

# FEDERAL REAL PROPERTY

## Efforts to Incorporate Climate Vulnerabilities and Environmental Justice into Asset Management



Report to the Chairman, Committee on Homeland Security and Governmental Affairs, U.S. Senate

June 2024  
GAO-24-106420  
United States Government Accountability Office

Accessible Version

# GAO Highlights

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Highlights of [GAO-24-106420](#), a report to the Chairman of the Committee on Homeland Security and Governmental Affairs, U.S. Senate

June 2024

## FEDERAL REAL PROPERTY

### **Efforts to Incorporate Climate Vulnerabilities and Environmental Justice into Asset Management**

#### **Why GAO Did This Study**

The federal government owns and leases a massive portfolio of real property assets—buildings as well as structures such as roads and dams—that costs billions of dollars to operate and maintain annually. Climate-related events and natural hazards can present risks to those real property assets. Additionally, adverse environmental conditions—including climate-related events and natural disasters—disproportionately burden certain communities. Certain executive orders have required agencies to incorporate climate and environmental justice considerations into the management of their real property assets.

GAO was asked to review how federal agencies have incorporated climate vulnerabilities and environmental justice into managing real property assets. This report describes how federal agencies (1) identify climate vulnerabilities and environmental justice considerations relevant to their real property assets, (2) incorporate climate vulnerabilities into their real property asset management, and (3) consider environmental justice in their real property asset management.

GAO interviewed officials and reviewed documentation from a sample of 13 selected federal agencies and three components within the Executive Office of the President. GAO selected the 13 agencies based on factors such as a range in the number and type of their assets. In addition, GAO reviewed relevant federal laws, regulations, executive orders, and guidance.

#### **What GAO Found**

Federal agencies are required to address climate vulnerabilities and environmental justice in managing their buildings and other real property assets. Climate vulnerabilities include risks, such as flooding, from weather and climate-related events. Environmental justice seeks to address the disproportionately high distribution of health and environmental risks among certain communities. The 13 agencies in GAO's review use federal planning tools and data, such as a mapping tool, to identify climate vulnerabilities and environmental justice considerations relevant to their real property assets. Additionally, officials from seven of the 13 agencies said they have supplemented these federal tools and data with custom tools they developed to identify climate vulnerabilities for their assets.

## EPA Building and an Eroding Shoreline in Gulf Breeze, Florida



Source: Environmental Protection Agency (EPA). | GAO-24-106420

All 13 selected agencies GAO reviewed have incorporated climate vulnerabilities as one factor, among many, into their existing processes for managing real property assets. The agencies typically ranked potential investments in real property assets based on these factors. Agencies may also consider climate vulnerabilities during regular maintenance activities and when planning renovation projects. According to agency officials, the agencies must balance addressing climate vulnerabilities with other considerations, such as addressing health and safety deficiencies and adhering to the terms and conditions of lease agreements.

All 13 selected agencies are also taking steps to consider environmental justice in their management of real property. Requirements to address environmental justice in federal agencies' asset management have evolved in recent years. Agencies' steps include efforts related to environmental reviews under the National Environmental Policy Act (NEPA). Under NEPA, federal agencies must assess the environmental effects of their proposed actions—including construction, management, and disposal of federally owned buildings—prior to making decisions. In addition, agency officials described taking steps to incorporate environmental justice into other parts of their asset management processes, such as to inform budgeting and planning processes.

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## Abbreviations

CEQ	Council on Environmental Quality
CFO	Chief Financial Officers
GSA	General Services Administration

HHS Department of Health and Human Services  
NEPA National Environmental Policy Act  
OMB Office of Management and Budget

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441 G St. N.W.  
Washington, DC 20548

June 26, 2024

The Honorable Gary C. Peters  
Chairman  
Committee on Homeland Security and Governmental Affairs  
United States Senate

Dear Mr. Chairman:

The federal government owns and leases space in a massive portfolio of real property—buildings and structures, such as roads, bridges, dams, and monuments—that costs billions of dollars to operate and maintain annually. Federal agencies own, lease space in, or otherwise manage hundreds of thousands of buildings and structures.<sup>1</sup>

Climate-related events and other natural hazards present risks to agencies’ management of that real property and can impose substantial costs. Climate change and natural disasters have cost the federal government billions of dollars and these costs will likely rise in the future, according to the Office of Management and Budget (OMB) and the U.S. Global Change Research Program.<sup>2</sup> We have designated *Limiting the Federal Government’s Exposure by Better Managing Climate Change Risks* as a high-risk area since 2013, in part because of the federal government’s role in owning or operating infrastructure.<sup>3</sup> Natural disasters can expose federal real property assets—including office buildings, levees, roads, and bridges—to physical damage that can require substantial resources to repair or rebuild. For the purpose of this report, we refer to natural hazard risks faced by federal agencies—such as extreme temperatures, flooding, wildfires, and hurricanes—as “climate vulnerabilities.”<sup>4</sup>

In addition, agencies’ management of real property can affect communities where these properties are located. Adverse health and environmental conditions—including risks from climate change and natural disasters—disproportionately burden some communities where federal real property is located. Concerns about such conditions have led to environmental justice efforts. Executive Order 14096 defines environmental justice, in part, as the just treatment and meaningful involvement of all people, regardless of income, race, color, national

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<sup>1</sup>The Federal Real Property Council, an interagency council that promotes the efficient and economical use of real property assets, among other things, separates real property 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, and roads and bridges.

<sup>2</sup>See Office of Management and Budget, *Analytical Perspectives: Budget of the U.S. Government Fiscal Year 2025* (Washington, D.C.: Mar. 2024), and U.S. Global Change Research Program, *Fifth National Climate Assessment, Economics Chapter* (Washington, D.C.: Nov. 2023).

<sup>3</sup>GAO, *High-Risk Series: Efforts Made to Achieve Progress Need to Be Maintained and Expanded to Fully Address All Areas*, [GAO-23-106203](#) (Washington, D.C.: Apr. 20, 2023).

<sup>4</sup>Although we use the term “climate vulnerabilities” to refer to these natural hazard risks, the extent to which individual hazards may be exacerbated by climate change may vary.

origin, tribal affiliation, or disability, in agency decision-making and other federal activities that affect human health and the environment.<sup>5</sup>

You asked us to review how agencies have incorporated considerations related to climate vulnerabilities and environmental justice into their management of real property assets. This report examines how federal agencies:

1. identify climate vulnerabilities and environmental justice considerations relevant to their real property assets,
2. incorporate considerations related to climate vulnerabilities into their real property asset management, and
3. consider environmental justice in their real property asset management.

To address all of these objectives, we interviewed officials and reviewed documentation from three components within the Executive Office of the President—the Council on Environmental Quality, OMB, and the Office of Science and Technology Policy. Each of these components has a role in developing and issuing government-wide guidance and policy related to addressing climate vulnerabilities and environmental justice in asset management.

We also interviewed officials and reviewed documentation from 13 selected agencies responsible for managing real property assets to learn about their management of those assets and how they addressed climate vulnerabilities and environmental justice.<sup>6</sup> We selected those 13 agencies by first limiting our selection to the 24 agencies subject to the Chief Financial Officers (CFO) Act of 1990.<sup>7</sup> We further narrowed our selection to the agencies that had data on their owned assets reported in the General Services Administration’s (GSA) Federal Real Property Profile Management System.<sup>8</sup> These agencies had a range of numbers of owned buildings and structures.<sup>9</sup> We also excluded certain agencies due to related, recently issued GAO work.<sup>10</sup>

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<sup>5</sup>Exec. Order No. 14096, *Revitalizing Our Nation’s Commitment to Environmental Justice for All*, 88 Fed. Reg. 25251 (Apr. 26, 2023).

<sup>6</sup>The 13 agencies we selected were the General Services Administration, the Environmental Protection Agency, the National Aeronautics and Space Administration, and the Departments of Agriculture, Commerce, Energy, Health and Human Services, Homeland Security, the Interior, Justice, Labor, Transportation, and Veterans Affairs.

<sup>7</sup>Chief Financial Officers Act of 1990, Pub. L. No. 101-576, 104 Stat. 2838 (1990) (codified as amended at 31 U.S.C. § 901(b)).

<sup>8</sup>Sixteen of the 24 CFO Act agencies had data on their owned assets reported in the Federal Real Property Profile Management System. The Federal Real Property Profile Management System is a database managed by GSA of real property under the control of federal executive branch agencies.

<sup>9</sup>Our selected agencies’ owned assets in the fiscal year 2021 Federal Real Property Management System data ranged from 161 to 42,502 buildings and from 79 to 83,246 structures. Our selection included agencies across this range, from agencies that owned relatively small numbers of buildings and structures to agencies that owned relatively large numbers of buildings and structures.

<sup>10</sup>We excluded the Department of Defense, the Department of State, and the U.S. Agency for International Development based on related, recently issued GAO work. See, e.g., GAO, *Overseas Real Property: State Has Not Aligned Natural Hazard Resilience Plans to Staffing Levels*, [GAO-23-105887](#) (Washington, D.C.: June 22, 2023); *Overseas Real Property: State’s Initial Assessment of Natural Hazard Risks Faced by Its Posts*, [GAO-23-105452](#) (Washington, D.C.: Oct. 18, 2022); *Climate Change: USAID Is Taking Steps to Increase Projects’ Resilience, but Could Improve Reporting of Adaptation Funding*, [GAO-20-555](#) (Washington, D.C.: July 28, 2020); and *Climate Resilience: Actions Needed to Ensure DOD Considers Climate Risks to Contractors as Part of Acquisition, Supply, and Risk Assessment*, [GAO-20-511](#) (Washington, D.C.: June 25, 2020).

In addition, we reviewed federal laws, regulations, executive orders, and guidance related to managing federal real property and addressing climate vulnerabilities and environmental justice. We also reviewed prior GAO reports on agencies' asset management, climate vulnerabilities, and environmental justice efforts.

We conducted this performance audit from November 2022 to June 2024 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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## Background

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### Managing Real Property Assets

Federal agencies are generally responsible for managing their owned and leased real property assets. Federal agencies are also required to implement asset management planning processes.<sup>11</sup> OMB provides guidance for agencies on principles and techniques for planning, budgeting, procuring, and managing real property assets. Agencies may use this guidance to develop processes for managing their assets—including prioritizing maintenance and construction projects—and managing risk, cost, schedule, and performance.<sup>12</sup>

Asset management can help federal agencies optimize limited funding and make decisions to better target their policy goals and objectives by applying a broad, strategic focus on a portfolio of assets. Asset management activities may include developing an understanding of how each of an organization's assets contributes to its success and managing and investing in those assets in such a way as to maximize that success.<sup>13</sup> Figure 1 provides an example of a general asset management framework.

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<sup>11</sup>Federal Assets Sale and Transfer Act, Pub. L. No. 114-287, 130 Stat. 1463 (2016); Federal Property Management Reform Act, Pub. L. No. 114-318, 130 Stat. 1608 (2016).

<sup>12</sup>Office of Management and Budget, *Preparation, Submission, and Execution of the Budget*, Circular No. A-11 (revised Aug. 2023). Appendix 13 of the Capital Programming Guide supplement to OMB Circular A-11 specifically addresses climate considerations and managing climate risks during the capital planning process.

<sup>13</sup>GAO, *Federal Real Property Asset Management: Agencies Could Benefit from Additional Information on Leading Practices*, [GAO-19-57](#) (Washington, D.C.: Nov. 5, 2018).



**Figure 1: Example of a General Asset Management Framework**



Source: GAO analysis of leading practices. | GAO-24-106420

Note: GAO developed this example of an asset management framework based on leading practices that included International Organization for Standardization 55000 standards. See GAO, *Federal Real Property Asset Management: Agencies Could Benefit from Additional Information on Leading Practices*, GAO-19-57 (Washington, D.C.: Nov. 5, 2018).

According to our prior work, asset management practices should continually evolve to match each agency’s organizational objectives and changing asset portfolio.<sup>14</sup> This evolution could include matching an organization’s current asset management practices to its objectives to address climate vulnerabilities and improve resilience to natural disasters.

## Climate Vulnerabilities

Executive orders have required agencies to address climate vulnerabilities, including through how those agencies manage their real property. Table 1 shows examples of executive order provisions relevant to managing federal real property for climate vulnerabilities. For example, in 2021, the Biden administration issued three executive orders that required agencies to develop plans to address climate vulnerabilities to federal real property, increase the energy and water efficiency of federal real property, and reduce emissions, among other things.<sup>15</sup> In addition, in September 2023 the Biden administration issued a National Climate

<sup>14</sup>GAO, *Federal Real Property Asset Management: Additional Direction in Government-Wide Guidance Could Enhance Natural Disaster Resilience*, GAO-21-596 (Washington, D.C.: Sept. 14, 2021).

<sup>15</sup>Exec. Order No. 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, 86 Fed. Reg. 7037 (Jan. 25, 2021); Exec. Order No. 14008, *Tackling the Climate Crisis at Home and Abroad*, 86 Fed. Reg. 7619 (Feb. 1, 2021); Exec. Order No. 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*, 86 Fed. Reg. 70935 (Dec. 13, 2021).

Resilience Framework that identifies key values, priorities, and objectives to help expand and accelerate nationally comprehensive, locally tailored, and community-driven resilience strategies.<sup>16</sup>

**Table 1: Examples of Executive Order Provisions that Address Managing Federal Real Property for Climate Vulnerabilities**

<b>Executive Order</b>	<b>Date issued</b>	<b>Provisions on managing federal real property and climate vulnerabilities</b>
Executive Order 13690, <i>Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input</i>	January 30, 2015	Establishes a federal flood risk management standard, which is a framework to increase the resilience of communities and federal assets against flooding and help preserve floodplains.
Executive Order 13990, <i>Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis</i>	January 20, 2021	Directs agencies to take actions to address climate change and to review agency actions that might be inconsistent with the policy of protecting public health and the environment.
Executive Order 14008, <i>Tackling the Climate Crisis at Home and Abroad</i>	January 27, 2021	Directs agencies to describe steps they could take with regard to their facilities and operations to bolster adaptation and increase resilience to the impacts of climate change, including describing each agency’s climate vulnerabilities. <sup>a</sup>
Executive Order 14008, <i>Tackling the Climate Crisis at Home and Abroad</i>	January 27, 2021	Directs agencies to use their procurement powers to increase the energy and water efficiency of federal buildings and facilities and ensure they are ready for climate effects.
Executive Order 14057, <i>Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability</i>	December 8, 2021	Sets climate-related goals for the federal government and directs agencies to take actions to meet them and to adapt the government to climate change, including pursuing goals such as climate resilient infrastructure and operations; achieving a net-zero emissions building portfolio by 2045; and 100 percent carbon pollution-free electricity on a net annual basis by 2030.
Executive Order 14057, <i>Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability</i>	December 8, 2021	Directs agencies to develop or revise policies and processes to promote climate resilient investment that advances adaptation to climate change and protects public health and the environment; conduct climate adaptation analysis and planning for climate-informed financial and management decisions and program implementation; reform agency policies and funding programs that are maladaptive to climate change and increase the vulnerability of communities, natural or built systems, economic sectors, and natural resources to climate impacts, or related risks; and develop and enhance tools that assess climate change impacts and support climate adaptation planning and implementation.
Executive Order 14057, <i>Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability</i>	December 8, 2021	Directs agencies to increase energy and water efficiency of their facilities and reduce waste and pollution.
Executive Order 14057, <i>Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability</i>	December 8, 2021	Directs agencies to pursue sustainable acquisition and procurement, including achieving net-zero emissions from federal procurement by 2050 through efforts that reduce emissions from federal contractors and suppliers through the Buy Clean policy, and promote sustainable and equitable locations for federal facilities.

Source: GAO analysis of Executive Orders. | GAO-24-106420

<sup>16</sup>White House, *National Climate Resilience Framework* (Washington, D.C.: Sept. 2023).

Note: This table presents examples of provisions from executive orders related to managing real property for climate vulnerabilities that are most relevant to this report. It does not include a comprehensive list of all such provisions or orders.

<sup>3</sup>The Council on Environmental Quality's (CEQ) interim instructions for preparing climate action plans directed agencies to develop plans for climate adaptation and climate resilience, including determining the five priority adaptation actions that each agency would implement in its mission, programs, operations, and management of procurement, real property, public lands and waters, and financial programs. Council on Environmental Quality, *Interim Instructions for Preparing Draft Climate Action Plans under Executive Order 14008* (Washington, D.C.: Mar. 2021). Executive Order 14057 calls for agencies to develop climate adaptation and resilience plans that build on the climate action plans developed under Executive Order 14008. Exec. Order No. 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*, 86 Fed. Reg. 70935 (Dec. 13, 2021). CEQ issued instructions for developing climate adaptation plans in September 2023. Council on Environmental Quality, *Instructions for the 2024-2027 Federal Climate Adaptation Plans* (Washington, D.C.: Sept. 28, 2023).

In September 2023, the Council on Environmental Quality (CEQ) issued guidance to agencies preparing 2024-2027 Climate Adaptation Plans, in response to Executive Orders 14008 and 14057.<sup>17</sup> The 2024-2027 plans are to focus on assessing and addressing current and future climate vulnerabilities to federal buildings, among other things. The guidance required agencies to submit their plans to CEQ and OMB by February 29, 2024, and the guidance anticipated that agencies would finalize their plans and post them online by May 2024. However, according to CEQ officials, requests from agencies for added time to obtain approval from their leadership led CEQ to postpone the expected publication of the plans until mid-2024.

OMB also issued guidance to agencies for incorporating considerations related to climate vulnerabilities into their asset management processes. In 2021, we recommended that OMB direct agencies to incorporate their assessments of natural disaster risk information into asset management investment decisions.<sup>18</sup> Subsequently, the Disaster Resiliency Planning Act was enacted in December 2022, which required OMB to establish guidance requiring each agency to incorporate natural disaster and climate resilience into real property asset management.<sup>19</sup> In November 2023, OMB issued guidance to agencies on incorporating assessments of natural hazard and climate vulnerability information into their real property asset management.<sup>20</sup>

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## Environmental Justice

With respect to environmental justice, Executive Order 12898, issued in 1994, required agencies to make achieving environmental justice part of their missions.<sup>21</sup> More recent executive orders have also addressed environmental justice, including in relation to managing federal agencies' real property. These orders have included, in part, an executive order which directed the creation of a new environmental justice initiative and mapping tool, and an executive order which directed agencies to address specific environmental justice issues and to engage with communities with environmental justice concerns. Table 2 shows examples of executive order provisions relevant to managing federal real property for environmental justice.

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<sup>17</sup>Council on Environmental Quality, *Instructions for the 2024-2027 Federal Climate Adaptation Plans* (Washington, D.C.: Sept. 28, 2023).

<sup>18</sup>GAO-21-596. GAO closed this recommendation following the enactment of the Disaster Resiliency Planning Act, Pub. L. No. 117-221, 136 Stat. 2277 (2022).

<sup>19</sup>Disaster Resiliency Planning Act, Pub. L. No. 117-221, § 3, 136 Stat. 2277, 2277 (2022).

<sup>20</sup>Office of Management and Budget, *Advancing Climate Resilience through Climate-Smart Infrastructure Investments and Implementation Guidance for the Disaster Resiliency Planning Act*, M-24-03 (Washington, D.C.: Nov. 29, 2023).

<sup>21</sup>Exec. Order No. 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, 59 Fed. Reg. 7629 (Feb. 16, 1994).

**Table 2: Examples of Executive Order Provisions that Address Managing Federal Real Property for Environmental Justice**

<b>Executive Order</b>	<b>Date issued</b>	<b>Provisions on managing federal real property and environmental justice</b>
Executive Order 12898, <i>Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations</i>	February 11, 1994	Directs agencies to make achieving environmental justice part of their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. <sup>a</sup>
Executive Order 12898, <i>Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations</i>	February 11, 1994	Directs agencies to conduct their programs, policies, and activities that substantially affect human health or the environment in a manner that ensures that they do not have the effect of excluding persons from participation in, denying persons the benefits of, or subjecting persons to discrimination under them because of their race, color, or national origin.
Executive Order 14008, <i>Tackling the Climate Crisis at Home and Abroad</i>	January 27, 2021	Directs the Council on Environmental Quality to create a geospatial Climate and Economic Justice Screening Tool and annually publish interactive maps highlighting disadvantaged communities.
Executive Order 14008, <i>Tackling the Climate Crisis at Home and Abroad</i>	January 27, 2021	Establishes the Justice40 Initiative with a goal that 40 percent of the overall benefits from certain federal investments—including certain infrastructure investments—would flow to disadvantaged communities. <sup>b</sup>
Executive Order 14008, <i>Tackling the Climate Crisis at Home and Abroad</i>	January 27, 2021	Establishes the Environmental Justice Scorecard, which details agency environmental justice performance measures.
Executive Order 14096, <i>Revitalizing Our Nation’s Commitment to Environmental Justice for All</i>	April 21, 2023	Directs agencies to address (1) disproportionate and adverse human health and environmental effects (including risks) and hazards of federal activities, including those related to climate change; (2) historical inequities, systemic barriers, or actions related to any federal regulation, policy, or practice that impair the ability of communities with environmental justice concerns to achieve and maintain a healthy and sustainable environment; and (3) barriers related to federal activities that impair the ability of communities with environmental justice concerns to receive equitable access to human health or environmental benefits, including benefits related to climate mitigation, adaptation, and resilience.
Executive Order 14096, <i>Revitalizing Our Nation’s Commitment to Environmental Justice for All</i>	April 21, 2023	Directs agencies to provide opportunities for the meaningful engagement of persons and communities with environmental justice concerns who are potentially affected by federal activities.
Executive Order 14096, <i>Revitalizing Our Nation’s Commitment to Environmental Justice for All</i>	April 21, 2023	Directs agencies to develop environmental justice strategic plans that would set forth each agency’s vision, goals, priority actions, and metrics to address and advance environmental justice. <sup>c</sup>
Executive Order 14096, <i>Revitalizing Our Nation’s Commitment to Environmental Justice for All</i>	April 21, 2023	Directs agencies to carry out environmental reviews under the National Environmental Policy Act in a manner that considers the effects of federal actions on communities with environmental justice concerns and provides the communities with opportunities for early and meaningful involvement.

Executive Order	Date issued	Provisions on managing federal real property and environmental justice
Executive Order 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All	April 21, 2023	Directs the Environmental Protection Agency to establish a public, internet-based, whole-of-government clearinghouse composed of culturally and linguistically appropriate and accessible materials related to environmental justice.

Source: GAO analysis of Executive Orders. | GAO-24-106420

Note: This table presents examples of provisions from executive orders related to managing real property for environmental justice that are most relevant to this report. It does not include a comprehensive list of all such provisions or orders.

<sup>a</sup>The Presidential memorandum transmitting Executive Order 12898 also stated that agencies should analyze the environmental effects, including human health, economic and social effects, of federal actions, including effects on minority communities and low-income communities, when such analysis was required by the National Environmental Policy Act, and should provide opportunities for community input in that process.

<sup>b</sup>Federal programs covered by the Justice40 Initiative established under Executive Order 14008, of which there were over 500 as of November 2023, are required to engage with community stakeholders and report certain information to the Office of Management and Budget, such as the percent of benefits directed to disadvantaged communities. In January 2024, GAO issued a report reviewing the implementation of the Justice40 Initiative to date. See GAO, *Justice40: Use of Leading Practices Would Strengthen Efforts to Guide Environmental Justice Initiative*, [GAO-24-105869](#) (Washington, D.C.: Jan. 29, 2024).

<sup>c</sup>In October 2023, the Council on Environmental Quality issued guidance on preparing these plans, including a template. Council on Environmental Quality, *Strategic Planning to Advance Environmental Justice Under Executive Order 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All* (Washington, D.C.: Oct. 2023).

Under the National Environmental Policy Act (NEPA), as amended, and its implementing regulations, federal agencies must assess the environmental effects of their proposed actions—including construction, management, and disposal of federally owned facilities—prior to making decisions.<sup>22</sup> For proposed major federal actions that are likely to have a significant effect on the quality of the human environment, NEPA requires federal agencies to prepare an environmental impact statement.<sup>23</sup> This process provides certain opportunities for public input on proposed actions.

The presidential memorandum that transmitted Executive Order 12898 provides that agencies should include effects on minority and low-income communities when analyzing the environmental effects of federal actions under NEPA.<sup>24</sup> CEQ and other entities have issued guidance and support to agencies in implementing environmental justice under NEPA, and Executive Order 14096 reinforces agencies' obligation to incorporate environmental justice considerations into their NEPA reviews. (See fig. 2). For example, CEQ guidance notes that agencies should consider the potential for multiple or cumulative exposure to human health or environmental hazards in the affected population. Agencies should also recognize the interrelated cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects. Further, agencies should develop effective public participation strategies and ensure meaningful

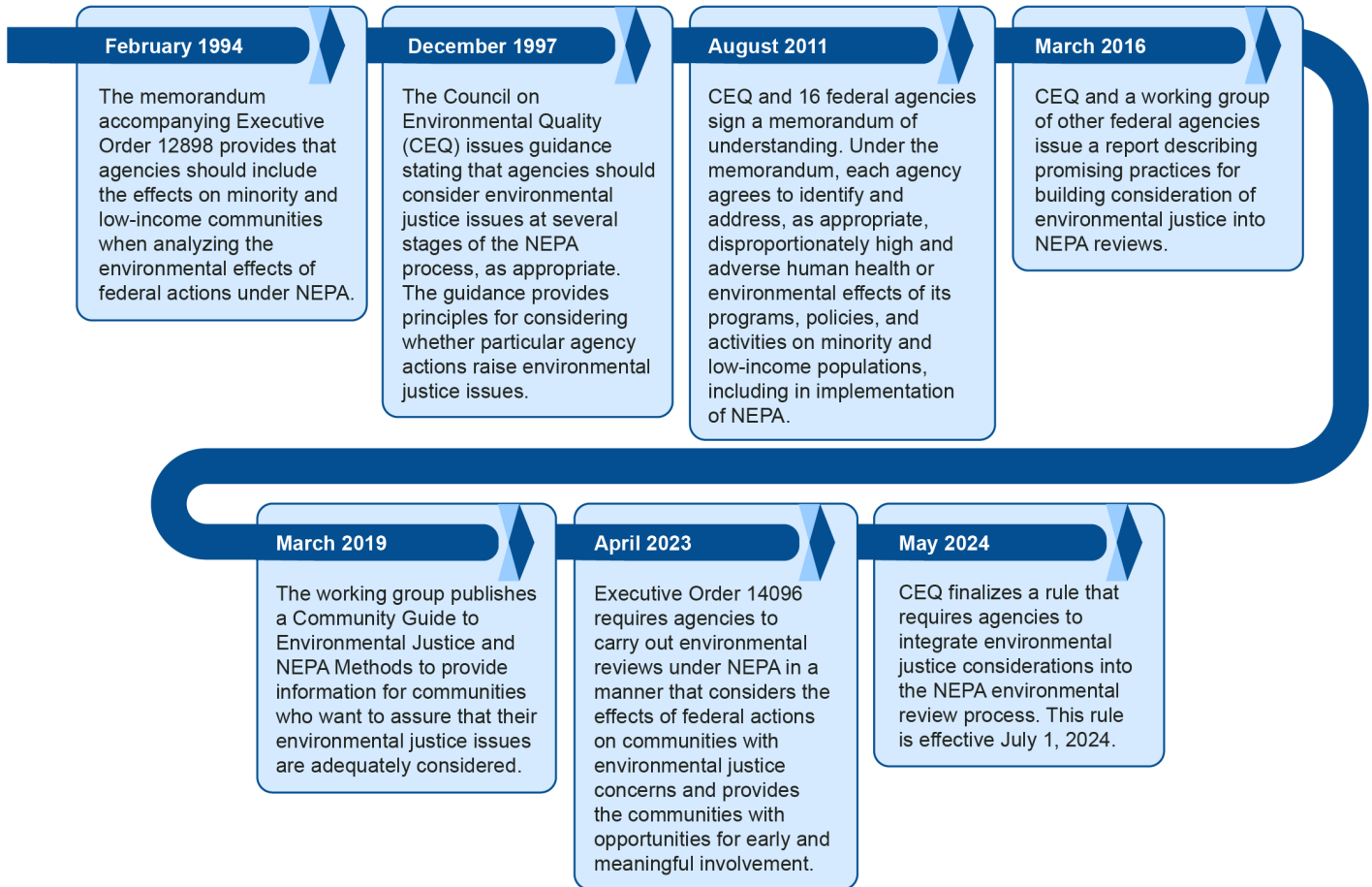
<sup>22</sup>After determining NEPA applies, the level and type of review of the proposed action varies based on an agency's assessment regarding whether the action is likely to have significant effects on the environment. 40 C.F.R. § 1501.3.

<sup>23</sup>42 U.S.C. § 4336(b). The human environment is interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. 40 C.F.R. § 1508.1(r). The effects analyzed under NEPA include ecological, aesthetic, historic, cultural, economic, social, or health. 40 C.F.R. § 1508.1(i)(4). CEQ guidance and recent executive orders also require consideration of environmental justice during NEPA reviews, as appropriate. See, e.g., Exec. Order No. 14096, 88 Fed. Reg. 25251 (Apr. 26, 2023) and Council on Environmental Quality, *Environmental Justice: Guidance Under the National Environmental Policy Act* (Washington, D.C.: Dec. 10, 1997). Additionally, on May 1, 2024 with an effective date of July 1, 2024, CEQ issued a final rule that requires agencies to integrate environmental justice considerations into the NEPA environmental review process and develop or revise, as necessary, proposed procedures to implement the regulations by July 1, 2025. Nat'l Env't Pol'y Act Implementing Regulations Revisions Phase 2, 89 Fed. Reg. 35442, 35573 (May 1, 2024).

<sup>24</sup>Exec. Order No. 12898, 59 Fed. Reg. 7629 (Feb. 16, 1994), and Exec. Office of the President, *Memorandum for the Heads of All Departments and Agencies: Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (Feb. 11, 1994). Executive Order 12898 uses the terms "minority populations" and "low-income populations." For the purposes of this report, we refer to these as "populations overburdened by adverse environmental conditions."

community representation in the NEPA process, according to the guidance.<sup>25</sup> Additionally, in October 2023, CEQ issued guidance to support effective strategic planning to advance environmental justice by providing agencies with a concrete roadmap that includes specific performance measures for meeting the charges of Executive Order 14096.<sup>26</sup>

**Figure 2: Timeline for Integration of Environmental Justice into National Environmental Policy Act Reviews, 1994-2023**



Source: GAO analysis of National Environmental Policy Act (NEPA) information. | GAO-24-106420

<sup>25</sup>Council on Environmental Quality, *Environmental Justice: Guidance Under the National Environmental Policy Act* (Washington, D.C.: Dec. 10, 1997).

<sup>26</sup>Council on Environmental Quality, *Strategic Planning to Advance Environmental Justice: Under Executive Order 14096, Revitalizing Our Nation’s Commitment to Environmental Justice for All* (Washington, D.C.: Oct. 2023).

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## Agencies Use Federal Planning Tools and Data to Identify Climate Vulnerabilities and Environmental Justice Considerations for Real Property

Agency officials we interviewed cited multiple federal planning tools and data used to identify the climate vulnerabilities of their agencies' real property. For example, Department of Energy officials said they used the U.S. Global Change Research Program's National Climate Assessment to help identify regional climate risks and impacts.<sup>27</sup> They also reported using the National Oceanic and Atmospheric Administration's Climate Explorer for regional climate maps and future climate projections.<sup>28</sup> Similarly, Department of Health and Human Services (HHS) officials described using Argonne National Laboratory's Climate Risk and Resilience Portal for supplemental information on the environmental conditions its components could encounter from flooding, heat, wind, and wildfire.<sup>29</sup> These officials said they also use the Climate Resilience Toolkit and other resources.<sup>30</sup>

Some agencies have supplemented the tools and data available from other federal sources with tools they developed themselves to identify the climate vulnerabilities of their real property. Officials from seven of the 13 agencies we spoke with said they have developed custom, agency-specific tools to help manage their assets. For example, Department of Transportation officials told us they created a tool that overlays severe weather data from the Federal Emergency Management Agency with data from their internal asset management database. Transportation uses this tool to calculate site-specific climate-risk scores for its facilities and operational assets. Officials told us they can use climate-risk scores to inform decisions on the selection or renewal of a leased facility.

Similarly, Department of Justice officials described internal tools they developed using numerous federal data sources that allow the agency to assess its real property assets for exposure to various climate hazards. The results provide Justice and each of its bureaus with a list of facilities that have the highest exposure ratings. The officials said that Federal Bureau of Investigation project teams, for example, have used the analysis to plan for climate-resilient design and construction projects that resist reasonably expected natural disasters and weather events.

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<sup>27</sup>The Global Change Research Act of 1990 established the U.S. Global Change Research Program to coordinate federal research and investments in understanding the forces shaping the global environment, both human and natural, and their impacts on society. Pub. L. No. 101-606, § 101, 104 Stat. 3096, 3097 (1990). The Global Change Research Act also requires the program to develop a quadrennial assessment, referred to as the National Climate Assessment. Pub. L. No. 101-606, § 106, 104 Stat. 3096, 3101 (1990). The National Climate Assessment integrates, evaluates, and interprets the findings of the U.S. Global Change Research Program and discusses the scientific uncertainties associated with such findings; analyzes the effects of global change on the natural environment, agriculture, energy production and use, land and water resources, transportation, human health and welfare, human social systems, and biological diversity; and analyzes current trends in global change, both human-induced and natural, and projects major trends for the subsequent 25 to 100 years.

<sup>28</sup>The National Oceanic and Atmospheric Administration's Climate Explorer provides interactive graphs and maps showing past and projected climate conditions for counties and county-equivalents across the U.S.

<sup>29</sup>Argonne National Laboratory's Climate Risk and Resilience Portal uses a supercomputer to model over 60 climate variables and provide highly localized, neighborhood-level climate projections from mid- to the end of the century.

<sup>30</sup>The administration's Climate Resilience Toolkit is a website designed to help users find and use tools, information, and subject matter expertise from across the federal government to build climate resilience.

Additionally, all 13 agencies we spoke with discussed using the Climate and Economic Justice Screening Tool for identifying environmental justice considerations.<sup>31</sup> This geospatial data mapping tool identifies disadvantaged communities based primarily on federal datasets across eight categories.<sup>32</sup> The tool considers a community disadvantaged if it is in a census tract that is at or above the threshold for one or more environmental, climate, or other burdens, and at or above the threshold for an associated economic burden.<sup>33</sup> Specifically, the mapping tool identifies climate vulnerabilities such as projected flood and wildfire risks. It also identifies environmental and health hazards, such as the community's proximity to hazardous waste facilities and the share of the population that has certain health conditions like asthma, heart disease, or diabetes. Figure 3 shows an example of information identified by this tool.

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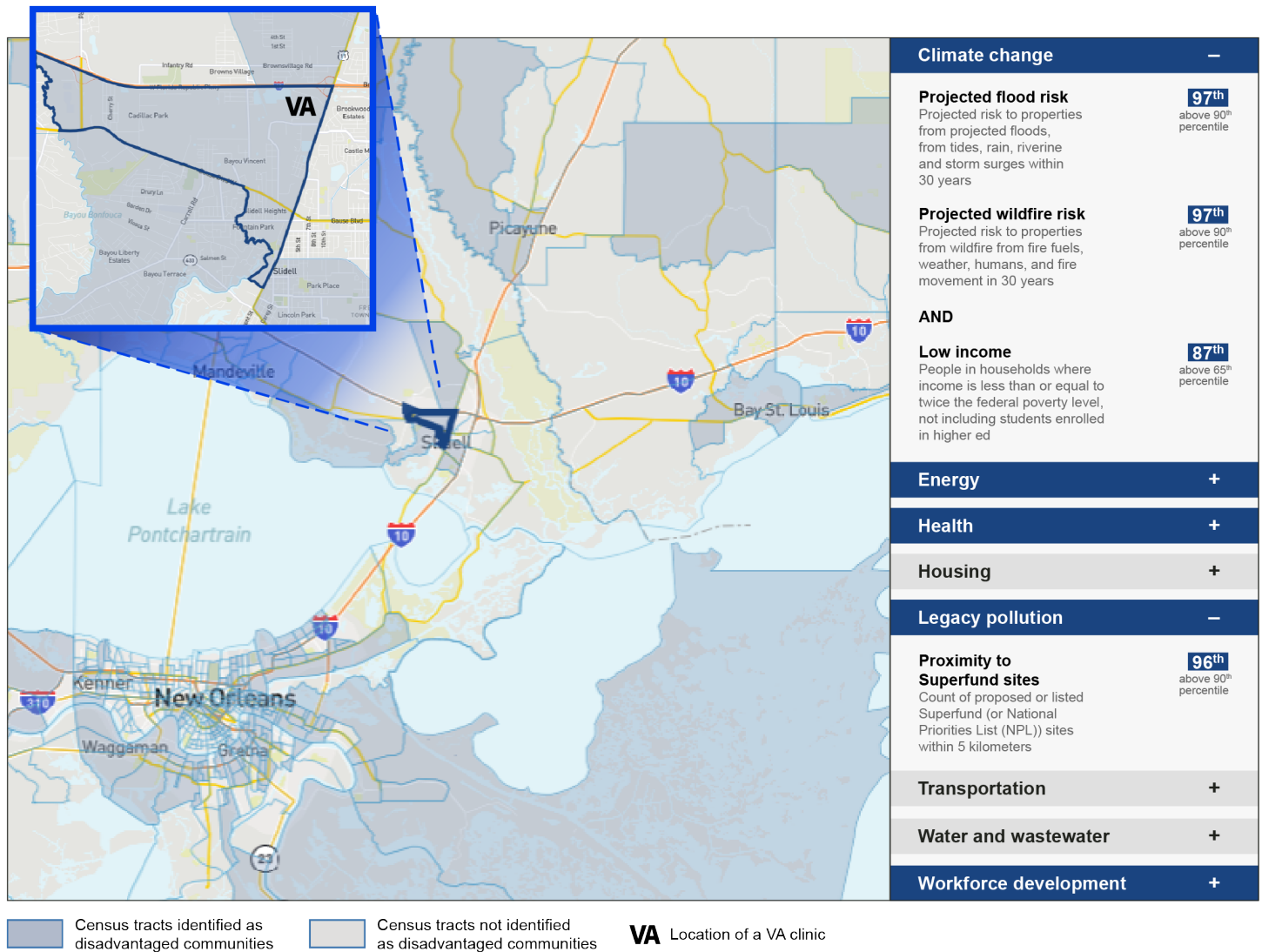
<sup>31</sup>The Climate and Economic Justice Screening Tool was developed by the Council on Environmental Quality for agencies to identify geographically defined communities experiencing burdens in eight categories: climate change, energy, health, housing, legacy pollution, transportation, water and wastewater, and workforce development. Additionally, other tools, such as the Climate Mapping for Resilience and Adaptation tool, include the Climate and Economic Justice Screening Tool.

<sup>32</sup>The tool uses a total of 14 publicly available datasets. The responsible parties for 12 of the 14 datasets are federal entities, such as the U.S. Census Bureau. The responsible parties for the remaining two datasets are a research and technology nonprofit company and a nonprofit coalition of national, regional, and local organizations and individuals focused on national community reinvestment.

<sup>33</sup>A census tract that is completely surrounded by disadvantaged communities and is at or above the 50th percentile for low income is also considered disadvantaged in the tool. In addition, communities are also considered disadvantaged if they are on the lands of federally recognized tribes, including Alaska Native Villages.



**Figure 3: Example of Tool Used by Selected Agencies to Identify Environmental Justice Considerations**



Source: Information and map from the Council on Environmental Quality's Climate and Economic Justice Screening Tool. | GAO-24-106420

Note: We added a Department of Veterans Affairs (VA) clinic above to demonstrate that there is federal real property in the selected geographic area. The tool does not identify the locations of federal real property.

Some agency officials we spoke with said it was a challenge selecting among available federal data and planning tools to identify climate vulnerabilities and environmental justice considerations for managing real property. Citing the number of available resources, the agency officials noted staff need to be able to identify and use the most up-to-date data and planning tools, which requires investments in training and hiring staff with climate literacy.

Components within the Executive Office of the President and the Environmental Protection Agency have recently taken steps that could help address this challenge.

- **Office of Science and Technology Policy.** In March 2023, the White House’s Office of Science and Technology Policy issued guidance that provided a high-level guide for federal agencies on selecting resources such as tools and data for understanding agency climate vulnerabilities. The guidance focuses on understanding exposure to current and future climate-related hazards and their potential impacts.<sup>34</sup>
- **Council on Environmental Quality.** In its September 2023 instructions to agencies for the 2024-2027 Climate Adaptation Plans, CEQ included a list of resources for agencies to use when developing their plans.<sup>35</sup> The resources include links to climate information and tools. For example, the instructions tell agencies to develop their plans using a data-driven approach and provide agencies with a tool to analyze the exposure of their buildings to determine risk to five priority climate hazards: wildfire, flooding, extreme precipitation, sea level rise, and extreme heat.<sup>36</sup>
- **Office of Management and Budget.** Guidance issued by OMB in November 2023 identified over 20 federal tools and resources that include tools for accessing natural hazard and climate risk information that agencies can incorporate in their real property management.<sup>37</sup> The guidance also outlines best practices for acquiring and evaluating data and tools for climate vulnerability assessments.
- **Environmental Protection Agency.** In April 2024, the Environmental Protection Agency announced an online collection of resources referred to as the Environmental Justice Clearinghouse, as directed by Executive Order 14096.<sup>38</sup> The clearinghouse is a public, internet-based, resource composed of environmental justice resources, including screening and mapping tools.

Further, we have reported in prior work on ways that agencies and OMB can improve their efforts to prioritize climate vulnerabilities or environmental justice. Specifically, we reported in June 2023 how Congress and federal agencies can develop an organizational arrangement to prioritize climate resilience investments, including creating a national climate information system.<sup>39</sup> We have ongoing work that further examines this issue. Additionally, in January 2024 we recommended that three components within the Executive Office of the President, including OMB and CEQ, improve guidance and tools on environmental justice considerations to better ensure an effective, timely, and consistent framework for implementing environmental justice initiatives.<sup>40</sup> The responsible components in the Executive Office of the President neither agreed nor disagreed, but CEQ stated that it anticipated taking steps to implement our recommendations.<sup>41</sup>

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<sup>34</sup>Office of Science and Technology Policy, *Selecting Climate Information to Use in Climate Risk and Impact Assessments: Guide for Federal Agency Climate Adaptation Planners* (Washington, D.C.: Mar. 2023).

<sup>35</sup>Council on Environmental Quality, *Instructions for the 2024-2027 Federal Climate Adaptation Plans* (Washington, D.C.: Sept. 28, 2023).

<sup>36</sup>The instructions also give agencies the option to include exposure to other climate vulnerabilities.

<sup>37</sup>Office of Management and Budget, *Advancing Climate Resilience through Climate-Smart Infrastructure Investments and Implementation Guidance for the Disaster Resiliency Planning Act*, M-24-03 (Washington, D.C.: Nov. 29, 2023).

<sup>38</sup>Exec. Order No. 14096, 88 Fed. Reg. 25251 (Apr. 26, 2023).

<sup>39</sup>GAO, *Climate Change: Summary of GAO’s Work on Federal Climate Resilience Projects*, [GAO-23-106362](#) (Washington, D.C.: June 20, 2023).

<sup>40</sup>GAO, *JUSTICE40: Use of Leading Practices Would Strengthen Efforts to Guide Environmental Justice Initiative*, [GAO-24-105869](#) (Washington, D.C.: Jan. 29, 2024).

<sup>41</sup>The responsible components have 180-days after our report issuance to submit to Congress a written statement of the actions they have or will take on our recommendations. 31 U.S.C. § 720.

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## Agencies Incorporate Climate Vulnerability Considerations into Existing Processes for Managing Real Property

Our review of interview responses and agency documentation found that all of our 13 selected agencies have incorporated considerations related to climate vulnerabilities as one factor, among many, into their existing real property asset management processes for making investment decisions. The agencies typically ranked potential investments in agency real property assets based on various factors, including climate vulnerabilities.

For example, HHS officials told us they identified the criticality of each building to its mission and the probability of each building's exposure to climate vulnerabilities. They used this probability to prioritize the order in which its subcomponents—such as the Centers for Disease Control and Prevention, the National Institutes of Health, the Food and Drug Administration, and the Indian Health Service—performed climate vulnerability assessments for each of their buildings. In turn, subcomponents first assessed those buildings HHS identified as having a high probability of climate vulnerabilities and as essential to HHS' mission and operations. The subcomponents developed plans, schedules, and budgets to address the climate vulnerabilities identified for each building, if applicable. The subcomponents incorporated these plans, schedules, and budgets into the overall funding estimates each subcomponent developed to meet its climate and sustainability goals. HHS used these estimates to prepare the budget justification it submitted to OMB.

Similarly, Department of the Interior guidance directs its subcomponents to coordinate and integrate their 5-year life cycle investment plans with other related plans and develop a comprehensive capital investment strategy designed to meet Interior's mission. In developing their 5-year plans, subcomponents should assess their assets' vulnerability to natural hazards. In addition, when developing plans for infrastructure projects included in the 5-year plan, they must consider adaptation to climate change, natural hazard risks, and resilience. The projects must also address impacts identified in the vulnerability assessments. Subcomponents then score each project based on four factors, including alignment with Interior's goals and objectives and the assets' importance to the mission. The 5-year life cycle investment plan then serves as the primary justification for requests for these projects and is the foundation for Interior's capital planning and investment control process.

Agencies may also consider climate vulnerabilities during renovation projects. Specifically, Department of Commerce officials told us that Commerce considers climate vulnerabilities during project development and planning, such as considering climate resiliency when planning major renovation projects. For example, officials told us they are planning to transition to renewable power for a National Oceanic and Atmospheric Administration observatory in Hawaii that lost power due to a natural hazard (see fig. 4). The observatory's remote location at the top of a volcano has allowed the administration to monitor gases in the atmosphere with minimal atmospheric influences from vegetation and human activity. In November 2022, the observatory lost electrical power when an eruption of the volcano destroyed electrical power poles. Commerce plans to convert the observatory to solar power, which officials say will help prevent future interruptions in electricity from volcanic activity and enable continuous atmospheric monitoring.

**Figure 4: Department of Commerce’s National Oceanic and Atmospheric Administration Mauna Loa Observatory on the Mauna Loa Volcano in Hawaii**



Source: Christine Smith, National Oceanic and Atmospheric Administration. | GAO-24-106420

Similarly, agencies may consider climate vulnerabilities during regular maintenance activities. For example, Department of Energy officials told us that if a boiler needs to be replaced, they will consider if they should replace the asset with a more resilient or efficient version to simultaneously address a climate vulnerability.

Officials from nine of the 13 agencies told us their agencies have also used funding outside of their asset management processes to address climate vulnerabilities in their real property. For example, Department of Agriculture officials told us they pursued outside funding through a Department of Energy grant program to increase the energy efficiency of their real property and reduce vulnerability to extreme weather and utility outages.<sup>42</sup> Similarly, Department of Homeland Security officials told us they received funding through the same Energy grant program for renewable energy and battery energy storage at three of its facilities. Agriculture officials noted that they also executed energy savings performance contracts, which leveraged third-party financing to make their facilities more energy- and water-efficient and reduce their vulnerability to utility outages.<sup>43</sup> Department of Veterans Affairs officials told us they also use energy performance contracts, in part, to address critical infrastructure challenges and climate vulnerabilities at their major medical centers.

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<sup>42</sup>Department of Energy’s Assisting Federal Facilities with Energy Conservation Technologies program provides grants to federal agencies that they can leverage with private capital to make energy and water efficiency upgrades to federal buildings.

<sup>43</sup>Energy saving performance contracting is a method in which the contractor incurs the costs of implementing energy savings measures, including at least the costs (if any) incurred in making energy audits, acquiring and installing equipment, and training personnel, in exchange for a share of any energy savings directly resulting from implementation of such measures during the term of the contract. 42 U.S.C. § 8287(a).

The terms and conditions of lease agreements can limit an agency's ability to address climate vulnerabilities in leased spaces, according to officials. For example, Department of Commerce officials told us that while they try to influence the decision-making of their lessor to alter leased spaces and address climate vulnerabilities, they have no control over such alterations. Similarly, Department of Justice officials said that their ability to make changes to their leased space is limited by the terms of their leases.<sup>44</sup>

Even with these limitations, the selected agencies we reviewed took some steps to consider climate vulnerabilities for leased assets. First, GSA policies require agencies to consider some climate vulnerabilities such as floodplains when they are renewing a lease or selecting a leased space.<sup>45</sup> Furthermore, some agency officials described incorporating climate vulnerabilities into leasing decisions beyond following those policies. For example, Justice officials told us that one of their subcomponent agencies prioritizes leasing spaces that have climate resiliency measures incorporated into their design. Similarly, Commerce officials said that its National Oceanic and Atmospheric Administration prioritizes leasing projects to balance consideration for sea level rise and climate adaptation.

Other considerations may compete with agencies' efforts to address climate vulnerabilities.<sup>46</sup> For example, Department of Labor officials told us that they make health and safety alterations their highest priority. Officials noted that the majority (98 percent) of Labor's owned buildings are Job Corps Centers that include dormitories, food halls, health centers, and buildings dedicated to certain trades. When the agency identifies deficiencies related to life, safety, and building code violations in buildings that house Job Corps Center students, Labor officials told us the campuses direct funding to address those issues first, instead of addressing climate vulnerabilities.

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## Agencies Are Taking Steps to Incorporate Environmental Justice into Real Property Asset Management

All of the 13 selected agencies have taken steps to incorporate environmental justice considerations into their management of federal real property. These steps include efforts related to environmental reviews under

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<sup>44</sup>According to Department of Justice officials, a majority of their real property asset management portfolio is leased and maintained by GSA. GSA officials noted that GSA leases space on behalf of the federal government that is assigned to the Department of Justice. GSA officials told us that if a tenant agency observes climate vulnerabilities at a GSA-owned building, it should alert GSA so that discussion and planning on mitigation of the vulnerabilities can take place. As part of those discussions, the parties will determine which agency is responsible for the cost of mitigation. GSA officials noted there is little GSA funding available for building improvements to address climate vulnerabilities in GSA-owned real property assets. For privately-owned buildings in which GSA leases space for assignment to a tenant federal agency, GSA officials said that climate vulnerabilities are considered as part of the lease procurement process. According to GSA officials, in the overwhelming majority of its leases of space in privately-owned buildings, the costs of maintaining the premises remain the responsibility of the building owner or landlord.

<sup>45</sup>The Federal Flood Risk Management Standard requires agencies to prepare for and protect federally funded buildings and projects from flood risks. Exec. Order No. 13690, *Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input*, 80 Fed. Reg. 6425 (Feb. 4, 2015). The standard's implementing instructions outline methods for determining floodplains under the standard.

<sup>46</sup>We have previously reported that federal agencies have deferred maintaining and repairing their buildings, creating a backlog of these needs. See GAO, *Federal Real Property: Agencies Should Provide More Information About Increases in Deferred Maintenance and Repair*, [GAO-24-105485](#) (Washington, D.C.: Nov. 16, 2023).

NEPA as well as efforts related to other parts of their asset management processes, including budgeting and planning, procurement and contracting, and energy efficiency efforts.

In particular, documentation from all of our selected agencies incorporated consideration of environmental justice in environmental reviews under NEPA.<sup>47</sup> For example, the Department of Homeland Security has incorporated environmental justice considerations through its directive and instruction manual for implementing NEPA at the agency. The instruction manual describes outreach efforts to reach populations overburdened by adverse environmental conditions. Similarly, HHS's General Administration Manual and Facilities Program Manual serve as an interim measure for describing how to incorporate environmental justice into the agency's NEPA reviews. For example, these manuals describe how to identify affected populations through demographic information and encourage public participation by populations that may suffer disproportionately high and adverse human health or environmental effects from a proposed action.<sup>48</sup> On May 1, 2024, CEQ finalized a rule that requires agencies to integrate environmental justice considerations into the NEPA environmental review process.<sup>49</sup>

In addition to incorporating environmental justice as part of NEPA reviews, agency officials we interviewed described taking additional steps to incorporate environmental justice into their asset management. These included actions taken during their budgeting and planning processes, when making procurement and contracting decisions, and when making decisions regarding energy and utilities. For example:

- **Budgeting and planning.** Officials from 11 of 13 agencies said that they have incorporated environmental justice considerations into their budgeting and planning processes. For example, HHS used an environmental justice index the agency developed as one factor when identifying and addressing climate risks for its real property asset management and investment decision process.<sup>50</sup> Additionally, in its request for fiscal year 2026 regional project submissions, GSA required that its regional offices provide certain environmental justice information to inform their project proposals, such as whether the relevant GSA property is located in an area with environmental justice concerns. For new construction projects, this information included ensuring that the project's proposed budget and scope had financial and subject matter expert resources dedicated to addressing existing site conditions and community concerns to the extent practicable. GSA officials noted that project financial constraints may limit GSA's ability to address community concerns as well as meet other project requirements.

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<sup>47</sup>In assessing the appropriate level of NEPA review, federal agencies must determine whether a proposed action is likely to have a significant effect on the environment. An agency prepares an environmental assessment for a proposed action that is not likely to have a significant effect or when the significance of the effect is unknown. Environmental impact statements, which are prepared when an agency finds that a proposed action is likely to have a significant effect, must describe the proposed action and the reasons for it, a reasonable range of alternatives, the environment that will be affected, and the consequences of the action for the environment. Agencies may also identify categories of actions, known as categorical exclusions, that normally do not significantly affect the quality of the human environment, and normally do not require preparation of an environmental assessment or an environmental impact statement.

<sup>48</sup>These agency documents and Executive Order 12898 use the terms "minority populations" and "low-income populations." For the purposes of this report, we refer to these as "populations overburdened by adverse environmental conditions."

<sup>49</sup>Nat'l Env't Pol'y Act Implementing Regulations Revisions Phase 2, 89 Fed. Reg. 35442 (May 1, 2024). The final rule requires agencies to develop or revise, as necessary, proposed procedures to implement the regulations by July 1, 2025.

<sup>50</sup>HHS developed an Environmental Justice Index to identify communities that experience the greatest cumulative impacts of environmental burdens on their health. Using data from multiple federal sources, the tool scores each census tract on 36 environmental, social, and health factors.

- **Procurement and contracting.** Officials from seven of 13 agencies said that they include environmental justice considerations when making procurement or contracting decisions, including decisions related to real property. Executive Order 14096 stated that building an equitable, inclusive, and sustainable economy that offers economic opportunities, workforce training, and high-quality and well-paying jobs is integral to advancing environmental justice.<sup>51</sup> For example, Energy officials said that the National Renewable Energy Laboratory has increased its goal to use more small, disadvantaged businesses. The officials said that the laboratory has also included environmental justice considerations in its procurement source selection criteria and its contracts that cannot be set aside solely for small businesses. For example, large contractors must provide plans to show how their work will support diversity and equity at the laboratory, provide measures for effectiveness and success, and describe plans to work with at least two small businesses throughout the term of the agreement. Additionally, National Aeronautics and Space Administration officials noted that the agency's Equity Action Plan includes considerations for equity in procurement, grants, and contracts, including in the areas of environmental justice and asset management. The agency's 2023 Equity Action Plan describes a strategy to increase use of contractors and businesses from underserved communities.<sup>52</sup>
- **Energy and utilities.** Officials from eight of 13 agencies said that they included environmental justice considerations in decisions regarding energy and utilities. For example, Department of Veterans Affairs officials told us that, in fiscal years 2023 and 2024, environmental justice considerations were one of the criteria for a site selection process for Veterans Affairs' energy saving performance contracts. Similarly, Department of Labor officials said that Labor incorporates environmental justice into its utility acquisition decisions, such as purchasing carbon- and pollution-free electricity options.

Officials from some agencies also described other efforts they have planned but have not yet undertaken. For example, Environmental Protection Agency officials said that the agency used the Climate and Economic Justice Screening Tool created by CEQ and the Small Business Administration's HUBZone map—a tool for identifying economically distressed communities—to identify which of its owned facilities were in disadvantaged or economically distressed communities.<sup>53</sup> The officials said that the Environmental Protection Agency is assessing whether to include that information as a weighting factor in its real estate project prioritization process. Similarly, Veterans Affairs officials said that they plan to begin using the Climate and Economic Justice Screening Tool to help inform decisions made in future NEPA reviews. According to Interior officials, beginning in the fiscal year 2026 budget cycle, Interior's lifecycle investment planning guidance will require Interior components to consider environmental justice in the projects that constitute their 5-year plans for investments in their assets. Interior has already incorporated environmental justice into its Interior-wide sustainable operations policy, which describes requirements for Interior components to integrate sustainability and resilience into agency operations, including real property management.

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<sup>51</sup>Exec. Order No. 14096, 88 Fed. Reg. 25251 (Apr. 26, 2023).

<sup>52</sup>National Aeronautics and Space Administration, *2023 NASA Equity Action Plan* (Washington, D.C.: Feb. 14, 2024).

<sup>53</sup>The Small Business Administration's HUBZone program helps small businesses located in economically distressed communities get preferential access to federal procurement opportunities. It publishes a map that identifies economically distressed communities, referred to as historically underutilized business zones.

Further, in April 2024, GSA issued a final rule that describes the factors that federal agencies should consider when making location decisions for federal facilities, including environmental justice considerations.<sup>54</sup> Pursuant to the revised regulations, when making real property location decisions agencies should seek to minimize negative and maximize positive impacts in communities affected by environmental justice concerns. Agencies should use available data and meaningful engagement with local stakeholders to identify such communities and identify, analyze, and address adverse human health and environmental effects and hazards.<sup>55</sup>

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## Agency Comments

We provided a draft of this report to CEQ, OMB, the Office of Science and Technology Policy, the Environmental Protection Agency, GSA, the National Aeronautics and Space Administration, and the Departments of Agriculture, Commerce, Energy, Health and Human Services, Homeland Security, the Interior, Justice, Labor, Transportation, and Veterans Affairs for review and comment. CEQ, the Office of Science and Technology Policy, GSA, and the Departments of Commerce, Health and Human Services, Labor, and Veterans Affairs had technical comments on the draft, which we incorporated as appropriate.

We are sending copies of this report to the appropriate congressional committees, the Chair of CEQ; the Directors of OMB and the Office of Science and Technology Policy; the Administrators of the Environmental Protection Agency, GSA, and the National Aeronautics and Space Administration; the Secretaries of Agriculture, Commerce, Energy, Health and Human Services, Homeland Security, the Interior, Transportation, and Veterans Affairs; the Acting Secretary of Labor; the Attorney General of the Department of Justice; and other interested parties. In addition, the report is available at no charge on the GAO website at <https://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-2834 or [marronid@gao.gov](mailto:marronid@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on

the last page of this report. GAO staff who made key contributions to this report are listed in appendix I.

Sincerely,



David Marroni  
Director, Physical Infrastructure Issues

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<sup>54</sup>General Services Administration, *Federal Management Regulation; Designation of Authority and Sustainable Siting*, 89 Fed. Reg. 29261 (Apr. 22, 2024). The rule amends the Federal Management Regulation, which contains regulatory policies concerning property management, including real property, and related administrative activities that apply to executive agencies.

<sup>55</sup>41 C.F.R. § 102-83.75.



# Appendix I: GAO Contact and Staff Acknowledgments

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## GAO Contact

David Marroni, at (202) 512-2834 or [marronid@gao.gov](mailto:marronid@gao.gov).

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## Staff Acknowledgments

In addition to the contact named above, Kyle Browning (Assistant Director), Tobias Gillett (Analyst in Charge), Tatyana Walker (Analyst in Charge), Emily Crofford, Dinah Girma, Alicia Loucks, Rebecca Morrow, Malika Rice, Kelly Rubin, Pam Snedden, Alicia Wilson, and April Yeaney made key contributions to this report.

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