



February 2018

2017 DISASTER CONTRACTING

Observations on Federal Contracting for Response and Recovery Efforts

GAO Highlights

Highlights of [GAO-18-335](#), a report to congressional requesters

Why GAO Did This Study

The 2017 hurricane season affected approximately 25.8 million people and caused an estimated \$265 billion dollars in damages, according to FEMA and the National Oceanic and Atmospheric Administration.

GAO was asked to review federal contracting activity to support the work of FEMA and other federal agencies related to the response to the 2017 hurricanes. This is the first report in a series of GAO reports on this issue. This report provides an overview of contract obligations as of December 31, 2017, for three major hurricanes—Harvey, Irma, and Maria. Future reports on this subject will focus on the planning, execution, and monitoring of federally awarded contracts.

GAO analyzed data from the Federal Procurement Data System-Next Generation through December 31, 2017; met with officials at the headquarters of FEMA and U.S. Army Corps of Engineers; and met with federal officials at the Joint Field Offices—multiagency coordination centers established by FEMA—in Austin, Texas (Harvey), Orlando, Florida (Irma), San Juan, Puerto Rico (Irma and Maria), and St. Croix, U.S. Virgin Islands (Irma and Maria).

What GAO Recommends

GAO is not making any recommendations in this report.

View [GAO-18-335](#). For more information, contact Marie A. Mak at (202) 512-4841 or makm@gao.gov.

February 2018

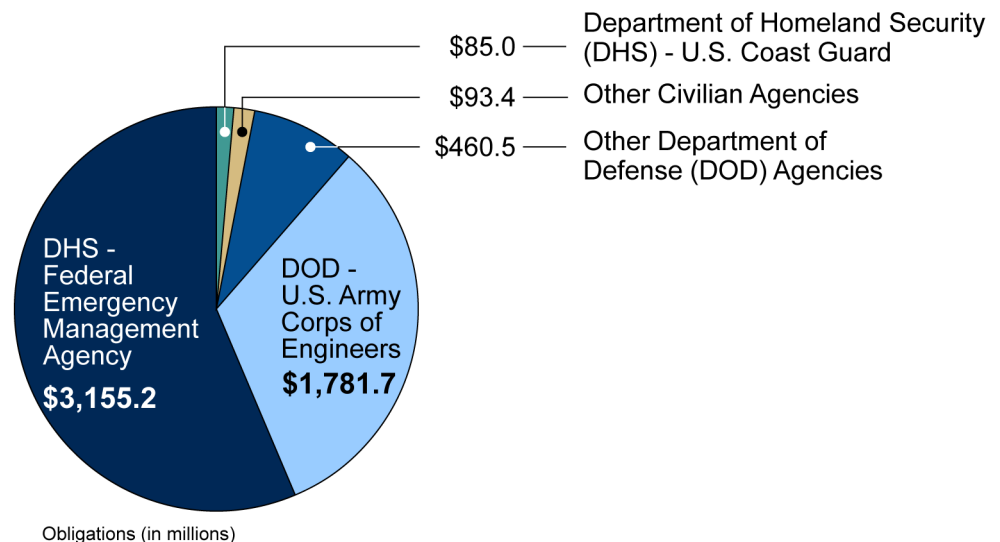
2017 DISASTER CONTRACTING

Observations on Federal Contracting for Response and Recovery Efforts

What GAO Found

As of December 31, 2017, 19 federal agencies had entered into contracts and obligated over \$5.6 billion on those contracts to support efforts related to Hurricanes Harvey, Irma, and Maria. The Department of Homeland Security, including the Federal Emergency Management Agency (FEMA), and Department of Defense components, including the U.S. Army Corps of Engineers, accounted for approximately 97 percent of those obligations. (See figure below for top contracting agencies.)

Contract Obligations by Top 10 Contracting Agencies, in Support of Hurricanes Harvey, Irma, and Maria, through December 31, 2017



Source: GAO analysis of Federal Procurement Data System-Next Generation data. | GAO-18-335

Federal agencies have obligated more than \$2 billion for products, such as food, water, and shelter, and about \$3.6 billion for services, such as power restoration.

The rate of competition for federal contracts was higher in the immediate aftermath of the three recent hurricanes GAO examined than for Hurricane Katrina during the same time period. Federal agencies are generally required to award contracts based on full and open competition. However, an agency may award a contract noncompetitively when the need for goods and/or services is urgent—as in the case of a natural disaster. GAO found, for the three hurricanes:

- the percentage of total obligations reported under competitive contracts was 73 percent as of December 31, 2017; and
- the percentage of contracts awarded competitively within the first 90 days after each hurricane's landfall was approximately 74 percent—an improvement compared to the first 90 days after Hurricane Katrina's landfall, when the competition rate for contracts was about 53 percent.

Contents

Letter		1
	Background	3
	Observations on Contract Obligations for the 2017 Hurricanes	6
	Agency Comments	13
Appendix I	Observations on Federal Contracting for Hurricanes Harvey, Irma, and Maria	15
Appendix II	GAO Contact and Staff Acknowledgements	22
Figures		
	Figure 1: Timeline and Category Levels of 2017 Major Hurricanes	4
	Figure 2: Obligations in the First 90 Days Post Landfall and as of December 31, 2017 for the Top Eight Hurricane Events by Contract Obligations (in constant calendar year 2017 dollars)	7
	Figure 3: Contract Obligations by Top 10 Contracting Agencies in Support of Hurricanes Harvey, Irma, and Maria, through December 31, 2017	8
	Figure 4: Top 10 Products in Terms of Contract Obligations in Support of Hurricanes Harvey, Irma, and Maria Combined through December 31, 2017, and Proportion of Obligations by Agency	9
	Figure 5: Top 10 Services in Terms of Contract Obligations in Support of Hurricanes Harvey, Irma, and Maria Combined through December 31, 2017, and Proportion of Obligations by Agency	10
	Figure 6: Extent of Competition in Support of Hurricanes Harvey, Irma, and Maria through December 31, 2017	11
	Figure 7: Hurricane Harvey Storm Damage	16
	Figure 8: Agency Contract Obligations in Support of Hurricane Harvey	16
	Figure 9: Top 5 Products in Terms of Contract Obligations in Support of Hurricane Harvey through December 31, 2017, and Proportion of Obligations by Agency	17
	Figure 10: Top 5 Services in Terms of Contract Obligations in Support of Hurricane Harvey through December 31, 2017, and Proportion of Obligations by Agency	17

Figure 11: Hurricane Irma Storm Damage	18
Figure 12: Agency Contract Obligations in Support of Hurricane Irma	18
Figure 13: Top 5 Products in Terms of Contract Obligations in Support of Hurricane Irma through December 31, 2017, and Proportion of Obligations by Agency	19
Figure 14: Top 5 Services in Terms of Contract Obligations in Support of Hurricane Irma through December 31, 2017, and Proportion of Obligations by Agency	19
Figure 15: Hurricane Maria Storm Damage	20
Figure 16: Agency Contract Obligations in Support of Hurricane Maria	20
Figure 17: Top 5 Products in Terms of Contract Obligations in Support of Hurricane Maria through December 31, 2017, and Proportion of Obligations by Agency	21
Figure 18: Top 5 Services in Terms of Contract Obligations in Support of Hurricane Maria through December 31, 2017, and Proportion of Obligations by Agency	21

Abbreviations

The Corps	U.S. Army Corps of Engineers
DHS	Department of Homeland Security
DOD	Department of Defense
FAR	Federal Acquisition Regulation
FEMA	Federal Emergency Management Agency
FPDS-NG	Federal Procurement Data System-Next Generation
PKEMRA	Post-Katrina Emergency Management Reform Act of 2006
Stafford Act	Robert T. Stafford Disaster Relief and Emergency Assistance Act

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



February 28, 2018

Congressional Requesters

The 2017 hurricane season affected approximately 25.8 million people, or nearly 8 percent of the United States population, according to the Federal Emergency Management Agency (FEMA). The National Oceanic and Atmospheric Administration has estimated the total cost of the three major 2017 hurricanes to be approximately \$265 billion, placing them among the top five costliest hurricanes on record in the United States along with Hurricanes Katrina and Sandy. In September 2015, we found that contracts play a key role in immediate disaster response and the longer-term community recovery.¹ Following the 2017 hurricane season, federal agencies continue to contract for essential products, such as food, water, and temporary housing for displaced residents and services such as power line restoration.

You asked us to review the federal government’s response to the 2017 hurricanes, specifically in terms of the extent of federal contracting activity to support the efforts of FEMA and other federal agencies. This is our first report in response to your request and we will issue additional future products focused on planning, execution, and monitoring of federally awarded contracts. In this report, we provide an overview of contract obligations through the end of calendar year 2017 for Hurricanes Harvey, Irma, and Maria—the three major hurricanes to make landfall in the United States during the season.² In addition, GAO is conducting a broader body of work covering various disaster response and recovery issues and will be reporting on those issues in the coming months.

To conduct this work, we used data from the Federal Procurement Data System-Next Generation (FPDS-NG) through December 31, 2017, to determine the federal departments and agencies with the most contract

¹GAO, *Disaster Contracting: FEMA Needs to Cohesively Manage Its Workforce and Fully Address Post-Katrina Reforms*, [GAO-15-783](#) (Washington, D.C.: Sept. 29, 2015).

²Hurricane Nate made landfall as a Category 1 storm on October 7, 2017 along the Gulf Coast. While FEMA did issue major disaster declarations for select counties in that region, it did not classify the storm as a major hurricane.

obligations for each storm,³ the types of products and services procured, and rates of competition.⁴ We met with federal officials at the Joint Field Offices in Austin, Texas (Harvey); Orlando, Florida (Irma); San Juan, Puerto Rico (Irma and Maria); and St. Croix, United States Virgin Islands (Irma and Maria). Joint Field Offices are temporary multiagency coordination centers—housing federal, state, local, tribal, nongovernmental, and private sector organizations—established locally by FEMA to facilitate field-level domestic incident management activities related to prevention, preparedness, response, and recovery. We also met with officials at FEMA’s headquarters and at the U.S. Army Corps of Engineers’ (the Corps) headquarters, who provided additional information on federal contracting activity in response to the 2017 hurricane season.

We assessed the reliability of FPDS-NG data by reviewing existing information about the FPDS-NG system and the data it collects—specifically, the data dictionary and data validation rules—and performed electronic testing. We determined the FPDS-NG data were sufficiently reliable for the purposes of this report.

We conducted this performance audit from August 2017 to February 2018 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

³For the purposes of this report, contract obligations include obligations against what FPDS-NG categorizes as definitive vehicles (definitive contracts and purchase orders that have a defined scope of work that do not allow for individual orders under them), and against what FPDS-NG categorizes as indefinite delivery vehicles (orders under the Federal Supply Schedule, orders/calls under blanket purchase agreements, orders under basic ordering agreements, orders under government-wide acquisition contracts, and orders under other indefinite delivery vehicles, such as indefinite delivery, indefinite quantity contracts).

⁴For purposes of this report, competition rate is the percentage of total obligations associated with contracts awarded competitively. We calculated competition rates as the percentage of obligations on competitive contracts and orders over all obligations on contracts and orders annually. Competitive contracts included contracts and orders coded in FPDS-NG as “full and open competition,” “full and open after exclusion of sources,” and “competed under simplified acquisition procedures” as well as orders coded as “subject to fair opportunity” and as “fair opportunity given,” and “competitive set aside.” Noncompetitive contracts included contracts and orders coded in FPDS-NG as “not competed,” “not available for competition,” and “not competed under simplified acquisition procedures,” as well as orders coded as an exception to “subject to fair opportunity,” including “urgency,” “only one source,” “minimum guarantee,” “follow-on action following competitive initial action,” “other statutory authority,” and “sole source.”

the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

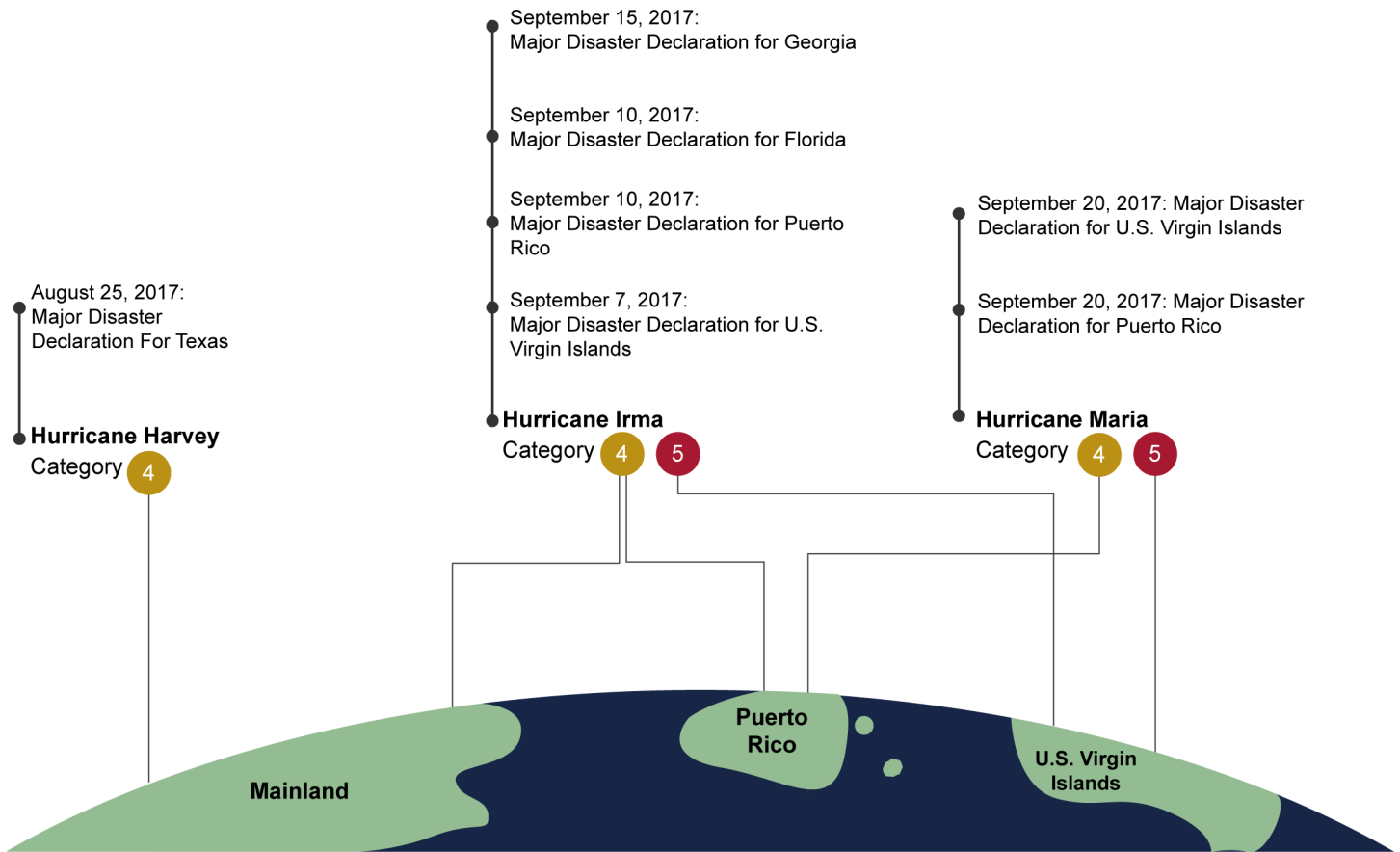
Background

The 2017 Hurricane Season

Three major hurricanes made historic landfalls in the United States in 2017. Hurricanes Harvey and Irma marked the first time two Atlantic Category 4 hurricanes hit the continental United States during the same season, and Hurricane Maria was the first Category 4 hurricane to make landfall on the main island of Puerto Rico in 85 years.⁵ See figure 1 for a timeline of these events.

⁵The Saffir-Simpson Hurricane Wind Scale is a 1 to 5 rating based on a hurricane's sustained wind speed, and it estimates potential types of property damage within each category. Hurricanes reaching Category 3 and higher are considered major hurricanes because of their potential for significant loss of life and damage. Category 4 hurricanes carry sustained winds of 130-156 miles per hour.

Figure 1: Timeline and Category Levels of 2017 Major Hurricanes



Source: GAO analysis of Federal Emergency Management Agency data. | GAO-18-335

Note: According to agency officials, contracting activity in response to the three hurricanes also occurred outside of the areas with major disaster declarations listed in the figure, such as in areas where the Federal Emergency Management Agency made emergency declarations.

Overview of Federal Disaster Response and Recovery

When hurricanes hit, state and local entities are typically responsible for disaster response efforts, but the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) establishes a process by which a state may request a presidential disaster declaration to obtain federal

assistance.⁶ According to the Department of Homeland Security's (DHS) National Response Framework—a guide to how the federal government, states and localities, and other public and private sector institutions should respond to disasters and emergencies—the Secretary of Homeland Security is responsible for ensuring that overall federal preparedness actions are coordinated to prevent gaps in the federal government's efforts to respond to all hazards, including hurricanes.

The National Response Framework identifies 14 emergency support functions that serve as the federal government's primary coordinating structure for building, sustaining, and delivering disaster response efforts across more than 30 federal agencies. Each function defines specific functional areas—such as communication, transportation, and energy—and designates a federal department or agency as the coordinating agency. For example, provision of assets and services related to public works and engineering, such as temporary roofing or power, are coordinated by the Corps, a component of the Department of Defense (DOD). The framework also designates FEMA, a component of DHS, to lead the coordination of the federal disaster response efforts across 30 federal agencies.

FEMA coordinates disaster response efforts through mission assignments—work orders it issues that direct another federal agency to utilize its authorities and the resources granted to it under federal law. Mission assignments are authorized by the Stafford Act and might consist of federal operations support or direct federal assistance.

- Federal operations support includes technical, operational, and logistical support to another federal agency in anticipation of, or in response to, a presidential declaration.
- Direct federal assistance includes the provision of goods and services, such as medical services and temporary power equipment, to affected state and local jurisdictions, following a presidential declaration and upon request from a state, local, tribal or territorial government for federal assistance. This assistance can come in the form of federal contracts.

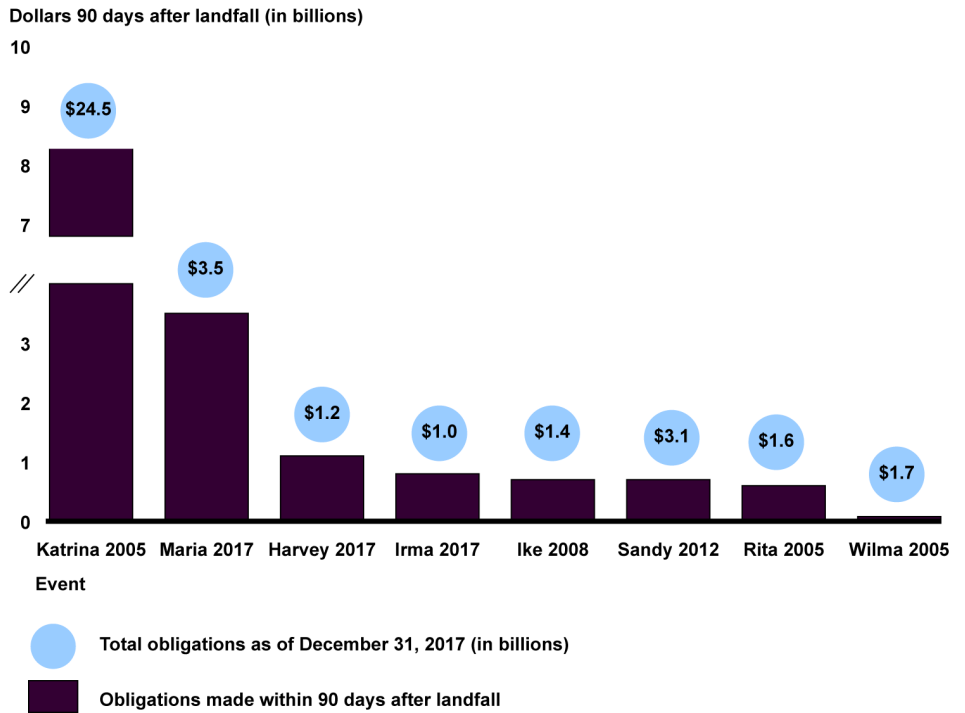
⁶42 U.S.C. § 5170. The Stafford Act, as amended, permits the President to declare a major disaster after a state's governor or chief executive of an affected Indian tribal government—a governing body of an Indian or Alaska Native tribe, band, nation, pueblo, village, or community that is federally recognized—finds that the disaster is of such severity and magnitude that effective response is beyond his or her own local capacities.

This report focuses on federal contracts. The report does not include contracts awarded by state and local entities in response to the hurricanes, such as debris removal contracts, which may be eligible for reimbursement through federal disaster assistance grant programs. FEMA resources in support of a disaster may also be provided through interagency agreements, grants, or memorandums of agreement/understanding; however, this report does not include these alternative forms of assistance.

Observations on Contract Obligations for the 2017 Hurricanes

Historically, federal contracts comprise a notable share of federal expenditures for hurricane response. It can take years to fully account for federal contract obligations resulting from a hurricane. For example, federal agencies are still making contract obligations as part of the recovery efforts as far back as Hurricanes Sandy and Katrina, which occurred in 2012 and 2005, respectively. Early estimates for the 2017 hurricanes already place them among the most expensive hurricanes in terms of federal contract obligations since 2005, when FPDS-NG began tracking information by hurricane. For example, within the first 90 days after its landfall, obligations for Hurricane Maria surpassed total obligations for Hurricane Sandy—\$3.38 billion compared to \$3.08 billion. See figure 2.

Figure 2: Obligations in the First 90 Days Post Landfall and as of December 31, 2017 for the Top Eight Hurricane Events by Contract Obligations (in constant calendar year 2017 dollars)



Source: GAO analysis of Federal Procurement Data System-Next Generation data. | GAO-18-335

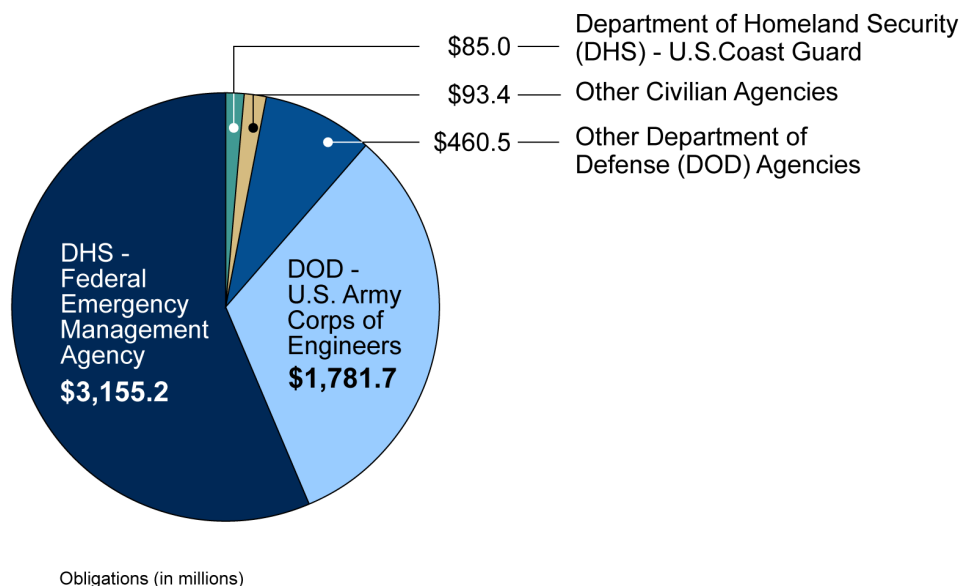
Note: FEMA officials told us that contracts awarded in support of the U.S. Virgin Islands after Hurricane Maria impacted the islands may all be coded under Hurricane Maria, regardless of whether the contract responds to needs from Hurricane Irma or Hurricane Maria.

As of December 31, 2017, 19 federal departments had obligated over \$5.6 billion for contracts in support of the response and recovery efforts for Hurricanes Harvey, Irma, and Maria.⁷ So far, DHS and DOD account for approximately 97 percent of total contract obligations across 19

⁷In addition to the Departments of Homeland Security and Defense, the following departments obligated funds for contracts in response to the three hurricanes—the Environmental Protection Agency; the Departments of Health and Human Services, Transportation, Veterans Affairs, Justice, Interior, Commerce, Agriculture, State, and Energy; Small Business Administration; General Services Administration; Social Security Administration; Corporation for National and Community Service; Agency for International Development; National Aeronautics and Space Administration; and the Broadcasting Board of Governors.

federal departments. Figure 3 provides details on the top 10 contracting agencies' contract obligations in support of the three hurricanes.

Figure 3: Contract Obligations by Top 10 Contracting Agencies in Support of Hurricanes Harvey, Irma, and Maria, through December 31, 2017

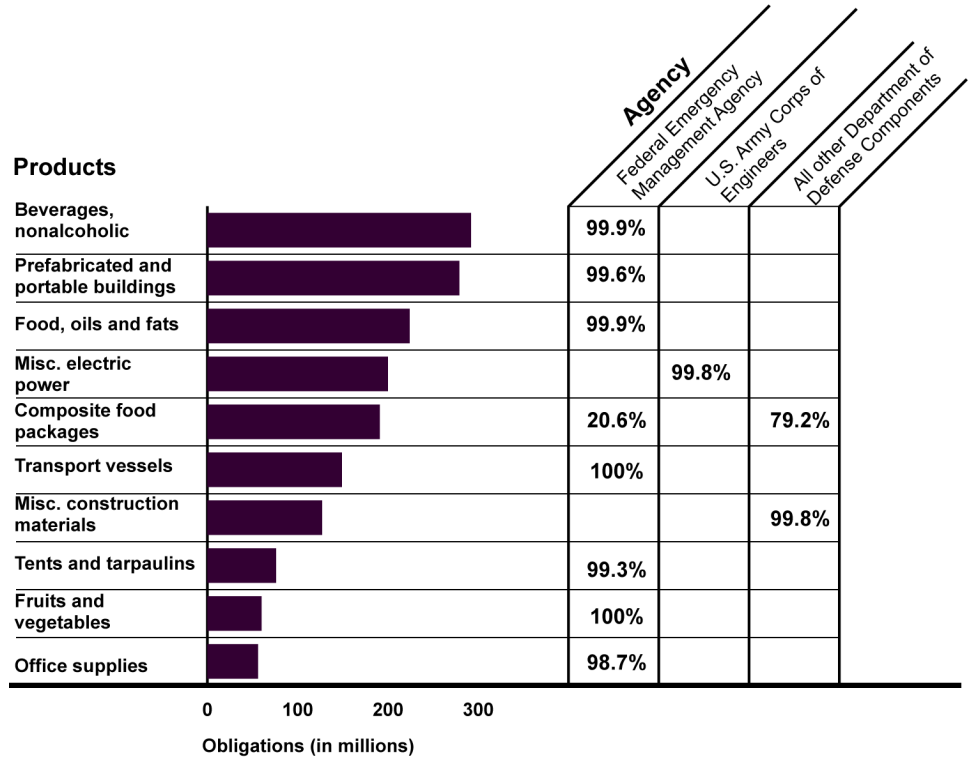


Source: GAO analysis of Federal Procurement Data System-Next Generation data. | GAO-18-335

Note: Other Department of Defense agencies in the top 10 include the Defense Logistics Agency, Department of the Navy, and Department of the Army (excluding the U.S. Army Corps of Engineers). Other civilian agencies in the top 10 include the Environmental Protection Agency, Department of Transportation's Maritime Administration, Small Business Administration, and the Department of Veterans Affairs.

Federal agencies procured a variety of products and services through contracts in response to the hurricanes, largely for essential life sustaining products and services, such as food, water, power, and lodging for survivors. Agencies obligated more than \$2 billion for products and about \$3.6 billion for services. Figure 4 outlines the top 10 products across the three hurricanes, which account for about 80 percent of all contract obligations for products. For example, FEMA and other agencies obligated more than \$768 million for food and beverages and about \$279 million for prefabricated buildings, such as manufactured housing units to provide lodging. FEMA also obligated about \$150 million for transport vessels, such as passenger ships to house survivors and first responders, as well as cargo vessels to ship essential supplies to Puerto Rico and the U.S. Virgin Islands.

Figure 4: Top 10 Products in Terms of Contract Obligations in Support of Hurricanes Harvey, Irma, and Maria Combined through December 31, 2017, and Proportion of Obligations by Agency



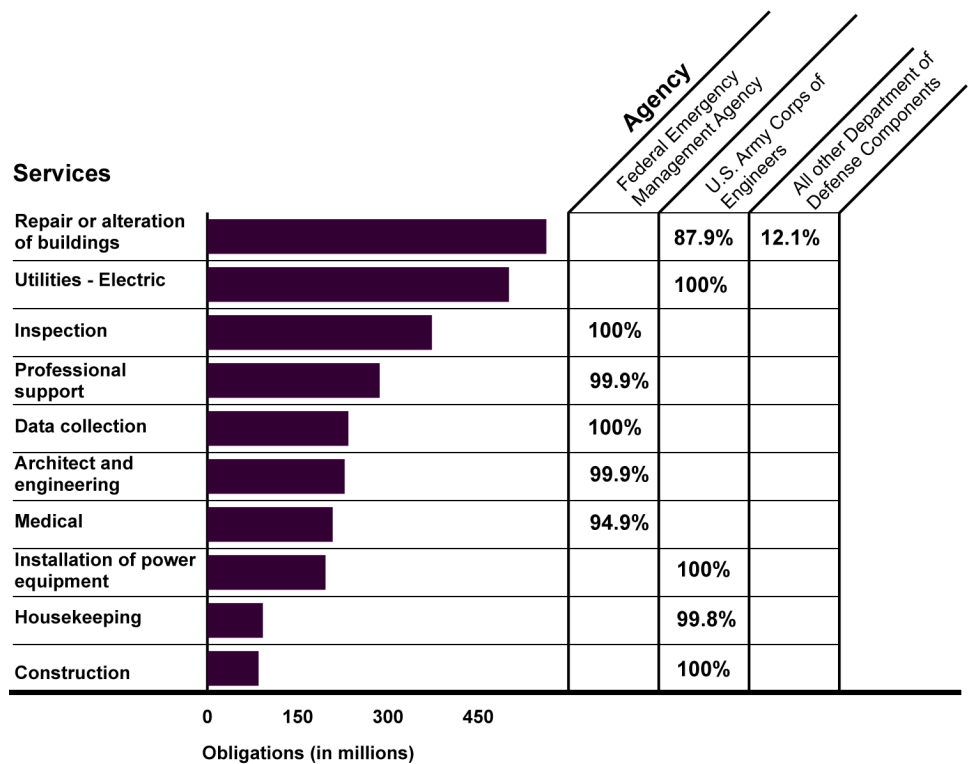
Source: GAO analysis of Federal Procurement Data System-Next Generation data. | GAO-18-335

Note: Obligations making up less than 1 percent of all obligations for a product are not included in the figure—as a result, the percentages shown in the figure do not always add up to 100 percent. The Army Corps of Engineers accounted for 0.4 percent of obligations for prefabricated and portable buildings. Other Department of Defense components accounted for less than 0.1 percent of obligations for food, oils and fats. The Federal Emergency Management Agency accounted for 0.2 percent of obligations on miscellaneous electric power and miscellaneous construction materials. Other civilian agencies accounted for less than 1 percent of obligations on beverages, nonalcoholic, composite food packages, tents and tarpaulins, fruits and vegetables, and office supplies.

The top 10 services account for more than three quarters of all obligations made to provide services in response to the three hurricanes, as shown in figure 5. For example, the Corps obligated over \$1 billion to support its power restoration mission and the repair of damaged buildings through contracts for utilities, repair or alteration, engineering, installation, and construction service contracts. FEMA obligated nearly \$374 million for inspection services, such as housing inspections as part of its individual assistance program. This program provides funds to hurricane survivors

to repair or rebuild their homes, among other things. In addition, agencies procured professional support services, such as support for FEMA's housing and feeding missions in the affected areas.

Figure 5: Top 10 Services in Terms of Contract Obligations in Support of Hurricanes Harvey, Irma, and Maria Combined through December 31, 2017, and Proportion of Obligations by Agency



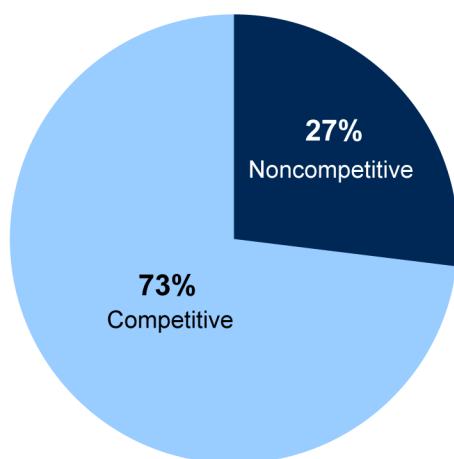
Source: GAO analysis of Federal Procurement Data System-Next Generation data. | GAO-18-335

Note: Obligations making up less than 1 percent of all obligations for a service are not included in the figure—as a result, the percentages shown in the figure do not always add up to 100 percent. Other Department of Defense components accounted for less than 0.1 percent of obligations for professional support and architect and engineering services. Other civilian agencies accounted for 5.1 percent of obligations for medical services and less than 1 percent of obligations for professional support and housekeeping services.

Contracting for disaster relief and recovery efforts presents unique circumstances in which to solicit, award, and administer contracts. Under the Federal Acquisition Regulation (FAR), agencies are generally required to use full and open competition when soliciting offers and awarding contracts; however, an agency may award a contract noncompetitively when the need for goods and/or services is of such an

unusual and compelling urgency that the federal government faces the risk of serious financial or other type of injury.⁸ Across all three hurricanes, we found that the competition rate—the percentage of total obligations reported under competitive contracts—was 73 percent, as shown in figure 6.

Figure 6: Extent of Competition in Support of Hurricanes Harvey, Irma, and Maria through December 31, 2017



Source: GAO analysis of Federal Procurement Data System-Next Generation (FPDS-NG) data. | GAO-18-335

Note: Less than 0.01 percent of obligations were not coded in FPDS-NG as competitive or noncompetitive.

In addition to provisions in the FAR, the Post-Katrina Emergency Management Reform Act of 2006 (PKEMRA),⁹ which addressed various shortcomings identified in the preparation for and response to Hurricane

⁸The FAR does not require agencies to seek full and open competition for contracts awarded using the simplified acquisition procedures (used for contracts that do not exceed the simplified acquisition threshold—generally \$150,000 or \$7 million when acquiring commercial items), though agencies are required to compete them to the maximum extent practicable. The National Defense Authorization Act for Fiscal Year 2017 raised the simplified acquisition threshold to \$250,000. Pub. L. No. 115-91, § 805.

⁹Pub. L. No. 109-295, §§ 601-699.

Katrina, included provisions related to contracting.¹⁰ One of these provisions requires DHS to promulgate regulations restricting the time period for certain disaster support contracts awarded on an urgent basis. Competition rates for contracts awarded within the first 90 days of landfall were higher for the 2017 hurricanes than for those contracts awarded in support of Hurricane Katrina during the same period—approximately 74 percent versus about 53 percent of obligations. While it is too soon to tell what drivers might be behind this increase in competition rates, we will continue to examine issues related to competition in our future work.

PKEMRA also required that FEMA identify and establish contracts prior to a disaster for goods and services that are typically needed during a disaster response—known as “advance” or “pre-positioned” contracts.

FEMA reported that it had an inventory of 77 advance contracts, which could be used to respond to disasters such as the recent hurricanes.¹¹ As of December 31, 2017, FEMA reported that it obligated about \$2.3 billion on 57 of its advance contracts—\$890 million for Harvey, \$459 million for Irma, and \$945 million for Maria. Some of the commonly acquired products and services under these advance contracts are professional support services; architect and engineering services; inspection services; prefabricated buildings; and food.

In addition to FEMA, Corps officials reported that they, too, award advance contracts as a preparedness measure as part of their Advance Contracting Initiative. Corps officials reported that the agency maintains an inventory of 28 advance contracts, of which 13 were used to support emergency response mission assignments for the 2017 hurricanes. In response to the 2017 hurricanes, the Corps reported that it obligated approximately \$449 million across these contracts to provide \$196 million for temporary power, \$139 million for temporary roofing, and \$114 million for debris removal. Response to Hurricane Maria comprised approximately 92 percent of the Corps obligations on advance contracts

¹⁰We have previously reported in 2015 that FEMA had not fully implemented PKEMRA’s statutorily required contracting reforms following Hurricane Katrina; see [GAO-15-783](#). We made eight recommendations to the FEMA Administrator and one recommendation to the Secretary of Homeland Security, three of which remain open.

¹¹FEMA included one interagency acquisition in its list of advance contracts, and reported obligating money through this mechanism for the three hurricanes as part of its advance contracting.

across all three hurricanes in 2017. Our future work will assess FEMA's and the Corps' advance contracting efforts.

Each of these storms hit different geographic locations and caused varying degrees of destruction, from flooding and wind damage to massive power outages. As such, the federal response looked different across the impacted areas, which the contracting data confirms. Appendix I provides contracting details specific to each hurricane.

Agency Comments

We provided a draft of this report to FEMA and DOD for review and comment. FEMA did not provide comments. DOD provided technical comments, which we incorporated as appropriate.

We are sending copies of this report to appropriate congressional committees, the Secretary of Homeland Security, the Secretary of Defense, and other interested parties. In addition, the report will be available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff have any questions concerning this report, please contact me at (202) 512-4841 or by email at makm@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.



Marie A. Mak
Director, Contracting and National Security Acquisitions

List of Requesters

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

The Honorable Rand Paul
Chairman
The Honorable Gary C. Peters
Ranking Member
Subcommittee on Federal Spending Oversight and Emergency
Management
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable Trey Gowdy
Chairman
The Honorable Elijah E. Cummings
Ranking Member
Committee on Oversight and Government Reform
House of Representatives

The Honorable Gary Palmer
Chairman
Subcommittee on Intergovernmental Affairs
Committee on Oversight and Government Reform
House of Representatives

The Honorable Blake Farenthold
Chairman
Subcommittee on Interior, Energy, and Environment
Committee on Oversight and Government Reform
House of Representatives

Appendix I: Observations on Federal Contracting for Hurricanes Harvey, Irma, and Maria

This appendix presents observations on federal contracting activity for each of the three hurricanes: Harvey, Irma, and Maria. Each of these observations is two pages and presents information current as of December 31, 2017. These two page summaries include an image provided by GAO from the affected areas, background information on each hurricane and its impact, contract obligation information, and information on advance contracts and contract competition rates. Each observation also includes the following figures:

- Agency Contract Obligations.
- Top 5 Products in Terms of Contract Obligations through December 31, 2017, and Proportion of Obligations by Agency.
- Top 5 Services in Terms of Contract Obligations through December 31, 2017, and Proportion of Obligations by Agency.

Hurricane Harvey

Observations on Federal Contracting for Response and Recovery Efforts

Background

Event

Hurricane Harvey made landfall in southeastern Texas on August 25, 2017, as a Category 4 hurricane.

The hurricane moved inland and stalled, setting a new record for the most rainfall from a U.S. tropical cyclone, with more than 50 inches of rain in some areas.

Impacts

The storm resulted in catastrophic flooding in Texas and western Louisiana. Within 90 days of the storm hitting Texas, more than \$10 billion in state and federal resources had been dedicated to recovery efforts. Given the widespread flooding following Harvey, inspectors conducted more than 580,000 inspections of storm-damaged homes during this same timeframe.

Contract Obligations for Hurricane Harvey

Figure 7: Hurricane Harvey Storm Damage

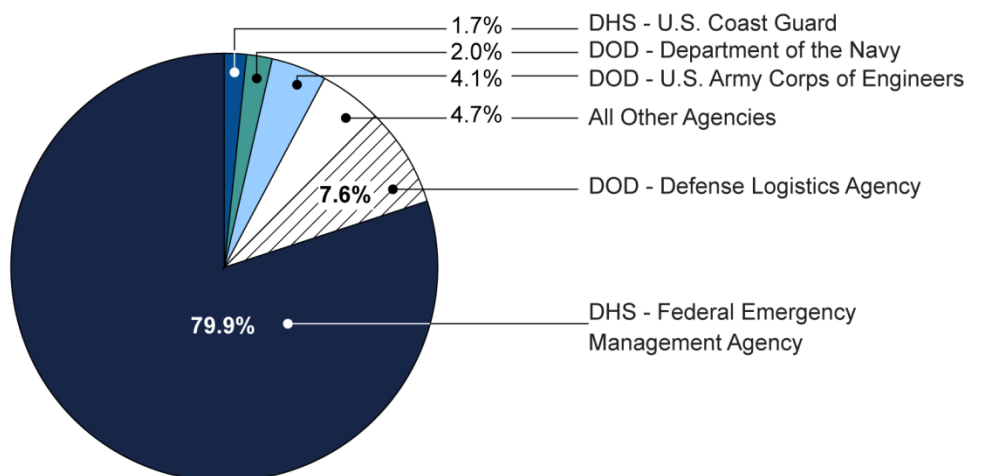


Storm damaged home in Harris, County, Texas.

Source: GAO. | GAO-18-335

As of December 31, 2017, federal agencies obligated about \$1.2 billion on contracts to support response and recovery efforts related to Hurricane Harvey. Contract obligations by the Federal Emergency Management Agency (FEMA)—within the Department of Homeland Security—represent approximately 80 percent of all contract obligations associated with Hurricane Harvey. Contracts awarded by three agencies within the Department of Defense—the Defense Logistics Agency, the U.S. Army Corps of Engineers (the Corps), and the Navy—comprise approximately 14 percent of all contract obligations associated with Hurricane Harvey. See figure 8.

Figure 8: The Departments of Homeland Security (DHS) and Defense (DOD) Account for the Majority of Contract Obligations in Support of Hurricane Harvey



Source: GAO analysis of Federal Procurement Data System-Next Generation data. | GAO-18-335

Advance Contracts

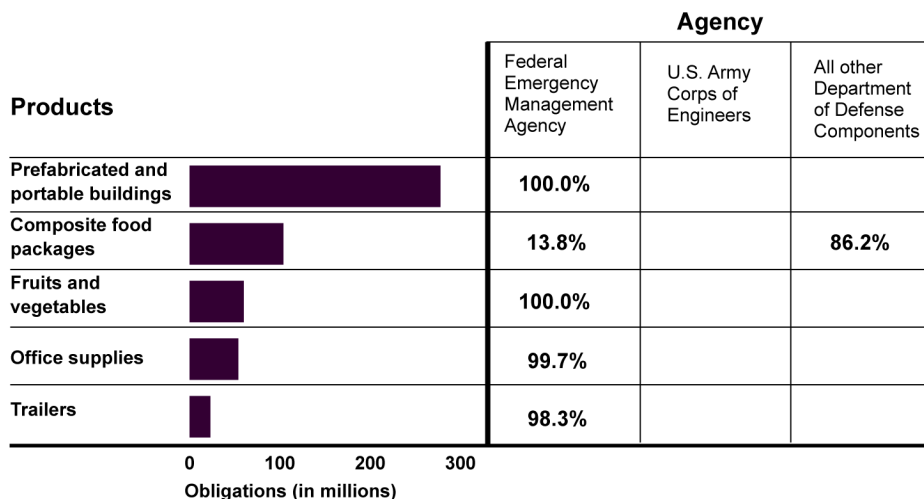
To facilitate a faster response, FEMA and the Corps identify goods and services that are typically needed for disaster response and establish contracts for them—known as advance contracts—prior to the disasters. In response to Hurricane Harvey, FEMA has reported obligations through its advance contracts of approximately \$890 million, as of December 31, 2017, of which more than \$270 million was for temporary housing. In addition, the Corps reported total obligations in response to Hurricane Harvey on its advance contracts of approximately \$7 million, consisting almost entirely of obligations for temporary power, such as generators.

Competition

The competition rate—the percentage of total obligations reported under competitive contracts—for contracts in response to Hurricane Harvey was 84 percent as of December 31, 2017.

Contract obligations were about evenly split for Hurricane Harvey between products and services. Federal agencies obligated about \$605 million on contracts for products, nearly half of which, over \$302 million, was for procurement of prefabricated housing units and trailers to provide temporary housing for survivors. Agencies obligated over \$164 million on food for survivors. See figure 9.

Figure 9: Top 5 Products in Terms of Contract Obligations in Support of Hurricane Harvey through December 31, 2017, and Proportion of Obligations by Agency

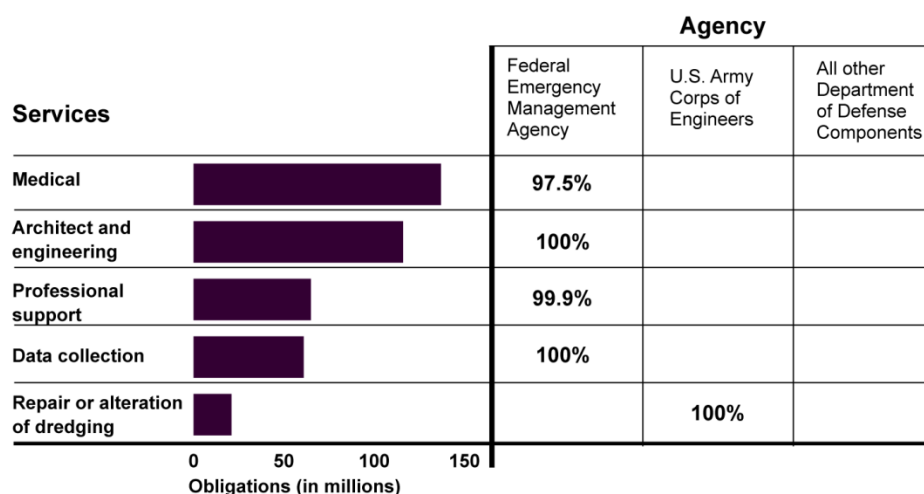


Source: GAO analysis of Federal Procurement Data System-Next Generation data. | GAO-18-335

Note: The percentages shown in the figure do not always add up to 100 percent due to small proportions of obligations from other civilian agencies.

In total, federal agencies obligated about \$624 million for services related to Hurricane Harvey, including approximately \$138 million for medical services, about \$117 million for architect and engineering services, and nearly \$66 million for professional support services, such as support for FEMA's housing mission in the affected areas, and data collection, such as FEMA call center agents. See figure 10.

Figure 10: Top 5 Services in Terms of Contract Obligations in Support of Hurricane Harvey through December 31, 2017, and Proportion of Obligations by Agency



Source: GAO analysis of Federal Procurement Data System-Next Generation data. | GAO-18-335

Note: The percentages shown in the figure do not always add up to 100 percent due to small proportions of obligations from other civilian agencies.

Hurricane Irma

Observations on Federal Contracting for Response and Recovery Efforts

Background

Event

Hurricane Irma made landfall in the U.S. Virgin Islands on September 6, 2017, as a Category 5 hurricane and then on September 10, 2017, in the Florida Keys as a Category 4 and southwestern Florida as a Category 3 hurricane.

Hurricane Irma became the strongest Atlantic Ocean hurricane on record, with peak winds of 185 miles per hour. It remained a hurricane for 11 days, the lengthiest Atlantic hurricane since 2004.

Impacts

The storm affected the U.S. Virgin Islands, Florida, Georgia, South Carolina, and North Carolina. The storm winds resulted in widespread power outages and extensive household and vegetative debris.

Contract Obligations for Hurricane Irma

Figure 11: Hurricane Irma Storm Damage

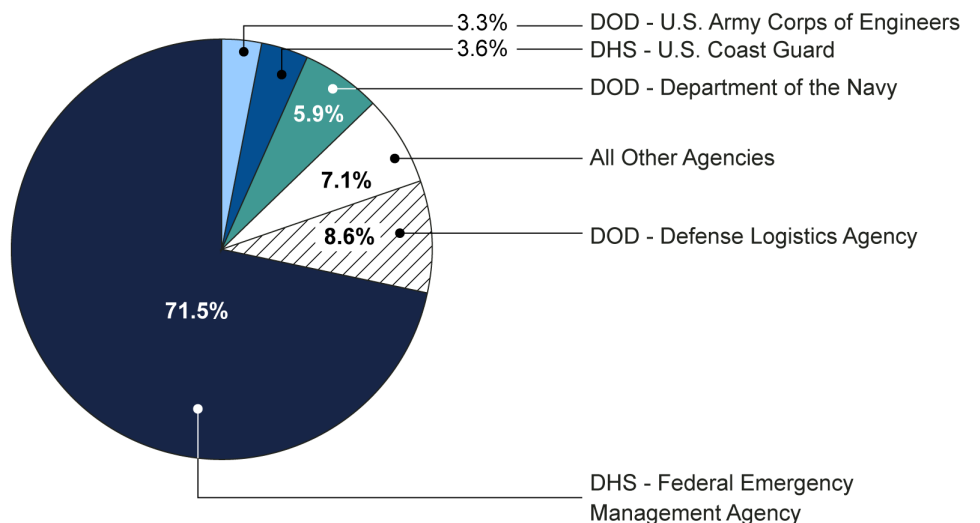


Debris in a canal, Marathon Key, Florida.

Source: GAO. | GAO-18-335

As of December 31, 2017, federal agencies obligated about \$964 million on contracts to support response and recovery efforts related to Hurricane Irma. Contract obligations by the Federal Emergency Management Agency (FEMA)—within the Department of Homeland Security—represent almost three quarters of all contract obligations associated with Hurricane Irma. Contracts awarded by three agencies within the Department of Defense—the Defense Logistics Agency, the U.S. Army Corps of Engineers (the Corps), and the Navy—comprise approximately 18 percent of all contract obligations associated with Hurricane Irma. See figure 12.

Figure 12: The Departments of Homeland Security (DHS) and Defense (DOD) Account for the Majority of Agency Contract Obligations in Support of Hurricane Irma



Source: GAO analysis of Federal Procurement Data System-Next Generation data. | GAO-18-335

Advance Contracts

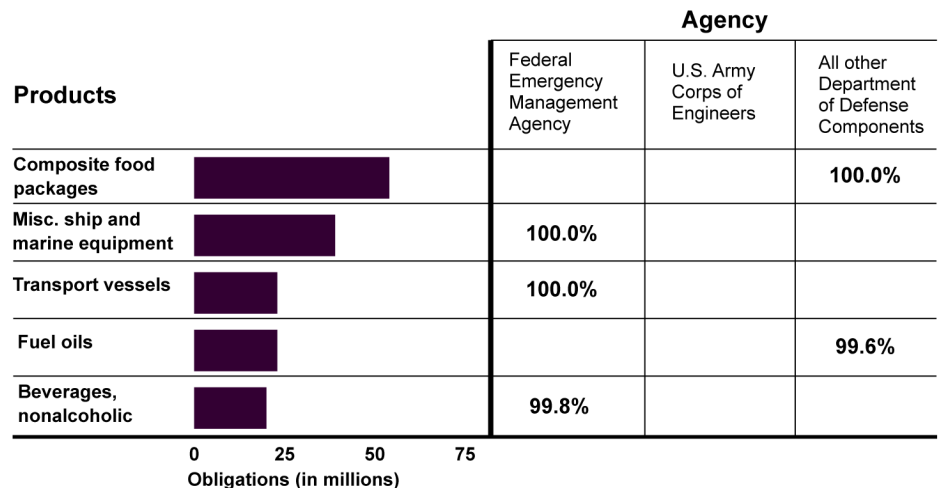
To facilitate a faster response, FEMA and the Corps identify goods and services that are typically needed for disaster response and establish contracts for them—known as advance contracts—prior to the disasters. In response to Hurricane Irma, FEMA reported obligations through its advance contracts of approximately \$459 million, as of December 31, 2017, largely for services, such as inspections of damaged buildings. In addition, the Corps reported obligations in response to Hurricane Irma on its advance contracts of approximately \$12 million for temporary power, \$18 million for temporary roofing, and \$468,000 for debris removal as of December 31, 2017.

Competition

The competition rate—the percentage of total obligations reported under competitive contracts—for contracts in response to Hurricane Irma was 81 percent as of December 31, 2017.

Federal agencies obligated over \$234 million on contracts for products, almost one-quarter of total obligations for Irma. Of this amount, over \$75 million was obligated across multiple agencies to procure food and beverages for survivors. FEMA obligated approximately \$63 million for ship and marine equipment and transport vessels, such as passenger ships to house survivors and first responders in the U.S. Virgin Islands. See figure 13.

Figure 13: Top 5 Products in Terms of Contract Obligations in Support of Hurricane Irma through December 31, 2017, and Proportion of Obligations by Agency

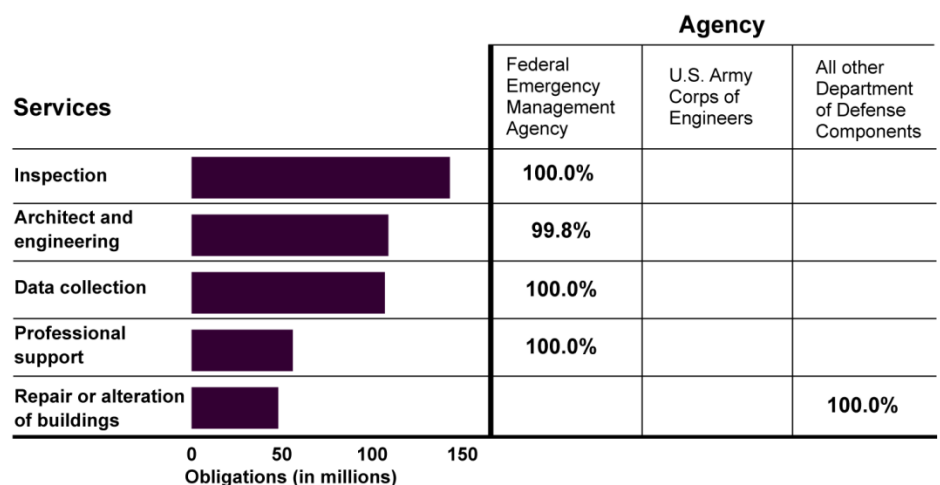


Source: GAO analysis of Federal Procurement Data System-Next Generation data. | GAO-18-335

Note: The percentages shown in the figure do not always add up to 100 percent due to small proportions of obligations from other civilian agencies.

Federal agencies obligated more than \$729 million on service contracts, or three quarters of all contract obligations for Irma. For example, FEMA obligated approximately \$144 million for inspection services, such as housing inspections for FEMA's individual assistance program. Together, FEMA and other agencies obligated about \$159 million through architecture and engineering services and repair and alteration services to support the repair and restoration of disaster-damaged facilities. FEMA and other agencies also obligated about \$164 million for data collection and support services, such as contractor support for FEMA's housing mission in the affected areas and data collection, such as FEMA call center agents. See figure 14.

Figure 14: Top 5 Services in Terms of Contract Obligations in Support of Hurricane Irma through December 31, 2017, and Proportion of Obligations by Agency



Source: GAO analysis of Federal Procurement Data System-Next Generation data. | GAO-18-335

Note: The percentages shown in the figure do not always add up to 100 percent due to small proportions of obligations from other civilian agencies.

Hurricane Maria

Observations on Federal Contracting for Response and Recovery Efforts

Background

Event

Hurricane Maria made landfall in the U.S. Virgin Islands and Puerto Rico on September 20, 2017, as a Category 5 and Category 4 hurricane respectively.

U.S. Virgin Islands

Hurricane Maria was the second Category 5 hurricane to hit the U.S. Virgin Islands in a 2-week period, following the early September Hurricane Irma landfall.

Puerto Rico

Hurricane Maria was the first Category 4 hurricane to make landfall on the main island of the U.S. territory in 85 years.

Impacts

The response following Hurricane Maria on Puerto Rico became the longest sustained air mission of food and water in FEMA history. Hurricane Maria also wiped out the power grid in Puerto Rico and St. Croix, resulting in power outages across the islands that have continued months after the storm.

Contract Obligations for Hurricane Maria

Figure 15: Hurricane Maria Storm Damage

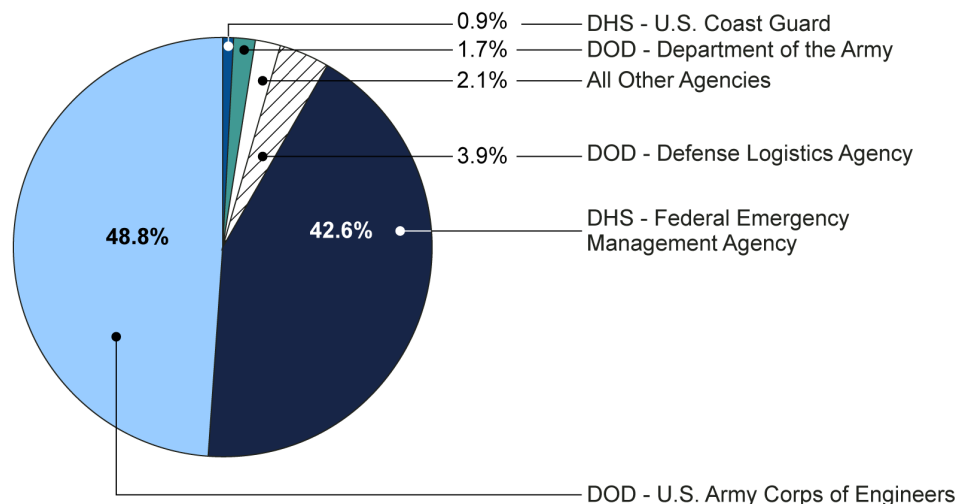


Damaged buildings with temporary roofing, Puerto Rico.

Source: GAO. | GAO-18-335

As of December 31, 2017, federal agencies obligated nearly \$3.5 billion on contracts to support response and recovery efforts related to Hurricane Maria. Contracts awarded by the United States Army Corps of Engineers (the Corps)—within the Department of Defense (DOD)—account for nearly half of all contract obligations associated with Hurricane Maria. Contract obligations by the Federal Emergency Management Agency (FEMA)—within the Department of Homeland Security—represent approximately 43 percent of all contract obligations associated with Hurricane Maria. See figure 16.

Figure 16: The Departments of Homeland Security (DHS) and Defense (DOD) Account for the Majority of Contract Obligations in Support of Hurricane Maria



Source: GAO analysis of Federal Procurement Data System-Next Generation data. | GAO-18-335

Advance Contracts

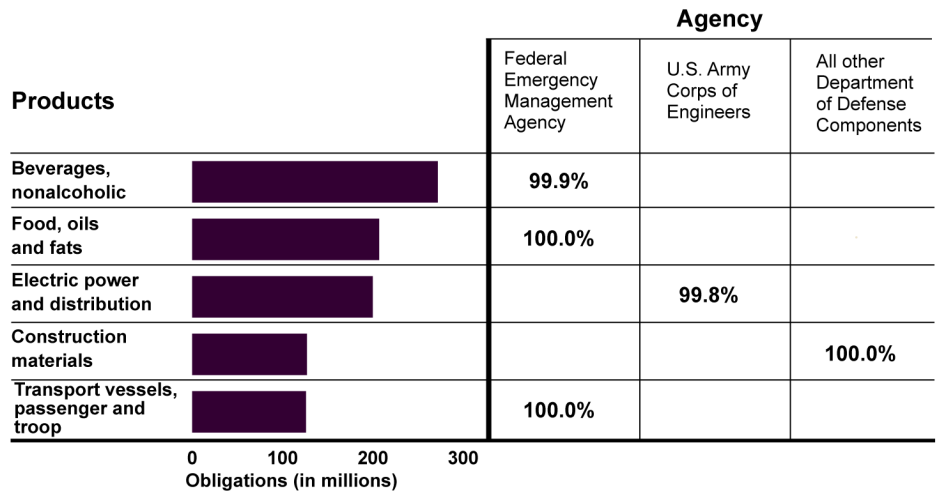
To facilitate a faster response, FEMA and the Corps identify goods and services that are typically needed for disaster response and establish contracts for them—known as advance contracts—prior to the disasters. In response to Hurricane Maria FEMA reported obligations through its advance contracts of approximately \$945 million, as of December 31, 2017, including more than \$200 million for inspection services. In addition, the Corps reported obligations in response to Hurricane Maria on its advance contracts of \$411 million, as of December 31, 2017, including approximately \$177 million for temporary power, \$121 million for temporary roofing, and \$113 million for debris removal.

Competition

The competition rate—the percentage of total obligations reported under competitive contracts—for contracts in response to Hurricane Maria was 67 percent as of December 31, 2017.

Federal agencies obligated more than \$1.2 billion on contracts for products. Of this amount, FEMA and other agencies obligated over \$272 million for beverages, such as drinking water, about 23 percent of all obligations for products. The Corps obligated about \$200 million for supplies to support the power restoration mission and the Defense Logistics Agency—within DOD—obligated approximately \$127 million for construction materials. FEMA obligated approximately \$126 million for transport vessels, such as passenger ships to house survivors and first responders, as well as for cargo vessels to transport supplies. See figure 17.

Figure 17: Top 5 Products in Terms of Contract Obligations in Support of Hurricane Maria through December 31, 2017, and Proportion of Obligations by Agency

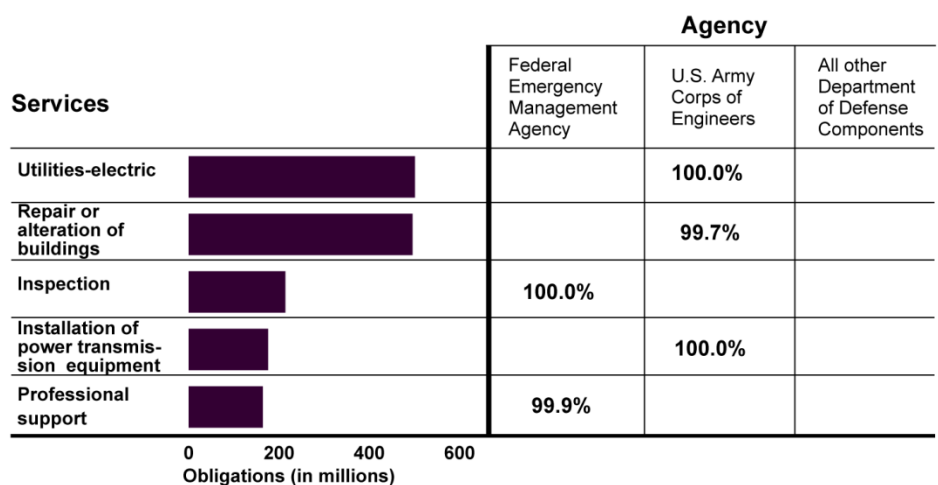


Source: GAO analysis of Federal Procurement Data System-Next Generation data. | GAO-18-335

Note: The percentages shown in the figure do not always add up to 100 percent due to small proportions of obligations from other civilian agencies. FEMA accounted for the remainder on electric power and distribution.

Service contracts represent about \$2.3 billion, or about 65 percent of all contract obligations for Maria, including almost \$1.2 billion obligated by the Corps to support its power restoration mission through contracts for utility, repair or alteration, and installation services. FEMA obligated nearly \$215 million for inspection services, such as home inspections for individuals applying for FEMA assistance. Agencies obligated about \$164 million for professional support services, such as those supporting FEMA's housing and feeding missions, see figure 18.

Figure 18: Top 5 Services in Terms of Contract Obligations in Support of Hurricane Maria through December 31, 2017, and Proportion of Obligations by Agency



Source: GAO analysis of Federal Procurement Data System-Next Generation data. | GAO-18-335

Note: The percentages shown in the figure do not always add up to 100 percent due to small proportions of obligations from other civilian agencies.

Appendix II: GAO Contact and Staff Acknowledgements

GAO Contact

Marie A. Mak, (202) 512-4841 or MakM@gao.gov

Staff Acknowledgements

In addition to the contact named above, Katherine Trimble (Assistant Director); Caryn E. Kuebler (Analyst in Charge); Aditi S. Archer; Emily Bond; Lorraine R. Ettaro; Suellen M. Foth; Julia M. Kennon; Kristine R. Hassinger; Elisha T. Matvay; Amanda Parker; Edith Sohna; and Robin M. Wilson made key contributions to this report.

GAO's Mission

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

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's website (<https://www.gao.gov>). Each weekday afternoon, GAO posts on its website newly released reports, testimony, and correspondence. To have GAO e-mail you a list of newly posted products, go to <https://www.gao.gov> and select "E-mail Updates."

Order by Phone

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

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

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

Connect with GAO

Connect with GAO on [Facebook](#), [Flickr](#), [Twitter](#), and [YouTube](#).
Subscribe to our [RSS Feeds](#) or [E-mail Updates](#). Listen to our [Podcasts](#).
Visit GAO on the web at <https://www.gao.gov>.

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Website: <https://www.gao.gov/fraudnet/fraudnet.htm>

E-mail: fraudnet@gao.gov

Automated answering system: (800) 424-5454 or (202) 512-7470

Congressional Relations

Orice Williams Brown, Managing Director, WilliamsO@gao.gov, (202) 512-4400,
U.S. Government Accountability Office, 441 G Street NW, Room 7125,
Washington, DC 20548

Public Affairs

Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800
U.S. Government Accountability Office, 441 G Street NW, Room 7149
Washington, DC 20548

Strategic Planning and External Liaison

James-Christian Blockwood, Managing Director, spel@gao.gov, (202) 512-4707
U.S. Government Accountability Office, 441 G Street NW, Room 7814,
Washington, DC 20548



Please Print on Recycled Paper.