

United States Government Accountability Office Report to Congressional Committees

April 2020

DOD UTILITIES PRIVATIZATION

Improved Data Collection and Lessons Learned Archive Could Help Reduce Time to Award Contracts

GAO Highlights

Highlights of GAO-20-104, a report to congressional committees

Why GAO Did This Study

Since 1988, military departments have privatized utility systems—such as electricity, water, natural gas, and wastewater—on military installations. DOD awards privatized utility services contracts to companies who upgrade, maintain, and operate the systems. Members of Congress and stakeholders have expressed concerns over the length of time it takes to award these contracts. DOD has a goal of reducing the time frames.

A House committee asked GAO to review DOD's utilities privatization. This report examines (1) the length of time to award contracts for privatized utility services, and (2) the extent to which DOD is demonstrating leading practices to collect and disseminate lessons learned.

GAO reviewed data on all 21 new utility services contracts awarded from fiscal years 2016 through 2018; compared DOD's lessons learned activities with GAO's leading practices; and interviewed DOD and utility company officials.

What GAO Recommends

GAO recommends that (1) DOD and the military departments collect information on the time to complete key steps when awarding these contracts, and (2) DOD develop a mechanism to store and archive lessons learned from across the department. DOD partially concurred with both recommendations, noting that it would be beneficial to expand the actions GAO had recommended. GAO agrees that such an expansion would be helpful in efforts to collect more data.

View GAO-20-104. For more information, contact Timothy J. DiNapoli at (202) 512-4841 or dinapolit@gao.gov.

DOD UTILITIES PRIVATIZATION

Improved Data Collection and Lessons Learned Archive Could Help Reduce Time to Award Contracts

What GAO Found

From fiscal years 2016 through 2018, Department of Defense (DOD) components awarded 21 new contracts for privatized utility services on military installations. The contracting process generally took an average of 4 years from solicitation to contract award. However, the entire pre-award contracting process could be longer, as GAO found that DOD does not maintain complete data on the time to conduct key steps in the acquisition planning phase (see table).

Average Time to Award Privatized Utility Services Contract by Contracting Agent Average Time to Complete Contracting Pre-award						
		Phases (months)				
	Number of	Acquisition	Solicitation to	Total acquisition		
Contracting agent	contracts	planning	contract award	time		
Defense Logistics		Data not		Data not		
Agency Energy	19	available	44.9	available		
Naval Facilities						
Engineering Command	1	7.5	92.4	99.9		
Air National Guard		Data not		Data not		
	1	available	56	available		

Source: GAO analysis of DOD data. | GAO-20-104

GAO found that DOD does not maintain data on when military departments begin to consider privatization and when a complete inventory of the associated infrastructure, such as pipes and valves, is available to use in the solicitation. While no DOD regulation or policy that GAO reviewed requires the collection of data on the time to complete all pre-award activities, in 2014, Defense Logistics Agency Energy officials established milestones to plan and monitor key pre-award activities. GAO found that the length of time from receipt of requirements to contract award was reduced from an average of 61 months pre-2014 to an average of 35 months post-2014.

The lessons learned efforts of DOD to shorten the time to award contracts have fully or partially demonstrated four of five leading practices. DOD's efforts include:

- collecting information through working groups and conferences;
- analyzing past privatization efforts to focus management oversight;
- validating changes by demonstrating new processes;
- storing lessons learned through revised guidance; and
- sharing lessons learned through working groups and training.

However, as DOD does not collect consistent information on the total time to award utility services contracts, DOD is missing opportunities to use lessons learned to reduce the time. Further, DOD does not have a repository for archiving specific lessons learned from utilities privatization efforts. Rather, DOD officials note they consider lessons learned as they develop updated guidance, templates, and handbooks. Without a repository of specific lessons learned, such as conducting the privatization process, DOD is missing opportunities to collect and share lessons learned to assist stakeholders on the remaining 580 utility systems it considers available for privatization.

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Abbreviations

ASD(Sustainment)	Office of the Assistant Secretary of Defense for Sustainment
DLA Energy DOD	Defense Logistics Agency Energy Department of Defense
FAR	Federal Acquisition Regulation
NAVFAC	Naval Facilities Engineering Command

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U.S. GOVERNMENT ACCOUNTABILITY OFFICE

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

April 2, 2020

The Honorable James M. Inhofe Chairman The Honorable Jack Reed Ranking Member Committee on Armed Services United States Senate

The Honorable Adam Smith Chairman The Honorable Mac Thornberry Ranking Member Committee on Armed Services House of Representatives

The military departments have been privatizing utility systems at military installations since 1988. As of December 2019, the Department of Defense (DOD) had privatized 614 of 2,590 utility systems on military installations worldwide. Utilities privatization is the process of transferring ownership and operations of utility systems from the government to a private or public entity. Utilities include electric, water, wastewater, and natural gas systems, among others. DOD has acknowledged that it has not maintained the systems in accordance with industry standards due to competing funding priorities, resulting in systems badly in need of repair and upgrades. According to the Office of the Assistant Secretary of Defense for Sustainment, utilities privatization enables military installations to obtain safe, reliable, and technologically current utility systems at a lower cost than under continued government ownership.

Members of Congress, DOD, and industry have expressed concerns about the length of time it takes to award contracts to privatize utility systems on military installations; reducing the time frames is a stated goal of DOD. A House Armed Services Committee report accompanying the National Defense Authorization Act for Fiscal Year 2019 included a provision that we review DOD's utilities privatization pre-award contracting process (which includes awarding a contract), including lessons learned to improve the process. This report examines (1) the length of time to award contracts for utility services and factors that affect it, and (2) the extent to which DOD is demonstrating leading practices to collect and disseminate lessons learned for utilities privatization. To determine the length of time to award contracts for utility services under the privatization process, we obtained data on new utility services contracts awarded from fiscal years 2016 through 2018, the latest full year of available data when we began our audit. To review the privatization process, we examined the pre-award activities because that period encompasses the military departments' decision-making to convey utility systems through privatization. The time frame captured at least one privatized utility services contract for each military department—Army, Air Force, and Navy. Collectively, DOD awarded 21 new contracts that privatized a total of 28 utility services at 15 military installations over the 3-year time frame as shown in table 1.

 Table 1: Number of DOD New Privatized Utility Services Contracts Awarded from

 Fiscal Years 2016 through 2018 by Contracting Agent

Contracting agent	DOD component	Number of contracts	Number of utilities	Number of military installations
Defense Logistics Agency Energy	Army	10	13	7
Defense Logistics Agency Energy	Air Force	9	13	6
Naval Facilities Engineering Command	Navy ^a	1	1	1
Air National Guard	Air National Guard	1	1	1
Total		21	28	15

Source: GAO analysis of DOD information. I GAO-20-104

^aThe Department of the Navy also includes the U.S. Marine Corps. The U.S. Marine Corps did not award any new utility services contracts from fiscal years 2016 through 2018.

For the purposes of our review, we define the pre-award contracting process to start when a military department begins to consider privatizing an installation's utility system(s) by, for example, formally designating which utilities at which installations could be privatized. We define the end of the process when the military department awards one or more utility services contracts.

We reviewed relevant statutes; applicable sections of federal, defense, and agency acquisition regulations and guidance; and military department and Defense Logistics Agency Energy (DLA Energy) documentation. DLA Energy served as the contracting agent on behalf of the Army and Air

Force during our review period.¹ We also reviewed contract files maintained by DLA Energy, Naval Facilities Engineering Command (NAVFAC), and the Air National Guard to determine the time to complete the process. We verified information maintained by each of these organizations on the length of time it takes to complete certain steps in the contracting process with information contained in the contract files. After correcting certain errors, such as incorrectly recorded dates, we determined that this information was sufficiently reliable for purposes of reporting on the length of time to conduct pre-award contracting activities. We also interviewed knowledgeable officials at the Office of the Deputy Assistant Secretary of Defense for Energy, which is part of the Office of the Assistant Secretary of Defense for Sustainment (ASD(Sustainment)), DLA Energy, the military departments, installations, and the contractors providing utility services. We selected a non-generalizable sample of three military installations with completed utilities privatization projects to gather information about the factors that affect the time to complete the pre-award contracting process. The selection was based on characteristics such as the fiscal year the contract was awarded and the number and type of utility systems privatized. We visited the following military installations: (1) Naval Air Station Key West, Florida; (2) Wright-Patterson Air Force Base, Ohio; and (3) Fort Riley, Kansas. The results of this selection are not generalizable to all utility services contracts or military installations, but provide insights and illustrative examples regarding factors that affect timing in the contract award process used to privatize utility systems.

To determine the extent to which DOD demonstrated leading practices identified by GAO and others for collecting and disseminating lessons learned, we compared DOD's activities related to lessons learned to leading practices we identified in prior work.² We analyzed DOD's lessons

¹DLA Energy's responsibilities as a contracting agent are generally found in agency-level memorandums of agreement for contracting support.

²GAO, Federal Real Property Security: Interagency Security Committee Should Implement a Lessons-Learned Process, GAO-12-901 (Washington, D.C.: Sept. 10, 2012); and Project Management: DOE and NNSA Should Improve Their Lessons Learned Process for Capital Asset Projects, GAO-19-25 (Washington, D.C.: Dec. 21, 2018). GAO-19-25 identified some lessons-learned practices from reports by both the Project Management Institute and the Department of the Army, Combined Arms Center, Center for Army Lessons Learned. Project Management Institute, Inc., A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Sixth Edition, 2017; Project Management Institute, Inc., Implementing Organizational Project Management: A Practice Guide, First Edition, 2014; and Center for Army Lessons Learned, Establishing a Lessons Learned Program: Observations, Insights, and Lessons (Fort Leavenworth, KS: June 2011).

learned documentation including: military department and DLA Energy contracting process, policies, procedures, and operating manuals; DLA Energy's utilities privatization website; Air Force and Navy utilities privatization handbooks; and the Air Force's lessons learned database. Based on our analysis, we assessed whether DOD fully, partially, or did not demonstrate the leading practices. We also interviewed officials from these organizations, obtained and analyzed documents, and attended the 2019 DLA Energy Worldwide Energy Conference to gain an understanding about utilities privatization. Appendix I has more details on our scope and methodology.

We conducted this performance audit from March 2019 to April 2020 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Utilities Privatization Authorities The military departments have been privatizing utility systems at military installations since 1988. In 1997, Congress provided the military departments permanent statutory authority, codified at 10 U.S.C. § 2688, as amended, to convey, or privatize, utility systems under military jurisdiction, such as those on military installations.³ The authority defines a utility system as a system for the generation and supply of electric power; the treatment or supply of water; the collection or treatment of wastewater; and the supply of natural gas, among others. When privatizing a utility, the Secretary of a military department makes a decision to convey a system to a private or public entity, and then a utility systems found on military installations.

³National Defense Authorization Act for Fiscal Year 1998, Pub. L. No. 105-85, § 2812 (1997), codified as amended at 10 U.S.C. § 2688. Additionally, since 1988, the military departments have used other authorities for specific utilities privatization efforts. For example, the Army had privatized some systems after obtaining congressional authority for each specific case.

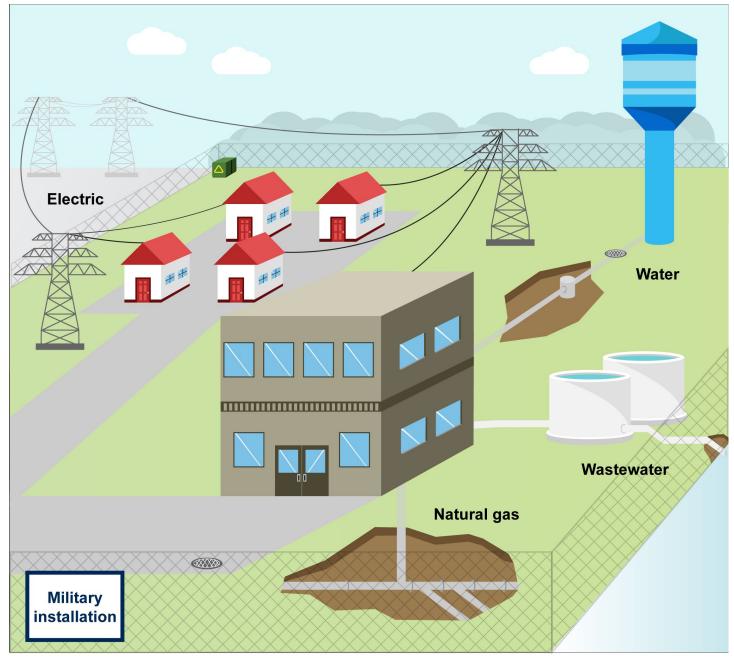


Figure 1: Types of Utility Systems Privatized on Military Installations

Source: GAO. | GAO-20-104

A utility system includes the associated equipment, fixtures, and structures, as well as easements and rights-of-way. 10 U.S.C. § 2688 states that the Secretary of a military department may convey a utility system, or part of a system, to a municipal, private, regional, district, or cooperative utility company or other entity. DOD's policy states that the military departments may maintain ownership of utility systems and decide not to privatize them for security reasons, or when privatization is determined to be uneconomical.⁴ According to officials, once DOD conveys a utility system and awards a contract for utility services, the contractor is responsible for replacing, repairing, and maintaining the associated equipment and structures as needed. Figure 2 provides photos of the before and after condition of a privatized utility system was modernized to replace analog monitoring equipment with digital equipment.

⁴During the period covered by our review, Department of Defense Instruction 4170.11, Installation Energy Management, Encl. 3 (Mar. 16, 2016) was in effect until superseded by Department of Defense Instruction 4170.11, Installation Energy Management, Encl. 3 (Dec. 11, 2009 (Incorporating Change 2, Aug. 31, 2018)). Enclosure 3, Sec. 3e, Utilities Privatization, has since been superseded by Under Secretary of Defense for Acquisition & Sustainment, *Supplemental Guidance for the Utilities Privatization Program* (Feb. 7, 2019). In the past, DOD has said that a system might be exempted from privatization for security reasons in situations where non-federal ownership would create an unacceptable risk to a military department's mission or compromise classified operations or property. A system was deemed uneconomical to privatize only when there is a demonstrated lack of market interest or when the costs to the government exceed the benefits. Deputy Secretary of Defense, *Department of Defense Reform Initiative Directive #49 – Privatizing Utility Systems*, Attachment (Dec. 23, 1998).

Figure 2: Electrical Panel on a Military Installation before (left) and after (right) the Utility System was Privatized



Source: Copyright © City Light & Power, Inc. | GAO-20-104

Utilities Privatization Program Management

The Office of the ASD(Sustainment), within the Office of the Secretary of Defense, develops policies for and oversees DOD's utilities privatization program. There are two main sources of DOD policy for utilities privatization—a DOD instruction on energy management at the installation level and a supplemental guidance specific to utilities privatization. During the period covered by our review, the instruction directed the military departments to attempt to privatize all utility systems, unless the Secretary of the military department determines that the system is exempt from privatization for security or economic reasons. In February 2019, DOD released supplemental guidance, which, among other things, superseded the relevant portions of the instruction (and cancelled prior supplemental guidance), and did not include a preference for privatization or the direction to complete privatization may now be performed at the discretion of the military departments.⁵

The military departments have the responsibility for program implementation, as the statutory authority to privatize utility systems is granted to the Secretaries of the military departments. As such, the military departments determine which systems will be privatized and

⁵Office of the Under Secretary of Defense for Acquisition and Sustainment Memorandum, *Supplemental Guidance for the Utilities Privatization Program* (Feb. 7, 2019). According to this guidance, changes were made to account for alternative financing options for infrastructure improvements, among other things.

which systems may be exempted from privatization. Once a military department begins to consider an installation for privatization, the installation command assists and facilitates in carrying out the privatization effort. According to officials, DLA Energy is the contracting agent for the majority of privatized utility services contracts awarded on behalf of the Army since 2004 and for the Air Force since 2008. Navy officials noted that NAVFAC is the contracting agent and administrator for the Navy and Marine Corps privatized utility services contracts.

As of December 2019, the military departments have privatized roughly a quarter of the utility systems on military installations (614 of the 2,590 systems); roughly a third of the systems were already owned by entities other than the federal government (733 of 2,590) (see table 2).

Military department	Privatized utility systems	Utility systems exempted from privatization ^a	Utility systems owned by others ^b	Utility systems available for privatization	Total utility systems
Army	386	0	483	247°	1,116
Air Force	194 ^d	174	59	233	660
Navy	34	489	191	100	814
Total	614	663	733	580	2,590

Table 2: Status of Department of Defense Utilities Privatization, as of December 2019

Source: Department of Defense. I GAO-20-104

^aMilitary departments may determine not to privatize utility systems for economic or security reasons. ^bUtility systems owned by others include systems that were built and are maintained by an entity other than the United States government.

^cDefense Logistics Agency Energy owns 16 utility systems located on Army installations. ^dIncludes one Wisconsin Air National Guard utility system privatized during fiscal years 2016 through 2018.

As reflected in the table, the military departments have identified 580 utility systems that are available for future utilities privatization. As of September 2018, DLA Energy reported that it had 18 ongoing utilities privatization efforts—12 for Army and six for Air Force. Also, the Navy noted that it has three ongoing utilities privatization efforts. According to Air Force and Navy officials, their departments took a "strategic pause" on new utilities privatization efforts in 2015 to determine if privatization is the best option for recapitalizing their deteriorating utility systems. The Navy and Air Force resumed new utilities privatization efforts in fiscal year 2017 and fiscal year 2019, respectively. DLA Energy will act as contracting agent for the Navy on a pilot basis, as well as continuing to do so for the Army and Air Force for future contract awards.

DOD's Contracting Process	The process for privatizing a utility system culminates in two actions: the award of a utility services contract and conveyance of the physical assets of the utility from the military department to the awardee. Once the military department has decided to consider privatizing a utility system at an installation, the department initiates efforts to award one or more utility services contracts. This contracting process is governed by federal statutes, the Federal Acquisition Regulation (FAR), the DOD and military department supplements to the FAR, and military department and agency guidance. For example, DOD is generally required to award utility services contracts using competitive procedures, but can award contracts



Source: GAO analysis of federal regulations and agency guidance. | GAO-20-104

• Acquisition Planning: Acquisition planning includes developing requirements, preparing cost estimates, and conducting market research to determine market interest, among other activities.⁷ For utilities privatization efforts, requirements also include the inventory of equipment—such as pipes, valves, and wires—and structures associated with the utility system. For privatized utility services contracts this phase begins with the decision to consider the privatization of utilities at a given installation and generally ends with the approval of an acquisition strategy.

⁶¹⁰ U.S.C. § 2688(b); 10 U.S.C. § 2304; and Federal Acquisition Regulation (FAR) part 6.

⁷For additional information, see GAO, *Service Contracts: Agencies Should Take Steps to More Effectively Use Independent Government Cost Estimates*, GAO-17-398 (Washington, D.C.: May 17, 2017); *Market Research: Better Documentation Needed to Inform Future Procurements at Selected Agencies*, GAO-15-8 (Washington, D.C.: Oct. 9, 2014); and *Acquisition Planning: Opportunities to Build Strong Foundations for Better Services Contracts*, GAO-11-672 (Washington, D.C.: Aug. 9, 2011).

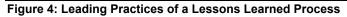
- Solicitation: Military departments may solicit offers from prospective contractors by issuing a request for proposals. The request for proposals informs the prospective contractors of the government's requirements, the anticipated terms and conditions that will apply to the contract, the information required in a proposal, and the factors used to evaluate proposals and their relative importance. Those who wish to respond must submit their proposal to the contracting office in the time and manner stated in the request for proposals. We consider the solicitation phase to begin with solicitation issuance and end at the deadline to submit the initial proposals, although the solicitation can be amended later and proposals revised.
- Initial Evaluation: Proposal evaluation is an assessment of the proposals based on stated evaluation factors and the offerors' ability to perform the prospective work successfully. For example, proposals undergo technical evaluation to determine offerors' ability to meet the technical requirements and cost or price evaluation to determine whether the price is fair and reasonable. We consider the initial evaluation phase to begin when potential offerors submit initial proposals and end once government contracting personnel receive approval to enter into negotiations or discussions.
- Discussion/Negotiation: Negotiations are exchanges, in either a competitive or non-competitive environment, between the government and offerors that are undertaken with the intent of allowing the offerors to revise proposals and obtaining the best value for the government. Negotiations allow, among other things, the offerors to address any government concerns with the proposals. We consider this phase to begin when the contracting officer receives approval to enter into negotiation and end when contracting personnel receive approval to award the contract.
- **Contract Award:** We consider the contract award phase to begin when the approval to award the contract is given and to end when the contracting officer signs the contract. In utilities privatization, as a part of the contract award phase, the Secretary of the military department makes a decision to convey the utility systems after the awardee has been selected.

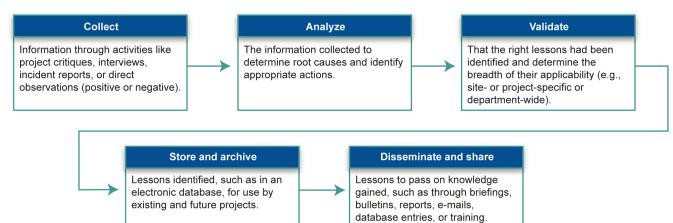
While the utilities privatization process must comply with relevant statutes and regulations, it has certain unique attributes.⁸ According to DLA Energy and military department officials, installations must conduct a thorough inventory of the physical assets associated with the utility

⁸The specific regulations that pertain to the acquisition of utility services are under FAR Part 41 and Defense Federal Acquisition Regulation Supplement Part 241.

	system (e.g., linear feet of water pipes and location, number and location of gas valves, and the number and location of lift station pumps) as well as the system's workload data to inform the requirements document. This is due to the fact that ownership of these physical assets will convey— i.e., be legally transferred—to the contractor after contract award. Conveyance from the military installation to a regulated public sector utility, such as a municipal water and wastewater authority, requires additional approval from the state's utility regulatory commission. Finally, privatized utility services contracts are generally long-term, up to 50 years in some cases. According to DLA Energy and military department officials, these factors affect the consideration of requirements and structure of the utilities privatization process in a way not normally found in standard contracts and can affect the time required for discussions and negotiations.
Leading Practices for Lessons Learned	The use of lessons learned is a principal component of an organizational culture committed to continuous improvement. Through lessons learned, DOD can continuously look for ways to make improvements to the utilities privatization program to shorten the time to award and enhance effectiveness and efficiency. Collecting and sharing lessons learned serve to communicate knowledge more effectively and to ensure that beneficial information is factored into planning, work processes, and activities. This process also provide a powerful method of sharing ideas for improving work processes, facility or equipment design and operation, quality, and cost-effectiveness. Leading practices of a lessons learned process identified by GAO and others include collecting, analyzing, validating, saving or archiving, and disseminating and sharing information and knowledge gained on positive and negative experiences. ⁹ Figure 4 shows this process.

9GAO-12-901 and GAO-19-25.





Source: Analysis of prior GAO reports and the Center for Army Lessons Learned report, Establishing a Lessons Learned Program: Observations, Insights, and Lessons. | GAO-20-104

Prior GAO Work

Since 2005, we have issued four reports that assessed various aspects of DOD's utilities privatization efforts:

- In May 2005, we identified several management weaknesses in DOD's implementation of the utilities privatization program. For example, we identified a number of concerns, such as the reliability of the economic analyses associated with privatization decisions and the adequacy of contract oversight. We made eight recommendations to help ensure the reliability of economic analyses and improve the utilities privatization guidance and procedures, among other things. DOD non-concurred with seven recommendations and partially concurred with one recommendation in its response to the report; however, DOD has since implemented all but one recommendation.¹⁰
- In September 2006, we reported that DOD's progress in implementing the utilities privatization program had been slower than expected and management concerns remained.¹¹ For example, the targeted time frame for program implementation was delayed by 6 years and

¹⁰GAO, *Defense Infrastructure: Management Issues Requiring Attention in Utility Privatization*, GAO-05-433 (Washington, D.C.: May 12, 2005). The one recommendation DOD did not implement was to revise the guidance for preparing economic analyses.

¹¹GAO, Defense Infrastructure: Actions Taken to Improve the Management of Utility *Privatization, but Some Concerns Remain,* GAO-06-914 (Washington, D.C.: Sept. 5, 2006).

concerns remained about the reliability of economic analyses used to support privatization decisions. We made seven recommendations to improve DOD's management of utilities privatization. DOD generally concurred with and implemented six of these recommendations.¹²

- In July 2015, we identified that DOD faces challenges in implementing utility resilience efforts, such as collecting and reporting comprehensive utility disruption data, and developing cybersecurity policies for its industrial control systems.¹³ We made four recommendations to clarify utility disruption reporting guidance, improve data validation steps, and address challenges to cybersecurity industrial control systems. DOD concurred or partially concurred with all but one recommendation and implemented three recommendations.
- In September 2018, we reported that DOD lacked guidance to develop performance metrics and implement cybersecurity requirements for privatized utility services contracts.¹⁴ We made two recommendations to provide guidance for development of metrics to track utilities privatization contract performance, and what constitutes covered defense information as it related to utility services contracts. DOD concurred with and implemented both recommendations.

Concerns about the length of time to award contracts are not limited to utilities privatization. For example, in July 2018, we reported that although DOD proposed reducing the time it takes to award weapon systems contracts, the department has limited understanding of how long it currently took and therefore lacked a baseline to measure success. We also found that, according to contracting officials, factors such as the quality of proposals, prospective offeror responsiveness to agency request for additional information, and complexity of the technical

¹²GAO-06-914. The one recommendation DOD did not implement was to require each project's economic analysis to include the system's current annual costs and the actual expected annual cost if the system is not privatized.

¹³GAO, *Defense Infrastructure: Improvements in DOD Reporting and Cybersecurity Implementation Needed to Enhance Utility Resilience Planning*, GAO-15-749 (Washington, D.C.: July 23, 2015). The one recommendation DOD did not implement was to revise the data collection template instructions to include reporting of disruptions caused by DOD-owned infrastructure. In fiscal year 2015, however, Congress passed legislation requiring DOD to collect data on non-commercial utility outages involving DOD-owned infrastructure.

¹⁴GAO, *Defense Infrastructure: Guidance Needed to Develop Metrics and Implement Cybersecurity Requirements for Utilities Privatization Contracts*, GAO-18-558 (Washington, D.C.: Sept. 4, 2018).

	requirements can add or reduce the time required for evaluation of proposals. We recommended that, to assess time frames for awarding contracts, DOD should develop a strategy to determine what information it should collect and how to use that information. DOD concurred and implemented the recommendation. ¹⁵
Time to Award Privatized Utility Services Contracts Is Lengthy and Affected by a Number of Factors	The time to complete the utilities privatization pre-award process generally took an average of 4 years from issuing the solicitation to awarding a contract for utility services for the contracts we assessed. Utilities privatization officials acknowledged that the process is lengthy, but DOD does not maintain complete data on key steps in the process, including when the process to consider privatization of a utility system began and the time needed to conduct acquisition planning. Consequently, it is not possible to determine the entire time to complete privatization of a utility system. In addition, the time to complete a specific utilities privatization effort may be affected by a number of factors. These factors can include changes to internal or external requirements, the technical complexity of the individual effort, the continuity of personnel involved in the effort, and command support for privatization.
Time to Complete Utilities Privatization Is Lengthy and Data for Each Phase of the Process Is Not Available	The 21 new contracts for privatized utility services awarded from fiscal years 2016 through 2018 generally took an average of 4 years from the time the DOD component issued a solicitation to when the contract was awarded. Utilities privatization officials acknowledged that the process is lengthy. They stated that it is due, in part, to the long-term nature of the contracts—that can be up to 50 years—and the complexity of the contracts. The entire pre-award contracting process could be longer, as we found that, with the exception of the one Navy-awarded contract we reviewed, DOD does not maintain complete data for every phase of the process. The data DOD does not maintain includes key events in the acquisition planning phase, specifically, when the military departments began considering privatizing a specific utility and when the requirements packages—a complete inventory of the associated infrastructure, such as pipes, wires, and valves—were available to use in the solicitation. Table 3 presents the available information on the average time to complete the five phases of the pre-award contracting process identified by GAO for the contracts we assessed.

¹⁵GAO, *Defense Contracts: DOD Should Develop a Strategy for Assessing Contract Award Time Frames*, GAO-18-467 (Washington, D.C.: July 16, 2018).

Table 3: Average Time for Privatized Utility Services Contracts Awarded from Fiscal Years 2016 through 2018 by Contracting Agent

		Average Time to Complete Contracting Pre-award Phases (months)						
Contracting agent	Number of contracts	Acquisition planning	Solicitation	Initial evaluation	Discussion/ negotiation	Contract award	Total	Solicitation to award
Defense Logistics Agency Energy (DLA Energy)	19	Data not available ^a	7.2	14.0	22.5	1.2	Data not available	44.9
Naval Facilities Engineering Command (NAVFAC)	1	7.5	47.8 ^b	Not applicable	40.2	4.4	99.9	92.4 ^b
Air National Guard	1	Data not available	0.7	Data not available	Data not available	4.9	Data not available	5.6

Sources: GAO analysis of DLA Energy, NAVFAC, and Air National Guard data. | GAO-20-104

^aAccording to DLA Energy officials, the military departments are generally responsible for tracking of the dates in this phase.

^bDOD officials disagreed with our calculations of the time required to privatize the wastewater system at Naval Air Station Key West. DOD officials noted that it took a 30-month pause during the solicitation phase after the State of Florida extended the date by which the installation needed to comply with new wastewater regulations. During this 30-month pause, the Navy evaluated alternative paths to comply with these regulations and therefore did not allow any additional work to be accomplished towards contract award. After determining that privatizing the utility system remained the most effective approach, however, the Navy resumed evaluating revised proposals that had been received in response to the amended original solicitation. As such, we consider Florida's extension and the resulting pause to be an example of an external factor that can affect the time needed to privatize utilities at military installations.

As indicated in table 3, even after excluding the time needed to conduct acquisition planning, there is wide variation in the average time taken from when contracting officials issued the solicitation to when they awarded the privatized utility services contracts. For example, NAVFAC took more than 92 months—or more than 7 years—to award its contract to privatize the Naval Air Station Key West wastewater system. The total time required to award the contract included a 30-month period during which the privatization effort was paused to evaluate alternative paths to meet new Florida wastewater regulations. Navy officials stated that our timeline should not include the 30-month period because the pause did allow any additional work to be accomplished to prepare for contract award. After determining that privatizing the utility system remained the most effective approach, however, the Navy resumed evaluating revised proposals that had been received in response to the amended original solicitation. DLA Energy took, on average, about 45 months-or nearly 4 years—to privatize utility systems and make awards for the 19 contracts it was responsible for. In contrast, the Air National Guard awarded a noncompetitive contract to privatize the wastewater system at Truax Field in Wisconsin to a local utility provider in about 6 months. However, according to Air National Guard officials, the local utility provider already maintained the infrastructure for the installation and had previously conducted an assessment of the installation wastewater system used to finalize the privatization requirements. While Air National Guard officials could not provide a date as to when they began to consider utilities privatization, they stated that they spent more than 70 months in acquisition planning before issuing the solicitation due, in part, to unfamiliarity with the utilities privatization process.

While no provision of the regulations or policies governing utilities privatization that we reviewed require DOD contracting activities to collect data on the time to complete each phase of the pre-award process, since 2014. DLA Energy officials have attempted to maintain such data for all the contracts for which they were the contracting agent. However, DLA Energy did not maintain data for the completion of milestones within the acquisition planning phase carried out by the military departments. In 2014, DLA Energy officials, with input from Army and Air Force utilities privatization officials, established milestones to plan and monitor key preaward contracting activities, including a target time to complete each milestone. DLA Energy and military department officials noted that these data help provide insight into, and accountability for, the progress made or challenges encountered during the pre-award process. However, the usefulness of these data are limited because the military departments must provide time frames for the front end of the process and have not done so. We found that a number of factors can affect the time to complete pre-award contracting activities, but for the purpose of establishing milestones to monitor these activities, DLA Energy varied the number of milestones and time frames to complete specific activities depending on whether the contract was competitively awarded and the number of proposals received. While table 3 shows the average time it took to complete pre-award phases by contracting agent for the contracts in our audit scope, figure 5 shows the milestones used by DLA Energy for competitive and non-competitive awards and the target time frames DLA Energy established for each milestone.

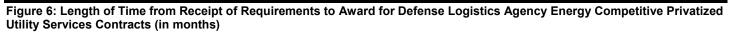
Figure 5: DLA Energy l	Utilities Privatization Milestones and	Time Frames for Phases of Pre-awa	rd Contracting Process
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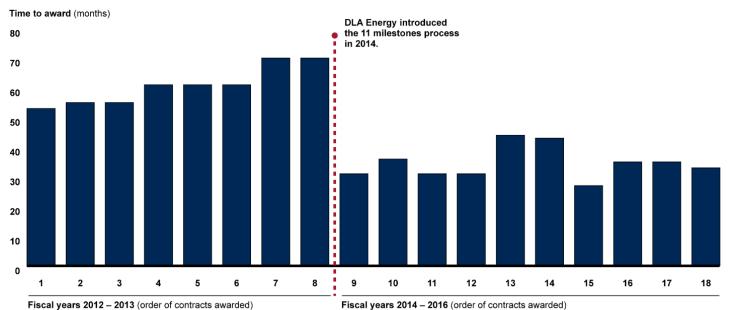
Contracting	-		arget for completion (months		
phase	Milestone and DOD component	1 – 6 competitive proposals received	7 – 10 competitive proposals received	Non-competitive proposals	
Acquisition planning	1 Military department approves schedule	Determined by military department (amount of time unknown)			
	2 Kickoff meeting	Determined by military department (amount of time unknown)			
	Final requirements and government should cost estimate received from military department, and reviewed/ approved by DLA Energy	Determined by military department (amount of time unknown)			
	Brief source selection authority (SSA) on acquisition strategy/signature	2.4	2.4	6.7	
Solicitation	5 Issue request for proposals	0.6	0.6	0.7	
	6 Close request for proposals	4.0	4.0	2.2	
Initial evaluation	 Brief SSA on negotiations strategy/obtain SSA approval to enter into discussions and establishment of competitive range 	4.8	7.1	Not applicable	
Discussion/ negotiation	Brief SSA and obtain concurrence to release final proposal revisions	8.2	9.4	Not applicable	
	(9) SSA reviews and signs the source selection decision document	7.5	9.1	13.7	
Contract	(1) Military department sends conveyance decision to DLA Energy	2.7	2.7	1.6	
award	1) DLA Energy awards contract	0.4	0.4	0.4	
Target	t for total time to award from receipt of requirements package	30.5	35.7	25.3	

Source: GAO analysis of Defense Logistics Agency Energy (DLA Energy) data. | GAO-20-104

DLA Energy officials noted that the time frames for the first three steps in the process—determining that one or more utility systems on an installation should be considered for privatization through when the military department provides DLA Energy a complete requirements package—are determined by the military departments. The military departments have not established target time frames for these activities, but have taken steps to understand factors that affect the time frames, which we discuss later in this report.

DLA Energy and military department officials noted that despite the limitations in the data, this information has helped them provide better management oversight of the process. A DLA Energy official stressed that the target time frames are meant to improve contract award time frames, incentivize performance, and provide accountability, and that they do not expect every contract to meet targets due to the complex nature of utilities privatization. Nevertheless, DLA Energy and military department officials stated that implementation of the milestones helped reduce the amount of time needed to award privatized utility services contracts. Our analysis of the 18 competitive utility services contracts awarded by DLA Energy from fiscal years 2016 through 2018 indicates that the average time from receipt of requirements to contract award has decreased. For example, our analysis indicated that DLA Energy took an average of nearly 61 months from receipt of requirements to competitively award eight contracts related to solicitations issued prior to 2014. Once the milestone tracking process was initiated in 2014, our analysis indicates that DLA Energy took an average of about 35 months from receipt of requirements to competitively award 10 privatized utility services contracts (see fig. 6).





Source: GAO analysis of Defense Logistics Agency Energy (DLA Energy) data. | GAO-20-104

Note: The figure does not reflect seven solicitations issued between fiscal years 2013 and 2018. These seven solicitations had not resulted in an award as of September 30, 2018. The awards or projected awards of the remaining solicitations generally follow the trend shown in this analysis.

Of the 10 privatized utility services contracts DLA Energy awarded since the process was initiated in 2014,

- two met or exceeded DLA Energy's target time frame;
- six were awarded within 6 months of the target time frame; and
- two were awarded over a year longer than the target time frame.

Multiple Factors Affected Length of Time to Award Privatized Utility Services Contracts

DLA Energy and military department officials identified several factors that, individually or collectively, could affect the time to award a privatized utility services contract. These factors include the extent to which internal or external requirements remain stable, the technical complexity of the privatization efforts, the continuity of personnel involved in the effort, and command support for privatization.

 Changes to Internal or External Requirements. According to a utilities privatization official we interviewed, unexpected changes to requirements may affect the time to award a utility services contract.

For example, Navy officials stated that Naval Air Station Key West initiated efforts to privatize its wastewater treatment facilities in August 2007 to meet new Florida wastewater regulations by the compliance deadline of July 2010. A Navy installation official stated that they determined that they would be challenged to meet the new regulations with existing facilities and could not upgrade those facilities to meet the new standards due to inadequate personnel and funding. After the Navy issued the original wastewater solicitation in March 2008, the state extended the required compliance date to December 2015. As a result, installation and Navy officials reconsidered utilities privatization and assessed whether the extended deadline would allow them to reach compliance without privatization. After evaluating alternative paths of action to ensure compliance with the new Florida wastewater regulations, installation and Navy officials determined it remained in the best interest of the installation to proceed with the solicitation and contract award.

Wright-Patterson Air Force Base officials stated that after they issued their solicitation for privatization of water systems, installation officials discovered that two of the wells were contaminated by firefighting foam. This foam, used to extinguish aircraft fires, contained chemicals which washed off runways and seeped into the groundwater. According to installation officials, concentrations of these chemicals exceeded non-regulatory lifetime health advisory levels, prompting the installation to remove the chemicals before distributing the water for use on base. To address the problem immediately, installation officials reported that they engaged with the Air Force Civil Engineer Center to fund a project to modify the existing water treatment plant to remove the chemicals before distributing the water for use; they could not wait for the award of the utility services contract. Installation officials stated the modification to the water treatment plant included the construction of a building to house a large filtration system to remove the contaminant. These officials also stated the modified water treatment plant was then included in the requirements package for the utilities privatization effort.

DLA Energy officials stated that a change to the requirements included in utilities privatization efforts was a frequent occurrence. As this information is central to determining the technical requirements and the cost estimate, changes to an inventory can affect the length of time spent in acquisition planning and in discussions and negotiations. Army officials stated that completion of the list of inventory to be privatized is a time-consuming process as records of the amount of pipes, valves, wires, facilities, or other items is often incomplete. Army and Air Force officials indicated that often multiple surveys of inventory are conducted by both the military departments and the contractor selected to maintain the utility system to finalize requirements. Officials reported that this is because, in part, a final and complete inventory is required so that after award the government can finalize the bill of sale and convey those systems to the utility services contract(s) provider(s).

- **Technical Complexity.** According to utilities privatization officials, the • technical complexity of the utilities privatization effort can also affect how long it takes to award a utility services contract. At Fort Riley, DLA Energy officials, installation officials, and contractor representatives shared with us that the complexity of the regulated environment of some utilities had an effect on the time to award. For example, a contractor representative stated his regulated utility company was one of the potential contractors vying for a utility services contract at Fort Riley, and this required additional approval from the state's utility regulatory commission. DLA Energy officials stated and the contractor representative stated that this additional complexity led to a prolonged negotiation and discussion effort as his company sought additional information about the asset inventory to create what it perceived to be a quality proposal for both the utility services contract and its utility regulatory commission. Our analysis of DLA Energy data found that for the majority of the contracts, the discussion/negotiation phase required the longest amount of time during the pre-award contracting process. The time to award for this utility system took one year longer than other utility systems privatized on the same installation.
- Continuity of Personnel. Utilities privatization officials we interviewed stated that the continuity of personnel involved in the process is critical to awarding a contract in a timely manner. For example, at Naval Air Station Key West, officials told us that staff turnover was prevalent at all levels multiple times during the utilities privatization process. These officials noted this turnover was due, in part, to the isolated location of the installation, which made it difficult to recruit and retain both civilian and military staff. They also noted that in turn, this turnover of staff led to loss of knowledge and dispersion of data. During our visit, we observed that installation staff had difficulty locating documentation and had limited knowledge of what occurred during the pre-award contracting process at the installation. Officials explained that this was due, in part, to the loss of some documentation due to flooding and the management of the process by other commands. In contrast, installation and contracting officials at Fort Riley stated that there was no turnover in the installation staff during the pre-award contracting process and no

turnover in the DLA Energy contracting staff once they took responsibility for administering the utility services contracts. Officials at Fort Riley stated that with continuity of staff, knowledge and working relationships were built and maintained. DLA Energy awarded utility services contracts for three utility systems in a comparatively quick time frame compared to the other contracts in our analysis.

Command Support for Privatization. Utilities privatization officials • stated that the support of the installation's command leadership can facilitate award of a utility services contract. For example, officials at Fort Riley said the installation commander and director of public works department fully supported utilities privatization as the solution to the installation's failing utility systems. These officials noted that due to this desire to privatize utility systems, the senior installation leadership openly communicated its goals and support of privatization throughout the pre-award contracting process. For example, Fort Riley officials stated that public works department staff assigned to work on the utilities privatization effort were sequestered or removed from all other assigned responsibilities. Installation officials stated this allowed the employees to focus on the utilities privatization tasks. According to Fort Riley officials, this leadership support was a factor in reducing the time to contract award. According to our analysis, the utility services contracts for Fort Riley were awarded more quickly than the majority of the utility services contracts we assessed at other installations. In contrast, officials at Wright-Patterson Air Force Base said their leadership was reluctant to fully support utilities privatization. While senior military department leadership directed the installation to privatize its utility systems, installation leadership was reluctant to do so due to concerns of job loss for public works department employees and perceived loss of flexibility in installation operations and maintenance funding. Installation officials stated that this reluctance was one factor in the amount of time it took to make the contract awards. According to our analysis, the contracting award process for the three utility systems at that location took longer than the majority of the utility services contracts we assessed at other installations.

DOD Generally Demonstrated Leading Practices for Lessons Learned to Improve the Utilities Privatization Pre- award Process, but	DOD is generally applying leading practices in its efforts to improve the timeliness of the utilities privatization pre-award contracting process, but is missing opportunities to analyze the effects of its changes and to better share the information with stakeholders. ASD(Sustainment), the military departments, and DLA Energy have taken, or plan to take, actions that demonstrate or partially demonstrate four of the five leading practices identified by GAO and others. However, despite the breadth of activities performed and planned by DOD, the department lacks key data it needs for further analysis and validation of the pre-award contracting process as well as a repository for archiving lessons learned for future stakeholders to access.
Lacks Key Data and Archive for Lessons	ASD(Sustainment), the military departments, and DLA Energy have taken actions to implement lessons learned, in part, to reduce the time it takes to award contracts. We assessed whether these actions demonstrated, partially demonstrated, or do not demonstrate each of the five leading practices for implementation of lessons learned identified by GAO and others. ¹⁶ Demonstration of these leading practices is critical to ensuring that lessons learned endure and that processes are improved. In reviewing ASD(Sustainment), military department, and DLA Energy pre-award documentation and interviewing knowledgeable officials, we found that all the DOD entities fully demonstrated the third leading practice—which is to validate the applicability of lessons—and demonstrated three other leading practices to varying degrees. None of these entities, however, demonstrated the store and archive leading practice (see table 4).

Leading practice	Office of the Assistant Secretary of Defense for Sustainment	Army	Navy	Air Force	Defense Logistics Agency Energy
Collect information	•	٠	•	•	•
Analyze information	•	٠	٠	٠	•
Validate applicability of lessons	•	٠	٠	٠	•
Store and archive lessons	0	0	0	0	0
Disseminate and share lessons	•	•	•	•	٠

Legend:

= fully demonstrated means met all of the criteria.
 = partially demonstrated means met part of the criteria.

 \circ = not demonstrated means met none of the criteria.

Source: GAO analysis of DOD information. I GAO-20-104

¹⁶GAO-12-901 and GAO-19-25.

Collect information. The collect information leading practice involves capturing information about events in the area of interest, which can be achieved through various methods. ASD(Sustainment), the military departments, and DLA Energy officials told us that they collect information for utilities privatization lessons learned through activities such as data calls, working groups, workshops, studies, conferences, and meetings.

Specific examples of DOD demonstrating this leading practice are as follows:

- According to an ASD(Sustainment) official, since about 1997, their office has sponsored a monthly Utilities Privatization Working Group attended by representatives of the military departments and DLA Energy officials. The purpose of the working group is to provide a collaborative forum to adjudicate issues and share lessons learned from utilities privatization activities. For example, topics of discussion on the April 2019 agenda included issues or challenges associated with developing an execution framework, methodologies to implement utilities privatization guidance, and updates on current utilities privatization activities from the military departments and DLA Energy.
- In 2019, ASD(Sustainment) added a requirement to its guidance for an annual utilities privatization program review with each military department to address portfolio lessons learned. According to ASD(Sustainment) officials, their office, the military departments, and DLA Energy officials plan to work together to develop a strategy for complying with the guidance.
- According to an Army official, the Army established a tri-military department annual Utilities Privatization Post-award Workshop in 2014 that discusses post-award issues among the military departments, DLA Energy, and contractors. Each military department has hosted a workshop. For example, the Navy hosted the November 2018 post-award workshop, which included updates by the military departments and DLA Energy on their utilities privatization activities, including some lessons learned.
- The Navy commissioned a study in 2016 to help reestablish its utilities privatization program and reduce life-cycle expenditures on infrastructure, including utility systems.¹⁷ The study examined the costs, benefits, and existing policies for private versus government

¹⁷METRON and Booz Allen Hamilton, *Facility Privatization Strategies and Cost Benefit Analysis Study*, Final Report (2016).

facilities ownership and recommended changes to the Navy's processes for utilities privatization. The study led to, among other things, the creation of Navy-specific utilities privatization guidance. According to a Navy official, they will establish a community of practice in partnership with DLA Energy to provide a quarterly forum for NAVFAC officials to share lessons learned and discuss utilities privatization problems and solutions.

 DLA Energy hosts the biannual DLA Energy Worldwide Energy Conference to provide personnel of the military departments, DLA Energy, and contractors the opportunity to learn from each other and top industry experts on the latest trends and initiatives in energy, including utilities privatization. DLA Energy also participates in the annual Department of Energy Annual Energy Exchange Conference. For example, in 2019 it participated in a discussion panel on utilities privatization.

These efforts to collect information and lessons learned are positive; however, as discussed earlier in this report, DOD lacks complete and consistent information on the time to award utility services contracts. Reducing the amount of time to award these contracts is a stated goal of DOD. ASD(Sustainment) issues annual data calls to the military departments to collect information such as the number of utility systems privatized by military department, the authority under which a privatization took place, and award dates for the utility services contracts. DLA Energy and military department officials indicated that collecting this information has contributed to efforts to reduce the amount of time needed to award utility services contracts. They acknowledge, however, that the military departments do not collect information on the formal decision to consider privatization of utility systems and the length of time to conduct key acquisition planning activities, such as developing a complete inventory of physical assets to document its requirements. The requirements package is a key component in the pre-award contracting process and includes an inventory of the utility system. This inventory includes items such as the pipes, valves, and wires that make up the utility system. Consequently, neither DLA Energy nor the military departments, with the exception of the Navy, had reliable information on the entire time it took to complete the pre-award contracting process. Without data on the key tasks that need to be completed during the pre-award contracting phase, DOD is missing an opportunity to assess the extent to which updated guidance, training, and other ongoing efforts are having an effect on the time to award utility services contracts. In recognition of this, an Air Force official stated that the Air Force Civil Engineer Center recently implemented a schedule-tracking mechanism to capture these dates, which will be used

with all new utilities privatization efforts. Collecting this information consistently across all military departments would allow for a more thorough analysis of contracting process information and could support future process improvement efforts.

Analyze information. The next leading practice is to analyze the information collected to determine root causes and identify appropriate actions.

Examples of DOD demonstrating the information analysis leading practice include:

- According to DLA Energy officials, in 2014, they reviewed and analyzed historical data from utility services contracts to revise the utilities privatization procurement time frame. As mentioned previously, this analysis led to the development of milestones and associated time-based targets to achieve each milestone, based on the number of proposals received, to reduce the pre-award contracting process. According to a DLA Energy official, the agency coordinated with its contractor support, and Army and Air Force program management offices to establish the time-based targets. In May 2014, the Air Force conducted a utilities privatization process improvement review with DLA Energy, among others, to streamline the utilities privatization process. The review allowed the Air Force to reduce the planned timelines for the utilities privatization pre-award contracting process, which DLA Energy administers on behalf of the Air Force, between the issuance of competitive solicitations to award by 14 months to 33 months. Similarly, in October 2014, the Army conducted a utilities privatization process improvement review with DLA Energy with a goal to reduce the time needed from issuance of a competitive solicitation to award of utility services contracts to less than 36 months. Army and DLA Energy officials identified opportunities for process or program improvement during the review. Overall, adopted changes reduced the planned timelines for the utilities privatization pre-award contracting process by approximately 5 months to 31 months.
- An Air Force official stated that lessons learned are collaboratively shared annually and have revealed lessons learned to improve the contracting process. This has led to updates of Air Force request for proposals template.
- The 2016 Navy study not only collected data on utilities privatization but also provided analysis to understand the opportunities, costs, and benefits associated with privatization. The Navy used the study to

enable decisions about whether privatization is the appropriate strategy to reduce life-cycle expenditures on utility infrastructure. The analysis performed for the study resulted in multiple products and findings. For example, the Navy created an Excel-based tool to consolidate utility data, organize data, and prioritize installations for evaluation of the potential to privatize.

 ASD(Sustainment) revises its utilities privatization guidance and procedures based on lessons learned and changes in laws and regulations. For example, we found that DOD responded to industry feedback by standardizing and clarifying request for proposal templates used in utilities privatization.

Based on our analysis, the military departments and DLA Energy fully demonstrated the leading practice for analyzing information, and ASD(Sustainment) partially demonstrated the leading practice. According to DOD, ASD(Sustainment) is responsible for overseeing progress tracking and goal setting for utilities privatization across the department. Therefore, analysis for performance across the department on the time it takes to award utility services contracts is its responsibility. As mentioned previously, while ASD(Sustainment) collects data on the number of utility services contracts, it is missing information about key pre-award contracting activities. In the absence of this information, ASD(Sustainment) cannot fully analyze the department's utilities privatization activities for further lessons learned to help reduce time frames for awarding contracts.

Validate applicability of lessons. Once collection and analysis have identified the lessons learned, the next leading practice is to validate that the right lessons have been identified and determine the scope of their applicability. Subject matter experts or other stakeholders may be involved in this step of the process.

Examples of DOD's demonstration of the validation leading practice include:

- ASD(Sustainment) officials noted that they assess the applicability of lessons by periodically revisiting and revising utilities privatization guidance. These officials said they revised such guidance, for example, in 2002, 2005, 2010, and 2019 to incorporate lessons learned from stakeholders across the process.
- According to an Army official, the Army periodically assesses the applicability of lessons learned by revising its utilities privatization

acquisition process based on the Army's strategic direction, military department meetings, and utilities privatization policy changes. This included the utilities privatization acquisition process improvement review with DLA Energy to reduce the time needed to award utility services contracts.

- According to the 2016 Navy study, contractors conducted interviews to validate data, obtain supplementary data, and ascertain qualitative information. In addition, contractors interviewed Air Force and Army utilities privatization representatives to garner lessons learned and understand other DOD components' approaches to utilities privatization. One result of the study was development of a repeatable methodology and framework, based on specific lessons learned, that can be used to evaluate candidate sites for utilities privatization. In addition, according to an official, the Navy is using the lessons learned from its study to develop its new utilities privatization handbook, a draft of which emphasizes the need throughout the process for the collection, documentation, and sharing of lessons learned to help future installations and refine the utilities privatization program. According to the Navy, it plans to update the handbook on an ongoing basis to reflect lessons learned from its pilot program with DLA Energy, and with the Army and Air Force utilities privatization programs.
- An Air Force official stated that over an 18-month period they assessed their utilities privatization process and developed a new, comprehensive utilities privatization process for pre-award contracting activities. The Air Force determined the scope of the applicability of lessons learned when it revised its draft utilities privatization playbook to incorporate this new process.
- DLA Energy revised how it monitors the utilities privatization process based on its analysis of historical utilities privatization data. DLA Energy officials said they validated these changes by testing the milestones and associated targets on a 2014 Army utility services contract and found them to be reasonable. Army and Air Force officials agreed with the assessment. DLA Energy officials stated that they also determined the scope of the applicability of lessons learned by determining to whom and what the lessons learned applied, and by taking actions to continually revisit and revise its templates and procedures. For example, we found that the fiscal years 2012 and 2016 versions of the request for proposals template reflected changes for both the Army and Air Force but we could not determine if they were the result of lessons learned. We also identified revisions DLA Energy made to incorporate lessons learned into operating manuals it

uses for the utilities privatization process. For example, a DLA Energy official noted that the agency revised its risk evaluation manual to improve the quality of the risk evaluations the source selection evaluation board performs.

Store and archive lessons. The archiving of lessons learned involves the use of a repository, used to disseminate and share information. As appropriate, these repositories should have the capability to store and share data and to secure classified, sensitive, or proprietary data. Archiving lessons learned should remain an ongoing process; otherwise, it risks becoming cumbersome and irrelevant.

Our observations on DOD's efforts to store and archive information on utilities privatization include:

- According to Air Force officials, the Air Force does not currently store or archive lessons learned for pre-award contracting activities. The Air Force Portfolio and Asset Control and Evaluation System stores and archives lessons learned for post-award contracting activities. The system is available to Air Force, DLA Energy, and other stakeholder agencies like the General Services Administration, but not to other military departments. To populate the database, the Air Force Civil Engineer Center portfolio management division uploads utilities privatization documents into the system, including weekly status reports, briefings, and meeting notes for post-award contracting activities. The system also records lessons learned and provides a social media discussion platform, known as the Contracting Officer's Representative Toolbox. Our review of the system determined that it is not widely populated. Specifically, as of December 2019, the system contained seven lessons learned, three discussion postings, and five documents in the Toolbox. According to Air Force officials, however, this system was not intended to be a repository for storing and archiving lessons learned for pre-award contracting activities and acknowledged that the Air Force does not currently have another means to do so.
- According to DLA Energy officials, they do not maintain a specific repository for storing and archiving lessons learned for utilities privatization pre-award contracting activities but make their revised templates and procedures—that they believe generally reflect key lessons learned—available to stakeholders for utilities privatization on a website. According to a DLA Energy official, the website is open to anyone that can access DLA.mil, but most of the content is intended to assist contracting officer's representatives in conducting their postaward contracting responsibilities.

- The Army has one key official who has managed its utilities privatization program activities for many years and has a substantial amount of experience and institutional knowledge. This official maintains utilities privatization files in hard copy—such as guidance, memorandums, and relevant studies—therefore this information is not readily available to all relevant stakeholders, such as the other military departments. According to the Army official, the Army does not maintain a repository for storing and archiving lessons learned for utilities privatization pre-award contracting activities.
- According to Navy officials, NAVFAC has a business management system that provides for the management of business processes, common practices, and process and quality improvement for NAVFAC products and services. The system's documentation is available for use by all NAVFAC commands and links to applicable policies, guidance, forms, and information so that work will be conducted in a consistent manner. According to officials, this system is updated annually or at significant process changes. However, the Navy is currently developing a module for the business management system for utilities privatization with an estimated completion date of March 2020. Navy officials stated that the module is expected to include preaward contracting lessons learned when it becomes operational.
- According to ASD(Sustainment) officials, they do not maintain a repository for storing and archiving lessons learned for utilities privatization pre-award contracting activities.

While ASD(Sustainment), the military departments, and DLA Energy officials stated they incorporate lessons learned in various ways, including when they revise policies and/or operating manuals, these officials acknowledge that they do not maintain a repository for storing and archiving lessons learned on specific utilities privatization pre-award contracting efforts. DLA Energy officials, who support both the Army and Air Force utilities privatization efforts, stated that revisions to templates and guidance were sufficient to implement lessons learned. The leading practices for lessons learned indicate that the use of a repository to store lessons learned allows agencies to disseminate and share the lessons learned. Without such a capability, ASD(Sustainment), the military departments, and DLA Energy may be missing opportunities to capture and share lessons learned that could benefit future utilities privatization efforts, including helping DOD achieve its goal of reducing the length of time to contract award.

Disseminate and share lessons. A critical step in any lessons learned process is the sharing and disseminating of the knowledge gained.

Agencies can disseminate lessons in many ways, such as briefings, bulletins, reports, emails, websites, database entries, the revision of work processes or procedures, and training. Lessons can be "pushed," or automatically delivered to a user, or "pulled," where a user searches for them in an archive of lessons learned information.

Examples of DOD demonstrating the disseminating and sharing leading practice include:

- As previously noted when discussing the collection criteria, the DOD officials we spoke with told us that they distribute lessons learned during annual reviews, industry conferences, regular meetings, workshops, training sessions, and working groups. The lack of documentation and archiving of the lessons learned, however, limits the ability of future users to search for and retrieve them.
- DLA Energy officials stated that they share templates created for the utilities privatization program with the military departments and industry. According to an ASD(Sustainment) official, these users find the information helpful and efficient as the templates can be customized where necessary depending on the type of potential contractor and solicitation and updated for lessons learned. Additionally, DLA Energy revises its standard operating procedures for the pre-award contracting process to incorporate lessons learned and disseminate changes. DLA Energy also provides training for the utilities privatization process, for example on the procedures contracting officials should use to conduct negotiations and past performance evaluations for utility services contracts.
- As previously discussed, the Air Force Portfolio and Asset Control and Evaluation System is a system used to store and disseminate lessons learned for the post-award utilities privatization process. While used in a limited fashion, the Contracting Officer's Representative Toolbox consists of a newsfeed and a documents file. The documents section allows users to save and share helpful utilities privatization documents with others. The system also contains a resource center to maintain updated training tools and resources for project oversight including frequently asked questions, best practices, and resolutions to project issues. While the system has the ability to both "push" information to users and allows for users to "pull" data by acting as an archive for documentation, it is not available to Army and Navy utilities privatization staff and does not currently contain lessons learned on the pre-award contracting process.

	We assessed DLA Energy as fully demonstrating, and ASD(Sustainment) and the military departments as partially demonstrating, this lessons learned criteria. While ASD(Sustainment) and military department officials do disseminate and share lessons learned, the inability of future users to search for and retrieve lessons learned limits their utility. For example, Air National Guard officials stated that they were unfamiliar with the utilities privatization process and encountered delays prior to releasing the solicitation, in part, due to the need to obtain information about how to execute the process. Having the capability for others to retrieve archived lessons learned could potentially assist future stakeholders in the process and help further shorten contracting award time frames.
Conclusions	DOD is taking steps to improve the effectiveness and efficiency of the utilities privatization pre-award contracting process and these efforts have contributed to decreasing the time needed to award utility services contracts. In particular, Army and Air Force officials consistently noted that DLA Energy's establishment of a milestone-based system to track the time to complete key steps in the pre-award contracting process in 2014 has helped provide better management oversight and improve accountability. DOD, however, does not collect consistent information on the time to complete key phases needed to award utility services contracts. Specifically, DOD does not have information on when the military departments identify that one or more utility systems on an installation should be considered for privatization and when the installation planning phase. The lack of consistent data on these two key events may hinder DOD's efforts to identify additional opportunities to reduce the length of time needed to award utility services contracts. Similarly, DOD recognizes the importance of collecting and disseminating lessons learned for the utilities privatization program, but currently lacks a mechanism to archive lessons learned during the pre-award contracting phase. As DOD has identified 580 utility systems that still may be privatized, having such a capability for others to retrieve archived lessons learned could potentially assist future stakeholders in the process and help further shorten contracting time frames.
Recommendations for	We are making two recommendations to the Secretary of Defense:
Executive Action	The Secretary of Defense should ensure that the Assistant Secretary of Defense for Sustainment collaborates with the military departments and the Defense Logistics Agency to collect consistent information on the time to complete key steps in the pre-award contracting process for privatizing utility services. (Recommendation 1)

	The Secretary of Defense should ensure that the Assistant Secretary of Defense for Sustainment collaborates with the military departments and the Defense Logistics Agency to develop a mechanism to store and archive lessons learned regarding the pre-award contracting process for privatizing utility services. (Recommendation 2)
Agency Comments	We provided a draft of this report to DOD for review and comment. DOD's written comments are reproduced in appendix II. DOD partially concurred with both recommendations and provided technical comments, which we incorporated as appropriate.
	DOD partially concurred with our first recommendation to collect consistent information on the time to complete key steps in the pre-award contracting process for privatizing utility services. DOD suggested that we modify our recommendation to include other DOD contracting activities that may support privatization efforts. Our recommendation, based on the scope of our audit work, was intended to cover recent privatized utility services contracting activities within the military departments, such as Naval Facilities Engineering Command. But we agree that DOD should include any activity that provides support for utilities privatization in its efforts to collect better data.
	Similarly, DOD partially concurred with our second recommendation to develop a mechanism to store and archive lessons learned regarding the pre-award contracting process for privatization of utility services. DOD suggested that we modify our recommendation to include other DOD contracting activities besides DLA and to recommend that DOD add the lessons learned from the post-award contract process, as post-award contract actions play a critical role in informing pre-award contracting processes. As noted above, we agree that DOD should include any contracting activities that support pre-award utilities privatization efforts. Similarly, while our work did not specifically assess how post-award activities could be incorporated into the lessons learned efforts, we agree that doing so may provide additional insights that would benefit future utilities privatization efforts.
	In its technical comments, DOD disagreed with our presentation of the time required by the Navy to privatize utilities at Naval Air Station Key West. Specifically, DOD officials believed that we should exclude from our calculations a 30-month period that occurred during the solicitation phase in which it evaluated alternative paths to comply with new Florida wastewater regulations. DOD noted that this pause did not allow any additional work to be accomplished towards contract award. We had identified this pause and the rationale underlying the Navy's decision to

do so in the draft report. We continue to believe it is appropriate to reflect this period in our calculations as the Navy did not cancel the original solicitation and, after deciding to continue to pursue the privatization efforts, evaluated the offerors' proposals that had been previously received prior to the pause and subsequently awarded the utility services contract based on that solicitation. In that regard, we consider the change in the date by which the Navy had to comply with Florida's wastewater regulations to be a relevant example of one of the many external factors that can affect the time needed to privatize utilities at a military installation. We did, however, reflect DOD's disagreement with our characterization where appropriate in the report.

We are sending copies of this report to the Secretary of Defense; the Under Secretary of Defense for Acquisition and Sustainment; the Assistant Secretary of Defense for Sustainment; the Secretaries of the Army, Navy, and Air Force; the Director, Defense Logistics Agency; appropriate congressional committees; and other interested parties. This report will also 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 e-mail at dinapolit@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix III.

Di Apol

Timothy J. DiNapoli Director, Contracting and National Security Acquisitions

Appendix I: Objectives, Scope, and Methodology

A House Armed Services Committee report accompanying the National Defense Authorization Act for Fiscal Year 2019 included a provision that we review the Department of Defense's (DOD) utilities privatization preaward contracting process (which includes awarding a contract), including lessons learned to improve the process. This report examines (1) the length of time to award contracts for utility services and factors that affect it, and (2) the extent to which DOD is demonstrating leading practices to collect and disseminate lessons learned for utilities privatization.

To determine the length of time to complete the pre-award contracting process to award a privatized utility services contract, we focused on utility services contracts awarded from fiscal years 2016 through 2018, the latest full year of available data when we began our audit. The time frame captured at least one privatized utility services contract for each military department—Army, Air Force, and Navy. To identify these contracts, we used information maintained by the Office of the Deputy Assistant Secretary of Defense for Energy, which is part of the Office of the Assistant Secretary of Defense for Sustainment (ASD(Sustainment)) on its utilities privatization master list, which includes such information as installation name and location, and when the contract was awarded.

For fiscal years 2016 through 2018, a comparison of the ASD(Sustainment) information and solicitation details provided by the awarding contracting agents identified 28 utility systems at 15 military installations that were privatized during our time frame through 21 contracts. Nineteen of the 21 contracts were awarded using competitive procedures and the remaining two were awarded without providing for full and open competition, which we refer to as non-competitive. Of the 19 competitive awards, 18 were awarded by the Defense Logistics Agency Energy (DLA Energy), which served as the contracting agent for the majority of the Army and Air Force utility services contracts during our review period; and one was awarded by the Naval Facilities Engineering Command, the contracting agent for the Navy and Marine Corps. The two non-competitive contracts were awarded by DLA Energy and the Air National Guard, respectively.

For the purposes of our review, we define the pre-award contracting process as the date from when a military department begins to consider privatizing an installation's utility system(s) to the contract award date. For all 21 privatized utility services contracts awarded between fiscal years 2016 through 2018, we obtained copies of the award documents. In addition, for the 19 competitively awarded utility services contracts, we conducted contract file reviews to record completion dates of pre-award

contracting phases and number of proposals received by utility. For the 18 DLA Energy competitive awards, we conducted two on-site reviews of the contract files at a DLA Energy facility to verify the dates and proposals. At the final DLA Energy contract file review, one analyst located and recorded each relevant document and date confirming completion of the pre-award contracting phase, as well as the offer information. A second analyst verified the accuracy of the information. After correcting certain errors, such as incorrectly recorded dates, we determined that this information was sufficiently reliable for purposes of reporting on the length of time to conduct pre-award contracting activities.

The Navy provided electronic documents for us to review for its one competitive award. A similar verification process was conducted for the Navy information. For the Air National Guard contract, we obtained the contract and additional information from contracting officials on the time to complete the pre-award contracting process. To supplement this data, we interviewed Air National Guard contracting officials involved in the contract.

To compare information on the factors that affected the length of time to award utility services contracts, we:

- Analyzed dates of comparable events throughout the pre-award contracting process found in the utilities privatization award contract files; and
- Conducted site visits to speak with DLA Energy, installation, and military department officials, and contractor representatives about their experiences with the utilities privatization pre-award contracting process.

We combined a record of all utilities privatization pre-award contracting information into one file. We used this file to compare time to award for all pre-award contracting activities. This data was further compared by competitive and non-competitive status, contracting agent, military department, type of utilities in the proposals, number of utilities in the proposals, and the size of the installation by acreage. The size of each installation was found in the *DOD Base Structure Report – Fiscal Year 2017 Baseline, A Summary of the Real Property Inventory*. However, due to the small number of contracts we assessed, we were unable to determine if there were any patterns to corroborate whether the factors such as the type of utilities in the proposals, number of utilities in the proposals, and the size of the installation did or did not affect time to contract award.

To determine if there was a change in time to award after the implementation of DLA Energy's 2014 time frames for pre-award contracting activities, we compared the time elapsed between receipt of requirements and award for competitively awarded privatized utility services contracts. The analysis does not reflect seven solicitations issued between fiscal years 2013 and 2018 as they were awarded, or were expected to be awarded after September 30, 2018, and are outside our audit scope. Using data obtained from DLA Energy, however, we determined that the awards or projected awards of these seven contracts generally follow the trend shown in our analysis.

To gather information on the factors that affected the time from the decision to enter the utilities privatization process to contract award, we selected a non-generalizable sample of three installations to visit. The installations were selected from a list supplied by the Office of the Deputy Assistant Secretary of Defense for Energy of installations privatized from fiscal years 2016 through 2018. To obtain a variety of utilities privatization characteristics, we selected the installation visits based on the following criteria: (1) representation of each military department; (2) types of utility system privatized (electric, natural gas, water, and wastewater); (3) geographic location of installations visited were awarded using competitive procedures.

Prior to our visit to the three installations, we analyzed contract file documentation and spoke with utilities privatization individuals at military department and DLA Energy headquarters. At the three installations, we conducted interviews with officials at the installation command, public works department, and contracting officials, and contractor representatives to obtain perspectives on their utilities privatization in general and specifically on the factors that affected the time to contract award. We conducted our non-generalizable site visits from May 2019 to July 2019 at (1) Naval Air Station Key West, Florida, (2) Wright-Patterson Air Force Base, Ohio, and (3) Fort Riley, Kansas. No Marine Corps installations were privatized from fiscal years 2016 through 2018. In addition, we spoke with contracting officials from the Air National Guard at Truax Field in Wisconsin. The results of this selection are not generalizable to all utility services contracts or military installations, but provide insights and illustrative examples regarding factors that affect timing in the contract award process used to privatize utility systems.

To determine the extent to which DOD demonstrated leading practices identified by GAO and others for collecting and disseminating lessons

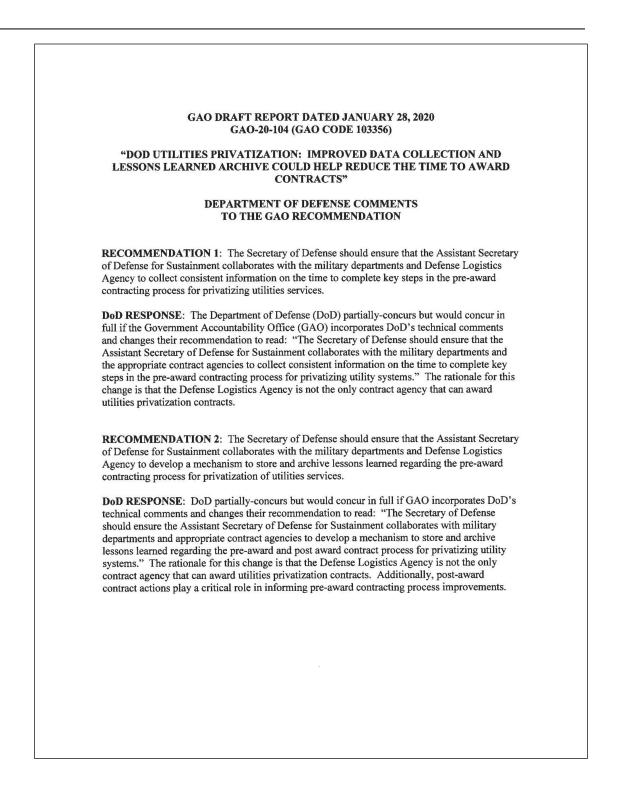
learned, we compared DOD's activities related to lessons learned against the five leading practices identified in our prior work to determine whether DOD demonstrated actions consistent with these practices. We then had a second analyst check the same documents and activities to verify our initial results. These leading practices for lessons learned are discussed in a September 2012 GAO report, Federal Real Property Security: Interagency Security Committee Should Implement a Lessons-Learned Process; and a December 2018 GAO report, Project Management: DOE and NNSA Should Improve Their Lessons-Learned Process for Capital Asset Projects.¹ We compared DOD's lessons learned documentation, including the Air Force's lessons learned database, DLA Energy's utilities privatization website and operating manuals, the military departments and DLA Energy contracting process policies and procedures, and Air Force and Navy utilities privatization handbooks against these practices. Based on our analysis, we assessed whether DOD fully (met all of the criteria), partially (met part of the criteria), or did not (met none of the criteria) demonstrate the leading practices. To determine the actions that DOD has taken to learn lessons from the utilities privatization pre-award contracting process and demonstrate leading practices, we interviewed officials from ASD(Sustainment), the military departments, and DLA Energy; obtained and analyzed documents; and attended the 2019 DLA Energy Worldwide Energy Conference to gain a greater understanding of utilities privatization.

We conducted this performance audit from March 2019 to April 2020 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

¹GAO-12-901 and GAO-19-25

Appendix II: Comments from the Department of Defense

ASSISTANT SECRETARY OF DEFENSE 3500 DEFENSE PENTAGON WASHINGTON, DC 20301-3500 SUSTAINMENT MAR 0 9 2020 Mr. Timothy J. DiNapoli Director, Contracting and National Security U.S. Government Accountability Office 441 G Street, NW Washington, DC 20548 Dear Mr. DiNapoli: This is the Department of Defense response to the GAO Draft Report, GAO-20-104, "DOD UTILITIES PRIVATIZATION: Improved Data Collection and Lessons Learned Archive Could Help Reduce the Time to Award Contracts," dated January 28, 2020 (GAO Code 103356). The Department acknowledges receipt of the draft report and provides responses to GAO recommendations in Enclosure 1. Additionally, the Department provides technical comments in Enclosure 2. Sincerely, Peter J. Potochney Acting Enclosures: As stated



Appendix III: GAO Contact and Staff Acknowledgments

GAO Contact	Timothy J. DiNapoli, (202) 512-4841 or dinapolit@gao.gov
Staff Acknowledgments	In addition to the contact named above, J. Kristopher Keener (Assistant Director), Joe E. Hunter (Analyst-in-Charge), Stephanie Gustafson, Gina Hoover, Tamera Lockley, Roxanna T. Sun, Anne Louise Taylor, Kari Terrio, and Kristy Williams made key contributions to this report.

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