



June 2019

# DEFENSE INFRASTRUCTURE

## Additional Actions Could Enhance DOD's Efforts to Identify, Evaluate, and Preserve Historic Properties

# GAO Highlights

Highlights of [GAO-19-335](#), a report to congressional addressees

## Why GAO Did This Study

The National Historic Preservation Act of 1966 requires each federal agency to establish a preservation program that ensures properties are identified and evaluated for historic significance, as well as managed and maintained in a way that considers their preservation.

Senate Report 115-130 accompanying a bill for the Military Construction, Veterans Affairs, and Related Agencies Appropriations Act for fiscal year 2018, included a provision that GAO assess DOD's management of historic properties in use on U.S. installations. This report examines the extent to which DOD (1) identifies and evaluates properties for historic significance, including those that have been privatized, and (2) assesses the condition of its historic properties and has guidance on the training of installation personnel maintaining and those working in historic properties. GAO reviewed DOD fiscal year 2017 real property data and policies and procedures; visited a non-generalizable sample of 10 installations, selecting them based factors such as military service representation and concentration of historic properties; and interviewed DOD officials, privatized housing developers, and installation personnel.

## What GAO Recommends

GAO is making seven recommendations, including that DOD take steps to verify that privatized military homes are identified and evaluated for historic significance; clarify the inventory requirement for historic properties; and develop guidance related to historic preservation training. DOD concurred with the recommendations.

View [GAO-19-335](#). For more information, contact Elizabeth Field, 202-512-2775, [field1@gao.gov](mailto:field1@gao.gov)

June 2019

## DEFENSE INFRASTRUCTURE

### Additional Actions Could Enhance DOD's Efforts to Identify, Evaluate, and Preserve Historic Properties

## What GAO Found

The Department of Defense (DOD) reported that it has identified and evaluated about 60,000 of its approximately 375,000 properties on installations as historic as of October 2017. DOD's practice is to identify and evaluate property for historic significance as installations have an identified need for or a project planned for the property, according to DOD officials. However, GAO identified opportunities for DOD to enhance its efforts in several areas.

- **DOD lacks complete and consistent data on historic properties.** Specifically, GAO identified data gaps and discrepancies between the data reported at the installation and department levels for fiscal year 2017. For example, for one installation, GAO found that 150 more historic properties were listed in its installation data than were listed in department-level data for that installation. In November 2018, GAO reported on issues concerning DOD's data and made recommendations to improve the data quality. DOD concurred and reported actions it plans to take to improve data quality. Doing so would help DOD to ensure it has complete information on properties of historic significance and prevent further data discrepancies.
- **DOD has limited visibility of privatized homes that could be historic.** When the military departments transferred military homes to private developers, DOD officials said they also transferred the responsibility to identify and evaluate homes for historic significance to the private developers. However, the military departments do not verify that private developers are doing so. Private developers at seven of the nine installations with privatized housing that GAO visited said they do not identify or evaluate homes for historic significance. Taking steps to verify that private developers carry out this responsibility could help DOD ensure that renovations or repairs are not made to privatized properties that could compromise their historic nature.

Additionally, DOD does not routinely assess the condition of its historic properties and a lack of guidance on training could hamper maintenance and preservation efforts. First, inventories of historic properties, including physical inspections, required every 3 years, are not being conducted at six of the 10 installations GAO visited. Officials at these six installations said that the inventory was not conducted because they were unaware of or misunderstood the requirement. Second, while each installation GAO visited had an established process for approving maintenance work orders, DOD officials reported problems with the maintenance of historic properties at these installations, ranging from maintenance personnel not addressing issues, to maintenance being conducted improperly. At nine of the 10 installations GAO visited, individuals who work in historic buildings said that they believed maintenance personnel did not know what maintenance could or could not be done to the historic buildings, and installation officials expressed concerns about a lack of training related to historic preservation. By clarifying the requirement to conduct a physical inventory and developing guidance on training, DOD would be better positioned to preserve the historic properties under its purview.

---

# Contents

---

Letter		1
	Background	3
	DOD Has Identified and Evaluated Some Properties as Historic, but Opportunities Exist to Enhance DOD's Efforts	10
	DOD Does Not Routinely Assess the Condition of Its Historic Properties or Ensure Personnel Have the Guidance and Training Needed to Preserve Them	17
	Conclusions	21
	Recommendations for Executive Action	22
	Agency Comments	23
Appendix I	Scope and Methodology	25
Appendix II	Department of Defense (DOD) Relationships with State Historic Preservation Officials	30
Appendix III	DOD Installation Maintenance and Work Order Review Processes	34
Appendix IV	Comments from the Department of Defense	36
Appendix V	GAO Contact and Staff Acknowledgments	39
Related GAO Products		40
Figures		
	Figure 1: Historic Property Planned for Use as the Headquarters of an Installation's Security Division	9
	Figure 2: Intended Flow of Data from Installations to the Department of Defense's (DOD) Real Property Assets Database	12
	Figure 3: Example of Historic Property After Renovations with Modern Materials, as of September 2018	31

---

Figure 4: Example of Historic Property to Be Converted to an Office and Conference Rooms, as of October 2018

---

**Abbreviations**

DOD	Department of Defense
NHPA	National Historic Preservation Act of 1966
OSD	Office of the Secretary of Defense
WHS	Washington Headquarters Services
ACHP	Advisory Council on Historic Preservation
SHPO	State Historic Preservation Officer
ICRMP	Integrated Cultural Resource Management Plan
RPAD	Real Property Assets Database
iNFADS	internet Naval Facilities Asset Data Store
GFEBs	General Fund Enterprise Business System
ACES	Automated Civil Engineering System
OUSD(A&S)	Office of the Under Secretary of Defense for Acquisition & Sustainment
MHPI	Military Housing Privatization Initiative

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



June 19, 2019

Congressional Addressees

The Department of Defense (DOD) oversees approximately 60,000 federally-owned properties of historic significance (historic properties) in the United States and its territories.<sup>1</sup> DOD uses historic properties on installations to support military missions and to provide housing for service members and their families. The National Historic Preservation Act of 1966 (NHPA), as amended, requires federal agencies to establish a preservation program that ensures that the historic property under the jurisdiction or control of each agency is identified and evaluated, as well as managed and maintained in a way that considers the preservation of historic, archeological, architectural, and cultural values.<sup>2</sup> As DOD's properties continue to age and become eligible for historic designation, DOD will increasingly face difficult decisions about how to balance maintaining working and living environments with preserving the status of historic properties.

Senate Report 115-130, accompanying a bill for the Fiscal Year 2018 Military Construction, Veterans Affairs, and Related Agencies Appropriations Act, included a provision for us to assess the historic properties in use on DOD's U.S. installations.<sup>3</sup> This report examines the extent to which (1) DOD identifies and evaluates properties for historic significance, including those that have been privatized, and (2) DOD assesses the condition of its historic properties and has guidance on the training of installation personnel maintaining and those working in historic properties.

To address these objectives, we reviewed relevant laws, regulations, executive orders, and DOD and military service guidance that govern

---

<sup>1</sup>DOD, *Response to Executive Order 13287, "Preserve America," Section 3: Reporting Progress on the Identification, Protection, and Use of Federal Historic Properties*. For the purposes of this report, we are using the term "properties" to include DOD's buildings and structures such as historic privatized housing, administrative space, and aircraft hangers. This definition of "properties" includes buildings and structures but excludes linear structures, such as roads, rail lines, fences, and land.

<sup>2</sup>Pub. L. No. 89-665 (1966), codified as amended at 54 U.S.C. §§ 300101-307108. For the remainder of the report, we will refer to this as the NHPA.

<sup>3</sup>S. Rep. No. 115-130, at 9 (2017).

---

efforts to identify and manage the historic properties that DOD controls. To gather detailed examples of DOD's historic preservation efforts, we visited a non-generalizable sample of 10 installations. To select our sample, we considered variation in geographic location, military service representation, and concentration of historic properties. While the results of our review are not generalizable, they provide insight into DOD's efforts to preserve historic properties on its installations. At these sites, we conducted semi-structured group discussions with individuals who work in DOD's historic properties to gain insight into how they use the historic properties and what their views are on the maintenance of those properties.

We reviewed DOD and military department real property data for fiscal year 2017 to assist in selecting installations for site visits. We also reviewed DOD plans and agreements and compared DOD's efforts to criteria in NHPA and DOD Instructions.<sup>4</sup> We interviewed officials from the Office of the Secretary of Defense (OSD), Washington Headquarters Services (WHS),<sup>5</sup> the military departments, the Advisory Council on Historic Preservation (ACHP),<sup>6</sup> private developers to whom DOD has conveyed the houses under the Military Housing Privatization Initiative,<sup>7</sup> and relevant state stakeholders. We assessed the documentary and testimonial evidence we collected against guidelines in Department of Defense Instruction 4715.16, *Cultural Resources Management*, and Department of Defense Manual 4165.63, *DOD Housing Management*, and Department of Defense Instruction 4165.14, *Real Property Inventory*

---

<sup>4</sup>Department of Defense Instruction 4715.16, *Cultural Resources Management* (Sept. 18, 2008) (incorporating change 2, Aug. 31, 2018); DOD Instruction 4165.14, *Real Property Inventory (RPI) and Forecasting* (Jan. 17, 2014) (incorporating change 2, Aug. 3, 2018).

<sup>5</sup>The Washington Headquarters Services manages real property in the National Capital Region.

<sup>6</sup>The ACHP is an independent federal agency established by NHPA in 1966. The ACHP advises and recommends measures to coordinate the activities of federal, state, and local agencies, private institutions, and individuals relating to historic preservation.

<sup>7</sup>Enacted on February 10, 1996, as part of the National Defense Authorization Act for Fiscal Year 1996, the Military Housing Privatization Initiative (MHPI) program is a public/private program whereby private sector developers may own, operate, maintain, improve, and assume responsibility for military family housing if doing so is economically advantageous and national security is not adversely affected. Pub. L. No. 104-106, § 2801 (1996), codified as amended at 10 U.S.C. §§ 2871-2886. Under MHPI authorities, DOD can work with the private sector to maintain military family housing by employing a variety of financial tools including: direct loans, loan guarantees, equity investments, and conveyance or leasing of property or facilities.

---

*(RPI) and Forecasting and the Standards for Internal Control in the Federal Government.*<sup>8</sup> A more detailed description of our scope and methodology is presented in appendix I.

We conducted this performance audit between March 2018 and June 2019, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

---

## Background

---

### The Legal Framework for Historic Preservation

The NHPA requires federal agencies to establish historic preservation programs to ensure the ongoing identification and protection of historic properties.<sup>9</sup> A historic property is any building, structure, object, site, or district listed on or eligible for inclusion in the National Register of Historic Places (National Register). To be eligible for the National Register, a property must meet certain criteria, such as being associated with the lives of significant people from the past or yielding important information about prehistory or history, among others.<sup>10</sup> Generally, properties that have achieved significance within the past 50 years are not considered eligible for the National Register unless they are of exceptional importance.<sup>11</sup>

The NHPA also established the ACHP, which advises the President and Congress on matters relating to historic preservation. The ACHP also recommends measures to coordinate activities of federal, state, and local agencies and private institutions and individuals relating to historic

---

<sup>8</sup>DOD Instruction 4165.14; DOD Manual 4165.63, *DOD Housing Management* (Oct. 28, 2010) (incorporating change 2, Aug. 31, 2018); DOD Instruction 4715.16; and GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: September 2014).

<sup>9</sup>54 U.S.C. § 306102.

<sup>10</sup>The criteria for evaluating properties for the National Register is set forth in 36 C.F.R. § 60.4.

<sup>11</sup>36 C.F.R. § 60.4 (2019).

---

preservation. The ACHP can review the relevant policies and programs of federal agencies and make recommendations to improve their effectiveness, coordination, and consistency.<sup>12</sup>

Section 106 of NHPA requires federal agencies, including DOD, to take into account the effects of their undertakings (hereinafter referred to as projects)<sup>13</sup> on historic properties, and to afford the ACHP a reasonable opportunity to comment on any such projects on historic properties by a federal agency.<sup>14</sup> Part 800 of title 36, Code of Federal Regulations, establishes procedures to define how DOD and other federal agencies should meet these statutory responsibilities and how to accommodate historic preservation concerns with the mission of the agency, including DOD.<sup>15</sup> Historic preservation concerns are reviewed in consultation with officials from the agency in question and other parties with an interest in the effects of the proposed project on historic properties. The goal of this consultation is to identify historic properties potentially affected by the project, assess its effects, and seek ways to avoid, minimize, or mitigate any adverse effects on historic properties.<sup>16</sup>

State Historic Preservation Offices—each led by a State Historic Preservation Officer (SHPO)—advise and assist federal agencies, including DOD, in carrying out their Section 106 responsibilities, and ensure that historic properties are taken into consideration during in

---

<sup>12</sup>According to ACHP officials, compared to other federal agencies, DOD is generally one of the most compliant with regard to historic preservation requirements, including identifying and evaluating historic properties. ACHP officials added that DOD's hierarchical structure seems to ensure the agency follows historic preservation policy.

<sup>13</sup>An undertaking is defined in the NHPA as a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency.

<sup>14</sup>This requirement is commonly referred to as "Section 106," as it was enacted in section 106 of the NHPA, and will be referred to throughout this report as such. Pub. L. No. 89-665, § 106 (1966) (codified as amended at 54 U.S.C. § 306108).

<sup>15</sup>36 C.F.R. pt. 800 (2019).

<sup>16</sup>36 CFR § Part 800.1 (2019).



---

project planning.<sup>17</sup> A more detailed description of the relationship between DOD and SHPOs is presented in appendix II.

A programmatic agreement is a document that federal agencies can, in consultation with the ACHP, SHPO, and/or other parties, negotiate and execute when a planned project will or may adversely affect historic properties and sets out the measures the federal agency will implement to resolve those adverse effects.<sup>18</sup> Agencies can use programmatic agreements to satisfy their Section 106 responsibilities in the following circumstances:

- when effects on historic properties are similar and repetitive or are multi-state or regional in scope,
- when effects on historic properties cannot be fully determined prior to approval of a project,
- when nonfederal parties are delegated major decision-making capabilities,
- where routine management activities are undertaken at federal installations, facilities, or other land-management units, or
- when other circumstances warrant a departure from the normal Section 106 process.

Section 110 of the NHPA requires federal agencies to establish a preservation program to protect, identify, evaluate, and nominate historic properties to the National Register.<sup>19</sup> Section 110 also states that agencies must designate qualified preservation officers to lead their respective agencies' efforts to adhere to the NHPA, among other requirements.

---

<sup>17</sup>In advising and assisting federal agencies in carrying out their section 106 compliance responsibilities, SHPOs often cooperate with other government entities and outside stakeholder groups to ensure that historic properties are taken into consideration at all levels of planning and development. The SHPO is one of the main stakeholders that installation cultural resources personnel must consult when a planned project could impact a historic property.

<sup>18</sup>36 C.F.R. § 800.14 (2019).

<sup>19</sup>"Section 110" refers to section 110 of NHPA, which was added in 1980. Pub. L. No. 89-665, § 110, as added by Pub. L. No. 96-515, § 206 (1980) (codified as amended at 54 U.S.C. §§ 306101-306107, 306109-306114).

---

Further, Executive Order 13287, *Preserve America*, instructs all executive branch departments and agencies to maximize efforts to integrate the policies, procedures, and practices of the executive order and the NHPA into their program activities to advance historic preservation objectives.<sup>20</sup> *Preserve America* also instructed executive branch departments and agencies to assess the current status of their historic property inventories (including general condition and management needs) and directs agencies with real property management responsibilities to report on efforts to identify, protect, and use historic properties every 3 years.<sup>21</sup>

---

## Roles and Responsibilities

DOD Instruction 4715.16 set forth the framework for a department-wide program that focuses on the management of cultural resources, which include historic properties.<sup>22</sup> According to DOD officials, as part of DOD's program to preserve historic properties, each military department designates federal preservation officers to coordinate its own separate historic property programs. Each department has an office or division that handles cultural resources and historic preservation and has staff who are generally knowledgeable about NHPA and its requirements.<sup>23</sup> The military departments also issue their own guidance that establishes policies on

---

<sup>20</sup>Exec. Order No. 13,287, *Preserve America*, 68 Fed. Reg. 10,635 (Mar. 5, 2003).

<sup>21</sup>Executive Order 13327, *Federal Real Property Asset Management*, instructs all executive branch departments and agencies to appoint a senior real property officer responsible for identifying, categorizing, monitoring, and assessing their department's/agency's real property assets. The senior real property officer is also responsible for incorporating planning and management requirements for historic property pursuant to Executive Order 13287, *Preserve America*, Exec. Order No. 13,327, *Federal Real Property Asset Management* 69 Fed. Reg. 5,895 (Feb. 6, 2004) (as amended by Exec. Order No. 13,423, *Strengthening Federal Environmental, Energy, and Transportation Management*, 72 Fed. Reg. 3,919 (Jan. 24, 2007) and Exec. Order No. 13,693, *Planning for Federal Sustainability in the Next Decade*, 80 Fed. Reg. 15,869 (Mar. 19, 2015).

<sup>22</sup>Department of Defense Instruction 4715.16, *Cultural Resources Management* (Sept. 18, 2008) (incorporating change 2, Aug. 31, 2018).

<sup>23</sup>Cultural resources include historic properties (any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in, the National Register of Historic Places, whether or not such eligibility has been formally determined), including artifacts, records, and material remains related to such a property or resource, according to DOD Instruction 4715.16.

---

historic preservation and delineates responsibilities for cultural resources personnel at the service and installation level.<sup>24</sup>

Each military department also is responsible for ensuring that military installations with cultural resources under their purview prepare Integrated Cultural Resource Management Plans (ICRMPs). These plans should include an inventory of all known historic properties, an inventory of properties that may be eligible for listing on the National Register, and standard operating procedures covering certain maintenance aspects of historic properties.<sup>25</sup> According to officials from the military departments, installations are responsible for setting up a process where all maintenance/work order requests are reviewed for further action. For example, the review process can take the form of a maintenance/work order request review board and typically includes the installation's cultural resources manager or members of the cultural resources manager's staff.<sup>26</sup> If the maintenance/work order request involves a historic property, then additional steps are taken at the installation level to consult with the appropriate stakeholders.<sup>27</sup> Once officials at an installation complete their evaluation of the potential impact a maintenance request/work order would have on a historic property, they consult with the SHPO on how to move forward with the proposed maintenance/work order, according to installation officials. A more detailed description of the review of maintenance/work order requests is presented in appendix III.

---

<sup>24</sup>Air Force Instruction 32-7065, *Cultural Resources Management* (Nov. 19, 2014) (incorporating change 1, Oct. 6, 2016); Army Regulation 200-1, *Environmental Protection and Enhancement* (Dec. 13, 2007); Secretary of the Navy Instruction 4000.35A, *Department of the Navy Cultural Resources Program* (Apr. 9, 2001), among others.

<sup>25</sup>DOD Instruction 4715.16.

<sup>26</sup>Cultural resource managers employed by DOD can be assigned to oversee cultural resource management programs within a defined region of the United States, within multiple military installations, or within a single installation. According to the cultural resource managers we spoke with, and after reviewing the duties of cultural resource managers listed in their installation's ICRMP, a cultural resource manager's main duties include identifying and evaluating cultural resources and managing these resources in a way that balances historical preservation with meeting modern mission needs. Cultural resource managers consult with outside stakeholders, such as their SHPOs, independent third parties, and other government groups, and are also responsible for updating their ICRMP's list of historic properties annually, with a complete review of the plan every 5 years.

<sup>27</sup>DODI 4715.16 also states that DOD officials shall consult with the appropriate stakeholders when potential projects can impact historic properties.

---

---

## DOD's Use of Historic Properties

DOD generally uses its historic properties in one of two ways—to support mission needs or to house service members and their families. Generally, after consultations with the SHPO, historic properties can be repurposed or renovated to fulfill current mission and housing needs.<sup>28</sup> For example, a historic aircraft hangar could be converted into additional administrative space or historic homes could be renovated by a private housing partner to house service members and their families. Figure 1 is an example of how a historic property could be reused.

---

<sup>28</sup>A Presidential memorandum directs federal agencies to take actions to include accelerating cycle times for identifying excess assets and disposing of surplus assets; eliminating lease arrangements that are not cost-effective; pursuing consolidation opportunities within and across agencies in common asset types (such as data centers, office space, warehouses, and laboratories); increasing occupancy rates in current facilities through innovative approaches to space management and alternative workplace arrangements, such as telework; and identifying offsetting reductions in inventory when new space is acquired. *Presidential Memorandum on Disposing of Unneeded Federal Real Estate—Increasing Sales Proceeds, Cutting Operating Costs, and Improving Energy Efficiency*, 75 Fed. Reg. 33,987 (June 10, 2010).

---

**Figure 1: Historic Property Planned for Use as the Headquarters of an Installation's Security Division**



Installation officials said this historic property has remained empty for about 10 years.

Source: GAO. | GAO-19-335

---

---

## DOD Has Identified and Evaluated Some Properties as Historic, but Opportunities Exist to Enhance DOD's Efforts

---

### DOD Has Identified and Evaluated 60,000 Properties as Historic

In October 2017, DOD reported that, of its approximately 375,000 properties on installations in the U.S. and its territories, it has identified and evaluated about 60,000 as historic and about 57,000 as not being historic.<sup>29</sup> DOD has not yet evaluated the remaining roughly 258,000 properties for historic significance.<sup>30</sup> Approximately 41,000 of these properties are greater than or equal to 50 years of age, according to DOD.

DOD's *Cultural Resource Management* Instruction requires DOD to conduct a survey of historic properties that includes the identification and evaluation of all cultural resources against the criteria of the National Register.<sup>31</sup> According to ACHP officials, DOD does not routinely identify and evaluate every property under its purview for historic significance as those properties reach 50 years of age. Instead, DOD's practice is to identify and evaluate property for historic significance as installations have an identified need for or a project planned for the property, according to both DOD and ACHP officials.<sup>32</sup> Officials said that, generally, federal agencies do not have the funding to proactively identify and

---

<sup>29</sup>DOD, *Response to Executive Order 13287, "Preserve America," Section 3: Reporting Progress on the Identification, Protection, and Use of Federal Historic Properties*, (Oct. 2017). We did not independently verify the totals reported by DOD.

<sup>30</sup>DOD reports on the status of its historic property every 3 years in its *Response to Executive Order 13287, "Preserve America," Section 3: Reporting Progress on the Identification, Protection, and Use of Federal Historic Properties*, which was last reported in October 2017. DOD is expected to report on the status of its historic properties in 2020.

<sup>31</sup>DOD Instruction 4715.16.

<sup>32</sup>According to ACHP officials, DOD is one of the most compliant federal agencies with regard to historic preservation requirements.

---

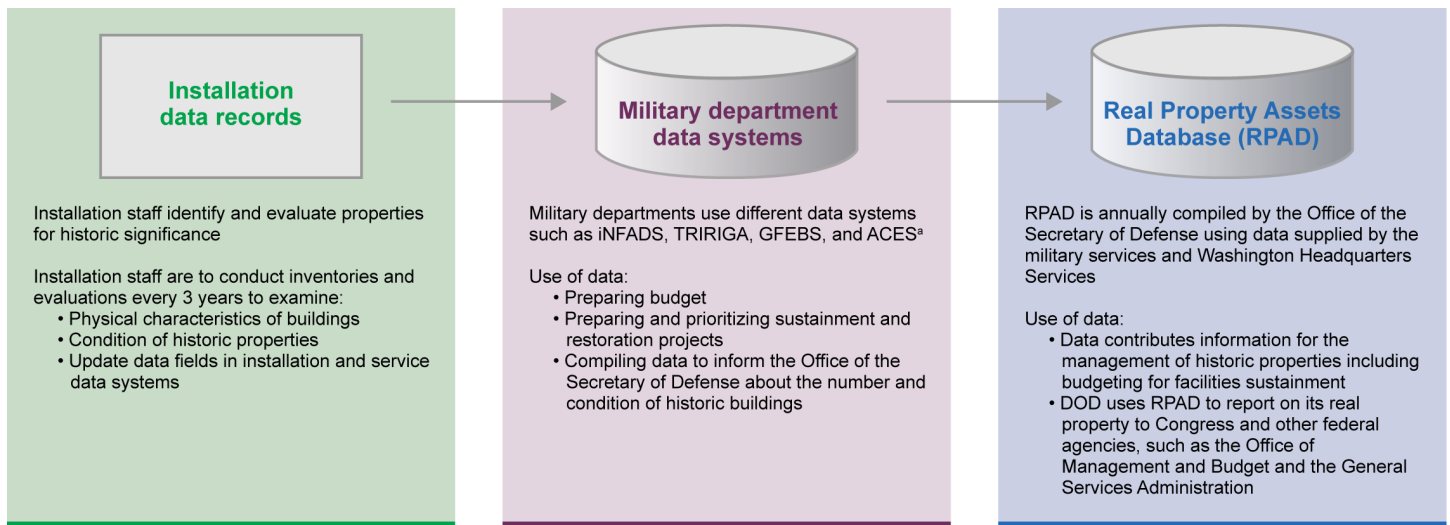
evaluate properties for historic significance. Rather, funding to identify and evaluate properties is included within a project's funding; therefore, generally federal agencies cannot begin to identify and evaluate a property for historic significance until a project for that property is funded, according to officials from the ACHP.

The initial process to identify, evaluate, and track real property, such as historic properties, occurs at the installation level. Installation officials are to record transactions; document new acquisitions, changes to existing facilities, and disposals; and collect information on the real property at each installation. Installation officials are then to enter this information into the corresponding military department or WHS real property data systems. The military departments and WHS use these databases to oversee and manage real property needs across DOD installations, such as how property is used to support the installations' missions and how much to budget for required sustainment, restoration, or construction of real property.<sup>33</sup> Figure 2 shows how data are intended to move from the installation level to the military department databases and then to the DOD-wide real property database, which DOD calls the "Real Property Assets Database (RPAD)."

---

<sup>33</sup>According to WHS officials, WHS is responsible for the management of the Pentagon and several other DOD headquarters buildings. Certain elements within the Pentagon have been evaluated and placed on the National Register of Historic Places, and WHS officials stated that they manage those elements in accordance with the National Historic Preservation Act. WHS also stated that they do not, however, nominate buildings to the National Register of Historic Places or identify and evaluate them for eligibility because the assets it owns are limited.

**Figure 2: Intended Flow of Data from Installations to the Department of Defense's (DOD) Real Property Assets Database**



Source: GAO analysis of Department of Defense information. | GAO-19-335

<sup>a</sup>The Navy (including the Marine Corps) uses the internet Naval Facilities Asset Data Store (iNFADS). Washington Headquarters Services uses a system known as TRIRIGA as their respective data systems to maintain and track real property. The Army uses the General Fund Enterprise Business System (GFEBS). The Air Force is currently using the Automated Civil Engineering System (ACES), but is transitioning to TRIRIGA.

OSD requires that the military departments and WHS submit their real property inventories to be compiled into RPAD.<sup>34</sup> DOD uses these data to provide information on its real property to Congress and other federal agencies, including the Office of Management and Budget and the General Services Administration, in order to assist in the oversight of federal real property.

<sup>34</sup>DOD Instruction 4165.14.



---

## DOD Lacks Complete and Consistent Data on Historic Properties, but Is Planning Actions to Improve Data Quality

We identified some gaps in data, as well as data discrepancies between the data reported at the installation level and the department level regarding historic properties for fiscal year 2017. For example, one of the 10 installations we visited could not generate a list of historic properties on the installation with corresponding data fields such as the facility condition,<sup>35</sup> plant replacement value,<sup>36</sup> and facility utilization rate.<sup>37</sup> Officials at this installation told us they are working on a long-term project to update their data on historic properties.

Additionally, data we collected from three of the 10 installations we visited were inconsistent with data in the installations' respective military department-level databases. For instance:

- One installation had 150 more historic properties listed in its installation real property data than were listed in the corresponding military department database. The installation's data also showed 114 fewer properties coded as "Not Yet Evaluated" for historic significance than did the military department's database. Similarly, the data in the military department database showed twice the number of privatized homes than did the installation database.
- A second installation had 119 properties coded as "Not Yet Evaluated" for historic significance, but none with this designation in the data provided by the installation. The data provided by the installation also included 164 privatized homes, none of which were included in the military department database. Further, this installation had nine historic properties that were not included in the military department database but that were included in the installation data, as well as 26 historic properties that were included in the military department database but that were not included in the installation data.

---

<sup>35</sup>Facility condition is a measure of a facility's physical condition that is expressed as a percentage (on a scale of 0 to 100). Factors used to calculate the facility condition include the facility's estimated deferred maintenance and repair costs and the facility's plant replacement value.

<sup>36</sup>Plant replacement value is a calculation of the cost to replace the current physical plant (facilities and supporting infrastructure) using today's construction costs (labor and materials) and standards (methodologies and codes).

<sup>37</sup>Utilization rate is a percentage (on a scale of 0 to 150) used to represent the extent to which a real property asset is used by the primary user for the current program based on its design purpose.

- 
- A third installation had fewer discrepancies, with two historic properties that were included in the installation data that were not in the military department database. The data in the military department database contained six assets that the installation data did not contain. There were also four discrepancies regarding privatized housing between the installation data and the military department database, with each database containing two entries the other did not include.

We asked five installation cultural resource managers about these discrepancies, and they stated that the military department databases most likely had not been updated to reflect the correct installation numbers.

In November 2018, we reported that RPAD contained inaccurate and incomplete data due to weaknesses in DOD's processes for recording and reporting real property, including historic property.<sup>38</sup> The military services lacked complete data regarding real property transactions as well physical inventories of real property, to include historic properties. We also found that the military services have not consistently recorded real property transactions (i.e., the acquisition of, change to, and disposal of real property assets) and the results of physical inventories of assets. Finally, we found that the military services have not corrected previously-identified discrepancies in their data systems, such as missing entries for utilization and facility condition and overdue asset reviews. We recommended that each of the services develop monitoring processes for recording all real property (including historic properties) information. We also recommended that the Under Secretary of Defense for Acquisition and Sustainment work in collaboration with the services to develop corrective action plans to remediate inconsistencies in the data. DOD concurred with these recommendations and identified actions it plans to take to implement them. Implementing these recommendations would help DOD ensure more accurate and complete information on properties of historic significance and prevent further data discrepancies. Also, more accurate and complete information on the identification and evaluation of properties would help installations, military departments, and WHS oversee and manage their real property needs, including informing decisions regarding how much to budget for required sustainment,

---

<sup>38</sup>GAO, *Defense Real Property: DOD Needs to Take Additional Actions to Improve Management of its Inventory Data*, [GAO-19-73](#) (Washington, D.C.: Nov. 13, 2018). DOD concurred or partially concurred with our recommendations, and we will continue to review DOD's efforts to implement these recommendations.

---

restoration, or construction of real property. We will continue to monitor DOD's progress in addressing these recommendations.

---

### DOD Has Limited Visibility of Privatized Military Housing That Could Be Historic

DOD may transfer the responsibility to identify and evaluate homes for historic significance to the private developers. However, the military department officials we interviewed could not confirm that private developers were meeting those responsibilities. The military departments have flexibility in how they structure their privatized housing projects, but project structures share certain similarities. For a typical privatization project, a military department leases land to a developer for a 50-year term and conveys existing homes located on the leased land to the developer for the duration of the lease.<sup>39</sup> Given the length of these lease agreements, homes may move beyond 50 years of age while being maintained by the private developer.

Military department officials told us that when a lease or programmatic agreement is signed with a private developer, the responsibility to identify and evaluate homes for historic significance is generally transferred to the private developer.<sup>40</sup> Navy and Marine Corps officials stated that, when the leases for privatized military homes were signed, a list of historic properties was provided to each private developer. According to Navy officials, those private developers are now responsible for identifying and evaluating privatized homes for historic significance once the lease is signed and the homes are transferred to the private developer. Similarly, Air Force officials stated that, prior to conveying homes to a private developer all homes encompassed in the lease agreement should have been identified and evaluated for historic significance by the Air Force. According to these officials, after the transfer of properties under the lease, the private developer is responsible for identifying and evaluating homes for historic significance. Army officials also stated that the responsibility to manage privatized homes and assess their historic value falls to the private developer.

---

<sup>39</sup>Each privatized housing project is a separate and distinct entity governed by a series of legal agreements that are specific to that project.

<sup>40</sup>We received and reviewed programmatic agreements from a number of installations we visited; but we did not review the programmatic agreements to determine whether they tasked private developers with identifying and evaluating homes for historic significance after reaching 50 years of age, because DOD officials told us that these responsibilities could be assigned elsewhere, such as in an ICRMP or a lease.

---

However, private developers at seven of the nine of installations we visited that had privatized historic military housing told us that they do not identify or evaluate additional homes for historic significance.<sup>41</sup> The private developers at the remaining two installations said they hire a third-party to identify and evaluate homes on the installations for historic significance as they age.

DOD's instruction on the management of cultural resources directs the establishment of a process to identify and evaluate cultural resources for historic significance.<sup>42</sup> The need to identify and evaluate privatized military homes for historic significance would arise if a new project were planned for homes that could be of historic significance. Officials from all three military departments told us that they have addressed the identification and evaluation process by formally transferring those responsibilities to the private developers through documents such as land-lease agreements, installations' programmatic agreements, and installations' ICRMPs. However, DOD guidance also states that because privatization creates a long-term governmental interest in privatized housing, it is essential that the military departments attentively monitor these privatization projects.<sup>43</sup> Taking steps to ensure that installation personnel verify that private developers are identifying and evaluating privatized properties for historic significance, as appropriate, could help to ensure that private developers do not make renovations or repairs to properties that could compromise their historic nature.

---

<sup>41</sup>We visited 10 installations however at the time of our review one installation did not have privatized historic military homes.

<sup>42</sup>DOD Instruction 4715.16

<sup>43</sup>Department of Defense Manual 4165.63 *DOD Housing Management* (Oct. 28, 2010) (incorporating change 2, Aug. 31, 2018).

---

## DOD Does Not Routinely Assess the Condition of Its Historic Properties or Ensure Personnel Have the Guidance and Training Needed to Preserve Them

---

### Some Installations Do Not Routinely Conduct Required Inventories of Historic Property to Help Ensure Its Preservation

Under DOD Instruction 4165.14, once a historic property has been identified, installations are required to complete a review of the real property asset record every 3 years, including a physical inventory that assesses the condition of the property. According to DOD, these inventories are important for planning, analysis, and decision making.

However, we found that these required inventories are not routinely being conducted at six of the 10 installations we visited for a variety of reasons. Specifically, cultural resource management officials at six of the 10 installations told us that the inventory was not conducted because they were unaware of the requirement or thought that updating their ICRMPs was sufficient to satisfy the inventory requirements. As previously noted, ICRMPs should include an inventory of all known historic properties, an inventory of properties that may be eligible for listing on the National Register, and standard operating procedures covering certain maintenance aspects of historic properties. Officials at one of the six installations reported that they believe it is a best practice to inventory their historic properties every 5 years if they have sufficient staff to do so. Officials at two installations stated that they do complete the required inventory every 3 years. Officials at the remaining two installations either did not provide any comment or said they were unsure of when the last inventory was completed.

However, officials from all of the services' headquarters reiterated to us that the requirement under DOD Instruction 4165.14 is to inventory historic properties every 3 years.<sup>44</sup> They explained that this inventory is

---

<sup>44</sup>Properties that are not historic are required to be reviewed and physically inventoried every 5 years. DOD Instruction 4165.14.

---

separate and distinct from the annual inventory required under the ICRMP process. For example, Air Force headquarters officials stated that the 3 year inventory should consist of a physical check of the condition of the buildings, while the annual inventory required as part of the ICRMP update is a process to update data, such as status codes, for newly evaluated buildings.

Until the military departments clarify the existing 3 year inventory requirement, current and accurate information on the condition of historic properties will not be available. Such information would better position officials who manage these properties to make informed management, maintenance, and planning decisions.

---

### Lack of Guidance on Training Could Hamper Maintenance and Historic Preservation Efforts

We found that misunderstandings about how to maintain historic properties have led, in some instances, to problems with the preservation of these properties at installations. Each of the 10 installations that we visited has an established process and procedures for reviewing and approving maintenance/work orders on historic properties.<sup>45</sup> These processes and procedures, articulated in installations' ICRMPs, vary by installation and are generally intended to assist in preserving historic properties.

However, cultural resource managers at five of the 10 installations said that past maintenance or renovation projects on some of their installations' historic buildings may have compromised the historic significance of those buildings. In some cases, for instance, maintenance was performed improperly by tenants of historic properties or by contractors, according to installation officials. At one installation we visited, an official said a tenant made changes to a historic building without undergoing the formal approval process at the installation, which includes informing the cultural resource manager of the proposed change. The official said the tenant added additional office space and equipment, such as computers and other systems, in an unused attic without updating the capacity of the electrical panels. As a result, the official said a fire started in the attic, causing extensive damage to the building. An official at another installation we visited told us a contractor pressure washed a historic property that ended up damaging the building. The

---

<sup>45</sup>For more detailed information on these review processes, see Appendix III.

---

official said the damage was not intentional, as the contractor did not realize that pressure washing would harm the property.

Unit members also noted some instances in which they were told by maintenance personnel that problems the members had reported could not be fixed because of the historic nature of the properties. For instance:

- At a Marine Corps installation, unit members said that maintenance and facilities management staff ignored or improperly handled issues they raised in their historic buildings. For example, unit members told us that maintenance personnel erroneously informed them they could not replace the air filters or clean out the mold in the ceiling because their building was historic.<sup>46</sup>
- At an Air Force installation, unit members told us their requests for upgraded electrical outlets and roof fixes were denied because maintenance personnel told them those changes could not be completed because of the historic nature of the building. According to unit members, the existing outlets were not suitable for work on the aircraft being maintained in the building and thus presented a safety risk. Moreover, unit members told us that, to deal with the roof leaks, they ultimately resorted to using buckets to catch water.
- At an Army installation, unit members told us that maintenance personnel informed them they could not address certain problems, such as leaks, because of the historic nature of the building. For example, unit members at this installation resorted to boarding up their building with plywood during storms to keep rainwater from affecting the secure facility in the basement of the historic building because maintenance division staff told them addressing the leaks was not their responsibility, due, in part, to the historic nature of the building.

One reason these problems may have occurred is that the individuals involved were not properly informed or trained about how to conduct maintenance on historic buildings. At nine of the 10 installations we visited, unit members who work in historic buildings told us that, based on their experiences requesting repairs to historic buildings, they believed maintenance personnel did not know what maintenance could or could

---

<sup>46</sup>The NHPA does not prohibit maintenance or renovation of historic buildings, but does require that federal agencies take into account the effect of a project on historic properties, and afford the ACHP a reasonable opportunity to comment prior to the expenditure of federal funds or the issuance of any license for the project.

---

not be done to the historic buildings. Officials from these installations expressed concerns about training, including a lack of training, related to historic preservation and maintenance of historic properties. For example,

- maintenance officials at three of the 10 installations we visited stated that they do not receive training on the special requirements associated with maintaining historic buildings; and
- cultural resource managers from four of the 10 installations told us that more training for installation staff, particularly maintenance staff, on historic preservation requirements would be helpful.

Furthermore, officials from two of the four SHPOs representing the states where we visited military installations said they believe that tenants and maintenance personnel at installations do not have the proper training to adhere to historic preservation requirements.<sup>47</sup>

Officials from the Office of the Under Secretary of Defense for Acquisition & Sustainment (OUSD(A&S)) also said they were aware of misunderstandings within the military communities about aspects of historic preservation. For example, these officials said there were misunderstandings among installation personnel, including between personnel from department of public works' offices, environmental offices, installation planners, and cultural resource managers about their roles and responsibilities concerning historic preservation.

The OUSD(A&S) is responsible for establishing cultural resource guidance, designating responsibilities, and providing procedures to implement DOD's cultural resources program.<sup>48</sup> DOD Instruction 4715.16 states that ICRMPs act as the instrument DOD uses to comply with the statutory management requirements of the NHPA.<sup>49</sup> It is also DOD policy that cultural resources under DOD control are to be managed and

---

<sup>47</sup>We conducted interviews with the SHPOs of California, Hawaii, Maryland, and Virginia.

<sup>48</sup>DOD Instruction 4715.16 assigns these responsibilities to the Assistant Secretary of Defense for Energy, Installations, and Environment (ASD(EI&E)). However, due to a reorganization within DOD, the responsibilities, resources, and workforce of the Office of the ASD(EI&E) have been transferred to the OUSD(A&S). See Pub. L. No. 114-328, § 901 (2016); Deputy Secretary of Defense Memorandum, *Implementation Guidance for the Establishment of the Office of the Under Secretary of Defense for Research and Engineering and the Office of the Under Secretary of Defense for Acquisition and Sustainment* (Jan. 31, 2018).

<sup>49</sup>DOD Instruction 4715.16.



---

maintained in a sustainable manner through a comprehensive program that considers the preservation of historic, archaeological, architectural, and cultural values; is mission supporting; and results in sound and responsible stewardship. In addition, the *Standards for Internal Control in the Federal Government* state that management should communicate quality information down and across reporting lines to enable personnel to perform key roles in achieving objectives, addressing risks, and supporting the internal control system.<sup>50</sup>

However, officials from each of the military departments stated that they do not have department-wide or service-wide guidance related to historic preservation training. Instead, the content and frequency of training is determined by the installations, according to military department officials. When we analyzed the installations' ICRMPs, we found that responsibilities for providing cultural resources training or technical guidance, feedback, and comments to installation personnel regarding historic preservation generally lie with the installation cultural resource manager.

Installation personnel rely on individual cultural resource managers and the individual installations' ICRMPs to ensure that all personnel at an installation have the training they need. Without providing installations with DOD or military department-wide guidance on training related to historic preservation, there could be more instances of improper or incomplete maintenance of historic properties on installations.

---

## Conclusions

According to the Advisory Council on Historic Preservation (ACHP), DOD is one of the most compliant federal agencies with regard to historic preservation requirements. DOD uses historic properties to support mission needs as well as to house military service members. Thus far, DOD has identified and evaluated 60,000 properties as historic. However, additional actions could enhance DOD's efforts to identify, assess, and preserve historic properties. First, we recently made recommendations which DOD concurred with, to improve the quality of DOD's real property data. Implementing the recommendations would help ensure that DOD has more accurate and complete information on properties of historic significance and prevent further data discrepancies. Second, taking steps to verify that private developers are identifying and evaluating privatized

---

<sup>50</sup>[GAO-14-704G](#).

---

properties that could be historic would help mitigate the risk of developers making renovations to properties that could compromise their historic nature. Additionally, clarifying the requirement to inventory historic properties every 3 years to assess their condition would help ensure that DOD has the information it has identified as important for planning, analysis, and decision-making related to such properties. Further, establishing guidance on training for installation personnel would help ensure they possess the necessary knowledge to properly maintain historic properties on installations.

---

## Recommendations for Executive Action

We are making a total of seven recommendations to DOD.

The Secretary of the Navy should take steps to ensure that Navy and Marine Corps' installation personnel verify that private developers are identifying and evaluating privatized properties for historic significance, as appropriate. (Recommendation 1)

The Secretary of the Army should take steps to ensure that Army installation personnel verify that private developers are identifying and evaluating privatized properties for historic significance, as appropriate. (Recommendation 2)

The Secretary of the Air Force should take steps to ensure that Air Force installation personnel verify that private developers are identifying and evaluating privatized properties for historic significance, as appropriate. (Recommendation 3)

The Secretary of the Navy should clarify the requirement for Navy and Marine Corps' installation personnel to conduct a physical inventory of historic properties every 3 years, including an assessment of each property's condition to ensure that facilities that have been identified and evaluated as historic are inventoried. (Recommendation 4)

The Secretary of the Army should clarify the requirement for Army installation personnel to conduct a physical inventory of historic properties every 3 years, including an assessment of each property's condition to ensure that facilities that have been identified and evaluated as historic are inventoried. (Recommendation 5)

The Secretary of the Air Force should clarify the requirement for Air Force installation personnel to conduct a physical inventory of historic properties every 3 years, including an assessment of each property's condition to

---

ensure that facilities that have been identified and evaluated as historic are inventoried. (Recommendation 6)

The Secretary of Defense should ensure that the Under Secretary of Defense for Acquisition and Sustainment, in collaboration with the military departments, develop and disseminate department-wide or service-wide guidance, on training related to historic preservation to installation personnel, including information on roles and responsibilities. (Recommendation 7)

---

## Agency Comments

We provided a draft of this report to DOD for review and comment. In written comments, DOD concurred with each of our recommendations. DOD's comments are reprinted in their entirety in appendix IV. DOD also provided technical comments, which we incorporated as appropriate.

---

We are sending copies of this report to the appropriate congressional committees and to the Acting Secretary of Defense; the Under Secretary of Defense for Acquisition and Sustainment; and Secretaries of the Departments of Air Force, Army and Navy, and the Director of Washington Headquarters Services. In addition, the report is available at no charge on the GAO website at <http://www.gao.gov>.

If you or our staff have any questions about this report, please contact me, Elizabeth Field, at (202) 512-2775 or [FieldE1@gao.gov](mailto:FieldE1@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs are listed on the last page of this report. GAO staff who made key contributions to this report are listed in appendix V.



Elizabeth Field  
Acting Director, Defense Capabilities and Management

---

*List of Addressees*

The Honorable John Boozman  
Chairman  
The Honorable Brian Schatz  
Ranking Member  
Subcommittee on Military Construction, Veterans Affairs, and Related  
Agencies  
Committee on Appropriations  
United States Senate

The Honorable Debbie Wasserman Schultz  
Chairwoman  
The Honorable John R. Carter  
Ranking Member  
Subcommittee on Military Construction, Veterans Affairs, and Related  
Agencies  
Committee on Appropriations  
House of Representatives

The Honorable Jerry Moran  
United States Senate

---

# Appendix I: Scope and Methodology

---

Senate Report 115-130, accompanying a bill for the Fiscal Year 2018 Military Construction, Veterans Affairs, and Related Agencies Appropriations Act, included a provision that GAO assess the historic properties in use on the Department of Defense's (DOD) U.S. installations.<sup>1</sup> This report assesses the extent to which (1) DOD identifies and evaluates properties for historic significance, including those that have been privatized, and (2) DOD assesses the condition of its historic properties and has guidance on the training of installation personnel maintaining and those working in historic properties.

For both objectives, we reviewed relevant laws, regulations, executive orders, and DOD (including military service) guidance that govern efforts to identify, evaluate, manage, and maintain DOD's historic properties.<sup>2</sup> We interviewed officials from the Office of the Secretary of Defense (OSD) (the Office of the Under Secretary of Defense for Acquisition and Sustainment); Washington Headquarters Services (Facilities Services Directorate); the Army (Installation Management Command; Office of the Assistant Chief of Staff for Installation Management; Office of the Assistant Secretary of the Army for Installations, Energy and Environment; U.S. Army Corps of Engineers); the Navy (Office of the Assistant Secretary of the Navy for Energy, Installations, and Environment; Office of the Deputy Assistant Secretary of the Navy for Installations and Facilities; Office of the Chief of Naval Operations; Naval Facilities Engineering Command); the Marine Corps (Headquarters Marine Corps; Marine Corps Installations Command; Environmental Management Division); and the Air Force (Headquarters Air Force; Air

---

<sup>1</sup>S. Rep. No. 115-130, at 9 (2017).

<sup>2</sup>Department of Defense Instruction 4715.16, *Cultural Resources Management* (Sept. 18, 2008) (incorporating change 2, Aug. 31, 2018); Department of Defense Instruction 4165.14, *Real Property Inventory (RPI) and Forecasting* (Jan. 17, 2014) (incorporating change 2, Aug. 31, 2018); Department of Defense Response to Executive Order 13287, "Preserve America," *Section 3: Reporting Progress on the Identification, Protection, and Use of Federal Historic Properties* (October 2017); Department of Defense Manual 4165.63, *DOD Housing Management* (Oct. 28, 2010) (incorporating change 2, Aug. 31, 2018); Air Force Instruction 32-7065, *Cultural Resources Management* (Nov. 19, 2014) (incorporating change 1, Oct. 6, 2016); Air Force Instruction 32-1032, *Planning and Programming Appropriated Fund Maintenance, Repair, and Construction Projects* (Sept 24, 2015) (incorporating Air Force Guidance Memorandum 2018-01, May 23, 2018); Army Regulation 200-1, *Environmental Protection and Enhancement* (Dec. 13, 2007); Army Regulation 420-1, *Army Facilities Management* (Feb. 12, 2008) (incorporating Rapid Action Revision Aug. 24, 2012); Secretary of the Navy Instruction 4000.35A, *Department of the Navy Cultural Resources Program* (Apr. 9, 2001); Chief of Naval Operations instruction 5090.1D *Environmental Readiness Program* (Jan. 10, 2014), among others.

Force Civil Engineer Center Installations Directorate). We reviewed DOD data, plans, and agreements, and compared DOD's efforts to address criteria in the National Historic Preservation Act and DOD Instructions.

Additionally, we met with officials from the Advisory Council on Historic Preservation<sup>3</sup> and private developers, such as Balfour Beatty, Clark Realty Capital, Lendlease, Lincoln Military Housing, and Hunt Companies, to whom DOD has conveyed property under the Military Housing Privatization Initiative (MHPI).<sup>4</sup> To gather detailed examples of DOD's historic preservation efforts, we visited historic properties at a non-generalizable sample of 10 installations. We selected these installations by analyzing DOD's fiscal year 2017 data on real property, limited our analysis to installations in the continental United States, and identified the number of buildings and structures ("properties") in each state DOD reported as historic. We selected four states, California, Hawaii, Virginia, and Maryland, for reasons including the high concentration of historic properties in the state. To select installations in each state, we considered variation in military service representation, the number of historic properties at each installation, and geographic variation and proximity.

During these visits, we interviewed officials representing environmental resource management, cultural resource management, and the department of public works, facilities management, along with privatized installation housing developers. Further, we met with relevant state stakeholders including State Historic Preservation officials in California, Hawaii, Maryland, and Virginia. We obtained documentary and testimonial evidence related to the identification, evaluation, management, and maintenance of historic properties. We also conducted semi-structured group discussions of those who work in historic properties. The results of our interviews and semi-structured group discussions are not generalizable to all DOD installations.

---

<sup>3</sup>The ACHP is an independent federal agency established by the NHPA in 1966 that directs federal agencies to act as responsible stewards when their actions affect historic properties. The ACHP advises the President and Congress on matters relating to historic preservation and recommends measures to coordinate activities of federal, state, and local agencies and private institutions and individuals relating to historic preservation. The ACHP can also review the policies and programs of federal agencies and make recommendations to improve the effectiveness, coordination, and consistency of those policies and programs.

<sup>4</sup>The military housing privatization initiative provided DOD with various authorities to obtain private-sector financing and management to repair, renovate, construct, and operate military housing.

To determine the extent to which DOD identifies and evaluates properties for historic significance, including homes that have been privatized, we reviewed prior GAO reports related to this issue, including a recent GAO report on DOD's real property data, including historic properties.<sup>5</sup> We also requested and reviewed data related to historic properties, for each installation that we visited, including data on: the facility condition,<sup>6</sup> plant replacement value,<sup>7</sup> and facility utilization rate,<sup>8</sup> among other data fields. We reviewed and compared the data from the military departments and from these selected installations.<sup>9</sup> As discussed in this report, we identified limitations of the reported data on historic properties that have been identified and evaluated by DOD.

Further, we compared DOD's efforts to ensure that privatized homes have been identified and evaluated for historic significance to guidelines in Department of Defense Instruction 4715.16, *Cultural Resources Management*, and Department of Defense Manual 4165.63, *DOD Housing Management*.<sup>10</sup> We also obtained and assessed testimonial evidence about the process to identify and evaluate privatized homes for historic significance from officials from the military departments and private developers.

To determine the extent to which DOD assesses the condition of its historic properties and has guidance on the training of installation personnel maintaining and working in historic properties, we conducted

---

<sup>5</sup>[GAO-19-73](#).

<sup>6</sup>Facility condition is a measure of a facility's physical condition that is expressed as a percentage (on a scale of 0 to 100). Factors used to calculate the facility condition include the facility's estimated deferred maintenance and repair costs and the facility's plant replacement value.

<sup>7</sup>Plant replacement value is a calculation of the cost to replace the current physical plant (facilities and supporting infrastructure) using today's construction costs (labor and materials) and standards (methodologies and codes).

<sup>8</sup>Utilization rate is a percentage (on a scale of 0 to 150) used to represent the extent to which a real property asset is used by the primary user for the current program based on its design purpose.

<sup>9</sup>The Air Force is currently using the Automated Civil Engineering System, but is transitioning to a new data system known as TRIRIGA. The Army uses the General Fund Enterprise Business System, the Navy (including the Marine Corps) uses the internet Naval Facilities Asset Data Store, and WHS uses TRIIGA as their respective data systems to maintain real property.

<sup>10</sup>DOD Manual 4165.63; DOD Instruction 4715.16 and [GAO-14-704G](#).

interviews with officials from within OSD, each military department and officials at the 10 installations we visited to identify efforts to manage and maintain historic properties. We also met with U.S. Army Corps of Engineers and DOD's Washington Headquarters Services to further understand their roles in historic property maintenance. We interviewed major developers who have, under the Military Housing Privatization Initiative, leased military housing from DOD and analyzed the process that is used to manage and maintain historic properties. We compared DOD's efforts to conduct inventories of historic properties to guidelines in Executive Order 13287, *Preserve America*, and DOD Instruction 4165.14, *Real Property Inventory (RPI) and Forecasting*.<sup>11</sup> In addition, related to the maintenance of historic properties, we compared DOD's efforts to guidelines in DOD Instruction 4715.16, *Cultural Resources Management*, and the *Standards for Internal Control in the Federal Government*.<sup>12</sup>

In addition, at the 10 installations we visited, we collected physical and documentary evidence of DOD's management and maintenance practices at the installation level. We analyzed installation-level planning documents related to the management and maintenance of historic properties, specifically the installation Integrated Cultural Resource Management Plans (ICRMPs) of the installations we visited. The ICRMPs were from installations spread out across the country and represented all branches of the military. We analyzed the ICRMPs to determine if there were any common themes. We also reviewed a non-generalizable sample of 10 programmatic agreements—one provided by each installation we visited—to identify common themes.<sup>13</sup> These themes cannot be generalized to all programmatic agreements. We conducted interviews with installation staff to understand their responsibilities for historic property management and maintenance. We interviewed state historic preservation officials to understand the relationship between installations and preservationists and efforts to preserve historic properties on installations.

---

<sup>11</sup>Department of Defense Response to Executive Order 13287, "Preserve America," Section 3: Reporting Progress on the Identification, Protection, and Use of Federal Historic Properties (October 2017), and Department of Defense Instruction 4165.14, *Real Property Inventory (RPI) and Forecasting* (Jan. 17, 2014) (incorporating change 2, Aug. 31, 2018).

<sup>12</sup>Department of Defense Instruction 4715.16, *Cultural Resources Management* (Sept. 18, 2008) (incorporating change 2, Aug. 31, 2018) and [GAO-14-704G](#).

<sup>13</sup>At each of the 10 installations we visited, we were provided with one programmatic agreement.



During our site visits to 10 installations, we conducted semi-structured group discussions with individuals who work in historic buildings to supplement our understanding of DOD's compliance with required policy and guidance, as well as any impact working in historic properties has on DOD employees. We used the military department data that informed our site selection, and queried the data to generate a random list of properties DOD identifies as historic. We provided each installation we visited with a list of 20 randomly selected historic properties and requested the installation's assistance in inviting unit members who work in these buildings to participate in a semi-structured group discussion. The participants of the semi-structured group discussions were asked to discuss their experiences working in historic buildings. The results of our semi-structured group discussions are not generalizable to all DOD installations.

To conduct the analysis and summary of these discussion groups, we developed a record of analysis that listed the installations visited and overall topics posed to the unit discussion groups and assessed the extent to which unit members had similar or different experiences working in historic buildings. We identified themes that emerged for each discussion topic across these group discussions.

We conducted this performance audit between March 2018 and June 2019, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

---

# Appendix II: Department of Defense (DOD) Relationships with State Historic Preservation Officials

---

Installation cultural resource managers we spoke to at all 10 installations we visited said that they cultivate and maintain active relationships with their state historic preservation office (SHPO) and regularly communicate with them on preservation issues affecting their installations.<sup>1</sup> Five out of the 10 cultural resource managers noted that maintaining a good working relationship with their SHPO made the consultation process more efficient. Officials we interviewed for two of the four SHPOs stated that being involved early in the consultation process with installation officials is more efficient and makes historic preservation an easier process by enabling them to receive feedback on proposed projects on historic properties, approval of programmatic agreements, and concurrence on their Integrated Cultural Resource Management Plans (ICRMPs) in a timely manner. For example, DOD officials at one military installation said they were able to use non-historic materials during renovations on a historic property in place of more costly period-accurate materials because the agreement with that SHPO facilitated such a solution. According to officials at this installation, SHPOs generally prefer the use of period-accurate materials on historic properties when conducting repairs and renovations. The officials, however, stated that they began consultations with the SHPO early in the process and were able to reach agreement that the historic nature of the property would not be adversely affected if non-historic materials were used. See figure 3 below.

---

<sup>1</sup>Installation cultural resource managers stated that they oversee efforts to maintain historic buildings and often consult with other installation personnel (in environmental, public works, and facilities offices) and the SHPO.

**Figure 3: Example of Historic Property After Renovations with Modern Materials, as of September 2018**



According to installation officials, renovations to this historic property's windows were completed using modern materials such as vinyl, which were less costly than the period-accurate wood.

Source: GAO. | GAO-19-335

Officials from two of the four SHPOs said that due to positive working relationships between the installation and the SHPO, a programmatic agreement has been put in place to help manage the installation's historic properties. These programmatic agreements can be used to address routine maintenance activities for historic properties that can be carried out by the installation with no further consultation with the SHPO. In the four states that we visited, SHPO officials said they executed programmatic agreements with some installations that can save time and reduce the number of required consultation meetings.<sup>2</sup> According to officials from two of the four SHPOs we interviewed, having programmatic agreements in place can increase the efficiency of the historic preservation process. Generally, these programmatic agreements can include the following:

---

<sup>2</sup>We met with relevant state stakeholders including State Historic Preservation officials in California, Hawaii, Maryland, and Virginia.

- Standard operating procedures. Programmatic agreements can include a number of routine maintenance plans pre-approved by the SHPO (such as the replacement of historic windows, repairing leaking historic roofs, and painting historic buildings) that an installation cultural resource manager can then follow without having to go through the consultation process.
- Inventories of relevant properties. Programmatic agreements can include inventories of historic properties that are relevant to the agreement. Generally, the procedures outlined in the programmatic agreement would apply to all of the properties listed in the inventory.
- Dispute resolution and emergency plans. Programmatic agreements can also include dispute resolution mechanisms between parties to the agreement and contingency plans for the maintenance and repair of historic properties in the event on an emergency.

DOD Instruction 4715.16 on cultural resource management states that installations should adapt and reuse existing structures at their installation before disposal, new construction, or leasing.<sup>3</sup> Installations typically consult with the SHPO before renovation work can proceed on historic properties, but, according to officials at one installation, alternative solutions can be reached if there is a good working relationship. In the figure below, at one military installation we visited, a historic property formerly used by National Aeronautics and Space Administration (NASA) and now used by the installation is in the process of being renovated and converted into additional office space. The concrete dome was used to test the aerodynamics of some of NASA's satellite and spaceship components and is being converted into a new conference room after the SHPO approved the installation's plan. See figure 4 below.

---

<sup>3</sup>Department of Defense Instruction 4715.16, *Cultural Resources Management* (Sept. 18, 2008) (incorporating change 2, Aug. 31, 2018).

**Figure 4: Example of Historic Property to Be Converted to an Office and Conference Rooms, as of October 2018**



**Exterior**



**Interior**

Source: GAO. | GAO-19-335

Note: Left photo is the exterior; right photo is the interior of this historic property.

While all of the installation cultural resource managers we spoke to told us they regularly communicate with their SHPO and five of these cultural resource managers said that good working relationships with the SHPO made the consultation process more efficient, installation officials may still experience challenges when trying to address historic preservation concerns. For example, maintenance officials at four of the 10 installations expressed some concerns about a backlog of consultations due in part to the increased time that they felt it takes to conduct these consultations. According to these officials, consultation backlogs caused delays to maintenance projects on historic properties at their installations.

---

# Appendix III: DOD Installation Maintenance and Work Order Review Processes

---

DOD officials from every military service stated that each installation has a process for reviewing maintenance requests and work orders, including those involving historic properties. These procedures, articulated in installations' Integrated Cultural Resource Management Plans (ICRMPs), vary by installation.<sup>1</sup> For example, at seven of the 10 installations we visited, the ICRMPs state that all maintenance requests and work orders are reviewed by a board (or other body of internal stakeholders) composed of maintenance personnel, cultural resources staff (including the cultural resources manager), and other installation personnel. Officials from the military departments said that these boards are responsible for, among other duties, regularly identifying maintenance requests and work orders that affect historic properties and ensuring that the proper steps are carried out before addressing a maintenance request. Decisions by the board, results of SHPO consultations, and programmatic agreement requirements are then, according to officials from the military departments, passed down to maintenance personnel before they begin work on the historic property. At two of the other installations we visited, the installations' department of public works reviews all maintenance requests and work orders, and at the remaining installation, the cultural resources manager reviews them, according to installation officials.

During our visits to the military installations, cultural resource managers from eight of the 10 installations stated that they play a role in their installation's maintenance request/work order review process and that maintenance personnel are typically included in the process. For example, one installation we visited set up a work induction board composed of staff from the installation's Environmental Security Division (which handles cultural resources), maintenance staff, and other internal stakeholders. The senior official within the Environmental Security Division at this installation said the board meets on a weekly basis to determine whether proposed projects (such as maintenance requests and work orders) will affect historic properties at the installation. If the project involves a historic property, the installation's cultural resources manager becomes involved and determines the extent of the affect to the property's historic nature. This senior official also told us that the board also checks in regularly on ongoing projects and monitors work being done on historic properties. Officials at another installation we visited said

---

<sup>1</sup>ICRMPs are plans that should include an inventory of all known historic properties, an inventory of properties that may be eligible for listing on the National Register, and standard operating procedures covering certain maintenance aspects of historic properties.

---

they treat any building that is aged 50 or older in their database as historic and the maintenance division sends every new project to their installation's historic preservation division to ensure a review of potential impacts of the maintenance requests or work orders.

# Appendix IV: Comments from the Department of Defense



SUSTAINMENT

ASSISTANT SECRETARY OF DEFENSE  
3500 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3500

MAY 30 2019

Ms. Elizabeth Field  
Acting Director, Defense Capabilities and Management  
U.S. Government Accountability Office  
441 G Street, N.W.  
Washington, DC 20548

Dear Ms. Field:

This is the Department of Defense (DoD) response to the Government Accountability Office (GAO) Draft Report, GAO-19-335, "DEFENSE INFRASTRUCTURE: Additional Actions Could Enhance DOD's Efforts to Identify, Evaluate, and Preserve Historic Properties," dated May 2, 2019 (GAO Code 102652). The DoD response to the GAO recommendations is enclosed.

The DoD concurs with all seven recommendations. The Military Departments will ensure that installation personnel verify private developers are identifying and evaluating privatized properties for historic significance. The Military Departments will also clarify the requirement for installation personnel to conduct a physical inventory of historic properties every three years, including an assessment of each property's condition. Finally, and on behalf of the Under Secretary of Defense for Acquisition and Sustainment, my office will work with the Military Departments to develop and disseminate guidance on training related to historic preservation for installation personnel, including information on roles and responsibilities.

The Department appreciates the opportunity to comment on the draft report.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert H. McMahon".

Robert H. McMahon

Enclosure:  
As stated



GAO DRAFT REPORT DATED MAY 2, 2019  
GAO-19-335 (GAO CODE 102652)

“DEFENSE INFRASTRUCTURE: ADDITIONAL ACTIONS COULD ENHANCE  
DOD’S EFFORTS TO IDENTIFY, EVALUATE, AND PRESERVE HISTORIC  
PROPERTIES”

DEPARTMENT OF DEFENSE COMMENTS  
TO THE GAO RECOMMENDATIONS

**RECOMMENDATION 1:** The Secretary of the Navy should take steps to ensure that Navy and Marine Corps installation personnel verify that private developers are identifying and evaluating privatized properties for historic significance, as appropriate.

**DoD RESPONSE:** Concur.

**RECOMMENDATION 2:** The Secretary of the Army should take steps to ensure that Army installation personnel verify that private developers are identifying and evaluating privatized properties for historic significance, as appropriate.

**DoD RESPONSE:** Concur.

**RECOMMENDATION 3:** The Secretary of the Air Force should take steps to ensure that Air Force installation personnel verify that private developers are identifying and evaluating privatized properties for historic significance, as appropriate.

**DoD RESPONSE:** Concur.

**RECOMMENDATION 4:** The Secretary of the Navy should clarify the requirements for Navy and Marine Corps installation personnel to conduct a physical inventory of historic properties every 3 years, including an assessment of each property’s condition to ensure that facilities that have been identified and evaluated as historic are inventoried.

**DoD RESPONSE:** Concur.

**RECOMMENDATION 5:** The Secretary of the Army should clarify the requirement for Army installation personnel to conduct a physical inventory of historic properties every 3 years, including an assessment of each property’s condition to ensure that facilities that have been identified and evaluated as historic are inventoried.

**DoD RESPONSE:** Concur.

**RECOMMENDATION 6:** The Secretary of the Air Force should clarify the requirement for Air Force installation personnel to conduct a physical inventory of historic properties every 3

years, including an assessment of each property's condition to ensure that facilities that have been identified and evaluated as historic are inventoried.

**DoD RESPONSE:** Concur.

**RECOMMENDATION 7:** The Secretary of Defense should ensure that the Under Secretary of Defense for Acquisition and Sustainment, in collaboration with the military departments, develop and disseminate department-wide or service-wide guidance, on training related to historic preservation to installation personnel, including information on roles and responsibilities.

**DoD RESPONSE:** Concur.

---

# Appendix V: GAO Contact and Staff Acknowledgments

---

---

## GAO Contact

Elizabeth Field (202) 512-2775, [FieldE1@gao.gov](mailto:FieldE1@gao.gov)

---

## Acknowledgments

In addition to the contact named above, Brian Lepore, Director (retired); Maria Storts, Assistant Director; Whitney Allen; Ronnie Bergman; Aaron Chua; Christopher Gezon; Alexandra Gonzalez; Lori Kmetz; Amie Lesser; Emily Martin; Natalia Peña; Clarice Ransom; Jodie Sandel; Monica Savoy; and John Van Schaik made key contributions to this report.

---

# Related GAO Products

---

*High-Risk Series: Substantial Efforts Needed to Achieve Greater Progress on High-Risk Areas.* [GAO-19-157SP](#). Washington, D.C.: March 6, 2019.

*Defense Real Property: DOD Needs to Take Additional Actions to Improve Management of Its Inventory Data.* [GAO-19-73](#). Washington, D.C.: November 13, 2018.

*Military Housing Privatization: DOD Should Take Steps to Improve Monitoring, Reporting, and Risk Assessment.* [GAO-18-218](#). Washington, D.C.: March 13, 2018.

*High-Risk Series: Progress on Many High-Risk Areas, While Substantial Efforts Needed on Others.* [GAO-17-317](#). Washington D.C.: February 15, 2017.

*Defense Infrastructure: More Accurate Data Would Allow DOD to Improve the Tracking, Management, and Security of Its Leased Facilities.* [GAO-16-101](#). Washington, D.C.: March 15, 2016.

*High-Risk Series: An Update.* [GAO-15-290](#). Washington D.C.: February 11, 2015.

*Federal Real Property: Improved Data Needed to Strategically Manage Historic Buildings, Address Multiple Challenges.* [GAO-13-35](#). Washington, D.C.: December 11, 2012.

*Defense Infrastructure: Military Services Lack Reliable Data on Historic Properties.* [GAO-01-437](#). Washington, D.C.: April 6, 2001.

---

---

## GAO's Mission

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

---

## Obtaining Copies of GAO Reports and Testimony

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

---

## Order by Phone

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

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

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

---

## Connect with GAO

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

---

## To Report Fraud, Waste, and Abuse in Federal Programs

Contact FraudNet:

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

Automated answering system: (800) 424-5454 or (202) 512-7700

---

## Congressional Relations

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

---

## Public Affairs

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

---

## Strategic Planning and External Liaison

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

