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April 2023

# CUSTOMS AND BORDER PROTECTION

## Actions Needed to Enhance Acquisition Management and Knowledge Sharing

Accessible Version

# GAO Highlights

Highlights of [GAO-23-105472](#), a report to the Ranking Member, Committee on Homeland Security, House of Representatives

## Why GAO Did This Study

CBP—a component of DHS—invests billions of dollars each year acquiring systems to support its missions. GAO and DHS reviews have found CBP is not consistently meeting its acquisition programs' cost and schedule goals, and is deploying capabilities that are not fully tested.

GAO was asked to review CBP's processes for planning and managing its acquisition programs. This report assesses, among other objectives, the extent to which (1) key CBP stakeholders are collaborating when planning selected acquisition programs, and (2) CBP demonstrates lessons learned practices when developing acquisition programs.

GAO reviewed acquisition policies and guidance and selected a nongeneralizable sample of 10 programs based on the programs' acquisition level and type, among other factors. For those programs, GAO reviewed documentation and lessons learned and interviewed acquisition and contracting officials. GAO assessed CBP's efforts against leading practices for collaboration and lessons learned identified in prior GAO work.

## What GAO Recommends

GAO is making four recommendations to CBP, including to update guidance; to formalize contracting officer involvement in program acquisition strategies; to collect, analyze, and validate lessons learned; and to develop a lessons learned repository. DHS agreed with these recommendations.

View [GAO-23-105472](#). For more information, contact Marie A. Mak at (202) 512-4841 or [makm@gao.gov](mailto:makm@gao.gov).

April 2023

## CUSTOMS AND BORDER PROTECTION

### Actions Needed to Enhance Acquisition Management and Knowledge Sharing

## What GAO Found

U.S. Customs and Border Protection (CBP) acquires systems—including software, marine vessels, and aircraft—to protect Americans from terrorism, secure U.S. borders, and facilitate lawful trade, among other missions.

### Examples of U.S. Customs and Border Protection Acquisition Programs



Source: U.S. Customs and Border Protection; Coastal Interceptor Vessel photographer Carlos Rivera. | GAO-23-105472

A number of key stakeholders collaborate to manage CBP's acquisition programs. Yet recent changes to the Department of Homeland Security's (DHS) policy have reduced formal involvement of one stakeholder—the contracting officer. Prior to the policy change, CBP contracting officers had a defined role in developing acquisition strategies through program-level acquisition plans, which were intended to discuss the overall strategy for relevant contracts supporting the program. Now, CBP contracting officers GAO spoke with coordinate with program managers on a contract-by-contract basis. Moreover, CBP has not yet updated its guidance to define the role contracting officers should have in developing program-level acquisition strategies. Doing so would help ensure that contracting officers are involved in ensuring that an acquisition program's overall contracting approach aligns with program goals and risks that may otherwise be obscured at the individual contract level.

CBP does not consistently demonstrate leading practices for lessons learned when developing acquisition programs. Lessons learned can be a valuable tool for evaluating the success or failure of a program and for applying those lessons to future efforts. CBP requires programs to conduct activities—such as post-implementation reviews—that can capture lessons learned. But the programs GAO reviewed did not consistently conduct these activities or collect, analyze, and validate these lessons learned. Updating guidance to require that programs' lessons learned are consistently collected, analyzed, and validated will help to ensure that CBP has identified root causes and appropriate actions to address them, and determined the applicability of lessons learned to other programs. GAO also found that, while CBP has taken some steps to share lessons learned, it does not have a formal process or a repository in place to consistently archive and share them. Without consistently archiving and sharing lessons learned, CBP is at risk of missing opportunities to improve its planning for similar acquisition programs and of losing lessons learned that could inform future acquisition programs.

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### **Abbreviations**

|        |   |
|--------|---|
| CAE    | Component Acquisition Executive                 |
| CBP    | Customs and Border Protection                   |
| DHS    | Department of Homeland Security                 |
| FAR    | Federal Acquisition Regulation                  |
| INVEST | Investment Evaluation, Submission, and Tracking |
| PAE    | Portfolio Acquisition Executive                 |
| PARM   | Program Accountability and Risk Management      |
| PLP    | Program Lifecycle Process                       |

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April 25, 2023

The Honorable Bennie G. Thompson  
Ranking Member  
Committee on Homeland Security  
House of Representatives

Dear Mr. Thompson:

The U.S. Customs and Border Protection (CBP), a component within the Department of Homeland Security (DHS), is responsible for securing America's borders. Its mission is to protect the United States against terrorist threats and to prevent the illegal entry of inadmissible persons and contraband, while also facilitating lawful travel, trade, and immigration. In support of that mission, CBP invests billions of dollars each year in a diverse portfolio of acquisition programs to help execute its many operations. While DHS leadership provides acquisition oversight of CBP's highest-dollar acquisition programs at certain milestones in the acquisition process, CBP is responsible for planning and executing all its acquisition programs on a day-to-day basis.

In 2008, DHS established an acquisition management policy, in part, to help components like CBP manage acquisition programs.<sup>1</sup> The department has dedicated resources and implemented additional guidance designed to improve acquisition oversight. In September 2012, we found this policy to be generally sound, in that it reflected key program management practices identified in our prior work.<sup>2</sup> In October 2020, we found that CBP had established its own acquisition policies that generally

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<sup>1</sup>Department of Homeland Security, *Acquisition Management Directive*, DHS Directive 102-01 (July 28, 2015) (incorporating change 1, Feb. 25, 2019) (commonly referred to as MD 102); *Acquisition Management Instruction*, DHS Instruction 102-01-001 (Mar. 9, 2016) (incorporating change 3, Jan. 21, 2021). Combined, these documents are designed to provide a framework for consistent and efficient departmental management, support, review, and approval of the types and approaches of DHS's acquisition programs.

<sup>2</sup>GAO, *Homeland Security: DHS Requires More Disciplined Investment Management to Help Meet Mission Needs*, [GAO-12-833](#) (Washington, D.C.: Sept. 18, 2012). For a complete list of our previous work in this area, see the Related GAO Products page at the end of this report.

aligned with DHS policy and our key acquisition management practices.<sup>3</sup> However, other reviews conducted by us and the DHS Office of Inspector General found that CBP was not meeting its acquisition programs' cost and schedule goals and was deploying capabilities that had not been fully tested, increasing the risk that operators would not receive the tools they needed to execute their missions.<sup>4</sup>

You asked us to review CBP's processes for planning, executing, and managing acquisition programs, particularly prior to and in between DHS milestone reviews for major programs.<sup>5</sup> This is the second report associated with that request.<sup>6</sup> This report assesses the extent to which (1) CBP's acquisition policies and guidance identify the roles, responsibilities, and processes to execute portfolio management; (2) key CBP stakeholders are collaborating when planning selected acquisition programs; and (3) CBP demonstrates lessons learned practices when developing acquisition programs.

To conduct our work, we reviewed DHS and CBP acquisition policies, guidance, instructions, and other documents that establish acquisition and related procurement roles, responsibilities, and oversight activities. We selected a nongeneralizable sample of 10 CBP acquisition programs to include in our review based on a variety of criteria, such as the programs' acquisition level and program type. Appendix I contains a list of CBP programs selected for our sample and criteria used in their selection. We reviewed acquisition documents and lessons learned documentation, such as post-implementation reviews and other documented lessons learned, for those 10 programs. We also interviewed DHS and CBP acquisition and contracting officials about their role in acquisition planning and use of lessons learned. We compared CBP efforts to federal internal

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<sup>3</sup>GAO, *Homeland Security Acquisitions: DHS Has Opportunities to Improve Its Component Acquisition Oversight*, [GAO-21-77](#) (Washington, D.C.: Oct. 20, 2020).

<sup>4</sup>GAO, *Facial Recognition: CBP and TSA are Taking Steps to Implement Programs, but CBP Should Address Privacy and System Performance Issues*, [GAO-20-568](#) (Washington, D.C.: Sept. 2, 2020). See also, Department of Homeland Security, Office of Inspector General, *CBP Does Not Have a Comprehensive Strategy for Meeting Its LS-NII Needs*, [OIG-20-75](#) (Washington, D.C.: Sept. 28, 2020).

<sup>5</sup>Major acquisition programs are those with total life-cycle cost estimates of \$300 million or more for capital asset acquisitions and \$100 million or more for services acquisitions.

<sup>6</sup>In September 2022, we reported on a CBP initiative to more quickly test and deliver new, innovative, and disruptive technologies to front-line CBP operators. See GAO, *Customs and Border Protection: Innovation Team Has Opportunities to Mature Operations and Improve Performance*, [GAO-22-105984](#) (Washington, D.C.: Sept. 29, 2022).

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control standards and selected key practices for portfolio management and leading practices for collaboration and lessons learned identified in prior GAO work. See appendix II for additional details about our scope and methodology.

We conducted this performance audit from October 2021 to April 2023 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

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### DHS Acquisition Management Policy and Oversight

To help its components manage acquisition investments, DHS established policies and processes for acquisition management, requirements development, and test and evaluation. The department and its components use these policies and processes to deliver systems that are intended to close critical capability gaps, helping enable components like CBP to execute its missions and achieve its goals. Some of these policies also help components implement the Federal Acquisition Regulation (FAR). The FAR, among other things, directs agencies to perform acquisition planning, and states that such planning shall integrate the efforts of all personnel responsible for significant aspects of the acquisition.<sup>7</sup>

DHS's policies and processes for managing its major acquisition programs are primarily set forth in its *Acquisition Management Directive 102-01* and *Acquisition Management Instruction 102-01-001*. DHS issued the initial version of this directive in November 2008 and has issued multiple updates to its acquisition management directive and instruction, in part, to be responsive to our prior recommendations.

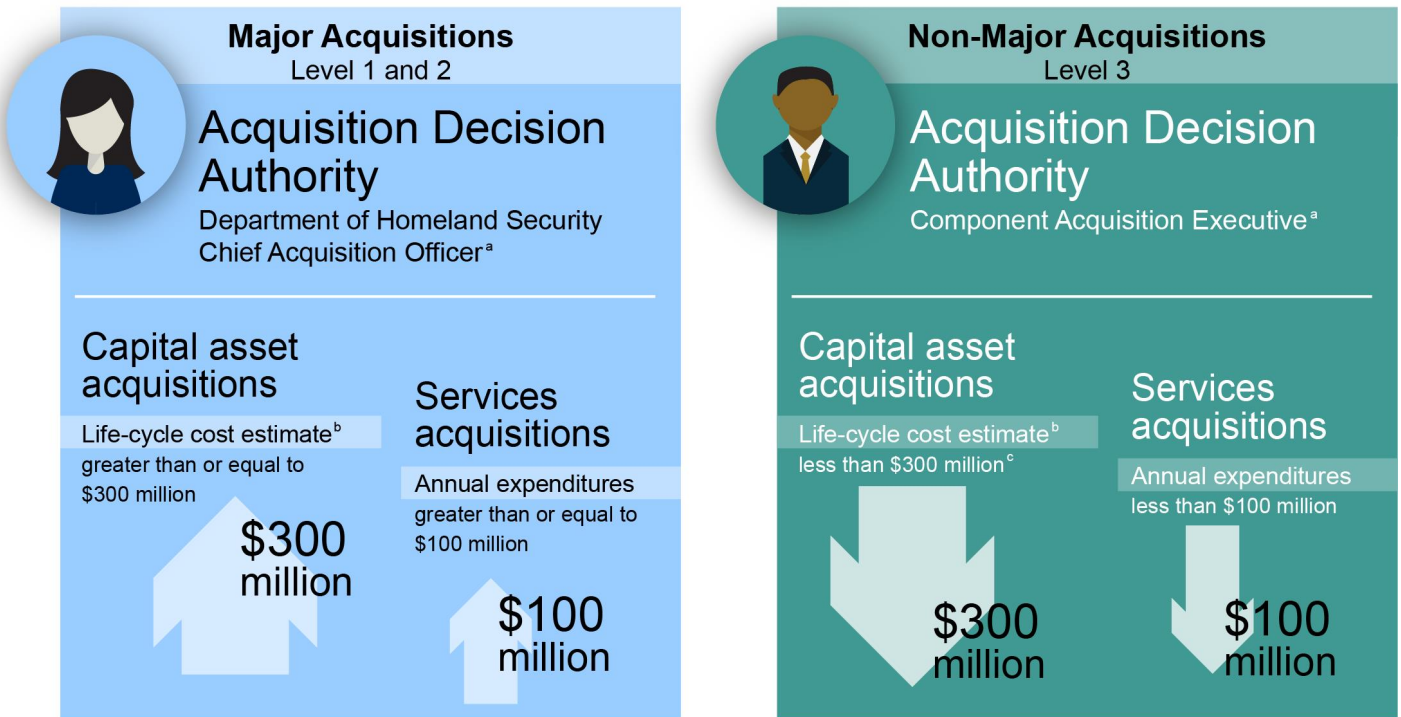
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<sup>7</sup>FAR 7.102. The FAR defines acquisition planning as the process by which the efforts of all personnel responsible for an acquisition are coordinated and integrated through a comprehensive plan for fulfilling the agency need in a timely manner and at a reasonable cost. It includes developing the overall strategy for managing the acquisition. FAR 2.101.



The Under Secretary for Management is the acquisition decision authority for the department’s largest acquisition programs, including those with life-cycle cost estimates of \$1 billion or greater (level 1 programs), and also those with cost estimates between \$300 million and less than \$1 billion (level 2 programs). Component Acquisition Executives (CAE)—typically the most senior acquisition management official within each DHS component—may be delegated acquisition decision authority under certain conditions for programs with cost estimates between \$300 million and less than \$1 billion. Each component’s CAE is the de facto acquisition decision authority for programs with life-cycle cost estimates under \$300 million (see fig. 1).

**Figure 1: Department of Homeland Security Acquisition Dollar Thresholds and Typical Acquisition Decision Authorities for Major and Non-Major Acquisition Programs**



Source: GAO analysis of Department of Homeland Security acquisition management policy. | GAO-23-105472

**Text for Figure 2: Department of Homeland Security Acquisition Dollar Thresholds and Typical Acquisition Decision Authorities for Major and Non-Major Acquisition Programs**

|       | Major Acquisitions | Non-Major Acquisitions |
|-------|--------------------|------------------------|
| Level | Level 1 and 2      | Level 3                |

|                                       | Major Acquisitions   | Non-Major Acquisitions   |
|---------------------------------------|--|--|
| <b>Acquisition Decision Authority</b> | Department of Homeland Security Chief Acquisition Officer <sup>a</sup>       | Component Acquisition Executive <sup>a</sup>                               |
| <b>Capital asset acquisitions</b>     | Life-cycle cost estimate <sup>b</sup> greater than or equal to \$300 million | Life-cycle cost estimate <sup>b</sup> less than \$300 million <sup>c</sup> |
| <b>Services acquisitions</b>          | Annual expenditures greater than or equal to \$100 million                   | Annual expenditures less than \$100 million                                |

Source: GAO analysis of Department of Homeland Security acquisition management policy. | GAO-23-105472

<sup>a</sup>Chief Acquisition Officers and Component Acquisition Executives can delegate their respective acquisition authority at certain acquisition decision events in the Department of Homeland Security's acquisition life-cycle framework, if certain criteria are met. For example, the Component Acquisition Executive may be delegated acquisition authority for programs with cost estimates between \$300 million and less than \$1 billion.

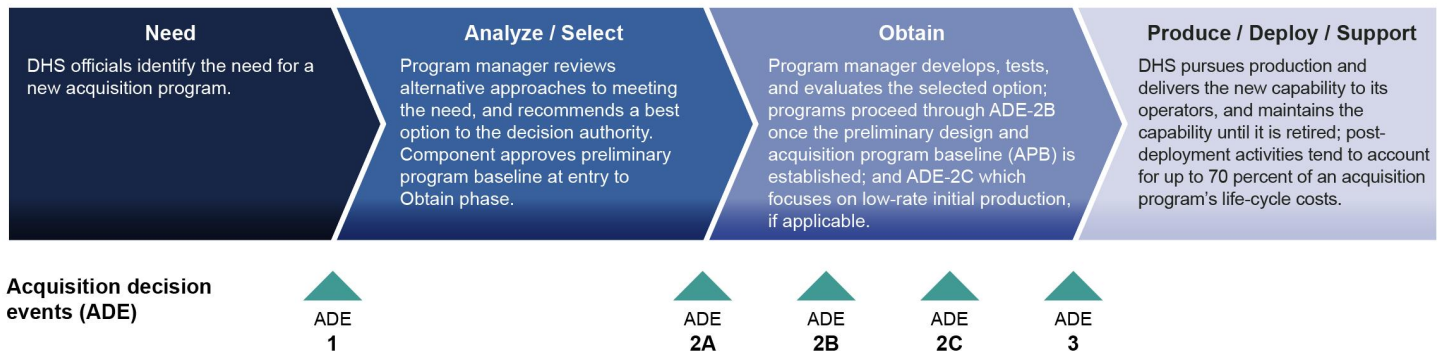
<sup>b</sup>An acquisition's life-cycle cost estimate includes an accounting of all resources and associated cost elements required to develop, produce, deploy, sustain, and dispose of a particular program.

<sup>c</sup>In some circumstances, asset acquisitions with a value of less than \$300 million or services acquisitions with annual expenditures under \$100 million may be designated as major acquisitions if determined to be of special interest by the Department of Homeland Security. An asset may be designated as special interest if it affects more than one component or has significant policy implication, among other reasons.

DHS acquisition management policy establishes that a major acquisition program's acquisition decision authority shall review the program at a series of predetermined decision events to assess whether the major program is ready to proceed through the life-cycle phases. Depending on the program, these events can occur within months of each other or be spread over several years. Figure 2 reflects the current acquisition life cycle in DHS policy.

**Figure 2: DHS Acquisition Life-Cycle Framework for Major Acquisition Programs**

Acquisition phases



Source: GAO analysis of Department of Homeland Security (DHS) data. | GAO-23-105472

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**Text for Figure 2: DHS Acquisition Life-Cycle Framework for Major Acquisition Programs**

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**Acquisition phases**

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**Need**

DHS officials identify the need for a new acquisition program.

Acquisition decision event 1

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**Analyze / Select**

Program manager reviews alternative approaches to meeting the need, and recommends a best option to the decision authority. Component approves preliminary program baseline at entry to Obtain phase.

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Acquisition decision events 2A, 2B, 2C

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**Obtain**

Program manager develops, tests, and evaluates the selected option; programs proceed through ADE-2B once the preliminary design and acquisition program baseline (APB) is established; and ADE-2C which focuses on low-rate initial production, if applicable.

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Acquisition decision event 3

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**Produce / Deploy / Support**

DHS pursues production and delivers the new capability to its operators, and maintains the capability until it is retired; post-deployment activities tend to account for up to 70 percent of an acquisition program's life-cycle costs.

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Source: GAO analysis of Department of Homeland Security (DHS) data. | GAO-23-105472

Each DHS component is responsible for creating policy and guidance for level 3 acquisition programs that comply with the department-level Acquisition Management Directive (102-01) and Instruction (102-01-001). CBP has also issued component guidance that applies to all CBP acquisitions. One such key document is the Program Lifecycle Process (PLP) Guide, which provides instructions for navigating the acquisition process.<sup>8</sup> The PLP Guide applies to all CBP key stakeholders—such as program managers, contracting officers, and user representatives—involved in a system's planning, design, development, deployment, sustainment, and disposal activities for major and non-major programs. The guide establishes CBP's acquisition management governance structure and outlines the roles and responsibilities of approval authorities and support organizations, among other things.

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## Organizational Structure of CBP Acquisitions

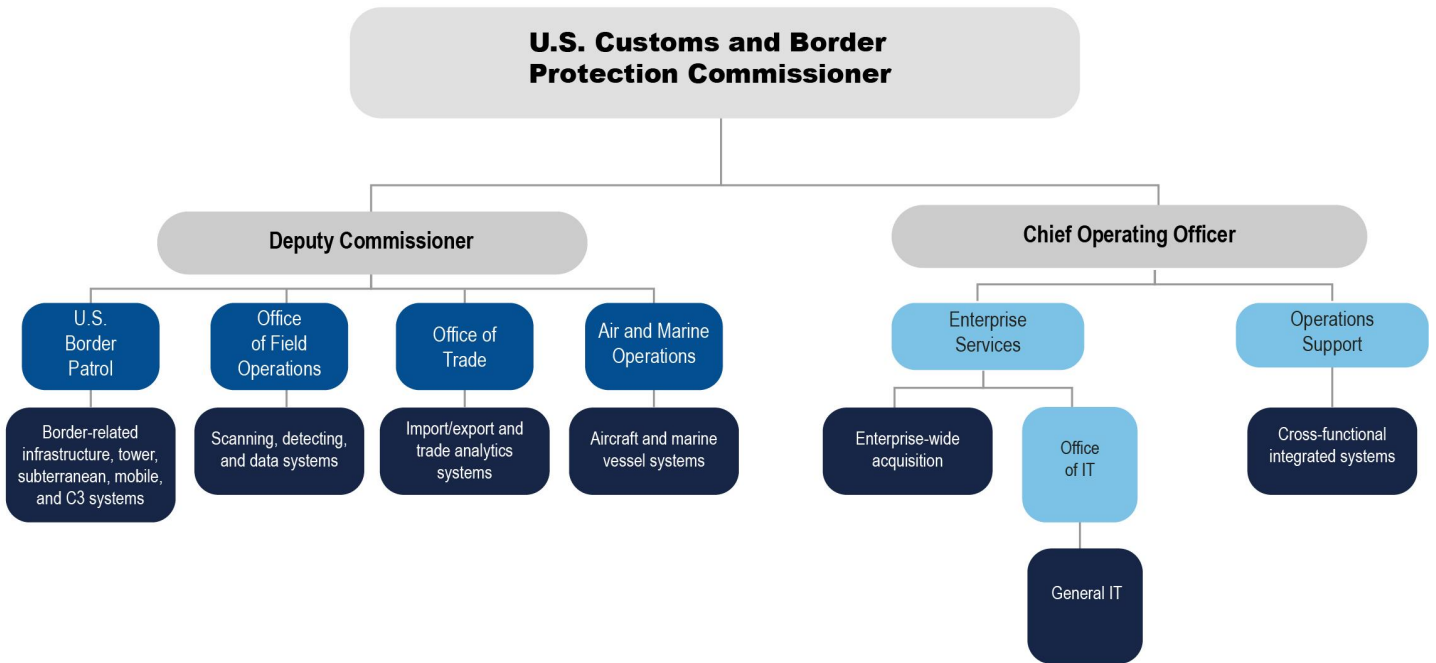
CBP has a number of both operational and support offices that, to varying degrees, are involved in the acquisition of systems, supplies, or services. The four operational offices—Air and Marine Operations, U.S. Border Patrol, Office of Field Operations, and Office of Trade—execute the operations that support CBP's mission, such as border security,

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<sup>8</sup>U.S. Customs and Border Protection, *Program Lifecycle Process (PLP) Guide 2.0* (Washington, D.C.: September 2021).

counterterrorism, and lawful trade and travel. Those operational offices are also responsible for managing the acquisition programs that are developing and fielding the systems their personnel need to conduct those operations. Two additional offices—Operations Support and Enterprise Services—conduct activities that support those acquisition programs, such as providing supplies and services. Figure 3 illustrates the reporting structure of the individual operational and support offices and the types of systems in their respective acquisition portfolios.

**Figure 3: U.S. Customs and Border Protection Organizational Structure and Office-level Acquisition Portfolios**



C3 Communications, command, and control

- Operational offices
- Offices supporting operations
- Office-level acquisition portfolios, managed by a Portfolio Acquisition Executive

Source: GAO presentation of U.S. Customs and Border Protection information | GAO-23-105472

**Text for Figure 3: U.S. Customs and Border Protection Organizational Structure and Office-level Acquisition Portfolios**

- 1) U.S. Customs and Border Protection Commissioner
  - a) Deputy Commissioner

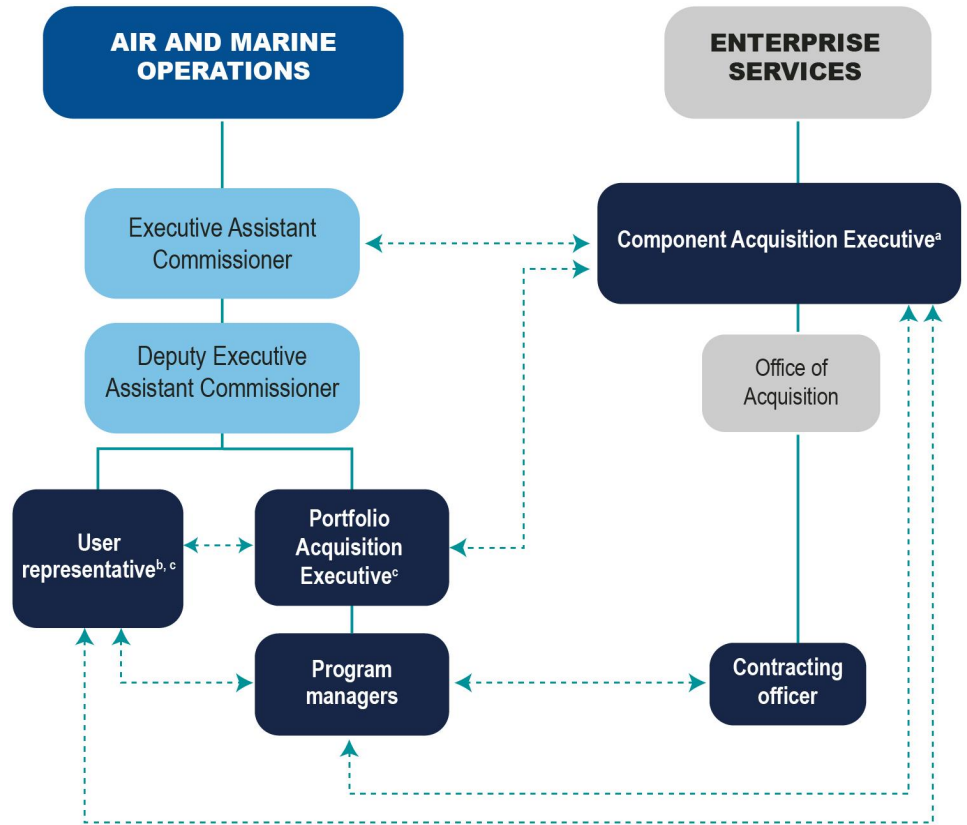
- i) U.S. Border Patrol (C3 Communications, command, and control Operational offices)
    - (1) Border-related infrastructure, tower, subterranean, mobile, and C3 systems (C3 Communications, command, and control Office-level acquisition portfolios, managed by a Portfolio Acquisition Executive)
  - ii) Office of Field Operations (C3 Communications, command, and control Operational offices)
    - (1) Scanning, detecting, and data systems (C3 Communications, command, and control Office-level acquisition portfolios, managed by a Portfolio Acquisition Executive)
  - iii) Office of Trade (C3 Communications, command, and control Operational offices)
    - (1) Import/export and trade analytics systems (C3 Communications, command, and control Office-level acquisition portfolios, managed by a Portfolio Acquisition Executive)
  - iv) Air and Marine Operations (C3 Communications, command, and control Operational offices)
    - (1) Aircraft and marine vessel systems (C3 Communications, command, and control Office-level acquisition portfolios, managed by a Portfolio Acquisition Executive)
- b) Chief Operating Officer
- i) Enterprise Services (C3 Communications, command, and control Offices supporting operations)
    - (1) Enterprise-wide acquisition (C3 Communications, command, and control Office-level acquisition portfolios, managed by a Portfolio Acquisition Executive)
    - (2) Office of IT (C3 Communications, command, and control Offices supporting operations)

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- (a) General IT (C3 Communications, command, and control Office-level acquisition portfolios, managed by a Portfolio Acquisition Executive)
  - ii) Operations Support (C3 Communications, command, and control Offices supporting operations)
    - (1) Cross-functional integrated systems (C3 Communications, command, and control Office-level acquisition portfolios, managed by a Portfolio Acquisition Executive)

Source:GAO presentation of U.S. Customs and Border Protection information | GAO-23-105472

Within these CBP operational and support offices, a number of key stakeholders and officials serve in positions that contribute to the acquisition and contracting approaches for CBP acquisition programs. Figure 4 identifies an example of the key stakeholders involved in CBP acquisitions and illustrates the relationships, whether direct reporting or collaborative, between them.

**Figure 4: U.S. Customs and Border Protection Operational Office Level Example with Key Acquisition Positions**



— Represents direct reporting responsibility between officials

- - - Represents coordinating responsibilities between officials for specific situations

Source: GAO presentation of U.S. Customs and Border Protection information. | GAO-23-105472

**Text for Figure 4: U.S. Customs and Border Protection Operational Office Level Example with Key Acquisition Positions**

|  | <b>Direct reporting responsibility between officials</b>                                   | <b>Coordinating responsibilities between officials for specific situations</b> |
|--|--|--|
| <b>Air and Marine Operations</b>               | Executive Assistant Commissioner   | na   |
| <b>Executive Assistant Commissioner</b>        | Air and Marine Operations<br>Deputy Executive Assistant Commissioner                       | Component Acquisition Executive  |
| <b>Deputy Executive Assistant Commissioner</b> | Executive Assistant Commissioner<br>User representative<br>Portfolio Acquisition Executive | na   |

Letter

|  | <b>Direct reporting responsibility between officials</b>    | <b>Coordinating responsibilities between officials for specific situations</b>                                 |
|--|---|--|
| <b>User representative<sup>b, c</sup></b>          | Deputy Executive Assistant Commissioner                     | Portfolio Acquisition Executive<br>Program managers<br>Component Acquisition Executive                         |
| <b>Portfolio Acquisition Executive<sup>c</sup></b> | Deputy Executive Assistant Commissioner<br>Program managers | User representative<br>Component Acquisition Executive   |
| <b>Program managers</b>                            | Portfolio Acquisition Executive                             | User representative<br>Component Acquisition Executive<br>Contracting officer                                  |
| <b>Enterprise Services</b>                         | Component Acquisition Executive                             | na   |
| <b>Component Acquisition Executive<sup>a</sup></b> | Enterprise Services<br>Office of Acquisition                | Executive Assistant Commissioner<br>Portfolio Acquisition Executive<br>User representative<br>Program managers |
| <b>Office of Acquisition</b>                       | Component Acquisition Executive<br>Contracting officer      | na   |
| <b>Contracting officer</b>                         | Office of Acquisition                                       | Program managers   |

Source: GAO presentation of U.S. Customs and Border Protection information. | GAO-23-105472

<sup>a</sup>While the current official who is the Component Acquisition Executive (CAE) is also the assistant commissioner of the Office of Acquisition, the CAE role is an agent of the commissioner and can be placed anywhere in the CBP organization.

<sup>b</sup>For the purposes of this report, we use the term user representative to refer to CBP Lead Business Authorities.

<sup>c</sup>This illustrates the location of the user representative and Portfolio Acquisition Executive within one office in U.S. Customs and Border Protection. Placement may vary by office.

Each operational and support office is led by an Executive Assistant Commissioner or a Chief in the case of U.S. Border Patrol. Within the Enterprise Services support office resides the Office of Acquisition. The Office of Acquisition supports CBP by providing expertise and oversight in acquiring or procuring mission-essential systems, supplies, or services. The office is responsible for establishing and maintaining acquisition policy (such as the PLP Guide), facilitating acquisition governance in coordination with the Office of Information and Technology, and ensuring the agency has a highly competent and effective workforce. The office also supports the CAE, the senior acquisition executive within CBP who makes specific acquisition decisions and recommendations. The CAE is also responsible for designating acquisition program managers and authorities throughout the component and providing oversight of all CBP acquisition programs. Other key stakeholders involved in supporting CBP acquisition programs include:



- **Portfolio Acquisition Executives.** The Portfolio Acquisition Executives (PAE) are the senior acquisition executive within a CBP operational and support office and are responsible to the respective Executive Assistant Commissioner for providing day-to-day oversight and direction to the acquisition program managers for their office's acquisition portfolio. The PAE maintains a dual reporting relationship, consulting with the CAE to include participation in regular and recurring acquisition staff meetings, but typically reporting in a formal manner to the Executive Assistant Commissioner.
- **User representatives.** The user representative, which CBP calls a Lead Business Authority, is the principal user advocate for the program. The user representative must be endorsed and empowered by the Commissioner or CAE, and represents the end-users of the capability in a decision-making capacity throughout the acquisition and development of the solution. The user representative may also identify new mission needs and capability gaps. The user representative is expected to provide continuous feedback to programs and projects on behalf of the user community, as well as to the operational requirements developers, to help ensure the requirements and guidance accurately reflect the needs of the users.
- **Program managers.** Program managers are accountable for managing their assigned programs and for ensuring that they effectively deliver the required capability to their customers within allocated cost and schedule resources. CBP's program managers are empowered to make final scope-of-work, capital investment, and performance acceptability decisions. The program manager is also responsible for meeting program objectives or production requirements. The program manager also manages and oversees the Program Management Office and Integrated Product Teams. If the program experiences or is expected to experience a breach of its cost, schedule, or performance goals, then the program manager is responsible for notifying the CAE and the program's acquisition decision authority.
- **Contracting officers.** Contracting officers are involved in acquisition planning and assist with the review and completion of procurement-level acquisition plans prepared by the program manager. Procuring contracting officers have authority to solicit and award contracts to vendors for the furnishing of products, services, construction, or research and development associated with CBP's acquisition programs.

As programs progress through the acquisition phases, these stakeholders are involved in collaborating on a number of key processes and

documents as part of each phase. For example, when program officials are identifying new programs during the Need phase, the program manager and the contracting officer are to collaborate on acquisition planning and start preparing a written acquisition plan, when required. The acquisition plan is prepared by the program manager and is submitted to the contracting officer for review and completion before approval at the required level. The program manager and contracting officer are to develop the acquisition plan while considering various approaches to meet the need during the Analyze/Select phase to identify the acquisition strategy.

Similarly, the user representative is to start developing requirements documents during the Need phase. In coordination with the program manager, the user representative is to develop the Operational Requirements Document, which includes the performance goals that a program must meet, during the Analyze/Select phase. Leading up to the 2A decision event and throughout the life cycle, the user representative is to provide continuous input to the program manager on requirements and end user needs.

CBP also uses several governance councils and boards to oversee and make decisions related to its portfolio of acquisition programs. One such board exists to evaluate each acquisition program's alignment with an overarching IT architecture and serves as the acquisition decision authority for level 3 programs when delegated. A different board meets on an ad hoc basis and is responsible for, among other things, approving assessment criteria and using that criteria to prioritize programs and portfolios. After formalizing its governance structure in 2020, CBP adjusted the responsibilities of its governance councils in an effort to provide greater transparency of the decision-making process and delegation of strategic decisions to the proper level.

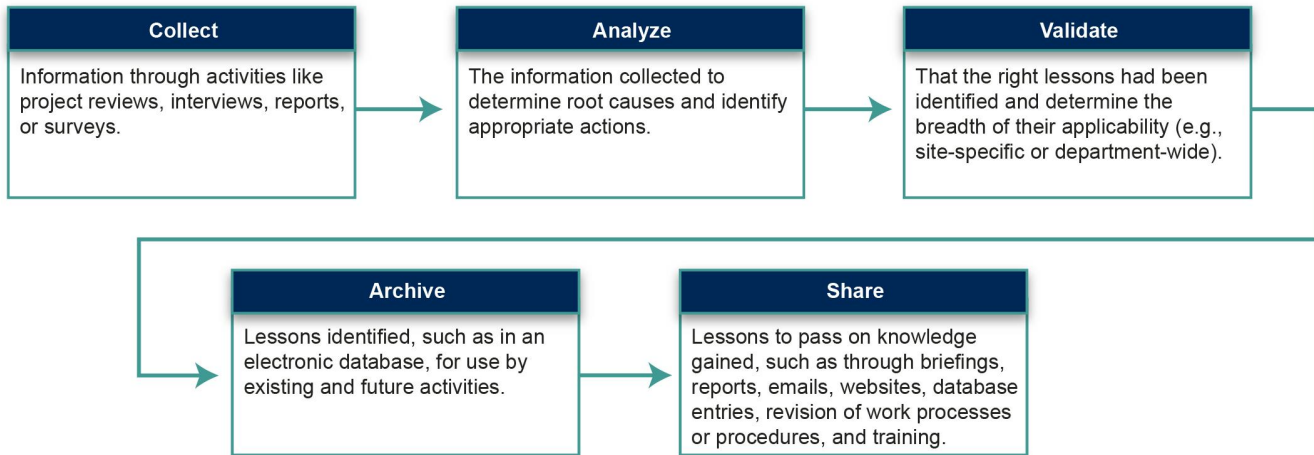
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## Leading Practices for Lessons Learned

The use of lessons learned is a principal component of an organizational culture committed to continuous improvement and can increase communication and coordination. Leading practices for a lessons learned process we and others previously identified include collecting, analyzing, validating, archiving, and sharing information and knowledge gained on

positive and negative experiences.<sup>9</sup> Figure 5 describes these leading practices.

**Figure 5: Leading Practices of a Lessons Learned Process**



Source: Analysis of prior GAO and U.S. Army lessons learned reports. | GAO-23-105472

**Text for Figure 5: Leading Practices of a Lessons Learned Process**

1. **Collect:** Information through activities like project reviews, interviews, reports, or surveys.
2. **Analyze:** The information collected to determine root causes and identify appropriate actions.
3. **Validate:** That the right lessons had been identified and determine the breadth of their applicability (e.g., site-specific or department-wide).

<sup>9</sup>GAO, *Army Modernization: Army Should Improve Use of Alternative Agreements and Approaches by Enhancing Oversight and Communication of Lessons Learned*, [GAO-21-8](#) (Washington, D.C.: Oct. 1, 2020); *DOD Utilities Privatization: Improved Data Collection and Lessons Learned Archive Could Help Reduce Time to Award Contracts*, [GAO-20-104](#) (Washington, D.C.: Apr. 2, 2020); *Project Management: DOE and NNSA Should Improve Their Lessons-Learned Process for Capital Asset Projects*, [GAO-19-25](#) (Washington, D.C.: Dec. 21, 2018); and *Federal Real Property Security: Interagency Security Committee Should Implement a Lessons-Learned Process*, [GAO-12-901](#) (Washington, D.C.: Sept. 10, 2012). [GAO-19-25](#) identified some lessons-learned practices from reports by both the Project Management Institute and the Department of the Army’s Combined Arms Center and Center for Army Lessons Learned. Project Management Institute, Inc. *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*, Sixth Edition, 2017; and Project Management Institute, Inc. *Implementing Organizational Project Management: A Practice Guide*, First Edition, 2014. U.S. Army, Center for Army Lessons Learned, *Establishing a Lessons Learned Program: Observations, Insights, and Lessons* (Fort Leavenworth, KS: June 2011). *PMBOK* is a trademark of Project Management Institute, Inc.

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4. **Archive:** Lessons identified, such as in an electronic database, for use by existing and future activities.
  5. **Share:** Lessons to pass on knowledge gained, such as through briefings, reports, emails, websites, database entries, revision of work processes or procedures, and training.

Source: Analysis of prior GAO and U.S. Army lessons learned reports. | GAO-23-105472

These leading practices generally build upon each other. For example, an organization with a consistent, coordinated archiving mechanism, such as an electronic database, is better able to demonstrate the leading practice for sharing lessons learned through access to such an archive.

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## CBP Acquisition Policy and Guidance Identify Portfolio Acquisition Executive Roles but Not Certain Governance Practices

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### Acquisition Policy and Guidance Identify Portfolio Acquisition Executive Roles

CBP's acquisition policy and guidance identify the role that PAEs play in overseeing and directing the entire acquisition portfolio within their respective offices as well as their coordination with stakeholders throughout CBP. PAEs have authority to oversee and direct the entire acquisition portfolio—comprised of programs with related mission needs—within their respective offices. They are involved in coordinating acquisition portfolio management decisions with multiple stakeholders throughout CBP related to how their programs contribute to their office's broader mission.

PAE positions are unique to CBP within DHS. CBP established these positions following a 2016 decision to align acquisition programs with the operational missions and offices that the programs supported. Following this realignment, CBP offices with acquisition programs developed acquisition organizations. Each organization is led by a PAE who is responsible for

- overseeing and directing the entire acquisition portfolio within a respective CBP office, and

- advising CBP executive leadership on the respective programs within that office.

According to CBP documentation, this change provides CBP offices with acquisition managers who are responsible to operational managers, and it also provides closer oversight for acquisition programs within CBP's realigned organizational structure. For example, PAEs are responsible for providing day-to-day oversight and direction to the program managers in their respective offices and ensuring the programs in their acquisition portfolio comply with CBP and DHS's acquisition policies and processes.

As the central node for acquisition management in CBP offices, PAEs are to coordinate acquisition decisions with other CBP stakeholders. These roles are outlined in various CBP acquisition policies and guidance.<sup>10</sup> For example:

- **Executive Assistant Commissioners.** Executive Assistant Commissioners are responsible for overseeing the operational execution and performance of resource plans, as well as decision-making by their respective offices. They have the authority over, provide direction on, and are accountable for the acquisition programs in their respective offices. The PAE is directly responsible to the Executive Assistant Commissioner on the conduct and performance of these programs. For example, PAEs from the Offices of Air and Marine Operations and Trade told us that acquisition performance and priorities are tied directly to their office's Executive Assistant Commissioner's performance goals.
- **Component Acquisition Executive.** CBP's CAE is responsible for managing and overseeing all acquisition functions in CBP and is to consult with the Commissioner, Deputy Commissioner, and Executive Assistant Commissioners, as appropriate, on significant acquisition matters. PAEs have an indirect reporting relationship to the CAE; are responsible for consulting with them on acquisition decision events; and ensure that information, issues, and risks related to acquisition programs are elevated to the CAE in a timely fashion. For example, PAEs are to provide the CAE with data on key cost, schedule, performance, and risks of acquisitions programs in their portfolio. According to an official in the Office of Acquisition, this occurs on a

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<sup>10</sup>Examples of these documents include: U.S. Customs and Border Protection, Commissioner Memorandum, *Acquisition Management, Governance and Doctrine* (July 29, 2016); *U.S. Customs and Border Protection Acquisition Management, Directive No. 5220-041A* (Feb. 7, 2019); and *Program Lifecycle Process Guide, HB5225-008* (September 2021).

bimonthly basis. PAE officials also stated they participate in CAE portfolio reviews of selected programs every 4 to 6 weeks.

- **Acquisition Review Council.** PAEs are core members of the Acquisition Review Council, a CBP-wide oversight body that makes decisions on a range of acquisition program issues. The Acquisition Review Council is chaired by the CAE, and all PAEs and relevant user representatives are invited to attend, among other participants. The purpose of these meetings is to ensure that acquisition programs are reviewed before progressing to the next stage of the acquisition life cycle.
- **Other Portfolio Acquisition Executive.** The PAEs we spoke with said that forums, such as acquisition reviews and governance councils, provide oversight over acquisitions and budget processes. Among other roles, the forums also provide opportunities for PAEs to collaborate with each other to share information and concerns about their acquisition portfolios. For example, the PAEs from U.S. Border Patrol and Air and Marine Operations told us they attend portfolio reviews even if the programs being discussed are not associated with their offices. According to the PAE from Air and Marine Operations, they can provide expertise and operational knowledge to other programs, such as how to manage program risks, in an advisory capacity.
- **User representative:** Each CBP operational office includes a user representative who has been delegated acquisition portfolio management roles. User representatives are to coordinate with the respective PAE in their office to ensure acquisition programs they oversee receive requirements and resources in a timely fashion. One PAE we spoke with said that the creation of the PAE position has established a partnership with user representatives and helped to bridge the gap between acquisition staff and end users.

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### CPB's 2021 Acquisition Guidance Does Not Clearly Identify Current Portfolio-Related Governance Practices

CPB's Office of Acquisition has not reflected or incorporated several governance practices in its main acquisition guidance, the PLP Guide. Specifically, the PLP guide, most recently updated in September 2021, does not reflect practices that CPB officials stated are used to execute portfolio management.

- **Strategy and Governance Office.** In 2018, CBP established what is now known as the Strategy and Governance Office within the Office of

the Commissioner. The Office of the Commissioner directed this office to coordinate leadership decision-making through CBP's governance structure, among other responsibilities. For example, an official from the Strategy and Governance Office told us that the office coordinates what issues from the Acquisition Review Council need to move to the Agency Leadership Council or Deputy Leadership Council. More recently, the office has been tasked with improving coordination between councils responsible for acquisitions, resource management, and operations. However, the 2021 PLP guide omits reference to the Strategy and Governance Office and its responsibilities for coordinating decisions between councils.

- **Governance of acquisitions that include IT.** The 2021 PLP Guide identifies the CBP Enterprise Architecture Review Board as a governing body, chaired by the CBP Chief Information Officer, that reviews investment initiatives and evaluates each acquisition programs' alignment with CBP-wide IT architecture. An official from the Office of Information and Technology—which houses the CBP Chief Technology Officer—told us that in practice CBP IT officials do not use the CBP Enterprise Architecture Review Board. Instead, this official and the Chief Technology Officer told us that three Office of Information and Technology organizations prioritize and evaluate IT related to acquisition programs: the IT Governance Council, the Technology Review Board, and the Technology Review Board's subcommittee called the Council of Architects. The PLP Guide does not mention the three organizations identified by the Chief Technology Officer. Eighteen of CBP's 22 acquisition programs on the October 2022 major acquisition oversight list include IT.
- **Executive Steering Committees.** The 2021 PLP Guide states that Executive Steering Committees may be formed as deemed necessary by senior leadership to (1) oversee enterprise-wide acquisition and investment management governance processes; (2) apply assessment criteria to prioritize programs and portfolios; and (3) review investment and portfolio selection criteria annually, among other things. However, in practice, CBP officials told us that Executive Steering Committees do not perform these portfolio responsibilities. Rather, CBP uses Executive Steering Committees only on an as-needed basis for reviewing specific acquisition programs rather than portfolios. Further, according to CBP's CAE—a signatory on the CBP acquisition guidance—acquisition personnel should not be prioritizing acquisition programs, as acquisitions are one element supporting a broader mission need for CBP operators. Instead, the CAE stated that operational leaders and their management councils, such as the

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Agency Leadership Council, prioritize decisions that affect acquisition programs.

Recently, CBP leadership initiated an independent assessment of CBP's acquisition procedures and governance structures. The independent assessment found the need to better communicate the practices and processes used by the governance councils. Completed in November 2021, the report noted challenges that CBP encountered tracking the coordination of discussion topics, like acquisition, as they move through CBP governance councils and management. The report recommended, among other things, that CBP could benefit from (1) more coordinated management across all councils to better track acquisition-related efforts; and (2) putting in place processes that ensure acquisition-related efforts are discussed and briefed to the right operational audience and at the proper intervals. In October 2022, CBP leadership reported these two recommendations as closed, noting that the Strategy and Governance Office has efforts underway to improve coordination and integration of acquisition-related councils throughout CBP.

While CBP is implementing practices to improve acquisition governance in CBP, these changes have yet to be formalized in acquisition guidance. The PLP Guide is intended to provide program managers and other acquisition officials with clear instructions on how to navigate CBP's acquisition governance process. However, the Office of Acquisition has not updated the guidance to reflect how these governance bodies are currently engaging in acquisition program oversight. When we asked the CAE and CAE staff about some of these discrepancies, they agreed that the PLP Guide should be updated.

Clearly defining leadership roles and responsibilities and empowering leaders to accomplish those responsibilities is critical to achieving positive acquisition outcomes. *Standards for Internal Control in the Federal Government* state that management should establish an organizational structure, assign responsibility, and delegate authority to achieve the entity's objectives.<sup>11</sup> In addition, key portfolio management practices identified in our prior work state that managers overseeing portfolios need to clearly define and empower leadership.<sup>12</sup> Up-to-date guidance on

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<sup>11</sup>GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#), (Washington, D.C.: Sept. 10, 2014).

<sup>12</sup>GAO, *Homeland Security Acquisitions: Leveraging Programs' Results Could Further DHS's Progress to Improve Portfolio Management*, [GAO-18-339SP](#) (Washington, D.C.: May 17, 2018).



CBP's acquisition governance process can also help prevent the loss of institutional knowledge, given that nine of the 10 acquisition programs included in our review experienced turnover in their program managers. Updating the PLP Guide to reflect changes in governance responsibilities and current practices will help ensure CBP program managers and other acquisition staff have the insights they need to navigate governance bodies involved in providing oversight of CBP's acquisition programs.

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## Key Stakeholders Collaborate in a Variety of Ways, but CBP Has Yet to Define Contracting Officer Involvement in Acquisition Program Strategy Development

User representatives, program managers, and contracting officers play a key role in planning acquisition programs, and we identified a variety of ways in which they collaborate. However, CBP has not yet identified steps to address how changes in DHS's acquisition policy, implemented in 2019, have limited CBP contracting officers' involvement and insights into program-level acquisition planning.

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### Program Managers Use Various Methods to Facilitate Collaboration

Across the 10 programs we reviewed, we found that program managers identified various methods they use to facilitate collaboration with user representatives. Some program managers stated they held regularly occurring meetings with user representatives to gather user feedback, while some said they met on a more ad hoc basis. For example, the program manager responsible for an Office of Trade program described engaging with the user representative by meeting once a month, one on one, to provide updates on the program's progress through the acquisition life cycle and funding needs, or to identify remaining challenges the user representative can help solve.

Two program managers we spoke with said that, although the user representatives are at the executive level, the program managers were able to communicate with them and could meet when needed. For

example, even though the user representative in the U.S. Border Patrol is the Deputy Chief of Border Patrol, the program manager for a tunnel program said it was not uncommon for them to meet multiple times a week to discuss end-user needs and how to improve their approach to meeting those needs. Another program manager told us it is useful when the user representative is an executive because it can expedite the resolution of issues.

Further, program managers from the U.S. Border Patrol and Air and Marine Operations offices said each office has established specific working groups to assist in their decision-making. For example:

- **U.S. Border Patrol.** U.S. Border Patrol established a requirements working group to help ensure its investments align with the vision, strategic goals, and mission priorities of the agency. A program manager with the U.S. Border Patrol we spoke with said that he relies on the group—which consists of senior Border Patrol officials—to address issues facing their acquisition program before presenting those options to the user representative for final decision. For example, the user representative for a surveillance tower program described using the working group to determine how best to deploy the towers across Southwest border regions prior to finalizing that decision. Specifically, the working group was presented three options for the number and locations to deploy the towers, and the members voted and approved one of the options.
- **Air and Marine Operations.** According to the user representative for Air and Marine Operations, the office has Operations Advisory Groups for each of its acquisition programs to identify solutions and recommendations on resourcing and operational decision-making for the user representative. For example, the user representative said that subject matter experts within each Operations Advisory Group can help program managers clarify capability gap solutions, as well as provide input into the development of requirements documents. As an example, they cited how the Operations Advisory Group for an interdiction aircraft has helped facilitate communication between program officials and end users on the availability of spare parts needed for the aircraft to perform certain missions. Knowing about these gaps helped to keep the user representative and end users informed about how the availability of parts will affect the program's acquisition schedule.

According to policy, user representatives and program managers are to coordinate on several key program documents. For example, the

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Operational Requirements Document establishes the performance parameters that must be met by the program to provide useful capabilities to the operator. It is developed and signed by both the user representatives and program managers.

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### CBP Contracting Officers Are Generally Not Involved in Developing Program-Level Acquisition Strategy Documentation

We found that most program managers and contracting officers collaborate during acquisition planning, but changes in DHS's acquisition policy limit CBP contracting officers' involvement and insights into program-level acquisition strategy development for the programs they support. Across the 10 programs we reviewed, seven program managers and six contracting officers said they coordinate on acquisition planning efforts during either regular or ad hoc meetings. For example:

- One contracting officer supporting two programs with the Office of Trade told us that she is involved with acquisition planning efforts when a program need is identified and has weekly meetings with the Integrated Product and Acquisition Planning Teams.
- Another contracting officer supporting a program with the U.S. Border Patrol told us about meetings with the program manager and how the team started prior to the Analyze/Select phase in the acquisition life cycle. The officer added that at these meetings, which occur weekly, acquisition personnel and stakeholders discuss various topics that include the technical aspects of the program, planning, pre-award actions, and creating procurement and statement of work documents. Meetings are supplemented by emails and phone calls, which help ensure every team member is receiving details that would help them fully understand the program.

Program managers and contracting officers coordinate on developing acquisition planning documents to support the programs. But, in 2019, the DHS Office of the Chief Procurement Officer updated its requirement to no longer require program-level written acquisition plans. Program-level plans were to identify the acquisition strategy for how the program capability would be obtained and supported and to include all acquisitions, including contracts, task orders, or delivery orders. An official from the DHS Office of the Chief Procurement Officer told us she made the program-level acquisition plan change for several reasons,

including to streamline acquisition planning.<sup>13</sup> Officials also noted that they thought the previous program-level acquisition plan lacked procurement specific details, so the Chief Procurement Officer could not be sure the office was approving sound contracting strategies. Pursuant to the FAR, DHS requires procurement-specific acquisition plans for contracts supporting an acquisition program, depending on contract type and dollar thresholds.<sup>14</sup>

Before the 2019 change, program-level acquisition plans were the only document that should have identified the program's overarching acquisition strategy that contracting officers formally reviewed and were involved in developing. Our analysis found that acquisition programs can be supported by a wide range of contracts, and each program tends to be managed by one contracting officer. For example, one program in our review is assigned one contracting officer, who manages upwards of 60 individual contracts for the program.

As a result of DHS eliminating the submission of a program-level acquisition plan at decision events, CBP no longer has a requirement that contracting officers are involved in and aware of program-level acquisition strategy. The change in DHS policy did not eliminate the need for program managers to consider acquisition strategies, and DHS and CBP officials we spoke with said the acquisition strategy may be included in other documents, like the Test and Evaluation Master Plan and the Capability Development Plan. However, according to CBP guidance, contracting officers do not have a responsibility to review or sign these documents, and contracting officers we spoke with identified gaps in their involvement in program-level acquisition planning. For example:

- A contracting officer supporting one of our selected programs told us that he is neither aware of nor does he have access to a high-level acquisition strategy for the program as a whole.

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<sup>13</sup>Office of the Chief Procurement Officer officials identified other reasons for the program-level acquisition plan change, including that they had another acquisition planning template for procurement specific details and that the program-level acquisition plan contained information that was already in other program documents.

<sup>14</sup>A written acquisition plan is required if a procurement is using the firm-fixed-price contract type and the dollar threshold is \$50 million or more, or if a procurement is other than firm-fixed-price and at or above the simplified acquisition threshold. Homeland Security Acquisition Manual 3007.103(e). Agencies are required to conduct acquisition planning for all acquisitions, but agencies are responsible for establishing criteria and thresholds at which more formal planning is required. FAR 7.102(a), 7.103(e). Acquisition planning should begin as soon as the agency need is identified. FAR 7.104.

- Two contracting officers supporting another program indicated that they still find program-level acquisition plans useful to assist with acquisition planning, and they refer back to the draft acquisition plan for the program and continue to revise it as it is a snapshot of all of the program's requirements at that point in time.
- A program manager with another program also explained that, after the change in DHS's policy, the contracting officer is involved with acquisition planning for individual contracts instead of at the program level.

Following the change to DHS acquisition planning policy, officials from DHS's Office of Program Accountability and Risk Management (PARM) told us they identified a need for a new document to recapture the acquisition information that was once contained in the program-level acquisition plan. None of the other program documents included all relevant program-level acquisition strategy information.

PARM officials told us that, in January 2022, they sent a new Acquisition Strategy Document template to each component for informal review and comment. In its January 2023 update to Instruction 102-01-001, DHS required programs to provide all elements of the Acquisition Strategy Document template. The Acquisition Strategy Document identifies a strategic-level approach to acquire a capability and includes the program's acquisition approach, contracting approaches, and risks and mitigation plans related to acquisition approaches and contracting. All of those elements were to be included in the program-level acquisition plan previously provided to PARM prior to the 2019 policy change. DHS PARM officials told us that program managers are responsible for developing the Acquisition Strategy Document and CAEs will be required to approve it.<sup>15</sup> However, PARM officials explained they have not specified the role that contracting officers will have in contributing to or reviewing the document, and said that they will defer to the program offices on how to involve contracting officers.

A leading collaboration practice we have identified in our prior work is to include all relevant participants, with the appropriate knowledge, skills,

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<sup>15</sup>PARM officials stated that programs will have flexibility in how to present the information in the template to PARM. Specifically, program managers can produce the template as a stand-alone document, use it as part of a briefing deck, or in other written presentations as long as all required elements are outlined.

and abilities, to contribute in collaboration efforts.<sup>16</sup> Further, CBP's CAE told us a new collaborative document is needed for program managers and contracting officers to develop a program-level acquisition strategy. However, CBP has not yet identified the steps it will take to ensure contracting officers are involved in developing a program-level acquisition strategy. Involving contracting officers, who are subject matter experts on contracting approaches and related risks that could affect the outcomes of acquisition programs, in acquisition strategy development can help to ensure the development of sound program-level acquisition strategies. Moreover, taking steps to update guidance to define the role that contracting officers should have in developing program-level acquisition strategies would better position them to be aware of key program-level information, such as cost, schedule, and performance considerations and acquisition program risks. These steps can help provide contracting officers with a holistic view of the various contracts supporting an acquisition program.

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## CBP Does Not Consistently Demonstrate Leading Practices for Lessons Learned on Acquisitions

CBP is not consistently applying leading practices for lessons learned in its efforts to develop acquisition programs. In some instances, programs are collecting lessons learned, but these lessons are not consistently analyzed or validated. In addition, CBP does not have a formal process for archiving and sharing lessons learned within and across offices.

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## CBP Does Not Consistently Collect, Analyze, and Validate Lessons Learned

We found that CBP is not consistently collecting information about the activities and results of its acquisition programs, analyzing lessons learned to determine root causes and appropriate actions to address them, or validating that it has identified the right lessons learned and determined the scope of their applicability.

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<sup>16</sup>GAO, *Managing for Results: Key Considerations for Implementing Interagency Collaborative Mechanisms*, [GAO-12-1022](#), (Washington, D.C.: Sept. 27, 2012).

At the program level, DHS policy and CBP guidance require programs to collect lessons learned as part of post-implementation reviews. These reviews occur near the beginning of the acquisition life-cycle's Produce/Deploy/Support phase, approximately 6 to 12 months after a system is initially deployed.<sup>17</sup> DHS supplemental guidance for preparing post-implementation reviews states that these reviews are conducted, in part, to ensure continued improvement of DHS's acquisition process based on lessons learned and to minimize the risk of repeating past mistakes.<sup>18</sup> Lessons learned in the post-implementation review should capture lessons learned across the life of the program, including programmatic successes and failures or best practices for use across DHS. In addition, after initially conducting a post-implementation review and when transitioned into sustainment, programs are required to conduct operational analysis on an annual basis. This analysis involves assessing cost, performance, and risk trends over time. CBP's PLP Guide states that operational analyses form the basis for lessons learned.

Of the 10 acquisition programs that we reviewed, five programs completed post-implementation reviews, one is currently conducting a post-implementation review, two plan to conduct post-implementation reviews after they reach initial deployment, and two did not conduct post-implementation reviews after achieving initial deployment.<sup>19</sup> A program official for one of these two programs told us that the program conducted an operational analysis every year in lieu of a post-implementation review. However, the operational analyses provided do not include lessons learned. The program manager for the other program told us a post-implementation review was not required and that the program did not have the resources for it.

DHS's guidance states that post-implementation reviews should capture lessons learned across the life of the program. Officials for four out of the

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<sup>17</sup>U.S. Customs and Border Protection's PLP Guide and Department of Homeland Security Instruction 102-01-103, *Systems Engineering Life Cycle* (Feb. 4, 2021), require acquisition programs to conduct post-implementation reviews.

<sup>18</sup>Department of Homeland Security, *Post Implementation Review Guidance for Acquisition Programs* (Feb. 24, 2020).

<sup>19</sup>Of the five programs that conducted post-implementation reviews, one of the programs is made up of dozens of systems. According to program officials, a program-wide post-implementation review for this program was not conducted. Instead, CBP conducted post-implementation reviews for three of the systems under the program. Of the three post-implementation reviews, one includes lessons learned.

10 CBP acquisition programs that we reviewed told us that they are collecting and documenting lessons learned throughout the acquisition life cycle leading up to the post-implementation review. As an example of collecting ongoing lessons learned, program officials for two programs in the Office of Trade told us that they collect lessons learned at the end of 2-week sprint cycles.<sup>20</sup> At the end of the sprint cycle, one of the programs discussed and documented what went well over the previous 2 weeks and what could be improved. The other program considered what they “liked, loathed, learned, and longed for” over the sprint cycle. Further, one of these programs collected lessons learned after experiencing a cost and schedule breach due to a capability being overlooked. The program conducted a post-mortem assessment of what went wrong, which included lessons learned, with the goal of determining a path forward for the program.

Program officials for six of the 10 programs we reviewed told us that they had not collected ongoing lessons learned. For example, a contracting officer for a marine vessel program we reviewed told us about an issue with contractor performance that, according to the official, could have been avoided if more extensive research had been done prior to awarding the contract. According to the contracting officer for the subsequent contract, a requirement was added for site visits to determine if potential contractors could provide what was needed. However, a program manager for this program told us that this lesson learned was not documented, and the program manager had not been made aware of it. This program also did not conduct a post-implementation review.

In addition, one program’s post-implementation review identified a lack of ongoing lessons learned as an issue. The post-implementation review for an aircraft program in the Air and Marine Operations Office found that the office does not have a formal, documented lessons learned process and recommended that the program have a more formal process and procedure for capturing lessons learned throughout the acquisition life cycle.

We also found that CBP is not consistently analyzing lessons learned to determine root causes and identify appropriate actions to address them.

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<sup>20</sup>Sprint planning and cycles are elements of an Agile Framework for development. For more information on Agile frameworks, see GAO, *Agile Assessment Guide: Best Practices for Agile Adoption and Implementation*, [GAO-20-590G](#) (Washington, D.C.: Sept. 28, 2020).



Of the five post-implementation reviews that had been completed, we found that two post-implementation reviews did not clearly identify any root causes, and the other three post-implementation reviews varied in whether they identified root causes for the lessons learned.<sup>21</sup> For example, a lesson learned for one program stated “system performance data have not been tested/collected on a routine basis,” but did not include a root cause for why the data were not being tested regularly. At the same time, the post-implementation review made a recommendation based on this lesson learned, stating that the program should “test and collect system performance on sensor suite on a routine basis.” Making a recommendation based on the lesson learned is an overall positive step, but, without a root cause as to why system performance data were not collected, program officials could encounter challenges implementing the recommendation. In addition, our review of lessons learned in the post-implementation reviews found they do not consistently have corresponding recommendations on appropriate actions.

Lessons learned in the post-implementation reviews are also not being consistently validated to ensure the right lessons learned have been identified and to determine the scope of their applicability. Officials for one program told us that such validation occurred through the review and signature process for the post-implementation review, while officials for three of the programs told us that they manage validation through operational analyses or a lessons learned report. However, based on our review of the operational analyses and lessons learned report, we could not directly link the lessons learned in the post-implementation reviews to the information in the operational analyses and lessons learned report. For example, a post-implementation review for a surveillance towers program identified four lessons learned, which program officials initially told us they validated in a lessons learned report developed 5 years later. However, the lessons learned report did not include any of the lessons learned from the post-implementation review. A program official later told us that the program manager had separately validated the lessons learned in the post-implementation review and the lessons learned report, and that the report’s intention was to capture a larger list of lessons learned for future tower programs. This raises questions as to whether the lessons learned in the post-implementation review were validated as

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<sup>21</sup>CBP provided seven post-implementation reviews, but two did not contain lesson learned. Therefore, we assessed five post-implementation reviews for analyzing and validating lessons learned.

being the right lessons learned, given that they were not included in the lessons learned report.

We also found that the five programs that had completed post-implementation reviews did not consistently identify or assess if lessons learned could be applicable to and, thus, leveraged by other programs. Post-implementation review guidance states that programs should capture lessons learned information gained throughout the acquisition program so that the information can be retained for future use and leveraged by other organizations and programs. Three of the five post-implementation reviews that we reviewed identified lessons learned or findings that the programs determined could be applicable to the wider CBP audience or future acquisition programs.

DHS's post-implementation review guidance states that the reviews should include lessons learned collected during the life of a program. However, it does not clearly state that lessons learned should be analyzed and validated, and CBP's PLP Guide does not require acquisition programs to collect, analyze, and validate lessons learned on an ongoing basis. Leading practices of a lessons learned process that we and others have identified include collecting, analyzing, and validating information and knowledge on positive and negative experiences.<sup>22</sup> For example, the Center for Army Lessons Learned found that performing lessons learned practices throughout the course of an event, rather than just at the end, can help to ensure that lessons learned are captured as close to the learning opportunity as possible.<sup>23</sup>

In December 2022, an acquisition official from the Office of Acquisition told us that CBP began collecting lessons learned in a spreadsheet from program reviews or knowledge that the Office of Acquisition has gained from working with programs. However, this collection is in its early phases, and, as of December 2022, the spreadsheet identified lessons learned for one program. The Office of Acquisition official also told us that they have not yet addressed how to analyze and validate lessons learned, although they see the value in doing so. Updating guidance to

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<sup>22</sup>GAO-21-8, GAO-20-104, GAO-19-25, and GAO-12-901. See also Project Management Institute, Inc., *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*, Sixth Edition, 2017 and Project Management Institute, Inc., *Implementing Organizational Project Management: A Practice Guide*, First Edition, 2014. Center for Army Lessons Learned, *Establishing a Lessons Learned Program: Observations, Insights, and Lessons* (June 2011).

<sup>23</sup>Center for Army Lessons Learned, *Establishing a Lesson Learned Program*.

require that programs' lessons learned are consistently collected, analyzed, and validated will help to ensure that CBP has identified root causes and appropriate actions to address them, and determined the applicability of lessons learned to other programs. In the absence of guidance for programs to consistently collect, analyze, and validate their lessons learned, the Office of Acquisition lacks reasonable assurance its current efforts to collect lessons learned, or analyze and validate them in the future, will be complete.

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### CBP Does Not Consistently Archive and Share Lessons Learned

We found that CBP has taken some steps to share lessons learned but does not have a formal process or a repository in place to consistently archive and share lessons learned within and across different CBP offices. For example:

- An official from the Office of Acquisition told us that lessons learned from post-implementation reviews can be shared with the Office of Acquisition at acquisition decision event briefings. The official also said that staff in the Office of Acquisition informally work to keep track of challenges and issues programs are facing. If the staff realize a new program could have the same issue, the staff try to flag the issue and make the new program aware of it or suggest that the program managers communicate. However, the official noted that this process is not formal, and that it could be strengthened by better collecting and archiving lessons learned.
- The Air and Marine Operations Office typically communicates lessons learned verbally and through briefing materials at meetings.
- Two of the post-implementation reviews we reviewed included findings related to archiving and sharing lessons learned. One recommended that lessons learned be communicated externally, and another recommended that lessons learned should be captured at the office level for application to other programs.

Several program managers and user representatives told us that a centralized way to collect lessons learned would be helpful. For example, a program manager for one of our selected programs stated that having a central repository would allow program managers to study post-implementation reviews and other such documents to hopefully learn from mistakes and successes. A user representative from another program told us that a lessons learned repository would be beneficial for CBP.

That user representative stated that CBP currently maintains repositories of program-related files in a decentralized way, and that the greatest benefit of a central repository is that it would help reduce the amount of time necessary to familiarize key leaders with programs when they come on board.

CBP's PLP Guide and DHS's guidance requires that acquisition programs upload post-implementation reviews into DHS's Investment Evaluation, Submission, and Tracking (INVEST) system, and CBP's CAE told us that programs are meeting this requirement. However, DHS's PARM is moving away from using INVEST, and no longer requires that information in INVEST be validated by component CAEs. Further, apart from the CAE, none of the program managers or user representatives across CBP offices that we spoke with identified INVEST as a system where they could view lessons learned. At the same time, DHS is developing a new system that will become the authoritative system of record for its data and acquisition documents. DHS officials told us that, while they are not planning to require post-implementation review written reports to be uploaded into the new system, lessons learned documentation could be uploaded to the system and that anyone with access to the system will be able to view any documents in the system.

Apart from requiring post-implementation reviews to be uploaded into INVEST, CBP's PLP Guide does not otherwise require acquisition programs to archive and share lessons learned within and across offices. CBP's CAE told us that CBP has stopped collecting lessons learned over the years, in part, due to resource constraints, but stated that a lessons learned program would be helpful and that more work in this area is needed.

Leading practices of a lessons learned process we and others have identified include archiving and sharing information and knowledge on positive and negative experiences.<sup>24</sup> A central component of a successful lessons learned process is to ensure that lessons learned are stored in a logical, organized manner. In addition, The Standard for Program

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<sup>24</sup>GAO-21-8, GAO-20-104, GAO-19-25, and GAO-12-901. Project Management Institute, Inc., *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*, Sixth Edition, 2017 and Project Management Institute, Inc. *Implementing Organizational Project Management: A Practice Guide*, First Edition, 2014. Center for Army Lessons Learned, *Establishing a Lessons Learned Program: Observations, Insights, and Lessons* (June 2011).

Management, produced by the Program Management Institute, Inc., states that lessons learned should be readily accessible to any existing or future program to facilitate continuous learning and avoid similar pitfalls encountered in other programs.<sup>25</sup> We have also found that relying on person-to-person discussions to share lessons learned can be problematic because personal networks can dissolve—for example, through attrition—and informal information sharing does not ensure everyone is benefiting from the lessons that are gleaned.<sup>26</sup>

Without consistently collecting, analyzing, validating, archiving, and sharing lessons learned, CBP is at risk of missing the opportunity to apply lessons learned when planning and executing similar acquisition programs and to improve policies or processes for which lessons learned identified shortfalls. Through our discussions with program officials and reviewing lessons learned, we observed areas where programs faced similar issues. For example, at least three programs experienced challenges or collected lessons learned related to how they developed and expressed their operational requirements. If lessons learned for these programs were developed according to leading practices, CBP could be better informed to ensure either additional programs do not have similar challenges or to make informed decisions while considering how to strengthen its policies and guidance.

In addition, CBP's acquisition programs experience frequent staff turnover. For example, according to CBP officials, nine of the 10 programs that we reviewed had program manager turnover and five programs had contracting officer turnover. Collecting lessons learned informally and only verbally, and not archiving and consistently sharing them in an organized manner creates a risk of lessons learned being lost over time and reduces the likelihood that staff onboarding to new programs will have access to the lessons learned.

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## Conclusions

DHS spends billions of dollars annually on acquisition programs to support CBP's missions, but we and others have found that these programs cost more, take longer, and underperform relative to original

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<sup>25</sup>Program Management Institute, Inc. *The Standard for Program Management*, Fourth Edition (2017).

<sup>26</sup>[GAO-19-25](#) and [GAO-12-901](#).

estimates. CBP developed a portfolio management governance system centered on offices, where acquisition programs and staff support key agency missions. Yet, CBP has not updated its acquisition guidance to reflect some practices intended to help key stakeholders improve communication about acquisition programs and navigate CBP's acquisition governance process. Incorporating key practices in these areas can help ensure program staff turnover does not result in a loss of valuable institutional knowledge.

In addition, while CBP has a variety of methods in place to facilitate stakeholder collaboration, recent changes in DHS policy resulted in CBP's contracting officers decreased involvement in developing an acquisition program's overall strategy. Updating its acquisition guidance to define how CBP involves contracting officers in reviewing a program's acquisition strategy can help CBP ensure these officials have a comprehensive view of the procurements contributing to the acquisition programs they support, and that there is documentation to maintain institutional knowledge regarding a program's acquisition history.

Further, CBP has taken steps to collect lessons learned to avoid repeating past mistakes, which is a positive first step. However, CBP has opportunities to strengthen its lessons learned processes by updating its guidance. Ensuring that acquisition programs have clear guidance on how to incorporate leading lessons learned practices and that programs have access to lessons learned could help acquisition program officials more effectively plan and avoid pitfalls that other programs have experienced throughout the acquisition life cycle.

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## Recommendations for Executive Action

We are making four recommendations to CBP:

The CBP Commissioner should update acquisition guidance, such as the PLP Guide, to accurately reflect how key governance councils are conducting portfolio management. (Recommendation 1)

The CBP Commissioner should ensure that the Component Acquisition Executive updates guidance to require that contracting officers be included in the development of information summarized in DHS's Acquisition Strategy Document, to ensure contracting officers have knowledge of and are involved in developing program-level acquisition strategies. (Recommendation 2)

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The CBP Commissioner should ensure that the CBP Component Acquisition Executive updates acquisition guidance to require CBP to collect, analyze, and validate acquisition programs' lessons learned throughout the acquisition life cycle. (Recommendation 3)

The CBP Commissioner should ensure that the CBP Component Acquisition Executive develops a central repository for acquisition programs to archive and share lessons learned. (Recommendation 4)

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## Agency Comments and Our Evaluation

We provided a draft of this report to DHS for review and comment. In its written comments, reproduced in appendix III, DHS agreed with the second, third, and fourth recommendations and identified steps it plans to take to address them. DHS disagreed with the first recommendation, as discussed below. DHS also provided technical comments, which we incorporated as appropriate.

DHS did not agree with our first recommendation, that the CBP Commissioner should update acquisition guidance to reflect how key governance councils are conducting portfolio management. In its response, DHS stated that CBP's Office of Acquisition does not set priorities, and thus does not believe that acquisition guidance is the appropriate mechanism to address portfolio management. Nevertheless, DHS also stated that the CBP Office of Acquisition will work with user representatives and CBP leadership to revise its PLP Guide to reflect how CBP established the portfolio management process, including how key governance councils conduct, or should conduct, portfolio management. We believe the planned actions DHS outlined in its response potentially address the intent of our recommendation. We maintain that these updates are necessary to ensure that the information on CBP's governance structure—which, according to the PLP guide, supports acquisition decision-making throughout CBP—is up to date and reflective of current practices.

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

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If you or your staff have any questions about this report, please contact me at (202) 512-4841 or [makm@gao.gov](mailto:makm@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix IV.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Marie A. Mak". The signature is fluid and cursive, with a long horizontal stroke at the end.

Marie A. Mak  
Director, Contracting and National Security Acquisitions



# Appendix I: Selected U.S. Customs and Border Protection (CBP) Acquisition Programs

We selected a nongeneralizable sample of 10 CBP acquisition programs to review. We used four criteria to assist with our selection. Table 1 presents each of those ten programs, their associated selection criteria, and a brief program description.

**Table 1: Selection Criteria and Descriptions of Selected Customs and Border Protection (CBP) Acquisition Programs**

| Acquisition program               | Acquisition level <sup>a</sup> | Acquisition type <sup>b</sup> | CBP office                 | Experienced cost, schedule, or performance breach | Description of program   |
|-----------------------------------|--------------------------------|-------------------------------|----------------------------|---|--|
| Advanced Trade Analytics Platform | 3                              | IT                            | Office of Trade            | No  | Advanced Trade Analytics Platform will gather and integrate disparate sources of internal and external trade information to allow CBP users to access enhanced data sets, employ advanced analytics capabilities, visualize trade impacts, and manage workload through a unified case management system.   |
| Automated Commercial Environment  | 1                              | IT                            | Office of Trade            | Yes   | Automated Commercial Environment is developing software that is intended to electronically collect, process, and manage trade data submitted by the international trade community.   |
| Biometric Entry-Exit              | 1                              | IT                            | Office of Field Operations | Yes   | Biometric Entry-Exit's purpose is to deploy a biometric matching service that provides the capability to biometrically confirm the identity of in-scope travelers arriving and departing the U.S. at air, land, and seaports.  |
| Cross Border Tunnel Threat        | 1                              | IT/Mixed                      | U.S. Border Patrol         | No  | Cross Border Tunnel Threat is intended to help CBP identify, acquire, and implement operational services and technologies necessary to surveil areas along the U.S. land border for cross border tunnels. These technologies will help CBP address existing gaps in the prediction, detection, investigation, and remediation of cross border tunnels. |
| Integrated Fixed Towers           | 2                              | IT/Mixed                      | U.S. Border Patrol         | Yes   | Integrated Fixed Towers helps the Border Patrol detect, identify, and classify illegal entries in remote areas of U.S. borders.  |

**Appendix I: Selected U.S. Customs and Border Protection (CBP) Acquisition Programs**

| <b>Acquisition program</b>                | <b>Acquisition level<sup>a</sup></b> | <b>Acquisition type<sup>b</sup></b> | <b>CBP office</b>                    | <b>Experienced cost, schedule, or performance breach</b> | <b>Description of program</b>  |
|---|--------------------------------------|-------------------------------------|--------------------------------------|--|--|
| Marine Vessels-Coastal Interceptor Vessel | 3                                    | Non-IT                              | Air and Marine Operations            | Yes  | Marine interdiction agents use the Coastal Interceptor Vessel in coastal waters to combat maritime smuggling and defend the waterways along our nation's borders from acts of terrorism.   |
| Medium Lift Helicopter                    | 1                                    | Non-IT                              | Air and Marine Operations            | Yes  | CBP uses the Medium Lift Helicopter for law enforcement and border security operations, air and mobility support and transport, search and rescue, and other missions.   |
| Multi-Role Enforcement Aircraft           | 1                                    | Non-IT                              | Air and Marine Operations            | No   | Multi-Role Enforcement Aircraft are fixed-wing, multi-engine aircraft that can be configured to perform multiple missions, including maritime, air, and land interdiction as well as signals detection to support law enforcement.                                     |
| Non-Intrusive Inspection Systems          | 1                                    | IT                                  | Office of Field Operations           | No   | Non-Intrusive Inspection Systems provides an effective and nondestructive means to detect and prevent illegal entry and exit in the U.S. and to detect and prevent illicit materials from entering the U.S. while allowing the legitimate flow of travel and commerce. |
| Unified Immigration Portal                | 3                                    | IT                                  | Office of Information and Technology | No   | Unified Immigration Portal will connect relevant data across the immigration life cycle to enable a more complete understanding of an individual's immigration journey.  |

Source: GAO analysis of CBP information. | GAO-23-105472

<sup>a</sup>Level 1 acquisition programs have a life-cycle cost estimate of \$1 billion or more; Level 2 programs have life-cycle cost estimates from \$300 million to less than \$1 billion; and Level 3 programs have life-cycle cost estimates from \$50 million to less than \$300 million.

<sup>b</sup>Whether a capital asset program is for an IT acquisition as defined by DHS, a non-IT acquisition, or a mixed acquisition that includes IT and non-IT.

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## Appendix II: Objectives, Scope, and Methodology

We examined the extent to which (1) U.S. Customs and Border Protection's (CBP) acquisition policies and guidance identifies roles, responsibilities, and processes for portfolio management, (2) key stakeholders collaborate when planning select acquisition programs, and (3) CBP demonstrates lessons learned practices for its acquisition programs.

To determine the extent to which CBP's acquisition policies and guidance identifies roles, responsibilities, and processes for portfolio management, we collected and reviewed key acquisition policy and guidance documentation. These documents included the Department of Homeland Security's (DHS) Acquisition Management Instruction 102-01-001, CBP's Program Lifecycle Process Guide, as well as other relevant documents from across CBP offices, including charters, memos, and briefings, to identify how portfolio management for acquisition programs is conducted within CBP.

We interviewed officials across CBP to determine how the policies, guidance, and processes for portfolio management were put into practice by CBP officials. We conducted interviews with officials from the Office of Acquisition, including the Component Acquisition Executive, to determine the office's involvement in managing the entire CBP-wide acquisition portfolio. We interviewed five out of seven Portfolio Acquisition Executives to learn about their role in CBP offices and how it pertained to the oversight of acquisition portfolios within their respective offices. We chose the five Portfolio Acquisition Executives we interviewed because they oversaw at least one of our 10 selected acquisition programs, described below. In addition, we interviewed CBP officials from the various CBP governance councils to understand their roles in overseeing acquisition decisions and to document how governance councils were currently used.

We analyzed CBP's acquisition policy and guidance against criteria for improving internal controls and a leading portfolio management practice. We determined that the control environment component of *Standards for Internal Control in the Federal Government*, specifically the underlying principle that management should establish an organizational structure, assign responsibility, and delegate authority to achieve their objectives,

was significant to this objective, and evaluated CBP's acquisition guidance against this principle.<sup>1</sup> We also selected a leading practice on portfolio management to evaluate whether CBP's governance councils were clearly defined in acquisition guidance and empowered to make decisions.<sup>2</sup> We excluded other portfolio management leading practices because they were outside the scope of our review.

To address the extent to which CBP program officials collaborated with key stakeholders when planning select acquisition programs and the extent to which CBP documents and share lessons learned from acquisitions, we selected a nongeneralizable sample of 10 CBP acquisition programs to review using four criteria to assist with our selection. We first identified CBP's acquisition programs using the DHS January 2022 Master Acquisition Oversight List. Of the 24 CBP acquisition programs listed, we used the following four criteria to select the 10 acquisition programs.

6. **Whether or not a program experienced a cost or schedule breach:** We identified which acquisition programs breached their cost or schedule baselines from 2016 to 2020, as reported in past GAO annual assessments of DHS acquisition programs. We then placed them into two categories: programs with past breaches and programs that never breached.<sup>3</sup> We considered prior breaches as the primary

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<sup>1</sup>GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: Sept. 10, 2014).

<sup>2</sup>GAO, *Homeland Security: DHS Requires More Disciplined Investment Management to Help Meet Mission Needs*, [GAO-12-833](#) (Washington, D.C.: Sept. 18, 2012) and *Best Practices: An Integrated Portfolio Management Approach to Weapon System Investments Could Improve DOD's Acquisition Outcomes*, [GAO-07-388](#) (Washington, D.C.: Mar. 30, 2007).

<sup>3</sup>If a program fails to meet any schedule, cost, or performance threshold approved in the acquisition program baseline, it is considered to be in breach. An acquisition program baseline establishes how the system being acquired will perform, when it will be delivered, and what it will cost. GAO, *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); *Homeland Security Acquisitions: Leveraging Programs' Results Could Further DHS's Progress to Improve Portfolio Management*, [GAO-18-339SP](#) (Washington, D.C.: May 17, 2018); *Homeland Security Acquisitions: Outcomes Have Improved but Actions Needed to Enhance Oversight of Schedule Goals*, [GAO-20-170SP](#) (Washington, D.C.: Dec. 19, 2019); and *DHS Annual Assessment: Most Acquisition Programs Are Meeting Goals but Data Provided to Congress Lacks Context Needed For Effective Oversight*, [GAO-21-175](#) (Washington, D.C.: Jan. 19, 2021).

indicator and chose five programs with past breaches; and five programs that were meeting their cost, schedule, and performance baselines. As level 3 CBP programs were not reviewed in GAO annual assessments of DHS acquisition programs, we requested from CBP a list of all reported breaches of level 3 programs.

7. **The level of acquisition, as defined by DHS acquisition policy (Level 1, 2, or 3):** We included more level 1 programs in the selection than level 2 or 3 programs for three related reasons: (1) level 1 programs include higher amounts of funding (\$1 billion or more) and require more complex program management; (2) level 1 programs represent the higher proportion of programs that breached relative to level 2 and 3 programs; and (3) we learned that certain level 3 programs do not require acquisition plans, leaving those exempt programs outside of our selection.<sup>4</sup>
8. **The CBP end user office to receive the acquisition product:** As CBP acquisitions provide different products to CBP offices due to their different missions, we chose acquisition programs from five out of the six CBP offices.
9. **The type of acquisition product being delivered (IT, Non-IT, Mixed):** CBP further categorizes its acquisition programs based on whether they are providing products that are solely IT, non-IT, or a mixture of both. We selected a variety of programs based on these different types of acquisition products being delivered.

After applying all four selection criteria to the Major Acquisition Oversight List, we selected 10 CBP acquisition programs. See appendix I for a table presenting the systems included in our review, along with their associated selection criteria.

To determine what stakeholders should be involved in collaborating over acquisition planning, we reviewed DHS and CBP's acquisition management policies and guidance, including the DHS Acquisition Management Directive 102-01, the DHS Acquisition Management Instruction 102-01-001, the DHS Acquisition Manual, the CBP Program Lifecycle Process Guide, and the CBP Acquisition Documentation Signature Guide and Templates. To further understand CBP and DHS's policies and guidance on acquisition planning, we interviewed officials with DHS's Office of the Chief Procurement Officer and DHS's Office of

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<sup>4</sup>Level 1 acquisition programs have life-cycle cost estimates of \$1 billion or more; Level 2 acquisition programs have life-cycle cost estimates between \$300 million and less than \$1 billion; and Level 3 acquisition programs have life-cycle cost estimates less than \$300 million.

Program Accountability and Risk Management as well as CBP's  
Component Acquisition Executive.

To determine the extent to which program officials were collaborating with other key stakeholders, we reviewed program documentation, such as acquisition plans, requirements documents, program baselines, decision memos, briefing slides, and meeting minutes for our selected programs. We also interviewed the program manager, user representative, and contracting officer for each of our selected programs to discuss the extent to which collaboration occurred during acquisition planning. We then compared CBP's collaboration efforts against leading practices for collaboration we have identified in our prior work.<sup>5</sup> Specifically, we compared our findings from this area to the leading collaboration practice that states stakeholders should include all relevant participants in collaboration efforts, ensuring that all participants have the right knowledge, skills, and abilities to help resolve challenges. We excluded other collaboration leading practices as they were outside the scope of our review.

To determine the extent to which CBP demonstrated lessons learned leading practices identified by GAO and others when executing acquisition programs, we compared CBP's activities related to lessons learned for acquisition programs against the five leading practices identified in our prior work to determine whether CBP consistently demonstrated these practices. We used the leading practices for lessons learned that we discussed in prior GAO reports and those identified by

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<sup>5</sup>GAO, *Managing for Results: Key Considerations for Implementing Interagency Collaborative Mechanisms*, [GAO-12-1022](#) (Washington, D.C.: Sept. 27, 2012).

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the Center for Army Lessons Learned and Project Management Institute.<sup>6</sup> To identify CBP and DHS's requirements for lessons learned, we reviewed DHS and CBP's acquisition policy and guidance, including DHS's Post Implementation Review Guidance for Acquisition Programs and Acquisition Management Instruction 102-01-001, as well as CBP's Program Lifecycle Process Guide.

To assess the extent to which CBP is conducting lessons learned for acquisition programs, we requested and reviewed CBP's lessons learned documentation for acquisition programs, including post-implementation reviews and other documented lessons learned for our selected programs. We also reviewed acquisition program documents for our selected programs, such as acquisition program baselines, briefings, and breach memos for the ten acquisition programs to identify program challenges and where potential lessons learned could be gleaned. We interviewed program managers, contracting officers, and user representatives for our selected programs about their experiences with lessons learned, as well as officials in the Office of Acquisition. We then compared CBP's lessons learned processes to the lessons learned leading practices to determine the extent to which CBP is demonstrating these practices.

We conducted this performance audit from October 2021 to April 2023 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

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<sup>6</sup>GAO, *Army Modernization: Army Should Improve Use of Alternative Agreements and Approaches by Enhancing Oversight and Communication of Lessons Learned*, [GAO-21-8](#) (Washington, D.C.: Oct. 1, 2020); *DOD Utilities Privatization: Improved Data Collection and Lessons Learned Archive Could Help Reduce Time to Award Contracts*, [GAO-20-104](#) (Washington, D.C.: Apr. 2, 2020); *Project Management: DOE and NNSA Should Improve Their Lessons-Learned Process for Capital Asset Projects*, [GAO-19-25](#) (Washington, D.C.: Dec. 21, 2018); and *Federal Real Property Security: Interagency Security Committee Should Implement a Lessons-Learned Process*, [GAO-12-901](#) (Washington, D.C.: Sept. 10, 2012). [GAO-19-25](#) identified some lessons-learned practices from reports by both the Project Management Institute and the Department of the Army, Combined Arms Center, Center for Army Lessons Learned. Project Management Institute, Inc. *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*, Sixth Edition (2017); Project Management Institute, Inc. *Implementing Organizational Project Management: A Practice Guide*, First Edition (2014); and Center for Army Lessons Learned, *Establishing a Lessons Learned Program: Observations, Insights, and Lessons* (Fort Leavenworth, KS: June 2011).

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**Appendix II: Objectives, Scope, and  
Methodology**

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the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.



# Appendix III: Comments from the Department of Homeland Security

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



**Homeland  
Security**

April 3, 2023

Marie A. Mak  
Director, Contracting & National Security Acquisitions  
U.S. Government Accountability Office  
441 G Street, NW  
Washington, DC 20548

Re: Management Response to Draft Report GAO-23-105472, "CUSTOMS AND  
BORDER PROTECTION: Actions Needed to Enhance Acquisition Management  
and Knowledge Sharing"

Dear Ms. Mak:

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

DHS leadership is pleased to note GAO's positive recognition of the strides the DHS acquisition community has made strengthening its oversight and management of acquisition programs, including the implementation of practices to improve acquisition governance within U.S. Customs and Border Protection (CBP), such as adjusting the responsibilities of CBP governance councils in 2020 to provide greater transparency for the decision-making process and delegation of strategic decisions to the proper level. GAO also recognized that CBP leadership recently initiated an independent assessment of CBP's acquisition procedures and governance structures, which demonstrates CBP's commitment to improving acquisition governance and the management of the entire CBP-wide acquisition portfolio. DHS remains committed to supporting efforts to best manage the risks acquisition programs face.

The draft report contained four recommendations for CBP, including one with which the Department non-concurs (Recommendation 1) and three with which it concurs (Recommendations 2-4). Enclosed find our detailed response to each recommendation. DHS previously submitted technical comments addressing several accuracy, contextual, and other issues under a separate cover for GAO's consideration.

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**Appendix III: Comments from the Department  
of Homeland Security**

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

Sincerely,

JIM H CRUMPACKER  Digitally signed by JIM H  
CRUMPACKER  
Date: 2023.04.03 11:18:30 -04'00'

JIM H. CRUMPACKER, CIA, CFE  
Director  
Departmental GAO-OIG Liaison Office

Enclosure

**Enclosure: Management Response to Recommendations  
Contained in GAO-23-105472**

GAO recommended that the CBP Commissioner:

**Recommendation 1:** Update acquisition guidance, such as the PLP [Program Lifecycle Process] Guide, to accurately reflect how key governance councils are conducting portfolio management.

**Response:** Non-concur. The CBP Office of Acquisition (OA) does not set priorities and does not agree that acquisition guidance is the appropriate mechanism to address portfolio management, but does support priorities as determined by appropriate corporate leadership—regardless of how those priorities are established (i.e., whether through portfolio management or some other means). As such, in consultation with CBP’s lead business authorities and component leadership, who are better situated to discuss portfolio management, OA will revise the PLP accordingly to reflect how CBP established the portfolio management process, including how key governance councils conduct—or should conduct—portfolio management. Estimated completion date (ECD): April 30, 2024.

**Recommendation 2:** Ensure that the Component Acquisition Executive [CAE] updates guidance to require that contracting officers be included in the development of information summarized in DHS’s Acquisition Strategy Document, to ensure contracting officers have knowledge of and are involved in developing program level acquisition strategies.

**Response:** Concur. CBP’s CAE will update CBP Directive 5220-041A, “U.S. Customs and Border Protection Acquisition Management,” dated February 7, 2019, and HB 5225-00, CBP “Program Lifecycle Process (PLP) Guide,” dated September 2021, to ensure contracting officers have knowledge of, and are involved in, developing program level acquisition strategies. ECD: December 29, 2023.

**Recommendation 3:** Ensure that the CBP CAE updates acquisition guidance to require CBP to collect, analyze, and validate acquisition programs’ lessons learned throughout the acquisition life cycle.

**Response:** Concur. CBP’s CAE will update CBP Directive 5220-041A and HB 5225-00 to ensure CBP collects, analyze, and validate acquisition programs’ lessons learned throughout the acquisition life cycle. ECD: December 29, 2023.

**Recommendation 4:** Ensure that the CBP CAE develops a central repository for acquisition programs to archive and share lessons learned.

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**Appendix III: Comments from the Department  
of Homeland Security**

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**Response:** Concur. CBP OA regularly conducts portfolio reviews which provide the opportunity for acquisition program managers across CBP to present the status of their programs to the principal acquisition leaders within CBP, to include the CAE, Head/Deputy Head of the Contracting Activity, and the Chief Information Officer. Leadership from the DHS Management Directorate, Office of Program Accountability and Risk Management also attend CBP portfolio reviews to maintain insight into CBP programs. During these meetings, the acquisition program managers share the status of their programs, including information that could be useful to the wider acquisition community, such as any lessons learned.

In addition to the regularly scheduled portfolio reviews, CAE staff will use a spreadsheet to track and promulgate lessons learned. This will be followed by an assessment to see if a different solution is needed longer term. ECD: December 29, 2023.

# Text for Appendix III: Comments from the Department of Homeland Security

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

April 3, 2023

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Director, Contracting & National Security Acquisitions  
U.S. Government Accountability Office  
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JIM H. CRUMPACKER, CIA, CFE

Director

Departmental GAO-OIG Liaison Office

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**Response:** Concur. CBP's CAE will update CBP Directive 5220-041A and HB 5225-00 to ensure CBP collects, analyze, and validate acquisition programs' lessons learned throughout the acquisition life cycle. ECD: December 29, 2023.

**Recommendation 4:** Ensure that the CBP CAE develops a central repository for acquisition programs to archive and share lessons learned.

**Response:** Concur. CBP OA regularly conducts portfolio reviews which provide the opportunity for acquisition program managers across CBP to present the status of their programs to the principal acquisition leaders within CBP, to include the CAE, Head/Deputy Head of the Contracting Activity, and the Chief Information Officer. Leadership from the DHS Management Directorate, Office of Program Accountability and Risk Management also attend CBP portfolio reviews to maintain insight into CBP programs. During these meetings, the acquisition program managers share the status of their programs, including information that could be useful to the wider acquisition community, such as any lessons learned.

In addition to the regularly scheduled portfolio reviews, CAE staff will use a spreadsheet to track and promulgate lessons learned. This will be followed by an assessment to see if a different solution is needed longer term. ECD: December 29, 2023.

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## Appendix IV: GAO Contact and Staff Acknowledgments

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### GAO Contact:

Marie A. Mak, (202) 512-4841 or [makm@gao.gov](mailto:makm@gao.gov).

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### Staff Acknowledgments:

In addition to the contact named above, Meghan C. Perez, Assistant Director; Nathan A. Tranquilli; Marcus C. Ferguson, Analyst-in-Charge; Pete Anderson; James R. Cora; Matthew L. McKnight; Anne Louise Taylor; Miranda J. Wickham; and Robin M. Wilson made key contributions to this report.



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## Related GAO Products

*Customs and Border Protection: Innovation Team Has Opportunities to Mature Operations and Improve Performance.* [GAO-22-105984](#). Washington, D.C.: September 29, 2022.

*DHS Annual Assessment: Most Acquisition Programs Are Meeting Goals Even with Some Management Issues and COVID-19 Delays.* [GAO-22-104684](#). Washington, D.C.: March 8, 2022.

*DHS Annual Assessment: Most Acquisition Programs Are Meeting Goals, but Data Provided to Congress Lacks Context Needed for Effective Oversight.* [GAO-21-175](#). Washington, D.C.: January 19, 2021.

*Homeland Security Acquisitions: DHS Has Opportunities to Improve Its Component Acquisition Oversight.* [GAO-21-77](#). Washington, D.C.: October 20, 2020.

*Agile Assessment Guide: Best Practices for Agile Adoption and Implementation.* [GAO-20-590G](#). Washington, D.C.: September 28, 2020.

*Facial Recognition: CBP and TSA Are Taking Steps to Implement Programs, but CBP Should Address Privacy and System Performance Issues.* [GAO-20-568](#). Washington, D.C.: September 2, 2020.

*Homeland Security Acquisitions: Outcomes Have Improved, but Actions Needed to Enhance Oversight of Schedule Goals.* [GAO-20-170SP](#). Washington, D.C.: December 19, 2019.

*Project Management: DOE and NNSA Should Improve Their Lessons-Learned Process for Capital Asset Projects.* [GAO-19-25](#). Washington, D.C.: December 21, 2018.

*Homeland Security Acquisitions: Leveraging Programs' Results Could Further DHS's Progress to Improve Portfolio Management.* [GAO-18-339SP](#). Washington, D.C.: May 17, 2018.

*Homeland Security Acquisitions: Earlier Requirements Definition and Clear Documentation of Key Decisions Could Facilitate Ongoing Progress.* [GAO-17-346SP](#). Washington, D.C.: April 6, 2017.

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**Related GAO Products**

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*Standards for Internal Control in the Federal Government.* [GAO-14-704G](#). Washington, D.C.: September 10, 2014.

*Managing for Results: Key Considerations for Implementing Interagency Collaborative Mechanisms.* [GAO-12-1022](#). Washington, D.C.: September 27, 2012.

*Homeland Security: DHS Requires More Disciplined Investment Management to Help Meet Mission Needs.* [GAO-12-833](#). Washington, D.C.: September 18, 2012.

*Federal Real Property Security: Interagency Security Committee Should Implement a Lessons-Learned Process.* [GAO-12-901](#). Washington, D.C.: September 10, 2012.

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