March 2019

PUERTO RICO HURRICANES

Status of FEMA Funding, Oversight, and Recovery Challenges
Why GAO Did This Study

In 2017 two major hurricanes – Irma and Maria – caused extensive damage throughout Puerto Rico. Hurricane Maria, a Category 4 hurricane, was the most intense hurricane to make landfall in Puerto Rico since 1928, destroying roads, buildings, and cutting power and communication lines, among other things. Puerto Rico estimates that $132 billion will be needed to repair and reconstruct infrastructure and services. FEMA—a component of the Department of Homeland Security (DHS)—is the lead federal agency responsible for assisting Puerto Rico as it recovers. FEMA administers the Public Assistance program in partnership with Puerto Rico to provide funds to rebuild damaged infrastructure and restore critically-needed services.

GAO was asked to review the federal government’s recovery efforts related to the 2017 hurricanes. This report, among other objectives, describes (1) FEMA’s Public Assistance spending in Puerto Rico and oversight efforts of federal recovery funds, and (2) initial challenges with the recovery process.

What GAO Found

The Federal Emergency Management Agency (FEMA) obligated almost $4 billion in Public Assistance grant funding to Puerto Rico as of September 30, 2018 in response to the 2017 hurricanes. FEMA obligated about $3.63 billion for emergency work—emergency measures such as debris removal and generators—and about $151 million for permanent work to repair and replace public infrastructure such as roads (see figure).

Puerto Rico established a central recovery office to oversee federal recovery funds and is developing an internal controls plan to help ensure better management and accountability of the funds. In the interim, FEMA instituted a manual reimbursement process—requiring FEMA to review each reimbursement request before providing Public Assistance funds—to mitigate risk and help ensure financial accountability. FEMA officials stated that they will remove this manual process once the agency approves Puerto Rico’s internal controls plan.

Officials from FEMA and Puerto Rico’s central recovery office and municipalities that GAO interviewed reported initial challenges with the recovery process, including with Public Assistance alternative procedures. Unlike in the standard Public Assistance program where FEMA will fund the actual cost of a project, the Public Assistance alternative procedures allow awards for permanent work projects to be made on the basis of fixed cost estimates to provide financial incentives for the timely and cost-effective completion of work. Challenges identified included concerns about lack of experience and knowledge of the alternative procedures being applied in Puerto Rico; concerns about missing, incomplete, or conflicting guidance on the alternative procedures; and concerns that municipalities have not been fully reimbursed for work already completed in the immediate aftermath of the hurricanes, causing financial hardships in some municipalities.

FEMA officials stated that the agency is taking actions to address reported recovery challenges, such as leveraging existing expertise to train personnel and developing supplemental guidance on alternative procedures and reducing delays in reimbursements. GAO will continue to monitor these issues and plans to report additional findings and recommendations as appropriate later this year.
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### Abbreviations

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<td>Bipartisan Budget Act of 2018</td>
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<td>COR3</td>
<td>Central Office for Recovery, Reconstruction and Resilience</td>
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<td>DHS</td>
<td>Department of Homeland Security</td>
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<td>DRF</td>
<td>Disaster Relief Fund</td>
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<td>EMMIE</td>
<td>Emergency Management Mission Integrated Environment</td>
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<td>FEMA</td>
<td>Federal Emergency Management Agency</td>
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<td>FOMB</td>
<td>Financial Oversight and Management Board</td>
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<td>HSOAC</td>
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<td>Integrated Financial Management Information System</td>
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<td>NOAA</td>
<td>National Oceanic and Atmospheric Administration</td>
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<td>Stafford Act</td>
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March 14, 2019

Congressional Requesters

On September 6, 2017, Hurricane Irma’s eyewall passed 50 nautical miles north of Puerto Rico as a category 5 hurricane, causing severe wind and rain inundation to the main island and significant damage to the island of Culebra. Less than two weeks later, on the morning of September 20, 2017, Hurricane Maria made a direct hit as a category 4 storm on the main island of Puerto Rico.\(^1\) Although the storm moved offshore in the early afternoon of September 20, 2017, tropical storm-force winds continued into the late night hours, causing extensive damage to electrical utilities, roads, bridges, and other public infrastructure throughout Puerto Rico. According to the National Hurricane Center, Hurricane Maria was the most intense hurricane to make landfall in Puerto Rico since 1928. In its recovery plan, Puerto Rico estimates that $132 billion in funding from 2018 through 2028 will be needed to repair and reconstruct the infrastructure damaged by the hurricanes. This includes $30 billion to comprehensively modernize Puerto Rico’s energy sector and improve its resiliency, nearly $5 billion to replace Puerto Rico’s drinking water system, and between $8 to $12 billion to rehabilitate owner-occupied homes that were substantially damaged by the hurricanes, among other things.\(^2\)

The Federal Emergency Management Agency (FEMA), a component of the Department of Homeland Security (DHS), leads the federal effort to mitigate, respond to, and recover from disasters, both natural and manmade.\(^3\) Among other responsibilities, FEMA administers the Public Assistance program in partnership with the Government of Puerto Rico (Puerto Rico), providing grant funding for a wide range of response and recovery activities. These activities include, among other efforts, debris

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\(^1\)The National Oceanic and Atmospheric Administration (NOAA) measures hurricanes on a scale from 1 to 5 with a Category 1 being the least intense and a Category 5 being the most intense. NOAA defines a Category 4 hurricane as one with winds above 130 miles per hour but less than 157 miles per hour. Hurricane Maria made landfall on Puerto Rico as a Category 4 hurricane.


\(^3\)See 6 U.S.C. § 313
removal; life-saving emergency protective measures; and the repair, 
replacement, or restoration of disaster-damaged publicly-owned facilities. 
In addition, FEMA coordinated with Puerto Rico to submit an economic and disaster recovery plan to Congress, as required by the Bipartisan Budget Act of 2018. FEMA also plans to work with Puerto Rico to ensure that it has effective internal controls in place to oversee federal recovery funds.

You asked us to review the federal government’s response and recovery efforts related to the 2017 hurricanes. As part of that effort, we have several reviews ongoing of FEMA’s and Puerto Rico’s disaster recovery planning, oversight, and execution efforts in Puerto Rico. This report provides information on (1) FEMA Public Assistance program spending and actions FEMA and Puerto Rico have taken to provide oversight of federal recovery funds, (2) initial challenges identified by officials from FEMA and Puerto Rico with the recovery process, and (3) Puerto Rico’s economic and disaster recovery plan.

We have another ongoing review that will examine disaster recovery efforts in Puerto Rico and we plan to issue that report in 2019. In addition, we are conducting a broader body of work covering various disaster response and recovery issues, including disaster recovery in the U.S. Virgin Islands and impacted states, and will also be reporting on those issues over the next year.

For this report, we reviewed relevant FEMA Public Assistance program documentation, and we obtained and analyzed data from FEMA’s Emergency Management Mission Integrated Environment (EMMIE) and Integrated Financial Management Information System (IFMIS) databases. These databases include data on Public Assistance program obligations and expenditures related to Hurricanes Irma and Maria in Puerto Rico as of the end of fiscal year 2018. We assessed the reliability of EMMIE and IFMIS data by reviewing existing information about these systems,


5These data do not include obligations and expenditures for direct federal mission assignments, in which a federal agency is tasked with providing eligible emergency work or debris removal services to a territory or state, or for other categories of mission assignments.
interviewing data users and managers responsible for these data, and cross-checking data across disparate sources to ensure consistency. Based on these steps, we determined these data to be sufficiently reliable for the purposes of describing Public Assistance program obligations and expenditures for Hurricanes Irma and Maria in Puerto Rico as of the end of fiscal year 2018. An obligation is a definite commitment that creates a legal liability of the government for the payment of goods and services ordered or received. An expenditure is an amount paid by federal agencies, by cash or cash equivalent, during the fiscal year to liquidate government obligations. For the purpose of this report, an expenditure represents the actual spending by Puerto Rico of money obligated by the federal government.

We interviewed officials from FEMA headquarters, as well as officials from FEMA Region II, the FEMA regional office with oversight for Puerto Rico. Further, in May, August, and September of 2018, we conducted site visits to Puerto Rico to observe hurricane-damaged areas and interview relevant officials. In Puerto Rico, we interviewed FEMA officials at the joint recovery office, a multiagency coordination center established in Guaynabo, Puerto Rico to coordinate major disaster recovery efforts. At this location, we interviewed the federal coordinating officer for Puerto Rico, officials from the Public Assistance program, and officials from FEMA’s finance and administration section to understand FEMA’s recovery operations in Puerto Rico. In addition, we interviewed Puerto Rico government officials from the Central Office for Recovery, Reconstruction and Resilience (COR3)\(^6\) and ten selected municipal

\(^6\)As outlined in the Governor’s order establishing COR3, COR3 will identify, procure, and administer all federal, territory, and private resources available to Puerto Rico related to recovery. Additionally, COR3’s Executive Director will act as the Governor’s Authorized Representative (GAR). The GAR is the designated individual responsible for administering federal disaster assistance programs on behalf of the state, local, tribal, or territorial government and ensuring compliance with all applicable laws, regulations, and FEMA guidance.
the results from our interviews cannot be generalized to all of Puerto Rico’s 78 municipalities; however, they provided important context about the status of recovery efforts in various locations throughout Puerto Rico. We spoke with officials from the Financial Oversight and Management Board (FOMB), a board established in the Puerto Rico Oversight, Management, and Economic Stability Act with broad budgetary and financial control over Puerto Rico. We also interviewed the comptroller of Puerto Rico to obtain her input on Puerto Rico’s government structures and municipal issues. Lastly, we reviewed Puerto Rico government documents related to recovery planning and internal controls.

We conducted this performance audit from March 2018 to March 2019 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.

On September 6, 2017, the eye of Hurricane Irma traveled about 50 nautical miles to the north of the northern shore of Puerto Rico as a category 5 hurricane. Less than two weeks later, Hurricane Maria made landfall as a category 4 hurricane on the main island of Puerto Rico on the morning of September 20, 2017 with wind speeds up to 155 miles per hour. During an August 2018 trip to Puerto Rico, we met with officials from the municipalities of Canóvanas, Cayey, Orocovis, and Toa Baja to gather preliminary information and to develop the semi-structured interviews that took place in September 2018. During the September 2018 visit, we conducted semi-structured interviews with Puerto Rico’s six most populous municipalities and the four municipalities with the highest level of Public Assistance spending per capita in each of FEMA’s four administrative branches in Puerto Rico. According to 2017 Census estimates, the six most populous municipalities are, in order of population: San Juan, Bayamón, Carolina, Ponce, Caguas, and Guaynabo. According to FEMA, the four municipalities with the highest level of Public Assistance spending per capita per FEMA branch as of August 6, 2018 are: Maricao (Branch I), Naranjito (Branch II), Maunabo (Branch III), and Guayanilla (Branch IV).

The Puerto Rico Oversight, Management, and Economic Stability Act established the Financial Oversight and Management Board (FOMB) to provide guidance to Puerto Rico in fiscal responsibility. See Pub. L. No. 114-187, 130 Stat. 549 (2016). FOMB is responsible for certifying Puerto Rico’s financial plans, approving and monitoring budgets and budgetary activities, advising Puerto Rico on financial management, and certifying restructuring and approving actions related to debt issuance. FOMB is also responsible for certifying Puerto Rico’s economic and disaster recovery plan, released on August 8, 2018.
hour. The center of the hurricane moved through southeastern Puerto Rico to the northwest part of the island, as shown in figure 1 below.

Figure 1: The Paths of Hurricanes Irma and Maria
In response to the request of the Governor of Puerto Rico, the President declared a major disaster the day after each hurricane impacted Puerto Rico. Major disaster declarations can trigger a variety of federal response and recovery programs for government and nongovernmental entities, households, and individuals, including assistance through the Public Assistance program. Under the National Response Framework, DHS is the federal department with primary responsibility for coordinating disaster response, and within DHS, FEMA has lead responsibility. The Administrator of FEMA serves as the principal adviser to the President and the Secretary of Homeland Security regarding emergency management.

FEMA’s Public Assistance Program

FEMA’s Public Assistance program provides funding to state, territorial, local, and tribal governments to assist them in responding to and recovering from major disasters or emergencies. As shown in figure 2, Public Assistance program funds are categorized broadly as either

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9In accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), as amended, the President of the United States may declare that a major disaster or emergency exists in response to a Governor’s or tribal chief executive’s request if the disaster is of such severity and magnitude that effective response is beyond the capabilities of a state, tribe, or local government and federal assistance is necessary. See 42 U.S.C. § 5170. Prior to a major disaster or emergency declaration, a Preliminary Damage Assessment is typically used to determine the impact and magnitude of damage and the resulting needs of individuals, businesses, the public sector, and the community as a whole. The territory uses the information collected as the basis for the Governor’s request for a major disaster or emergency declaration. However, based on the severity and magnitude of Hurricanes Irma and Maria, the FEMA Regional Administrator upon consultation with Puerto Rico, determined supplemental federal assistance was necessary before joint federal, state, and local government Preliminary Damage Assessments were completed.

10See 42 U.S.C. § 5170. Presidential Policy Directive-8: National Preparedness establishes a national preparedness system made of an integrated set of guidance, programs, and processes designed to strengthen the security and resilience of the United States through systematic preparation for the natural and human-caused threats that pose the greatest risk. This system breaks preparedness activities into five different lines of effort—prevention, protection, mitigation, response, and recovery—each of which requires a separate planning framework.


12The Public Assistance program represents the largest share of the Disaster Relief Fund (DRF), which is the primary source of federal disaster assistance for state and local governments when a disaster is declared. The DRF is appropriated no-year funding, which allows FEMA to fund, direct, coordinate, and manage response and recovery efforts—including certain efforts by other federal agencies and state and local governments, among others—associated with domestic disasters and emergencies.
“emergency work” or “permanent work.” Within those two broad categories are separate sub-categories. In addition to the emergency work and permanent work categories, FEMA’s Public Assistance program includes category Z, which represents indirect costs, administrative expenses, and other expenses a recipient or subrecipient incurs in administering and managing projects.

![Figure 2: Federal Emergency Management Agency (FEMA's) Public Assistance Program Categories of Work](image)

Puerto Rico’s agencies, such as the Department of Housing; public corporations, such the Puerto Rico Electric Power Authority and the Puerto Rico Aqueduct and Sewer Authority; and Puerto Rico’s 78 municipalities are eligible to apply for the Public Assistance program. FEMA’s Public Assistance program also provides funding for cost-effective hazard mitigation measures to reduce or eliminate the long-term
risk to people and property from future natural and man-made disasters and their effects. Specifically, FEMA provides funding for hazard mitigation measures in conjunction with the repair of disaster-damaged facilities to enhance their resilience during future disasters. For example, a community that had a fire station damaged by a disaster could use Public Assistance funding to repair the facility and incorporate additional measures such as installing hurricane shutters over the windows to mitigate the potential for future damage.

In Puerto Rico, the Public Assistance program is administered through a partnership between FEMA and the recipient (Puerto Rico), which provides funding to eligible subrecipients (local or territory-level entities). Under the standard Public Assistance program process, once the President has declared a disaster, Public Assistance staff work with the recipient or subrecipients to help them document damages, identify eligible costs and work, and prepare requests for Public Assistance grant funds by developing project proposals. Officials then review and obtain approval of projects prior to FEMA obligating funds to reimburse recipients or subrecipients for eligible work.

The Use of Alternative Procedures for Public Assistance Projects in Puerto Rico

The Sandy Recovery Improvement Act of 2013 authorized the use of alternative procedures in administering the Public Assistance program, thereby providing new flexibilities to FEMA, states, territories, and local governments for debris removal, infrastructure repair, and rebuilding projects using funds from this program. The stated goals of the

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13FEMA may fund hazard mitigation measures related to the damaged facilities receiving Public Assistance funding pursuant to section 406 of the Stafford Act, as amended. 42 U.S.C. § 5172; 44 C.F.R. § 206.226. FEMA Public Assistance policy allows three different methods to test for cost-effective hazard mitigation. First, under the 15 percent rule, hazard mitigation measures may amount up to 15 percent of the total eligible cost of repair work on a project. Second, certain hazard mitigation measures that have been predetermined to be cost-effective may qualify under the 100 percent rule, which permits the hazard mitigation as long as it does not exceed 100 percent of the eligible cost of the repair work on a project. Third, for measures that exceed eligible costs, the territory must demonstrate that the measure is cost effective through an acceptable benefit/cost analysis methodology.

14The Sandy Recovery Improvement Act of 2013 amended the Stafford Act by adding Section 428, which authorized FEMA to approve Public Assistance program projects under the alternative procedures provided by that section for any presidentially-declared major disaster or emergency. This section further authorized FEMA to carry out the alternative procedures as a pilot program until FEMA promulgates regulations to implement this section. Pub. L. No. 113-2, div. B, § 1102(2), 127 Stat. 39, amending Pub. L. No. 93-288, tit. IV, § 428 (codified at 42 U.S.C. § 5189f).
alternative procedures are to reduce the costs to the federal government, increase flexibility in the administration of the Public Assistance program, expedite the provision of assistance under the program, and provide financial incentives for recipients of the program for the timely and cost-effective completion of projects.¹⁵

Unlike the standard Public Assistance program where FEMA will fund the actual cost of a project, the Public Assistance alternative procedures allow awards for permanent work projects to be made on the basis of fixed cost estimates to provide financial incentives for the timely and cost-effective completion of work.¹⁶ Under these procedures, if the actual cost of the project exceeds the fixed cost estimate agreed upon by FEMA and the recipient, the recipient or subrecipient is responsible for the additional costs. However, if the actual cost of completing eligible work for a project is below the estimate, the recipient or subrecipient may use the remaining funds for other eligible purposes, such as for additional cost-effective hazard mitigation measures to increase the resiliency of public infrastructure. These funds may also be used for activities that improve the recipient’s or subrecipient’s future Public Assistance operations or planning. Although FEMA had approved alternative procedure grants in 30 states as of April, 2018, in these cases, alternative procedures were used on a project-by-project basis. Puerto Rico’s recovery from the 2017 hurricanes is the first recovery to use alternative procedures for all large permanent work projects.

On October 30, 2017, Puerto Rico requested to use the alternative procedures process for all large-project funding for Public Assistance permanent work, categories C through G.¹⁷ According to FEMA guidance, as part of the alternative procedures process in Puerto Rico, FEMA and Puerto Rico must agree on a group of personnel with cost estimation expertise who will serve as part of a center of excellence. This center of

¹⁵See 42 U.S.C. § 5189f(c).
¹⁷According to a November 2017 amendment to Puerto Rico’s major disaster declaration, due to the extraordinary level of infrastructure damage caused by Hurricane Maria, as well as the financial status of Puerto Rico, officials chose to use the alternative procedures for all large-project funding for Public Assistance categories C through G pursuant to section 428 of the Stafford Act. Puerto Rico; Amendment No. 5 to Notice of a Major Disaster Declaration, 82 Fed. Reg. 53,514 (Nov. 16, 2017). For fiscal year 2018, the large project threshold is $125,500.
excellence will assist FEMA and Puerto Rico in developing cost estimating methodologies to be used for determining fixed cost estimates for Public Assistance permanent work projects. FEMA officials stated that they are in the process of conducting inspections for Public Assistance projects for permanent work and, as of August 2018, had a total list of 10,000 site inspections to complete. FEMA officials stated that October 2019 is their target date for completing all alternative procedures fixed cost estimates for Public Assistance permanent work.  

However, pursuant to 428 guidance published in April 2018, this time frame may be adjusted on a project-by-project basis, based on extenuating circumstances.

Amendment 5 to the President’s disaster declaration imposed a number of grant conditions, including that Puerto Rico establish an oversight authority supported by third-party experts. This authority is to act as the grant recipient for all Public Assistance and hazard mitigation funding to ensure sound project management and enhanced, centralized oversight over FEMA grant distributions. In October 2017, the Governor of Puerto Rico established COR3, a Puerto Rico government office, to plan, guide, and oversee recovery efforts, including administering and overseeing the Public Assistance program. According to FEMA and COR3 officials, COR3 will fulfill the oversight requirements outlined in Amendment 5. According to COR3 officials, COR3 was also established to ensure coordination with FEMA. The Executive Director of COR3 will act as the Governor’s Authorized Representative, which is the designated individual

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18Amendment 5 to the notice of Puerto Rico’s major disaster declaration also directs that estimates for projects exceeding a threshold amount are to be validated by an independent, third-party expert. Puerto Rico; Amendment No. 5 to Notice of a Major Disaster Declaration, 82 Fed. Reg. 53,514 (Nov. 16, 2017). FEMA has determined that this amount will be $5 million.


20COR3 has entered into contracts with four management consulting firms (CGI, Deloitte, ICF, and Navigant) to work on various projects including developing a recovery management plan and internal controls plan, and creating a disaster recovery information web portal, among others. According to COR3, these firms were retained using an open and competitive bid process.
responsible for administering federal disaster assistance programs on behalf of Puerto Rico.\textsuperscript{21} Among other things, COR3 will:

- Identify, procure, and administer all federal, territorial, and private resources available to Puerto Rico related to recovery;
- Provide oversight of subrecipients using risk-based monitoring; and
- Provide technical assistance and advise Puerto Rico’s governmental agencies and municipalities regarding any matter related to recovery.

According to COR3 officials, they will also implement internal controls, policies, and procedures to appropriately manage recovery funds.

COR3 has also launched an online transparency portal intended to provide a breakdown of FEMA Public Assistance and other federal funding made available for disaster recovery in Puerto Rico.\textsuperscript{22}

Bipartisan Budget Act of 2018 Requirements for Puerto Rico and Congressional Oversight of Recovery Efforts

The Bipartisan Budget Act of 2018 (Bipartisan Budget Act) required that Puerto Rico submit an economic and disaster recovery plan to Congress by August 9, 2018, that defines the priorities, goals, and expected outcomes of Puerto Rico’s recovery related to a number of sectors, including, among other things, infrastructure, housing, electric power systems and grid restoration.\textsuperscript{23} The Bipartisan Budget Act also directs the Governor of Puerto Rico to develop the disaster recovery plan in coordination with FEMA, with support and contributions from other federal agencies having designated responsibilities in the National Disaster Recovery Framework.

\textsuperscript{21}44 C.F.R. §§ 206.2(a)(13) and 206.41(d). The Governor’s Authorized Representative is the designated individual responsible for administering federal disaster assistance programs on behalf of the state, local, tribal, or territorial government and ensuring compliance with all applicable laws, regulations, and FEMA guidance.

\textsuperscript{22}https://www.recovery.pr/

\textsuperscript{23}Pub. L. No. 115-123, § 21210, 132 Stat. 64, 108-09 (2018). Other sectors specified in the Bipartisan Budget Act are: economic issues, including workforce development and industry expansion and cultivation; natural and cultural resources; governance and civic institutions; environmental issues, including solid waste facilities; and other infrastructure systems, including repair, restoration, replacement, and improvement of public infrastructure such as water and wastewater treatment facilities, communications networks, and transportation infrastructure.
As of June 2015, Puerto Rico had roughly $66.9 billion in outstanding debt. According to the recovery plan, economic contraction in the years prior to the hurricanes contributed to a severe fiscal crisis and Puerto Rico’s credit rating dropped below investment grade in early 2014, followed by a series of defaults on debt payments. In response to Puerto Rico’s financial crisis, Congress passed and the President signed the Puerto Rico Oversight, Management, and Economic Stability Act in June 2016, which established the FOMB with broad budgetary and financial control over Puerto Rico.24 The Bipartisan Budget Act also permits the FOMB to review any federal funds over $10 million that are designated for Puerto Rico’s response to or recovery from Hurricanes Irma or Maria.25

FEMA obligated nearly $4 billion in Public Assistance funds for Puerto Rico’s emergency work projects, as well as the repair and restoration of its public infrastructure, among other things. In order to provide financial oversight of these funds, Puerto Rico is developing an internal controls plan as well as management policies and procedures that will, in part, help provide financial monitoring. In the interim, FEMA has instituted a manual reimbursement process to mitigate risk and ensure fiscal accountability.

FEMA Obligated Almost $4 Billion, and Puerto Rico Expended Almost $1.7 Billion in Public Assistance Funding as of September 2018

As shown in figure 3, FEMA has obligated $3.63 billion (93 percent) for emergency work (categories A and B), and $151 million (4 percent) for permanent work (categories C through G) in Puerto Rico as of September 30, 2018.26 An additional $136 million (3 percent) was obligated for management and administrative costs.

26FEMA data presented in this report on obligations and expenditures in Puerto Rico represent funding provided through FEMA’s Public Assistance program. These data do not include obligations and expenditures for, among other things, direct federal mission assignments, in which a federal agency is tasked with providing eligible emergency work or debris removal services to a territory or state, or for other categories of mission assignments.
Figure 3: Federal Emergency Management Agency’s Public Assistance Obligations to Puerto Rico by Category of Work, as of September 30, 2018

3% Category Z: Management costs
$135.0 million

Emergency work $3,625.0 million
- Category A: Debris removal $576.3 million
- Category B: Emergency protective measures $3,048.7 million

Permanent work $151.1 million
- Category C: Roads and bridges $135.6 million
- Category D: Water control facilities $0
- Category E: Buildings and equipment $15.2 million
- Category F: Utilities <$0.1 million
- Category G: Parks, recreation, and others $0.2 million


Note: Numbers might not add up due to rounding. Emergency protective measures include activities to lessen the immediate threat to life, public health, or safety such as search and rescue operations and providing medical care and transport. Management costs are indirect costs, administrative expenses, and other expenses a recipient or subrecipient incurs in administering and managing the program that are not directly chargeable to a specific project. These data do not include obligations and expenditures for, among other things, direct federal mission assignments, in which a federal agency is tasked with providing eligible emergency work or debris removal services to a territory or state, or for other categories of mission assignments.

As of the end of fiscal year 2018, Puerto Rico expended about $1.7 billion (about 43 percent) of the almost $4 billion Public Assistance funds obligated by FEMA. Ninety-eight percent of this amount went toward emergency work projects in categories A and B. For example, the Puerto Rico Aqueduct and Sewer Authority expended almost $91 million to cover the costs of generator usage. Aside from generators, one category B
project by the Puerto Rico Emergency Management Agency repaired the emergency warning system for about $9.4 million. A third project put a temporary roof on a Puerto Rico Institute of Culture facility in Vieques for $4,000.

As shown in table 1, the majority of FEMA’s obligations in Puerto Rico as of September 30, 2018, have been for emergency work categories because these projects began soon after the disasters struck and focused on removing debris and providing assistance to address immediate threats to life and property.

Table 1: Federal Emergency Management Agency’s Public Assistance Obligations to Puerto Rico and Expenditures for Hurricanes Irma and Maria by Category of Work, as of September 30, 2018

<table>
<thead>
<tr>
<th>Public Assistance Work Category</th>
<th>Obligated Amount (in millions)</th>
<th>Expended Amount (in millions)</th>
<th>Percent Expended</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: Debris Removal</td>
<td>$576.34</td>
<td>$137.50</td>
<td>24%</td>
</tr>
<tr>
<td>B: Emergency Protective Measures</td>
<td>$3,048.65</td>
<td>$1,513.76</td>
<td>50%</td>
</tr>
<tr>
<td>C: Roads and Bridges</td>
<td>$135.64</td>
<td>$32.40</td>
<td>24%</td>
</tr>
<tr>
<td>D: Water Control Facilities</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>E: Buildings and Equipment</td>
<td>$15.16</td>
<td>$1.24</td>
<td>8%</td>
</tr>
<tr>
<td>F: Utilities</td>
<td>$0.03</td>
<td>$0.01</td>
<td>29%</td>
</tr>
<tr>
<td>G: Parks, Recreational, and Othera</td>
<td>$0.24</td>
<td>$0.04</td>
<td>15%</td>
</tr>
<tr>
<td>Z: Management Costsb</td>
<td>$135.95</td>
<td>$1.49</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$3,912.01</strong></td>
<td><strong>$1,686.43</strong></td>
<td><strong>43%</strong></td>
</tr>
</tbody>
</table>

Legend: An em dash “—” indicates that zero funding corresponds with that category.

Source: FEMA’s Emergency Management Mission Integrated Environment (EMMIE) and Integrated Financial Management Information System (IFMIS) data as of September 30, 2018 | GAO-19-256

Note:

a Other refers to infrastructure such as playground equipment, mass transit facilities, piers, ports and harbors, and other items that do not fit in categories C-F.

b Management costs represent indirect costs, administrative expenses, or other expenses Puerto Rico or a subrecipient incurs in administering and managing the Public Assistance program that are not directly chargeable to a specific project. These data do not include obligations and expenditures for, among other things, direct federal mission assignments, in which a federal agency is tasked with providing eligible emergency work or debris removal services to a territory or state, or for other categories of mission assignments.

In contrast, permanent work projects take time to identify, develop, and ultimately complete as they represent the longer-term repair and restoration of public infrastructure. Funds expended by Puerto Rico for permanent work have been mostly limited to roads and bridges (category C) because impassable roads like the one shown in figure 4 below
They can also get in the way of other disaster recovery efforts.

Figure 4: Collapsed Segment of Road Near Maricao, Puerto Rico, September 2018

Expenditures for roads and bridges (category C) amount to approximately $32 million, while expenditures for other permanent work categories (D-G) total approximately $1 million. According to FEMA officials, Public Assistance projects in categories D-G are still pending prioritization and
formulation. For example, figure 5 below shows a recreational public space along the edge of a river in Maricao. The dashed line indicates where the iron railing and concrete paving used to continue, overlooking the river, before Hurricane Maria. As of September 2018, the municipality was awaiting FEMA assistance to begin restoration.

Figure 5: Missing Rail in Public Space Along River’s Edge, Maricao, Puerto Rico, September 2018

FEMA categorizes Puerto Rico’s subrecipients as commonwealth public corporations, commonwealth agencies, municipalities, and all other entities. As shown in table 2 below, 89 percent of obligations, as of the
end of September 2018, for Puerto Rico were awarded to commonwealth public corporations and commonwealth agencies, with 47 percent awarded to the Puerto Rico Electric Power Authority. Overall, about 43 percent of obligated funds have been expended.

Table 2: Federal Emergency Management Agency (FEMA)’s Public Assistance Obligations to Puerto Rico and Expenditures by Subrecipient (as categorized by FEMA) for Hurricanes Irma and Maria, as of September 30, 2018

<table>
<thead>
<tr>
<th>Subrecipients</th>
<th>Percent of All Obligations to Puerto Rico</th>
<th>Obligated Amount (in millions)</th>
<th>Percent of Obligations Expended</th>
<th>Expended Amount (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Commonwealth Public Corporations and Commonwealth Agencies</td>
<td>89%</td>
<td>$3,477.07</td>
<td>43%</td>
<td>$1,511.82</td>
</tr>
<tr>
<td>Puerto Rico Electric Power Authority (PREPA)</td>
<td>47%</td>
<td>$1,848.72</td>
<td>51%</td>
<td>$939.70</td>
</tr>
<tr>
<td>Puerto Rico Department of Housing</td>
<td>17%</td>
<td>$665.69</td>
<td>42%</td>
<td>$276.78</td>
</tr>
<tr>
<td>Puerto Rico Department of Transportation and Public Works</td>
<td>10%</td>
<td>$390.05</td>
<td>12%</td>
<td>$47.65</td>
</tr>
<tr>
<td>Central Recovery and Reconstruction Office (COR3)</td>
<td>3%</td>
<td>$107.01</td>
<td>1%</td>
<td>$1.49</td>
</tr>
<tr>
<td>Other Commonwealth Public Corporations and Other Commonwealth Agencies a</td>
<td>12%</td>
<td>$465.59</td>
<td>53%</td>
<td>$246.19</td>
</tr>
<tr>
<td>Municipalities of Puerto Rico</td>
<td>11%</td>
<td>$419.20</td>
<td>41%</td>
<td>$173.67</td>
</tr>
<tr>
<td>Other b</td>
<td>0%</td>
<td>$15.75</td>
<td>6%</td>
<td>$0.95</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>$3,912.01</strong></td>
<td><strong>43%</strong></td>
<td><strong>$1,686.43</strong></td>
</tr>
</tbody>
</table>

Source: FEMA’s Emergency Management Mission Integrated Environment (EMMIE) and Integrated Financial Management Information System (IFMIS) data as of September 30, 2018 | GAO-19-256

Note: Numbers might not add up due to rounding. Subrecipient categories (i.e., Commonwealth Public Corporations, Commonwealth Agencies, Municipalities, Other) are as categorized by FEMA. Individual entities in this breakdown were selected on the basis that they comprised ten percent or more of the total Public Assistance obligations to Puerto Rico. Moreover, COR3 was added as well, due to its significant role in Puerto Rico’s disaster recovery and Public Assistance fund administration.

aOther Commonwealth Public Corporations and Commonwealth Agencies as categorized by FEMA include entities such as the Puerto Rico Housing Finance Authority, the Puerto Rico Land Authority, the Puerto Rico Department of Education, the Puerto Rico National Guard, and many others.

bOther, as categorized by FEMA, include entities such as schools and universities, hospitals, community services, and nonprofit organizations. These data do not include obligations and expenditures for, among other things, direct federal mission assignments, in which a federal agency is tasked with providing eligible emergency work or debris removal services to a territory or state, or for other categories of mission assignments.
As previously discussed, Puerto Rico designated COR3 to administer and manage the Public Assistance program in coordination with FEMA. As part of COR3’s recovery oversight role, COR3 officials stated that they are developing an internal controls plan and recovery management policies and procedures with FEMA. According to COR3, these oversight documents will provide detailed guidance on grant application, procurement, payment and cash management, and financial monitoring and reporting, among other things. According to COR3 officials, they have held numerous meetings to coordinate with FEMA and have submitted drafts of the internal controls plan as well as management policies and procedures for FEMA’s consideration. In addition, according to COR3 officials, COR3 plans to provide direct technical assistance related to federal grants management to Puerto Rico’s cabinet-level agencies, public corporations, municipalities and other eligible subrecipients. As part of COR3’s advisory role, COR3 is expected to help Puerto Rico’s agencies, public corporations, municipalities, and some nonprofit entities formulate projects, draft cost estimates, and make funding requests, among other things.

Federal grant award regulations allow FEMA to impose additional specific grant award conditions in specific circumstances, such as to mitigate risk and ensure fiscal accountability of the recipient or subrecipient. According to FEMA, once FEMA obligates funds, the recipient is able to expend funds as necessary. However, in November 2017, according to FEMA officials, the agency instituted a manual reimbursement process for subrecipients in Puerto Rico for federal funds, including Public Assistance funds, to mitigate fiduciary risk and decrease the risk of misuse of funds. Specifically, FEMA officials stated that they decided to institute this process because the government of Puerto Rico had expended funds prior to submitting complete documentation of work performed. According to FEMA officials, they also decided to institute the manual reimbursement process due to Puerto Rico’s financial situation.

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27See 2 C.F.R. §§ 200.205, 200.207; see generally 2 C.F.R. part 200. These additional award conditions may include requiring payments as reimbursements rather than advance payments; withholding authority to proceed to the next phase until receipt of evidence of acceptable performance within a given period of performance; requiring additional, more detailed financial reports, among other conditions.

28COR3 is responsible for collecting and submitting all documentation requested by FEMA from subrecipients.
weaknesses in internal controls, and the large amount of recovery funds, among other things.

This manual reimbursement process requires that COR3 fill out the Office of Management and Budget’s Standard Form 270 and submit supporting documentation before obligated funds can be withdrawn by Puerto Rico through COR3 and reimbursed to subrecipients. 29 Subsequently, FEMA must review the submitted Standard Form 270 and all project documentation for completeness, compliance, and accuracy before disbursing funds to the recipient. In cases where FEMA requires additional documentation to process a Standard Form 270 request, FEMA will submit requests for information asking COR3 to supply the information needed for FEMA to complete the review. 30 FEMA officials said that they aim to complete the entire process described above within ten calendar days, or 15-20 calendar days if FEMA needs to request additional information from COR3. Additionally, FEMA officials stated that the manual reimbursement process is intended as a temporary measure. They will cease the process once FEMA has reviewed the operational effectiveness of COR3’s internal controls and approved the final internal controls plan, which are under review. 31

29 Standard Form 270: Request for Advance or Reimbursement.

30 Additional documentation requested by FEMA to process a Standard Form 270 request includes, among other things, copies of contracts, cost of labor estimates, bid documents, and evidence of payment.

31 As part of our ongoing review, we will continue to monitor COR3’s role in disaster recovery, the development of its recovery management policies, procedures, and plan, and FEMA’s review of these efforts.
FEMA, COR3, and Puerto Rico municipal government officials from ten municipalities we interviewed reported initial challenges with the recovery process, including with Public Assistance alternative procedures. These concerns included (1) workforce capacity constraints, (2) a need for additional guidance, (3) delays related to choosing cost estimators, and (4) reimbursement for emergency work.32

Workforce capacity constraints. FEMA and municipality officials cited concerns about FEMA staff turnover and lack of knowledge about how the Public Assistance alternative procedures are to be applied in Puerto Rico. While several municipal officials we spoke to remarked positively on consistent communication with FEMA officials, municipal officials in six municipalities we visited cited high levels of turnover among FEMA staff as a challenge.33 For example, officials in three municipalities said that discontinuity in FEMA personnel has caused them to have duplicative conversations with FEMA. An official from one municipality described the disruption that had been caused by repeated changes in FEMA personnel, especially when their point of contact at FEMA changed at least six times since the hurricanes.

FEMA officials acknowledged that more personnel with expertise in the alternative procedures process are needed to administer the Public Assistance program and assist subrecipients. According to FEMA officials, FEMA has leveraged existing expertise from personnel in the Federal Coordinating Officer Advisory Group to train new employees to

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32As a part of our ongoing work on the alternative procedures process in Puerto Rico, we plan to conduct interviews with Puerto Rico government agencies in addition to municipalities who have been obligated funds from FEMA through the Public Assistance program. At the time of this report, we met with municipalities only. We chose to initially focus our work on municipalities to learn more about the disaster recovery process at the local government level, where officials are best positioned to speak directly to the impact of the Public Assistance program on the ground. According to the National Disaster Recovery Framework, local governments are primarily responsible for managing local recovery. Puerto Rico’s 78 municipalities are the highest level of local government under the central-level government and each municipality has the legal authority over all matters of a municipal nature. Each municipal government has an executive branch, led by a municipal mayor, and a municipal legislature.

33During interviews with officials from 10 selected municipalities, officials identified various challenges during the course of our discussions. When we report the number of municipalities that identified a particular challenge, this does not necessarily mean that the remaining municipalities did not also experience the challenge. It means that those municipalities did not raise the challenge during the course of our interviews.
increase workforce capacity. FEMA personnel from this group are rotating experts assigned to recovery issues to increase institutional understanding of alternative procedures and train local hires. According to FEMA officials, these local hires can serve as FEMA staff for up to one year before they become reservists. In addition, FEMA officials stated that they have identified contractors with previous experience regarding alternative procedures to provide additional assistance to subrecipients.

Need for additional guidance. Municipal officials cited concerns about a lack of comprehensive guidance for the alternative procedures process. Specifically, officials in eight municipalities we interviewed cited problems with missing, incomplete, or conflicting guidance from FEMA. In addition, officials in four municipalities stated that they are waiting on additional written instructions to establish more clear and consistent guidance. Officials from one municipality told us that the lack of written guidance has meant that the municipality has had to re-submit documents to FEMA multiple times to respond to changing guidance that they have received verbally. Additionally, four municipalities cited missing, incomplete, or conflicting guidance from COR3 as a challenge. However, one municipality noted that the quality of communication with COR3 has improved over time as COR3 has become more established.

According to FEMA officials, they are drafting supplemental guidance for the alternative procedures process with the goal of incorporating lessons learned from prior iterations of the alternative procedures. Similarly, according to COR3 officials, COR3 is currently developing additional guidance and standard operating procedures to help subrecipients, including municipalities and Puerto Rico government agencies, better understand FEMA Public Assistance grant requirements.

Delays related to choosing cost estimators for Puerto Rico. As mentioned previously, FEMA’s guidance for alternative procedures requires that FEMA and Puerto Rico, through COR3, choose personnel with expertise in cost estimation to serve as a center of excellence, which will develop a cost estimating methodology. FEMA has chosen personnel to staff the center of excellence. However, in August 2018, FEMA officials told us that COR3 had not yet finalized their choice of personnel, which

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34Reservists work on an intermittent basis and are deployed as needed. Reservists’ activities can include interviewing disaster survivors; conducting and verifying damage assessments; providing administrative, financial, and logistical support; and performing a wide variety of other tasks as identified by staffing needs and operational requirements.
had delayed the cost estimation process. Subsequently, COR3 officials told us that personnel have been identified to serve on the center of excellence and the final contracting process for these personnel is now in progress.

**Reimbursement for emergency work.** Officials in nine municipalities we spoke to said that they had not been fully reimbursed for emergency work they completed. Further, officials in five municipalities we interviewed stated that the lack of full reimbursement has caused financial hardships. For example, officials in three municipalities said that the lack of full reimbursement has meant that the municipalities have had to pause or delay recovery work due to lack of financial resources. A mayor in one municipality stated that they have scaled back some essential services, such as the frequency of garbage pick-up, while waiting for full reimbursement.

According to FEMA officials, delays in providing reimbursement were due to several factors including a loss in FEMA personnel to process reimbursement requests and a significant increase in the volume of reimbursement requests submitted by COR3 to FEMA. FEMA officials also stated an increasing need to make requests for information to COR3 due to a lack of documentation submitted at the time of the reimbursement request. In response to these factors, FEMA officials told us that they have undertaken new procedures with COR3. For example, according to FEMA officials, COR3 adopted procedures to review the completeness of documentation prior to submitting a reimbursement request to FEMA. FEMA officials stated that the agency is also holding weekly meetings with COR3 to increase coordination, and that FEMA increased the number of personnel devoted to reimbursement reviews. According to officials from FEMA and COR3, these steps have contributed to reduced delays.
In response to the Bipartisan Budget Act, Puerto Rico submitted an economic and disaster recovery plan (recovery plan) to Congress on August 8, 2018. The recovery plan defines the priorities, goals, and expected outcomes of Puerto Rico’s recovery related to building government capacity for the recovery and strengthening of Puerto Rico’s infrastructure, among other things. The recovery plan estimates infrastructure repair and recovery costs of $132 billion and total recovery costs of $139 billion for a time period starting in 2018 and ending in 2028. According to the recovery plan, COR3 will guide recovery investment and policy in the months and years ahead and is intended to serve as a focal point for strategic thought and management of Puerto Rico’s recovery.

The recovery plan is generally responsive to the directives outlined in the Bipartisan Budget Act. For example, Puerto Rico submitted the plan to Congress within 180 days of enactment of the Bipartisan Budget Act. The recovery plan defines priorities, goals, and expected outcomes for Puerto Rico’s recovery effort based on damage assessments conducted by sector. As mentioned earlier, Puerto Rico developed the recovery plan in coordination with FEMA and with support of the U.S. Department of Energy, the U.S. Department of Health and Human Services, and other federal agencies with responsibilities outlined in the National Disaster Recovery Framework.

Additionally, the FOMB of Puerto Rico certified the recovery plan on August 28, 2018, as directed in the Bipartisan Budget Act, but provided two caveats to its certification. First, FOMB expressed concern that the recovery plan lacks sufficient detail of funding sources and estimates a much greater amount of federal funding than the certified fiscal plan for

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37Because section 21210 of the Bipartisan Budget Act includes directives with future implementation deadlines, we did not evaluate whether the plan is responsive to all directives related to the recovery plan. For example, the Act required Puerto Rico, in coordination with FEMA, to produce a report on the progress of achieving the goals set out in the recovery plan every 180 days after its release. The first such report is expected to be released in February 2019. Additionally, the Act required that FOMB use and incorporate damage assessments into its fiscal plan while the plan is in development and in effect. According to COR3, these damage assessments are not yet finalized.
Puerto Rico projects. The recovery plan states that at the time of its release, Puerto Rico had not undergone eligibility reviews in various federal funding programs, and therefore the ability to identify accurate funding sources was limited. COR3 officials confirmed that full recovery funding needs will not be known until all damage assessments are complete, and they will continue to identify and leverage all funding resources as they are made available. Second, FOMB indicated that the recovery plan does not address oversight of federal funds and the recovery process. While the Bipartisan Budget Act does not require specific mechanisms for oversight of federal funding as part of the recovery plan, according to COR3 officials, they plan to implement internal controls, policies, and procedures to provide oversight.

Puerto Rico’s recovery plan outlines 276 “courses of action” (actions)—defined by the plan as “a collection of potential activities, policies, and other actions that could contribute to recovery”—selected by Puerto Rico to align with its future recovery vision. As shown in table 3 below, the actions reflect Puerto Rico’s short-term and long-term recovery vision, organized into three areas. First, the recovery plan proposes “precursor” actions—those that serve as a foundation for all future actions—that will be prioritized for implementation. For example, the recovery plan includes actions to build capacity of municipalities to secure and manage recovery funds, and to improve the quality and volume of public data available to decision makers. Second, the recovery plan proposes a set of actions that aim to build the infrastructure and systems that support Puerto Rico’s economy, society, and disaster resiliency, such as addressing vulnerabilities in Puerto Rico’s electric grid. Finally, the recovery plan proposes a set of actions that address Puerto Rico’s long-term recovery goals, such as developing and enhancing Puerto Rico’s visitor economy.
Table 3: Categories of “Courses of Action” in Puerto Rico’s Recovery Plan

<table>
<thead>
<tr>
<th>“Precursor” Actions</th>
<th>Capital Investments</th>
<th>Long-Term Strategic Initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actions that aim to set the foundation for all other recovery projects and initiatives in seven areas:</td>
<td>Actions to build a strong infrastructure and systems organized into nine areas:</td>
<td>Actions to address Puerto Rico’s long-term recovery goals in eight areas:</td>
</tr>
<tr>
<td>• Building government capacity to handle day-to-day business and recovery efforts</td>
<td>• Energy</td>
<td>• Ocean Economy</td>
</tr>
<tr>
<td>• Availability of high-quality data to support decision making</td>
<td>• Telecommunications</td>
<td>• Visitor Economy</td>
</tr>
<tr>
<td>• Enhance local capacity to secure and manage recovery funds</td>
<td>• Water</td>
<td>• Emergency Services</td>
</tr>
<tr>
<td>• Maximizing the impact of federal funds</td>
<td>• Transportation</td>
<td>• Agricultural Modernization and Processing</td>
</tr>
<tr>
<td>• Supporting local-level planning</td>
<td>• Housing</td>
<td>• Digital Transformation</td>
</tr>
<tr>
<td>• Increasing ease of doing business in Puerto Rico</td>
<td>• Public Buildings</td>
<td>• 21st Century Workforce</td>
</tr>
<tr>
<td>• Reducing barriers to formal work and incentivizing workforce training</td>
<td>• Education</td>
<td>• Entrepreneurship</td>
</tr>
<tr>
<td></td>
<td>• Health</td>
<td>• Advanced Manufacturing</td>
</tr>
<tr>
<td></td>
<td>• Natural Environment</td>
<td></td>
</tr>
</tbody>
</table>

Most individual actions in the recovery plan include initial and recurring cost estimates for the time period from 2018 through 2028. The recovery plan describes all cost estimates as preliminary, and says that more specific cost estimates require completion of damage assessments and more details about the implementation of actions.\textsuperscript{38}

To develop Puerto Rico's disaster recovery plan, FEMA assisted COR3 in retaining the Homeland Security Operational Analysis Center (HSOAC), a federally-funded research and development center operated by the RAND Corporation under contract with DHS. According to FEMA officials, FEMA provided funding and technical assistance, through contractor support, for Puerto Rico to develop the recovery plan, but COR3 and Puerto Rico will be responsible for its implementation.\textsuperscript{39} These officials also stated that Puerto Rico received input and technical assistance from other federal departments, such as those in the Recovery Support Function Leadership Group led by FEMA.\textsuperscript{40}

HSOAC developed the recovery plan in consultation with Puerto Rico by developing a preliminary sector-by-sector assessment of damages and needs caused by Hurricanes Irma and Maria across Puerto Rico. In conjunction with Puerto Rico’s stated vision for the recovery process, HSOAC’s damage assessment report provided the baseline needed to define, compare, and prioritize actions.

\textsuperscript{38}According to the recovery plan, the methods and information used to develop cost estimates varied for each action, but wherever possible rough-order-of-magnitude cost estimates were developed to support high-level planning. Estimates include costs for repairing damaged assets to pre-hurricane conditions or improving them to meet environmental and engineering codes and standards, and when cost-effective, improving their disaster resiliency. Costs are associated with correcting pre-hurricane deficiencies, as well as addressing hurricane damage. Estimates include incremental operations and maintenance costs if those costs increased as a result of the hurricanes. Full operations and maintenance costs were used for facilities that were not being maintained prior to the hurricanes. Some actions, such as proposed policy changes, did not include cost estimates, though the plan acknowledged potential administrative costs. Each action includes a cost range, indicating that estimates will change depending on costs of equipment or labor, and on policy and implementation decisions.

\textsuperscript{39}FEMA awarded HSOAC nearly $27.6 million to assist Puerto Rico in developing its recovery plan and any associated products.

\textsuperscript{40}FEMA chairs the Recovery Support Function Leadership Group, an interagency body comprised of over 20 other federal agencies that coordinate operational, resource, and preparedness issues relating to interagency disaster recovery activities at the national level.
HSOAC worked in teams of sector-specific experts to develop and refine the actions by reviewing reports, proposals, best practices, and other literature. For example, in June 2018, the U.S. Department of Energy released a report on energy resilience for Puerto Rico’s electric grid, containing recommendations for Puerto Rico to consider when developing the Recovery Plan. HSOAC sought feedback from various subject matter experts and stakeholders while developing the recovery plan. According to FEMA officials, FEMA’s joint recovery office delivered interim drafts of the recovery plan to federal agency partners and Puerto Rico for feedback. HSOAC also sought input from local-level stakeholders, including Puerto Rico’s municipal governments. For example, HSOAC commissioned a survey of officials from municipalities to gauge the challenges they faced in the aftermath of the 2017 hurricanes. According to FEMA and HSOAC officials, the survey, along with other input provided by mayors led to the development of actions focused on building the capacity of municipal governments to support recovery efforts.

HSOAC officials noted that while the final recovery plan was submitted to Congress, they will continue to produce products that will assist Puerto Rico and their stakeholders in recovery implementation. HSOAC intends to release updated versions of the recovery plan, including updated damage and needs assessments. Other expected products include detailed descriptions and cost estimates for each action and a lessons learned report. The Bipartisan Budget Act also directs Puerto Rico to develop a public report on the progress made in achieving the recovery plan's goals every 180 days after submission.

FEMA officials explained that the recovery plan serves as a strategic, direction-setting plan for recovery, and does not provide step-by-step or site-by-site guidance on the recovery process. FEMA officials also acknowledged that there may be some overlap between some of the actions in the recovery plan and some of the permanent work funded through FEMA’s Public Assistance program, but that it is COR3’s responsibility to merge and coordinate such recovery efforts.
We provided a draft of this report to DHS and the government of Puerto Rico for review and comment. In its comments, reproduced in appendix I, DHS summarized the amount of Public Assistance funding provided to Puerto Rico through fiscal year 2018. DHS also described FEMA’s temporary manual reimbursement process instituted to mitigate risk and ensure fiscal accountability of taxpayer dollars, and stated that FEMA is committed to supporting Puerto Rico as it finalizes internal controls, management policies and procedures to oversee disaster recovery funds. DHS also provided technical comments, which we incorporated as appropriate.

The government of Puerto Rico provided comments that we reproduced in appendix II. In its comments, the government of Puerto Rico stated that in addition to what was discussed in this report, COR3 achieved progress and faced additional challenges.

This report is a part of an ongoing review of disaster recovery efforts in Puerto Rico. The remainder of our ongoing work will continue to examine Puerto Rico’s recovery process, including implementation of the Public Assistance alternative procedures process and efforts by FEMA and Puerto Rico to oversee disaster recovery funds, including the manual reimbursement process.

If you and your staff have any questions, please contact me at (404) 679-1875 or currie@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 II.

Chris P. Currie
Director, Homeland Security and Justice Issues
List of Requesters

The Honorable Michael Enzi
Chairman
Committee on the Budget
United States Senate

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

The Honorable Rand Paul, M.D.
Chairman
Subcommittee on Federal Spending, Oversight and Emergency Management
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable Maxine Waters
Chairwoman
Committee on Financial Services
House of Representatives

The Honorable Sean Duffy
Ranking Member
Subcommittee on Housing, Community Development, and Insurance
Committee on Financial Services
House of Representatives

The Honorable Al Green
Chairman
Subcommittee on Oversight and Investigations
Committee on Financial Services
House of Representatives

The Honorable Bennie Thompson
Chairman
Committee on Homeland Security
House of Representatives
March 4, 2019

Chris P. Currie
Director, Homeland Security and Justice Issues
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548


Dear Mr. Currie:

Thank you for the opportunity to review and comment on this draft report. The U.S. Department of Homeland Security (DHS) appreciates the U.S. Government Accountability Office’s (GAO) work in planning and conducting its review and issuing this report.

We are pleased that GAO’s draft report recognizes (1) the extent of damages the 2017 hurricanes caused throughout Puerto Rico, (2) that the Federal Emergency Management Agency (FEMA) has obligated nearly $4 billion through fiscal year 2018 in Public Assistance funding for Puerto Rico emergency work projects, as well as the repair of its public infrastructure, among other things, (3) both FEMA and Puerto Rico have taken actions to provide oversight of these Federal recovery funds, and (4) challenges remain for FEMA and Puerto Rico’s Central Office for Recovery, Reconstruction and Resilience (COR3) to fulfill their respective responsibilities to rebuild damaged infrastructure and restore critically-needed services, while ensuring proper stewardship of taxpayer dollars.

One way FEMA is mitigating risk and ensuring fiscal accountability of taxpayer dollars is through a manual reimbursement process prohibiting Puerto Rico’s unrestricted withdrawal of Public Assistance funds. This temporary process was instituted due to Puerto Rico’s financial situation, weaknesses in internal controls, and the large scope of recovery funds, among other things. The process helps ensure that funds are expended only for projects that have appropriate supporting documentation, thus reducing the chance that FEMA will later need to recover funding found to be associated with unsupported costs. As the draft report relates and to its credit, Puerto Rico is developing an internal controls plan as well as management policies and procedures that will, in part,
help provide financial monitoring. This manual process will end once FEMA has reviewed the operational effectiveness of COR3’s internal controls and approved the final internal controls plan, which are currently under review.

FEMA remains committed to supporting COR3 efforts to finalize guidance on grant application, procurement, payment and cash management, and financial monitoring and reporting for both COR3 and its sub recipients. DHS remains committed to supporting our citizens and first responders before, during and after disasters.

We noted that the draft report did not contain any recommendations. Technical comments were previously provided under separate cover. We look forward to GAO’s continued work related to Puerto Rico hurricane recovery efforts and any formal recommendations once that work is complete.

Again, thank you for the opportunity to review and comment on this draft report. Please contact me if you have any questions. We look forward to working with you in the future.

Sincerely,

JIN H. CRUMPACKER, CIA, CFE
Director
Departmental GAO-OIG Liaison Office
Appendix II: Comments from the Government of Puerto Rico

January 30, 2019

The Honorable Gene L. Dodaro
Comptroller General of the United States
U.S. General Accountability Office
441 G Street, NW
Washington, DC 20548


Dear Mr. Dodaro,

I am writing with regard to the U.S. Government Accountability Office (GAO) report, GAO-19-256, Puerto Rico Hurricanes: Status of FEMA Funding, Oversight, and Recovery Challenges. The Government of Puerto Rico and the Central Recovery and Reconstruction Office (COR3) would like to thank GAO’s engagement team for their efforts to date in compiling this document and for the opportunity to review and provide comment for inclusion in the final version of the GAO Report. COR3 believes that there are areas within the document where progress by COR3 has been achieved and can be further defined. Additionally, though some were described in the report, there are additional challenges to Puerto Rico’s recovery that remain and need to be addressed. There exists a strong partnership between COR3 and local FEMA leadership and we are confident that our continued collaboration and mutual desire to support the U.S. citizens of Puerto Rico will ensure success in our recovery efforts.

Below are the official comments and feedback of the Government of Puerto Rico.

1. COR3 Committed to Transparency and Accountability in Recovery: COR3 has established a comprehensive and effective system, which includes policies and procedures, to manage federal funding and promote accountability and transparency. This system is modeled after systems successfully implemented by other states in disaster recovery to facilitate a strong recovery for Puerto Rico. COR3 has implemented policies and procedures to support the strategic focus of short and long-term recovery efforts to include appropriate internal controls, procurement processes, grant monitoring, cash and property management processes, and reporting. Additionally, COR3 is developing a strong subrecipient monitoring, training, and technical assistance program to support the recovery of other Puerto Rico government agencies, municipal governments, and private non-profits.

2. Need Consistent FEMA Guidance on Implementation of Section 428: FEMA has required Puerto Rico to develop all permanent work processes using the provisions of Section 428 of the Stafford Act. Section 428, also known as alternative procedures, has never been applied on such a large scale before and the lack of experienced FEMA staff or clear and consistent guidance from FEMA has contributed to untenable delays in recovery efforts. Additionally, the difficulty with Section 428 is that it requires a “fixed cost estimate,” which, once agreed upon by FEMA, the recipient, and the subrecipient, cannot...
Appendix II: Comments from the Government of Puerto Rico

be changed. Under a typical PA program project, the grant amount is estimated and if circumstances are discovered during the repair/replacement period that change the scope of work or cost, the project can be amended or versioned. The fixed cost estimate requirement, the review of a project before obligation of funding is onerous and time consuming, which is causing the entire recovery process to be delayed.

3. **Extension of 428 Timeline Needed to Address Delays in Fixed Cost Estimate Approval by FEMA:** FEMA has set a deadline of October 2019 for the completion of all Fixed Cost Estimates for Permanent Work. As of January 2019, only eleven Fixed Cost Estimates have been completed and agreed upon. Due to the onerous and disadvantageous nature of this process, COR3 does not believe that it is possible for FEMA and COR3 to meet the October 2019 deadline and an extension will be required.

4. **Need to Remove Unnecessary Duplication in 428 Implementation:** Currently, both FEMA and the subrecipients are doing separate and detailed analysis of damages (Damage Description and Dimensions (DDD)) and costs. This process is duplicative and time-consuming and has contributed to the delay in obligation of the PA projects. Both the Sandy Recovery Act of 2013 and the Disaster Recovery Reform Act of 2018, encourage FEMA to rely on the certified cost estimate of the subrecipient’s licensed engineer. COR3 has recommended to FEMA that they follow the Congressional intent of these two pieces of legislation concerning the damage assessment process, and rely on the product of a professionally licensed engineer, thus reducing duplication of effort and expediting the process of funding eligible projects.

5. **COR3 Ready for FEMA to End 270 Manual Drawdown Process That is Causing Undue Burdens and Delays in Recovery:** FEMA implemented a manual drawdown process, more commonly known as the “270 process,” for reimbursements under the PA program. The process places an undue burden on the applicant and subrecipients that significantly delays the reimbursement process. Because of the economic condition of most subrecipients across Puerto Rico, a lengthy delay in reimbursement means they may not be able to pay contractors in a timely manner. Under the relevant provisions of Titles 2 and 44 of the Code of Federal Regulation (CFR), states/recipient are in fact responsible for managing the reimbursement of funding to subrecipients and have the flexibility under the CFR provision to develop a system that supports the needs of subrecipients. It is our belief that FEMA has never implemented such manual drawdown for any previous disaster in the nation. However, following guidance from FEMA, COR3 sourced highly qualified subject matter specialists experienced with the FEMA programs; COR3 developed compliant policies and procedures (patterned after those implemented in other states), which have been reviewed and fully coordinated with FEMA. COR3 has demonstrated to FEMA that we are prepared to assume the process; however, FEMA has placed additional burdensome conditions on COR3 that will not allow us to be responsive to the needs of subrecipients. We understand and are willing to assume the full responsibility and risk associated with this role and view this as necessary to facilitate the speed of the recovery. Without the flexibility to manage the process as allowed by the CFR, COR3 cannot accept management of the reimbursement process.

6. **Congressional Intent on Pre-Existing Conditions Waiver Must be Respected for Successful Recovery:** On February 9, 2018, President Donald Trump signed into law the Bipartisan Budget Act of 2018 (BBBA), P.L. 115-123. The legislation passed by comfortable margins in both the U.S. Senate (71-28) and the U.S. House of Representatives (240-186). The legislation extended funding of federal government operations, increased the allowable discretionary spending levels for defense and non-defense programs, lifted the debt ceiling for borrowing by the federal government, and provided for
disaster relief funding. The legislation included several provisions that impact Puerto Rico. One provision of the BBA, Section 20601, gives FEMA the authority to provide assistance to restore disaster-damaged facilities or systems to industry standard and to restore functionality of the disaster-damaged facility or system without regard to pre-disaster condition. This provision was included in the legislation and approved by Congress and the Administration for one very important reason: to ensure that the large investment of federal taxpayer monies into the recovery efforts on Puerto Rico and the U.S. Virgin Islands did not end up throwing "good money after bad" by restoring facilities to a condition that would only cause them to continue to deteriorate, put people back into at-risk situations in sub-standard facilities, and result in both buildings and infrastructure not being reconstructed in a manner that meets current best-practices and standards. To do otherwise would have been shortsighted and would not only waste the many billions of dollars of taxpayer funds that would be invested in Puerto Rico and the U.S. Virgin Islands, but also put the taxpayer at extraordinary risk the next time a hurricane or other event caused widespread impacts to the islands. Unfortunately, since the passage of the BBA, the Administration has taken many steps to narrow or eliminate eligibility under Section 20601. One of our main concerns is FEMA’s recent position that it will not implement BBA Section 20601 and that Section 406 of the Stafford Act (PA Program) regulations trump the BBA in counter Congressional intent to provide Puerto Rico sufficient funding to allow structures to be rebuilt without funding reductions for pre-existing condition that they cannot afford, and without missing opportunities to improve, modernize, and make their facilities and systems more resilient from future disasters. We believe these actions, taken in total, represent an effort to undermine the Congressional intent of the BBA Section 20601, and it also puts Puerto Rico at great risk that its entire recovery effort could “stall” due to lack of necessary funding to restore damaged buildings and infrastructure.

In closing, I want to thank GAO for its efforts in preparing this report. I hope that the comments contained herein are helpful. Should you have any questions or would like to discuss our comments further, please feel free to contact me at your convenience.

Sincerely,

[Signature]

[Name, Title]

Executive Director
Governor’s Authorized Representative

cc: Chris P. Currie, Director, Homeland Security and Justice Issues, GAO
Appendix III: GAO Contact and Staff Acknowledgments

<table>
<thead>
<tr>
<th>GAO Contact</th>
<th>Chris Currie, (404) 679-1875 or <a href="mailto:CurrieC@gao.gov">CurrieC@gao.gov</a>.</th>
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<tr>
<td>Staff Acknowledgments</td>
<td>In addition to the contact named above, Joel Aldape (Assistant Director), Pedro Almoguera, Aditi Archer, Michelle Bacon, Sylvia Bascope, Lilia Chaidez, Taylor Hadfield, Danielle Pakdaman, Lorraine Ettaro, Eric Hauswirth, Heidi Nielson, and Kevin Reeves made key contributions to this report.</td>
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