



February 2018

2017 DISASTER CONTRACTING

Observations on Federal Contracting for Response and Recovery Efforts

Accessible Version

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

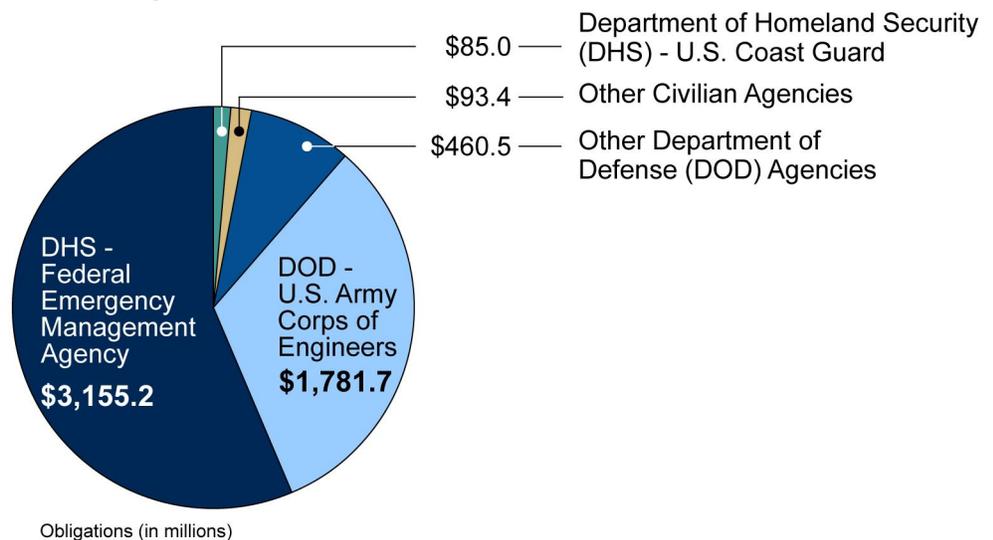
2017 DISASTER CONTRACTING

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

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

Department	Obligations (in millions)
Department of Homeland Security (DHS) – U.S. Coast Guard	85.0
All other Agencies	93.4
Other Department of Defense (DOD) Agencies	460.5
DOD - U.S. Army Corps of Engineers	1781.7
DHS - Federal Emergency Management Agency	3155.2

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.

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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

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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.

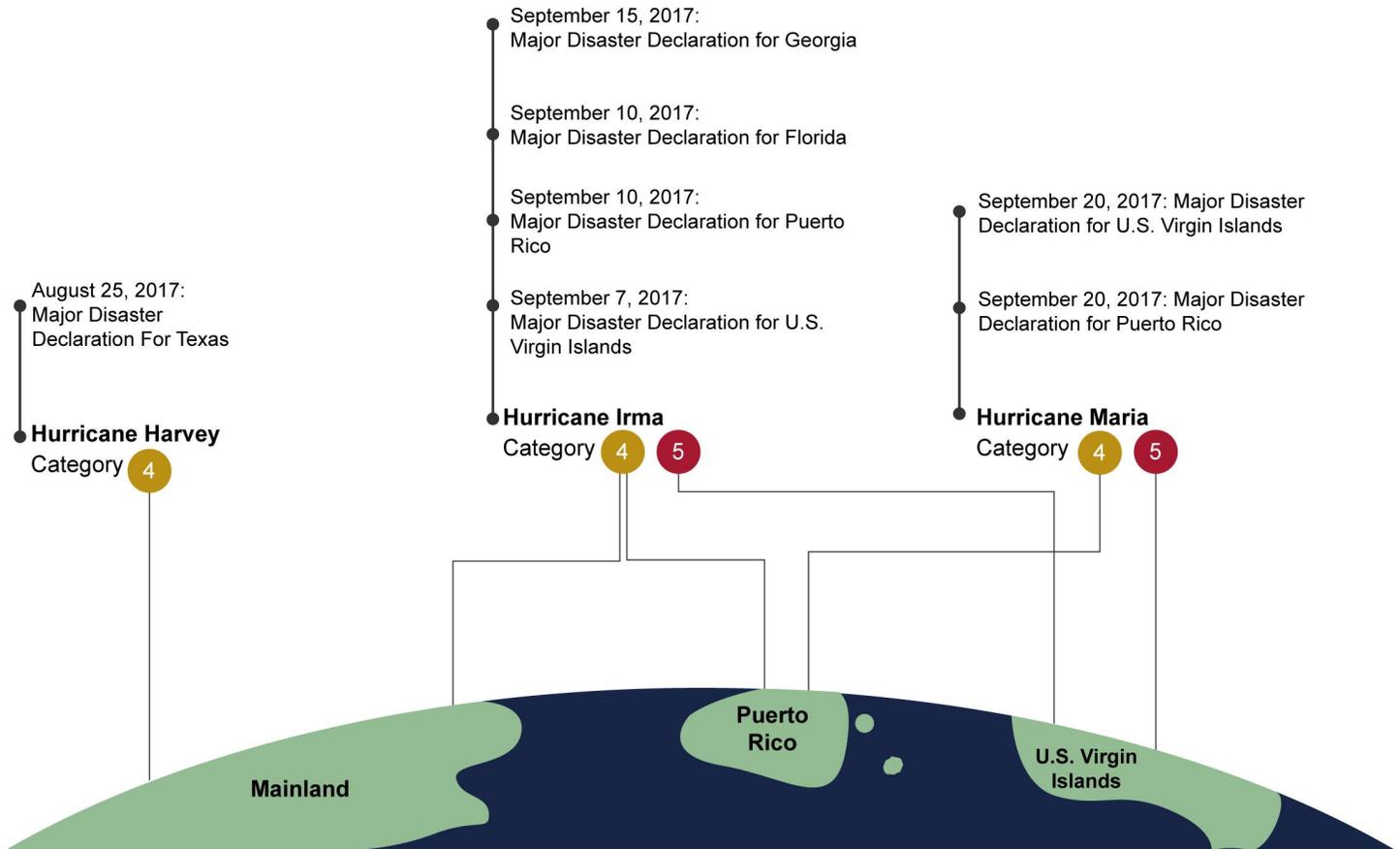
Background

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.

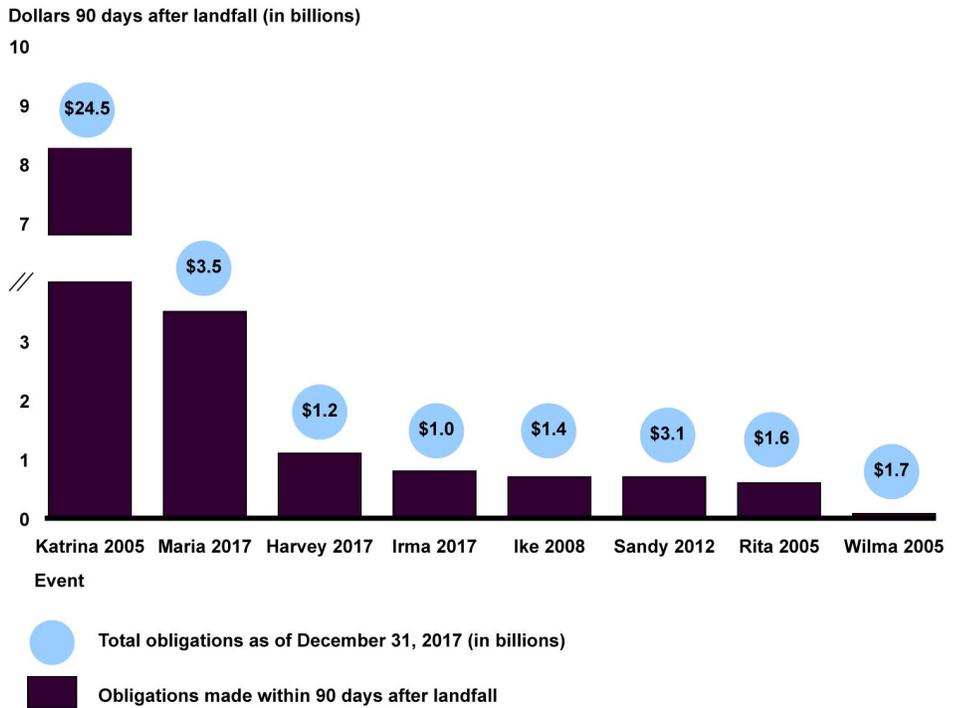
⁶42 U.S.C. § 5170. The Stafford Act, as amended, permits the President to declare a major disaster after a state's governor or chief executive of an affected Indian tribal government—a governing body of an Indian or Alaska Native tribe, band, nation, pueblo, village, or community that is federally recognized—finds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

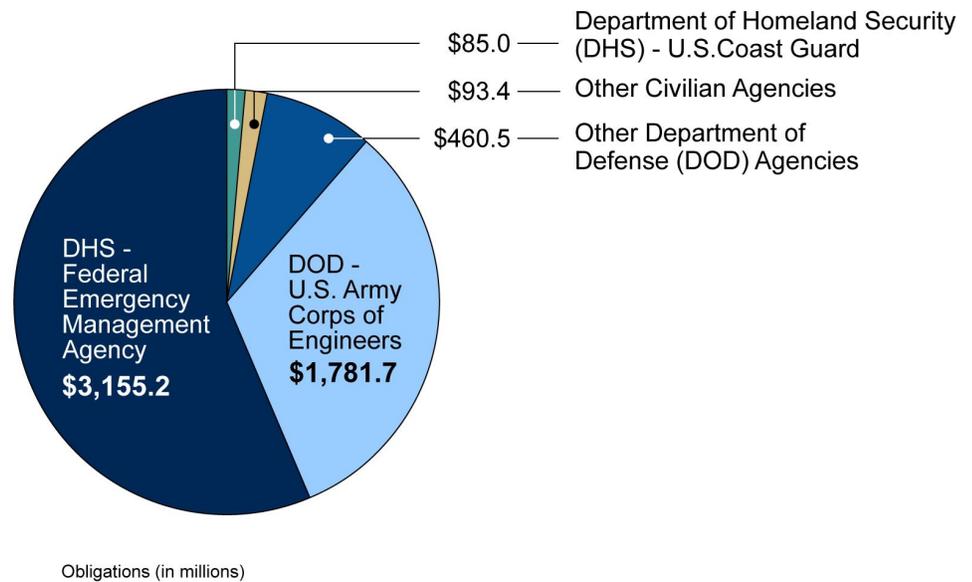
Data Table for Figure 2: Obligations in the First 90 Days Post Landfall and as of December 31, 2017 for the Top Eight Hurricane Events by Contract Obligations (in constant calendar year 2017 dollars)

Event	Obligations made within 90 days after landfall (in billions)	Total obligations as of December 31, 2017 (in billions)
Hurricane Katrina 2005	8312016573	24482661525
Hurricane Maria 2017	3382070067	3482878342
Hurricane Harvey 2017	1132323189	1229060145
Hurricane Irma 2017	898828301	963624327
Hurricane Ike 2008	765364621	1387549627
Hurricane Sandy 2012	719782574	3082383587
Hurricane Rita 2005	672849161	1639201310
Hurricane Wilma 2005	88157760	1701979649

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 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

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.

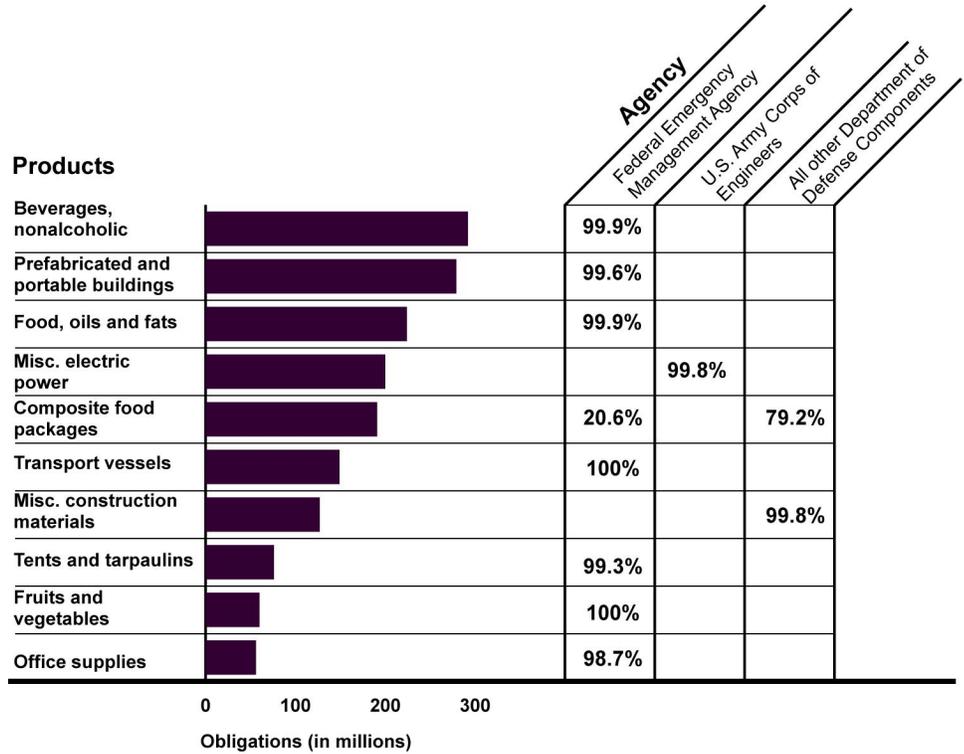
Data Table for Figure 3: Contract Obligations by Top 10 Contracting Agencies in Support of Hurricanes Harvey, Irma, and Maria, through December 31, 2017

Department	Obligations (in millions)
Department of Homeland Security (DHS) – U.S. Coast Guard	85.0
All other Agencies	93.4
Other Department of Defense (DOD) Agencies	460.5
DOD - U.S. Army Corps of Engineers	1781.7
DHS - Federal Emergency Management Agency	3155.2

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

Data Table for 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

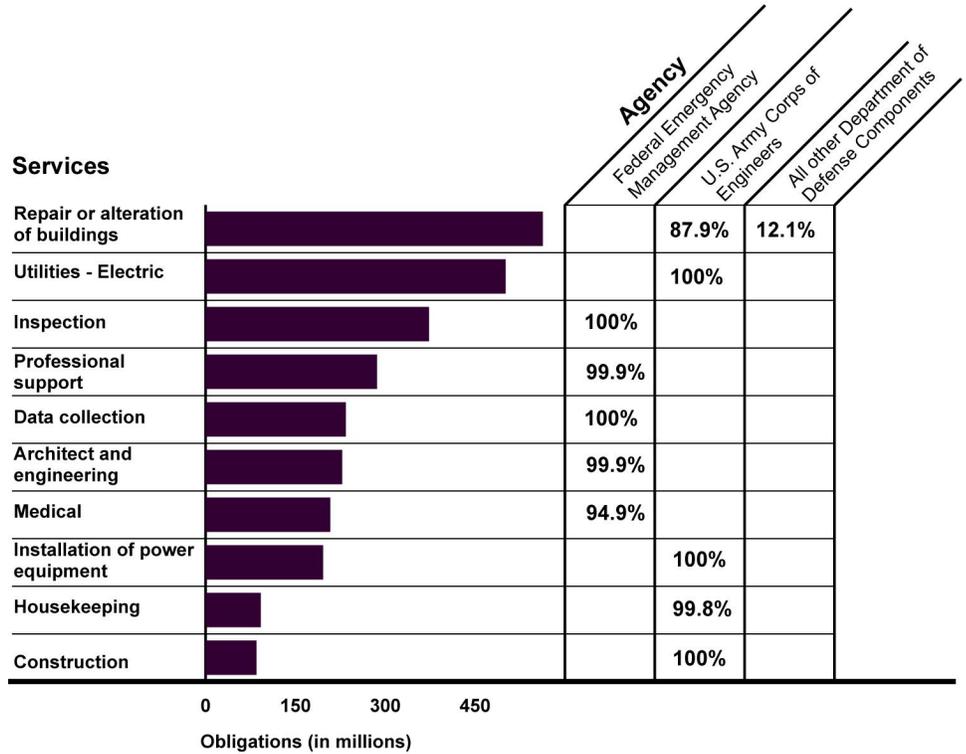
Products	Obligations (in millions)	Federal Emergency Management Agency	U.S. Army Corps of Engineers	All other Department of Defense Components
Beverages, nonalcoholic	292738419	99.9 percent		
Prefabricated and portable buildings	279274211	99.6 percent		
Food, oils and fats	224061638	99.9 percent		

Products	Obligations (in millions)	Federal Emergency Management Agency	U.S. Army Corps of Engineers	All other Department of Defense Components
Misc. electric power and distribution equipment	200251108		99.8 percent	
Composite food packages	191454259	20.6 percent		79.2 percent
Transport vessels	149896928	100 percent		
Misc. construction materials	127597216			99.8 percent
Tents and tarpaulins	76121196	99.3 percent		
Fruits and vegetables	60094496	100 percent		
Office supplies	56264220	98.7 percent		

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.

Data Table for 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

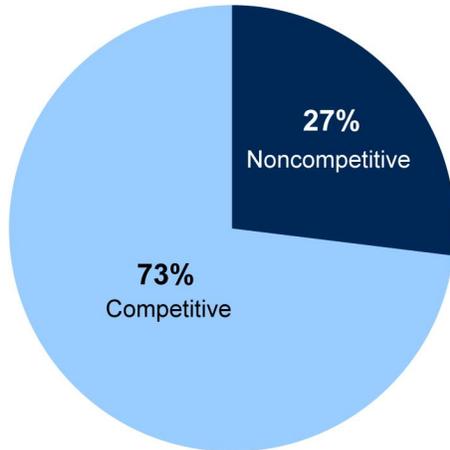
Service	Obligations (in millions)	Federal Emergency Management Agency	U.S. Army Corps of Engineers	All other Department of Defense Components
Repair or alteration of buildings	563399811		87.9 percent	12.1 percent
Utilities-Electric	501269336		100 percent	

Inspection	373603976	100 percent
Professional support	286433454	99.9 percent
Data collection	234970585	100 percent
Architect and engineering	228051761	99.9 percent
Medical	208238091	94.9 percent
Installation of power equipment	196037223	100 percent
Housekeeping	92052701	99.8 percent
Construction	85958303	100 percent

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.

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.

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.

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

Noncompetitive	27 percent
Competitive	73 percent

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 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

⁹Pub. L. No. 109-295, §§ 601-699.

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.

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 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.

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.

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
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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.

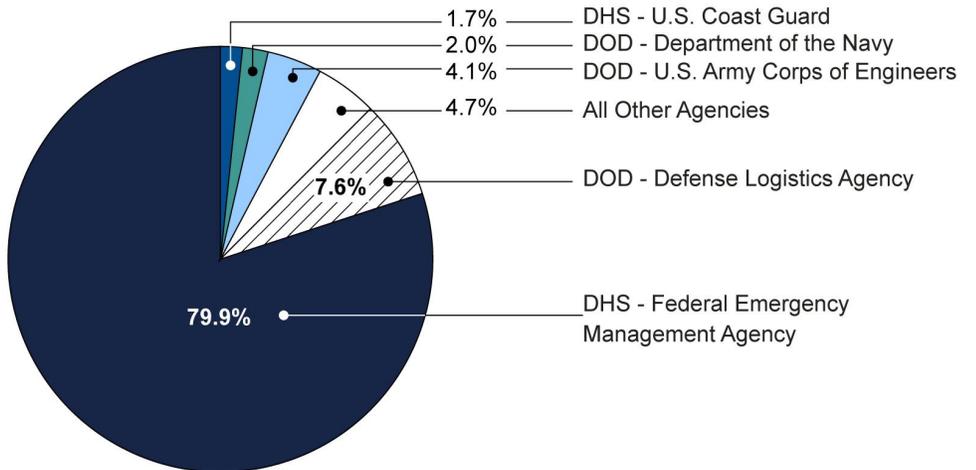
Figure 7: Hurricane Harvey Storm Damage



Storm damaged home in Harris, County, Texas.

Source: GAO. | GAO-18-335

Figure 8: Agency Contract Obligations in Support of Hurricane Harvey



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

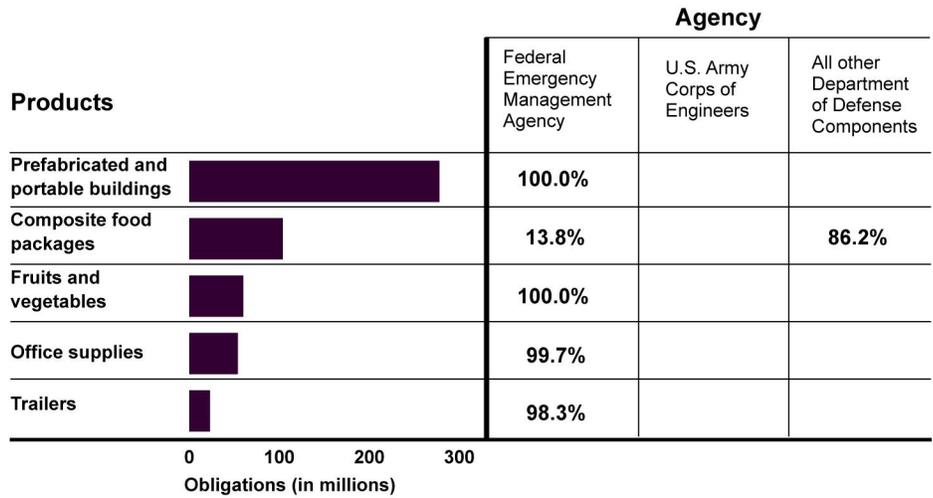
Data Table for Figure 8: Agency Contract Obligations in Support of Hurricane Harvey

Department	Percent
DHS - U.S Coast Guard	1.7
DOD - Department of the Navy	2.0

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

Department	Percent
DOD - U.S. Army Corps of Engineers	4.1
All Other Agencies	4.7
DOD - Defense Logistics Agency	7.6
DHS - Federal Emergency Management Agency	79.9

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



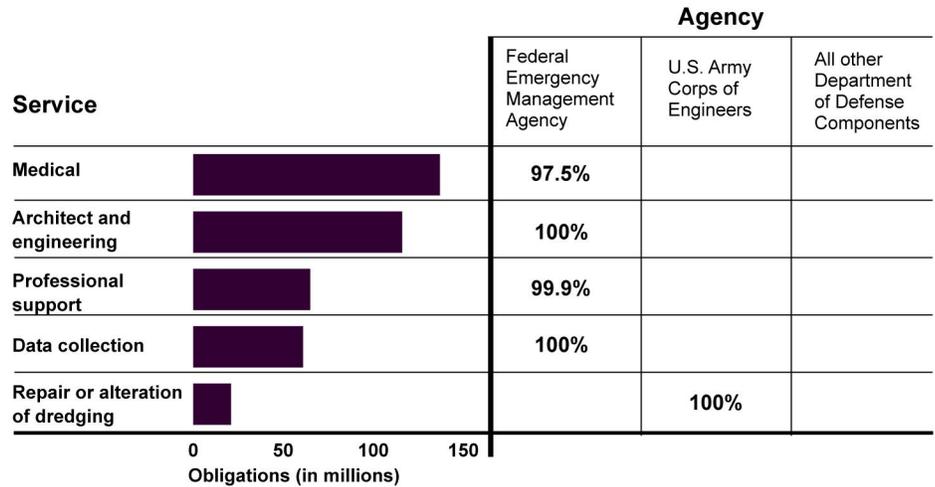
Source: GAO analysis of Federal Procurement Data System-Next Generation data. | GAO-18-335

Data Table for 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

Products	Obligations (in millions)	Federal Emergency Management Agency	U.S. Army Corps of Engineers	All other Department of Defense Components
Prefabricated and portable buildings	278125698	100.0 percent		
Composite food packages	104309751	13.8 percent		86.2 percent
Fruits and vegetables	60094496	100.0 percent		
Office supplies	54844752	99.7 percent		
Trailers	23967132	98.3 percent		

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

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

Data Table for 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

Services	Obligations (in millions)	Federal Emergency Management Agency	U.S. Army Corps of Engineers	All other Department of Defense Components
Medical	137831183	97.5 percent		
Architect and engineering	116515343	100.0 percent		
Professional support	65708184	99.9 percent		
Data collection	61351945	100.0 percent		
Repair or alteration of dredging	21685290		100.0 percent	

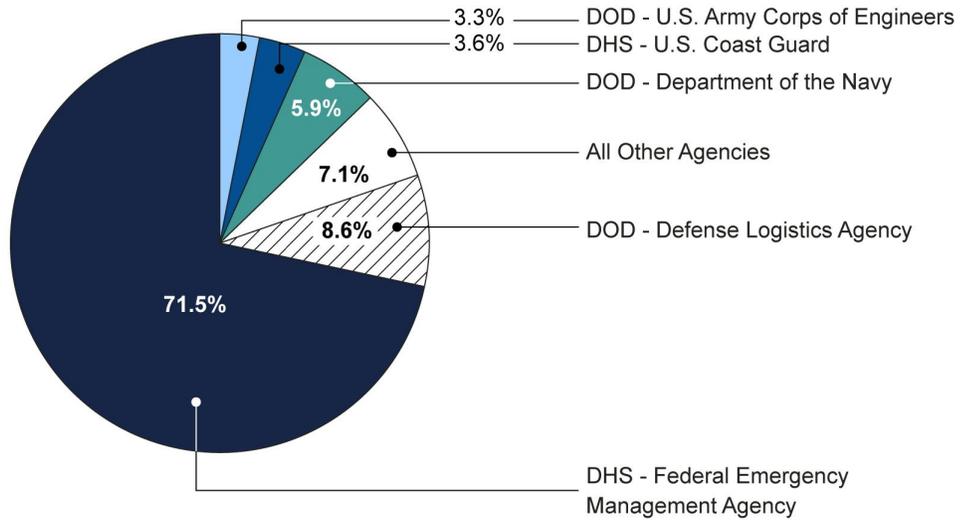
Figure 11: Hurricane Irma Storm Damage



Debris in a canal, Marathon Key, Florida.

Source: GAO. | GAO-18-335

Figure 12: Agency Contract Obligations in Support of Hurricane Irma



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

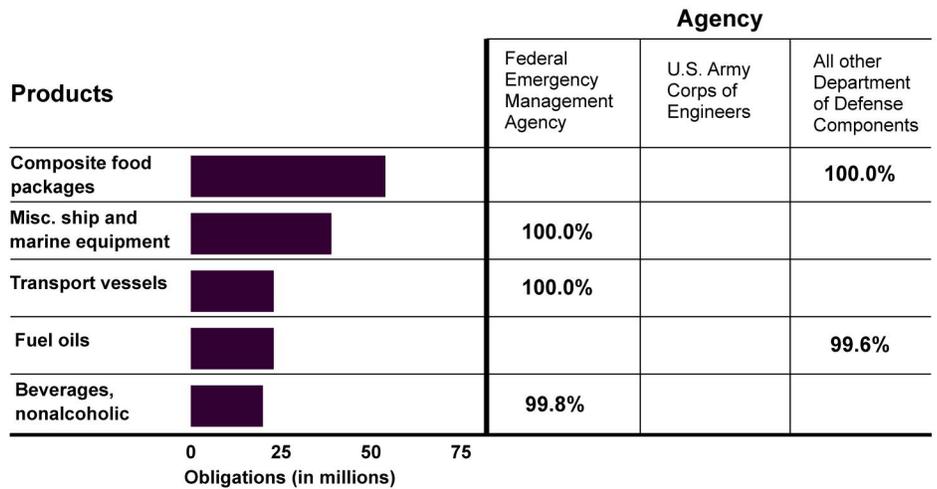
Data Table for Figure 12: Agency Contract Obligations in Support of Hurricane Irma

Department	Percent
DOD - U.S. Army Corps of Engineers	3.3
DHS - U.S. Coast Guard	3.6
DOD - Department of the Navy	5.9

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

Department	Percent
All Other Agencies	7.1
DOD - Defense Logistics Agency	8.6
DHS - Federal Emergency Management Agency	71.5

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



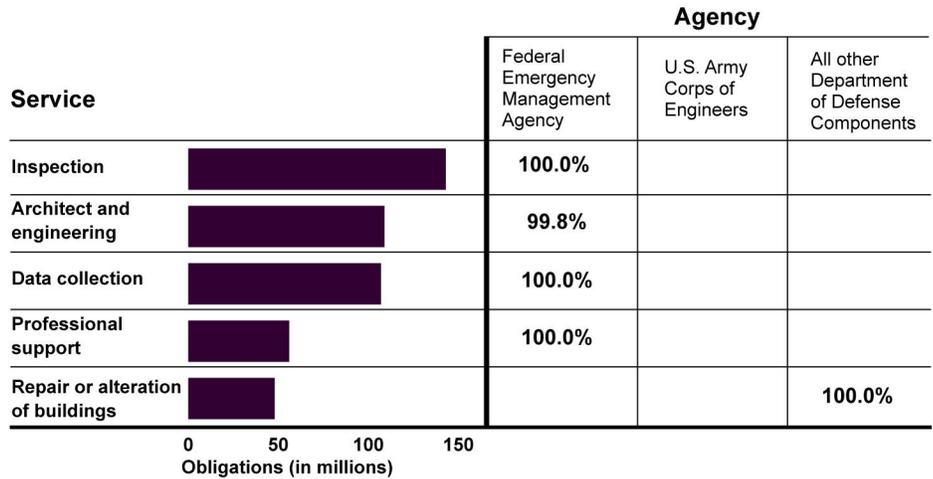
Source: GAO analysis of Federal Procurement Data System-Next Generation data. | GAO-18-335

Data Table for 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

Products	Obligations (in millions)	Federal Emergency Management Agency	U.S. Army Corps of Engineers	All other Department of Defense Components
Composite food packages	54607268			100.0 percent
Misc. ship and marine equipment	39250000	100.0 percent		
Transport vessels	23874330	100.0 percent		
Fuel oils	23198910			99.6 percent
Beverages, nonalcoholic	20511358	99.8 percent		

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

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

Data Table for 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

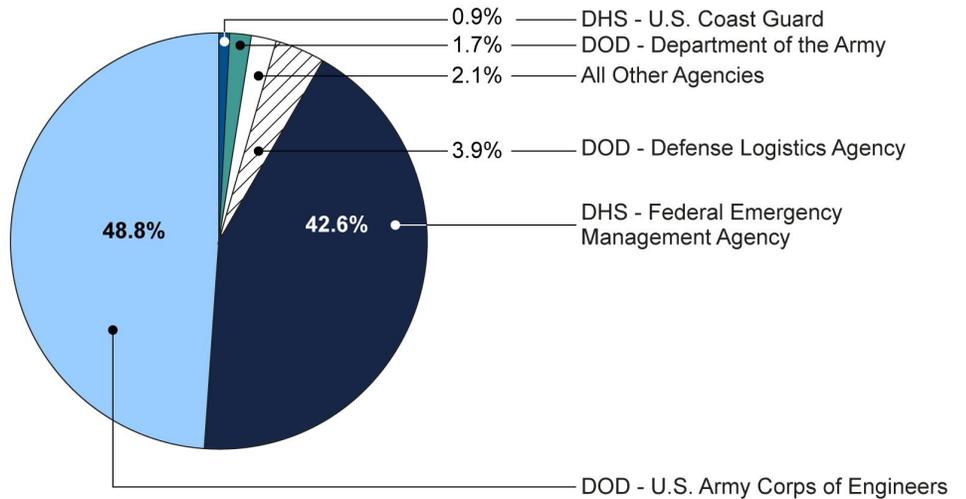
Service	Obligations (in millions)	Federal Emergency Management Agency	U.S. Army Corps of Engineers	All other Department of Defense Components
Inspection	143625207	100.0 percent		
Architect and engineering	109966272	99.8 percent		
Data collection	107742366	100.0 percent		
Professional support	56445731			
Repair or alteration of buildings	48582034			100.0 percent

Figure 15: Hurricane Maria Storm Damage



Damaged buildings with temporary roofing, Puerto Rico.
Source: GAO. | GAO-18-335

Figure 16: Agency Contract Obligations in Support of Hurricane Maria



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

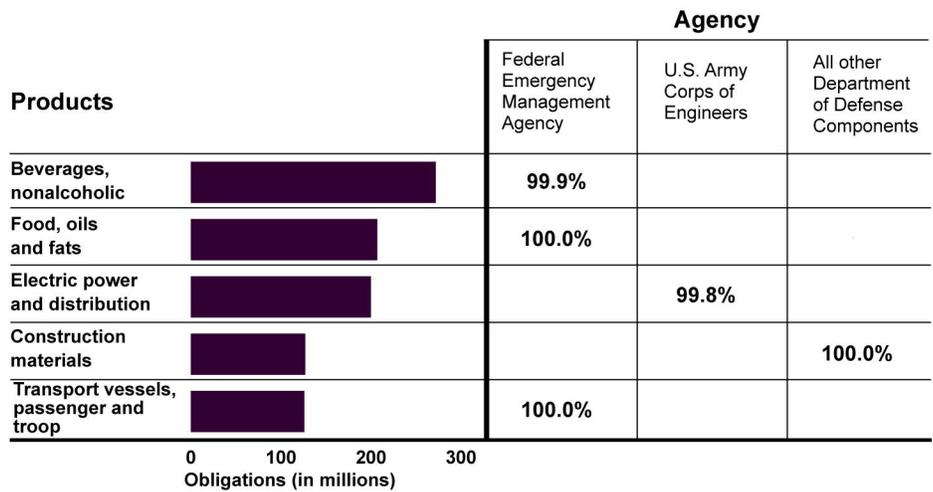
Data Table for Figure 16: Agency Contract Obligations in Support of Hurricane Maria

Department	Percent
DHS - U.S. Coast Guard	0.9
DOD - Department of the Army	1.7
All Other Agencies	2.1

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

Department	Percent
DOD - Defense Logistics Agency	3.9
DHS - Federal Emergency Management Agency	42.6
DOD - U.S. Army Corps of Engineers	48.8

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



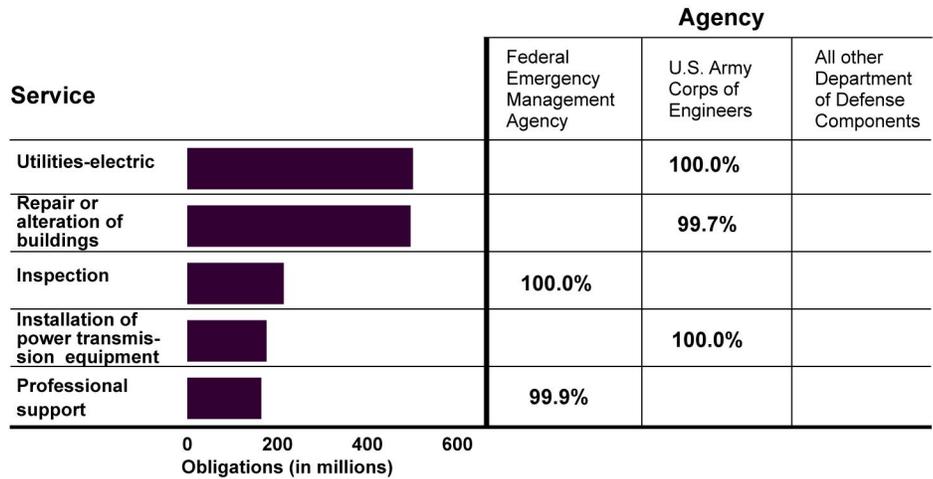
Source: GAO analysis of Federal Procurement Data System-Next Generation data. | GAO-18-335

Data Table for 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

Products	Obligations (in millions)	Federal Emergency Management Agency	U.S. Army Corps of Engineers	All other Department of Defense Components
Beverages, nonalcoholic	272138018	99.9 percent		
Food, oils and fats	207085956	100.0 percent		
Electric power and distribution	200227740		99.8percent	
Construction materials	127287930			100.0 percent
Transport vessels, passenger and troop	126022598	100.0 percent		

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

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

Data Table for 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

Service	Obligations (in millions)	Federal Emergency Management Agency	U.S. Army Corps of Engineers	All other Department of Defense Components
Utilities-electric	501179153		100.0 percent	
Repair or alteration of buildings	496244058		99.7 percent	
Inspection	214623787	100.0 percent		
Installation of power transmission equipment	176789708		100.0 percent	
Professional support	164279538	99.9 percent		

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.

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