

# Financial Management Systems: DHS Should Improve Plans for Addressing Its High-Risk Area and Guidance for Independent Reviews

GAO-24-106895

Q&amp;A Report to Congressional Requesters

July 30, 2024

## Why This Matters

Since the Department of Homeland Security's (DHS) creation in 2003, it has faced significant internal control and financial management systems deficiencies. We added DHS to our High Risk List to help focus greater attention on these issues in 2003. To address its financial management issues, DHS is executing a multiyear plan to implement new financial management systems at its components, including U.S. Coast Guard, Federal Emergency Management Agency (FEMA), and U.S. Immigration and Customs Enforcement (ICE).

In our 2023 high-risk update, we reported that much work remains to be done to modernize financial management systems, business processes, and related internal controls at these components. Without integrated financial management systems that have fully effective controls, DHS increases its risk that financial information will be inconsistent, incomplete, or incorrect.

Given DHS's long-standing financial management systems issues, we were asked to provide oversight of the agency's financial systems modernization (FSM) efforts. We are providing an update on our assessment of DHS's efforts, including its strategies for addressing its high-risk financial management area, as well as guidance on cost and schedule estimation and incorporating independent verification and validation (IV&V). This report is one in a series of reports addressing DHS's efforts to modernize its financial management systems.

## Key Takeaways

- While DHS has multiple strategy documents, they collectively do not constitute a comprehensive strategy for addressing its high-risk financial management area. We recommend that DHS fully incorporate performance management leading practices in its high-risk financial management area strategies and guidance.
- DHS's cost and schedule estimation guidance generally incorporates GAO's leading practices.
- DHS's systems engineering guidance does not fully incorporate all key elements of effective IV&V. We recommend that DHS fully incorporate these key elements in its systems engineering guidance.

## Why is DHS's financial management on GAO's High Risk List?

Since DHS's creation, significant deficiencies in its internal control and financial management systems have hampered the agency's ability to effectively manage its financial operations. We identified DHS's financial management as being at high risk—that is, vulnerable to fraud, waste, abuse, and mismanagement or in need of transformation—in 2003.<sup>1</sup> There are two key actions that DHS needs to take to resolve this high-risk area: (1) modernizing its financial management systems and (2) obtaining an unmodified (clean) opinion on internal controls over

financial reporting (ICOFR).<sup>2</sup> Starting in fiscal years after 2005 the Department of Homeland Security Financial Accountability Act required DHS to annually obtain an audit opinion on its ICOFR, making DHS the only Chief Financial Officers Act agency explicitly required by law to do so.<sup>3</sup>

DHS has made progress in addressing its high-risk financial management area by sustaining certain outcomes. For example, the agency has received a clean audit opinion on its financial statements for 11 consecutive years—fiscal years 2013 through 2023. However, DHS’s auditors reported adverse opinions on ICOFR for the same 11-year period because of several material weaknesses in internal control.<sup>4</sup> To obtain a clean ICOFR opinion, DHS needs to reduce these weaknesses, including two that are long-standing—one in its financial reporting and the other in its IT systems and controls.

By modernizing its financial management systems, DHS can go a long way toward addressing its long-standing material weaknesses. However, the agency has not yet accomplished this. We have reported on DHS’s unsuccessful modernization attempts, which include the Electronically Managing Enterprise Resources for Government Effectiveness and Efficiency program (fiscal years 2004-2006); the Transformation and Systems Consolidation effort (fiscal years 2007-2011); and its most recent effort, FSM (beginning in fiscal year 2014).<sup>5</sup>

**What is DHS doing to address its high-risk financial management area?**

As required by the National Defense Authorization Act for Fiscal Year 2017, DHS has been reporting to GAO on a biannual basis the status of its efforts to address its high-risk area.<sup>6</sup> DHS must demonstrate measurable, sustained progress on implementing its corrective action plans until GAO (1) determines that the agency has sufficiently addressed the area, (2) removes the area from its High Risk List, and (3) submits written notification to the appropriate congressional committees. To comply with the act, DHS prepares an *Integrated Strategy for High-Risk Management* to fulfill its reporting requirement and serve as an outline of its strategy for addressing its high-risk financial management area.

In 2010, we identified (and DHS agreed with) 30 measurable actions or outcomes that the agency could take to address its high-risk management areas.<sup>7</sup> Of these 30 outcomes, eight relate to financial management. Of these eight, DHS has fully addressed two: (1) obtaining a clean audit opinion on its financial statements and (2) doing so for 2 consecutive years (see table 1). To address the remaining six outcomes, DHS is acquiring and implementing modern financial management systems through three acquisition programs: FSM-Trio, FSM-FEMA, and FSM-Cube.<sup>8</sup>

**Table 1: Status of the Department of Homeland Security’s (DHS) Efforts to Address Its High-Risk Financial Management Outcomes (as of April 2024)**

DHS financial management action and outcome number	GAO assessment of high-risk financial management actions and outcomes
(1) Obtain an unmodified (clean) audit opinion on all financial statements.	<b>Fully addressed.</b> DHS obtained its first clean opinion on its fiscal year 2013 financial statements.
(2) Obtain an unmodified (clean) audit opinion on internal controls over financial reporting (ICOFR) to demonstrate effective internal controls.	<b>Partially addressed.</b> DHS is executing a multiyear plan to achieve a clean ICOFR opinion, which includes completing its financial systems modernization (FSM) efforts to reduce one of the outstanding areas of material weaknesses to a significant deficiency. Because of delays for the FSM efforts for both the Federal Emergency Management Agency (FEMA) and U.S. Immigration and Customs Enforcement (ICE), and the re-baselining efforts for the U.S. Coast Guard, DHS’s current target date for obtaining a clean ICOFR opinion is fiscal year 2027.

DHS financial management action and outcome number	GAO assessment of high-risk financial management actions and outcomes
(3) Sustain unmodified opinions on financial statements for at least 2 consecutive years.	<b>Fully addressed.</b> DHS has received an unmodified (clean) audit opinion on its financial statements for 11 consecutive years—fiscal years 2013 through 2023.
(4) Sustain clean ICOFR opinions for at least 2 consecutive years.	<b>Initiated.</b> DHS stated that it remains focused on obtaining its first ICOFR opinion for fiscal year 2027 and the second for fiscal year 2028.
(5) Achieve substantial compliance with the Federal Financial Management Improvement Act of 1996 (FFMIA).	<b>Partially addressed.</b> Since inception, DHS has been noncompliant with FFMIA. The new estimated date for achieving compliance is fiscal year 2028.
(6) Effectively manage the implementation of a financial management system solution or modernization of existing systems for the U.S. Coast Guard.	<b>Partially addressed.</b> Coast Guard implemented its new system in December 2021. However, DHS declared a breach of program baselines, postponing the declaration of full operational capability. According to DHS, its re-baselining efforts are ongoing, and it expects to declare full operational capability in August 2025.
(7) Effectively manage the implementation of a financial management system solution or modernization of existing systems for FEMA.	<b>Initiated.</b> DHS awarded a contract for the software license in mid-November 2022 and awarded a contract for system integration services in September 2023. Multiple bid protests have delayed the FEMA implementation date to the second quarter of fiscal year 2026.
(8) Effectively manage the implementation of a financial management system solution or modernization of existing systems for ICE.	<b>Initiated.</b> The implementation date for ICE and its component customers has been delayed and new dates will not be available until after the system integration contract has been awarded and FSM-Cube completes discovery phase activities.

Fully addressed: Outcome is fully addressed.

Mostly addressed: Progress is significant, and a small amount of work remains.

Partially addressed: Progress is measurable, but significant work remains.

Initiated: Activities have been initiated to address the outcome, but it is too early to report progress.

Not initiated: Activities have not been initiated to address this outcome.

Source: GAO analysis of DHS data. | GAO-24-106895

## Does DHS have a comprehensive strategy for addressing its high-risk area?

No. DHS does not have a comprehensive strategy at the departmental or operational level that fully incorporates leading practices for performance management and addresses its high-risk financial management area. For example, the strategic documentation we reviewed does not identify the resources needed to achieve DHS's goals.

DHS's *Integrated Strategy for High-Risk Management* reports the agency's progress in addressing its high-risk IT and financial management outcomes and broadly outlines its strategy for doing so.<sup>9</sup> However, it does not fully incorporate leading practices for performance management that would provide direction and guidance for staff at the operational level. Instead, DHS has developed individual strategy and guidance documents for managing its efforts at a departmental or an operational level to modernize its financial management systems and obtain a clean ICOFR opinion. The documents DHS provided us each have a different purpose and contain varying levels of detail, and some were more focused on DHS achieving its goals for FSM and obtaining a clean ICOFR opinion than others.

These multiple documents collectively do not constitute a comprehensive strategy for addressing the agency's high-risk financial management area, nor do they fully incorporate leading practices. In *GAO's Evidence-Based Policymaking: Practices to Help Manage and Assess the Results of Federal Efforts*, we identified 13 leading practices for performance management with key actions to

implement the practices.<sup>10</sup> These leading practices align with and support our criteria for removal of a program or area from GAO’s High Risk List.<sup>11</sup>

We reviewed several documents containing strategies and guidance related to DHS’s FSM efforts and evaluated these against the leading practices for performance management. We determined that the activities incorporated in DHS’s key FSM departmental and operational strategies fully met nine and partially met four of GAO’s 13 leading practices for performance management (see table 2).

**Table 2: GAO’s Assessment of DHS’s Strategies for Managing Its FSM Efforts**

<b>Leading practice</b>	<b>GAO assessment of DHS’s strategy documents for FSM efforts</b>
Define goals	<b>Fully met.</b> Defines both long- and short-term goals for activities and aligns goals across organizational levels.
Identify strategies and resources	<b>Partially met.</b> Identifies strategies for each goal and discusses coordination with both internal and external organizations. However, documentation does not identify the resources needed to achieve DHS’s goals.
Assess the environment	<b>Fully met.</b> Identifies internal and external factors that could affect goal achievement and defines strategies to address those risk factors.
Assess the extent to which existing evidence addresses key questions <sup>a</sup>	<b>Partially met.</b> Identifies relevant internal and external sources of evidence and discusses assessing the coverage and quality of the evidence. However, documentation does not identify key questions to address.
Identify and prioritize new evidence needs	<b>Partially met.</b> Discusses, in some documentation, the identification of new evidence needs. However, none of the documentation discusses prioritization or how to fulfill those evidence needs.
Generate new evidence	<b>Fully met.</b> Generally provides a discussion of developing an evidence-building implementation plan and ensuring that evidence meets quality standards.
Use evidence to learn	<b>Fully met.</b> Generally discusses assessing progress toward goals and developing an understanding of why the results were achieved.
Apply learning to decision-making	<b>Partially met.</b> Discusses processes that use evidence to inform management decisions and identify if any additional evidence is needed to further inform decisions. However, the documentation does not discuss these items at the detailed and key operational level.
Communicate learning and results	<b>Fully met.</b> Includes communication of relevant information internally and externally, and tailors this information to meet stakeholders’ needs.
Demonstrate leadership commitment	<b>Fully met.</b> Includes involvement of senior leaders and coordination within the department.
Involve stakeholders	<b>Fully met.</b> Includes discussion of how early and often stakeholders are engaged throughout the process and how this engagement is tailored based on their needs and purpose.
Promote accountability	<b>Fully met.</b> Generally assigns responsibilities at the high level and holds officials accountable for learning and results.
Build and maintain capacity	<b>Fully met.</b> Generally identifies actions to maintain or enhance capacity and discusses assessing the sufficiency of existing capacity at the high level.

DHS: Department of Homeland Security

FSM: Financial Systems Modernization

Fully met: The documentation provided evidence that sufficiently satisfied all aspects of the criterion.

Partially met: The documentation provided evidence that sufficiently satisfied some, but not all, aspects of the criterion.

Not met: The documentation provided did not satisfy any aspects of the criterion.

Source: GAO analysis of DHS documents against leading practices for performance management. | GAO-24-106895

<sup>a</sup>Evidence is the available body of facts or information indicating whether a belief or proposition is true or valid. Evidence can consist of quantitative or qualitative information and may be derived from a variety of sources. To help ensure that evidence is useful and ultimately used, organizations can express decision-maker and stakeholder needs as key questions that when addressed with relevant evidence provide valuable insights.

Further, we reviewed several documents containing strategies and guidance related to DHS’s efforts to obtain a clean ICOFR opinion and evaluated these against the leading practices for performance management. We determined that the activities incorporated in DHS’s key ICOFR departmental and operational strategies fully met nine and partially met four of GAO’s 13 leading practices for performance management (see table 3).

**Table 3: GAO’s Assessment of DHS’s Strategies for Obtaining a Clean ICOFR Opinion**

<b>Leading practice</b>	<b>GAO assessment of DHS’s strategy documents for obtaining a clean ICOFR opinion</b>
Define goals	<b>Fully met.</b> Defines both long- and short-term goals for activities and aligns goals across organizational levels.
Identify strategies and resources	<b>Partially met.</b> Identifies strategies for each goal, as well as coordination with organizations, programs, and activities that contribute to each goal. However, documentation does not identify the resources needed to achieve each goal.
Assess the environment	<b>Fully met.</b> Identifies internal and external factors that could affect goal achievement and defines strategies to address those risk factors.
Assess the extent to which existing evidence addresses key questions <sup>a</sup>	<b>Fully met.</b> Identifies key questions to address, identifies relevant internal and external sources of evidence, and assesses the coverage and quality of the evidence.
Identify and prioritize new evidence needs	<b>Fully met.</b> Identifies new evidence needs and prioritizes how and when to fulfill those needs.
Generate new evidence	<b>Fully met.</b> Discusses evidence building and how new evidence will meet quality standards.
Use evidence to learn	<b>Fully met.</b> Discusses assessment of progress toward goals and develops an understanding of the results achieved.
Apply learning to decision-making	<b>Fully met.</b> Discusses the use of evidence to inform management decisions, and identifies additional evidence needs to further inform decisions.
Communicate learning and results	<b>Fully met.</b> Communicates relevant information both internally and externally, and tailors the information to meet stakeholders’ needs.
Demonstrate leadership commitment	<b>Fully met.</b> Discusses the involvement of senior leaders and coordinates and integrates performance management activities.
Involve stakeholders	<b>Partially met.</b> Discusses the engagement of stakeholders early and often. However, the documentation generally does not discuss the tailoring of such engagement based on stakeholders’ needs and purposes.
Promote accountability	<b>Partially met.</b> Assigns responsibilities at a high level. However, the documentation does not discuss if or how individuals are held accountable for learning and results.
Build and maintain capacity	<b>Partially met.</b> Does not fully discuss assessing existing capacity or identify actions to maintain or enhance capacity.

DHS: Department of Homeland Security

ICOFR: internal controls over financial reporting

Fully met: The documentation provided evidence that sufficiently satisfied all aspects of the criterion.

Partially met: The documentation provided evidence that sufficiently satisfied some, but not all, aspects of the criterion.

Not met: The documentation provided did not satisfy any aspects of the criterion.

Source: GAO analysis of DHS documents against leading practices for performance management. | GAO-24-106895

<sup>a</sup>Evidence is the available body of facts or information indicating whether a belief or proposition is true or valid. Evidence can consist of quantitative or qualitative information and may be derived from a variety of sources. To help ensure that evidence is useful and ultimately used, organizations can express decision-maker and stakeholder needs as key questions that when addressed with relevant evidence provide valuable insights.

A comprehensive strategy that fully incorporates GAO’s leading practices for performance management activities would help DHS effectively manage its efforts to address its high-risk financial management area. For example, such

leading practices would include identifying resources and capacity necessary for acquiring and implementing new systems at FEMA and ICE. Without a comprehensive strategy and guidance, DHS diminishes its ability to address challenges or set priorities that help to successfully implement its efforts.

**Why are reliable cost and schedule estimates beneficial?**

Reliable cost and schedule estimates are invaluable for any acquisition program, such as DHS’s FSM program. Managers rely on both estimates to evaluate trade-offs in a program’s cost, schedule, and scope. Together, reliable cost and schedule estimates increase the probability of a program being successful and achieving agency goals.

Cost estimates help program planners determine whether a program is feasible. They are the basis for establishing and defending budgets and developing performance measurement baselines. Cost estimates also help decision-makers evaluate resource requirements at program milestones and other important decision points. For example, cost estimates are integral to determining and communicating a realistic view of likely cost outcomes to develop, produce, operate, maintain, and dispose of a program.

Schedule estimates define when and for how long work will occur, as well as how each activity is related to the others. The program schedule estimate provides not only a road map for systematic project execution, but also a way to gauge progress, identify and resolve potential problems, and promote accountability at all levels of the program. Additionally, scheduling allows program managers to decide between possible sequences of activities, determine the flexibility of the schedule according to available resources, predict the consequences of managerial action or inaction, and develop contingency plans to mitigate risks.

Cost and schedule estimates are integrally related. A cost estimate cannot be considered credible if it does not account for the potential cost effects of falling behind schedule. Conversely, a well-planned schedule can help program managers develop reliable time-phased budgets and use funds effectively. Figure 1 provides a summary of the shared benefits of reliable cost and schedule estimates.

**Figure 1: Summary of Shared Benefits of Reliable Cost and Schedule Estimates**



Source: GAO. | GAO-24-106895

The success of an acquisition program also depends, in part, on appropriately designed guidance for preparing cost and schedule estimates. Such guidance provides a standard process for agency officials and contractors to follow, allowing them to develop reliable estimates that can be clearly traced, replicated, and updated.

**Does DHS have appropriately designed cost estimation guidance?**

Yes. DHS's *Financial Management Policy Manual* applies to its systems acquisition programs and contains guidance on cost estimating and analysis.<sup>12</sup> This guidance describes a process for developing a well-documented, comprehensive, accurate, and credible cost estimate. We found that the guidance is generally consistent with GAO's *Cost Estimating and Assessment Guide*, which presents leading practices in the context of a 12-step cost estimation process.<sup>13</sup> The process represents a consistent methodology based on industry and government best practices that can be used across the federal government to develop, manage, and evaluate program cost estimates.

We determined that the activities incorporated in DHS's cost estimation guidance fully met 10 and substantially met two of GAO's 12 steps of a reliable cost estimation process (see table 4).

**Table 4: GAO's Assessment of the Department of Homeland Security's (DHS) Guidance on the Cost Estimation Process**

Key step in cost estimation process	GAO assessment of DHS's agencywide cost estimation guidance
Define estimate's purpose	<b>Fully met.</b> Defines the purpose, scope, and level of detail required of the life cycle cost estimate.
Develop estimating plan	<b>Fully met.</b> Defines a plan of action and milestones for developing a cost estimate.
Define program	<b>Fully met.</b> Defines the program's technical and performance requirements.
Determine estimating structure	<b>Fully met.</b> Prescribes a standard work-breakdown structure for IT systems, ships, aircraft, facilities, and security systems.
Identify ground rules and assumptions	<b>Fully met.</b> Defines the program's ground rules and assumptions.
Obtain data	<b>Fully met.</b> Discusses different data sources and methods of data analysis and documentation.
Develop the point estimate	<b>Substantially met.</b> Defines the point estimate and describes various types of cost estimating techniques. However, does not require the completion of an independent cost estimate.
Conduct sensitivity analysis	<b>Fully met.</b> Defines sensitivity analysis and describes how it should be conducted.
Conduct risk and uncertainty analysis	<b>Substantially met.</b> Describes potential sources of uncertainty and how to analyze risks. However, does not require updating the risk assessment as program changes occur.
Document estimate	<b>Fully met.</b> States a program's estimate should be documented in sufficient detail.
Present estimate to management for approval	<b>Fully met.</b> Describes briefings to management and stresses their importance to the cost estimate approval process.
Update estimate to reflect actual costs and changes	<b>Fully met.</b> States that cost estimates should be updated at least annually to reflect actual life cycle costs.

Fully met: The documentation provided evidence that fully satisfied all aspects of the criterion.  
 Substantially met: The documentation provided evidence that satisfied most, but not all, aspects of the criterion.  
 Partially met: The documentation provided evidence that satisfied some, but not all, aspects of the criterion.  
 Minimally met: The documentation provided evidence that satisfied a small portion of the criterion.  
 Not met: The documentation provided evidence that did not satisfy any aspects of the criterion.

Source: GAO analysis of DHS documents against key steps in cost estimation process. | GAO-24-106895

**Does DHS have appropriately designed schedule estimation guidance?**

Yes. DHS's *Program Scheduling Handbook* applies to its systems acquisition programs and describes (1) scheduling-related leading practices that acquisition programs across the department should use; (2) common scheduling techniques, tools, and environments used in building reliable schedules; and (3) how schedules are reviewed prior to predetermined program milestones.<sup>14</sup> We found that this guidance is generally consistent with GAO's *Schedule Assessment Guide*, which presents 10 leading practices associated with developing high-quality and reliable schedules.<sup>15</sup> These leading practices represent standard criteria that managers and auditors can use to determine the extent to which agency programs and guidance meet industry scheduling standards.

We determined that the activities incorporated in DHS's schedule estimation guidance fully met six, substantially met three, and partially met one of GAO's 10 leading practices for developing schedule estimates (see table 5).

**Table 5: GAO's Assessment of the Department of Homeland Security's (DHS) Guidance on the Schedule Estimation Process**

Leading practice for developing schedule estimates	GAO assessment of DHS's agencywide schedule estimation guidance
Capture all activities	<b>Fully met.</b> States the schedule should include all activities necessary to accomplish the project's objectives.
Sequence all activities	<b>Substantially met.</b> Discusses sequencing of activities, but minimizes the risk related to many activities occurring before a major event.
Assign resources to all activities	<b>Partially met.</b> Discusses how a schedule should specify the resources needed to do the work and whether they are available when needed. However, assigning resources to activities is only discussed for programs with earned value management.
Establish duration of all activities	<b>Substantially met.</b> Establishes the importance of realistically estimating how long each activity should take. However, does not discuss the documentation of assumptions or methodologies used to estimate durations.
Verify that schedule can be traced horizontally and vertically	<b>Fully met.</b> States the schedule should link products and outcomes associated with other sequenced activities (horizontally traced) and contain data that are consistent between different schedule levels (vertically traced).
Confirm that critical path is valid	<b>Fully met.</b> Defines the sequence of activities that determine earliest program completion date.
Ensure reasonable total float	<b>Fully met.</b> Discusses how to determine and monitor the amount of time an activity can slip before the delay affects the program's estimated finish date (total float).
Conduct schedule risk analysis	<b>Fully met.</b> Discusses the process for developing, documenting, and updating the schedule risk analysis.
Update schedule using actual progress and logic	<b>Substantially met.</b> States that schedule updates should incorporate actual start and finish dates, logic, progress, and forecast adjustments for the remaining effort. However, does not discuss management review and approval of the updated schedule and archiving the schedule once it has been approved.
Maintain baseline schedule	<b>Fully met.</b> States that the baseline schedule should be established promptly to manage project scope, timelines, and required resources.

Fully met: The documentation provided evidence that fully satisfied all aspects of the criterion.

Substantially met: The documentation provided evidence that satisfied most, but not all, aspects of the criterion.

Partially met: The documentation provided evidence that satisfied some, but not all, aspects of the criterion.

Minimally met: The documentation provided evidence that satisfied a small portion of the criterion.

Not met: The documentation provided evidence that did not satisfy any aspects of the criterion.

Source: GAO analysis of DHS documents against schedule estimation leading practices. | GAO-24-106895

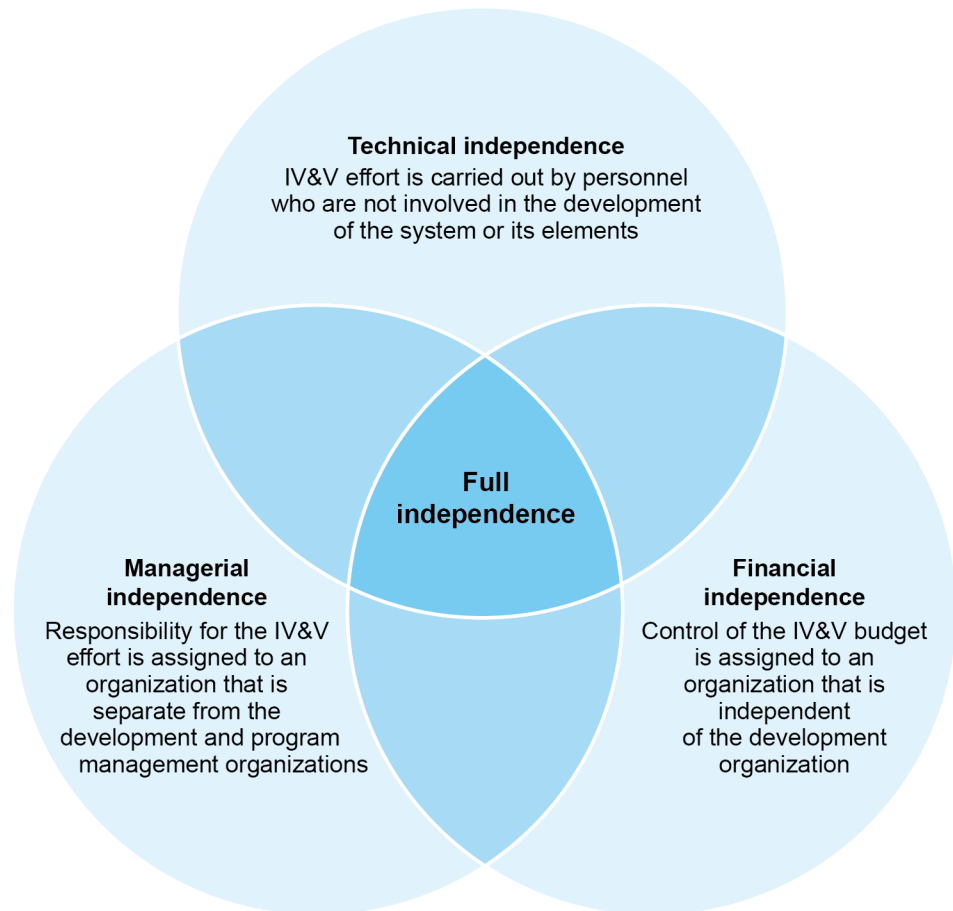


## What is IV&V?

The independent verification and validation (IV&V) process involves having an independent expert determine whether a system or product meets users' needs and fulfills its intended purpose. It is a way to manage the inherent risks of developing and acquiring systems. The IV&V process starts by proactively determining early in a program's life cycle what its risks are likely to be, and then identifying those that could be mitigated or lessened by performing additional reviews and quality assessments. Therefore, IV&V goes beyond the normal quality assurance and performance review activities performed during system development and acquisition.

Independence is a key aspect of IV&V's value to the systems acquisition process. To be considered fully independent, an IV&V effort must include three components of independence: technical, managerial, and financial (see fig. 2). Full independence is generally preferred for systems acquisitions that are high risk and critically important to an organization. To help ensure that IV&V's insights into a program's processes and associated work products are objective, independence from the development and program management effort is essential.

**Figure 2: Components of Independent Verification and Validation (IV&V) Independence**



Source: GAO analysis of leading practices. | GAO-24-106895

**Why is IV&V beneficial?** IV&V can provide management with an independent and objective assessment of a program's processes, products, and risks throughout its life cycle. IV&V activities can help ensure the quality of program deliverables, improving business and requirements analysis, software development, and system and integration

testing. They can also help management detect and correct problems earlier on in the acquisition process. All together, these added IV&V benefits can assist acquisition programs with meeting their performance, schedule, and budget goals.

We have long recognized the use of IV&V as a leading practice for federal agencies in acquiring programs that are complex, large scale, or high risk.<sup>16</sup> To fully realize the benefits of IV&V, organizations should adopt certain key elements of IV&V. Based on industry standards and leading practices from across the federal government, we previously identified 10 key elements for effective IV&V for large and complex system development and acquisition programs.<sup>17</sup> These 10 key elements fall under five areas: (1) establish IV&V decision criteria and process, (2) establish IV&V independence, (3) define IV&V program scope, (4) define IV&V program resources, and (5) establish IV&V management and oversight. For additional information on the key elements, see table 7 in the How GAO Did This Study section below.

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### Does DHS's acquisition guidance include all key elements of effective IV&V?

No. We determined that DHS's current acquisition management and systems engineering guidance does not fully incorporate any of the 10 key elements of effective IV&V. DHS officials stated that the agency's prior guidance, which we previously found fully incorporated elements of effective IV&V, was decommissioned and rolled into its *Systems Engineering Life Cycle (SELC) Guidebook*.<sup>18</sup> DHS officials stated these changes were made to streamline DHS's guidance but could not provide the precise timing for this decision.

We reviewed the current *SELC Guidebook*, issued by DHS's Program Accountability and Risk Management. We found that it includes only limited information on the IV&V process and no longer fully incorporates the key elements of effective IV&V. For example, DHS's systems engineering guidance instructs DHS officials to consider risk when deciding whether to conduct certain technical activities and reviews for systems acquisition programs. However, it does not include specific, risk-based criteria to facilitate deciding whether, or the extent to which, a program would use IV&V. The guidance also does not address how the technical, managerial, and financial independence requirements of a program's IV&V agent should be defined, documented, and imposed. Further, the guidance does not specifically address whether or how IV&V resources should be defined and documented, including the facilities, personnel, tools, techniques, and methods that should be used.

Without systems engineering guidance that fully incorporates key elements of effective IV&V, DHS does not have an adequate framework for planning and managing its IV&V efforts. As a result, DHS risks not maximizing the value of its investment in IV&V, as the efforts may be duplicative, unnecessary, or ineffective. Further, it is less likely that IV&V will contribute significantly toward DHS meeting its cost, schedule, and mission goals for its systems acquisition programs.

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### Did DHS use IV&V for its FSM efforts?

Yes. Though not required, DHS most recently contracted for IV&V services in June 2021 for its FSM program. DHS's IV&V contract states that its purpose is to support the Joint Program Management Office's (JPMO) oversight of the FSM program, including the individual FSM projects (i.e., FSM-Trio, FSM-FEMA, and FSM-Cube). This included the evaluation of FSM projects' processes, along with the evaluation of FSM-Cube's and FSM-FEMA's procurement documentation and contracts for system integration services.

Our review of selected IV&V contract deliverables showed that, among other things, the IV&V contractor reviewed JPMO's risk register each month to identify

any active risks that warranted the attention of senior leadership.<sup>19</sup> Further, the contractor performed quality assurance procedures for JPMO and identified gaps in JPMO's documentation.

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## Conclusions

Since our last evaluation, the status of DHS's high-risk financial management outcomes has not changed. DHS continues its efforts to address these outcomes by acquiring and implementing modern financial management systems through three acquisition programs.

DHS's efforts to effectively address its high-risk financial management area are hampered by strategies and guidance that do not fully incorporate GAO's leading practices for performance management activities. Such strategies would enhance DHS's ability to effectively address the remaining outcomes in its high-risk financial management area.

The success of an acquisition program depends, in part, on whether management has appropriately designed guidance to enable reliable cost and schedule estimates. DHS's cost and schedule estimation guidance generally incorporates GAO's leading practices. As a result, DHS generally has a consistent methodology to develop, manage, and evaluate reliable program cost and schedule estimates.

However, DHS does not have clear, agencywide systems engineering guidance that fully incorporates key elements of effective IV&V. This increases the risk of duplicative, unnecessary, or potentially ineffective IV&V efforts. Additionally, DHS is less likely to achieve the full potential of its systems acquisition programs, such as FSM. Consequently, IV&V efforts undertaken without such guidance may not provide the intended benefits of ensuring that acquired systems meet quality standards, satisfy user needs, and operate as intended.

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## Recommendations for Executive Action

We are making the following two recommendations to DHS:

The Under Secretary for Management should ensure that the Chief Financial Officer works with the relevant DHS offices to fully incorporate performance management leading practices in its high-risk financial management area strategies and guidance. (Recommendation 1)

The Under Secretary for Management should ensure that the Director of the Office of Program Accountability and Risk Management fully incorporates key elements of effective IV&V in DHS's systems engineering guidance. (Recommendation 2)

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## Agency Comments

We provided a draft of this report to DHS for review and comment. In written comments, reproduced in appendix I, the department concurred with our two recommendations and described actions it will take to address the issues we identified. Those actions, if the department implements them as described, should address our recommendations. The department also provided technical comments on our report that we incorporated as appropriate.

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## How GAO Did This Study

To assess the status of DHS's efforts to address its high-risk financial management outcomes, we reviewed DHS's status updates for the eight high-risk financial management (FM) outcomes included in the March 2024 *Integrated Strategy for High-Risk Management*. Additionally, we followed up with DHS regarding ongoing remediation efforts to confirm progress as of April 2024.

The following scale was used to evaluate the progress made toward addressing the FM outcomes: fully addressed = outcome is fully addressed; mostly

addressed = progress is significant and a small amount of work remains; partially addressed = progress is measurable, but significant work remains; initiated = activities have been initiated to address the outcome, but it is too early to report progress; and not initiated = activities have not been initiated to address this outcome.

To assess whether DHS’s strategy for addressing its GAO-designated high-risk financial management area—including modernizing its financial systems and obtaining a clean ICOFR opinion—incorporates leading practices, we reviewed the agency’s strategy documentation related to these efforts.<sup>20</sup> We compared these documents against the 13 leading practices and key actions to implement the practices (see table 6) included in GAO’s *Evidence-Based Policy Making: Practices to Help Manage and Assess the Results of Federal Efforts*.<sup>21</sup>

**Table 6: Leading Practices for Performance Management and Assessing the Results of Federal Efforts**

Leading practice	Key actions
<b>Plan for results:</b> Can help a federal organization provide a clear picture of what it is trying to achieve, how it will achieve it, and any obstacles that may affect its ability to do so.	
1. Define goals	<ul style="list-style-type: none"> <li>Define goals for all activities.</li> <li>Identify both long-term outcomes and near-term measurable results.</li> <li>Align goals across organizational levels.</li> </ul>
2. Identify strategies and resources	<ul style="list-style-type: none"> <li>Identify strategies for each goal.</li> <li>Coordinate with other organizations, programs, and activities contributing to the goal, when applicable.</li> <li>Identify the resources needed to achieve each goal.</li> </ul>
3. Assess the environment	<ul style="list-style-type: none"> <li>Identify internal and external factors that could affect goal achievement.</li> <li>Define strategies to address or mitigate the factors.</li> </ul>
<b>Assess and build evidence:</b> Can help federal organizations in planning and implementing evidence-building activities to assist decision-makers.	
4. Assess the extent to which existing evidence addresses key questions	<ul style="list-style-type: none"> <li>Identify key questions to address.</li> <li>Identify relevant internal and external sources of evidence.</li> <li>Assess the coverage and quality of the evidence.</li> </ul>
5. Identify and prioritize new evidence needs	<ul style="list-style-type: none"> <li>Identify new evidence needs.</li> <li>Prioritize how and when to fulfill those needs.</li> </ul>
6. Generate new evidence	<ul style="list-style-type: none"> <li>Develop an evidence-building implementation plan.</li> <li>Ensure new evidence will meet quality standards.</li> </ul>
<b>Use evidence:</b> Can help federal organizations make evidence-informed decisions.	
7. Use evidence to learn	<ul style="list-style-type: none"> <li>Assess progress toward goals.</li> <li>Develop an understanding of why results were achieved.</li> </ul>
8. Apply learning to decision-making	<ul style="list-style-type: none"> <li>Use evidence to inform management decisions.</li> <li>Identify any additional evidence needs to further inform decisions.</li> </ul>
9. Communicate learning and results	<ul style="list-style-type: none"> <li>Communicate relevant information internally and externally.</li> <li>Tailor the information to meet stakeholders’ needs.</li> </ul>
<b>Foster a culture of learning and continuous improvement:</b> Can help provide the necessary foundation for an organization to plan for results, assess and build evidence, and use that evidence to learn and improve.	
10. Demonstrate leadership commitment	<ul style="list-style-type: none"> <li>Involve senior leaders.</li> <li>Coordinate and integrate activities.</li> </ul>

Leading practice	Key actions
11. Involve stakeholders	<ul style="list-style-type: none"> <li>Engage stakeholders early and often.</li> <li>Tailor engagement based on needs and purpose.</li> </ul>
12. Promote accountability	<ul style="list-style-type: none"> <li>Assign responsibility.</li> <li>Hold individuals accountable for learning and results.</li> </ul>
13. Build and maintain capacity	<ul style="list-style-type: none"> <li>Assess sufficiency of existing evidence-building capacity.</li> <li>Identify actions to maintain or enhance capacity.</li> </ul>

Source: GAO. | GAO-24-106895

We used the following scale to evaluate whether DHS’s individual strategy and guidance documents met leading practices by evaluating each document against the key action items to implement the practice: fully met = the documentation provided evidence that sufficiently satisfied all aspects of the criterion; partially met = the documentation provided evidence that sufficiently satisfied some, but not all, aspects of the criterion; and not met = the documentation provided did not satisfy any aspects of the criterion.

After we assessed the key action items for each individual strategy document, we used the following scale to determine the overall rating for the main leading practice: fully met = the documentation provided evidence that sufficiently satisfied all aspects of the criterion; partially met = the documentation provided evidence that sufficiently satisfied some, but not all, aspects of the criterion; and not met = the documentation provided did not satisfy any aspects of the criterion. We also met with DHS officials to gain an understanding of the agency’s strategy and approach for modernizing its financial systems and obtaining a clean ICOFR opinion.

To assess the extent to which DHS’s guidance<sup>22</sup> for developing and monitoring its FSM cost and schedule estimates incorporates leading practices, we reviewed DHS’s cost and schedule estimation guidance and compared it against GAO’s *Estimating and Assessment Guide*<sup>23</sup> and *Schedule Assessment Guide*.<sup>24</sup> We also met with DHS officials to discuss the agency’s cost and schedule estimation guidance and the results of our analysis. We did not assess the reliability of DHS’s cost and schedule estimates for its FSM program for this report because (1) the Coast Guard planned to finalize its re-baselining efforts at the end of April 2024 and (2) FSM-FEMA and FSM-Cube have not yet developed formal cost and schedule estimates as of April 2024.

We used the following scale to evaluate whether DHS’s guidance met key steps and leading practices for both cost and schedule estimates: fully met = the documentation provided evidence that fully satisfied all aspects of the criterion; substantially met = the documentation provided evidence that satisfied most, but not all, aspects of the criterion; partially met = the documentation provided evidence that satisfied some, but not all, aspects of the criterion; minimally met = the documentation provided evidence that satisfied a small portion of the criterion; and not met = the documentation provided evidence that did not satisfy any aspects of the criterion.

To assess the extent to which DHS incorporated key elements of effective IV&V in its acquisition management and systems engineering guidance, we reviewed DHS’s guidance related to IV&V.<sup>25</sup> We compared this guidance against key elements of effective IV&V identified in a prior GAO report (see table 7).<sup>26</sup> The prior report based these key elements on industry standards and leading practices from across the federal government. Additionally, we met with DHS officials to discuss the agency’s guidance related to IV&V.

**Table 7: Key Elements of Effective Independent Verification and Validation (IV&V)**

**Establish IV&V decision criteria and process.** A risk-based, decision-making process is defined to determine whether or the extent to which programs should be subject to IV&V, to include:

1. Establishing risk-based criteria for determining which programs should be subject to IV&V.
2. Establishing a process for using IV&V to improve the management of the IT acquisition/development program.

**Establish IV&V independence.** The degree of technical, managerial, and financial independence required of the personnel or agents performing IV&V is defined, including:

3. Technical, managerial, and financial independence requirements for the IV&V agent.
4. A mechanism for reporting the results of IV&V to program oversight officials and program management.

**Define IV&V program scope.** The scope of IV&V activities is defined, including:

5. A definition of the program activities subject to IV&V.
6. Validation and verification compliance criteria for each program activity subject to IV&V.

**Define IV&V program resources.** The resources needed for IV&V are specified, including:

7. The facilities, personnel, tools, techniques, and methods.

**Establish IV&V management and oversight.** The management and oversight to be performed are specified, including:

8. The process for responding to issues raised by the IV&V effort.
9. The roles and responsibilities of all parties involved in the program.
10. How the effectiveness of the IV&V effort will be evaluated.

Source: GAO analysis of leading practices. | GAO-24-106895

To gain an understanding of how DHS used IV&V for its FSM program, we reviewed DHS's IV&V contract and selected contract deliverables. We also met with DHS officials to discuss the agency's use of IV&V for its FSM programs. Finally, the IV&V contractor's program management plan states that the FSM IV&V program is technically, managerially, and financially independent. However, we did not assess the independence of DHS's IV&V contractor for this report.

We conducted this performance audit from June 2023 to July 2024 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.

## List of Addressees

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

The Honorable Glenn F. Ivey  
Ranking Member  
Subcommittee on Oversight, Investigations, and Accountability  
Committee on Homeland Security  
House of Representatives

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

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## GAO Contact Information

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

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



**Homeland  
Security**

BY ELECTRONIC SUBMISSION

July 10, 2024

Paula M. Rascona  
Director, Financial Management and Assurance  
U.S. Government Accountability Office  
441 G Street, NW  
Washington, DC 20548-0001

Re: Management Response to Draft Report GAO-24-106895, "Financial Management Systems: DHS Should Improve Plans for Addressing its High-Risk Area and Guidance for Independent Reviews"

Dear Ms. Rascona:

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 recognition of the Department's continued efforts to modernize its financial management systems and the progress made in addressing its high-risk financial management area by sustaining certain outcomes, such as receiving a "clean" (unmodified) financial statement audit opinion for eleven consecutive years (2013 to 2023). GAO also acknowledged that the activities (1) incorporated in DHS's key financial systems modernization (FSM) departmental and operational strategies, and (2) related to DHS's efforts to obtain a clean Internal Controls Over Financial Reporting (ICOFR) opinion both fully met nine and partially met four of GAO's 13 leading practices for performance management and that DHS's cost and schedule estimation guidance is generally consistent with GAO's leading practices. DHS remains committed to strengthening FSM efforts to enhance its ability to effectively address the remaining outcomes in its high-risk financial management area with strategies and guidance that fully incorporate GAO's leading practices for performance management.




The draft report contained two recommendations for DHS with which the Department concurs. 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, as appropriate.

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: 2024.07.10 14:26:47 -04'00'

JIM H. CRUMPACKER  
Director  
Departmental GAO-OIG Liaison Office

Enclosure

**Enclosure: Management Response to Recommendations  
Contained in GAO-24-106895**

GAO recommended that the Under Secretary for Management:

**Recommendation 1:** Ensure that the Chief Financial Officer works with the relevant DHS offices to fully incorporate performance management leading practices in its high-risk financial management area strategies and guidance.

**Response:** Concur. DHS's Office of the Chief Financial Officer (OCFO) will assess performance management leading practices noted by GAO as "partially met," and develop a plan to incorporate those practices in high-risk financial management area strategies and guidance. As part of this effort, the OCFO's Risk Management and Assurance Division will conduct a resourcing review to accurately identify current resourcing levels and capabilities and crosswalk that information to the high risk areas related to DHS's ability to obtain and sustain an unmodified ICOFR opinion. The information gleaned from this analysis will enable the Department to identify current strategic resourcing as well as potential resourcing deficient areas that may need to be addressed by the Department in order to ensure appropriate skillsets, stakeholder engagement, oversight, accountability, and capacity needed to not only obtain but also to sustain an unmodified ICOFR opinion. Following completion of the resourcing review, as needed, additional response actions and efforts will be developed to fully resolve gap areas that may be identified by the Department and to ensure full implementation of GAO's leading practices for performance management.

To assist in addressing current control deficiencies related to financial management, the Department's multiyear plan to strengthen existing and implement new financial management systems in DHS Components, including the U.S. Coast Guard, Federal Emergency Management Agency (FEMA), and U.S. Immigration and Customs Enforcement (ICE), remains a critical foundational effort to addressing current control deficiencies related to financial management and substantiating a clean ICOFR opinion. As such, the strategies and guidance related to DHS's FSM efforts are key tenets to and building blocks for the Department's ICOFR Headquarters and Component-level operational strategies. OCFO's Financial Management Division will conduct a detailed review of our current bi-annual Integrated Strategy for High-Risk Management and continue to enhance this consistent, up to date source of information, reporting on our current progress and detailing the remaining activities to achieve Full Operational Capability for the U.S. Coast Guard (as part of the TRIO system with the Transportation Security Administration and Countering Weapons of Mass Destruction Office while simultaneously completing appropriately managed acquisition, discovery, implementation, migration and operationalization activities for the FEMA and ICE financial system modernizations.

Estimated Completion Date (ECD): June 30, 2025.

**Recommendation 2:** Ensure that the Director of the Office of Program Accountability and Risk Management [PARM] fully incorporates key elements of effective IV&V [independent verification and validation] in DHS's systems engineering guidance.

**Response:** Concur. PARM will fully incorporate GAO's feedback and include the key elements of effective IV&V in DHS's "Systems Engineering Lifecycle Guidebook," which is currently under revision. ECD: June 30, 2025.

## Endnotes

<sup>1</sup>GAO, *High Risk Series: An Update*, [GAO-03-119](#) (Washington, D.C.: Jan. 2003). In determining whether a government program or operation is high risk, we consider several factors, including whether the financial systems, policies, and procedures an agency established to carry out the program or operation are effective.

<sup>2</sup>GAO, *High-Risk Series: Efforts Made to Achieve Progress Need to Be Maintained and Expanded to Fully Address All Areas*, [GAO-23-106203](#) (Washington, D.C.: Apr. 20, 2023).

<sup>3</sup>Department of Homeland Security Financial Accountability Act, Pub. L. No. 108-330, § 4, 118 Stat. 1275, 1277-78 (Oct. 16, 2004), *codified at* 31 U.S.C. § 3516(f) and *reprinted in* 31 U.S.C. § 3516 note. Chief Financial Officers Act agencies are those federal executive agencies listed in 31 U.S.C. § 901(b), which currently includes 24 such agencies.

<sup>4</sup>A material weakness is a deficiency or combination of deficiencies in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis.

<sup>5</sup>GAO, *Homeland Security: Departmentwide Integrated Financial Management Systems Remain a Challenge*, [GAO-07-536](#) (Washington, D.C.: June 21, 2007); *Financial Management Systems: DHS Faces Challenges to Successfully Consolidating Its Existing Disparate Systems*, [GAO-10-76](#) (Washington, D.C.: Dec. 4, 2009); and *DHS Financial Management: Actions Needed to Improve Systems Modernization and Address Coast Guard Audit Issues*, [GAO-23-105194](#) (Washington, D.C.: Feb. 28, 2023).

<sup>6</sup>Pub. L. No. 114-328, div. A, tit. XIX, § 1903(b), 130 Stat. 2000, 2673 (Dec. 23, 2016), *classified at* 6 U.S.C. § 341(a)(11).

<sup>7</sup>In 2011, we found that DHS needed to focus its efforts on five management areas—human capital, acquisitions, IT, financial, and management integration. Since then, DHS has made sustained progress in some, but not all, of these areas. Therefore, in 2023 we narrowed this high-risk area to focus on DHS's remaining work in the two areas that continue to experience significant challenges: IT and financial management. See [GAO-23-106203](#).

<sup>8</sup>The FSM-Trio program comprises three DHS components—the Countering Weapons of Mass Destruction Office, Transportation Security Administration, and Coast Guard. FEMA's modernization efforts are under its own program, FSM-FEMA. The FSM-Cube program includes ICE and its financial management customers: Cybersecurity and Infrastructure Security Agency, Departmental Management and Operations, Science and Technology Directorate, and U.S. Citizenship and Immigration Services.

<sup>9</sup>The five high-risk criteria that must be met for removal of areas from our High Risk List provide a guide for efforts to narrow and ultimately address high-risk issues. They include (1) leadership commitment, (2) agency capacity, (3) an action plan, (4) monitoring efforts, and (5) demonstrated progress. See GAO, *High-Risk Series: Key Practices to Successfully Address High-Risk Areas and Remove Them from the List*, [GAO-22-105184](#) (Washington, D.C.: Mar. 3, 2022).

<sup>10</sup>GAO, *Evidence-Based Policymaking: Practices to Help Manage and Assess the Results of Federal Efforts*, [GAO-23-105460](#) (Washington, D.C.: July 12, 2023).

<sup>11</sup>Each of the 13 leading practices for performance management activities aligns with and supports one or more of the five criteria for removal from GAO's High Risk List. For example, "leadership commitment" is one of the leading practices and one of the high-risk removal criteria.

<sup>12</sup>Department of Homeland Security, *Financial Management Policy Manual, Chapter 9: Cost Estimating and Analysis*, (Dec. 2023).

<sup>13</sup>GAO, *Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Program Costs*, [GAO-20-195G](#) (Washington, D.C.: Mar. 2020).

<sup>14</sup>Department of Homeland Security, *Program Scheduling Handbook*, version 1.0 (Sept. 2021).

<sup>15</sup>GAO, *Schedule Assessment Guide: Best Practices for Project Schedules*, [GAO-16-89G](#) (Washington, D.C.: Dec. 2015).

<sup>16</sup>GAO, *Customs Service Modernization: Results of Review of First Automated Commercial Environment Expenditure Plan*, [GAO-01-696](#) (Washington, D.C.: June 5, 2001), and *Information Technology: DHS Needs to Improve Its Independent Acquisition Reviews*, [GAO-11-581](#) (Washington, D.C.: July 28, 2011).

<sup>17</sup>[GAO-11-581](#).

<sup>18</sup>Department of Homeland Security, *Systems Engineering Life Cycle (SELC) Guidebook* (May 2021). According to the *SELC Guidebook*, it is intended to provide guidance that enables consistent technical management and supports the efficient and effective delivery of system capabilities to end users.

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<sup>19</sup>A risk register is a central repository to describe and track risks and to record risk management actions. According to DHS Instruction 102-01-001, version 02, *Acquisition Management*, an effective risk register should include the following for every risk: risk category, risk statement, risk trigger, likelihood score, impact score, risk level, response plan, planned response steps with completion measures, the risk owner, and action summary notes.

<sup>20</sup>We reviewed several strategy documents in addition to Department of Homeland Security, *Integrated Strategy for High-Risk Management* (Washington, D.C.: Sept. 2023). Specifically, the individual FSM strategy documents we reviewed include Department of Homeland Security, *Office of the Chief Financial Officer Strategic Plan Fiscal Years 2022-2026* (fiscal year 2022); *Information Technology Strategic Plan FY2024-2028* (Sept. 2023); *Memorandum for Financial Systems Modernization Programs: Progress and Key Tenets for the Path Forward* (Washington D.C.: Mar. 6, 2019); and the *Joint Concept of Operations for Financial Systems Modernization* (Mar. 31, 2022).

Further, the individual ICOFR strategy documents we reviewed include Department of Homeland Security, *Internal Control Playbook* (fiscal year 2023); *Internal Control Bluebook* (fiscal year 2022); *Internal Control over Financial Reporting (ICOFR) Process Guide*, version 1.0 (Oct. 1, 2022); *Internal Controls over Financial Reporting (ICOFR) Process Guide – Information Technology (IT) Supplement*, version 1.2 (Mar. 22, 2023); *Internal Control Playbook: Information Used in Controls Guidebook*, version 1.0 (Aug. 13, 2021); and *Internal Control over Financial Reporting (ICOFR) Process Guide: Service Provider Monitoring Guidebook*, version 1.2 (Feb. 28, 2023).

<sup>21</sup>[GAO-23-105460](#).

<sup>22</sup>DHS provided several documents related to its cost and schedule estimation processes. We focused our assessment on DHS's *Financial Management Policy Manual, Chapter 9: Cost Estimating and Analysis* and *Program Scheduling Handbook*, as most of DHS's cost and schedule estimate guidance is included in these documents.

<sup>23</sup>[GAO-20-195G](#).

<sup>24</sup>[GAO-16-89G](#).

<sup>25</sup>The DHS acquisition management and systems engineering guidance we reviewed includes Department of Homeland Security, *Acquisition Management Directive 102-01*, version 03.1 (July 28, 2015); *Systems Engineering Life Cycle (SELC) Instruction 102-01-103*, version 01 (Feb. 4, 2021); *SELC Guidebook* (May 2021); and *DHS Supplemental Guidance: Incorporating T&E into Acquisition Contracts* (Jan. 2019).

<sup>26</sup>[GAO-11-581](#).