

GAO Highlights

Highlights of [GAO-17-27](#), a report to the Committee on Armed Services, U. S. Senate

Why GAO Did This Study

DOD installations rely on utilities, such as electricity, to accomplish their missions and disruptions can hamper military operations. Senate Report 114-49 included a provision for GAO to report on DOD-owned utility disruptions. This report (1) describes the number, causes and impacts of utility disruptions caused by the failure of DOD-owned utility infrastructure for fiscal years 2009 through 2015; (2) assesses the extent to which owners and managers of DOD-owned systems have access to utility disruption information; and (3) assesses the extent to which the implementation of a standardized facility condition assessment process provides DOD consistent information about its utility systems.

GAO surveyed a representative group of 453 DOD-owned electric, water, wastewater, and natural gas utility systems, evaluated DOD policies and reports, interviewed officials, and conducted interviews with several survey respondents who experienced the most disruptions.

What GAO Recommends

To improve utility system information, GAO is recommending that the Army, Air Force, and Marine Corps take steps or provide guidance to consistently collect disruption information, and that while the SMS utilities module is under development, DOD take steps to ensure that the services apply condition standards consistently. DOD concurred with the recommendations to collect disruption data and partially concurred with the other recommendation stating that it would determine if further consistent condition standards are needed.

View [GAO-17-27](#). For more information, contact Brian Lepore at (202) 512-4523 or leporeb@gao.gov.

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DEFENSE INFRASTRUCTURE

Actions Needed to Strengthen Utility Resilience Planning

What GAO Found

Based on GAO's survey of Department of Defense (DOD) owned utility systems, there were 4,393 instances of utility disruptions caused by equipment failure for fiscal years 2009 through 2015 and the results of our survey and interviews with DOD installation officials indicated that these disruptions have caused a range of financial and operational impacts. Survey respondents identified several factors that contributed to equipment failures that led to disruptions, such as equipment operating beyond its intended life; poor equipment condition; and equipment not being properly maintained. Survey respondents reported over \$29 million in financial impacts for fiscal years 2009 through 2015. Installation officials reported experiencing operational impacts such as a week-long shut down of operations at an Army facility on Joint Base McGuire-Dix-Lakehurst, New Jersey.

Information about utility disruptions is not consistently available to DOD utility owners and managers at the installation level. Specifically, 151 out of 364 survey respondents stated that they did not have information on utility disruptions for any fiscal year from 2009 through 2015. An overarching reason GAO found for disruption information not being available is that the services vary in the extent to which each has issued guidance to collect and retain utility disruption information at the installation level. The Army has some guidance to report utility disruptions, but we found that some installations did not consistently have this information available. The Air Force and Marine Corps do not have current guidance directing the installations to track utility disruption information. The Navy issued new guidance in 2015 which, if implemented as directed, may improve the collection of utility disruption information. According to installation and headquarters officials, there are benefits to collecting utility disruption information since it can be used to identify repairs and to prioritize funding for those repairs. However, without guidance directing installations to collect information about all types of utility disruptions, service officials may not have the information needed to make informed decisions or to compete effectively for limited repair funds.

DOD's implementation of the Sustainment Management System (SMS), a software tool to conduct standardized condition assessments, may not provide it with comparable and reliable facility condition index (FCI) data -- a metric used to make strategic investment decisions. In 2013, to improve the reliability of FCI data, DOD directed the services to use SMS which standardizes the way the services conduct condition assessments and calculate the FCI. According to officials, the SMS module for utility systems is still in development, but modules for other facilities, such as buildings, are complete and in use. While the SMS process is intended to provide DOD with credible FCI data, GAO found the process could result in differences in the FCI because the services are able to customize settings, called condition standards, within the process. Variation among the condition standards could result in facilities having differences in the FCI although the assessed physical conditions of the facilities are the same. As a result, the FCI data would not be comparable. Without taking steps to ensure that the services' condition standards for the utilities module, which is under development, will provide the department with comparable and reliable FCI data, the SMS utilities module may not provide DOD information that is comparable across the department.