

**Testimony** 

Before the Committee on Homeland Security and Governmental Affairs, U.S. Senate

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## EXTREME WEATHER EVENTS

# Limiting Federal Fiscal Exposure and Increasing the Nation's Resilience

Statement of Mark Gaffigan, Managing Director Natural Resources and Environment



Highlights of GAO-14-364T, a testimony before the Committee on Homeland Security and Governmental Affairs, U.S. Senate

#### Why GAO Did This Study

According to the United States Global Change Research Program, the costs and impacts of weather disasters resulting from floods, drought, and other events are expected to increase in significance as previously "rare" events become more common and intense. These impacts pose financial risks to the federal government. While it is not possible to link any individual weather event to climate change, these events provide insight into the potential climate-related vulnerabilities the United States faces.

GAO focuses particular attention on government operations it identifies as posing a "high risk" to the American taxpayer and, in February 2013, added to its High Risk List the area Limiting the Federal Government's Fiscal Exposure by Better Managing Climate Change Risks. GAO's past work identified a variety of fiscal exposures—responsibilities, programs, and activities that may either legally commit the federal government to future spending or create the expectation for future spending in response to extreme weather events. This testimony is based on reports GAO issued from March 2007 to November 2013 that address these issues.

GAO is not making new recommendations but made numerous recommendations in prior reports on these topics, which are in varying states of implementation by the Executive Office of the President and relevant federal agencies.

View GAO-14-364T. For more information, contact Mark Gaffigan at (202) 512-3841 or gaffiganm@gao.gov.

#### February 12, 2014

#### **EXTREME WEATHER EVENTS**

### Limiting Federal Fiscal Exposure and Increasing the Nation's Resilience

#### What GAO Found

The federal government has opportunities to limit its exposure and increase the nation's resilience to extreme weather events. Since 1980, the U.S. has experienced 151 weather disasters with damages exceeding 1 billion dollars each. This testimony focuses on 4 areas where the government could limit its fiscal exposure.

- Property and crop insurance. The financial risks from two federal insurance programs—the National Flood Insurance Program administered by the Federal Emergency Management Agency (FEMA) and the Federal Crop Insurance Corporation (FCIC)—create a significant fiscal exposure. In 2012, the NFIP had property coverage of over \$1.2 trillion and the FCIC had crop coverage of almost \$120 billion. As of December 2013, FEMA's debt from flood insurance payments totaled about \$24 billion. For various reasons, FCIC's costs more than doubled from \$3.4 billion in fiscal year 2001 to \$7.6 billion in fiscal year 2012. In 2007, GAO found that the agencies responsible for these programs needed to develop information on their long-term exposure to climate change. The Biggert-Waters Flood Insurance Reform Act of 2012 requires FEMA to use information on future changes in sea levels and other factors in updating flood maps used to set insurance rates. Private insurers are also studying how to include climate change in rate setting. GAO is currently examining the extent to which private and federal insurance programs address risks from climate change.
- <u>Disaster aid</u>. The federal government does not fully budget for recovery activities after major disasters, thus creating a large fiscal exposure. GAO reported in 2012 that disaster declarations have increased to a record 98 in fiscal year 2011 compared with 65 in 2004. Over that period, FEMA obligated over \$80 billion for disaster aid. GAO's past work recommended that FEMA address the federal fiscal exposure from disaster assistance.
- Owner and operator of infrastructure. The federal government owns and operates hundreds of thousands of facilities that a changing climate could affect. For example, in its 2010 Quadrennial Defense Review, the Department of Defense (DOD) recognized the risk to its facilities posed by climate change, noting that the department must assess the potential impacts and adapt. GAO plans to report later this year on DOD's management of climate change risks at over 500,000 defense facilities.
- Provider of technical assistance to state and local governments. The federal government invests billions of dollars annually in infrastructure projects that state and local governments prioritize, such as roads and bridges. Total public spending on transportation and water infrastructure exceeds \$300 billion annually, with about 25 percent coming from the federal government and the rest from state and local governments. GAO's April 2013 report on infrastructure adaptation concluded that the federal government could help state and local efforts to increase their resilience by (1) improving access to and use of available climate-related information, (2) providing officials with improved access to local assistance, and (3) helping officials consider climate change in their planning processes.

United States Government Accountability Office

Chairman Carper, Ranking Member Coburn, and Members of the Committee:

Thank you for inviting me to discuss our work on opportunities for the federal government to reduce the fiscal exposure and financial risks posed by extreme weather events. According to the United States Global Change Research Program (USGCRP), the impacts and costliness of weather disasters—resulting from floods, drought, and other events such as tropical cyclones—are expected to increase in significance as previously "rare" events become more common and intense due to anticipated changes in the global climate system. Typically, climate change is described as average annual changes in temperature or precipitation, and is associated with shifts in the frequency and severity of extreme weather that can impose substantial costs on society. The 151 weather disasters since 1980 with overall damages exceeding \$1 billion each illustrate these vulnerabilities. While it is not possible to link any individual weather event to climate change, these events provide insight into the potential climate-related vulnerabilities the United States faces.

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<sup>&</sup>lt;sup>1</sup>Our past work identified a variety of fiscal exposures—responsibilities, programs, and activities that may either legally commit the federal government to future spending or create the expectation for future spending. Fiscal exposures vary widely as to source, extent of the government's legal commitment, and magnitude. Further, some of these factors may change over time. For example, the government's response to an event or series of events can strengthen expectations that the government will respond in the same way to similar events in the future. For additional information, see *Fiscal Exposures: Improving Cost Recognition in the Federal Budget*, GAO-14-28 (Washington, D.C.: Oct. 29, 2013).

<sup>&</sup>lt;sup>2</sup>Thomas R. Karl, Jerry M. Melillo, and Thomas C. Peterson, eds. *Global Climate Change Impacts in the United States* (Cambridge University Press: 2009). USGCRP coordinates and integrates the activities of 13 federal agencies that conduct research on changes in the global environment and their implications for society. USGCRP began as a presidential initiative in 1989 and was codified in the Global Change Research Act of 1990 [Pub. L. No. 101-606, § 103 (1990)]. USGCRP-participating agencies are the Departments of Agriculture, Commerce, Defense, Energy, Interior, Health and Human Services, State, and Transportation; U.S. Agency for International Development; Environmental Protection Agency; National Aeronautics and Space Administration; the National Science Foundation; and the Smithsonian Institution.

<sup>&</sup>lt;sup>3</sup>The National Oceanic and Atmospheric Administration's National Climatic Data Center tracks and evaluates climate events in the United States and globally that have great economic and societal impacts. Additional information on billion dollar weather disasters is available here.

Federal, state, and local policymakers increasingly view adaptation—adjustments to natural or human systems in response to actual or expected climate change—as a risk-management strategy to protect vulnerable sectors and communities that could be affected by extreme weather events and changes in the climate. For example, adaptation measures may include raising river or coastal dikes to protect infrastructure from sea level rise, building higher bridges, and increasing the capacity of storm water systems. As stated in a 2010 National Research Council (NRC) report, even though uncertainties exist regarding the exact nature and magnitude of impacts, mobilizing now to increase the nation's resilience can be an insurance policy against climate change risks.<sup>4</sup>

My testimony today is based on reports we issued from March 2007 to November 2013. We conducted work for these reports in accordance with generally accepted government auditing standards. Our issued reports have detailed information about our scope and methodology.

Limiting Federal
Fiscal Exposure and
Financial Risks from
Extreme Weather
Events by Increasing
the Nation's
Resilience

Among other impacts, climate change could threaten coastal areas with rising sea levels, alter agricultural productivity, and increase the intensity and frequency of severe weather events such as floods, drought, and hurricanes that have cost the nation tens of billions of dollars in damages over the past decade. For example, Congress provided around \$60 billion in budget authority for disaster assistance after Superstorm Sandy. These impacts pose significant financial risks, but the federal government is not well positioned to address this fiscal exposure, partly because of the complex nature of the issue. Given these challenges and the nation's fiscal condition, in February 2013, we added *Limiting the Federal* 

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<sup>&</sup>lt;sup>4</sup>NRC, America's Climate Choices: Panel on Adapting to the Impacts of Climate Change, *Adapting to the Impacts of Climate Change* (Washington, D.C.: 2010). NRC is the principal operating agency of the National Academy of Sciences and the National Academy of Engineering.

<sup>&</sup>lt;sup>5</sup>Congress temporarily increased the borrowing authority for the National Flood Insurance Program by \$9.7 billion and provided about \$50 billion in appropriated funds for expenses related to the consequences of Superstorm Sandy.

Government's Fiscal Exposure by Better Managing Climate Change Risks to our list of high-risk areas.<sup>6</sup>

Climate-related impacts will result in increased fiscal exposures for the federal government from many areas, including, but not limited to its role as (1) the insurer of property and crops vulnerable to climate impacts, (2) the provider of aid in response to disasters, (3) the owner or operator of extensive infrastructure such as defense facilities and federal property vulnerable to climate impacts, and (4) the provider of data and technical assistance to state and local governments responsible for managing the impacts of climate change on their activities.

#### Federal Government as Insurer of Property and Crops

The financial risks from two important federal insurance programs—the National Flood Insurance Program (NFIP) administered by the Federal Emergency Management Agency (FEMA) and the Federal Crop Insurance Corporation (FCIC) administered by the United States Department of Agriculture (USDA)—create a significant fiscal exposure. In 2012, the NFIP had property coverage of over \$1.2 trillion and the FCIC had crop coverage of almost \$120 billion. NFIP has been on our High Risk List since March 2006 because of concerns about its long-term financial solvency and related operational issues. While Congress and FEMA intended to finance NFIP with premiums collected from policyholders and not with tax dollars, the program was, by design, not intended to pay for itself. As of December 2013, FEMA's debt from flood insurance payments totaled about \$24 billion—up from \$17.8 billion before Superstorm Sandy—and FEMA had not repaid any principal on the loan since 2010. Further, the federal government's crop insurance

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<sup>&</sup>lt;sup>6</sup>GAO, *High-Risk Series: An Update*, GAO-13-283, February 2013. Every 2 years at the start of a new Congress, GAO calls attention to agencies and program areas that are high risk due to their vulnerabilities to fraud, waste, abuse, and mismanagement, or are most in need of transformation. Click here to access the *Limiting the Federal Government's Fiscal Exposure by Better Managing Climate Change Risks* content. The focus of this high-risk area may evolve over time to the extent that federal climate change programs and policies change.

<sup>&</sup>lt;sup>7</sup>FEMA has authority to borrow money from Treasury to pay losses that exceed premium revenue and any accumulated surplus. Treasury charges FEMA interest on the outstanding debt. Before Superstorm Sandy, this borrowing authority stood at \$20.725 billion. In January 2013, Congress passed and the President signed into law a \$9.7 billion increase in this authority to pay flood claims related to Superstorm Sandy, raising FEMA's borrowing authority to a total of \$30.425 billion. Pub. L. No. 113-1, § 1(a), 127 Stat. 3, 3 (2013).

costs have increased in recent years for a variety of reasons, more than doubling from \$3.4 billion in fiscal year 2001 to \$7.6 billion in fiscal year 2012.8

In March 2007, we reported that both of these programs' exposure to weather-related losses had grown substantially, and that FEMA and USDA had done little to develop the information necessary to understand their long-term exposure resulting from climate change. We recommended that the Secretaries of Agriculture and Homeland Security analyze the potential long-term fiscal implications of climate change on federal insurance programs and report their findings to Congress. The agencies agreed with the recommendation and contracted with experts to study their programs' long-term exposure from climate change. Both agencies have incorporated the findings of the reports into their climate change adaptation plans—as directed by instructions and guidance implementing Executive Order 13514 on Federal Leadership in Environmental, Energy, and Economic Performance. We are currently examining how these programs account for climate change in their activities.

In addition, we have previously reported on external factors that complicate the administration of NFIP and affect its financial stability. <sup>10</sup> In June 2011, we reported that FEMA had not been authorized to account for long-term erosion when updating flood maps used to set premium rates for NFIP, increasing the likelihood that premiums would not cover future losses. We therefore suggested that Congress consider authorizing NFIP to account for long-term erosion in its flood maps. <sup>11</sup> Subsequently, Congress passed the Biggert-Waters Flood Insurance Reform Act of 2012 (Biggert-Waters Act), which requires FEMA to use information on

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<sup>&</sup>lt;sup>8</sup>GAO-14-28.

<sup>&</sup>lt;sup>9</sup>GAO, Climate Change: Financial Risks to Federal and Private Insurers in Coming Decades Are Potentially Significant, GAO-07-285 (Washington, D.C.: Mar. 16, 2007).

<sup>&</sup>lt;sup>10</sup>GAO, National Flood Insurance Program: Continued Attention Needed to Address Challenges, GAO-13-858T (Washington, D.C.: Sept. 18, 2013); GAO, Flood Insurance: Implications of Changing Coverage Limits and Expanding Coverage, GAO-13-568 (Washington, D.C.: July 3, 2013).

<sup>&</sup>lt;sup>11</sup>GAO, FEMA: Action Needed to Improve Administration of the National Flood Insurance Program, GAO-11-297 (Washington, D.C.: June 9, 2011).

topography, coastal erosion areas, changing lake levels, future changes in sea levels, and intensity of hurricanes in updating its flood maps. 12

The Biggert-Waters Act also reauthorized NFIP through 2017 and made other significant changes to the program, including removing subsidized premium rates for certain properties, eliminating the grandfathering of prior premium rates when a property is remapped, and requiring FEMA to create a reserve fund. While these changes may help put NFIP on a path to financial solvency, their ultimate effect is not yet known. In addition, the program faces challenges in making the changes. For example, implementation of certain changes was delayed by provisions in the Consolidated Appropriations Act of 2014, and S. 1926, which passed the Senate on January 30, 2014, would delay the implementation of certain rate increases contained in the Biggert-Waters Act. As we have previously reported, such delays to rate increases may help address affordability concerns, but they would likely continue to increase NFIP's long-term burden on taxpayers. <sup>13</sup>

## Federal Government as Provider of Disaster Aid

In the event of a major disaster, federal funding for response and recovery comes from the Disaster Relief Fund managed by FEMA, and disaster aid programs of other participating federal agencies. <sup>14</sup> The federal government does not fully budget for these costs, thus creating a

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<sup>&</sup>lt;sup>12</sup>Pub. L. No 112-141, Div. F, Tit. II, Subtit. A, § 100216(b), 126 Stat. 405, 927 (2012) (codified at 42 U.S.C. 4101b(b)).

<sup>&</sup>lt;sup>13</sup>GAO, Flood Insurance: Strategies for Increasing Private Sector Involvement, GAO-14-127 (Washington, D.C.: Jan. 22, 2014).

<sup>&</sup>lt;sup>14</sup>As reported by the Congressional Research Service in August 2013, Congress appropriates money to the Disaster Relief Fund to ensure that funding for disaster relief is available to help individuals and communities stricken by emergencies and major disasters. Congress also appropriates disaster funds to other accounts administered by other federal agencies pursuant to federal statutes that authorize specific types of disaster relief. The Disaster Relief Fund is generally funded at a level that is sufficient for what are known as "normal" disasters. These are incidents for which Disaster Relief Fund outlays are less than \$500 million. When a large disaster occurs, additional funding for the Disaster Relief Fund may be provided through emergency supplemental appropriations. A supplemental appropriation generally provides additional budget authority during the current fiscal year to (1) finance activities not provided for in the regular appropriation or (2) provide funds when the regular appropriation is deemed insufficient. For more information, see Congressional Research Service, *Disaster Relief Funding and Supplemental Appropriations for Disaster Relief*, R40708, (Washington, D.C.: Aug. 5, 2013).

large fiscal exposure. We reported, in September 2012, that disaster declarations have increased over recent decades to a record of 98 in fiscal year 2011 compared with 65 in 2004. 15 Over that period, FEMA obligated over \$80 billion in federal assistance for disasters. We also found that FEMA has had difficulty implementing long-standing plans to assess national preparedness capabilities and that FEMA's indicator for determining whether to recommend that a jurisdiction receive disaster assistance does not accurately reflect the ability of state and local governments to respond to disasters. 16 Had FEMA adjusted its indicator to reflect changes in personal income and inflation, 44 percent and 25 percent fewer disaster declarations, respectively, would have met the threshold for public assistance during fiscal years 2004 through 2011. In September 2012, we recommended, among other things, that FEMA develop a methodology to more accurately assess a jurisdiction's capability to respond to and recover from a disaster without federal assistance. FEMA concurred with this recommendation.

#### Federal Government as Property Owner and Operator

The federal government owns and operates hundreds of thousands of buildings and facilities that a changing climate could affect. For example, in its 2010 Quadrennial Defense Review, the Department of Defense (DOD) recognized the risk to its facilities posed by climate change, noting that the department must assess potential impacts and adapt as required. We plan to report later this year on DOD's management of climate change risks at over 500,000 defense facilities. In addition, the federal government manages about 650 million acres—nearly 30 percent of the land in the United States—for a variety of purposes, such as recreation, grazing, timber, and fish and wildlife. In 2007, we recommended that that the Secretaries of Agriculture, Commerce, and the Interior develop guidance for their resource managers that explains how they expect to address the effects of climate change, and the three

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<sup>&</sup>lt;sup>15</sup>GAO, Federal Disaster Assistance: Improved Criteria Needed to Assess a Jurisdiction's Capability to Respond and Recover on Its Own, GAO-12-838 (Washington, D.C.: Sept. 12, 2012).

<sup>&</sup>lt;sup>16</sup>GAO, Managing Preparedness Grants and Assessing National Capabilities, GAO-12-526T (Washington, D.C.: Mar. 20, 2012). See also GAO, Disaster Response: Criteria for Developing and Validating Effective Response Plans, GAO-10-969T (Washington, D.C.: Sept. 22, 2010).

<sup>&</sup>lt;sup>17</sup>The Quadrennial Defense Review is a legislatively mandated review of DOD strategies and priorities and is required to be conducted every 4 years.

departments generally agreed with this recommendation. <sup>18</sup> However, as we showed in our May 2013 report, resource managers still struggled to incorporate climate-related information into their day-to-day activities, despite the creation of strategic policy documents and high-level agency guidance. <sup>19</sup>

#### Federal Government as Provider of Technical Assistance to State and Local Governments

The federal government invests billions of dollars annually in infrastructure projects that state and local governments prioritize and supervise. In total, the United States has about 4 million miles of roads and 30,000 wastewater treatment and collection facilities. According to a 2010 Congressional Budget Office report, total public spending on transportation and water infrastructure exceeds \$300 billion annually, with roughly 25 percent of this amount coming from the federal government and the rest coming from state and local governments.<sup>20</sup> These projects have large up-front capital investments and long lead times that require decisions about addressing climate change before its potential effects are discernable. The federal government plays a limited role in project-level planning for transportation and wastewater infrastructure, and state and local efforts to consider climate change in infrastructure planning have occurred primarily on a limited, ad hoc basis.

Infrastructure is typically designed to withstand and operate within historical climate patterns. However, according to NRC, as the climate changes and historical patterns—in particular, those related to extreme weather events—no longer provide reliable predictions of the future, infrastructure designs may underestimate the climate-related impacts to infrastructure over its design life, which can range as long as 50 to 100 years.<sup>21</sup> These impacts can increase the operating and maintenance

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<sup>&</sup>lt;sup>18</sup>GAO, Climate Change: Agencies Should Develop Guidance for Addressing the Effects on Federal Land and Water Resources, GAO-07-863 (Washington, D.C.: Aug. 7, 2007).

<sup>&</sup>lt;sup>19</sup>GAO, Climate Change: Various Adaptation Efforts Are Under Way at Key Natural Resource Management Agencies, GAO-13-253 (Washington, D.C.: May 31, 2013).

<sup>&</sup>lt;sup>20</sup>Congressional Budget Office, *Public Spending on Transportation and Water Infrastructure*, Pub. No. 4088 (Washington, D.C.: November 2010).

<sup>&</sup>lt;sup>21</sup>See, for example, NRC, Panel on Strategies and Methods for Climate-Related Decision Support, Committee on the Human Dimensions of Global Change, *Informing Decisions in a Changing Climate* (Washington, D.C.: 2009).

costs of infrastructure or decrease its life span, or both, leading to social, economic, and environmental impacts.

For example, the National Oceanic and Atmospheric Administration estimates that, within 15 years, segments of Louisiana State Highway 1—the only road access to Port Fourchon, which services virtually all deepsea oil operations in the Gulf of Mexico, or about 18 percent of the nation's oil supply—will be inundated by tides an average of 30 times annually due to relative sea level rise. Flooding of this road effectively closes this port. Because of Port Fourchon's significance to the oil industry at the national, state, and local levels, the U.S. Department of Homeland Security, in July 2011, estimated that a closure of 90 days could reduce the national gross domestic product by \$7.8 billion. <sup>22</sup> Figure 1 shows Louisiana State Highway 1 leading to Port Fourchon.

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<sup>&</sup>lt;sup>22</sup>Department of Homeland Security, National Infrastructure Simulation and Analysis Center, Risk Development and Modeling Branch, Homeland Infrastructure Threat and Risk Analysis Center, Office of Infrastructure Protection, In Collaboration with the National Incident Management Systems and Advanced Technologies Institute at the University of Louisiana at Lafayette, *Louisiana Highway 1/Port Fourchon Study* (July 15, 2011).



Figure 1: Louisiana State Highway 1 Leading to Port Fourchon

Source: NOAA.

Despite the risks posed by climate change, we found, in April 2013, that infrastructure decision makers have not systematically incorporated potential climate change impacts in planning for roads, bridges, and wastewater management systems because, among other factors, they face challenges identifying and obtaining available climate change information best suited for their projects. Even where good scientific information is available, it may not be in the actionable, practical form needed for decision makers to use in planning and designing infrastructure. Such decision makers work with traditional engineering processes, which often require very specific and discrete information. Moreover, local decision makers—who, in this case, specialize in infrastructure planning, not climate science—need assistance from experts who can help them translate available climate change information into something that is locally relevant. In our site visits to a limited number

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<sup>&</sup>lt;sup>23</sup>GAO, Climate Change: Future Federal Adaptation Efforts Could Better Support Local Infrastructure Decision Makers, GAO-13-242 (Washington, D.C.: Apr. 12, 2013).

of locations where decision makers overcame these challenges—including Louisiana State Highway 1—state and local officials emphasized the role that the federal government could play in helping to increase their resilience.<sup>24</sup>

Any effective adaptation strategy must recognize that state and local governments are on the front lines in both responding to immediate weather-related disasters and in preparing for the potential longer-term impacts associated with climate change. We reported, in October 2009, that insufficient site-specific data—such as local temperature and precipitation projections—complicate state and local decisions to justify the current costs of adaptation efforts for potentially less certain future benefits. We recommended that the appropriate entities within the Executive Office of the President develop a strategic plan for adaptation that, among other things, identifies mechanisms to increase the capacity of federal, state, and local agencies to incorporate information about current and potential climate change impacts into government decision making. USGCRP's April 2012 strategic plan for climate change science recognizes this need by identifying enhanced information management and sharing as a key objective.

Our April 2013 report on infrastructure adaptation concluded that the federal government could help state and local efforts to increase their resilience by (1) improving access to and use of available climate-related information, (2) providing officials with improved access to local assistance, and (3) helping officials consider climate change in their planning processes.<sup>26</sup> In April 2013 we recommended, among other things, that the Executive Director of USGCRP or other federal entity

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<sup>&</sup>lt;sup>24</sup>To examine consideration of climate change in U.S. infrastructure planning, we visited a nonprobability sample of seven selected locations where decision makers had undertaken such planning—three locations focused on roads and bridges (Washington State Route 522; Interstate-10 Twin Span Bridge near New Orleans, Louisiana; and Louisiana State Highway 1), two locations focused on wastewater management systems (King County Wastewater Treatment Division in Washington and the Milwaukee Metropolitan Sewerage District in Wisconsin), and two National Aeronautics and Space Administration centers (Johnson Space Center in Houston, Texas, and Langley Research Center in Hampton, Virginia).

<sup>&</sup>lt;sup>25</sup>GAO, Climate Change Adaptation: Strategic Federal Planning Could Help Government Officials Make More Informed Decisions, GAO-10-113 (Washington, D.C.: Oct. 7, 2009).

<sup>&</sup>lt;sup>26</sup>GAO-13-242.

designated by the Executive Office of the President work with relevant agencies to identify for decision makers the "best available" climate-related information for infrastructure planning and update this information over time, and to clarify sources of local assistance for incorporating climate-related information and analysis into infrastructure planning, and communicate how such assistance will be provided over time. They have not directly responded to these recommendations, but the President's June 2013 Climate Action Plan and November 2013 Executive Order 13653 on Preparing the United States for the Impacts of Climate Change drew attention to these issues. For example, the Executive Order directs numerous federal agencies, supported by USGCRP, to work together to develop and provide authoritative, easily accessible, usable, and timely data, information, and decision-support tools on climate preparedness and resilience.

We also have work under way exploring, among other things, the risk extreme weather events and climate change pose to defense facilities, public health, agriculture, public transit systems, and federal insurance programs. This work—within the framework of the February 2013 high-risk designation—may identify other steps the federal government could take to limit its fiscal exposure and make our communities more resilient to extreme weather events.

Chairman Carper, Ranking Member Coburn, and Members of the Committee, this concludes my prepared statement. I would be pleased to answer any questions you have at this time.

# GAO Contact and Staff Acknowledgments

If you or your staff members have any questions about this testimony, please contact me at (202) 512-3841 or <a href="mailto:gaffiganm@gao.gov">gaffiganm@gao.gov</a>. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. Alfredo Gomez, Director; Michael Hix, Assistant Director; and Heather Chartier, Diantha Garms, Cindy Gilbert, Richard Johnson, Joseph Dean "Pep" Thompson, and Lisa Van Arsdale made key contributions to this testimony.

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<sup>&</sup>lt;sup>27</sup>More information on the June 2013 Climate Action Plan and Executive Order 13653 can be found here.

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