



May 2017

# HOMELAND SECURITY

## Progress Made to Implement IT Reform, but Additional Chief Information Officer Involvement Needed

Accessible Version

# GAO Highlights

Highlights of [GAO-17-284](#), a report to congressional requesters

## Why GAO Did This Study

In 2014, Congress enacted IT reform legislation, referred to as FITARA, which includes provisions related to seven areas of IT acquisition management. In 2015, OMB released FITARA implementation guidance that outlined agency CIO responsibilities and required agencies to develop action plans for implementing the guidance.

This report examines, among other things, the extent to which DHS has implemented selected action plans and the key challenges that DHS has faced in implementing selected FITARA provisions.

To do so, GAO analyzed DHS's efforts to implement a sample of 31 of 109 action plans that DHS had reported as complete and that described later-stage implementation steps. To determine challenges, GAO analyzed and compared DHS documentation, including a random sample of IT-related contracts and agreements, to selected FITARA provisions to identify gaps between what was required by FITARA and what DHS had implemented. These provisions required, among other things, significant coordination between DHS headquarters and five components.

## What GAO Recommends

GAO is making 7 recommendations to DHS to ensure that it fully and effectively implements FITARA. Among other things, GAO recommends that DHS fully implement the action plans and address challenges related to CIO contract approval and evaluation of risk. DHS concurred with all 7 recommendations and provided estimated completion dates for implementing each of them.

View [GAO-17-284](#). For more information, contact Carol C. Harris at (202) 512-4456 or [HarrisCC@gao.gov](mailto:HarrisCC@gao.gov).

May 2017

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### Progress Made to Implement IT Reform, but Additional Chief Information Officer Involvement Needed

#### What GAO Found

The Department of Homeland Security (DHS) has fully implemented 28 of the 31 selected Federal Information Technology (IT) Acquisition Reform Act (FITARA) action plans; however, as of December 2016, DHS did not fulfill all aspects of 3 action plans. For example, one action plan is to use an updated process for reviewing troubled programs to provide support to such programs; however, DHS has not finalized its policy for this process. Until DHS ensures that these 3 plans are implemented, it will lack assurance that it is fulfilling FITARA's goals.

DHS faces challenges in implementing certain FITARA provisions:

**Chief Information Officer (CIO) approval of contracts and agreements.** FITARA requires, among other things, the agency CIO to review and approve IT contracts and agreements associated with major investments (e.g., high cost) prior to award. However, the CIO did not participate in the approval of any of the 48 contracts in GAO's sample associated with major investments. While DHS has made improvements to its review process, until the Office of the CIO determines how to increase its review of contracts and agreements, the CIO will continue to have limited visibility into planned IT expenditures.

**CIO evaluation of risk.** DHS's Office of the CIO was conducting risk evaluations of major IT investments and updating the ratings on the Office of Management and Budget's (OMB) public website known as the IT Dashboard, as required by FITARA. However, in October 2016, DHS changed its process for evaluating 30 of DHS's 93 major IT investments and, as a result, the CIO is no longer primarily responsible for the evaluations or associated risk ratings that are publicly reported for these investments. Instead, multiple DHS organizations and officials are to evaluate these investments and the CIO's assessment only accounts for about 18 percent of the total score. Further, while under the old process, DHS's CIO was responsible for assessing these 30 investments against criteria that OMB guidance stated CIOs may use, under the new process, the CIO is only to assess these investments against one of OMB's criteria (see table below). This process change challenges the CIO's ability to publicly report risk ratings.

**Change in Responsibility for Conducting Chief Information Officer (CIO) Risk Evaluations that Are Reported to the Information Technology (IT) Dashboard for 30 Major IT Investments**

Office of Management and Budget evaluation criteria	Primary office responsible under old process	Primary organization or official responsible under new process
Risk management	CIO	Program Accountability and Risk Management, CIO, Chief Financial Officer, and Director of Test and Evaluation
Requirements management	CIO	Joint Requirements Council; Office of Systems Engineering; Director of Test and Evaluation
Contractor oversight	CIO	Chief Procurement Officer
Historical performance	CIO	Not assessed by DHS under new process
Human capital	CIO	Program Accountability and Risk Management CIO and any organization or official responsible for assessing any other factor in the evaluation
Other factors	CIO	

Source: GAO analysis of DHS documentation. | GAO-17-284.

Until DHS addresses these challenges, the goal of FITARA to elevate the role of the department CIO in acquisition management will not be fully realized.

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**Abbreviations**

CIO	chief information officer
DHS	Department of Homeland Security
EBMO	Enterprise Business Management Office
FITARA	Federal Information Technology Acquisition Reform Act
IT	information technology
OCIO	Office of the Chief Information Officer
OMB	Office of Management and Budget

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May 18, 2017

The Honorable Ron Johnson  
Chairman  
Committee on Homeland Security and Governmental Affairs  
United States Senate

The Honorable Michael McCaul  
Chairman  
Committee on Homeland Security  
House of Representatives

The federal government plans to spend more than \$89 billion on information technology (IT) in fiscal year 2017. However, prior IT expenditures too often have failed to meet cost and schedule expectations or make significant contributions to mission-related outcomes. To address these concerns, in December 2014, Congress enacted IT reform legislation, commonly referred to as the Federal Information Technology Acquisition Reform Act or FITARA. In June 2015, the Office of Management and Budget (OMB) released FITARA implementation guidance that, among other things, outlined responsibilities and authorities of federal agency chief information officers (CIO); it also required agencies to develop action plans needed to implement the FITARA guidance.

The Department of Homeland Security (DHS) relies heavily on IT to carry out its mission. In fiscal year 2016, the department's IT budget of approximately \$6.2 billion was the third largest in the federal government. Given the importance of implementing FITARA and the size of its budget, we reviewed the progress that this department has made in addressing the act. Specifically, our objectives were to (1) determine the extent to which DHS has developed action plans that address FITARA,<sup>1</sup> and the extent to which DHS has implemented selected action plans; and (2)

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<sup>1</sup>FITARA contains seven sections and, as a covered agency, DHS has responsibilities for implementing five of the sections (agency CIO authority enhancements, enhanced transparency and improved risk management, portfolio reviews, federal data center consolidation, and the expansion of training and use of IT acquisition cadres). The remaining two sections (related to the federal strategic sourcing initiative and government-wide software purchasing program) are only applicable to OMB or the General Services Administration.

determine the key challenges that DHS is facing in implementing selected FITARA provisions.

To address the initial part of the first objective—determine the extent to which DHS has developed action plans that address FITARA—we identified and reviewed each of the 131 action plans<sup>2</sup> which DHS developed in accordance with OMB's FITARA implementation guidance that identified 17 topic areas of agency CIOs' roles and responsibilities, referred to as common baseline sections. OMB's 17 baseline areas and DHS's 131 supporting action plans are related to three of the five FITARA sections applicable to DHS: agency CIO authority enhancements, portfolio reviews, and the expansion of training and use of IT acquisition cadres.

In addition, we reviewed the department's IT acquisition human capital plan and its data center consolidation plan, which were intended to address FITARA's fourth and fifth applicable sections on the expansion of training and use of IT acquisition cadres, and data center consolidation, respectively. Further, we reviewed the department's plan for assessing IT program risks, which was developed prior to the enactment of FITARA, but is consistent with the act's provisions on enhanced transparency and improved risk management. We compared the information in each of these plans to the five applicable sections in FITARA. We did not assess whether DHS would be in full compliance with FITARA if the plans were implemented.

To address the second part of the first objective—determine the extent to which DHS has implemented selected FITARA action plans—we first identified those action plans (of the 131 total plans) that DHS reported it had fully implemented as of April 2016. This resulted in the identification of 109 action plans. (The remaining 22 of the 131 total plans were identified by DHS as not yet fully implemented and, thus, were not included in our selection pool.)

From the 109 plans that the department identified as fully implemented, we then selected a sample of the plans for review. To create the sample, we selected only those action plans that (1) were included in the 11 common baseline sections that DHS identified as fully implemented (out of the 17 total sections) and (2) described later-stage implementation

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<sup>2</sup>DHS refers to these as action items.

steps; we did not include plans that described earlier-stage, or preliminary steps which the department said had been implemented. For example, we included in our sample action plans that focused on the implementation of an updated process, rather than action plans that focused on the preliminary identification of how a process needs to be updated. Based on these criteria, we selected a sample of 31 action plans.

We then obtained and analyzed available DHS documentation supporting the implemented actions, such as DHS policy documents, guidance documents, concepts of operations, process models, program management briefings, meeting minutes, memorandums, committee charters, and relevant e-mails to and from staff in DHS's Office of the Chief Information Officer (OCIO) and OMB. We compared the documentation to the selected action plans to determine the extent to which DHS had implemented the plans. We also interviewed cognizant officials from across the department, including from the OCIO, the Enterprise Business Management Office (EBMO), the Office of the Chief Human Capital Officer, the Office of Program Accountability and Risk Management, and the Office of the Chief Procurement Officer. We discussed with these officials the steps that DHS had taken to implement the selected action plans.

Regarding our assessments of the sample of DHS's FITARA action plans, we determined an action plan to be fully implemented when the evidence provided by DHS officials fulfilled all aspects of the action plan's description. We assessed an action plan as being partially implemented when the evidence fulfilled some, but not all, aspects of the action plan's description. For action plans that we determined to be partially implemented (although the department had identified them as being fully implemented), we reviewed documentation and met with department officials to identify the causes for why those action plans were not yet fully implemented.

To address the second objective, we identified the five sections within FITARA that were applicable to DHS as a covered agency. These sections related to agency CIO authority enhancements, enhanced transparency and improved risk management, portfolio reviews, federal data center consolidation, and the expansion of training and use of IT acquisition cadres. We then selected and reviewed provisions for three of those sections—agency CIO authority enhancements, enhanced transparency and improved risk management, and the expansion of training and use of IT acquisition cadres. (We did not select provisions

from the sections on portfolio reviews and federal data center consolidation because we had recently completed work that addressed these sections.<sup>3)</sup>

To select the provisions from within the three sections, we first identified those that would require significant coordination between DHS headquarters and its components—since such coordination is especially important to the department’s decentralized structure. We also identified those that should have already been implemented by the department based on the time that had passed since FITARA was enacted in December 2014.

Based on the criteria, we selected provisions that require:

- the DHS CIO to review and approve IT contracts and agreements before the department enters into them (part of the agency CIO authority enhancements section);
- the department CIO to evaluate each major IT investment<sup>4</sup> according to risk, in accordance with guidance issued by the Director of OMB (part of the enhanced transparency and improved risk management section); and
- the department to develop and strengthen its IT acquisition cadre, to include having highly skilled program and project managers (part of the expansion of training and use of IT acquisition cadres section).<sup>5</sup>

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<sup>3</sup>See, for example, GAO, *Information Technology Reform: Billions of Dollars in Savings Have Been Realized, but Agencies Need to Complete Reinvestment Plans*, [GAO-15-617](#) (Washington, D.C.: Sept. 15, 2015); and *Information Technology: Additional OMB and Agency Actions Needed to Ensure Portfolio Savings Are Realized and Effectively Tracked*, [GAO-15-296](#) (Washington, D.C.: Apr. 16, 2015).

<sup>4</sup>OMB defines a major IT investment as a system or an acquisition requiring additional management attention because it has significant importance to the mission or function of the government; significant program or policy implications; high executive visibility; high development, operating, or maintenance costs; an unusual funding mechanism; or is defined as major by the agency’s capital planning and investment control process.

<sup>5</sup>The 31 reportedly implemented action plans that we reviewed in our first objective did not address these FITARA provisions; as such, we did not review any of DHS’s action plans associated with these provisions.

We examined the implementation of these provisions by DHS headquarters<sup>6</sup> and the department's five operational components with the largest planned fiscal year 2016 IT budgets, as reported on OMB's IT Dashboard. These components were the Transportation Security Administration, U.S. Citizenship and Immigration Services, U.S. Coast Guard, U.S. Customs and Border Protection, and U.S. Immigration and Customs Enforcement.

Further, to address the contract approval provision within this objective, we selected a random sample of contracts and interagency agreements from each of the five selected components and headquarters. To do so, we first asked DHS to provide us with a list of contracts for IT or IT services that met the following criteria:

- must have been awarded between October 1, 2015 and May 31, 2016;
- must have been unclassified; and
- must not have been identified as a contract modification.

From the list of contracts provided by DHS, we then selected a subset of contracts from each of the five selected components and headquarters to review. Specifically, based on the total value of each contract, we randomly selected 17 contracts from each of the components and headquarters using the following cost ranges:

- \$100,000 to less than \$1 million (7 contracts),
- \$1 million to less than \$2.5 million (7 contracts), and
- \$2.5 million and above (3 contracts).

Two of the selected components—U.S. Citizenship and Immigration Services and U.S. Immigration and Customs Enforcement—did not have enough contracts in each cost range for us to assess the total number of contracts we had planned. In instances where this occurred, we reviewed these components' available, applicable contracts within those particular cost ranges.

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<sup>6</sup>DHS headquarters includes the Office of the Secretary, the Office of the Under Secretary for Management, and the Office of the Under Secretary for Science and Technology.

As a result, our sample consisted of a total of 92 contracts. Of the 92 contracts, DHS officials from headquarters and the five selected components associated 48 contracts with major investments and 21 with non-major investments.<sup>7</sup> Officials from headquarters, Customs and Border Protection, and the U.S. Coast Guard were unable to map 23 contracts in our sample to an IT investment.

To select the sample of agreements for review, we first asked DHS to provide us with a list of agreements for IT or IT services that met the following criteria:

- must have been classified by DHS as interagency acquisitions<sup>8</sup> (rather than financial transactions);
- must have been entered into between October 1, 2015 and May 31, 2016;
- must have had a total value of greater than \$100,000; and
- must have been unclassified.

Based on the above criteria, DHS provided a list of 24 interagency agreements from headquarters and the five selected components. We included all of those agreements in our review. Of the 24 interagency agreements, DHS officials associated 8 agreements with major investments and 5 with non-major investments. The officials were unable to map 11 interagency agreements in our sample to an IT investment.

To determine whether each contract or interagency agreement was approved prior to DHS entering into them, we obtained and analyzed each of the contracts and agreements, as well as associated approval documentation, such as acquisition review decision documents. We then compared the contracts, agreements, and associated approval documentation to the FITARA provisions to identify gaps between what FITARA required and what DHS had implemented. Specifically, we compared the: (1) signature date on the contract or agreement to the date that was identified on the associated approval documentation and (2) amount approved to the amount awarded.

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<sup>7</sup>A non-major IT investment is an investment that, among other things, does not meet the criteria for a major IT investment.

<sup>8</sup>DHS defines an interagency acquisition as a procedure by which an agency needing supplies or services obtains them from another agency.

Additionally, because DHS used its governance process—referred to as the IT Acquisition Review process—to approve contracts and agreements, we assessed whether the DHS CIO (for contracts and agreements associated with major investments) or a delegate who reports directly to the CIO (for contracts and agreements associated with non-major investments) was a full participant in that process, as required by FITARA. Specifically, for contracts and agreements associated with major investments, we analyzed the contract or agreement and associated approval documentation to determine whether the CIO signed off on the contract or agreement, attended a meeting where it was discussed, or provided written comments regarding it.

For contracts and agreements associated with non-major investments, we analyzed the contract or agreement and associated approval documentation to determine the position title of the official who approved the proposed contract or agreement. We then asked officials from DHS headquarters and the five components to identify whether the approving official reported directly to the DHS CIO, as required by FITARA. If that person did not directly report to the DHS CIO, we asked for documentation demonstrating whether the DHS CIO or an official who reports directly to the CIO was involved as a full participant in the approval process (i.e., attended a meeting where the specific contract or agreement was discussed, or provided written comments regarding it).

We also interviewed cognizant DHS officials from headquarters and the five selected components to discuss DHS's IT Acquisition Review process, the steps DHS had taken to review and approve IT contracts and agreements prior to award, and the reasons for any gaps we identified to determine their challenges in fully implementing this FITARA provision.

Within our second objective, to address the provision of FITARA that requires the DHS CIO to evaluate each major IT investment according to risk and update the associated CIO ratings on OMB's IT Dashboard in accordance with OMB guidance, we analyzed DHS's policy for updating the CIO ratings on the Dashboard. We also analyzed DHS's assessment template that was used for developing the ratings reported on the Dashboard. We then compared these documents to the FITARA provision to identify gaps between what FITARA required and what DHS had implemented. Further, we interviewed officials from EBMO and the Office of Program Accountability and Risk Management to discuss the steps DHS had taken to evaluate its major IT investments and update the associated CIO ratings on OMB's IT Dashboard. We also discussed with

these officials the reasons for the gaps we identified to determine their challenges in addressing these gaps and fully implementing the provision.

To identify any challenges associated with implementing the FITARA provision that required DHS to develop and strengthen its IT acquisition cadre, we obtained and analyzed documentation on DHS headquarters' and the five selected components' efforts to develop and deploy a skilled IT acquisition cadre. Specifically, we assessed the department's acquisition human capital plan and IT strategic plan, and compared them to the FITARA provision to identify gaps between what FITARA required and what DHS had implemented. We also interviewed cognizant DHS officials from headquarters and the five selected components to discuss the steps DHS had taken to implement an IT acquisition cadre. In addition, we discussed with these officials the reasons for the gaps we identified to determine what, if any, challenges they encountered in addressing these gaps and fully implementing the provision.

To assess the reliability of the data that we used to support the findings in this report, we reviewed relevant program documentation to substantiate evidence obtained through interviews with agency officials. We determined that the data used in this report were sufficiently reliable for the purposes of our reporting objectives. We made appropriate attribution indicating the sources of the data.

We conducted this performance audit from March 2016 to May 2017 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.

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## Background

Information systems are critical to the health, economy, and security of the nation. To support these systems, the federal government plans to invest more than \$89 billion on IT in fiscal year 2017. However, prior IT expenditures too often have produced failed projects—that is, projects with multimillion dollar cost overruns, schedule delays measured in years, and questionable mission-related achievements.

These failed projects often suffered from a lack of disciplined and effective management, such as project planning, requirements definition, and program oversight and governance. In many instances, agencies had not consistently applied best practices that are critical to successfully acquiring IT investments. Based on these issues, in 2015, we designated the management of IT acquisitions and operations across the federal government as high risk.<sup>9</sup>

DHS has been challenged in improving the management of its IT projects. We have reported on these challenges since shortly after the department was created in 2002. In particular, we have reported on DHS's need to improve its executive oversight of IT investments and its use of key program management practices.

In 2003, we also designated the transformation of DHS as high risk because it had to transform 22 agencies—several with major management challenges—into one department.<sup>10</sup> The department subsequently made important progress in implementing its range of missions and in strengthening and integrating its management functions (e.g., acquisition, financial, and IT). However, in 2015 we reported that, among other things, additional work was needed for DHS to continue to improve its IT management.<sup>11</sup> We have made numerous recommendations to help the department address these challenges.<sup>12</sup>

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## IT Management and Reform Legislation

Over the last three decades, Congress has enacted several laws to assist the federal government in managing IT investments. For example, the Paperwork Reduction Act of 1995 required OMB to develop and oversee policies, principles, standards, and guidelines for federal agency IT functions. It also required individual agencies to establish processes for

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<sup>9</sup>GAO, *High-Risk Series: An Update*, [GAO-15-290](#) (Washington, D.C.: Feb. 11, 2015).

<sup>10</sup>GAO, *High-Risk Series: An Update*, [GAO-03-119](#) (Washington, D.C.: Jan. 1, 2003).

<sup>11</sup>[GAO-15-290](#).

<sup>12</sup>See, for example, GAO, *Homeland Security: Oversight of Neglected Human Resources Information Technology Investment Is Needed*, [GAO-16-253](#) (Washington, D.C.: Feb. 11, 2016); and *Immigration Benefits System: Better Informed Decision Making Needed on Transformation Program*, [GAO-15-415](#) (Washington, D.C.: May 18, 2015).

maximizing the value and managing the risk of major information system initiatives.<sup>13</sup>

The following year, in 1996, Congress enacted the Clinger-Cohen Act to strengthen those requirements by, among other things, mandating the appointment of agency CIOs.<sup>14</sup> Under these two laws, CIO responsibilities for IT management include implementing and enforcing applicable government-wide and agency IT management principles, standards, and guidelines; assuming responsibility and accountability for IT investments; and monitoring the performance of IT programs and advising the agency head on whether to continue, modify, or terminate such programs.<sup>15</sup>

More recently, in December 2014, Congress passed IT reform legislation (commonly referred to as the Federal Information Technology Acquisition Reform Act or FITARA). This law holds promise for improving agencies' acquisitions of IT and enabling Congress to monitor agencies' progress and hold them accountable for reducing duplication and achieving cost savings.

FITARA includes provisions related to seven areas of management—referred to as FITARA sections. Five of these sections are applicable to DHS as a covered agency; six are applicable to OMB in its executive branch budget and policy role; and six are applicable to the General Services Administration, both as a covered agency and in its government-wide acquisition role:

- **Agency CIO authority enhancements.** Agency CIOs are required to (1) approve the IT budget requests of their respective agencies, (2) certify that IT investments are adequately implementing OMB's incremental development guidance, (3) review and approve contracts for IT prior to award, and (4) approve the appointment of other agency employees with the title or functions of component CIO.<sup>16</sup>

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<sup>13</sup>44 U.S.C. § 3504(h) & 3506(h).

<sup>14</sup>44 U.S.C. § 3506(a)(2)(A), as amended by sec. 5125(a), Pub. L. No. 104-106 (Feb. 10, 1996).

<sup>15</sup>40 U.S.C. § 11315(c) and 44 U.S.C. § 3506(h).

<sup>16</sup>FITARA's provisions generally apply to Chief Financial Officers Act (31 U.S.C. § 901(b)) agencies with limited application to the Department of Defense.

- **Enhanced transparency and improved risk management.** OMB and agencies are to make publicly available detailed information on federal IT investments, and agency CIOs are to categorize their investments by risk. In addition, in the case of major investments rated as high risk for 4 consecutive quarters, the law requires that the agency CIO and the investment's program manager conduct a review aimed at identifying and addressing the causes of the risk.
- **Portfolio review.** Agencies are to annually review their IT investment portfolios in order to, among other things, increase efficiency and effectiveness, and identify potential waste and duplication.
- **Federal data center consolidation initiative.** Agencies are required to provide OMB with a data center inventory, a strategy for consolidating and optimizing the data centers (to include planned cost savings), and quarterly updates on progress made.
- **Expansion of training and use of IT acquisition cadres.** Agencies are to update their acquisition human capital plans to address supporting the timely and effective acquisition of IT. In doing so, the law calls for agencies to consider, among other things, establishing IT acquisition cadres or developing agreements with other agencies that have such cadres.
- **Maximizing the benefit of the federal strategic sourcing initiative.** OMB is to issue regulations requiring that federal agencies compare their purchases of services and supplies to what is offered under the federal strategic sourcing initiative.
- **Government-wide software purchasing program.** The General Services Administration is to develop a strategic sourcing initiative to enhance government-wide acquisition and management of software.

Most of these FITARA sections relate to our high-risk topic on the government-wide management of IT acquisitions and operations.<sup>17</sup> With regard to this topic, for example, we focus on the need for CIO authority enhancements, portfolio reviews, and federal data center consolidation.

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## OMB's FITARA Implementation Guidance

In June 2015, OMB released guidance that describes how agencies are to implement FITARA.<sup>18</sup> Among other things, this guidance outlined topic

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<sup>17</sup>[GAO-15-290](#).

<sup>18</sup>OMB, *Management and Oversight of Federal Information Technology*, M-15-14 (Washington, D.C.: June 10, 2015).

areas related to agency CIOs' roles and responsibilities—referred to as OMB's common baseline sections. For example, the CIO is responsible for engaging with program managers, reviewing and approving the IT budget request, and developing the IT workforce. Table 1 identifies OMB's 17 common baseline sections and associated topics.

**Table 1: Office of Management and Budget's (OMB) 17 Common Baseline Sections for Implementing the Federal Information Technology (IT) Acquisition Reform Act**

OMB common baseline section
A. Visibility of IT resource plans/decisions to Chief Information Officer (CIO)
B. CIO role in pre-budget submission for programs that include IT and overall portfolio
C. CIO role in planning program management
D. CIO review and approval of major IT investment portion of budget request
E. Ongoing CIO engagement with program managers
F. Visibility of IT planned expenditure reporting to CIO
G. CIO defines IT processes and policies
H. CIO role on program governance boards
I. Shared acquisition and procurement responsibilities with the Chief Acquisition Officer and Chief Financial Officer
J. CIO role in recommending modification, termination, or pause of IT projects or initiatives
K. CIO review and approval of acquisition strategy and acquisition plan
L. CIO approval of reprogramming
M. CIO approval of the appointment of new bureau CIOs
N. CIO participation in bureau CIOs' evaluations
O. CIO and Chief Human Capital Officer develop bureau IT leadership directory
P. CIO develops and strengthens IT workforce
Q. CIO reports to agency head (or Deputy/Chief Operating Officer)

Source: GAO analysis of data from OMB. | GAO-17-284.

OMB also developed an assessment template for agencies to use to assess their current practices against the common baseline sections—referred to as a self-assessment. Based on OMB's guidance, agencies are expected to use the template to document areas where they are not in conformance with the baseline sections. The guidance also directed the agencies to develop action plans describing the changes they needed to make in order to conform to the baseline sections. The guidance further directed agencies to conduct an annual review and to update the self-assessment, with the first update to be completed by the end of April 2016.

In response to the guidance, in November 2015, DHS submitted to OMB a self-assessment of its conformance with the common baseline. As a result of the assessment, DHS identified 130 action plans that it intended to implement to ensure that the department would meet all baseline responsibilities. According to the assessment, the department originally planned to implement all of the action plans by the end of May 2016. However, the department updated its assessment in April 2016 and revised the number of action plans to 131. It also deferred the implementation of certain action plans and revised the final time frame by which it expected to implement all of the plans to the second quarter of fiscal year 2018. As of April 2016, the department reported to OMB that it had fully implemented 109 of its 131 action plans. Appendix I lists the department's 131 action plans and the respective OMB common baseline sections with which they are associated.

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## Oversight of DHS's IT Investments

DHS acquires IT and other capabilities that are intended to improve its ability to execute its mission to prevent and deter terrorist attacks, and protect against and respond to threats and hazards to the nation. In accordance with OMB guidance,<sup>19</sup> the department classifies its IT investments as major and non-major investments.

DHS's capital planning guidance states that the department's major investments are those that are expected to cost \$50 million or more over their life cycles, while non-major investments are those expected to cost less than \$50 million over their life cycles.<sup>20</sup> According to data that DHS reported to OMB's IT Dashboard,<sup>21</sup> the department had 92 major IT investments in fiscal year 2016 and planned to spend about \$5.1 billion on them during that year.

DHS's Under Secretary for Management is designated as the department's Chief Acquisition Officer and, as such, is responsible for managing the implementation of department-wide acquisition policies. To

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<sup>19</sup>OMB, *Fiscal Year 2018 IT Budget – Capital Planning Guidance* (June 24, 2016).

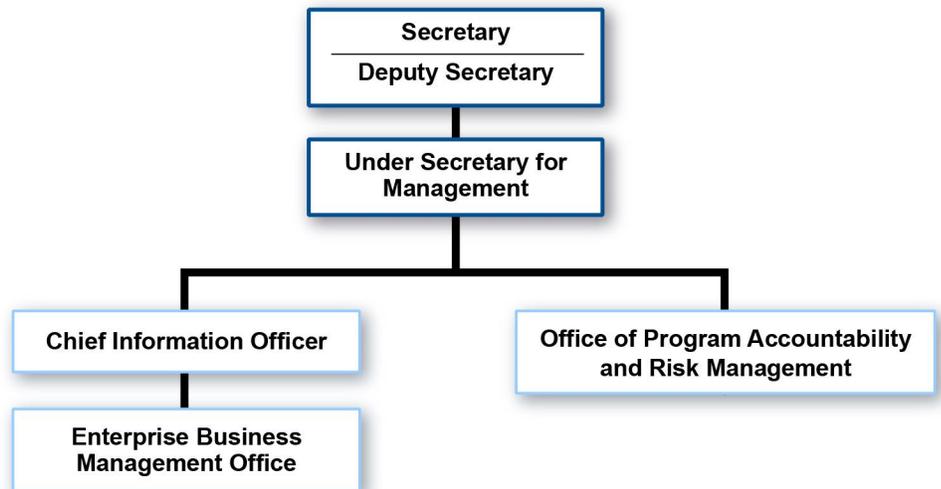
<sup>20</sup>DHS Instruction 102-02-001, *Capital Planning and Investment Control Guidebook* (March 24, 2016).

<sup>21</sup>OMB's IT Dashboard is a public website that provides detailed information on major IT investments at 27 federal agencies, including ratings of their performance against cost and schedule targets.

help manage and oversee the department’s investments, DHS’s Office of Program Accountability and Risk Management is responsible for the department’s overall acquisition governance process and is to report directly to the Under Secretary for Management. Specifically, this office has the responsibility to develop and update program management policies and practices, facilitate and assist in the review of major programs, provide guidance for workforce planning activities, provide support to program managers, and collect program performance data.

Further, per the department’s policy, DHS’s CIO, who also reports to the Under Secretary for Management, is responsible for setting departmental IT policies, processes, and standards. This official also is to ensure that IT acquisitions comply with the department’s IT management processes, technical requirements, and approved enterprise architecture, among other things. Within the OCIO, EBMO has been given primary responsibility for administering the CIO’s responsibilities and, as such, for ensuring that the department’s IT investments align with its missions and objectives. EBMO is also responsible for leading the implementation of DHS’s FITARA action plans. Figure 1 shows the key department-level organizations with IT acquisition management responsibilities at DHS.

**Figure 1: Key Department of Homeland Security Department-level Organizations with Information Technology Acquisition Management Responsibilities**



Source: GAO analysis of Department of Homeland Security data. | GAO-17-284

To help manage the department’s IT acquisitions, DHS implemented a governance process—referred to as the IT Acquisition Review process—which is managed by EBMO. This governance process is intended to

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ensure IT acquisitions align with DHS's missions and policies. As part of this process, the CIO is responsible for reviewing, prior to award, contracts and agreements that have planned values of \$2.5 million or more, among other criteria. In addition, DHS's components that have a CIO are to review, for their respective component, contracts and agreements with planned values of less than \$2.5 million, among other criteria.

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## DHS's Plans Addressed FITARA and Most, but Not All, Selected Plans Have Been Fully Implemented

DHS developed plans, including 131 action plans, that addressed the five sections of FITARA that were applicable to the department.<sup>22</sup> Further, as of December 2016, DHS fully implemented 28 of the 31 action plans we selected for review. However, we identified 3 action plans that the department has not fully implemented because specific actions called for in these plans had not been undertaken. Ensuring that its action plans are fully implemented will better position DHS to effectively manage the department's IT acquisitions, consistent with FITARA.

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### DHS Developed Plans that Addressed FITARA

DHS developed 131 action plans that, collectively, addressed three of the five applicable FITARA sections: (1) agency CIO authority enhancements, (2) portfolio reviews, and (3) development and deployment of an IT acquisition cadre. For example, related to the agency CIO authority enhancements section—which requires DHS to, among other things, approve the department's IT budget requests—the department developed action plans for identifying and reviewing relevant policies that impact the processes, roles, and responsibilities within DHS's budget phases; documenting and modeling the current processes; identifying gaps and opportunities in those current processes; and documenting and implementing updated policies to ensure the DHS CIO is involved in the

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<sup>22</sup>These five FITARA sections are: agency CIO authority enhancements, enhanced transparency and improved risk management, portfolio reviews, federal data center consolidation, and the expansion of training and use of IT acquisition cadres. The remaining two sections of FITARA are only applicable to OMB or the General Services Administration.

department's IT budgeting decisions and the management of IT programs.

In addition, DHS developed action plans that relate to the portfolio review section of FITARA. This section requires the department to annually review its portfolios of IT investments in order to, among other things, identify potential duplication in similar investments within the portfolios. DHS's action plans to address this section included, among other things, identifying gaps in the department's current processes where OMB's common baseline requirements were not satisfied; updating relevant policies and guidance to collect the necessary information related to executing the IT budget; and ensuring policy updates are approved by relevant parties.

The department also created action plans to address the section of FITARA related to IT acquisition cadres. Specifically, this section requires the department to consider developing and implementing a cross-functional group trained in IT program management and acquisition. For example, DHS created action plans for identifying training opportunities that will enhance staff development at multiple levels, developing a workforce planning process for assessing the department's current technology skills, identifying existing employee skillsets related to acquisition and IT, and aligning the department's existing course inventory to acquisition certifications and specializations in IT.

Beyond the 131 FITARA action plans, the department developed a separate plan that addressed the FITARA section that requires DHS to consolidate its data centers. Specifically, DHS developed a strategic plan that describes how it intends to implement OMB's data center consolidation guidance.<sup>23</sup>

In addition, the department previously developed a plan that is consistent with the remaining section of FITARA that is applicable to DHS—enhanced transparency and improved risk management. This section requires the department to make publicly available detailed information on its federal IT investments, and the CIO to categorize the department's investments by risk. Related to the requirements in this section, in 2013, DHS issued a plan which stated that IT programs' risks were to be assessed on a regular basis and that the assessments would serve as

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<sup>23</sup>We have future work planned that will assess the completeness of this plan.

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the basis for the ratings to be regularly published on OMB's IT Dashboard. (This plan is discussed in more detail later in the report.)

As a result of the department developing these plans to implement FITARA, it should be better positioned to implement the act. Further, doing so has more effectively positioned the department to take steps to elevate the role of its CIO and improve the oversight of its IT acquisition and management.

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### DHS Has Taken Steps that Fully Implemented Most, but Not All, of the Selected FITARA Action Plans

Of the 31 selected action plans that we reviewed,<sup>24</sup> 28 of them (about 90 percent) have been fully implemented as of December 2016 (that is, the evidence provided by DHS fulfilled all aspects of the action plan's description), as the department reported. However, 3 action plans (about 10 percent) have not been fully implemented, even though the department reported them as fully implemented. In these instances, the evidence of the actions taken by the department fulfilled some, but not all, aspects of the action plan's description. Table 2 provides the implementation status of the 31 selected action plans and the OMB common baseline sections associated with each of these action plans.

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<sup>24</sup>Of the 131 total plans, DHS reported that it had fully implemented 109, as of April 2016. DHS planned to fully implement the remaining 22 action plans later and, thus, we did not include them in our selection pool. Therefore, we selected a sample of 31 plans to review from the selection pool of 109. To create the sample, we selected only those action plans that, among other things, were included in the 11 common baseline sections that DHS identified as fully implemented. As such, we did not select action plans from sections F, H, I, J, K, or P, which the department had indicated were partially implemented. Additionally, while DHS reported that it fully implemented sections M and Q, DHS did not have any action items related to these sections. As such, we did not select any action plans from them.

**Table 2: Status of 31 Selected Department of Homeland Security (DHS) Federal Information Technology (IT) Acquisition Reform Act (FITARA) Action Plans, as of December 2016**

Office of Management and Budget (OMB) common baseline section	DHS action plan <sup>a</sup>	Fully implemented <sup>b</sup>	Partially implemented <sup>c</sup>
A. Visibility of IT resource plans/decisions to Chief Information Officer (CIO)	1. Ensure updates to policies are approved by relevant parties and submit updated/approved policies to OMB.	X	
	2. Document and implement the updated and agreed upon processes for the planning, programming, and budgeting phases to ensure CIO has visibility into IT resource plans and decisions.	X	
B. CIO role in pre-budget submission for programs that include IT and overall portfolio	3. Ensure content updates to policies are approved by all relevant parties and submit updated/approved policies to OMB.	X	
	4. Document and implement the updated processes for the planning, programming, and budgeting phases to ensure CIO has a role in pre-budget submission.	X	
	5. Document and update the DHS IT portfolio management processes to align with the updated planning, programming, and budgeting phases to assess the use of IT-related resources.	X	
C. CIO role in planning program management	6. Formalize the endorsement or approval process to incorporate CIO review, assessment, and acknowledgement of appropriate artifacts in the Acquisition Lifecycle Framework.	X	
	7. Update language within DHS's acquisition management directive to fully align with FITARA and OMB's common baseline.	X	
	8. Complete an analysis of the current state of activities during the first phase of the acquisition life-cycle (when a capability need is identified).	X	
	9. Develop a proposed framework for streamlining activities in the first phase of the acquisition life-cycle.	X	
	10. Complete an implementation recommendation plan for streamlining and reporting on activities that occur in the first phase of the acquisition life-cycle.	X	
	11. Document and model current processes and supporting requirements for the planning, programming, and budgeting phases.	X	
	12. Document and implement the updated and agreed upon processes for planning, programming, and budgeting phases to ensure CIO has a role in program planning.	X	
	13. Ensure content updates to policies are approved by all relevant parties and submit updated policies to OMB.	X	
D. CIO review and approval of major IT investment portion of budget request	14. Ensure content updates to policies are approved by all relevant parties and submit updated policies to OMB.	X	
	15. Document and implement the updated and agreed upon processes for planning, programming, and budgeting phases to ensure the CIO has approval of agency IT budget submission.	X	

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Office of Management and Budget (OMB) common baseline section	DHS action plan <sup>a</sup>	Fully implemented <sup>b</sup>	Partially implemented <sup>c</sup>
E. Ongoing CIO engagement with program managers	16. The IT Program/Project Manager Center of Excellence <sup>e</sup> will be established as a cross-functional team to gather appropriate best practices, determine pain points, and address these pain points.	X	
	17. The IT Program/Project Manager Center of Excellence will develop IT performance metrics to ensure programs are meeting objectives.	X	
	18. Develop requirements to validate the IT performance metrics.	X	
	19. Leverage the updated DHS TechStat <sup>f</sup> process to provide support to failing or troubled programs. <sup>g</sup>		X
	20. Update the process to ensure the IT Program/Project Manager Center of Excellence reviews IT performance metrics and strategies.		X
	21. Create IT Program/Project Manager standard operating procedures and best practices guides.	X	
G. CIO defines IT processes and policies	22. Develop process models and list of requirements for CIO certification of reviews related to IT initiatives.	X	
	23. Submit approved process models and supporting guidance.	X	
	24. Incorporate CIO certification of incremental development or scope of the systems engineering life-cycle reviews to ensure that the process sufficiently addresses various IT resource categories.		X
	25. Incorporate the agile and systems engineering life-cycle guidebooks and instructions into DHS's acquisition management directive.	X	
L. CIO approval of reprogramming	26. Ensure content updates to policies are reviewed by all stakeholders and submit updated policies to OMB.	X	
	27. Revise relevant documentation and processes to reflect CIO approval of component's requests for reprogramming and transfer requests of IT resources.	X	
N. CIO participation in bureau CIOs' evaluations	28. Develop an executive-level leadership competency applicable to CIO employees in certain performance plans. <sup>h</sup>	X	
	29. Incorporate this competency in certain CIO performance plans, amend performance system descriptions as necessary, and submit these amendments to the Office of Personnel Management. <sup>h</sup>	X	
	30. Provide guidance during the performance appraisal cycle that will provide component Line of Business <sup>i</sup> (e.g., CIO) input into the assessments.	X	
O. CIO and Chief Human Capital Officer develop bureau IT leadership directory	31. Include evaluating rating officials and reviewing officials in the provided survey report.	X <sup>j</sup>	
<b>Total</b>		<b>28</b>	<b>3</b>

Source: GAO analysis of data provided by DHS. | GAO-17-284.

<sup>a</sup>For the purposes of this report, we slightly modified and/or condensed the wording of certain DHS action plans.

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<sup>b</sup>We determined an action plan to be fully implemented when the evidence provided by DHS officials fulfilled all aspects of the action plan's description.

<sup>c</sup>We determined an action plan to be partially implemented when the evidence fulfilled some, but not all, aspects of the action plan's description.

<sup>d</sup>In accordance with OMB's FITARA implementation guidance, the DHS CIO reviewed and approved the major IT investments portion of the department's fiscal year 2017 budget request, which accounted for about 83 percent of its IT budget.

<sup>e</sup>DHS's IT Program/Project Manager Center of Excellence is a cross-functional team created to provide guidance and assistance in the management of IT programs and projects.

<sup>f</sup>A TechStat is a face-to-face, evidence-based review of an IT program with DHS headquarters, component leadership, and OMB, as appropriate.

<sup>g</sup>In December 2016, Enterprise Business Management Office (EBMO) officials reported that they had begun implementing the new TechStat process, but they were still in the process of finalizing the policy on that new process.

<sup>h</sup>According to EBMO officials, the action plans associated with the executive-level leadership competency were focused only on the component CIOs that were part of the Senior Executive Service pay plan, not those that were part of the General Schedule pay plan.

<sup>i</sup>A Line of Business is a specific operating unit or shared service within DHS, such as financial management or human resources. DHS's Line of Business chiefs include, among others, the CIO and chief financial officer.

<sup>j</sup>While DHS had developed an IT leadership directory that identified evaluating rating officials, this directory did not initially include the reviewing officials, as stated in the action plan. EBMO officials stated that this was because OMB's instructions for creating the directory identified the reviewing official field as optional. In response to us asking about it during our review, DHS subsequently updated the directory to include the reviewing officials.

For the 28 selected action plans that the department fully implemented, DHS officials had, for example, updated multiple policies related to the department's planning, programming, and budgeting phases; ensured that the updated policies were approved by relevant parties; and submitted the updated policies to OMB. In addition, the department documented and implemented updated processes for the planning, programming, and budgeting phases to ensure that the CIO has, among other things, visibility into IT resource plans and decisions. Further, the department revised relevant documentation and processes to reflect the CIO's responsibility to approve components' requests for reprogramming or transferring IT resources.

However, the remaining 3 selected action plans were not yet fully implemented due to two factors: (1) the steps taken did not address all planned actions and (2) DHS updated its policies with conflicting guidance. Specifically, DHS's steps to implement action plans 19 and 20 addressed part, but not all, of these plans. Related to action 19—to leverage the updated DHS TechStat<sup>25</sup> process to provide support to

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<sup>25</sup>A TechStat is a face-to-face, evidence-based review of an IT program with DHS headquarters, component leadership, and OMB, as appropriate.

failing or troubled programs—OCIO officials were in the process of updating the department’s TechStat policy to comply with FITARA, but had not completed the update. As of December 2016, the officials stated that they could not provide a date for when the policy would be finalized. Until the CIO, who is responsible for establishing departmental IT policies, finalizes the TechStat policy, the department will be limited in its ability to ensure that DHS is meeting FITARA’s IT acquisition reform goals, as well as consistently providing support to failing or troubled programs.

With regard to action 20—to ensure the IT Program/Project Manager Center of Excellence<sup>26</sup> reviews IT performance metrics and strategies—DHS developed IT performance metrics. However, as of December 2016, EBMO officials stated that the Center of Excellence had not begun using these metrics across all programs to identify poorly performing programs. These officials told us that they expected the Center of Excellence to begin using these metrics across all programs to identify those needing assistance in the second quarter of fiscal year 2017. Use of these metrics by the center will be vital to its ability to proactively identify poorly performing programs and help them to improve their performance.

With regards to action 24, which required that the DHS CIO certify investments’ incremental development activities, the department updated its multiple systems engineering life-cycle policies and guidance documents with conflicting information regarding who was to certify these development activities. While one of the policies was updated to specify that the DHS CIO was the certifier, another policy and a guidance document was updated to specify that the component CIO was the certifier.

Officials from EBMO and the Office of Program Accountability and Risk Management stated that these documents were not written at the same time and, as a result, reflected conflicting policies and guidance that needed further clarification. However, the officials did not state when they intended to make the clarifications and updates to the policies and guidance. Until the Under Secretary for Management, who is responsible for managing the implementation of department-wide acquisition policies, updates DHS’s relevant policies and guidance in a consistent manner to identify that the DHS CIO is to certify investments’ incremental

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<sup>26</sup>DHS’s IT Program/Project Manager Center of Excellence is a cross-functional team created to provide guidance and assistance in the management of IT programs and projects.

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development activities, the department is at risk of excluding the CIO from important investment oversight activities.

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## DHS Faces Several Challenges in Implementing FITARA

DHS currently faces a number of important challenges in implementing several selected FITARA provisions. These provisions relate to (1) the CIO's approval of IT contracts and agreements before award, (2) the CIO's evaluation of each major IT investment according to risk, and (3) the development and deployment of an IT acquisition cadre.<sup>27</sup> While the department has taken steps aimed at addressing these challenges, more work remains. Moreover, until the department takes actions that fully address these challenges, the goal of FITARA to elevate the role of the department CIO may not be fully realized.

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### CIO Review of Certain Contracts and Agreements Is a Challenge for DHS

FITARA prohibits a covered agency (such as DHS) from entering into a contract or agreement for IT or IT services (associated with major and non-major investments), unless the contract or agreement has been reviewed and approved by the agency CIO.<sup>28</sup> FITARA allows the CIO to delegate these review and approval duties if a contract or agreement is to support a non-major IT investment.<sup>29</sup> In such cases, the delegated official must report directly to the agency CIO. Accordingly, in order to properly distinguish the appropriate approving official, per FITARA, it is necessary for an agency to determine whether each IT contract and agreement is associated with a major or non-major investment.

Alternatively, FITARA states that an agency may use its governance processes to approve any contract or agreement (associated with major

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<sup>27</sup>The 31 reportedly implemented action plans that we reviewed in our first objective did not address these FITARA provisions; as such, we did not review any of DHS's action plans associated with these provisions.

<sup>28</sup>This does not apply to the Department of Defense.

<sup>29</sup>FITARA's contract approval provision is related to OMB's common baseline section K on the review and approval of acquisition strategies and plans.

investments), if the agency CIO is a full participant in the governance processes. Further, when governance processes are used for review of contracts or agreements associated with non-major IT investments, the CIO or an individual who reports directly to the agency CIO must be a full participant in the governance processes.

While DHS used its governance process (e.g., the CIO's IT Acquisition Review process, discussed earlier) to approve contracts and interagency agreements associated with major and non-major investments, the DHS CIO did not directly review or approve any of the contracts or interagency agreements that we examined. Furthermore, the CIO or an appropriate delegate was not always a full participant in the department's use of its governance process to approve the contracts and interagency agreements that we reviewed, as required by FITARA. Specifically,

- Of the 48 contracts and 8 interagency agreements in our sample<sup>30</sup> that department officials associated with major investments (i.e., those requiring additional management attention because of, among other things, their significance to the department's mission or high costs, as defined by OMB), the DHS CIO neither directly reviewed, nor participated in the governance process to review, any of those contracts or agreements, as required by FITARA. Instead, all of the contracts and interagency agreements were reviewed by either the Executive Director or Deputy Executive Director of EBMO, or a component official, which was not in compliance with FITARA.
- While an appropriate delegate who reported directly to the department CIO participated in the review of 5 of the 21 selected contracts that DHS officials associated with non-major investments, the department CIO or an appropriate delegate did not participate in the review of the remaining 16 contracts (about 76 percent). In addition, neither the DHS CIO nor an appropriate delegate participated in the review of any of the 5 interagency agreements in our sample that were associated with non-major investments. Instead, these contracts and interagency agreements were reviewed and approved, as part of the governance process, by someone who did not report directly to the DHS CIO,

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<sup>30</sup>Of the 92 contracts and 24 interagency agreements in our sample, DHS officials from headquarters and the five selected components associated 48 contracts and 8 interagency agreements with major investments. Additionally, these officials associated 21 contracts and 5 interagency agreements in our sample with non-major investments. Officials from headquarters, Customs and Border Protection, and the U.S. Coast Guard were unable to map 23 contracts and 11 interagency agreements in our sample to IT investments, as discussed later.

such as a deputy assistant commissioner or a management analyst. Such review and approval was not consistent with FITARA.

Table 3 summarizes the number of selected contracts and interagency agreements that were and were not reviewed by the appropriate official prior to award, as required by FITARA.

**Table 3: Number of Selected Contracts and Interagency Agreements Reviewed by the Department of Homeland Security (DHS) Chief Information Officer (CIO) or Appropriately Delegated Official Prior to Award**

	Contracts and interagency agreements associated with major information technology (IT) investment	Total value of contracts and interagency agreements associated with major IT investments <sup>a</sup>	Contracts and interagency agreements associated with non-major IT investment	Total value of contracts and interagency agreements associated with non-major IT investments <sup>a</sup>
Contracts and interagency agreements approved by appropriate reviewer (DHS CIO or direct report, as appropriate), <sup>b</sup> <u>consistent</u> with the Federal IT Acquisition Reform Act (FITARA)	0	\$0	5 (5 contracts, 0 agreements)	\$79 million
Contracts and interagency agreements <u>not</u> approved by appropriate reviewer (DHS CIO or direct report, as appropriate), <sup>b</sup> <u>inconsistent</u> with FITARA	56 (48 contracts, 8 agreements)	\$287 million	21 (16 contracts, 5 agreements)	\$104 million

Source: GAO analysis of DHS-provided data. | GAO-17-284.

<sup>a</sup>The total value of each contract and interagency agreement refers to the entire amount of the expected award, including the total value of the base period and any option periods.

<sup>b</sup>DHS was unable to map 23 contracts and 11 interagency agreements included in our sample to an IT investment. The total value of these contracts and agreements was about \$40 million.

Further, the department CIO did not prioritize the reviews of contracts associated with major IT investments, even for those with known performance problems. For example, three of the contracts in our sample were associated with two major DHS IT investments with past or existing performance issues: Customs and Border Protection’s Automated Commercial Environment investment and United States Citizenship and Immigration Services’ Transformation investment. We have previously

reported on significant performance problems with these investments.<sup>31</sup> However, the DHS CIO did not directly review and approve the contracts for these troubled investments, as required by FITARA for contracts associated with major investments. Instead, the Customs and Border Protection CIO and the Executive Director of EBMO reviewed the contracts for these investments, respectively.

According to OCIO officials, the reason why the department CIO delegated the approval of contracts and agreements in a way that was inconsistent with FITARA was that DHS had a large volume of contracts, which made it challenging for the department CIO and those who reported to the CIO to review every contract and agreement. Specifically, data provided by DHS showed that, in fiscal year 2016, the department awarded approximately 5,100 contracts for IT or IT services. According to DHS officials, as a work around to this resource constraint, the department CIO delegated the review and approval of contracts and agreements to EBMO or component officials.

OCIO officials recognized that the department needs to make improvements to better meet the intent of FITARA's contract and agreement approval section and they have begun taking steps to do so. For example, in May 2016, the department updated its department-wide acquisition procedures to require greater participation in the acquisition planning process by the DHS CIO and component CIOs. Specifically, the updated procedures specify that the DHS CIO is required to review and sign the acquisition plans<sup>32</sup>—which are developed early in the procurement planning process and provide top-level plans for the overall acquisition approach—associated with major IT acquisitions that have estimated life-cycle costs of greater than \$50 million or service acquisitions with an annual expenditure of \$100 million or more. Additionally, the updated procedures specify that the component CIOs are to review and sign the acquisition plans for all acquisitions involving sensitive information. Further, in October 2016, OCIO updated its

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<sup>31</sup>GAO, *Immigration Benefits System: U.S. Citizenship and Immigration Services Can Improve Program Management*, [GAO-16-467](#) (Washington, D.C.: July 7, 2016); *Homeland Security Acquisitions: DHS Has Strengthened Management, but Execution and Affordability Concerns Endure*, [GAO-16-338SP](#) (Washington, D.C.: Mar. 31, 2016); and [GAO-15-415](#).

<sup>32</sup>An acquisition plan is to address all of the technical, business, management, and other significant considerations that will control the acquisition, and is to include costs related to contractual requirements, as well as the rationale for the contract type selection.

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associated IT Acquisition Review governance process to implement these new procedures.

Nevertheless, while these updates to the department-wide acquisition procedures and governance process represent improvements by allowing the CIO and component CIOs insight into early procurement planning, the CIO's visibility into contracts is limited because these top-level acquisition plans do not include important details (e.g., the full scope of the work to be performed) that are contained in specific contracts.

Additionally, the department's governance process requires contracts or agreements that are associated with major investments and that have total estimated procurement values of at least \$2.5 million to be submitted to the DHS OCIO for review.<sup>33</sup> However, these processes still do not require contracts and agreements that are associated with major investments and are under this threshold to be submitted for CIO review, which is inconsistent with FITARA.

In response to our concerns, in April 2017, OCIO officials stated that they had begun to analyze how they could best increase the CIO's and appropriate delegates' reviews of contracts and agreements, while considering the department's staffing constraints. The officials also stated that, once this analysis is complete, they plan to update their governance process accordingly; however, they did not know when these actions would be completed. Until the governance process is updated in a way that increases the CIO's and appropriate delegates' reviews of contracts and agreements associated with major and non-major investments, the DHS CIO will continue to have limited visibility into the department's planned IT expenditures. Additionally, the CIO may lack critical data to make investment decisions and may not be able to use the increased authority that FITARA's contract and agreement approval provision is intended to provide.

Further exacerbating this issue, FITARA does not allow agency CIOs to delegate the review and approval of contracts and agreements associated with major investments, but there were many contracts and interagency agreements in our sample for which DHS officials were unable to map to a major or non-major IT investment; as such, they could

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<sup>33</sup>DHS's threshold for determining, along with other criteria, whether a contract will be reviewed at the headquarters OCIO level is \$2.5 million; contracts under \$2.5 million are to be reviewed by the component CIO (if the component has a CIO).

not ensure that these contracts and agreements were reviewed by the appropriate officials. Specifically, officials from DHS headquarters, Customs and Border Protection, and the U.S. Coast Guard were unable to map 23 of the 92 contracts (about 25 percent) and 11 of the 24 interagency agreements (about 46 percent) in our sample to a major or non-major IT investment.

The officials cited various reasons for why they could not map these contracts and interagency agreements to a major or non-major IT investment. Specifically,

- OCIO officials stated that only contracts and agreements that go through the department's headquarters-level contract approval process (i.e., defined by DHS as those valued at \$2.5 million or over and are associated with major investments) are required to identify the associated investments. These officials stated that, at the headquarters level, the department does not ask about the investments associated with contracts and agreements that do not go through this headquarters-level contract approval process.
- While Customs and Border Protection officials were able to identify the IT investments associated with the majority of their contracts and interagency agreements in our sample, these officials stated that certain contracts were not associated with planned IT investments. Rather, according to the officials, these contracts were to address emerging needs (e.g., a need for new laptops) that Customs and Border Protection offices had identified that were not originally planned as part of an investment.
- U.S. Coast Guard officials stated that their process for accounting for all IT costs does not include a mapping of every contract or agreement to a major or non-major IT investment. These officials said they were working with DHS headquarters to improve their process for tracking contracts and agreements associated with IT investments, but did not specify a time frame for completing this effort.

Until the Under Secretary for Management updates DHS headquarters', Customs and Border Protection's, and U.S. Coast Guard's processes to track, for all contracts and agreements, the IT investment with which each is associated (as applicable), the department will be challenged in its ability to ensure that the contracts and agreements that are associated with these investments receive the appropriate level of oversight.

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## DHS's Recent Change in Its Risk Rating Process Creates a Barrier to Reporting the CIO's Assessment to OMB's IT Dashboard

FITARA requires each agency CIO to categorize its major IT investments according to risk, in accordance with guidance issued by the Director of OMB.<sup>34</sup> In this regard, OMB issued guidance in June 2015 that directed agency CIOs to evaluate and categorize (i.e., rate) the risk of each major IT investment. In addition, OMB's guidance directs agencies to report their CIO risk ratings on OMB's public website known as the IT Dashboard.<sup>35</sup>

Prior to October 2016, DHS's OCIO, on behalf of the CIO, was conducting such evaluations on the department's major IT investments in accordance with OMB's six criteria. The office was also regularly updating the associated CIO risk ratings on the IT Dashboard, as required by FITARA and OMB.<sup>36</sup>

However, as of October 2016, the CIO was no longer directly responsible for the full evaluations or the associated risk ratings that are publicly reported on the IT Dashboard for approximately one-third of the department's major IT investments. This was due to DHS's Under Secretary for Management issuing a new policy in October 2016 that assigned responsibility for collecting the appropriate acquisition program data for evaluating the health of all level one and level two major acquisition programs<sup>37</sup> (both IT and non-IT) that are on the department's

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<sup>34</sup>This FITARA provision is not related to a specific OMB common baseline section, but is addressed separately in OMB's FITARA implementation guidance.

<sup>35</sup>OMB's IT Dashboard is a public website that provides detailed information on major IT investments at 27 federal agencies, including ratings of their performance against cost and schedule targets.

<sup>36</sup>Prior to the enactment of FITARA, in 2009 OMB had issued guidance requiring agencies to update CIO ratings on the IT Dashboard. As such, the CIO had been updating ratings on the IT Dashboard during prior years. For the purposes of this review, we looked at the process and regularity of these updates during 2016.

<sup>37</sup>DHS's level one major acquisition programs are those with planned life-cycle costs of greater than or equal to \$1 billion. The department's level two major acquisition programs have planned life-cycle costs of \$300 million or more, but less than \$1 billion.

Master Acquisition Oversight List<sup>38</sup> to the Office of Program Accountability and Risk Management. According to EBMO officials, as of December 2016, these level one and level two investments that the Office of Program Accountability and Risk Management was to facilitate the evaluation of included 30 of DHS's 93 major IT investments. DHS's policy further states that the department CIO is to report the ratings that are facilitated by the Office of Program Accountability and Risk Management on these 30 IT investments to OMB's IT Dashboard. The officials also stated that OCIO is to continue to have responsibility for the evaluations of the 63 other IT investments not on that oversight list, and for reporting the associated risk ratings of these investments to the IT Dashboard.

According to the Office of Program Accountability and Risk Management's evaluation template, 39 factors, each with an associated weight, are to be considered in conducting the evaluations, and each factor is to be assessed by different organizations and officials within the department. These organizations and officials include, among others, the Offices of Program Accountability and Risk Management, the Chief Procurement Officer, the Chief Information Officer, Systems Engineering, and the Chief Financial Officer; as well as the Director of Operational Test and Evaluation, and the Joint Requirements Council. After all of the offices prepare their parts of the assessment, the Office of Program Accountability and Risk Management is to calculate a final evaluation rating based on the 39 factors and their weights.

For its part, the CIO is responsible for assessing the 30 IT investments against 10<sup>39</sup> of the 39 factors, which accounts for about 18 percent of the total assessment score. Thus, over 80 percent of the evaluation and final assessment score for the investments included in the evaluation facilitated by the Office of Program Accountability and Risk Management does not involve the key IT management executive—the CIO.

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<sup>38</sup>DHS's Master Acquisition Oversight List is created by the Office of Program Accountability and Risk Management and is used to identify the programs for which that office has oversight responsibility. These include both major and non-major acquisition programs, among others, that meet certain criteria determined by DHS, such as programs that have planned life-cycle costs of more than \$300 million and are included in DHS's 5-year funding plans that are reported to Congress.

<sup>39</sup>In addition to the 10 factors that the CIO is directly responsible for assessing, the CIO may also assess major IT investments against 1 additional factor related to geo-political impacts on the investment. This factor may be assessed by any DHS office and it accounts for less than 1 percent of the total assessment score.

Moreover, DHS’s CIO was previously responsible for evaluating and reporting the associated risk ratings of the department’s 30 major IT investments on the Master Acquisition Oversight List against the criteria that OMB’s 2015 guidance stated CIOs may use to evaluate and report the risk of their programs. However, as shown in table 4, under the new process facilitated by the Office of Program Accountability and Risk Management, the CIO is only responsible for assessing these investments against one of OMB’s criteria.

**Table 4: Change in Responsibility for Conducting Department of Homeland Security (DHS) Chief Information Officer (CIO) Risk Evaluations that Are Reported to the Information Technology (IT) Dashboard for 30 Major IT Investments**

Office of Management and Budget’s CIO evaluation criteria	Office primarily responsible for evaluation under old process (before October 2016)	Organization or official primarily responsible for evaluation under new process (after October 2016)
Risk management	CIO	Program Accountability and Risk Management, CIO, Chief Financial Officer, and Director of Operational Test and Evaluation
Requirements management	CIO	Joint Requirements Council, Office of Systems Engineering, and Director of Operational Test and Evaluation
Contractor oversight	CIO	Chief Procurement Officer
Historical performance	CIO	Not assessed by DHS under this process
Human capital	CIO	Program Accountability and Risk Management
Other factors	CIO	CIO and any organization or official responsible for assessing any other factor in the evaluation

Source: GAO analysis of DHS documentation. | GAO-17-284.

Further, while the Office of Program Accountability and Risk Management is responsible for facilitating the development of the risk ratings that are reported to the IT Dashboard for these 30 IT investments, as of December 2016, according to DHS officials, OCIO was also conducting a separate evaluation on these investments. Specifically, OCIO officials stated that they have continued to conduct their own evaluations in order to meet OCIO’s other investment oversight responsibilities.

As such, the Under Secretary for Management’s October 2016 assignment of responsibility for facilitating the assessment of these investments to the Office of Program Accountability and Risk Management is not only in conflict with FITARA, but also in conflict with guidance the Acting Deputy Under Secretary for Management issued in April 2015 in response to our prior recommendation to the department.

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Specifically, in March 2015,<sup>40</sup> we reported that there were overlapping responsibilities and duplicative efforts between the Office of Program Accountability and Risk Management and the OCIO in the oversight and management of IT investments on the Master Acquisition Oversight List. We recommended in our 2015 report that DHS develop written guidance to clarify the roles and responsibilities of the Office of Program Accountability and Risk Management and OCIO for conducting oversight of major acquisition programs.

In response to our recommendation, in April 2015, the Acting Deputy Under Secretary for Management issued guidance that clarified that the CIO is responsible for performing the program assessments for the IT investments on the Master Acquisition Oversight List, which then are to be reported on the IT Dashboard. Accordingly, the Under Secretary for Management's recent change suggests that the issue of overlapping responsibilities and duplicative efforts between the Office of Program Accountability and Risk Management and the OCIO in the oversight and management of certain IT investments that we raised 2 years ago has not yet been adequately addressed within the department.

Thus, rather than elevating the CIO's role per the goal of FITARA, the recent change in DHS's evaluation of these IT investments is achieving the opposite effect by reducing the CIO's role and creating a barrier for this official to appropriately report investment risk ratings to the Dashboard. According to EBMO officials, the department's goal is to use one evaluation process that covers all major IT investments in order to ensure consistency across all evaluations reported on the Dashboard. However, as of December 2016, DHS officials did not know when the department would begin using only one evaluation process for its major IT investments, or who would be responsible for those reviews under that single process. Until the Under Secretary for Management updates and implements the process that the department uses for assessing the risks of major IT investments to ensure that the ratings reported fully reflect the CIO's assessment of each major IT investment, Congress' and the public's insight into the assessment of each major investment's risk and performance will be limited.

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<sup>40</sup>GAO, *Homeland Security Acquisitions: DHS Should Better Define Oversight Roles and Improve Program Reporting to Congress*, [GAO-15-292](#) (Washington, D.C.: Mar. 12, 2015).

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## DHS Faces Challenges in Developing and Strengthening Its IT Acquisition Cadre

FITARA requires agencies to update their acquisition human capital plans to address how the agencies are meeting their human capital requirements. In particular, the act requires agencies to consider, among other things, establishing cross-functional groups trained in IT program management and IT acquisition—referred to as IT acquisition cadres.<sup>41</sup> In July 2011 (prior to the enactment of FITARA), OMB's Office of Federal Procurement Policy issued guidance that identified key knowledge areas essential for such a cadre, including, among other things, IT strategic planning, acquisition planning, information security requirements, risk management, requirements definition, and contract management.<sup>42</sup> We have also previously issued a human capital guide that stresses the importance of federal agencies ensuring that their employees have the skills needed to perform effectively and achieve agency goals.<sup>43</sup> Our guidance states that, among other things, federal agencies need to determine what skills and competencies are necessary in order to meet current and future challenges, assess any gaps in current skills and competencies, and address those gaps.

Although DHS has taken certain actions toward implementing an IT acquisition cadre and developing an acquisition human capital plan, the department has experienced challenges in fully implementing this FITARA provision. Specifically,

- **DHS has not defined its IT acquisition cadre.** While DHS updated its acquisition human capital plan in April 2016 to address its use of the procedures required by FITARA, the department faces challenges in strengthening its IT acquisition cadre because it has not yet identified the specific positions or personnel that are to be included in the cadre. To its credit, the department identified the number of acquisition personnel that it has in multiple functional areas, such as its project/program managers, contracting officers, and system

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<sup>41</sup>FITARA's IT acquisition cadre provision is related to OMB's common baseline section P, to develop and strengthen the IT workforce.

<sup>42</sup>OMB, Office of Federal Procurement Policy, *Guidance for Specialized Information Technology Acquisition Cadres* (Washington, D.C.: July 13, 2011).

<sup>43</sup>GAO, *Human Capital: A Guide for Assessing Strategic Training and Development Efforts in the Federal Government*, [GAO-04-546G](#) (Washington, D.C.: Mar. 1, 2004).

engineering staff. However, it has not determined how many of those staff are knowledgeable in IT investment management and whether they should be considered a part of the IT acquisition cadre.

The department also reported in its April 2016 acquisition human capital plan that directors and project/program managers within OCIO are required to maintain appropriate certifications to oversee IT acquisitions. However, it has not determined whether this group of workforce professionals has the specialized skills and knowledge needed in all of the areas outlined in OMB's Office of Federal Procurement Policy's guidance.

EBMO officials told us that they hope to define the entire IT acquisition cadre through a survey and/or skills assessment during fiscal year 2017; however, specific plans for doing so had not been established.<sup>44</sup> Until the CIO establishes time frames and implements a plan for (1) identifying the specific staff or positions currently within its IT acquisition cadre; and (2) assessing whether these staff and positions address all of the specialized skills needed, as outlined in the Office of Federal Procurement Policy's cadre guidance, the department risks not having the critical skills needed to effectively acquire IT services. In addition, the department will continue to be challenged in its ability to meet FITARA's intent of making timely progress toward developing and strengthening its IT acquisition cadre.

- ***DHS lacks clarity on the acquisition skills needed to support its new IT delivery model.*** DHS's IT Strategic Plan for fiscal years 2015 through 2018 calls for a paradigm shift in the department's IT delivery model—from acquiring IT assets to acquiring services, and acting as a service broker (e.g., an intermediary between the purchaser of a service and the seller of that service). According to OCIO officials, this shift will require a significant change in the skillsets of DHS's employees.

However, the department has faced challenges in implementing this new IT delivery model because it has not identified its future skillset needs or determined the gaps, if any, between its employees' current

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<sup>44</sup>In December 2016, DHS approved an instruction that will require major acquisition programs, which include both IT and non-IT programs, to develop and annually update acquisition program management staffing plans. These plans are intended to identify sufficient numbers of trained and qualified acquisition program management staff to effectively manage the department's level one and two major acquisition programs. We recently reported on this new process. See *Homeland Security Acquisitions: Earlier Requirements Definition and Clear Documentation of Key Decisions Could Facilitate Ongoing Progress*, [GAO-17-346SP](#) (Washington, D.C.: Apr. 6, 2017).

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skillsets and its future needs. DHS awarded a workforce management contract in July 2016 to, among other things, assist with the implementation of the new IT delivery model at headquarters, including defining future IT skill sets needed and conducting a skills gap analysis. However, while EBMO officials stated in December 2016 that they would conduct these activities by the end of fiscal year 2017, the department did not have a specific plan for when it would identify its future IT skillset needs, or analyze and address the skills gaps resulting from the new delivery model.

Until the CIO establishes time frames and implements a plan for (1) identifying future IT skillset needs to support DHS's new delivery model, (2) conducting a skills gap analysis, and (3) resolving any skills gaps identified, the department will continue to be challenged in its ability to ensure that it has the skillsets necessary to perform the new responsibilities associated with the shift.

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## Conclusions

In response to FITARA, DHS has taken several key steps toward improving the department-level CIO's role in IT acquisitions, including updating the department's acquisition governance process and associated guidance to require greater participation by the CIO. However, additional actions are needed by the CIO. Specifically, related to the department's incomplete implementation of its action plan to use the updated DHS TechStat process to provide support to failing or troubled programs, until the CIO finalizes the department's TechStat policy, DHS will be limited in its ability to help such programs. In addition, the DHS CIO's lack of review of certain contracts and agreements puts the department at risk of awarding duplicative or unnecessary contracts and agreements. As such, until the CIO updates the department's IT Acquisition Review governance process to increase the number of contracts and agreements (associated with both major and non-major investments) that are reviewed by the CIO and appropriate delegates, the CIO will continue to have limited visibility into the department's planned IT expenditures.

Further, the department's lack of knowledge about the specific staff or positions in its IT acquisition cadre; the skillsets it currently has; and the skills it needs to implement its new IT delivery model, reduces OCIO's ability to ensure that it has all of the skillsets required. Without the CIO establishing time frames and implementing a plan for (1) identifying the specific staff or positions currently within its IT acquisition cadre; and (2)

assessing whether these staff and positions address all of the specialized skills needed, as outlined in the Office of Federal Procurement Policy's cadre guidance, the department risks not having the critical skills needed to effectively acquire IT services. Moreover, without the CIO establishing time frames and implementing a plan for (1) identifying future IT skillset needs to support DHS's new delivery model, (2) conducting a skills gap analysis, and (3) resolving any skills gaps identified, the department will continue to be challenged in its ability to ensure that it has the skillsets necessary to perform the new responsibilities associated with the shift.

DHS's Under Secretary for Management has also taken actions aimed at implementing FITARA by updating the department's acquisition policies and guidance documents. However, until the Under Secretary for Management makes additional updates to these acquisition policies and guidance documents to be consistent in identifying that the DHS CIO is to certify investments' incremental development activities (as required by one of the department's FITARA action plans), the CIO is at risk of not being included in important investment oversight activities.

In addition, the contracts and interagency agreements for which DHS officials could not determine whether they were associated with a major investment is concerning. Until the Under Secretary for Management updates DHS headquarters', Customs and Border Protection's, and the U.S. Coast Guard's processes to track, for all contracts and agreements, the IT investment with which each is associated (as applicable), the Under Secretary has limited assurances that these contracts and agreements will be reviewed by the appropriate officials. Lastly, the Under Secretary for Management's recent policy change that limited the CIO's input into risk ratings for certain major IT investments has devalued the CIO's role. Until the Under Secretary updates and implements the process that the department uses for assessing the risks of major IT investments to ensure that the ratings reported to the IT Dashboard fully reflect the CIO's assessment of each major IT investment, Congress' and the public's insight into the assessment of each major investment's risk and performance will be limited.

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## Recommendations for Executive Action

To ensure that DHS effectively implements FITARA, we are making seven recommendations to the Secretary of Homeland Security.

Specifically, we are recommending that the Secretary of Homeland Security direct the Under Secretary for Management to direct the Chief Information Officer to take the following actions:

- finalize the department's TechStat policy;
- update the department's IT Acquisition Review governance process to increase the number of contracts and agreements (associated with both major and non-major investments) that are reviewed by the CIO and appropriate delegates;
- establish time frames and implement a plan for (1) identifying the specific staff or positions currently within the department's IT acquisition cadre; and (2) assessing whether these staff and positions address all of the specialized skills and knowledge needed, as outlined in OMB's Office of Federal Procurement Policy's guidance for developing an IT acquisition cadre; and
- establish time frames and implement a plan for (1) identifying the department's future IT skillset needs as a result of DHS's new delivery model, (2) conducting a skills gap analysis, and (3) resolving any skills gaps identified.

Further, we are recommending that the Secretary of Homeland Security direct the Under Secretary for Management to

- update the department's acquisition policies and guidance to be consistent in identifying that the DHS CIO is to certify investments' incremental development activities;
- update DHS headquarters', Customs and Border Protection's, and U.S. Coast Guard's processes to track, for all contracts and agreements, the IT investment with which each is associated (as applicable); and
- update and implement the process DHS uses for assessing the risks of major IT investments to ensure that the CIO rating reported to the Dashboard fully reflects the CIO's assessment of each major IT investment.

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## Agency Comments and Our Evaluation

DHS provided written comments on a draft of this report, which are reprinted in appendix II. In its comments, the department concurred with all seven of our recommendations and provided estimated completion dates for implementing each of them. For example, the department stated that, by June 30, 2017, its headquarters OCIO intends to develop a department-level plan for identifying the staff included in DHS's IT acquisition cadre. Further, it said the DHS OCIO plans to require the components to develop associated component-level plans for identifying their IT acquisition cadres.

In response to our recommendation that the Under Secretary for Management update DHS headquarters' processes to track, for all contracts and agreements, the IT investment with which each is associated (as applicable), the department described recent actions that it had taken to implement this recommendation. Specifically, it stated that OCIO had updated the tool used as part of the IT Acquisition Review governance process to require that the contract number be provided for all acquisitions reviewed by headquarters OCIO. The department further noted that the tool also links each acquisition to the associated funding investment. The department reported that these updates were completed on January 31, 2017. We will follow-up with the department to obtain documentation demonstrating that the tool tracks this information.

In response to oral comments that were also provided by DHS officials on a draft of this report, we clarified one of our recommendations. The department concurred with this clarified recommendation in its written comments.

In addition, we received technical comments from DHS headquarters and component officials, which we have incorporated, as appropriate.

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

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Should you or your staffs have any questions on information discussed in this report, please contact Carol Harris at (202) 512-4456 or [Harriscc@gao.gov](mailto:Harriscc@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix III.



Carol C. Harris  
Director, Information Technology Acquisition Management Issues

# Appendix I: The Department of Homeland Security's (DHS) Action Plans to Implement Information Technology Acquisition Reform

The table below lists DHS's 131 Federal Information Technology Acquisition Reform Act (FITARA) action plans and the respective Office of Management and Budget (OMB) common baseline sections<sup>1</sup> with which they are associated. Additionally, the table lists DHS's planned implementation dates for each of the department's FITARA action plans, as of April 2016, and identifies the 31 action plans that were included in GAO's review.

**Table 5: The Department of Homeland Security's (DHS) Action Plans to Implement the Federal Information Technology Acquisition Reform Act (FITARA) and Their Associated Office of Management and Budget (OMB) Common Baseline Sections and Planned Implementation Dates**

OMB common baseline section	DHS action plan <sup>a</sup>	DHS's planned implementation date, as of April 2016	Included in GAO's review (number in GAO's review)
A. Visibility of information technology (IT) resource plans/decisions to Chief Information Officer (CIO)	1. Document and model current processes and supporting requirements for planning, programming, and budget phases.	November 2015	
	2. Identify and review relevant policies that impact processes, roles, and responsibilities within DHS's planning, programming, and budget phases.	November 2015	
	3. Identify gaps and opportunities in current processes to address OMB common baseline requirements.	November 2015	
	4. Collaborate with appropriate stakeholders to develop process models and supporting list of requirements for the target planning, programming, and budget phases.	December 2015	
	5. Draft content updates to ensure relevant policies are compliant with OMB common baseline requirements.	March 2016	
	6. Ensure updates to policies are approved by relevant parties and submit updated/approved policies to OMB.	March 2016	X (1)

<sup>1</sup>OMB's FITARA implementation guidance outlined roles and responsibilities of agency Chief Information Officers and other senior agency officials related to 17 topic areas, referred to as common baseline sections.

**Appendix I: The Department of Homeland Security's (DHS) Action Plans to Implement Information Technology Acquisition Reform**

<b>OMB common baseline section</b>	<b>DHS action plan<sup>a</sup></b>	<b>DHS's planned implementation date, as of April 2016</b>	<b>Included in GAO's review (number in GAO's review)</b>
	7. Document and implement the updated and agreed upon processes for the planning, programming, and budgeting phases to ensure the CIO has visibility into IT resource plans and decisions.	March 2016	X (2)
B. CIO role in pre-budget submission for programs that include IT and overall portfolio	8. Document and model current processes and supporting requirements for the planning, programming, and budget phases.	November 2015	
	9. Identify and review relevant policies that impact processes, roles, and responsibilities within each planning, programming, and budget phase.	November 2015	
	10. Identify gaps and opportunities in current processes to address OMB common baseline requirements.	November 2015	
	11. Collaborate with appropriate stakeholders to develop process models and supporting list of requirements for the target planning, programming, and budget phases.	December 2015	
	12. Document and update the DHS IT portfolio management processes to align with the updated planning, programming, and budgeting phases to assess the use of IT-related resources.	February 2016	X (3)
	13. Document and implement the updated processes for the planning, programming, and budgeting phases to ensure CIO has a role in pre-budget submission.	March 2016	X (4)
	14. Draft content updates to ensure relevant policies are compliant with OMB common baseline requirements.	March 2016	
	15. Ensure content updates to policies are approved by all relevant parties and submit updated/approved policies to OMB.	March 2016	X (5)
C. CIO role in planning program management	16. Document and model current processes and supporting requirements for the planning, programming, and budgeting phases.	November 2015	X (6)
	17. Identify and review relevant policies that impact processes, roles, and responsibilities within each planning, programming, and budgeting phase.	November 2015	
	18. Complete an analysis of the current state of activities during the first phase of the acquisition life-cycle (when a capability need is identified).	November 2015	X (7)
	19. Identify gaps and opportunities in current processes to address OMB common baseline requirements.	November 2015	
	20. Formalize the endorsement or approval process to incorporate CIO review, assessment, and acknowledgement of appropriate artifacts in the Acquisition Lifecycle Framework.	December 2015	X (8)
	21. Collaborate with appropriate stakeholders to develop process models and supporting list of requirements for the target planning, programming, and budgeting phases.	December 2015	
	22. Update language within DHS's acquisition management directive to fully align with FITARA and OMB's common baseline.	December 2015	X (9)
	23. Develop a proposed framework for streamlining activities in the first phase of the acquisition life-cycle.	December 2015	X (10)

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<b>OMB common baseline section</b>	<b>DHS action plan<sup>a</sup></b>	<b>DHS's planned implementation date, as of April 2016</b>	<b>Included in GAO's review (number in GAO's review)</b>
	24. Conduct a survey to assess the appropriate level of agile adoption across DHS.	January 2016	
	25. Complete an implementation recommendation plan for streamlining and reporting on activities that occur in the first phase of the acquisition life-cycle.	February 2016	X (11)
	26. Draft content updates to ensure relevant policies are compliant with OMB common baseline requirements.	March 2016	
	27. Ensure content updates to policies are approved by all relevant parties and submit updated policies to OMB.	March 2016	X (12)
	28. Document and implement the updated and agreed upon processes for planning, programming, and budgeting phases to ensure CIO has a role in program planning.	May 2016	X (13)
	29. DHS will pilot with selected programs a streamlined approach to the process for the first phase of the acquisition life-cycle (when a capability need is identified).	May 2016	
D. CIO review and approval of major IT investment portion of budget request	30. Document and model current processes and supporting requirements for the planning, programming, and budgeting phases.	November 2015	
	31. Identify and review relevant policies that impact process steps, roles, and responsibilities of the planning, programming, and budgeting phases to better support analysis and approval of the IT funding portion of the budget.	November 2015	
	32. Develop appropriate processes to support the review and approval of the IT investment portion of the budget request, resulting in a joint affirmation statement by the CIO and Chief Financial Officer.	November 2015	
	33. Identify gaps and opportunities in current processes to address OMB common baseline requirements.	November 2015	
	34. Collaborate with appropriate stakeholders to develop process models and supporting list of requirements for the target planning, programming, and budgeting phases.	December 2015	
	35. Work with the Joint Requirements Council to determine how to leverage the intake for capability requirements to identify new major IT requests.	January 2016	
	36. Coordinate the integration points between the offices of the CIO and Chief Financial Officer to ensure that CIO has appropriate review and approval of the IT investment portion of the budget request.	March 2016	
	37. Document and implement the updated and agreed upon processes for planning, programming, and budgeting phases to ensure the CIO has approval of agency IT budget submission.	March 2016	X (14)
	38. Draft content updates to ensure relevant policies are compliant with OMB common baseline requirements.	March 2016	
	39. Ensure content updates to policies are approved by all relevant parties and submit updated policies to OMB.	March 2016	X (15)
	40. Vet program health status and the relationship of budgets under consideration to a plan to resolve unsatisfactory status that has been similarly vetted and approved at the Component level.	March 2016	
41. Validate processes for approval of major IT investment requests.	March 2016		

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<b>OMB common baseline section</b>	<b>DHS action plan<sup>a</sup></b>	<b>DHS's planned implementation date, as of April 2016</b>	<b>Included in GAO's review (number in GAO's review)</b>
E. Ongoing CIO engagement with program managers	42. The IT Program/Project Manager Center of Excellence <sup>b</sup> will be established as a cross-functional team to gather appropriate best practices, determine pain points, and address these pain points.	November 2015	X (16)
	43. The IT Program/Project Manager Center of Excellence will develop IT performance metrics to ensure programs are meeting objectives.	November 2015	X (17)
	44. Leverage the updated DHS TechStat <sup>c</sup> process to provide support to failing or troubled programs.	November 2015	X (18)
	45. Update the process to ensure the IT Program/Project Manager Center of Excellence reviews IT performance metrics and strategies.	December 2015	X (19)
	46. Develop requirements to validate the IT performance metrics.	December 2015	X (20)
	47. Initiate process to update the policy on IT Integration and Management to reflect the CIO's roles and responsibilities for IT performance metric.	December 2015	
	48. Coordinate and harmonize the IT program assessment and engagement functions between the office of the CIO and the office of Program Accountability and Risk Management.	December 2015	
	49. Create IT program management standard operating procedures and best practices guides.	March 2016	X (21)
F. Visibility of IT planned expenditure reporting to CIO	50. Identify gaps in current process where OMB common baseline requirements are not satisfied and/or do not align with overarching PortfolioStat policy and guidance.	November 2015	
	51. Collaborate with stakeholders to develop process models and supporting list of requirements for the target review and reporting of IT budget execution to support PortfolioStat reporting requirements.	December 2015	
	52. Identify relevant policies that impact process steps, roles, and responsibilities for Chief Financial Officer budget execution reporting and PortfolioStat budget execution reporting requirements.	January 2016	
	53. Document current capabilities for collecting and validating planned expenditure reporting for IT investments.	February 2016	
	54. Document proposed methods to capture planned expenditures for IT investments.	February 2016	
	55. Document requirements for collecting and validating planned expenditure reporting for IT investments.	February 2016	
	56. Identify gaps in current capabilities where OMB common baseline requirements are not satisfied.	February 2016	
	57. Update policy, guidance, and documentation to collect the appropriate amount of information needed to better support analysis, planning, and recommendations related to IT budget execution.	March 2016	
58. Ensure content updates to policies are approved by all relevant parties and submit updated policies to OMB.	March 2016		

**Appendix I: The Department of Homeland Security's (DHS) Action Plans to Implement Information Technology Acquisition Reform**

<b>OMB common baseline section</b>	<b>DHS action plan<sup>a</sup></b>	<b>DHS's planned implementation date, as of April 2016</b>	<b>Included in GAO's review (number in GAO's review)</b>
	59. Update guidance and documentation to collect the appropriate amount of information needed to better support analysis, planning, and recommendations related to planned IT expenditures.	March 2016	
	60. Implement the updated and agreed upon processes and methods for planned expenditure reporting for IT investments.	April 2016	
	61. Implement the updated and agreed upon processes for IT budget execution reporting.	April 2016	
G. CIO defines IT processes and policies	62. Identify relevant process steps, roles, and responsibilities within each review phase of the systems engineering life-cycle for CIO certification.	November 2015	
	63. Review the Technical Review Guide to ensure it includes the CIO's certification of incremental development or scope of the systems engineering life-cycle reviews to ensure that the process sufficiently addresses various IT resource categories.	November 2015	
	64. Develop process models and list of requirements for CIO certification of reviews related to IT initiatives.	November 2015	X (22)
	65. Verify that changes in process models reflect updates to relevant policies.	November 2015	
	66. Submit approved process models and supporting guidance.	December 2015	X (23)
	67. Incorporate the agile and systems engineering life-cycle guidebooks and instructions into DHS's acquisition management directive.	December 2015	X (24)
	68. Incorporate CIO certification of incremental development or scope of the systems engineering life-cycle reviews to ensure that the process sufficiently addresses various IT resource categories.	December 2015	X (25)
	69. Conduct survey of programs to assess level of agile adoption across DHS.	March 2016	
H. CIO role on program governance boards	70. Augment the list of IT governance boards on which the CIO participates with a description of the authority, scope, and chief "X" officer <sup>d</sup> membership of those boards.	November 2015	
	71. Identify all IT governance boards on which the CIO should participate in accordance with FITARA.	March 2016	
	72. Update existing processes and approved policies to ensure CIO reviews major program acquisition plans for programs that include IT resources.	March 2016	
	73. Recommend charter amendments to non-compliant boards to make the CIO a voting member.	May 2016	
I. Shared acquisition and procurement responsibilities with the Chief Acquisition Officer and Chief Financial Officer	74. Identify where supplemental guidance is needed for federal acquisition certification.	November 2015	
	75. Document existing process model to ensure that IT acquisitions are led by personnel with appropriate federal acquisition certification, including specialized IT certification, as appropriate.	November 2015	
	76. Ensure that DHS's acquisition management directive is updated as appropriate to reflect changes in the CIO roles and responsibilities and aligns with FITARA guidelines.	November 2015	
	77. Identify gaps in current process for acquisition strategy plans where OMB common baseline requirements are not satisfied.	December 2015	

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OMB common baseline section	DHS action plan <sup>a</sup>	DHS's planned implementation date, as of April 2016	Included in GAO's review (number in GAO's review)
	78. Identify relevant policies that impact process steps, roles, and responsibilities for life-cycle cost estimate review board process.	December 2015	
	79. Develop procurement innovator designation/recognition program to recognize individuals choosing to fulfill certain learning events.	March 2016	
	80. Ensure content updates to policies for acquisition strategy plans are approved by stakeholders and in compliance with related OMB policy.	March 2016	
	81. Ensure content updates to policies for the life-cycle cost estimate review board process are approved by all stakeholders and submit updated policies to OMB.	March 2016	
	82. Identify relevant policies that impact process steps, roles, and responsibilities for acquisition plans.	March 2016	
	83. Determine and amend/issue procurement policy and oversight guidance and procedures.	March 2016	
	84. Provide training to IT project and program managers in support of the achievement of program manager-IT specialization.	March 2016	
	85. Further establish the commodity manager structure, consistent with the government-wide category management and strategic sourcing initiatives.	March 2016	
	86. Develop and deploy more learning cafe events.	March 2016	
	87. Identify gaps in current process for life-cycle cost estimate review board process where OMB common baseline requirements are not satisfied.	May 2016	
	88. Update existing processes to include the office of the CIO through a life-cycle cost estimate review board process.	May 2016	
	89. Document existing process models and supporting list of requirements for life-cycle cost estimates.	May 2016	
	90. Implement the updated and agreed upon processes to ensure CIO review of strategy and acquisition plans, including incremental acquisition and development principles.	June 2016	
	91. Update DHS's investment management system to identify IT specialization.	December 2016	
	92. Enhance acquisition and systems engineering life-cycle guidance to determine appropriate visibility and analysis of IT cost elements, strategy and acquisition plans, and strategy to determine that the CIO has appropriate review, governance, and oversight of IT spending and implementation of IT policy.	May 2016	
	93. Establish a draft tailored version of a systems engineering life-cycle path for non-major IT acquisitions for components and headquarters that do not have a published systems engineering life-cycle or equivalent.	May 2016	

**Appendix I: The Department of Homeland Security's (DHS) Action Plans to Implement Information Technology Acquisition Reform**

OMB common baseline section	DHS action plan <sup>a</sup>	DHS's planned implementation date, as of April 2016	Included in GAO's review (number in GAO's review)
I. Shared acquisition and procurement responsibilities with the Chief Acquisition Officer and Chief Financial Officer, and  K. CIO review and approval of acquisition strategy and acquisition plan) <sup>e</sup>	94. Ensure content updates to policies for acquisition plan review board process are approved by all stakeholders and submit updated policies to OMB for review.	March 2016	
J. CIO role in recommending modification, termination, or pause of IT projects or initiatives	95. Identify gaps in current TechStat process where OMB common baseline requirements are not satisfied.	November 2015	
	96. Identify relevant policies that impact process steps, roles, and responsibilities within TechStat.	November 2015	
	97. The CIO will initiate TechStat reviews for chronically red programs and as a member of the acquisition review board, will make recommendations to modify, terminate, or pause IT based on criteria identified in FITARA.	February 2016	
	98. Ensure content updates to policies are approved by all stakeholders and submit updated policies to OMB.	March 2016	
	99. Initiate updates to the TechStat policy to reflect FITARA requirements and corresponding process documentation to properly align with all business controls and responsibilities for every relevant role included within the TechStat process.	March 2016	
	100. Develop specific criteria and concept of operations, and train component CIO staff, to conduct TechStat accountability sessions.	September 2016	
K. CIO review and approval of acquisition strategy and acquisition plan	101. Review and document the existing chief procurement officer process for acquisition plan reviews.	November 2015	
	102. Determine what procurement policy/oversight changes, if any, need to be made.	November 2015	
	103. Perform a threshold analysis to identify and define "substantial change" and "significant contract."	February 2016	
	104. Identify processes to reflect CIO participation in the review of acquisition plans of any investments that include IT resources and incorporate CIO signature authority for IT strategy/acquisition plans. The offices of the CIO and Chief Procurement Officer will update relevant policies to ensure compliance with OMB common baseline.	March 2016	
	105. Develop specific criteria, concept of operations, and training documents to support the CIO review and signatory requirements for acquisition plans.	June 2016	
	106. Components' heads of contracting activity will include component CIO review and approval as part of the approval procedures for acquisition plans below the chief procurement officer review thresholds.	June 2016	

**Appendix I: The Department of Homeland Security's (DHS) Action Plans to Implement Information Technology Acquisition Reform**

<b>OMB common baseline section</b>	<b>DHS action plan<sup>a</sup></b>	<b>DHS's planned implementation date, as of April 2016</b>	<b>Included in GAO's review (number in GAO's review)</b>
L. CIO approval of reprogramming	107. The office of the CIO will coordinate with office of the Chief Financial Officer's budget division to develop and document an approval process for coordination for reprogramming.	November 2015	
	108. Identify relevant policies that impact process steps, roles, and responsibilities within IT reprogramming and transfer request process.	December 2015	
	109. Revise relevant documentation and processes to reflect CIO approval of components' requests for reprogramming and transfer requests of IT resources.	March 2016	X (26)
	110. Ensure content updates to policies are reviewed by all stakeholders and submit updated policies to OMB.	March 2016	X (27)
M. CIO approval of the appointment of new bureau CIOs	<i>DHS rated itself as fully meeting this common baseline area and did not identify any action plans for it.</i>		
N. CIO participation in bureau CIOs' evaluations	111. Provide guidance during the performance appraisal cycle that will provide component Line of Business <sup>7</sup> (e.g., CIO) input into the assessments.	November 2015	X (28)
	112. The offices of the CIO and chief human capital officer will collaborate to include evaluating rating officials and reviewing officials in the provided survey report.	November 2015	
	113. Develop an executive-level leadership competency applicable to CIO employees in certain performance plans. <sup>9</sup>	November 2015	X (29)
	114. Incorporate this competency in certain CIO performance plans, amend performance system descriptions as necessary, and submit these amendments to the Office of Personnel Management. <sup>9</sup>	January 2016	X (30)
	115. Develop a scorecard to evaluate the effectiveness of the IT competency in performance plans.	March 2016	
	116. Conduct a survey to determine the effectiveness of the IT competency.	June 2016	
O. CIO and Chief Human Capital Officer develop bureau IT leadership directory	117. Include evaluating rating officials and reviewing officials in the provided survey report.	November 2015	X (31)
P. CIO develops and strengthens IT workforce	118. Identify existing course and training inventory (i.e., sponsors and course offerings).	November 2015	
	119. Work collaboratively with stakeholders to provide commercial off-the-shelf training targeted to IT acquisitions.	December 2015	
	120. Identify course gaps for employee skillsets enhancement.	February 2016	
	121. Identify existing employee skillsets (acquisition and IT specialization) per FITARA guidance and policies.	February 2016	

**Appendix I: The Department of Homeland Security's (DHS) Action Plans to Implement Information Technology Acquisition Reform**

OMB common baseline section	DHS action plan <sup>a</sup>	DHS's planned implementation date, as of April 2016	Included in GAO's review (number in GAO's review)
	122. The office of the CIO will continue to collaborate with the office of the chief procurement officer on the IT Supplement to the DHS annual acquisition human capital plan	March 2016	
	123. Align existing course inventory to acquisition certifications and IT specialization.	May 2016	
	124. Identify agency mission training needs per FITARA guidance and policies.	May 2016	
	125. Identify strategy, roadmaps, and metrics to improve training and employee skillsets and fulfill gaps.	September 2016	
	126. Report out on metrics.	2nd quarter of fiscal year 2018	
	127. Execute strategy and roadmap.	4th quarter of fiscal year 2017	
	128. Develop a workforce planning process for assessment of current IT skills.	4th quarter of fiscal year 2017	
	129. Further refine the DHS IT competency model and identify training opportunities that will enhance IT staff development at multiple levels.	4th quarter of fiscal year 2017	
	130. Further develop self-assessment tools used to streamline acquisition of Federal Acquisition Certification for Program and Project Managers IT competencies.	4th quarter of fiscal year 2017	
	131. Utilize the workforce planning process to assess skills and employ Digital Services staff.	4th quarter of fiscal year 2017	
Q. CIO reports to agency head (or Deputy/ Chief Operating Officer)	<i>DHS rated itself as fully meeting this common baseline area and did not identify any action plans for it.</i>		
<b>Total</b>		<b>131</b>	<b>31</b>

Source: GAO based on DHS's April 2016 update to its FITARA implementation self -assessment. | GAO-17-284.

<sup>a</sup>For the purposes of this report, we slightly modified and/or condensed the wording of certain DHS action plans.

<sup>b</sup>DHS's IT Program/Project Manager Center of Excellence is a cross-functional team created to provide guidance and assistance in the management of IT programs and projects.

<sup>c</sup>A TechStat is a face-to-face, evidence-based review of an IT program with DHS headquarters, component leadership, and OMB, as appropriate.

<sup>d</sup>Chief "X" officer is a generic term for job titles where "X" represents a specific specialized position that serves the entire organization, such as the chief information officer, chief financial officer, or chief human capital officer.

<sup>e</sup>DHS documentation stated that this action plan was applicable to both sections I and K of OMB's common baseline.

<sup>f</sup>A Line of Business is a specific operating unit or shared service within DHS, such as financial management or human resources. DHS's Line of Business chiefs include, among others, the CIO and chief financial officer.

<sup>g</sup>According to Enterprise Business Management Office officials, the action plans associated with the executive-level leadership competency were focused only on the component CIOs that were part of the Senior Executive Service pay plan, not those that were part of the General Schedule pay plan.

## Appendix II: Comments from the Department of Homeland Security

U.S. Department of Homeland Security  
Washington, DC 20528



**Homeland  
Security**

April 21, 2017

Ms. Carol Harris  
Director, Information Technology  
Acquisition Management Issues  
U.S. Government Accountability Office  
441 G Street, NW  
Washington, DC 20548

Re: Management's Response to Draft Report GAO-17-284, "HOMELAND SECURITY:  
Progress Made to Implement IT Reform, but Additional Chief Information Officer  
Involvement Needed"

Dear Ms. Harris:

Thank you for the opportunity to review and comment on this draft report. The U.S. Department of Homeland Security (DHS) appreciates the U.S. Government Accountability Office's (GAO) work in planning and conducting its review and issuing this report.

The Department is pleased with GAO's recognition of the progress the Department has made in the implementation of the Federal Information Technology Acquisition Reform Act (FITARA). Since the enactment of FITARA, the Department identified 131 action plans which were developed in accordance with the Office of Management and Budget's (OMB) implementation guidance. The Department also developed action plans that relate to the portfolio review section of FITARA. Beyond the 131 FITARA action plans, DHS also developed a strategic plan that describes how it intends to implement OMB's data center consolidation guidance. As of April 2017, the Department has completed approximately 95 percent of the FITARA action items.

The draft report contains seven recommendations with which the Department concurs. Attached find our detailed response to each recommendation.

Again, thank you for the opportunity to review and comment on this draft report. Technical comments were previously provided under separate cover. Please feel free to contact me if you have any questions. We look forward to working with you again in the future.

Sincerely,

A handwritten signature in black ink, appearing to read "J. H. Crumacker".

J. H. CRUMACKER, CIA, CFE  
Director  
Departmental GAO-OIG Liaison Office

Attachment

**Attachment: DHS Management Response to Recommendations  
Contained in GAO-17-284**

GAO recommended that the Secretary of Homeland Security direct the Under Secretary of Management (USM) to direct the Chief Information Officer (CIO) to:

**Recommendation 1:** Finalize the Department's TechStat policy.

**Response:** Concur. The TechStat policy was drafted by the Office of the Chief Technology Officer (OCTO) and has been vetted throughout the Department for concurrence. The policy is in the process of being approved and signed by the Acting USM. Estimated Completion Date (ECD): September 30, 2017.

**Recommendation 2:** Update the Department's IT Acquisition Review governance process to increase the number of contracts and agreements (associated with both major and non-major investments) that are reviewed by the CIO and appropriate delegates.

**Response:** Concur. The DHS Office of the Chief Information Officer (OCIO) will update the Department's IT Acquisition Review governance process to provide that the CIO and/or appropriate delegates review the material documents supporting a significant portion of the contracts and agreements associated with major and non-major investments. ECD: September 30, 2017.

**Recommendation 3:** Establish time frames and implement a plan for (1) identifying the specific staff or positions currently within the department's IT acquisition cadre; and (2) assessing whether these staff and positions address all of the specialized skills and knowledge needed, as outlined in the [Office of Management and Budget] OMB's Office of Federal Procurement Policy's guidance for developing an IT acquisition cadre.

**Response:** Concur. As DHS operates under a federated model, Headquarters should establish policy and ensure compliance; therefore, the DHS OCIO will develop a Department-level plan and require Components to develop Component-level plans, to include delegating to Component CIOs. Specifically, OCIO, the Office of the Human Capital Officer (OCHCO), and the Office of the Chief Procurement Officer (OCPO) in consultation with the Office of Program Accountability and Risk Management (PARM) will develop a plan to identify the Department's IT acquisition cadre by June 30, 2017. Once the future IT skills needed for the IT acquisition cadre has been identified, the OCIO, OCPO, and OCHCO will collaborate to assess the staff's specialized skills and knowledge while still maintaining alignment with the OCIO's continuous strategic workforce planning efforts. ECD: September 30, 2017.

**Recommendation 4:** Establish time frames and implement a plan for (1) identifying the department's future IT skillset needs as a result of DHS new delivery model, (2) conducting a skills gap analysis, and (3) resolving any skills gaps identified.

**Response:** Concur. DHS OCIO will initiate the workforce assessments/gap analysis, along with having focus group discussions from OCIO employees to gather information regarding high-level IT skills, competencies, and training needs. A report with the findings and

recommendations will be completed no later than June 30, 2017. In addition, the OCIO, PARM, OCPO, and OCHCO will conduct a competency/skills assessment that will identify future IT skill set needs by ECD is September 30, 2017. Lastly, OCIO will then initiate the research and analysis to determine steps to resolve IT skills gaps identified across OCIO.  
ECD: December 31, 2017.

GAO also recommended that the Secretary of Homeland Security direct the USM to:

**Recommendation 5:** Update the department's acquisition policies and guidance to be consistent in identifying that the DHS CIO is to certify investments' incremental development activities.

**Response:** Concur. The DHS Instruction 102-01-004, *DHS Agile Development and Delivery for IT* (April 11, 2016), will be updated to clarify that the DHS CIO or appropriately delegated CIO direct report has the responsibility for certifying that all DHS programs and projects are appropriately implementing incremental software development. PARM and OCTO will submit to the USM for signature a policy memorandum that amends the Agile Instruction. This will serve the immediate purpose until such time that the full Agile Instruction can be edited and undergo the clearance process for approval signature. In addition, the DHS CIO signed a delegation letter on April 19, 2017, assigning the DHS Chief Technology Officer as the approval authority for certification of incremental delivery for programs. This certification will be included in all future CAO Acquisition Decision Memorandums. ECD: September 30, 2017.

**Recommendation 6:** Update DHS Headquarters, [U.S.] Customs and Border Protection's [CBP], and U.S. Coast Guard's [USCG] processes to track, for all contracts and agreements, the IT investment with which each is associated (as applicable).

**Response:** DHS Headquarters Concur. The DHS OCIO Enterprise Business Management Office (EBMO) has enhanced the SharePoint tool by which the information technology acquisition reviews (ITAR) are processed to require that the contract number be provided for all acquisitions reviewed. The ITAR tool also links the acquisition to the funding investment. This action was completed on January 31, 2017.

CBP Concur. CBP has functional area codes that are used on SAP requisitions to track spending of defined major and non-major IT investments. CBP, Office of Information and Technology (OIT) and Office of Finance (OF) will review functional area codes and/or project codes to determine if there are gaps. If gaps exist, OIT and OF will collaborate to ensure that functional area codes are established. All IT acquisitions that are properly coded with specific IT commodity object class codes are automatically routed to the CBP CIO's office for review and approval via the automatic workflow of CBP's financial system, SAP. There will continue to be IT requirements in support of day-to-day operational requirements that are aligned to non-investment funding. ECD: December 31, 2017.

USCG Concur. The USCG is undergoing an update to their processes to track contracts related to IT investments (where applicable), as shown below.

- 3rd Qtr FY2017: Obtain signatures for Management Letter between USCG Head of Contracting Activity and Assistant Commandant of C4IT to establish Planning

Procurement Conference processes to track contracts/agreements with alignment to IT Investments.

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- 3rd Qtr FY2018: Implement monthly reporting of all USCG IT/IM acquisitions contract data in INVEST.

ECD: September 30, 2018.

**Recommendation 7:** Update and implement the process DHS uses for assessing the risks of major IT investments to ensure that the CIO rating reported to the Dashboard fully reflects the CIO's assessment of each major IT investment.

**Response:** Concur. The Department's IT investment assessment process is becoming more comprehensive, and thus more informed, by expanding to include participation from Department-wide stakeholders. The OCTO will collaborate with OMB to communicate the vision, discuss the new rating factors, and make prudent modifications to provide a complete and transparent evaluation of the program that satisfies all equities, while ensuring the CIO still has primary reporting responsibility for the Federal IT Dashboard. This will be a part of the Integrated Program Assessments and feed both Acquisition Program Health Assessment and the IT Dashboard. ECD: September 30, 2017.

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## Appendix III: GAO Contact and Staff Acknowledgments

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### GAO Contact

Carol C. Harris at (202) 512-4456 or [HarrisCC@gao.gov](mailto:HarrisCC@gao.gov)

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### Staff Acknowledgments

In addition to the contacts named above, the following staff also made key contributions to this report: Shannin O’Neill (Assistant Director); Emily Kuhn (Analyst-in-Charge); Mathew Bader; Ronalynn (Lynn) Espedido; Rebecca Eyler; Javier Irizarry; and Corey Rodriguez.

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## Appendix IV: Accessible Data

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### Agency Comment Letter

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#### Appendix II: Comments from the Department of Homeland Security

##### Page 1

April 21, 2017

Ms. Carol Harris

Director, Information Technology Acquisition Management Issues

U.S. Government Accountability Office 441 G Street, NW

Washington, DC 20548

Re: Management's Response to Draft Report GAO-17-284, "HOMELAND SECURITY: Progress Made to Implement IT Reform, but Additional Chief Information Officer Involvement Needed"

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Departmental GAO-OIG Liaison Office

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model, (2) conducting a skills gap analysis, and (3) resolving any skills gaps identified.

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