challenge. For example, electrical equipment costs have gone up as 1950s facilities are now 70 years old. Getting replacements are more difficult, which leads to more expensive retrofitting, which can cause other issues down the line with connected equipment. However, as more buildings are removed and the footprint decreases, the site anticipates the maintenance costs to decrease over the next five years.

Site-Specific Practices

Paducah Site staff work with the site contractors to determine what work will be prioritized based on the integrated priority list. Main factors considered by the site for what work is completed are safety, requirements, agreement drivers, funding availability, and deconstruction lists.

Paducah Site Maintenance Needs of Operating Facilities, as of June 2025

Annual actual maintenance	\$9.4 million
Annual required maintenance	\$28.0 million
Deferred maintenance	\$67.9 million
Repair needs	\$140.6 million

Source: GAO analysis of Department of Energy and EM information. | GAO-26-107957

Note: “Operating Facilities” in this case includes the status categories of “operating” and “standby”.



Portsmouth Site

Portsmouth, Ohio, and Lexington, Kentucky

The Portsmouth Site features a gaseous diffusion plant undergoing environmental cleanup. The site is managed by the Portsmouth Paducah Project Office in Lexington, Kentucky, which performs services including project, risk, and contract management, and other business support services to both the Paducah and Portsmouth sites.

Source: Office of Environmental Management (EM). | GAO-26-107957

Mission-Critical Facilities

As of June 2025:

92 of 514 facilities were considered “mission critical”

0 of 92 mission-critical facilities had a condition index of “poor” or “very poor”

0 of 92 mission-critical facilities were given an overall asset condition of “inadequate”

Portsmouth Site Facility Statistics

As of June 2025, out of 514 total facilities:

- Property types:
 - 154 buildings
 - 111 trailers
 - 249 other structures and facilities
- Operating status:
 - Operating: 425 facilities
 - Shutdown: 48
 - Standby: 35
 - Undergoing decommissioning, disposition, or deactivation: 6
- Facility condition:
 - Very good: 485 facilities
 - Good: 9
 - Fair: 13
 - Poor: 5
 - Very poor: 0
 - Not assessed: 2

Portsmouth Site Infrastructure Maintenance Examples of Challenges and Site-Specific Practices

Challenges

Staff from Portsmouth Site noted the age of the equipment as a key challenge. For example, electrical equipment costs have gone up as 1950s facilities are now 70 years old. Getting replacements are more difficult, which leads to more expensive retrofitting, which can cause other issues down the line with connected equipment. Water and sewage treatment plants are at particular risk of increasing costs. However, as more buildings are removed and the footprint decreases, the sites anticipate the maintenance costs to decrease over the next five years.

Site-Specific Practices

Portsmouth Site staff work with the site contractors to determine what work will be prioritized based on the integrated priority list. Main factors considered by the site for what work is completed are safety, requirements, agreement drivers, funding availability, and deconstruction lists.

Portsmouth Site Maintenance Needs of Operating Facilities, as of June 2025

Annual actual maintenance	\$16.9 million
Annual required maintenance	\$17.5 million
Deferred maintenance	\$2.4 million
Repair needs	\$99.6 million

Source: GAO analysis of Department of Energy and EM information. | GAO-26-107957

Note: “Operating Facilities” in this case includes the status categories of “operating” and “standby”.



Savannah River Site

Aiken, South Carolina

The Savannah River Site, a 310-square-mile site in Aiken, South Carolina, focused on the production of plutonium and tritium for use in the manufacture of nuclear weapons from the early 1950s until the end of the Cold War. In 1992, the site turned to environmental cleanup, nuclear materials management, and research and development activities.

Source: Office of Environmental Management (EM). | GAO-26-107957

Mission-Critical Facilities

As of June 2025:

436 of 1,842 facilities were considered “mission critical”

67 of 436 mission-critical facilities had a condition index of “poor” or “very poor”

1 of 436 mission-critical facilities were given an overall asset condition of “inadequate”

Savannah River Site Facility Statistics

As of June 2025, out of 1,842 total facilities:

- Property types:
 - 626 buildings
 - 342 trailers
 - 874 other structures and facilities

- Operating status:
 - Operating: 1,350 facilities
 - Shutdown: 433
 - Standby: 59
 - Undergoing decommissioning, disposition, or deactivation: 0

- Facility condition:
 - Very good: 1,273 facilities
 - Good: 108
 - Fair: 244
 - Poor: 174
 - Very poor: 30
 - Not assessed: 13

Savannah River Site Infrastructure Maintenance Examples of Challenges and Site-Specific Practices

Challenges

The H-canyon crane, used to move materials through the radioactive “hot” parts of the facility, is a piece of critical machinery with extensive maintenance needs. The crane was last replaced in the early 1980s. The crane’s systems are interconnected and critical to H-canyon’s continuing operations. In 2024, the site developed plans for updating this critical system. In 2028, the site will make the update.

Site-Specific Practices

Savannah River Site has a preventative maintenance program, according to site staff. This program relies on technical knowledge and support of the contractors at the site. For example, the site, the contractors, and the other DOE units present at the Savannah River Site work together to schedule mission downtime that is used for regular maintenance or reduce the downtime between asset failures. The goal of this program is to have reactive or preventative maintenance as well as predictive maintenance. Site staff believe that a better understanding the root cause of failures can help make this shift.

Savannah River Site Maintenance Needs of Operating Facilities, as of June 2025

Annual actual maintenance	\$313.2 million
Annual required maintenance	\$14.8 million
Deferred maintenance	\$285.8 million
Repair needs	\$527.9 million

Source: GAO analysis of Department of Energy and EM information. | GAO-26-107957

Note: “Operating Facilities” in this case includes the status categories of “operating” and “standby”.



Oak Ridge Reservation

Oak Ridge, Tennessee

The Oak Ridge Site, located in eastern Tennessee, is one of the three original sites in the Manhattan Project. The site purified isotopes, conducted advanced research, manufactured weapons components, and enriched uranium. EM Oak Ridge’s mission is to remove environmental legacies resulting from more than 60 years of nuclear weapons development and government-sponsored nuclear energy research.

Source: Office of Environmental Management (EM). | GAO-26-107957

Mission-Critical Facilities

As of June 2025:

100 of 547 facilities were considered “mission critical”

0 of 100 mission-critical facilities had a condition index of “poor” or “very poor”

0 of 100 mission-critical facilities were given an overall asset condition of “inadequate”

Oak Ridge Facility Statistics

As of June 2025, out of 547 total facilities:

- Property types:
 - 154 buildings
 - 109 trailers
 - 284 other structures and facilities
- Operating status:
 - Operating: 330 facilities
 - Shutdown: 188
 - Standby: 18
 - Undergoing decommissioning, disposition, or deactivation: 11
- Facility condition:
 - Very good: 508 facilities
 - Good: 11
 - Fair: 2
 - Poor: 3
 - Very poor: 1
 - Not assessed: 22

Oak Ridge Infrastructure Maintenance Examples of Challenges

EM Oak Ridge reported that a variety of mission-critical facilities, such as the 3039 stack and U233 support facilities, operate with high risk to mission. There is an additional risk for aging infrastructure that is being used for office space or warehouse space needs that are mission dependent, not mission critical. It can be costly to do repairs and replace assets that are beyond their design life but still needed to support on-site personal or equipment, according to the site.

Oak Ridge prioritizes funding for maintenance-based safety and compliance. Building 3608 is the Liquid Gaseous Waste Operations Facility at the site. It is critical to support both EM and non-EM mission needs in Oak Ridge. The facility is well past its design life, and the site has been performing upgrades to the system using infrastructure funding and plus ups. MSRE (building 7503) is a high-risk excess facility that requires additional maintenance for the continuous purge system and ongoing maintenance related to fuel salt storage in the aging facility.

According to site staff, federal oversight is necessary for administration of contract requirements, supplemental guidance, and adherence to DOE order requirements. The contractor staff continue to operate, but with a significant decrease in the federal support to administer requirements, according to site staff. According to site staff, some contracts do not incorporate FIMS or other DOE order reporting requirements, putting the onus on federal staff for reporting.

Oak Ridge Maintenance Needs of Operating Facilities, as of June 2025

Annual actual maintenance	\$60.5 million
Annual required maintenance	\$64.6 million
Deferred maintenance	\$0
Repair needs	\$7.6 million

Source: GAO analysis of Department of Energy and EM information. | GAO-26-107957

Note: Oak Ridge reset its deferred maintenance data to \$0 in June 2025 as the site works to reconfigure how it calculates these costs. As a result, Oak Ridge’s costs are not represented in the deferred maintenance figure. Also, “Operating Facilities” in this case includes the status categories of “operating” and “standby”.



Los Alamos Field Office

Los Alamos, New Mexico

Los Alamos Field Office is dedicated to the cleanup of waste from operations during the Manhattan Project and Cold War eras at the Los Alamos National Laboratory in New Mexico. Los Alamos Field Office’s cleanup scope includes legacy waste remediation and disposition, soil and groundwater remediation, and deactivation and decommissioning of excess buildings and facilities.

Source: Office of Environmental Management (EM). | GAO-26-107957

Mission-Critical Facilities

As of June 2025:

3 of 67 facilities were considered “mission critical”

0 of 3 mission-critical facilities had a condition index of “poor” or “very poor”

0 of 3 mission-critical facilities were given an overall asset condition of “inadequate”

Los Alamos Facility Statistics

As of June 2025, out of 67 total facilities:

- Property types:
 - 36 buildings
 - 25 trailers
 - 6 other structures and facilities

- Operating status:
 - Operating: 55 facilities
 - Shutdown: 1
 - Standby: 11
 - Undergoing decommissioning, disposition, or deactivation: 0

- Facility condition:
 - Very good: 59 facilities
 - Good: 1
 - Fair: 0
 - Poor: 2
 - Very poor: 0
 - Not assessed: 5

Los Alamos Field Office Infrastructure Maintenance Examples of Challenges and Site-Specific Practices

Challenges

The site reported that two challenges for collecting required facility data are consistent participation by subject matter experts for facility assessments; and insufficient information systems or processes that collect required data at the appropriate level, such as having granularity down to an asset. The site also found that their procedures for generating data for three FIMS data elements identified as performance measures, annual required maintenance, annual actual maintenance, and deferred maintenance are all under development, as of June 2025.

EM-Los Alamos provided some examples of building with high annual required maintenance costs. Dome 230 and 229 are storage facilities for legacy transuranic waste at the site. The fire-retardant fabric utilized at these facilities has a 10-year lifespan and was recently re-skinned. TA-54 is currently approaching capacity for storage of waste. Building 533 is an office space that houses 40 staff; there have been repairs made to the roof and walkways.

Site-Specific Practices

The site reported that safety, compliance, and security are the top factors for prioritization for maintenance. Organizational and operational goals are secondary factors for maintenance prioritization at the site.

Los Alamos Maintenance Needs of Operating Facilities, as of June 2025

Annual actual maintenance	\$0
Annual required maintenance	\$3,083,244
Deferred maintenance	\$479,549
Repair needs	\$531,841

Source: GAO analysis of Department of Energy and EM information. | GAO-26-107957

Note: “Operating Facilities” in this case includes the status categories of “operating” and “standby”



Idaho National Laboratory – Idaho Cleanup Project

Idaho Falls, Idaho

The Idaho Cleanup Project at the Idaho National Laboratory is in southeast Idaho. EM’s remaining scope at the Idaho Cleanup Project includes soil and groundwater remediation; completion of deactivation and decommissioning activities; and retrieval, management, and disposal of transuranic waste.

Source: Office of Environmental Management (EM). | GAO-26-107957

Mission-Critical Facilities

As of June 2025:

121 of 409 facilities were considered “mission critical”

9 of 121 mission-critical facilities had a condition index of “poor” or “very poor”

5 of 121 mission-critical facilities were given an overall asset condition of “inadequate”

Idaho National Laboratory Facility Statistics

As of June 2025, out of 409 total facilities:

- Property types:
 - 156 buildings
 - 85 trailers
 - 168 other structures and facilities
- Operating status:
 - Operating: 363 facilities
 - Shutdown: 13
 - Standby: 27
 - Undergoing decommissioning, disposition, or deactivation: 6
- Facility condition:
 - Very good: 311 facilities
 - Good: 12
 - Fair: 12
 - Poor: 12
 - Very poor: 13
 - Not assessed: 49

Idaho National Laboratory Infrastructure Maintenance Examples of Challenges and Site-Specific Practices

Challenges

With current funding limitations, decisions at the site are made based on a risk-to-mission basis. In many cases, emergent repairs are made to aged and legacy systems/equipment due to the inability to perform upgrades and modernization activities within the funding constraints. Upgrades and modernization activities are most often added to FIMS as deferred maintenance, according to the site.

Site-Specific Practices

The Idaho Site has over 213 FIMS assets over 30 years old. Many assets are operating past their design life and need to be replaced, and many electrical systems exceed 50 years. Failure of aged and legacy equipment—such as transformers and substations, hot cell cranes and manipulators, and plant utility systems—could have significant impacts on both cost and schedule due to the potential lack of commercial availability of replacement parts and potential redesign efforts.

Current FIMS data indicates CPP-1696, CPP-666, and WMF-676 as the highest Annual Required Maintenance costs. Additional prioritized funding would be utilized to repair, upgrade, and modernize aged and legacy facility systems and equipment and other infrastructure to reduce the risk to mission. Many of these infrastructure systems—some as old as 74 years—support multiple site missions that extend out to 2060. Unanticipated failure of legacy electrical system components, and other legacy utility system failures, could shut down processing facility operations, resulting in extending the mission duration and increasing the overall life cycle costs.

Idaho National Laboratory Maintenance Needs of Operating Facilities, as of June 2025

Annual actual maintenance	\$48.2 million
Annual required maintenance	\$26.6 million
Deferred maintenance	\$52.1 million
Repair needs	\$248.4 million

Source: GAO analysis of Department of Energy and EM information. | GAO-26-107957

Note: “Operating Facilities” in this case includes the status categories of “operating” and “standby”.



Consolidated Business Center – Managed Sites

Various Locations

EM's Consolidated Business Center assists in the operation of seven sites across the country. These seven sites vary in mission and purpose and can have multiple locations for one site. Some of these sites plan to close in the next 5 years.

Source: Office of Environmental Management (EM). | GAO-26-107957

Mission-Critical Facilities

As of June 2025:

49 of 247 facilities were considered “mission critical”

0 of 49 mission-critical facilities had a condition index of “poor” or “very poor”

1 of 49 mission-critical facilities were given an overall asset condition of “inadequate”

Consolidated Business Center – Managed Sites Examples of Site-Specific Practices

The Consolidated Business Center has overseen EM cleanup work at the Bettis Atomic Power Laboratory, Environmental Management Consolidated Business Center–New York, Nevada National Security Site, Lawrence Berkeley National Laboratory, Energy Technology Engineering Center, Moab Uranium Mill Tailings Remedial Action Project, and West Valley Demonstration Project.

At the Nevada National Security Site, EM Nevada works with the National Nuclear Security Administration, whose contractor is responsible for facility maintenance, to maintain their operations.

The Moab Uranium Mill Tailings Remedial Action Project anticipates site closure in 2029. According to site responses to our questionnaire, this affects maintenance planning as site operations look to shift to disposition of the assets prior to closure.

At the Energy Technology Engineering Center, the highest maintenance costs are for air monitoring stations, which provide valuable data to support the site’s cleanup operations.

Consolidated Business Center – Managed Sites Facility Statistics

As of June 2025, out of 247 total facilities:

- Property types:
 - 74 buildings
 - 80 trailers
 - 93 other structures and facilities
- Operating status:
 - Operating: 224 facilities
 - Shutdown: 8
 - Standby: 14
 - Undergoing decommissioning, disposition, or deactivation: 1
- Facility condition:
 - Very good: 179 facilities
 - Good: 3
 - Fair: 2
 - Poor: 2
 - Very poor: 0
 - Not assessed: 61

Consolidated Business Center – Managed Sites Combined Maintenance Needs of Operating Facilities, as of June 2025

Annual actual maintenance	\$1,216,721
Annual required maintenance	\$1,439,638
Deferred maintenance	\$967,197
Repair needs	\$2,567,474

Source: GAO analysis of Department of Energy and EM information. | GAO-26-107957

Note: “Operating Facilities” in this case includes the status categories of “operating” and “standby”.

Appendix III: Comments from the Department of Energy



Department of Energy
Washington, DC 20585

April 24, 2026

Mr. Nathan Anderson
Director, Natural Resources and Environment
United States Government Accountability Office
441 G Street N.W.
Washington, DC 20548

Dear Mr. Anderson:

The Department of Energy (DOE) appreciates the opportunity to comment on the United States Government Accountability Office's (GAO) draft report titled, *NUCLEAR WASTE CLEANUP: Better Data and Project Prioritization Vital to Managing Aging Infrastructure and Communicating Needs* (GAO-26-107957).

Since 1989, the Office of Environmental Management's (EM) mission has been to clean up hazardous materials and contaminated facilities at sites across DOE. Safely deactivating and decommissioning facilities, some of which date back to the Manhattan Project, introduced unique challenges and demands on infrastructure. EM continues to maintain necessary infrastructure while prioritizing required upgrades, as funding permits, to advance EM's cleanup mission in a risk-informed manner.

EM manages its infrastructure and related data as outlined in applicable DOE Orders and federal regulations. EM continues to take the necessary steps to ensure infrastructure data is accurate, consistent, and complete across the EM complex, without increasing already extensive reporting requirements. EM will also continue to initiate improvements to the infrastructure management strategy as necessary based on EM cleanup mission needs.

EM concurs with two recommendations and partially concurs with two recommendations contained in the draft report. EM's responses to the recommendations are provided in the enclosure. General and technical comments on the draft report were provided separately to GAO.

If you have any questions, please contact me or Mr. Jack Zimmerman, Acting Associate Principal Deputy Assistant Secretary for Regulatory and Policy Affairs, at (513) 246-1050.

Sincerely,

A handwritten signature in blue ink that reads "Timothy J. Walsh".

Timothy J. Walsh
Assistant Secretary
for Environmental Management

Enclosure

Enclosure

Management Response

**GAO Draft Report: “NUCLEAR WASTE CLEANUP: Better Data and Project
Prioritization Vital to Managing Aging Infrastructure and Communicating Needs”
(GAO-26-107957)**

Recommendation 1: The Assistant Secretary for the Office of Environmental Management (EM) should ensure sites create and complete corrective action plans to correct data validation issues identified in the Facilities Information Management Systems (FIMS) validation scorecard process.

DOE Response: Concur

EM is committed to and will continue collaborating with its sites and the Office of Management (MA) to ensure the timely development of FIMS corrective action plans and the remediation of deficiencies identified during the validation process to ensure the reliability and accuracy of FIMS data. EM will work with field offices to track the status of corrective action plans. Once the corrective action plans are completed, EM will issue a memorandum documenting all fields on the validation scorecards that meet the required guidelines.

Estimated Completion Date: December 31, 2026

Recommendation 2: The Assistant Secretary for EM should ensure EM sites have procedures to accurately and comparably capture deferred maintenance and annual actual maintenance FIMS data elements, as required in DOE Order 430.1C., Chg. 2.

DOE Response: Concur

EM is committed to and will continue collaborating with MA to ensure EM sites remain in compliance with real property reporting requirements, including documenting deferred maintenance and annual actual maintenance data. MA maintains FIMS and issues DOE Order 430.1C, Chg.2, Real Property Asset Management procedures for documenting deferred maintenance and annual actual maintenance data. EM will work with MA and EM field offices to conduct a documented review of field office procedures that either validates compliance or identifies what changes are needed to achieve compliance. Proposed changes will be distributed to field offices for implementation during normal procedure update cycles.

Estimated Completion Date: December 31, 2026

Recommendation 3: The Assistant Secretary for EM should incorporate more reliable information from EM sites in the Master Asset Plan (MAP), such as project prioritization decisions for infrastructure maintenance projects, to better reflect site maintenance needs.

DOE Response: Partially Concur

**Appendix III: Comments from the Department
of Energy**

Enclosure

The Master Asset Plan (MAP) is an annual report on the status of EM site infrastructure. The MAP includes a risk-based analysis of deferred maintenance needs and a list of projects with the greatest cost-benefit to implement. The MAP does not prioritize EM-wide funding needs or provide direction to sites.

EM will evaluate existing internal reporting to determine if more specific information on site infrastructure project priorities is needed, including the potential impacts on mission activities of funding or not funding each project. After the evaluation, EM will issue a memo to field office managers, reiterating prioritization requirements for infrastructure maintenance and implementing any additional internal reporting guidance.

Estimated Completion Date: December 31, 2026

Recommendation 4: The Assistant Secretary for EM should communicate to Congress the reductions in cost and risk to mission that can be achieved if specific projects are prioritized.

DOE Response: Partially Concur

EM tracks the status of funded projects both at the site level and through the EM Headquarters budget office. EM will continue to provide the appropriate level of detail necessary to support the President's budget request.

EM will issue a memo to Field Office Managers emphasizing the importance of including justification, project prioritization, and reductions in cost and risk to mission, where appropriate, to support the funding requested in the President's budget request.

Estimated Completion Date: December 31, 2026

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

Nathan Anderson, andersonn@gao.gov

Staff Acknowledgments

In addition to the contact named above, Wyatt R. Hundrup (Assistant Director), Skip McClinton (Analyst in Charge), Brian Hartman, Rebecca Conway, Serena Lo, Matt McLaughlin, Jerry Sandau, and Adrian Apodaca made key contributions to this report.

GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through our website. Each weekday afternoon, GAO posts on its [website](#) newly released reports, testimony, and correspondence. You can also [subscribe](#) to GAO's email updates to receive notification of newly posted products.

Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, <https://www.gao.gov/ordering.htm>.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

Connect with GAO

Connect with GAO on [X](#), [LinkedIn](#), [Instagram](#), and [YouTube](#).
Subscribe to our [Email Updates](#). Listen to our [Podcasts](#).
Visit GAO on the web at <https://www.gao.gov>.

To Report Fraud, Waste, and Abuse in Federal Programs

Contact FraudNet:

Website: <https://www.gao.gov/about/what-gao-does/fraudnet>

Automated answering system: (800) 424-5454

Media Relations

Sarah Kaczmarek, Managing Director, Media@gao.gov

Congressional Relations

David A. Powner, Acting Managing Director, CongRel@gao.gov

General Inquiries

<https://www.gao.gov/about/contact-us>



Please Print on Recycled Paper.