



February 2022

BUREAU OF PRISONS

Enhanced Data Capabilities, Analysis, Sharing, and Risk Assessments Needed for Disaster Preparedness

GAO Highlights

Highlights of [GAO-22-104289](#), a report to congressional addressees

Why GAO Did This Study

BOP is responsible for the care and custody of over 150,000 federal inmates and the maintenance and repair of 122 institutions. Natural disasters, such as hurricanes, can present a specific danger to inmates and staff who may not be able to evacuate, due to security measures.

Senate Report 116-127 includes a provision for GAO to examine how BOP protects inmates during disasters. This report addresses BOP's (1) preparation for disasters; (2) tracking and analysis of disaster-related repair projects; (3) approach to managing disaster response and related impacts; and (4) identification and sharing of lessons learned from, and assessment of vulnerability to, disasters.

GAO reviewed BOP guidance, policy, and data on maintenance and repair projects. GAO also interviewed officials from a nongeneralizable sample of six BOP institutions, selected, in part, on the basis of experience with a disaster from calendar years 2017 through 2020.

What GAO Recommends

GAO is making eight recommendations to BOP, including establishing in policy a clear definition of disaster for tracking projects, incorporating analytic features into its data systems, systematically sharing lessons learned from disasters, and including disaster-related risks in its vulnerability assessments. BOP concurred with five of the eight recommendations. BOP did not concur with the three recommendations to incorporate analytic features into its data systems, citing among other things, questions about cost and feasibility. GAO made related modifications, as discussed in the report.

View [GAO-22-104289](#). For more information, contact Gretta L. Goodwin at (202) 512-8777 or goodwin@gao.gov.

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What GAO Found

The Bureau of Prisons (BOP), within the Department of Justice, prepares for disasters by requiring its institutions to develop contingency plans outlining steps to prepare and respond to disasters and requiring staff to complete related training, which includes what constitutes a disaster.

Tornado Damage at a BOP Institution, April 2020



Source: Federal Bureau of Prisons. | GAO-22-104289

BOP has two data systems to collect information on maintenance and repair projects, including those related to disasters. However, BOP has not defined "disaster" for the purposes of tracking it in its data systems. Further, these systems do not include analytic features that could position BOP to identify trends in the type, timeliness, and cost of its projects. By establishing in policy a clear definition of disaster, and incorporating analytic features into its data systems—such as project milestones and cost indicators, as well as queries and alerts on these features—BOP could identify trends across projects and position itself to better address unnecessary delays or costs.

BOP has various processes for managing disaster response, including using a standardized Incident Command Structure approach and documenting and responding to the impacts of disasters on inmates and staff. For example, when a hurricane hit one BOP institution, the institution converted the visiting room and training center into staff living quarters and supplied cots, sheets, blankets, showers, and food until staff could return to their homes.

BOP lacks approaches for sharing lessons learned from all disasters and assessing institutions' disaster vulnerability. According to BOP, it identifies and shares disaster-related lessons learned through after-action reports; however, these reports are not required, and their content varies. Further, officials at all six institutions said they identified and shared lessons in other ways, such as conference calls. By implementing a systematic approach for identifying and sharing all the lessons learned and taking steps to routinely collect feedback from institutions on their application, BOP could have greater assurance that institutions are leveraging lessons to prepare for future disasters. Further, BOP's approach for assessing institutions' vulnerability focuses on security-related risks, not disaster-related risks, such as building damage. By expanding assessments to include disaster-related risks, BOP could leverage opportunities to build resilience and reduce institutions' risk to damage from future disasters.

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August 2020

Abbreviations

BOP	Bureau of Prisons
FCC	Federal Correctional Complex
FCI	Federal Correctional Institution
FDC	Federal Detention Center
FEMA	Federal Emergency Management Agency
FMIS	Financial Management Information System
ICS	Incident Command System
MDC	Metropolitan Detention Center
MOU	memorandum of understanding
OEP	Office of Emergency Preparedness
PMBOK©	Project Management Body of Knowledge
TMS	Total Maintenance System

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February 2, 2022

Congressional Addressees

Natural disasters, such as hurricanes or tornados, can present a specific danger to inmates and staff at correctional institutions who may not be able to easily evacuate, due to security measures. At the federal level, the Bureau of Prisons (BOP), within the Department of Justice, is responsible for the care and custody of over 150,000 inmates housed in its 122 institutions, Residential Reentry Centers, and privately managed facilities across the country.¹ Over the past few years, the U.S. has experienced some of the most destructive and costly natural disasters in its history. For example, according to the National Oceanic and Atmospheric Administration, from 2017 through 2020, there were 66 separate weather events in the U.S. that each resulted in damages exceeding \$1 billion, with the total damages from these events exceeding \$550 billion.²

Given the scope and severity of recent natural disasters and the specific risks these events pose to inmates and staff at correctional institutions, questions have been raised about BOP's emergency preparedness and its ability to ensure the safety and security of inmates, staff, and its institutions. You asked us to review BOP's disaster response efforts. In addition, Senate Report 116-127, which accompanies the Consolidated Appropriations Act, 2020, includes a provision for us to examine how BOP protects inmates during disasters, including its emergency response plans and standard operating procedures, and what, if anything, BOP should do to strengthen these safeguards in the future.³

This report addresses the following: (1) how BOP prepares for disasters; (2) the extent to which BOP is able to track and analyze the type,

¹Because this report focuses on disaster-related damages to infrastructure, and the infrastructure of the privately managed facilities is not owned or operated by BOP, nor part of the federal government's real property portfolio, we excluded privately managed facilities from the scope of our review.

²The National Oceanic and Atmospheric Administration is a component of the Department of Commerce composed of scientists who research and monitor weather and climate issues to provide citizens, planners, emergency managers, and other decision makers with reliable information.

³S. Rept. No. 116-127, at 110 (2019), which accompanies the Consolidated Appropriations Act, 2020, Pub. L. No. 116-93, 133 Stat. 2317.

timeliness, and costs of its disaster-related repair projects; (3) BOP's approach to managing its institutions' disaster response and addressing related impacts on staff and inmates; and (4) the extent to which BOP identifies and shares lessons learned from disasters and assesses the vulnerability of BOP institutions to disasters.

To address all four of our objectives, we selected six BOP institutions that experienced a disaster from calendar years 2017 through 2020 and interviewed officials at each location from February through March 2021.⁴ We chose calendar years 2017 through 2020 because those years capture both recent severe weather events that impacted BOP institutions and the maximum period of time (3 years) that BOP allows its institutions to complete disaster-related repair projects. We also selected these six institutions to represent varied geographic dispersion, a mix of institution security levels, a mix of structure types (both stand-alone institutions as well as those that are part of a complex), and the severity of disasters experienced. For each of the selected institutions, we interviewed management staff, including the Warden and associate wardens. We also reviewed documents, such as institution-specific contingency plans that explain the institution's disaster response procedures as well as photographs of disaster damage at their institutions. In addition, we interviewed BOP union officials to obtain their perspectives on BOP's disaster preparedness and response efforts.

To address our first objective, we reviewed BOP guidance on disaster planning efforts, including institution-specific contingency plans activated at the six selected institutions from calendar years 2017 through 2020. We interviewed officials from BOP headquarters—referred to as the central office—BOP's six regional offices, and our selected institutions about how they prepared for disasters. In addition, we interviewed BOP officials about the training BOP provides to staff at the regional office and the institution level to help ensure that staff are aware of disaster preparedness and response policies and procedures.

To address our second objective, we reviewed BOP data on disaster-related expenditures and projects that occurred at the six selected

⁴From calendar years 2017 through 2020, 15 BOP institutions experienced a disaster. The specific institutions we selected for our review were Federal Correctional Complex, Beaumont, Texas; Federal Correctional Institution, Estill, South Carolina; Federal Correctional Institution, Marianna, Florida; Metropolitan Detention Center, Guaynabo, Puerto Rico; Federal Detention Center, Houston, Texas; and Federal Correctional Complex, Pollock, Louisiana.

institutions from BOP's Financial Management Information System (FMIS) and its Total Management System (TMS), which store this information. To assess the reliability of the data, we reviewed FMIS and TMS reports from institutions that have experienced disasters from calendar years 2017 through 2020 and interviewed BOP officials responsible for inputting the data. We identified some limitations in the data systems and how they capture disaster information, such as the systems not being interoperable. Further, during our review, we found out that BOP plans to replace these systems. Therefore, we focused our review on the functionalities of the systems and BOP's efforts to replace them. We also interviewed officials from BOP central office, BOP's six regional offices, and our selected institutions about how they maintained data on disaster-related repair projects. We compared BOP's approach to defining disasters in its data systems with criteria related to defining key terms and processes in policy.⁵ We also compared these limitations with the characteristics GAO identified for an effective asset management framework—specifically the characteristic that directs organizations to use quality information to inform decision-making about its assets.⁶ We compared BOP's process to monitor disaster-related projects with GAO's Disaster Resilience Framework, including accessing appropriate information that can help decision makers identify current and future disaster risk and the impact of risk-reduction strategies.⁷

To address our third objective, we reviewed logs of institutions' disaster response efforts and inspection results from our selected institutions. Further, we interviewed management officials at each of our selected BOP institutions about their efforts to manage disaster response and to inform staff about the institutions' disaster-related plans and policies. We also interviewed these officials about steps they have taken to address

⁵Project Management Institute, Inc., *A Guide to the Project Management Body of Knowledge*, 6th ed. (2017). *PMBOK* is a trademark of Project Management Institute, Inc. The Project Management Institute, Inc., founded in 1969, is a not-for-profit association that provides global standards for project management. These standards are utilized worldwide and provide guidance on how to manage various aspects of projects, programs, and portfolios. The *PMBOK® Guide* is the Project Management Institute's flagship publication that includes standards for effective project management

⁶GAO, *Federal Real Property Asset Management: Agencies Could Benefit from Additional Information on Leading Practices*, [GAO-19-57](#) (Washington, D.C.: Nov. 5, 2018).

⁷GAO: *Disaster Resilience Framework: Principles for Analyzing Federal Efforts to Facilitate and Promote Resilience to Natural Disasters*, [GAO-20-100SP](#) (Washington, D.C.: October 2019).

the impacts that recent disasters have had on inmates, staff, and the institution.

To address our fourth objective, we reviewed BOP documentation, such as after-action reports and vulnerability assessments for the six institutions we selected. We also spoke with BOP officials at central office, each regional office, and our six selected institutions about their processes for identifying and sharing lessons learned from disasters and how they conduct vulnerability or other assessments to identify institutions' vulnerabilities to disasters. We also assessed BOP's efforts to identify and share lessons learned and to assess the vulnerability of its institutions to disasters by comparing these efforts with practices described in the Federal Emergency Management Agency's (FEMA) National Disaster Recovery Framework and GAO's Disaster Resilience Framework.⁸ Specifically, the practices described in the two frameworks relate to efforts to obtain information needed to identify, assess, and respond to risks to improve disaster resilience.

We conducted this performance audit from April 2020 to February 2022 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

Emergency Management Concepts and Principles

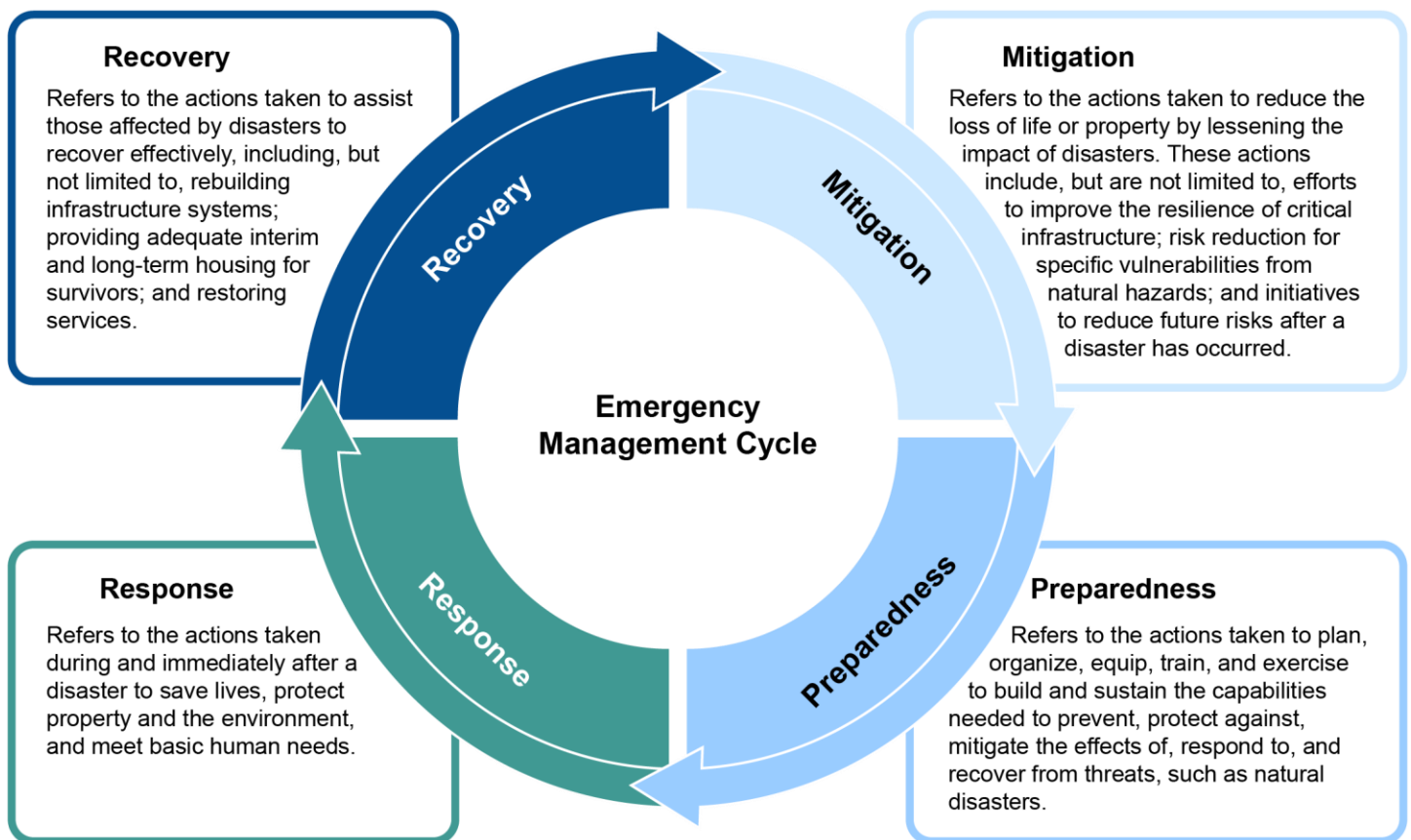
The Federal Emergency Management Agency is the lead federal agency responsible for disaster preparedness, response, and recovery. As part of these responsibilities, FEMA facilitates planning efforts for all hazards, including natural disasters, and has established guidance documents to inform agencies, organizations, and the public about disaster preparedness and assistance. For example, FEMA developed and provides training on the National Incident Management System for all levels of government, nongovernmental organizations, and the private sector, with the goal of preventing, protecting against, mitigating, responding to, and recovering from incidents. The National Incident Management System calls for agencies, in the event of a disaster or other

⁸Federal Emergency Management Agency, *National Disaster Recovery Framework*, 2nd ed. (Washington, D.C.: June 2016); and [GAO-20-100SP](#).

emergency, to set up an Incident Command System (ICS), which is a standardized approach to incident management that enables a coordinated response among various stakeholders. BOP uses this approach through its incident command centers at the institution, regional, and central offices.

FEMA defines emergency management as the coordinated and collaborative integration of all relevant stakeholders into the four stages of emergency management: preparedness, response, recovery, and mitigation (see fig. 1).

Figure 1: Federal Emergency Management Agency’s Four Stages of the Emergency Management Cycle



Source: Federal Emergency Management Agency. | GAO-22-104289

BOP's Definition of "Disaster"

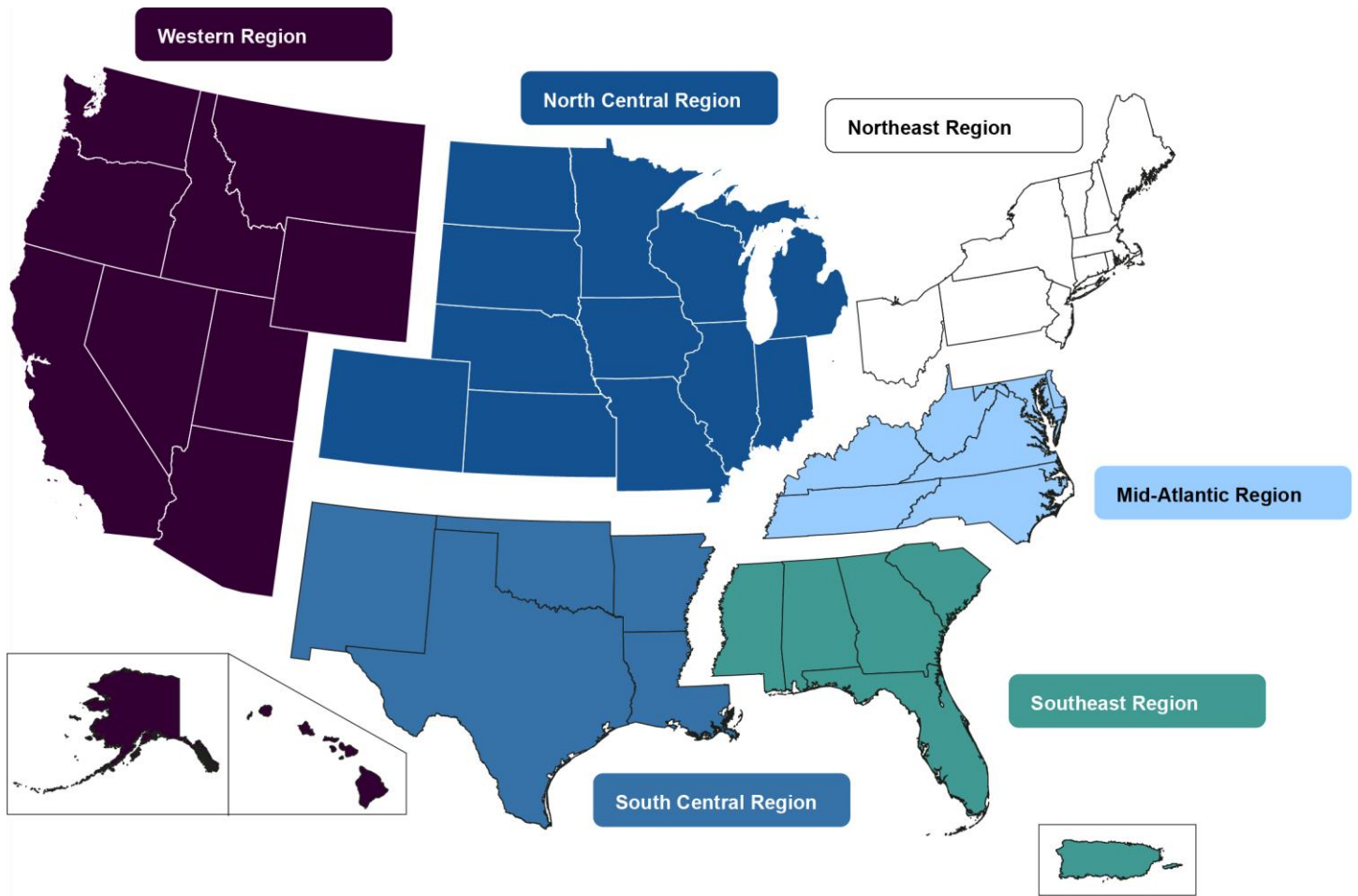
In its staff training on emergency preparedness, BOP defines disasters as one of two types of incidents: (1) a natural occurrence or accident that may require outside assistance—this could include floods, earthquakes, tornados, hurricanes, or wildfires; and (2) an induced catastrophe, which may also require outside assistance, from actions brought on by individuals or groups—including incidents such as arson or a bombing. For the purposes of our review, we focused on BOP efforts related to the first type of disaster.

BOP's Structure

BOP's central office in Washington, D.C., serves as BOP's headquarters and oversees BOP operations and program areas. Within the central office, the Correctional Programs Division oversees a number of critical functions for BOP, including those carried out by the Office of Emergency Preparedness (OEP). OEP is responsible for supporting BOP's regional offices and institutions in responding to disasters or other emergencies. BOP's Administration Division is responsible for overseeing major infrastructure and safety and security issues, including the financial management of damage repairs caused by disasters at its institutions.

BOP has six regional offices that cover the Mid-Atlantic, North Central, Northeast, South Central, Southeast, and Western regions of the U.S. (see fig. 2). These offices, each led by a regional director, oversee the operations of about the same number of federal institutions within their respective geographic regions. Divided among the six regions are 122 BOP institutions, owned and operated by BOP and, therefore, part of the federal government's real property portfolio.

Figure 2: Federal Bureau of Prisons' (BOP) Regional Offices

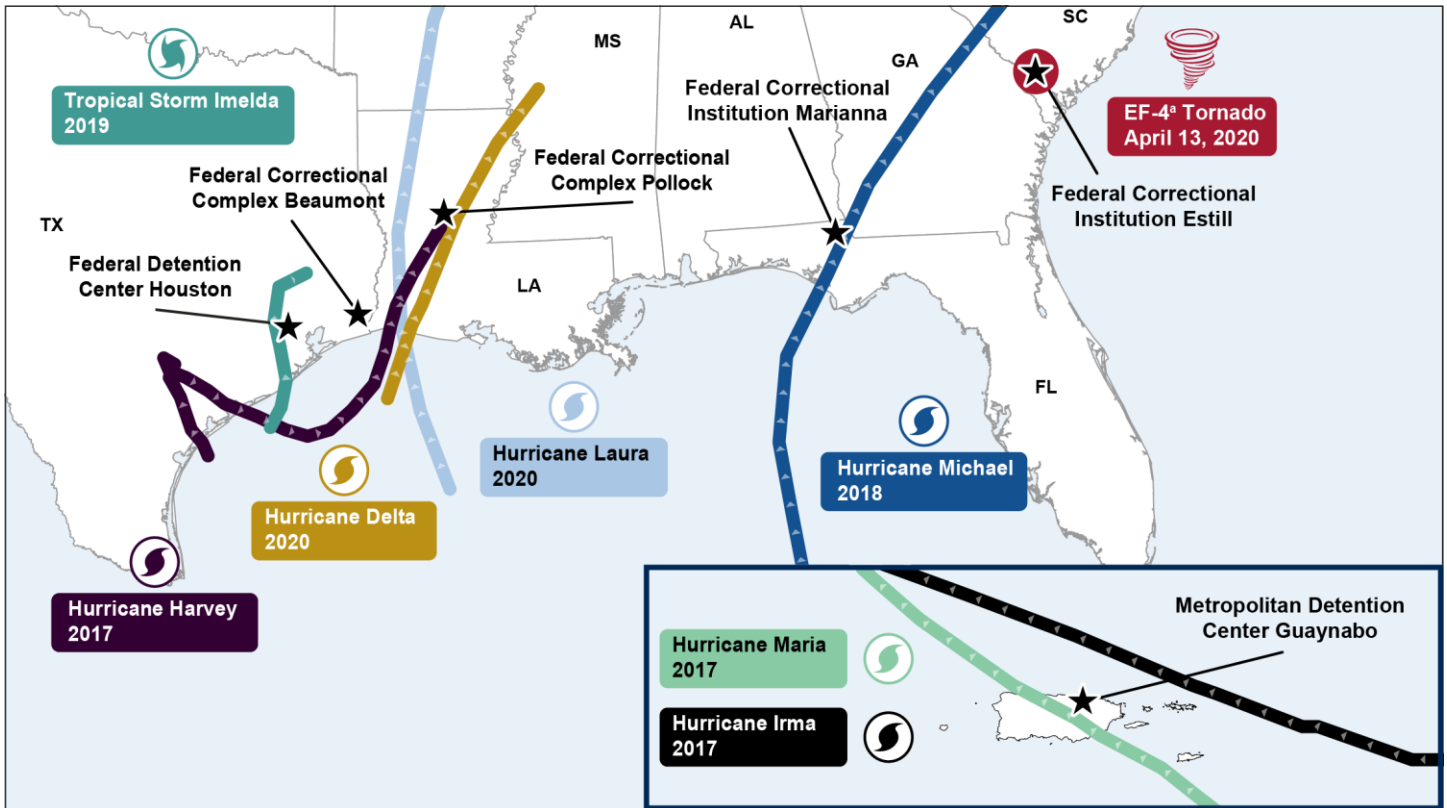


Source: GAO analysis of BOP data. | GAO-22-104289

Disasters Affecting BOP Institutions from 2017 through 2020

According to BOP central office officials, from calendar years 2017 through 2020, disasters affected 15 BOP institutions. An adverse weather event, such as a hurricane, a tropical storm, or a tornado, affected all 15 institutions. Figure 3 depicts the location of the six facilities we selected for interviews and the natural disaster each faced from 2017 through 2020.

Figure 3: Natural Disasters Impacting Six Selected Federal Bureau of Prisons' (BOP) Institutions from Calendar Years 2017 through 2020



Source: GAO analysis based on BOP and National Oceanic and Atmospheric Administration data. | GAO-22-104289

Notes: Institutions self-reported which disasters impacted them. Some storm paths may go near an institution without causing damage to that institution or affecting the institution's operations.

^aThe Enhanced Fujita (EF) Scale is used to assign a tornado a rating based on estimated wind speeds and related damage. EF scale ratings range from 0 to 5, with a 0 rating having 60 to 85 miles per hour wind speed, and a 5 rating having over 200 miles per hour wind speed.

BOP Funding for Facility Maintenance and Repair

BOP's Administration Division provides funding to institutions for maintenance and repair needs, which it determines based on factors such as the projects that the institution, the regional office, and the Administration Division have prioritized; institution size; and security classification. If a disaster arises and an institution cannot fully fund repairs from its own budget, the institution may request additional funding from its regional office or, if the project cannot be funded by the region, central office. Regional offices and central office maintain a set-aside contingency budget for this purpose, which, according to BOP officials, is approximately 10 percent of their annual maintenance and repair budget.

According to BOP central office officials, local institutions may fund minor maintenance and repair projects using their own budget allocations but would still need to inform their regional office or central office of the project.

BOP Develops Plans and Trains Staff to Prepare for Disasters

BOP Requires Its Institutions to Develop Plans for Disaster Preparedness and Response

BOP's Correctional Services Manual requires that each institution develop 18 different contingency plans to establish the institution's approach for various emergency or disaster situations, such as fires or escaped inmates, and to update these plans annually. In addition, some BOP regional offices may require institutions in their region to develop additional plans for weather events common in their locations. For example, BOP's South Central Region, which is susceptible to hurricanes, requires institutions to develop plans specific to hurricane preparedness and response. According to officials from two institutions we spoke with, they consult guidance from FEMA in developing these plans.

At the central office level, BOP has also developed policy guidelines for institutions in developing their required contingency plans. According to these guidelines, OEP requires certain elements to be included in all plans—such as a statement of purpose, a description of chain of command, a plan for communication during the incident, preparations to enhance safety and security for staff and inmates, and a plan for gathering intelligence. We reviewed the contingency plans that were activated by our selected institutions for disasters they experienced from calendar years 2017 through 2020 and observed that the plans generally aligned with the policy guidelines established by BOP central office. In addition, some of our selected institutions developed additional plans for disasters that they were most likely to experience. For example, institutions in the South Central and Southeast regions prepared additional plans on hurricane preparedness and response, such as a checklist that describes actions that institutions should take before, during, and after a hurricane event.

According to BOP central office and regional office officials, there are several review layers annually, for each contingency plan. Generally, they said that institutions first send the plans to their respective regional office

for review. Then, each regional office is to send the contingency plans to the Correctional Programs Division at the central office, which oversees the BOP's overall emergency preparedness. Further, OEP reviews the contingency plans to determine whether the plans meet policy guidelines. Within central office, the Program Review Division is responsible for reviewing each institution's overall emergency preparedness, including reviewing its contingency plans and memorandums of understanding (MOU) with outside agencies, such as fire and rescue departments.

BOP Requires Institutions to Train Staff on Disaster Preparedness and Response

BOP's Correctional Services Manual requires employees at BOP institutions to complete annual training, which includes training on emergency preparedness-related topics, such as disaster preparedness and response. This training includes a review of the institution's contingency plans as well as any updates to the plans or procedures. According to BOP officials, the training also serves as an opportunity for employees to raise questions or concerns about the plans.

One segment of this training requires BOP institutions to conduct mock exercises—two major and six minor exercises each year—to evaluate the effectiveness of their contingency plans. For both major and minor mock exercises, BOP policy states that institutions should evaluate their contingency plans to determine if the plan is realistic, staff are knowledgeable about their responsibilities, and equipment is readily available and operational. The institutions generally inform participating staff that these exercises are for training purposes. However, the institutions may, if necessary, conduct some exercises without informing participating staff in advance to evaluate preparedness and response time more accurately. According to BOP officials, institutions usually conduct major mock exercises for over 4 hours and involve two or more Crisis Management Teams.⁹ Minor mock exercises can last as little as 30 minutes to an hour and usually deploy just one contingency plan at a time. BOP involves inmates in exercises related to fire drills and provides inmates with guidance in their orientation handbook on their institutions' expectations for inmates in disaster or emergency situations. According to BOP officials, the institutions conduct an after-action review following

⁹To prepare for any possible situation related to emergencies, BOP employs a multipronged strategy for responding, which consists of six Crisis Management Teams. These teams are the (1) Planning Section Team, (2) Crisis Negotiation Team, (3) Crisis Support Team, (4) Disturbance Control Team, (5) Special Operations Response Teams, and (6) Evidence Recovery Team.

each mock exercise to determine if there are any opportunities for improving the exercise.

In addition to these mock exercises, each region is to conduct Crisis Management Team training. These regional trainings are to incorporate disaster planning at a larger scale than the training for local institutions. Regional officials are to conduct the trainings annually or at least biyearly, usually for 3 to 5 days, depending on available funds and the availability of staff to conduct the trainings.¹⁰ BOP's central office is to monitor the Crisis Management Team trainings, according to BOP policy. Table 1 describes the various forms of BOP's disaster preparedness and response training.

Table 1: Summary of the Federal Bureau of Prisons' (BOP) Required Training Related to Disaster Preparedness and Response

Training	Description of training	Additional requirements
Major mock exercises	Major mock exercises will be a minimum of 4 hours in length and include components from the various Crisis Management Teams. One major mock exercise should include local, state, or federal law enforcement agencies.	The Captain ^a will ensure that a minimum of two major mock exercises are conducted annually. These drills are specifically designed to test breaching/contingency plans and related memorandums of understanding (MOUs) with outside agencies. Regional Crisis Management Training scenarios may be considered as one major mock exercise. Institutions must prepare a report of findings for follow-up review that addresses all concerns during the exercise involving procedures, response teams, facilities, communications, local law enforcement responses, staffing, command center operations, etc. The Captain will establish a mock exercise file that should include a synopsis of the exercise and documentation from Crisis Management Team leaders and designated participating staff.
Minor mock exercises	Minor mock exercises may be 4 hours or less in duration. These tests should evaluate staff's response in areas such as a complete loss of power to the institution, bomb threats, or preparation of escape flyers. If live weapons or munitions of any type are used in these mock exercises, appropriate safety precautions will be observed.	The Captain will ensure that a minimum of six minor mock exercises are conducted annually. These drills are specifically designed to test breaching/contingency plans and MOUs. Institutions must prepare a report of findings for follow-up review that mirrors the report compiled for major mock exercises, described above. Similarly, the Captain will establish a mock exercise file that mirrors those for major mock exercises.

¹⁰During the Coronavirus Disease 2019 pandemic, beginning in March 2020, BOP officials told us that they postponed major and minor mock exercises and other scheduled training to prevent staff from spreading the disease. Because the pandemic was still underway as of August 2021, officials did not know when such training would resume.

Training	Description of training	Additional requirements
Crisis Management Team training	<p>The Crisis Management Team trainings are designed to increase the skills, knowledge, and abilities of crises teams responding to emergencies that may impact the region's institutions.</p> <p>During these trainings, BOP officials and designated participating staff will discuss multiple elements of crisis management, such as (1) defining emergencies, (2) reviewing emergency contingency plans and continuity of operations, and (3) reviewing emergency planning and logistical information to identify staff roles and responsibilities in emergency situations.</p>	<p>Crisis Management Team trainings are held yearly or biyearly, usually for 3 to 5 days, depending on available funds and availability of regional officials. Each region develops its training schedule based on what classes the regional office officials believe to be needed that year. Crisis Management Team trainings are not required by BOP central office. Nevertheless, BOP policy states that these trainings must occur once every 2 years.</p>

Source: GAO summary of BOP Information. | GAO-22-104289

^aCaptains at BOP institutions are generally responsible for the security, custody, and protection of everyone in the institution. The Captain is concerned with inmate discipline, appearance, and conduct. The Captain is also responsible for all correctional personnel. In contrast, wardens at BOP institutions are responsible for the total operation of the institution. The Warden meets frequently with the senior staff members, including the Captain, to review their areas of responsibility and to ensure compliance with BOP policies.

BOP's Program Review Division reviews OEP and is responsible for monitoring required disaster preparedness and response training. For example, the Program Review Division is to review training documentation for the past 4 quarters to determine if command center support staff are receiving the sufficient amount of training on the functions of the command center. In addition, according to BOP central office officials, the Program Review Division will also review correctional staff training records and supporting documentation (if applicable) to determine if captains, lieutenants, Crisis Management Team members, and Emergency Preparedness officers have completed applicable training.

BOP Collects Disaster-Related Repair Project Information but Has Limited Ability to Track and Analyze Project Type, Timeliness, and Costs

BOP has two systems for collecting information on maintenance and repair projects, including those related to disasters. However, we found limitations that affect BOP's ability to track and analyze data on projects' type, timeliness, and costs. Specifically, we found that (1) BOP's data systems do not incorporate a definition of a disaster or codes or other mechanisms for project tracking purposes; (2) BOP's ongoing efforts to make its data systems interoperable by October 2022 do not include analytic features; and (3) absent such analytic features, BOP has not been positioned to identify trends in the type, timeliness, and cost of its projects.

Data Systems Do Not Incorporate a Codified Disaster Definition

BOP has two systems for collecting information on maintenance and repair projects. BOP manages each system independently for a specific purpose. The Financial Management Information System tracks obligations for maintenance and repair projects. The Total Maintenance System is a property management system used to manage the individual maintenance and repair projects. BOP institutions, regional offices, and central office each use both FMIS and TMS to track the costs and progress of maintenance and repair projects. Projects in FMIS and TMS have a tracking number and project name, and BOP provides training to staff who enter data into these systems to specify within the project's narrative profile whether the obligation was disaster related. However, BOP cannot consistently identify disaster-related projects, including for the purposes of maintaining awareness or conducting analysis, because BOP has not defined "disaster" in its policy for the purposes of designating, in the data systems, whether a project is related to a disaster or not. In addition, BOP's data systems do not allow for labeling such projects related to specific disasters, such as with corresponding codes, other than in the narrative text.

Absent a clear definition and codes or other mechanisms to track disaster-related projects, staff manually input into a narrative field a description of the repair project and type of disaster (e.g., "hurricane," "flood," or "tornado"). We found that BOP staff did not consistently record repair projects initiated to address a specific disaster event, affecting BOP's ability to reliably identify disaster-related projects. Additionally, BOP staff we interviewed varied in their understanding of what constitutes a disaster for the purposes of tracking whether a project is disaster related or not. For example, officials from two BOP institutions we spoke with stated that a disaster is defined by the amount of damage an institution sustains, though no specifics—such as what types of damage

or a threshold amount of damage—have been defined. Additionally, officials we spoke with from three other institutions stated that relevant state and local officials declare whether an incident is disaster.

The Project Management Institute, Inc., *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* highlights the importance of policies in defining the control, direction, and coordination for an organization to achieve its goals, which could help ensure the quality and consistency of the data that the organization uses to make informed decisions.¹¹ While BOP has a definition of a disaster it uses in its staff training on emergency preparedness, such a definition is not codified in policy specifically for the purposes of project data collection, tracking, and analysis across all of BOP’s institutions.¹² In addition, based on such a codified definition of a disaster from its training materials or from another authoritative source, BOP could benefit from establishing specific types of codes in its planned interoperable data systems that could support project monitoring efforts, including tracking and analyzing projects related to specific disaster events. For example, BOP could create codes that would designate whether a project is related to a hurricane, flood, or tornado and for specific, named disaster events (e.g., “Hurricane Harvey”). By establishing in policy a clear definition of a disaster, and establishing codes or other tracking mechanisms in its planned interoperable data systems, BOP could help ensure the quality and consistency of the data recorded. Such quality data could, in turn, enable BOP to monitor projects resulting from disasters and to identify and analyze the type, timeliness, and costs of such projects, as we discuss in more detail later in the report.

Efforts to Make Data Systems Interoperable Do Not Include Analytic Features to Track Project Type, Timeliness, and Cost

While TMS and FMIS are currently independent systems, BOP is working with a contractor to make the two systems interoperable by October 2022. According to BOP Administration Division officials, making the two systems interoperable will help connect the property management system with the financial management system to allow, for example, concurrent and real-time updates to project property asset and cost information.

¹¹Project Management Institute, Inc., *A Guide to the Program Management Body of Knowledge*.

¹²In its staff training on emergency preparedness, BOP defines disasters as one of two types of incidents: (1) a natural occurrence or accident that may require outside assistance—this could include floods, earthquakes, tornados, hurricanes, or wildfires; and (2) an induced catastrophe, which may also require outside assistance, from actions brought on by individuals or groups—including something like arson or a bombing.

Establishing an interoperable system is a positive effort that could offer useful capabilities. Although BOP plans to integrate its financial and project management systems, its current plans for the systems do not include analytic features that could help BOP track projects' type, timeliness, and costs. Such analytic capabilities could include, for example, allowing for queries based on whether a project is disaster related (and what specific disaster it relates to); setting alerts based on upcoming project milestones (and any related delays); and determining the overall fiscal exposure to BOP from ongoing, disaster-related repair projects, using cost indicators.

According to BOP officials, BOP's current property management and financial data systems do not allow for certain query functionalities—such as alerts or analysis of trends—because they were not designed to do so. BOP officials told us that being able to query the system to identify disaster-related projects and understand how much BOP has obligated to them would be beneficial. However, officials presented conflicting viewpoints about the timing of their plans for system integration and whether adding additional functionalities would incur additional costs. Some familiar with the plans said specifications were still being designed. Others said they were unsure if any new functionalities could be incorporated before the integrated systems become operational in October 2022. Given that this process is underway, the timing presents an opportunity for BOP to understand the costs associated with adding new analytic features into these integrated systems to determine which would be the most feasible to implement and take steps to make these changes now, as the system is being designed. This would position BOP to not only to make these improvements in the most cost-effective manner, but also to better address unnecessary delays and costs moving forward.

BOP's 122 institutions are its greatest material asset. In previous work, we identified six key characteristics of an effective asset management framework, including the use of quality data. Specifically, organizations should collect, analyze, and verify the accuracy of asset data, including the organization's inventory of assets and data on each asset's condition, age, maintenance cost, and criticality to the organization.¹³ In BOP's

¹³[GAO-19-57](#). GAO identified these key characteristics through reviews of the International Organization for Standardization's 55000 standards—an international consensus standard on asset management—studies and articles on asset management practices, and interviews with experts.

case, such asset data could include more robust timeliness and cost information on maintenance and repair projects for its institutions specifically damaged or otherwise affected by disasters.

As BOP continues to make its financial and property management systems interoperable, establishing cost-effective and feasible analytic features—such as project milestones and cost indicators, as well as queries and alerts on these features—would position BOP to have better visibility into the monitoring of projects for possible project delays and cost escalation. In addition, by ensuring that its planned interoperable systems incorporate the newly established analytic features, as appropriate, BOP could ensure that this information is collected systematically to assist with project monitoring and oversight.

BOP Is Not Positioned to Identify Trends in Projects' Type, Timeliness, and Cost

According to BOP's current process to communicate the status of projects, institutions use TMS to submit reports and update their project status on a monthly basis, including estimated completion dates. According to BOP central office officials, these monthly reports are forwarded to the regional offices and reviewed for content.

At the central office level, officials can access TMS at any time to check on a project's status, if they choose to do so. However, BOP officials told us that this information is not analyzed to identify trends because TMS does not have analytical features to do so, as discussed above. Additionally, on a monthly basis, a central office official queries the system for any projects that are within 90 days of the required completion date to determine if there are any problems that would cause the project to reach or exceed the expiration deadline. Beyond using this 90-day alert, central office officials told us that they rely on local institutions to inform their regional office if there are any delays or challenges that could impact project completion. Officials from BOP's Administration Division, the office that oversees the financial management of damage repairs, also noted that they hold monthly teleconferences with regional facility administrators, in which they discuss such delays or challenges. For example, these officials stated that during a recent call, BOP regional facility administrators noted that challenges with filling institution maintenance positions were impacting the completion of projects.

In addition, Executive Order 13327, issued in 2004, directed federal agencies to develop an asset management planning process and plan to promote the efficient and economical use of their real property assets. Exec. Order No. 13327, 69 Fed. Reg. 5897 (Feb. 6, 2004).

Central office officials also told us that they believe the current process for monitoring maintenance and repair projects is adequate. However, while the institutions we spoke with shared examples of project delays unique to circumstances surrounding a disaster, central office officials were unfamiliar with such delays. For example, officials at three of the six institutions we spoke with told us about persistent delays in completing needed repairs of damage to their institution resulting from disasters. Such delays included time needed to secure sufficient funds to complete projects, which incurred additional damages to the institution's assets and costs to BOP.¹⁴ For example, one institution that experienced a tornado described delays in needed funding and contract approvals to conduct assessments on the extent of roof-related damage. These delays resulted in additional roof leaks and further equipment damages in some areas. At another institution, due to multiple factors, it took 2.5 years to bring back inmates that were evacuated after a hurricane because of the time required to complete the repairs in the housing units that had suffered damage. When we shared these examples with central office officials, they said that project completion delays are typically due to a need for additional funding or contractor or procurement delays and that these delays tend to be consistent regardless of the type of the project, such as whether it is disaster related or not.

In addition, we requested data on all facility maintenance and repair projects that BOP initiated during the scope of our review (2017-2020), including how many projects met or exceeded the maximum period (3 years) that BOP allows its institutions to complete the projects. According to BOP data, 1,684 projects were initiated during this period, and 1,643 of these projects had or have a 3-year expiration deadline.¹⁵ Of the 1,643 projects listed, we found that 1,591—or 97 percent—met the deadline. However, 3 percent did not, accounting for 52 projects during a 3-year period. Among the 52 projects, 31—or about 60 percent—did not request an extension, per policy, to address the delays they were experiencing, and central office officials we spoke with were not aware of such projects

¹⁴According to BOP officials, for larger-scale projects, some delays may be caused by the need to wait for supplemental funding to be appropriated. As they explained, while waiting, there is a potential for additional damage and costs to accumulate. Though officials acknowledged that BOP can and does reprioritize its own resources to dedicate to these emergency projects, funding needs for some larger projects cannot be achieved without supplemental funding.

¹⁵Not all 1,684 projects are disaster related. In addition, according to BOP officials, all projects, except architectural and engineering projects, are subject to the 3-year term limit, while certain projects can be subject to a 6-month deadline that is based on the availability of appropriated funds.

until we specifically requested this information. Incorporating analytic features such as interim project milestones and cost indicators, as well as queries and alerts, would allow BOP to have greater visibility into project timeliness and a mechanism for understanding the rationale for extensions. Additionally, regularly conducting an analysis of trends over time that uses the analytic features would enhance BOP's awareness of projects exceeding deadlines without requests for extensions, and its decision-making related to projects resulting from disasters.

As we have previously reported, disaster costs will likely increase as certain extreme weather events become more frequent and intense, due to climate change, according to the U.S. Global Change Research Program, a global change research coordinating body that spans 13 federal agencies.¹⁶ This may cause unforeseen challenges to BOP's management of its maintenance and repair projects, especially those initiated after disasters. Moreover, according to BOP, its infrastructure is aging, with many institutions being over 50 years old.¹⁷ Maintaining the safety and security of its institutions will likely call for significant investment and require BOP central office to access reliable information to make informed decisions about its institutions' infrastructure. GAO's Disaster Resilience Framework states that accessing information that is accurate, understandable, and from a trusted source can help decision makers identify current and future disaster risk and the impact of risk-reduction strategies.¹⁸ By regularly conducting an analysis of trends over time that uses the analytic features it has established, and making changes when warranted, BOP could enhance its ability to identify trends in the timeliness of projects and the factors driving those trends. Such enhanced monitoring could also help BOP prioritize maintenance projects based on its analyses of project trends and inform its disaster resilience

¹⁶GAO, *Climate Resilience: A Strategic Investment Approach for High-Priority Projects Could Help Target Federal Resources*, [GAO-20-127](#) (Washington, D.C.: October 2019).

¹⁷According to BOP's fiscal year 2021 congressional budget submission, BOP facilities and systems/equipment (water, sewer, electrical, and heating/air conditioning), many of which are aged and undersized, continue to be overutilized, which causes extensive wear and tear as well as premature deterioration.

¹⁸[GAO-20-100SP](#). The term "disaster resilience" refers to the ability to prepare for anticipated hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions. The Disaster Resilience Framework serves as a guide for analysis of federal actions to facilitate and promote resilience to natural disasters. This framework is organized around three broad, overlapping principles and a series of questions that those who provide oversight or management of federal efforts can consider when analyzing opportunities to enhance their contribution to national disaster resilience.

efforts by helping it to identify the most effective risk-reduction strategies across all of its institutions.

BOP Has Processes to Manage Institutions' Disaster Response and Preparedness and for Addressing Impacts on Staff and Inmates

BOP Has Processes to Ensure Institutions Follow Disaster Plans and Policies

BOP uses ICS, which is a standardized approach to managing an incident that specifies an organizational structure and follows a combination of standard procedures that cover topics including personnel, equipment, facilities, and communications. The primary role of ICS is to establish planning and management functions for responding partners to work in a coordinated and systematic way. These functions can include coordinating resource management and allocation, as well as planning.

Certain BOP staff are designated as ICS staff and trained in ICS activation and management, when needed. When an institution activates its ICS, these staff report to a command center, where they coordinate internally and with relevant stakeholders and document events and decisions throughout the incident. The institution Warden determines when activation of the institution-level ICS is necessary, and BOP's regional offices and central office determine whether to activate their respective command centers. BOP may activate ICS during a disaster as part of the institution's contingency plan or for planned events, such as scheduled mock exercises.

BOP institutions also establish MOUs with state and local agencies with whom institutions coordinate to help manage disaster response, when warranted. Officials at three of the six BOP institutions emphasized the utility of the MOUs they have established with state and local agencies with whom they coordinate, when warranted, during disasters. For example, Metropolitan Detention Center (MDC) Guaynabo in Puerto Rico has an MOU with the local safety management office. This office contacts MDC Guaynabo as needed and puts bulletins in the news about preparing for adverse weather, which the institution shares with its staff.

During an incident, an institution’s ICS command center may need to call upon these state and local agencies with which the institution has MOUs in place. For example, in the event of a fire, the institution may call the local fire department.

The ICS structure also requires BOP institutions to complete a number of reports documenting their disaster response. The extent of these reports depends upon the severity of the incident and may include checklists, time lines, and ICS logs to document institutional response to a disaster. These documents may also include records of coordination with state and local agencies. According to BOP officials, institutions are to share these ICS documents with their respective regional office for oversight purposes, and institutions may also share them with the central office command center for larger-scale events. Documentation on damage to BOP institutions is directed to the Administrative Division for its oversight as well, as this office is responsible for the financial management of damage repairs.

For the purposes of monitoring BOP institutions’ disaster preparedness, BOP also has a number of different inspections and reviews examining a variety of issues, including disaster preparedness. Table 2 shows examples of these inspections, with the reviewing entity, purpose, and frequency of each review.

Table 2: Examples of the Federal Bureau of Prisons’ (BOP) Institution Inspections and Their Purpose and Frequency

Inspection	Purpose	Frequency
BOP Program Review Division	Each program review focuses on a single program area, such as Correctional Services or Facilities Management. Inspection items can be relevant to disaster management, such as preventive maintenance and staff knowledge about institution security.	Every 3 years for institutions with a good or superior rating in the prior review, every 2 years for an acceptable rating, and every 18 months for a deficient rating. Institutions receiving an at-risk rating are reviewed again when the institution requests closure on the program review.
American Correctional Association	To ensure that institutions meet standards for services, programs, and operations essential to effective correctional management, including safety, security, order, inmate care, and programs.	2 years after an institution becomes operational, and every 3 years thereafter.
Accreditation Association for Ambulatory Health Care (AAAHC)	AAAHC accreditation advocates for the provision of high-quality health care through nationally recognized standards. Standards cover topics such as patient rights, emergency preparedness, quality of care, and health records.	Every 3 years.
Local	Local fire and safety, and building and grounds inspections.	Annually.

Source: GAO analysis of BOP information. | GAO-22-104289

BOP Has Processes for Institutions to Address the Disasters' Effects on Staff and Inmates

Disasters can impact an institution's physical assets and also have serious health and safety impacts on inmates and staff. BOP has processes for monitoring, documenting, and responding to the impacts of disasters on inmates and staff.

In the aftermath of disasters, inmates have experienced disruptions to their living conditions, such as those caused by power outages and having to evacuate to other BOP institutions.¹⁹ For example, in October 2018, Federal Correctional Institution (FCI) Marianna in Florida evacuated inmates to another BOP institution because of widespread hurricane damage. In April 2020, FCI Estill in South Carolina also evacuated some inmates after an Enhanced Fujita Scale (EF-4) tornado struck the institution.²⁰ As shown in figure 4, much of the perimeter fence was lost. As a result, FCI Estill had to evacuate medium-security inmates, while the minimum-security inmates remained.

¹⁹In September 2019, the Department of Justice Office of Inspector General issued a report that examined inmate living conditions in the aftermath of a fire and subsequent week-long power outage at BOP's MDC Brooklyn, which impacted lighting in certain housing areas and affected computers, phones, and other institution systems and equipment. As a result, the institution cancelled inmate legal and social visits. Though this disaster at MDC Brooklyn took place during the period we reviewed (2017-2020), BOP did not consider this event a disaster because the power outage was attributed to a mechanical failure.

²⁰The Enhanced Fujita (EF) Scale is used to assign a tornado a rating based on estimated wind speeds and related damage. EF scale ratings range from 0 to 5, with a 0 rating having 60 to 85 miles per hour wind speed, and a 5 rating having over 200 miles per hour wind speed.

Figure 4: Tornado Damage to Perimeter Fencing and Recreation Yard at Federal Correctional Institution Estill in South Carolina, April 2020



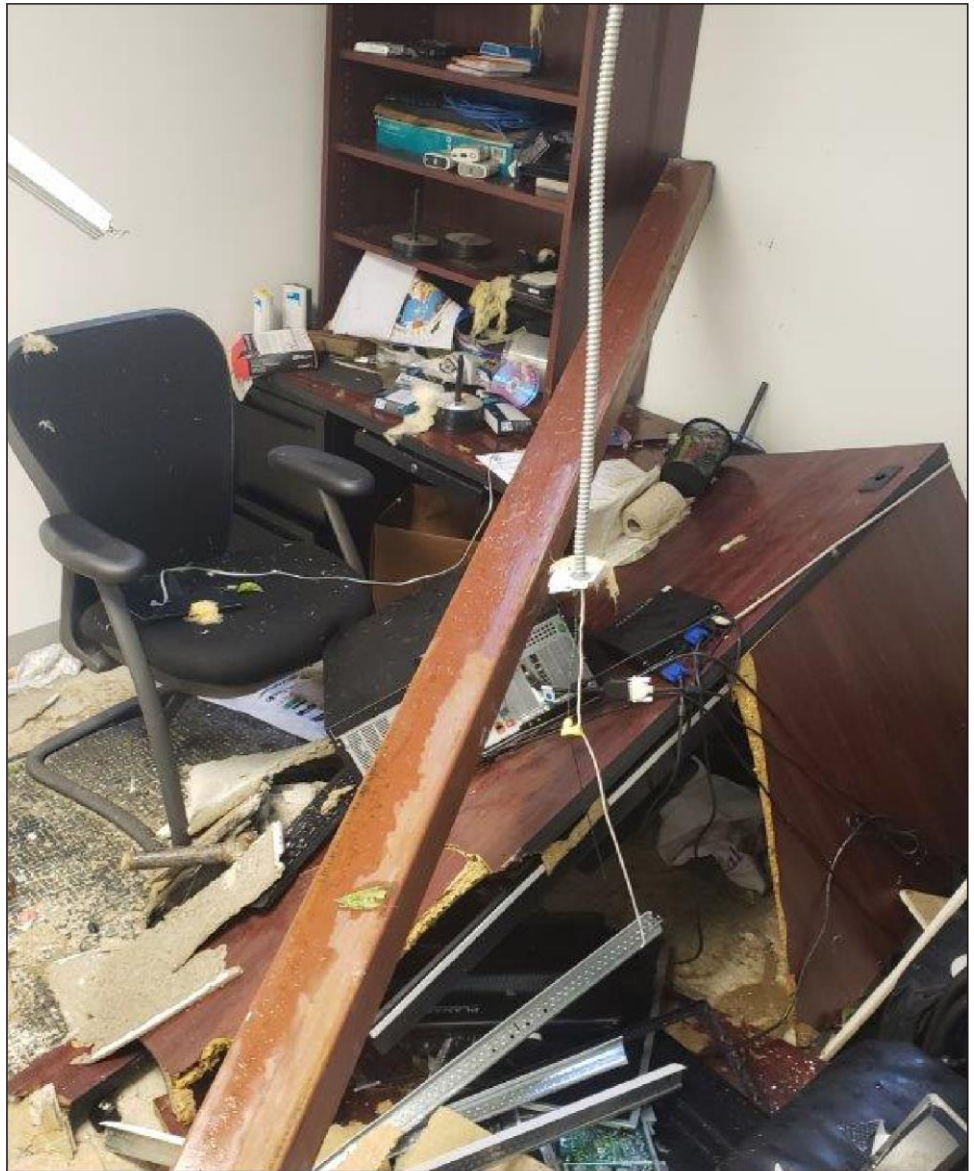
Source: Federal Bureau of Prisons. | GAO-22-104289

Inmates may also lose access to programs and services during or after a disaster. For example, in September 2017, MDC Guaynabo officials locked inmates down in their cells as a hurricane approached and did not permit inmates to attend classes or recreation. Institution officials explained that this action was necessary because if the power and the generators fail, the institution will be in complete darkness, in which case staff need to be sure that inmates are sheltered in place in their cells. Inmates were also unable to call relatives during the lockdown to see if they had been affected by the hurricanes.

Disasters also affect BOP staff. After a hurricane, roads may be flooded and affect travel to and from the institution, which can require staff to work longer shifts. For example, in August 2017, Federal Detention Center (FDC) Houston required some staff to remain at work after their shift because the next shift could not travel to the institution, due to flooding. Similarly, staff at MDC Guaynabo had difficulty commuting, due to blocked roads after Hurricanes Irma and Maria in September 2017. Staff who were already at the institution when the hurricanes hit had to stay there and did not know the status of their families and homes, due to loss of communication. Staff may have personal property damage that they are not able to immediately attend to, as the institution must be staffed. For example, officials told us that 90 percent of the staff at FCI Marianna reported to institution management that they had home damage after Hurricane Michael in October 2018.

Disasters may also cause damage to staff work areas or result in institutions changing staff duties. Figure 5 shows a damaged employee workspace in the administrative building at FCI Pollock's medium-security component as a result of Hurricane Laura in August 2020. Additionally, disaster damage may result in an institution assigning staff duties that they would not typically perform. For example, an institution contingency plan we reviewed provided callback procedures for off-duty staff, as well as a designated staff assembly area. As the plan indicated, when staff arrived, institution officials could relieve staff of their assigned duties and reassign them to other posts, as necessary, for additional coverage.

Figure 5: Hurricane Damage to an Employee Workspace at Federal Correctional Institution Pollock in Louisiana, August 2020



Source: Federal Bureau of Prisons. | GAO-22-104289

BOP has a number of processes to address the impacts of disasters on inmates and staff. According to BOP officials, the institution's command center is to document any impacts on inmates or staff during a disaster. If

the disaster is severe enough that a regional office or central office also activates its command center, then the institution's command center is to provide information to these higher command centers about any impacts that inmates and staff experienced at the institution. Further, BOP officials said that institution staff provide information about inmate impacts during a disaster to BOP's Correctional Services Branch, the office that oversees OEP.

Inmates may also file grievances with BOP for certain disaster impacts. According to BOP officials, the process for resolving inmate grievances is the same, whether the grievance is disaster related or not. When an inmate files a grievance, institution officials are responsible for investigating the grievance and providing a response to the inmate, for which the Warden retains documentation for at least 5 years. For example, about 200 inmates filed grievances after FCI Marianna evacuated its inmates and staff due to a hurricane in October 2018. During the evacuation, institution officials allowed inmates to take limited personal property. After the disaster, staff inventoried and forwarded the remainder of the inmates' property to them. Most of the grievances were claims of BOP's loss of inmate property that occurred during this process.

Institutions also have processes to assist staff who have been impacted by disasters. For example, officials from Federal Correctional Complex (FCC) Beaumont in Texas told us that after a hurricane, institution management conducted a staff accountability check to assess the welfare and safety of staff. FDC Houston also mentioned using a staff accountability system that could recall staff if needed to ensure adequate facility staffing. In addition, when a hurricane hit FCI Marianna in October 2018, most staff were unable to return to their homes for 10 days, due to power lines and trees blocking roads. The institution set up the visiting room and training center to be staff living quarters, with supplies such as cots, sheets, blankets, showers, and food. The regional office sent staff from other institutions so that FCI Marianna could release its own staff to address personal matters.

Opportunities Exist for BOP to Share Lessons Learned from All Disasters and Assess Institutions' Disaster Vulnerability

BOP Could More Systematically Share Disaster-Related Lessons Learned and Collect Feedback on Their Application

According to BOP officials, BOP identifies lessons learned about institutions' disaster experiences through after-action reports that institutions complete when their respective regional offices request that they do so. Officials told us that there is discretion around the circumstances in which an after-action report would be necessary, such as the extent of the disaster and the resources needed to respond, and that the content of these reports may vary. The officials stated that when reports are developed, BOP shares them with all wardens across the bureau.

We reviewed the after-action reports that four of the six institutions in our sample completed.²¹ We found that the content and structure of each report varied and that none of the four reports included lessons learned, even though officials at all six institutions stated that they had identified lessons learned after the disasters they had experienced. These institution officials said that they have also shared their lessons learned in various ways. Specifically, officials at one institution stated that they shared their best practices and lessons learned through meetings with the regional offices. Officials at another institution told us that they had informally shared their best practices and lessons learned with other institutions, but they had never had best practices and lessons learned from other institutions shared with them. Additionally, officials from a third institution said that they had identified and shared their lessons learned among their own management team but had not had the opportunity to share them outside of their institution because the regional office had not required an after-action report. In addition, we found that BOP does not collect feedback from institutions, such as during regional office

²¹The other two institutions in our sample did not complete an after-action report because they were not requested to do so by their respective field offices.

conference calls, on whether any of the lessons learned from disasters that have been shared are applied, as appropriate, by other institutions.

According to central office officials, they have not seen a need to expand how lessons learned are identified and shared across the bureau because they believe that relying on after-action reports to capture lessons learned is adequate. However, after-action reports are not required to be completed and, as noted, the content of the reports can vary. Further, BOP officials stated that they have not taken steps to collect feedback on whether any lessons learned that are shared are applied by other institutions, as appropriate, because it is up to wardens to identify which lessons learned are applicable for their institutions. However, officials at our selected institutions identified some best practices and lessons learned that the after-action reporting process did not capture and that could benefit other institutions. For example:

- FCC Beaumont in Texas. Officials described how they coordinated with the local power company in advance of the winter storm they experienced to ensure that their institution would continue to access power. In coordinating with the power company, the institution also shared information about its power sources and institution needs so that if the power company has to cut power during a disaster, the power company could notify institution officials so they could take steps to secure the institution.
- FCC Pollock in Louisiana. Officials discussed the frequency of storms they experience and said that as a result, they now staff a full-time emergency preparedness officer for their institution, as opposed to having these responsibilities be a collateral duty for another individual. They stated that having one person exclusively focused on emergency preparedness has allowed the institution to be more proactive, which helps them ensure contingency plans are up to date, the institution has adequate supplies, and that coordination has taken place across the institution and the surrounding community.
- FCI Estill in South Carolina. Officials shared that they created a log of staff's specialized skills that they use to determine if repair needs after a disaster can be met in-house, as opposed to hiring outside contractors. Officials stated that this log created efficiencies after the recent tornado they endured, and they estimated savings of more than a million dollars since its implementation.

FEMA's National Disaster Recovery Framework, which sets out broad guidance and best practices in disaster recovery, discusses the importance of leveraging lessons learned and best practices to inform

disaster resilience.²² Specifically, it highlights the role that agencies like BOP can have to facilitate and coordinate peer-to-peer engagement to share lessons learned and best practices, such as between BOP institutions that may face similar situations in the future. BOP, as the owner and operator of its infrastructure, has a significant stake in managing disaster-related risks and impacts to its institutions.

Implementing a systematic approach for identifying and sharing all of the disaster-related lessons that BOP institutions have learned could help BOP more fully leverage these experiences, and the knowledge gained from them, and improve BOP's overall disaster preparation and response going forward. This could include modifying BOP's after-action reporting process—such as by requiring institutions to complete the reports or by standardizing the reports' structure— or by developing a separate approach that supplements its after-action reporting process. Further, taking steps to routinely collect feedback from BOP's institutions, such as through existing monthly conference calls with the regional offices, about how or whether they have implemented lessons learned, as applicable for their institution, has advantages. Namely, by doing so, BOP could have greater assurance that institutions are leveraging the experiences of other institutions to help prepare for future disasters and ensure the safety of staff, inmates, and property.

BOP Institutions Conduct Vulnerability Assessments, but Their Scope Does Not Include Disaster-Related Risks

BOP conducts annual assessments of its institutions to assess any vulnerabilities that need to be addressed; however, none of these assessments examines the institution's vulnerability to disasters. According to BOP officials, the annual assessments that BOP currently conducts focus on security-related vulnerabilities, such as vulnerabilities for contraband to be smuggled in or for inmates to escape. Included in these assessments is a description of the vulnerability, the type of remedy recommended to address it—such as adding new fencing or upgrading screening technology—and the projected cost and time frame for the project. In addition, BOP officials also conduct annual building and grounds inspections, which includes an assessment of mechanical systems. According to these officials, these inspections examine the institution's infrastructure for structural and functional integrity—such as the integrity of buildings or roofs or the durability of fencing—but the scope of these inspections does not include whether the infrastructure can withstand a disaster.

²²Federal Emergency Management Agency. *National Disaster Recovery Framework*.

Officials at all six BOP institutions we spoke with stated that they have not conducted a vulnerability or hazard assessment to determine the aspects of their operations or infrastructure that would most likely be impacted by a disaster and to propose measures for mitigating them. For example, BOP's current inspections would not examine roofs or fencing in the context of a natural disaster situation to identify risks and develop plans to reduce such risks.

According to BOP officials, they have not required institutions to routinely conduct vulnerability assessments in preparation for disasters because BOP's vulnerability assessments have traditionally focused on security concerns. However, according to BOP officials, the Administration Division (which oversees BOP infrastructure and damage repairs) is consulting with the Correctional Programs Division (which oversees OEP) to determine whether BOP should expand the scope of these vulnerability assessments to include infrastructure needs and concerns. According to these officials, this expanded scope would not be specific to disasters, but they anticipate that it would address disaster-related infrastructure concerns. As of November 2021, BOP officials could not provide further details on BOP's plans for conducting disaster-related vulnerability assessments or a time line for when BOP would decide about a possible expansion of its current vulnerability assessments.

FEMA's National Disaster Recovery Framework highlights opportunities to build resilience against disasters by continually evaluating threats, hazards, and impacts and implementing new policies and requirements to reduce risk.²³ Further, GAO's Disaster Resilience Framework states that accessing information that is authoritative and understandable, such as information provided through a vulnerability assessment, can help decision makers to identify current and future risk and the impact of risk-reduction strategies.²⁴ By expanding the scope of its annual vulnerability assessments to include an assessment of disaster-related risks, including any plans for mitigating those risks, BOP could leverage potential opportunities to build disaster resilience and reduce its risk to damage and disruption from future disasters.

Conclusions

Over the past few years, the U.S. has experienced some of the most destructive natural disasters in its history. Extreme weather events that may result in natural disasters are becoming more frequent and intense,

²³Federal Emergency Management Agency. *National Disaster Recovery Framework*.

²⁴[GAO-20-100SP](#).

which poses an undeniable fiscal risk to BOP as it makes decisions regarding the use of its limited resources. Disasters can be especially hazardous in prisons because inmates and staff may not be able to evacuate as easily, due to security measures.

BOP's recent experience with disasters has highlighted key opportunities for BOP to help protect inmates and staff and to manage its infrastructure to improve BOP's disaster resilience. For example, by establishing in policy a clear definition of a disaster, and establishing codes or other tracking mechanisms in its planned interoperable data systems for the purposes of tracking disaster-related projects, BOP could help ensure the quality and consistency of the data recorded. Further, establishing cost-effective and feasible analytic features—including project milestones and cost indicators, as well as queries and alerts—would position BOP central office officials to have better visibility into the monitoring of projects for possible delays and cost escalation. Further, by incorporating these analytic features into its data systems, as appropriate, BOP could ensure that this information is collected systematically to assist with monitoring. In addition, by regularly conducting an analysis of trends using the analytic features and making changes, if warranted, BOP could enhance its visibility into the monitoring of projects to address unnecessary delays or costs and improve its disaster resilience efforts.

Further, implementing a systematic approach for identifying and sharing all of the disaster-related lessons that BOP institutions have learned could help BOP more fully leverage these experiences and the knowledge gained from them and improve BOP's overall disaster preparation and response going forward. In addition, by taking steps to routinely collect feedback from its institutions about how or whether they have implemented lessons learned, as applicable for their institution, BOP could have greater assurance that institutions are leveraging the experiences of other institutions to help prepare for future disasters and ensure the safety of staff, inmates, and property. Moreover, expanding the scope of BOP's annual vulnerability assessments to include disaster-related risks could also help BOP to build disaster resilience, including reducing its risk to damage and disruption in future disasters.

Recommendations for Executive Action

We are making the following eight recommendations to BOP:

The Director of BOP should establish in policy a clear definition of “disaster” for the purposes of tracking maintenance and repair project information. (Recommendation 1)

The Director of BOP should establish codes or other tracking mechanisms for the purposes of tracking disaster-related projects. (Recommendation 2)

The Director of BOP should establish cost-effective and feasible analytic features—such as project milestones and cost indicators, as well as queries and alerts—that would position BOP to have better visibility into the monitoring of projects for possible delays and cost escalation. (Recommendation 3)

The Director of BOP should ensure that the plans to make financial and property management data systems interoperable incorporate the newly established analytic features, as appropriate, to ensure that project information is collected systematically. (Recommendation 4)

The Director of BOP should, once the financial and property management data systems are interoperable, regularly conduct an analysis of trends using the established analytic features, as appropriate, and make changes, when warranted, to avoid unnecessary delays or costs. (Recommendation 5)

The Director of BOP should implement a systematic approach for identifying and sharing the lessons that BOP institutions have learned following their disaster-related experiences. (Recommendation 6)

The Director of BOP should take steps to routinely collect feedback from its institutions to understand how or whether the lessons shared have been implemented at other institutions, as applicable. (Recommendation 7)

The Director of BOP should expand the scope of its annual vulnerability assessments to include disaster-related risks and plans to mitigate the risks identified. (Recommendation 8)

Agency Comments and Our Evaluation

We provided a draft of this report to DOJ, BOP, the Department of Homeland Security, and the Administrative Office of the United States Courts for review and comment. The Department of Homeland Security and the Administrative Office of the United States Courts responded through email that each had no comments. BOP provided written comments, which are summarized below and reproduced in appendix I, as well as technical comments, which we incorporated as appropriate. DOJ did not provide separate comments from BOP. In its comments,

BOP concurred with five of the eight recommendations and did not concur with the other three.

BOP concurred with the first and second recommendations, and noted that it will establish a definition of “disaster” in its policy to enhance its operations and create a code in its data systems or create other tracking mechanisms to efficiently track disaster-related projects.

BOP did not concur with the draft report’s third, fourth, and fifth recommendations to:

- establish analytic features, such as project milestones and cost indicators as well as queries and alerts that would position BOP to better monitor projects for possible delays and cost escalation;
- ensure its plans to make financial and property management data systems interoperable incorporate the newly established analytic features; and
- once the financial and property management data systems are interoperable, ensure its monitoring processes include an analysis of trends using the features.

In its written response, BOP noted two reasons for its disagreement. First, BOP stated that incorporating the recommended features into a system that is not designed for this type of analysis could require additional funding. As an alternative, BOP stated it believed a cost-benefit analysis should be conducted prior to implementation to determine if analytical features, such as milestones and cost indicators, as well as queries and alerts, can be achieved. With respect to incorporating the analytic features into plans to make its financial and property management systems interoperable and using those features once implemented to analyze trends, BOP stated that it is not able to commit to such an initiative prior to assessing feasibility and cost. In the alternative, BOP suggested that it could review the feasibility and cost of doing so. Second, BOP stated that it did not concur because mechanisms are already in place to routinely monitor projects for timeliness through standard contract monitoring processes. This includes Contracting Officers who are responsible for ensuring performance of all necessary actions for effective contracting.

Related to BOP’s first point, we agree that the consideration of benefits, costs, and feasibility is important prior to undertaking agency initiatives. With respect to the specific recommendations to establish analytic features and incorporate them into its planned interoperable data

systems, BOP officials stated during our review that having such features in its data systems would be beneficial. In addition, our report identified varying ways in which establishing and using such features for trend analysis would better position BOP with project monitoring overall and ultimately help BOP to better address any unnecessary delays and avoid any potential future costs associated with such delays.

During our review, BOP officials also noted they were uncertain about the costs and feasibility of establishing and incorporating such features. As we noted in our report, BOP is in the process of integrating its data systems—a process that is expected to last through October 2022 and includes developing a list of new requirements and capabilities for the integrated systems. Given that this process is underway, the timing presents an opportunity for BOP to consider the costs and feasibility of establishing and incorporating the analytic features. BOP could then use this information to determine which features would be most feasible and cost-effective and take steps to incorporate these features as the systems are being integrated. In addition, doing so would help BOP ensure that this information is collected systematically, thereby facilitating any future trend analysis. In response to BOP's comments, we made modifications to the report to more explicitly include the consideration of costs and feasibility.

Related to BOP's second point, we agree that there are mechanisms in place for BOP Contracting Officers, as well as Contracting Officer Representatives, to monitor individual projects. However, we found that the mechanisms for communicating oversight of all of these projects could be improved, particularly as it relates to the visibility BOP central office has over its projects overall. For example, as we note in our report, BOP central office officials we spoke with were not aware of the approximately 60 percent of maintenance and repair projects that did not request an extension to address delays, per policy, until we specifically requested this information. As such, we continue to believe that implementing analytic features into its data systems, as appropriate, and subsequently using them to conduct trend analysis would better position BOP central office to have greater visibility into project delays and cost escalation across all projects. We made modifications to the report to emphasize that the recommendations are directed to BOP central office's overall visibility into the monitoring of projects and not activity related to the monitoring of individual contracts.

BOP concurred with both the sixth and seventh recommendations. In its written response, BOP noted that it will develop and implement a system

to identify and share lessons learned from disaster-related experiences. Once it has taken these steps, BOP stated it will routinely collect feedback in order to assess, as applicable, whether institutions implemented the shared lessons.

BOP also concurred with the eighth recommendation. In its written response, BOP noted that applicable divisions are working to expand the scope of annual vulnerability assessments to include disaster-related risks and that this expansion will assist the agency in mitigating the risks identified.

We are sending copies of this report to the appropriate congressional committees, DOJ, BOP, the Department of Homeland Security, and the Administrative Office of the United States Courts. In addition, the report is available at no charge on the GAO website at <https://www.gao.gov>.

If you or your staff have any questions about this report, please contact Gretta L. Goodwin at (202) 512-8777 or GoodwinG@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix II.



Gretta L. Goodwin
Director, Homeland Security and Justice

List of Addressees

The Honorable Jeanne Shaheen
Chair
The Honorable Jerry Moran
Ranking Member
Subcommittee on Commerce, Justice, Science, and Related Agencies
Committee on Appropriations
United States Senate

The Honorable Margaret Wood Hassan
Chair
Subcommittee on Emerging Threats and Spending Oversight
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable Matt Cartwright
Chairman
The Honorable Robert B. Aderholdt
Ranking Member
Subcommittee on Commerce, Justice, Science, and Related Agencies
Committee on Appropriations
House of Representatives

The Honorable Tammy Duckworth
United States Senate

The Honorable Fred Keller
House of Representatives

Appendix I: Comments from the Department of Justice



U.S. Department of Justice

Federal Bureau of Prisons

Office of the Director

Washington, D.C. 20534

January 5, 2022

Ms. Gretta L. Goodwin
Director
Homeland Security and Justice
Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Ms. Goodwin,

The Bureau of Prisons (BOP) appreciates the opportunity to review and comment on the Government Accountability Office's (GAO's) draft report entitled Bureau of Prisons: Enhanced Data Capabilities, Analysis, Sharing, and Risk Assessments Needed for Disaster Preparedness (GAO-21-104289). The BOP offers the following comments regarding the recommendations.

Recommendation 1: The Director of the BOP should establish in policy a clear definition of disaster for purposes of tracking maintenance and repair project information.

BOP Response: The BOP concurs with recommendation 1. The BOP delineates mitigation, preparedness, and response and recovery phases in training materials in order to ensure disasters are handled appropriately and efficiently. A clear definition of disaster for tracking maintenance and repair project information will be established to enhance our operations.

Recommendation 2: The Director of the BOP should establish codes or other tracking mechanisms for purposes of tracking disaster-related projects.

BOP Response: The BOP concurs with recommendation 2. The BOP will establish codes in data systems or create other tracking mechanisms to efficiently track disaster-related projects.

Recommendation 3: The Director of the BOP should establish analytic features, such as project milestones and cost indicators,

Appendix I: Comments from the Department of Justice

as well as queries and alerts that would position BOP to better monitor projects for possible delays and cost escalation.

BOP Response: The BOP does not concur with recommendation 3 as currently drafted. BOP respectfully notes that incorporating the recommended features into a system that is not designed for this type of analysis could require additional funding. As an alternative, the BOP believes a cost benefit analysis should be conducted prior to implementation to determine feasibility. In addition, the BOP does not concur with this recommendation as currently written because mechanisms are already in place to routinely monitor projects for timeliness pursuant to the Federal Acquisition Regulation (FAR) at FAR 1.602, 1.603, 1.604, 36.206, and 36.515, as well as the Bureau of Prisons Acquisition Policy (BPAP) Program Statement 4101.06 at Sections 36.206, et seq. BOP contracts are administered by Contracting Officers who are responsible for ensuring performance of all necessary actions for effective contracting while BOP Contracting Officer Representatives assist in the technical monitoring and day-to-day administration. BOP construction contracts include various mechanisms for monitoring performance through the use of project milestones and cost indicators, including a construction schedule, daily logs, and liquidated damages. See BPAP at Sections 36.206, 36.212-70, 36.213-71, and 36.515-70.

Suggested alternate language is as follows: The Director of the BOP should conduct a cost benefit analysis to determine if analytic features, such as milestones and cost indicators, as well as queries and alerts, can be achieved.

Recommendation 4: The Director of BOP should ensure that the plans to make financial and project management data systems interoperable incorporate the newly established analytic features, to ensure that project information is collected systematically.

BOP Response: The BOP does not concur with recommendation 4 as currently written for similar reasons to those described in recommendation three above. The FAR and the BPAP Program Statement provides adequate monitoring of projects for timeliness. Monitoring performance through the use of project milestones and cost indicators are included in construction contracts. See BPAP at Sections 36.206, 36.212-70, 36.213-71, and 36.515-70. In the alternative, BOP believes it should evaluate the feasibility and cost of such an initiative prior to implementation.

Suggested alternate language is as follows: The Director of the BOP should review the feasibility and cost of having the financial

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and project management data systems connection incorporate the newly established analytic features, to ensure that project information is collected systematically.

Recommendation 5: The Director of BOP should, once the financial and property management data systems are interoperable, ensure that its monitoring processes include an analysis of trends using the analytics features, and make changes when warranted to avoid unnecessary delays or costs.

BOP Response: BOP does not concur with recommendation 5 for reasons similar to those described in response to recommendation 3 and 4. BOP is not able to commit to such an initiative prior to assessing its feasibility and cost.

Suggested alternate language: The Director of the BOP should review the feasibility and cost of having the financial and property management data systems connection include monitoring processes including an analysis of trends using the analytic features, and make changes when warranted to avoid unnecessary delays or costs.

Recommendation 6: The Director of BOP should implement a systematic approach for identifying and sharing the lessons that BOP institutions have learned following their disaster-related experiences.

BOP Response: The BOP concurs with recommendation 6. A system to identify and share lessons learned following disaster-related experiences will be developed and implemented.

Recommendation 7: The Director of BOP should take steps to routinely collect feedback from its institutions to understand how or whether the lessons that it has shared have been implemented at other institutions, as applicable.

BOP Response: The BOP concurs with recommendation 7. Once a system is developed to identify and share lessons learned relating to disasters experienced by our facilities, the BOP will routinely collect feedback in order to assess, as applicable, whether the shared lessons have been implemented.

Recommendation 8: The Director of BOP should expand the scope of its annual vulnerability assessments to include disaster-related risks and plan to mitigate the risks identified.

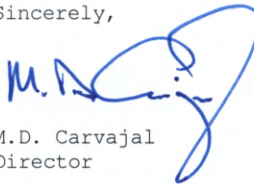
BOP Response: The BOP concurs with recommendation 8. Applicable

**Appendix I: Comments from the Department of
Justice**

divisions are working to expand the scope of annual vulnerability assessments to include disaster-related risks. This expansion will assist the agency in mitigating the risks identified.

Thank you for the opportunity to comment on this report. We look forward to GAO closing the recommendations that the BOP has agreed to address.

Sincerely,



M.D. Carvajal
Director

Appendix II: GAO Contacts and Staff Acknowledgments

GAO Contact

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Staff Acknowledgments

In addition to the contact named above, Joy Booth (Assistant Director), Julia Vieweg (Analyst-in-Charge), Emily Flores, Kellen Wartnow, Edith Sohna, and Tamera Lockley made key contributions to this report. In addition, key support was provided by Mariel Alper, Aditi Archer, Billy Commons, Benjamin Crossley, Elizabeth Dretsch, Philip Farah, Susan Hsu, Susan Irving, Jeffrey Knott, Janet McKelvey, Sara Ann Moessbauer, Jan Montgomery, Leah Nash, and Amelia Shachoy.

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