



December 2016

ENTERPRISE RISK MANAGEMENT

Selected Agencies' Experiences Illustrate Good Practices in Managing Risk

Accessible Version

GAO Highlights

Highlights of [GAO-17-63](#), a report to the Committee on Oversight and Government Reform, House of Representatives

Why GAO Did This Study

Federal leaders are responsible for managing complex and risky missions. ERM is a way to assist agencies with managing risk across the organization. In July 2016, the Office of Management and Budget (OMB) issued an updated circular requiring federal agencies to implement ERM to ensure federal managers are effectively managing risks that could affect the achievement of agency strategic objectives.

GAO's objectives were to (1) update its risk management framework to more fully include evolving requirements and essential elements for federal enterprise risk management, and (2) identify good practices that selected agencies have taken that illustrate those essential elements.

GAO reviewed literature to identify good ERM practices that generally aligned with the essential elements and validated these with subject matter specialists.

GAO also interviewed officials representing the 24 Chief Financial Officer (CFO) Act agencies about ERM activities and reviewed documentation where available to corroborate officials' statements. GAO studied agencies' practices using ERM and selected examples that best illustrated the essential elements and good practices of ERM.

GAO provided a draft of this report to OMB and the 24 CFO Act agencies for review and comment. OMB generally agreed with the report. Of the CFO act agencies, 12 provided technical comments, which GAO included as appropriate; the others did not provide any comments.

View [GAO-17-63](#). For more information, contact J. Christopher Mihm at (202) 512-6806 or mihmj@gao.gov

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What GAO Found

Enterprise Risk Management (ERM) is a forward-looking management approach that allows agencies to assess threats and opportunities that could affect the achievement of its goals. While there are a number of different frameworks for ERM, the figure below lists essential elements for an agency to carry out ERM effectively. GAO reviewed its risk management framework and incorporated changes to better address recent and emerging federal experience with ERM and identify the essential elements of ERM as shown below.



Source: GAO. | GAO-17-63

GAO has identified six good practices to use when implementing ERM.

Essential Elements and Good Practices of Enterprise Risk Management (ERM)

Elements	Good Practices
Align ERM process to goals and objectives	<p>Leaders Guide and Sustain ERM Strategy</p> <p>Implementing ERM requires the full engagement and commitment of senior leaders, supports the role of leadership in the agency goal setting process, and demonstrates to agency staff the importance of ERM.</p>
Identify Risks	<p>Develop a Risk-Informed Culture to Ensure All Employees Can Effectively Raise Risks</p> <p>Developing an organizational culture to encourage employees to identify and discuss risks openly is critical to ERM success.</p>
Assess Risks	<p>Integrate ERM Capability to Support Strategic Planning and Organizational Performance Management</p> <p>Integrating the prioritized risk assessment into strategic planning and organizational performance management processes helps improve budgeting, operational, or resource allocation planning.</p>
Select Risk Response	<p>Establish a Customized ERM Program Integrated into Existing Agency Processes</p> <p>Customizing ERM helps agency leaders regularly consider risk and select the most appropriate risk response that fits the particular structure and culture of an agency.</p>
Monitor Risks	<p>Continuously Manage Risks</p> <p>Conducting the ERM review cycle on a regular basis and monitoring the selected risk response with performance indicators allows the agency to track results and impact on the mission, and whether the risk response is successful or requires additional actions.</p>
Communicate and Report on Risks	<p>Share Information with Internal and External Stakeholders to Identify and Communicate Risks</p> <p>Sharing risk information and incorporating feedback from internal and external stakeholders can help organizations identify and better manage risks, as well as increase transparency and accountability to Congress and taxpayers.</p>

Source: GAO. | GAO-17-63

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Abbreviations

AFERM	Association of Federal Enterprise Risk Management
APG	agency priority goals
APMC	Agency Program Management Council
CFO	Chief Financial Officer
CFOC	Chief Financial Officers Council
CIO	Chief Information Officer
CMO	Chief Management Officer
Commerce	Department of Commerce
COO	Chief Operating Officer
COSO	Committee of Sponsoring Organizations of the Treadway Commission
CRO	Chief Risk Officer
DATA Act	Digital Accountability and Transparency Act of 2014
DHS	Department of Homeland Security
Education	Department of Education
EMAT	ERM Maturity Assessment Tool
ERM	Enterprise Risk Management
ERSC	Executive Risk Steering Committee
FMFIA	Federal Managers' Financial Integrity Act
FSA	Office of Federal Student Aid
FTE	Full-time equivalent
GPRA	Government Performance and Results Act
GPRAMA	GPRA Modernization Act of 2010
HUD	Department of Housing and Urban Development
Interior	Department of the Interior
IRS	Internal Revenue Service
ISO	International Organization for Standardization
IT	information technology
JPSS	Joint Polar Satellite System
NIST	National Institute of Standards and Technology
NASA	National Aeronautics and Space Administration
NOAA	National Oceanic and Atmospheric Administration
OCRO	Office of the Chief Risk Officer

OMB	Office of Management and Budget
OPERM	Office of Program Evaluation and Risk Management
OPM	Office of Personnel Management
PIC	Performance Improvement Council
PIH	Office of Public and Indian Housing
PIO	Performance Improvement Officer
PwC	PricewaterhouseCoopers
QPR	quarterly performance review
RAFT	Risk Acceptance Form and Tool
RMC	Risk Management Council
SSA	Social Security Administration
Treasury	Department of the Treasury
TSA	Transportation Security Administration
VA	Department of Veterans Affairs

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December 1, 2016

The Honorable Jason Chaffetz
Chairman
The Honorable Elijah E. Cummings
Ranking Member
Committee on Oversight and Government Reform
House of Representatives

Federal government leaders manage complex and inherently risky missions across their organizations, such as protecting Americans from health threats, preparing for and responding to natural disasters, building and managing safe transportation systems, advancing scientific discovery and space exploration, maintaining a safe workplace, and addressing security threats. Managing these and other complex challenges, requires effective leadership and management tools and commitment to delivering successful outcomes in highly uncertain environments.

While it is not possible to eliminate all uncertainties, it is possible to put in place strategies to better plan for and manage them. Enterprise Risk Management (ERM) is one tool that can assist federal leaders in anticipating and managing risks, as well as considering how multiple risks in their agency can present even greater challenges and opportunities when examined as a whole. Risk is the effect of uncertainty on objectives with the potential for either a negative outcome or a positive outcome or opportunity. The Office of Management and Budget (OMB) defines ERM as an effective agency-wide approach to addressing the full spectrum of the organization's significant internal and external risks by understanding the combined impact of risks as an interrelated portfolio, rather than addressing risks only within silos. An example of an agency enterprise risk is unfilled mission critical positions across the entire organization that when examined as a whole could threaten the accomplishment of the mission.

We first issued our risk management framework in 2005 related to homeland security efforts for assessing threats and taking appropriate steps to deal with them.¹ At that time, there was no established

¹GAO, *Risk Management: Further Refinements Needed to Assess Risks and Prioritize Protective Measures at Ports and Critical Infrastructure*, [GAO-06-91](#) (Washington, D.C.: Dec. 15, 2005).

universally agreed upon set of requirements or processes for a risk management framework specifically related to homeland security and combating terrorism. We developed the 2005 framework with five major phases that helped us assess how the Department of Homeland Security (DHS) was applying risk management.

In July 2016, OMB issued an update to Circular A-123 requiring federal agencies to implement ERM to better ensure their managers are effectively managing risks that could affect the achievement of agency strategic objectives.² Even before OMB required agencies to adopt ERM, several agencies, after facing significant risks to their mission, were implementing ERM to address risk-based issues and improve their ability to respond to future risks. For example:

- The Office of Federal Student Aid (FSA) in the Department of Education (Education) adopted ERM in 2004, in part, according to documents we reviewed, to help address long-standing risks including poor financial management and internal controls, which led us to place it on our High-Risk List between 1990 and 2005.³
- The Internal Revenue Service (IRS) adopted an ERM program in 2013 to address issues related to the review of tax-exempt applications cited in a Department of the Treasury (Treasury) Inspector General for Tax Administration report that would improve IRS operations broadly, as well as provide a common framework for capturing, reporting, and addressing risk areas, and improve the timeliness of reporting identified risks to the IRS Commissioner, IRS leaders, and external stakeholders, such as Congress.⁴
- The Office of Public and Indian Housing (PIH) at the Department of Housing and Urban Development (HUD) finalized its ERM framework and implementation plans in 2014. This was done in response to several high profile financial and compliance issues with public housing authorities, as well as concerns over the completeness of its

²OMB, *Management's Responsibility for Enterprise Risk Management and Internal Control*, Circular No. A-123, (July 15, 2016).

³In 2005, FSA was removed from our High-Risk List, not just as a result of adopting ERM, but also through a combination of leadership commitment, capacity to resolve the risk, the development of a corrective action plan, monitoring of the corrective measures, and demonstrated progress in resolving the high-risk area.

⁴IRS, *Charting a Path Forward: Initial Assessment and Plan of Action* (Washington, D.C.: June 24, 2013).

Federal Managers' Financial Integrity Act (FMFIA) certifications including internal controls and risk management practices, according to agency officials.⁵

We performed our work for this report under the authority of the Comptroller General to conduct evaluations to assist Congress with its oversight responsibilities. Our objectives were to (1) update our risk management framework to more fully include evolving requirements and essential elements for federal ERM, and (2) identify good practices that selected agencies were taking that illustrate those essential elements. We also considered views of subject matter specialists with current experience in ERM. See appendix I for the list of subject matter specialists who advised us in our review of the practices.

To adapt our 2005 risk management framework to focus on ERM, we identified essential elements needed to execute ERM and assist agencies as they implement and sustain their ERM programs that are generally consistent with other commonly used ERM frameworks, such as the *ISO 31000 Risk Management Principles and Guidelines* and the 2004 *COSO Enterprise Risk Management - Integrated Framework*.⁶ When we shared these essential elements with subject matter specialists, they confirmed that they represent the critical elements of the ERM process.

To identify good practices in using ERM, we analyzed and synthesized ERM literature using ProQuest, First Search, and Scopus bibliographic databases in public and business sources.⁷ We validated these good practices with subject matter specialists with knowledge specific to the use of ERM in government settings, and, based on their suggestions, we refined the practices. We then considered the essential elements of ERM relative to our identified good practices and determined how these

⁵31 U.S.C. § 3512.7

⁶International Organization for Standardization (ISO), *ISO 31000-Risk Management Principles and Guidelines*, (ISO, Nov.15, 2009), and Committee of Sponsoring Organizations of the Treadway Commission (COSO), and COSO, *Enterprise Risk Management-Integrated Framework*, 2004. COSO has since updated ERM framework, *Enterprise Risk Management-Aligning Strategy with Performance*, exposure draft issued in June 2016, but we did not include this in our analysis.

⁷In the bibliographic database search, we used the following terms, enterprise risk management, best practices, leading practices, government, and public sector, for years 2005 through 2015, and searched in scholarly and trade journals, conference proceedings, and dissertations and theses.

practices generally fit with the essential elements as a way to assist agencies as they implemented ERM.

To identify what agencies were doing consistent with our essential elements and how their good practices were used in implementing ERM, we used a semi-structured interview protocol and spoke with officials representing 21 of the 24 executive branch agencies covered in the Chief Financial Officers (CFO) Act of 1990, as amended.⁸ Three agencies did not participate in interviews but provided us with written responses to our questions, including the Departments of Agriculture and the Interior and the Social Security Administration. We asked each of the 24 agencies whether or not the agency had ERM in place and their perspectives on ERM.

To identify case illustrations of the good practices, we reviewed information from agency interviews and documentation they provided about their ERM practices. From the ERM practices of 24 CFO Act agencies and their component agencies, we selected examples that best illustrated our essential elements and good practices. In conducting the case illustrations, we interviewed agency officials and reviewed agency documentation about their use of ERM. We selected examples from nine agencies including the Department of Commerce (Commerce) and its component bureaus the National Institute of Standards and Technology (NIST) and the National Oceanic and Atmospheric Administration (NOAA), DHS's Transportation Security Administration (TSA), PIH, the Office of Personnel Management (OPM), Treasury and the IRS, and FSA.

We also interviewed OMB officials from the offices involved in the update of Circular A-123, the Office of Performance and Personnel Management and the Office of Federal Financial Management, to gain their perspectives on agencies' implementation of ERM.

We conducted this performance audit from June 2015 to December 2016 in accordance with generally accepted government auditing standards.

⁸31 U.S.C. § 901(b). The 24 CFO Act agencies, generally the largest federal agencies, are the Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, Homeland Security, Housing and Urban Development, the Interior, Justice, Labor, State, Transportation, the Treasury, and Veterans Affairs, as well as the Agency for International Development, Environmental Protection Agency, General Services Administration, National Aeronautics and Space Administration, National Science Foundation, Nuclear Regulatory Commission, Office of Personnel Management, Small Business Administration, and Social Security Administration.

Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

ERM allows management to understand an organization's portfolio of top-risk exposures, which could affect the organization's success in meeting its goal. As such, ERM is a decision-making tool that allows leadership to view risks from across an organization's portfolio of responsibilities. ERM recognizes how risks interact (i.e., how one risk can magnify or offset another risk), and also examines the interaction of risk treatments (actions taken to address a risk), such as acceptance or avoidance. For example, treatment of one risk in one part of the organization can create a new risk elsewhere or can affect the effectiveness of the risk treatment applied to another risk. ERM is part of overall organizational governance and accountability functions and encompasses all areas where an organization is exposed to risk (financial, operational, reporting, compliance, governance, strategic, reputation, etc.).

In July 2016, OMB updated its Circular No. A-123 guidance to establish management's responsibilities for ERM, as well as updates to internal control in accordance with *Standards for Internal Control in the Federal Government*.⁹ OMB also updated Circular No. A-11, *Preparation, Submission, and Execution of the Budget* in 2016 and refers agencies to Circular No. A-123 for implementation requirements for ERM.¹⁰ Circular No. A-123 guides agencies on how to integrate organizational performance and ERM to yield an "enterprise-wide, strategically-aligned portfolio view of organizational challenges that provides better insight about how to most effectively prioritize resource allocations to ensure successful mission delivery." The updated requirements in Circulars A-123 and A-11 help modernize existing management efforts by requiring agencies to implement an ERM capability coordinated with the strategic planning and strategic review process established by the GPRA Modernization Act of 2010 (GPRAMA), and with the internal control processes required by the FMFIA and in our *Standards for Internal*

⁹GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: September 2014).

¹⁰OMB, Circular No. A-11, *Preparation, Submission, and Execution of the Budget* pt 6, §§ 270 (July 2016).

Control in the Federal Government.¹¹ This integrated governance structure is designed to improve mission delivery, reduce costs, and focus corrective actions towards key risks.

More specifically, Circular No. A-123 discusses both internal control and ERM and how these fit together to manage agency risks. Our *Standards for Internal Control in the Federal Government* describes internal control as a process put in place by an entity's oversight body, management, and other personnel that provides reasonable assurance that objectives related to operations, compliance, and reporting will be achieved, and serves as the first line of defense in safeguarding assets.¹² Internal control is also part of ERM and used to manage or reduce risks in an organization. Prior to implementing ERM, risk management focused on traditional internal control concepts to managing risk exposures. Beyond traditional internal controls, ERM promotes risk management by considering its effect across the entire organization and how it may interact with other identified risks.¹³ Additionally, ERM also addresses other topics such as setting strategy, governance, communicating with stakeholders, and measuring performance, and its principles apply at all levels of the organization and across all functions.¹⁴

Implementation of OMB circulars is expected to engage all agency management, beyond the traditional ownership of A-123 by the Chief Financial Officer community. According to the A-123 Circular, it requires leadership from the agency Chief Operating Officer (COO) and Performance Improvement Officer (PIO) or other senior official with responsibility for the enterprise, and close collaboration across all agency mission and mission-support functions.¹⁵ The A-123 guidance also

¹¹Pub. L. No. 111-352, 124 Stat. 3866 (Jan. 4, 2011).

¹²GAO-14-704G.

¹³For additional discussion about ERM in the federal government, see Dr. Karen Hardy, *Enterprise Risk Management, A Guide for Government Professionals*, (San Francisco, CA: John Wiley & Sons, Inc., 2015), and Thomas H. Stanton and Douglas W. Webster, *Managing Risk and Performance*, (Hoboken, NJ: John Wiley & Sons, Inc., 2014).

¹⁴See COSO, *Enterprise Risk Management-Aligning Strategy with Performance*, exposure draft issued in June 2016, for additional information on ERM and its relationship to internal controls.

¹⁵Agencies are required to designate a senior executive within the agency as a Performance Improvement Officer (PIO), who reports directly to the COO and has responsibilities to assist the agency head and COO with performance management activities.

requires agencies to create a risk profile that helps them identify and assess risks arising from mission and mission-support operations, and consider those risks as part of the annual strategic review process. Circular A-123 requires that agencies' risk profiles include risks to strategic, operations, reporting and compliance objectives.

A federal interagency group of ERM practitioners developed a Playbook released through the Performance Improvement Council (PIC) and the Chief Financial Officers Council (CFOC) in July 2016 to provide federal agencies with a resource to support ERM.¹⁶ In particular, the Playbook assists them in implementing the required elements in the updated A-123 Circular.¹⁷

Updated ERM Framework Provides Assistance to Agencies as They Implement ERM

To assist agencies in better assessing challenges and opportunities from an enterprise-wide view, we have updated our risk management framework first published in 2005 to more fully include recent experience and guidance, as well as specific enterprise-wide elements.¹⁸ As mentioned previously, our 2005 risk management framework was developed in the context of risks associated with homeland security and combating terrorism. However, increased attention to ERM concepts and their applicability to all federal agencies and missions led us to revise our risk framework to incorporate ERM concepts that can help leaders better address uncertainties in the federal environment, changing and more complex operating environments due to technology and other global factors, the passage of GPRAMA and its focus on overall performance improvement, and stakeholders seeking greater transparency and accountability. For many similar reasons, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) initiated an effort to update its ERM framework for 2016, and the International Organization

¹⁶U.S. CFO Council and Performance Improvement Council, Playbook: *Enterprise Risk Management for the U.S. Federal Government*, (Washington, D.C.: Jul. 29, 2016).

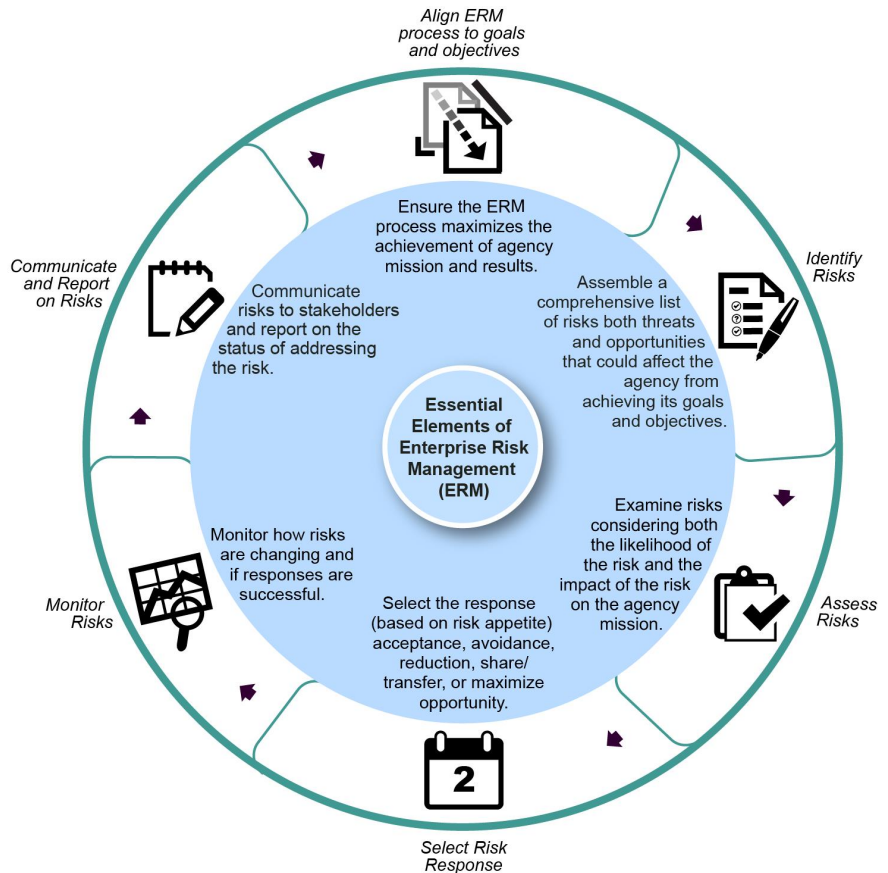
¹⁷GPRAMA established the Performance Improvement Council (PIC) in law and included additional responsibilities. The PIC is charged with assisting OMB to improve the performance of the federal government. Among its other responsibilities, the PIC is to facilitate the exchange among agencies of useful performance improvement practices and work to resolve government-wide or crosscutting performance issues. The Chief Financial Officers Council (CFOC) is comprised of federal CFOs, senior officials at OMB, and the U.S. Treasury to address the critical issues in federal financial management with collaborative leadership

¹⁸GAO-06-91.

for Standardization (ISO) plans to update its ERM framework in 2017. Further, as noted, OMB has now incorporated ERM into Circulars A-11 and A-123 to help improve overall agency performance.

We identified six essential elements to assist federal agencies as they move forward with ERM implementation. Figure 1 below shows how ERM's essential elements fit together to form a continuing process for managing enterprise risks. The absence of any one of the elements below would likely result in an agency incompletely identifying and managing enterprise risk. For example, if an agency did not monitor risks, then it would have no way to ensure that it had responded to risks successfully. There is no "one right" ERM framework that all organizations should adopt. However, agencies should include certain essential elements in their ERM program.

Figure 1: Essential Elements of Federal Government Enterprise Risk Management



Source: GAO. | GAO-17-63

Below we describe each essential element in more detail, why it is important, and some actions necessary to successfully build an ERM program.

1. **Align the ERM process to agency goals and objectives.** *Ensure the ERM process maximizes the achievement of agency mission and results.* Agency leaders examine strategic objectives by regularly considering how uncertainties, both risks and opportunities, could affect the agency's ability to achieve its mission. ERM subject matter specialists confirmed that this element is critical because the ERM process should support the achievement of agency goals and objectives and provide value for the organization and its stakeholders. By aligning the ERM process to the agency mission, agency leaders can address risks via an enterprise-wide, strategically-aligned portfolio rather than addressing individual risks within silos. Thus, agency leaders can make better, more effective decisions when prioritizing risks and allocating resources to manage risks to mission delivery. While leadership is integral throughout the ERM process, it is an especially critical component of aligning ERM to agency goals and objectives because senior leaders have an active role in strategic planning and accountability for results.
2. **Identify risks.** Assemble a comprehensive list of risks, both threats and opportunities, that could affect the agency from achieving its goals and objectives. This element of ERM systematically identifies the sources of risks as they relate to strategic objectives by examining internal and external factors that could affect their accomplishment. It is important that risks either can be opportunities for, or threats to, accomplishing strategic objectives. The literature we reviewed, as well as subject matter specialists, pointed out that identifying risks in any organization is challenging for employees, as they may be concerned about reprisals for highlighting "bad news."

Risks to objectives can often be grouped by type or category. For example, a number of risks may be grouped together in categories such as strategic, program, operational, reporting, reputational, technological, etc. Categorizing risks can help agency leaders see how risks relate and to what extent the sources of the risks are similar. The risks are linked to relevant strategic objectives and documented in a risk register or some other comprehensive format that also identifies the relevant source and a risk owner to manage the treatment of the risk. Comprehensive risk identification is critical even if the agency does not control the source of the risk. The literature and subject matter specialists we consulted told us that it is important to

build a culture where all employees can effectively raise risks. It is also important for the risk owner to be the person who is most knowledgeable about the risk, as this person is likely to have the most insight about appropriate ways to treat the risk.

3. **Assess risks.** Examine risks considering both the likelihood of the risk and the impact of the risk on the mission to help prioritize risk response. Agency leaders, risk owners, and subject matter experts assess each risk by assigning the likelihood of the risk's occurrence and the potential impact if the risk occurs. It is important to use the best information available to make the risk assessment as realistic as possible. Risk owners may be in the best position to assess risks. Risks are ranked based on organizational priorities in relation to strategic objectives. Risks are ranked based on organizational priorities in relation to strategic objectives. Agencies need to be familiar with the strengths of their internal control when assessing risks to determine whether the likelihood of a risk event is higher or lower based on the level of uncertainty within the existing control environment. Senior leaders determine if a risk requires treatment or not. Some identified risks may not require treatment at all because they fall within the agency's risk appetite, defined as how much risk the organization is willing to accept relative to mission achievement. The literature we reviewed and subject matter specialists noted that integrating ERM efforts with strategic planning and organizational performance management would help an organization more effectively assess its risks with respect to the impact on the mission.
4. **Select risk response.** *Select a risk treatment response (based on risk appetite) including acceptance, avoidance, reduction, sharing, or transfer.* Agency leaders review the prioritized list of risks and select the most appropriate treatment strategy to manage the risk. When selecting the risk response, subject matter experts noted that it is important to involve stakeholders that may also be affected, not only by the risk, but also by the risk treatment. Subject matter specialists also told us that when agencies discuss proposed risk treatments, they should also consider treatment costs and benefits. Not all treatment strategies manage the risk entirely; there may be some residual risk after the risk treatment is applied. Senior leaders need to decide if the residual risk is within their risk appetite and if additional treatment will be required. The risk response should also fit into the management structure, culture, and processes of the agency, so that ERM becomes an integral part of regular management functions. One subject matter specialist suggested that maximize opportunity should also be included as a risk treatment response, so that leaders may

capture the positive outcomes or opportunities associated with some risks.

5. **Monitor Risks.** *Monitor how risks are changing and if responses are successful.* After implementing the risk response, agencies must monitor the risk to help ensure that the entire risk management process remains current and relevant. The literature we reviewed also suggests using a risk register or other comprehensive risk report to track the success of the treatment for managing the risk. Senior leaders and risk owners review the effectiveness of the selected risk treatment and change the risk response as necessary. Subject matter specialists noted that a good practice includes continuously monitoring and managing risks. Monitoring should be a planned part of the ERM process and can involve regular checking as part of management processes or part of a periodic risk review. Senior leaders also could use performance measures to help track the success of the treatment, and if it has had the desired effect on the mission.
6. **Communicate and Report on Risks.** *Communicate risks with stakeholders and report on the status of addressing the risks.* Communicating and reporting risk information informs agency stakeholders about the status of identified risks and their associated treatments, and assures them that agency leaders are managing risk effectively. In a federal setting, communicating risk is important because of the additional transparency expected by Congress, taxpayers, and other relevant stakeholders. Communicating risk information through a dedicated risk management report or integrating risk information into existing organizational performance management reports, such as the annual performance and accountability report, may be useful ways of sharing progress on the management of risk. The literature we reviewed showed and subject matter specialists confirmed that sharing risk information is a good practice. However, concerns may arise about sharing overly specific information or risk responses that would rely on sensitive information. Safeguards should be put in place to help secure information that requires careful management, such as information that could jeopardize security, safety, health, or fraud prevention efforts. In this case, agencies can help alleviate concerns by establishing safeguards, such as communicating risk information only to appropriate parties, encrypting sensitive data, authorizing users' level of rights and privileges, and providing information on a need-to-know basis.

Emerging Good Practices Are Being Used at Selected Agencies to Implement ERM

We identified six good practices that nine agencies are implementing that illustrate ERM's essential elements. The selected good practices are not all inclusive, but represent steps that federal agencies can take to initiate and sustain an effective ERM process, as well as practices that can apply to more advanced agencies as their ERM processes mature. We expect that as federal experiences with ERM evolve, we will be able to refine these practices and identify additional ones.

Below in table 1, we identify the essential elements of ERM and the good practices that support each particular element that agencies can use to support their ERM programs. The essential elements define what ERM is and the good practices and case illustrations described in more detail later in this report provide ways that agencies can effectively implement ERM. The good practices may fit with more than one essential element, but are shown in the table next to the element to which they most closely relate.

Table 1: Essential Elements and Associated Good Practices of Federal Government Enterprise Risk Management (ERM)

Element	Good Practice
Align ERM process to goals and objectives <i>Ensure the ERM process maximizes the achievement of agency mission and results.</i>	Leaders Guide and Sustain ERM Strategy Implementing ERM requires the full engagement and commitment of senior leaders, which supports the role of leadership in the agency goal setting process, and demonstrates to agency staff the importance of ERM.
Identify Risks <i>Assemble a comprehensive list of risks, both threats and opportunities, that could affect the agency from achieving its goals and objectives.</i>	Develop a Risk-Informed Culture to Ensure All Employees Can Effectively Raise Risks Developing an organizational culture to encourage employees to identify and discuss risks openly is critical to ERM success.
Assess Risks <i>Examine risks considering both the likelihood of the risk and the impact of the risk to help prioritize risk response.</i>	Integrate ERM Capability to Support Strategic Planning and Organizational Performance Management Integrating the prioritized risk assessment into strategic planning and organizational performance management processes helps improve budgeting, operational, or resource allocation planning.
Select Risk Response <i>Select risk treatment response (based on risk appetite) including acceptance, avoidance, reduction, sharing, or transfer.</i>	Establish a Customized ERM Program Integrated into Existing Agency Processes Customizing ERM helps agency leaders regularly consider risk and select the most appropriate risk response that fits the particular structure and culture of an agency.
Monitor Risks <i>Monitor how risks are changing and if responses are successful.</i>	Continuously Manage Risks Conducting the ERM review cycle on a regular basis and monitoring the selected risk response with performance indicators allows the agency to track results and impact on the mission, and whether the risk response is successful or requires additional actions.
Communicate and Report on Risks <i>Communicate risks with stakeholders and report on the status of addressing the risk.</i>	Share Information with Internal and External Stakeholders to Identify and Communicate Risks Sharing risk information and incorporating feedback from internal and external stakeholders can help organizations identify and better manage risks, as well as increase transparency and accountability to Congress and taxpayers.

Source: GAO. | GAO-17-63

Good Practice: Guide and Sustain ERM Strategy through Leadership Engagement

The following examples illustrate how selected agencies are guiding and sustaining ERM strategy through leadership engagement. These include how they have:

- designated an ERM leader or leaders
- committed organization resources to support ERM, and
- set organizational risk appetite.

This good practice relates most closely to Align ERM Process to Goals and Objectives as shown in table 1.

TSA's ERM Process Is Led by a Chief Risk Officer and Senior-Level Executive Risk Steering Committee

According to the Chief Financial Officer's Council (CFOC) and Performance Improvement Council (PIC) Playbook, strong leadership at the top of the organization, including active participation in oversight, is extremely important for achieving success in an ERM program. To manage ERM activities, leadership may choose to designate a Chief Risk Officer (CRO) or other risk champion to demonstrate the importance of risk management to the agency and to implement and manage an effective ERM process across the agency. The CRO role includes leading the ERM process; involving those that need to participate and holding them accountable; ensuring that ERM reviews take place regularly; obtaining resources, such as data and staff support if needed; and ensuring that risks are communicated appropriately to internal and external stakeholders, among other things. For example, at TSA, the CRO serves as the principal advisor on all risks that could affect TSA's ability to perform its mission, according to the August 2014 TSA ERM Policy Manual. The CRO reports directly to the TSA Administrator and the Deputy Administrator. In conjunction with the Executive Risk Steering Committee (ERSC) composed of Assistant Administrators who lead TSA's program and management offices, the CRO leads TSA in conducting regular enterprise risk assessments of TSA business processes or programs, and overseeing processes that identify, assess, prioritize, respond to, and monitor enterprise risks.¹⁹

Specifically, the August 2014 TSA ERM Policy Manual describes ERSC's role to "oversee the development and implementation of processes used to analyze, prioritize, and address risks across the agency including terrorism threats facing the transportation sector, along with non-operational risks that could impede its ability to achieve its strategic objectives." The TSA CRO told us that its ERSC provides an opportunity for all Assistant Administrators to get together to have risk conversations. For example, the CRO recently recommended that the ERSC add implementation of the agency's new financial management system to the risk register.

¹⁹Assistant Administrators on the ERSC are from the offices of Acquisition, Finance and Administration, Human Capital, Information Technology, Global Strategies, Intelligence and Analysis, Law Enforcement/Federal Air Marshal Service, Security Capabilities, Security Operations, and Security Policy and Industry Engagement, Training and Development, Professional Responsibility, Legislative Affairs, Strategic Communication and Public Affairs, Investigations, Civil Rights and Chief Counsel.

According to the CRO, the system's implementation was viewed as the responsibility of the Chief Financial Officer (CFO) and Chief Information Officer (CIO). However, the implementation needed to be managed at the enterprise-level because if it was not successfully implemented, the entire enterprise would be affected. The CRO proposed adding the implementation of the new financial management system to the TSA risk register to give the issue broader visibility. The ERSC unanimously concurred with the recommendation, and staff from the Office of Finance and Administration—the risk owner—will brief the ERSC periodically on the status of the effort.

According to TSA's ERM Policy Manual, the CRO leads the overall ERM process, while the ERSC brings knowledge and expertise from their individual organizations to help identify and prioritize risks and opportunities of TSA's overall approach to operations. While the CRO and ERSC play critical roles in ERM oversight, the relevant program offices still own risks and execute risk management, according to the TSA ERM Policy Manual.

FSA Committed Resources to Support ERM

To launch and sustain a successful ERM program, organizational resources are needed to help implement leadership's vision of ERM for the agency and ensure its ongoing effectiveness. For example, when FSA began its ERM program in 2004, the Chief Operating Officer (COO) decided to hire a CRO and give him full responsibility to establish the ERM organization and program and implement it across the organization. According to documents we reviewed, the CRO dedicated resources to define the goal and purpose of the ERM program and met with key leaders across the agency to socialize the program. Agency leadership hired staff to establish the ERM program and provided risk management training to business unit senior leaders and their respective staff. Our review of documents shows that the FSA continues to provide ERM training to senior staff and all FSA employees and also participates in an annual FSA Day, so employees can learn more about all business units across FSA including the Risk Management Office and its ERM implementation. In September 2016, the FSA CRO told us that the Risk Management Office had a staff of 19 full-time equivalent (FTE)

employees.²⁰ FSA continues to provide resources to its ERM program and has subsequently structured its leadership by involving two senior leaders and a risk management committee to manage ERM processes. According to the CRO, its risk committee guides the ERM process, tracks the agency's progress in managing risks, and increases accountability for outcomes.

Both the CRO, the Chairman of the Risk Management Committee and the Senior Risk Advisor report directly to the FSA Chief Operating Officer (COO). The CRO manages the day-to-day aspects of assessing risks for various internal FSA operations, programs and initiatives, as well as targeting risk assessments on specific high-risk issues, such as the closing of a large for-profit school. The Chairman of the Risk Management Committee and the Senior Risk Advisor advise the COO by identifying and analyzing external risks that could affect the accomplishment of FSA's strategic objectives. The Senior Risk Advisor also gathers and disseminates information internally that relates to FSA risk issues, such as cybersecurity or financial issues. In addition, he serves as the Chair of the Risk Management Committee and leads its monthly meetings.

Other senior leaders and members involved with the Risk Management Committee were drawn from across the agency and demonstrate the importance of ERM to FSA. Specifically, the committee is chaired by the independent senior risk advisor and comprised of the CRO, COO, CFO, Chief Information Officer (CIO), General Manager of Acquisitions, Chief Business Operations Officer, Chief of Staff, Chief Compliance Officer, Deputy COO, and Chief Customer Experience Officer, and meets monthly. Agency officials said that the participation of the COO, along with that of the other functional chiefs, indicates ERM's importance and the commitment of staff—namely these executives—in the effort.

²⁰According to OMB, *Preparation, Submission and Execution of the Budget*, OMB Circular A-11 (July 1, 2016), FTE employment means the total number of regular straight-time hours worked (i.e., not including overtime or holiday hours worked) by employees divided by the number of compensable hours applicable to each fiscal year. Annual leave, sick leave, compensatory time off and other approved leave categories are considered "hours worked" for purposes of defining full-time equivalent employment that is reported in the employment summary.

National Institute of Standards and Technology Surveyed Leaders' Views of Risk Appetite

Developing an agency risk appetite requires leadership involvement and discussion. The organization should develop a risk appetite statement and embed it in policies, procedures, decision limits, training, and communication, so that it is widely understood and used by the agency. Further, the risk appetite may vary for different activities depending on the expected value to the organization and its stakeholders. To that end, the National Institute of Standards and Technology (NIST) ERM Office surveyed its 33-member senior leadership team to measure risk appetite among its senior leaders. Without a clearly defined risk appetite, NIST could be taking risks well beyond management's comfort level, or passing up strategic opportunities by assuming its leaders were risk averse. The survey objectives were to "assess management familiarity and use of risk management principles in day-to-day operations and to solicit management perspectives and input on risk appetite, including their opinions on critical thresholds that will inform the NIST enterprise risk criteria."

Survey questions focused on the respondent's self-reported understanding of a variety of risk management concepts and asked respondents to rate how they consider risk with respect to management, safety, and security. The survey assessed officials' risk appetite across five areas: NIST Goal Areas, Strategic Objectives, Core Products and Services, Mission Support Functions, and Core Values. See figure 2 for the rating scale that NIST used to assess officials' appetite for risk in these areas.

Figure 2: National Institute of Standards and Technology Leadership Risk Appetite Survey Scale

SECTION III: RISK APPETITE

Risk Appetite is the amount of risk, on a broad level, an organization is willing to accept in pursuit of value. This includes avoiding those risks that could have unacceptable negative impacts, as well as pursuing calculated risks that could have beneficial outcomes (opportunities).

Risk appetite refers to the outcomes of decisions made both in terms of consequences as well as opportunities missed. Risk appetite facilitates the alignment of resources in the pursuit of an organization’s goals. Perhaps most importantly, risk appetite helps define an organization’s risk culture by capturing the norms and traditions that inform daily decisions made by management and employees on how to best achieve the organization’s mission.

In responding to the next set of questions, please consider your response in context of the below rating scale.

Risk Appetite Rating Scale ¹:

Rating	Risk Taking Philosophy	Tolerance for Uncertainty	Choice	Trade-Off
5 – Open	Will take justified risks	Fully anticipated How willing are you to accept uncertain outcomes, whether positive or negative?	When faced with multiple options, how willing are you to select an option that puts this objective at risk?	How willing are you to trade off this objective against achievement of other objectives?
4 – Flexible	Will take strongly justified risks	Expect some	Will choose option with highest return; accept possibility of failure	Willing
3 – Cautious	Preference for safe delivery	Limited	Will choose to put at risk, but will manage the impact	Willing under certain conditions
2 – Minimalist	Intentionally conservative	Low	Will accept if limited, and heavily out-weighted by benefits	Prefer to avoid
1 – Averse	Risk avoidance is a core objective	Extremely low	Will accept only if essential, and limited possibility/extent of failure	With extreme reluctance
			Will select the lowest risk option, always	Never

¹ CEB analysis, 2015.

Source: Department of Commerce National Institute of Standards and Technology. | GAO-17-63

The survey results revealed a disconnect between the existing and desired risk appetite for mission support functions. According to NIST officials, respondents believed the bureau needed to accept more risk to allow for innovation within mission support functions. According to agency officials, to better align risk appetite with mission needs, the NIST Director tasked the leadership team with developing risk appetite levels for those areas with the greatest disagreement between the existing and desired risk appetite, while still remaining compliant with laws and regulations. Agency officials told us the NIST ERM Office plans to address this topic via further engagement with senior managers and subject matter experts.

Good Practice: Develop a Risk-Informed Culture to Ensure All Employees Can Effectively Raise Risks

The following examples illustrate how selected agencies are developing a risk-informed culture, including how they have:

- encouraged employees to discuss risks openly,
- trained employees on ERM approach
- engaged employees in ERM efforts, and
- customized ERM tools for organizational mission and culture.

This good practice relates most closely to Identify Risks, one of the Essential Elements of Federal Government ERM shown in table 1.

Commerce Defined Roles and Responsibilities Across the Agency to Build a Risk Management Culture and Guide Its ERM Process

Successful ERM programs find ways to develop an organizational culture that allows employees to openly discuss and identify risks, as well as potential opportunities to enhance organizational goals or value. The CFOC and PIC Playbook also supports this notion that once ERM is built into the agency culture, the agency can learn from managed risks or, near misses, using them to improve how it identifies and analyzes risk. For example, Commerce officials sought to embed a culture of risk awareness across the department by defining cascading roles of leadership and responsibility for ERM across the department and for its 12 bureaus. Additionally, an official noted that Commerce leveraged this forum to share bureau best practices; develop a common risk lexicon; and address cross-bureau risks, issues and concerns regarding ERM practice and implementation. According to the updated ERM program policy, these roles should support the ERM program and promote a risk management culture. They also help promote transparency, oversight, and accountability for a successful ERM program.

Table 2 shows the ERM roles and set of responsibilities within Commerce and how they support a culture of risk awareness at each level.

Table 2: Department of Commerce Roles and Selected Responsibilities for Enterprise Risk Management (ERM)

Department Level	
Role	Selected Responsibilities
Executive Governance Committee composed of senior level department representatives	Provide policy and management oversight and advice regarding ERM implementation and operations; facilitate governance and risk consideration as element of department decision-making; inform department management of progress towards ERM maturity and efficacy of policy
Risk Management Council	Recommend and advise on development and implementation of processes for identifying, assessing, treating, monitoring, and reporting organizational risks; foster sound risk management practices throughout the department
Office of Program Evaluation and Risk Management (OPERM)	Leads the department in increasing knowledge and understanding of risk; coordinate risk management efforts; monitor execution of enterprise risk policy across the department
Bureaus and Departmental Offices	Carry out risk management processes and integrate into day-to-day operations as a means of institutionalizing risk management across the department
Office of Financial Management	Oversee, assess, and test internal controls over financial reporting as part of the requirements outlined in Appendix A of OMB Circular A-123
Bureau Level	
Role	Selected Responsibilities
Bureau Heads	Appoint a Risk Management Officer; ensure bureau implements ERM in accordance with policy; ensure timely submission of annual assurance statement required by the Federal Managers' Financial Integrity Act
Risk Management Officers	Serve as champions for overseeing implementation, integration, and management of ERM framework within bureau; serve on department Risk Management Council; update bureau risk inventory annually and elevate common or department-level risks to OPERM as needed; oversee, assess, and report on bureau ERM maturity annually
Managers and Supervisors	Ensure that those with risk management responsibilities are properly trained and that employees are aware of and follow sound risk management policies and practices
Employees	Manage risk within their area of responsibility

Source: Department of Commerce | GAO-17-63.

HUD ERM Training Emphasized Culture Changes Needed to Raise Risks

To successfully implement and sustain ERM, it is critical that staff, at all levels, understand how the organization defines ERM, its subsequent ERM approach, and organizational expectations on their involvement in the ERM process. The CFOC and PIC Playbook also supports risk awareness as previously stated because once ERM is built into the

agency culture, it can be possible to learn from managed risks and near misses when risks materialize, and then used to improve the process of identifying and analyzing risk in the future. Further, the Playbook suggests that this culture change can only occur if top agency leaders champion ERM and encourage the flow of information needed for effective decision making. For example, to promote cultural change and encourage employees to raise risks, PIH trained about half of its 1,500 employees in 2015. Agency officials told us that they plan to expand on the 2015 training and provide training to all PIH employees after 2016.

The in-person PIH training includes several features of our identified ERM good practices, such as leadership support and the importance of developing a risk-informed culture. For example, the Principal Deputy Assistant Secretary for PIH was visibly involved in the training and kicked off the first of the five training modules using a video emphasizing ERM. The training contained discussions and specific exercises dedicated to the importance of raising and assessing risks and understanding the leadership and employee roles in ERM. The first training module emphasized the factors that can support ERM by highlighting the following cultural characteristics.

- ERM requires a culture that supports the reporting of risks.
- ERM requires a culture of open feedback.
- A risk-aware culture enables all HUD staff to speak up and then be listened to by decision-makers.
- Leadership encourages the sharing of risks.

By focusing on the importance of developing a risk aware culture in the first ERM training module, PIH officials emphasized that ERM requires a cultural transformation for its success. To enable all employees to participate and benefit from the training, PIH officials recorded the modules and made them available on You-Tube.

TSA Sponsored Several Programs to Raise Risk Awareness Among Employees

Our literature review found that building a risk-aware culture supports the ERM process by encouraging staff across the organization to feel comfortable raising risks. Involving employees in identifying risks allows the agency to increase risk awareness and generate solutions to those identified risks. Some ways to strengthen this culture include the presence of risk management communities of practice, the development and dissemination of a risk lexicon agencywide, and conducting forums that enable frontline staff to raise risk-related strategic or operational concerns with leadership and senior management. For example, TSA's

Office of the Chief Risk Officer (OCRO) has sponsored a number of activities related to raising risk awareness.

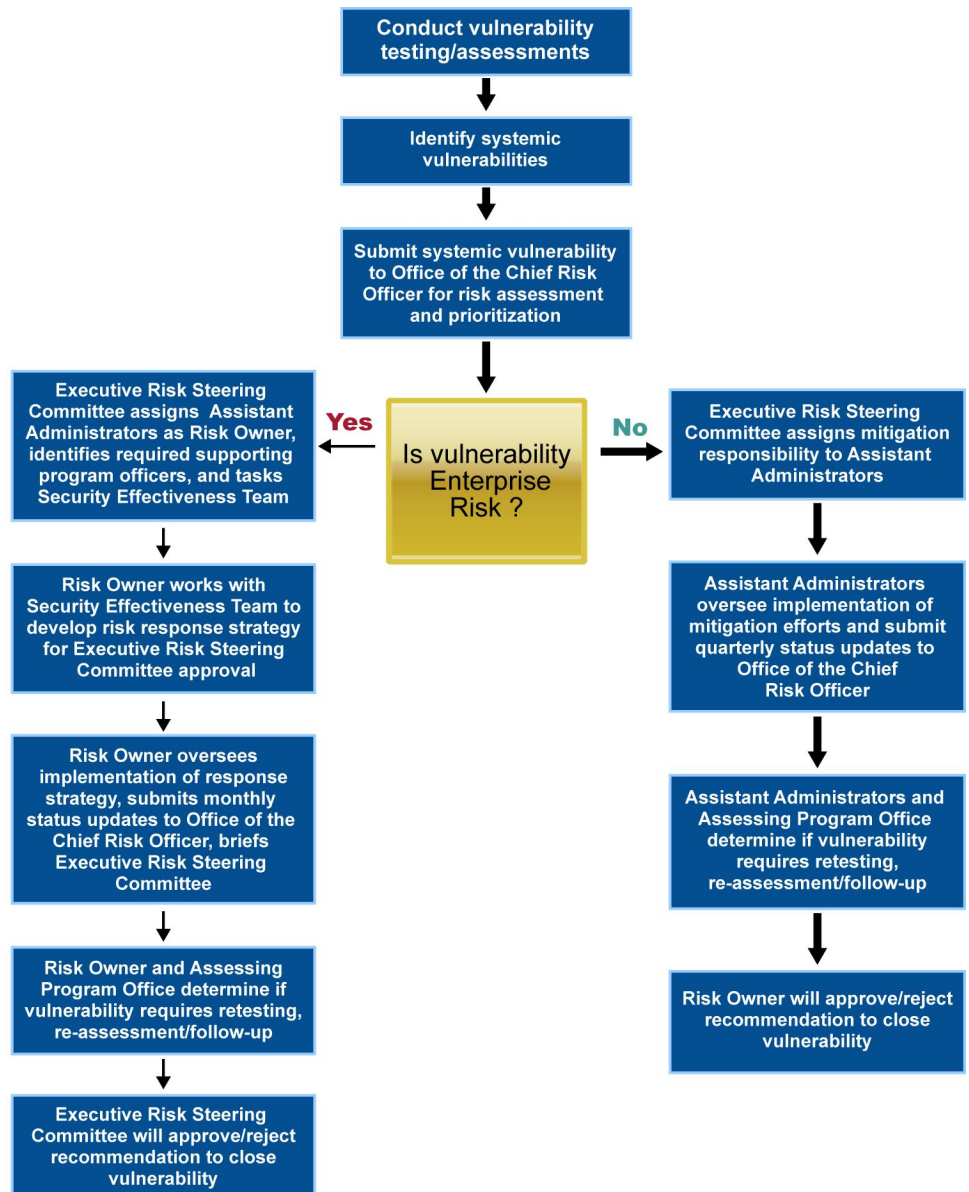
First, TSA has established a risk community of interest open to any employee in the organization, and has hosted speakers on ERM topics. These meetings have provided an opportunity for employees across the administration to learn and discuss risks and become more knowledgeable about the types of issues that should be raised to management.

Second, TSA created a risk lexicon, so that all staff involved with ERM would use and understand risk terminology similarly. The lexicon describes core concepts and terms that form the basis for the TSA ERM framework. TSA incorporated the ERM lexicon into the TSA ERM Policy Manual.

Third, in January 2016, TSA started a vulnerability management process for offices and functions with responsibility for identifying or addressing security vulnerabilities. Officials told us that this new process is intended to help raise risks from the bottom up so that they receive top level monitoring. According to the December 2015 TSA memo we reviewed, the process centralizes tracking of vulnerability mitigation efforts with the CRO, creates a central repository for vulnerability information and tracking, provides executive engagement and oversight of enterprise vulnerabilities by the Executive Risk Steering Committee (ERSC), promotes cross-functional collaboration across TSA offices, and requires the collaboration of Assistant Administrators and their respective staff across the Agency.

See figure 3 below for an overview of how TSA's vulnerability management process is intended to work. The CRO told us that employees from all levels can report risks with broader, enterprise-level application to the OCRO. Once the OCRO decides the risks are at an enterprise level, the office assembles a working group and submits ideas to the ERSC to decide at what level it should be addressed. The risk is then assigned to an executive who will be required to provide a status update.

Figure 3: Transportation Security Administration Vulnerability Management Process



Source: Department of Homeland Security and Transportation Security Administration. | GAO-17-63

Fourth, officials in the TSA OCRO told us that TSA has established points of contact in every program office, referred to as ERM Liaisons. Each ERM Liaison is a senior level official that represents their program office

in all ERM related activities. TSA also implemented risk management awareness training to headquarters and field supervisors that covered topics such as risk-based decision-making, risk assessment, and situational awareness. Officials told us they are also embedding ERM principles into existing training, so that employees will understand how ERM fits into TSA operations.

NIST Adapted the Commerce ERM Framework to Reflect Lab Safety Vocabulary Appropriate to Its Culture

Customizing ERM tools and templates can help ensure risk management efforts fit agency culture and operations. For example, NIST tailored certain elements of the Commerce ERM framework to better reflect the bureau's risk thresholds. Commerce has developed a set of standard risk assessment criteria to help identify and rate risks, referred to as the Commerce ERM Reference Card. NIST officials reported that some of the safety and security terms used at Commerce differed from the terms used at NIST and required tailoring to map to NIST's existing safety risk framework, which is a heavily embedded component of NIST operations and culture. To better align to NIST, the NIST ERM Program split safety and security risks into distinct categories when establishing a tailored ERM framework for the bureau (see table 3).

According to agency officials, the NIST ERM Reference Card also leverages American National Standards Institute guidelines, so it does not introduce another separate and potentially conflicting set of terms. Officials told us that these adaptations to the NIST ERM framework help maintain continuity with the Commerce framework, but reflect the particular mission, needs, and culture of NIST.

Table 3: Comparison of Department of Commerce (Commerce) and National Institute of Standards and Technology (NIST) Enterprise Risk Management (ERM) Reference Cards

Risk Level (lowest to highest)	Commerce Safety & Security (includes IT security)	NIST Safety (of Personnel, the Environment and Public Health)	NIST Security (includes Cyber, Personnel and Physical Security)
1	No harm	Near miss. Minimal treatment required.	Minimal Impact. Easily contained asset damage, loss or harm.
2	Minor first aid treatment or minor loss of Commerce asset	Minor first aid treatment or routine clean-up	Limited loss of NIST asset or temporary disruption to operations. Slight facility/property damage or harm.
3	Medical treatment required or moderate loss of Commerce asset.	Medical treatment beyond first aid required, lost work day(s). More than routine clean-up.	Moderate loss of NIST asset or moderate impact to operations. More than slight facility/property damage or harm.
4	Serious injury or major loss of Commerce asset	Serious injury, temporary disability. Temporary environmental or public health impact.	Major loss of NIST asset, including subsystem loss, inability to perform essential functions or serious facility/property damage or harm.
5	Death or permanent injury or complete loss of Commerce asset	Death or permanent disability. Lasting environmental or public health impact.	Catastrophic; unrecoverable major system/facility loss or harm. Inability to perform multiple essential functions.

Source: Department of Commerce. | GAO-17-63

Good Practice: Integrate ERM Capability to Support Strategic Planning and Organizational Performance Management

The following examples illustrate how selected agencies are integrating ERM capability to support strategic planning and organizational performance management. These include how they have:

- incorporated ERM into strategic planning processes, and
- used ERM to improve information for agency decisions.

This good practice most closely relates to Assess Risks, one of the Essential Elements of Federal Government ERM, shown in table 1.

Treasury Used Risk Discussions in Quarterly Performance Reviews

Through ERM, an agency looks for opportunities that may arise out of specific situations, assesses their risk, and develops strategies to achieve positive outcomes. In the federal environment, agencies can leverage the GPRAMA performance planning and reporting framework to help better manage risks and improve decision making. For example, Treasury has integrated ERM into its existing strategic planning and management processes. According to our review of the literature and the subject matter specialists we interviewed, using existing processes helps to avoid creating overlapping processes. Further, by incorporating ERM this way,

risk management becomes an integral part of setting goals, including agency priority goals (APG), ultimately achieving an organization's desired outcomes. Agencies can use regular performance reviews, such as the quarterly performance reviews of APGs and annual leadership-driven strategic objective review, to help increase attention on progress towards the outcomes agencies are trying to achieve. According to OMB Circular No. A-11, agencies are expected to manage risks and challenges related to delivering the organization's mission. The agency's strategic review is a process by which the agency should coordinate its analysis of risk using ERM to make risk-aware decisions, including the development of risk profiles as a component of the annual strategic review, identifying risks arising from mission and mission-support operations, and providing a thoughtful analysis of the risks an agency faces towards achieving its strategic objectives. Instituting ERM can help agency leaders make risk-aware decisions that affect prioritization, performance, and resource allocation.


Treasury officials stated they integrated ERM into their quarterly performance or data-driven reviews and strategic reviews, both of which already existed. Officials stated this action has helped elevate and focus risk discussions. Staff from the management office and individual bureaus work together to complete the template slide, which is used to include a risk element in their performance reviews. As part of this process, they are assessing risk. See figure 4 for how risk is incorporated into Treasury's quarterly performance review (QPR) template. Officials stated that they believe this approach to prepare for the data-driven review has helped improve outcomes at Treasury. For example, according to agency officials, Treasury used its QPR process to increase cybersecurity.

Treasury officials also told us that during the fall and the spring, each Treasury bureau completes the data-driven review templates. Agency officials are to use the summer data-driven review as an opportunity to discuss budget formulation. In winter, they are to use the annual data-driven review to show progress towards achieving strategic objectives.²¹ According to agency officials, the strategic review examines and assesses risks identified as part of the data-driven reviews and aggregates and analyzes these results at the cross cutting strategic

²¹OMB requires agencies to conduct leadership-driven, annual reviews of their progress towards achieving each strategic objective—the outcome or impact the agency is intending to achieve through its various programs and initiatives—established in their strategic plans. These reviews are known as the strategic review.

objective level, which helps improve agency performance. Integrating ERM into this existing data-driven review process avoids creating a duplicative process and increases the focus on risk.

Figure 4: Department of the Treasury Quarterly Performance Review Templates



Bureau Name
Quarterly
Performance
Review
Spring 2016
 Date

Session Goals/Outcomes
<ul style="list-style-type: none"> Assess progress on priorities Surface problems or assistance needed Discuss potential solutions Recognize successes
Potential Spring QPR Discussion Topics
<ul style="list-style-type: none"> Recent events and progress Risks, priorities, and opportunities Priority initiatives Performance/management metrics review

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Topic	Slides
Strategic Alignment Overview	
Follow-Ups & Updates	
Risk Landscape	
Priority Initiatives	
Performance Metrics	
Management Metrics	

Risk Landscape				
Name	Likelihood	Impact	Top Five Risk Areas	
			Brief description (including audit recs where applicable)	Mitigation Strategy/ Related Initiatives
	H/M/L	H/M/L		

Source: Department of the Treasury. | GAO-17-63

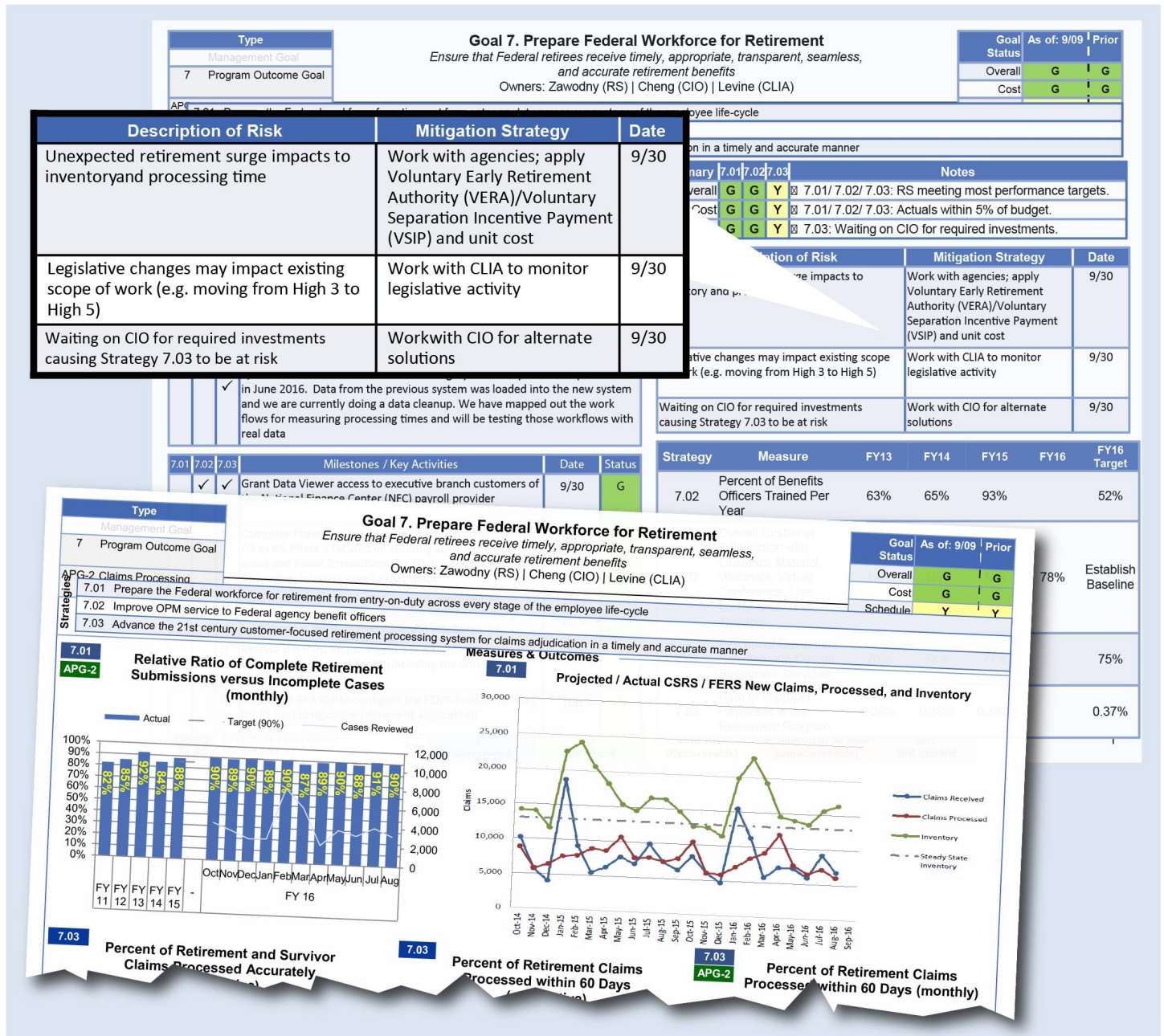
In another example, Treasury officials identified implementation of the Digital Accountability and Transparency Act of 2014 (DATA Act) both at Treasury and government-wide as a risk and established “Financial Transparency” as one of its two APGs for fiscal years 2016 and 2017. According to agency officials, incorporating risk management into the data-driven review process sends a signal about the importance of the DATA Act and brings additional leadership focus and scrutiny needed to successfully implement the law.

OPM Builds Agency View of Risk into Decision Making and Organizational Performance Management Reviews

The literature we reviewed notes that ERM contributes to leaders' ability to identify risks and adjust organizational priorities to enhance decision-making efforts. For example, OPM has a Risk Management Council (RMC) that builds risk-review reporting and management strategies into existing decision making and performance management structures. This includes Performance Dashboards, APG reviews, and regular meetings of the senior management team, as is recommended by the CFOC and PIC Playbook. The RMC also uses an existing performance dashboard for strategic goal reviews as part of its ERM process and to help inform decisions as a result of these reviews. Officials told us they present their dashboards every 6 or 7 weeks to the Chief Management Officer (CMO) and RMC, as part of preparing for their data-driven reviews. Each project and its risks are mapped against the strategic plan. When officials responsible for a goal identify risks, they must also provide action plan strategies, timelines, and milestones for mitigating risks.

Figure 5 shows an OPM dashboard to illustrate how OPM tracks progress on a goal of preparing the federal workforce for retirement, for such a risk as an unexpected retirement surge, and documents mitigation strategies to address such events. According to agency officials, the CMO and RMC monitor high level and high visibility risks on a weekly basis. In August 2016, OPM officials told us they were monitoring five to seven major projects, such as information technology (IT) security implementation and retirement services processes.

Figure 5: Example of an Office of Personnel Management (OPM) Dashboard for Preparing the Federal Workforce for Retirement Goal



Source: Office of Personnel Management. | GAO-17-63

Each quarterly data-driven review includes an in-depth look into a specific goal and the examination of risks as part of the review. Officials told us that in the past 3 years, they have covered each of the strategic goals using the dashboard. According to officials, during one of these reviews, OPM identified a new risk related to having sufficient qualified contracting staff to meet the goal of effective and efficient IT systems. Since OPM considers contracting a significant component of that goal, they decided to create the Office of Procurement Operations to help increase attention to contracting staff. Using ERM, OPM officials told us they believe that they could better prioritize funding requests across the agency, ultimately balance limited resources, and make better informed decisions.

Good Practice: Establish a Customized ERM Program Integrated into Existing Agency Processes

The following examples illustrate how selected agencies are establishing a customized ERM program into existing agency processes. These include how they have:

- designed an ERM program that allows for customized agency fit,
- developed a consistent, routinized ERM program, and
- used a maturity model approach to build an ERM program.

This good practice relates primarily to Identify Risk and Select Risk Response, two of the Essential Elements of Federal Government ERM shown in table 1.

The Office of Federal Student Aid Customized Its Approach to Designing and Implementing ERM

Effective ERM implementation starts with agencies establishing a customized ERM program that fits their specific organizational mission, culture, operating environment, and business processes but also contains the essential elements of an ERM framework. The CFOC and PIC Playbook focuses on the importance of a customized ERM program to meet agency needs. This involves taking into account policy concerns, mission needs, stakeholder interests and priorities, agency culture, and the acceptable level for each risk, both for the agency as a whole and for the specific programs.

For example, in 2004, the Department of Education's (Education) Office of Federal Student Aid (FSA) began establishing a formal ERM program, based on the Committee of Sponsoring Organizations of the Treadway Commission (COSO) ERM Framework, to help address longstanding risks using customized implementation plans. More specifically, FSA's framework and materials were customized for it to ensure that they were specific to work within a government setting, and to capture the nuances

of FSA's business model. Agency officials told us that one reason they adopted a COSO-based model for ERM is that it was geared toward achieving an entity's objectives, and could be customized to meet FSA's organizational needs as a performance-based organization.²²

Thus, FSA adopted a three-phase approach that allowed for increased maturity over time, and customized it to help the organization adapt to the new program using a COSO-based methodology for risk management. According to FSA documents, the first phase involved creating the ERM organization, designing a high-level implementation plan, and forming its enterprise risk committee to help support its first ERM efforts. The second phase involved creating a strategic plan and detailed project plan to implement ERM. For example, the original FSA ERM Strategic Plan contained an ERM vision statement (see textbox below) for aligning strategic risks with goals and objectives. The FSA Plan also provided its approach for identifying risks that could affect FSA's ability to achieve these objectives.

Federal Student Aid Enterprise Risk Management Original Vision Statement

"Our vision is to create the premier Enterprise Risk Management Program in the Federal government. One that provides for an integrated view of risk across the entire Federal Student Aid organization; aligns strategic risks with the organization's goals and objectives; ensures that risk issues are integrated into the strategic decision making process; and manages risk to further the achievement of performance goals."

Source: FSA|GAO-17-63

During the initial implementation of FSA's ERM program, the ERM strategic goals were to:

1. provide for an integrated view of risks across the organization,
2. ensure that strategic risks are aligned with strategic goals and objectives,
3. develop a progressive risk culture that fosters an increased focus on risk and awareness of related issues throughout the organization, and

²²To address longstanding management weaknesses, the Higher Education Act of 1965 was amended in 1998, to establish FSA as the first federal performance-based organization (PBO). A PBO is intended to transform the delivery of public services by committing to achieving specific measurable goals with targets for improvement, in exchange for being provided with more flexibility to manage its operations.

-
4. improve the quality and availability of risk information across all levels of the organization, especially for executive management.

Finally, according to documents we reviewed, the third phase of FSA's ERM implementation included developing enterprise-level risk reports, and advanced methods, tools, and techniques to monitor and manage risk. For example, the documents we reviewed showed that some of the key tools that supported FSA's ERM implementation included ERM terminology, risk categories, risk ratings, and a risk-tracking system. These tools help FSA select an appropriate risk response that works with existing agency processes and culture.

TSA Risk Taxonomy Promotes a Consistent Approach to the Risk Review Process

A consistent process for risk review that systematically categorizes risk helps leaders to ensure that the consideration of potential risk takes place. The CFOC and PIC Playbook suggests that organizations define risk categories to support their business processes, and use these categories consistently. For example, to identify and review risks, the TSA Risk taxonomy organizes risks into categories so the agency can consistently identify, assess, measure, and monitor risks across the organization, as discussed in the TSA Policy Manual.

The TSA Risk Taxonomy captures the risks in all aspects of mission operations, business operations, governance, and information. Figure 6 lists each risk category that is reviewed. The taxonomy helps TSA both collect risks and identify the most critical, and helps ensure that the same vocabulary and categorization system are used across TSA. Officials report that they chose these categories to help break down organizational silos and help identify all types of risks. For example, they did not want "mission risk" to consider only the Federal Air Marshal Service and airport checkpoint screening. Rather, they wanted a broad understanding of risks across the various TSA components.

Figure 6. Transportation Security Administration Risk Taxonomy



Source: TSA. | GAO-17-63

TSA officials stated that they believe the taxonomy will be even more useful when TSA has an automated computer application to help analyze all similar and related risks across the enterprise.

Commerce Designed an Assessment Tool for Its Bureaus to Determine Their ERM Maturity

OMB is encouraging agencies to use a maturity model approach in the ERM guidance provided in A-123. Results from our literature review and OMB suggested that a maturity model allows the organization to plan for continued agency improvement as its efforts mature. For example, to assist implementing a department-wide ERM process, Commerce developed an ERM Maturity Assessment Tool (EMAT), as well as a comprehensive guidebook and other tools, to share with its 12 bureaus. The EMAT consists of 83 questions to help bureaus determine their ERM maturity (see figure 7 for a sample of EMAT questions). According to agency officials, bureaus are required to conduct EMAT assessments annually. According to agency officials, while the EMAT lays out the basic components of ERM, the bureaus may customize the tool to fit their respective organizations. Commerce expects the bureaus to demonstrate increased levels of maturity over time. Agency officials reported that overall, the level of maturity has increased since the program began.

Discussions of the EMAT have allowed bureaus to learn from each other and identify strategies for addressing common challenges. According to officials, these challenges include documenting risk treatment plans and providing the rationale to support management’s risk mitigation choices.

Figure 7: Selected Questions from Commerce’s Enterprise Risk Management Maturity Assessment Tool (EMAT)

Bureau:		Test		RMO:	
Scored by:				Date:	
Score:		1		Level:	<u>Beginner</u>
I. FUNDAMENTALS OF RISK MANAGEMENT					
1	ERM is linked to bureau strategic goals and objectives.	Comments/Justification			
	Yes or No? Select Response: <input type="checkbox"/>				
2	A Risk Management Officer (RMO) for the bureau has identified and trained.	Comments/Justification			
	Yes or No? Select Response: <input type="checkbox"/>				
3	A risk management structure has been defined.	Comments/Justification			
	Yes or No? Select Response: <input type="checkbox"/>				
4	Risk owners have been identified and trained.	Comments/Justification			
	Yes or No? Select Response: <input type="checkbox"/>				
5	The consequence areas in our bureau's ERM reference card reflect the risk appetite of our senior leadership.	Comments/Justification			
	Yes or No? Select Response: <input type="checkbox"/>				
6		Comments/Justification			

Source: Department of Commerce. | GAO-17-63

**Good Practice:
Continuously Manage
Risks**

The following example illustrates how a select agency is continuously managing risks including how it has:

- tracked and monitored current and emerging risks.

This good practice most closely relates to Monitor Risks, one of the Essential Elements of Federal Government ERM shown in table 1.

**HUD Uses Risk Dashboards to
Monitor Risks**

Continuously managing risk requires a systematic or routine risk review function to help senior leaders and other stakeholders accomplish the organizational mission. The CFOC and PIC Playbook recommends that risks be identified and assessed throughout the year as part of a regular process, including surveillance of leading risk indicators both internally and externally. For example, PIH has two risk management dashboards, which it uses to monitor and review risks.

The Risk and Mitigation Strategies Dashboard shown in figure 8, according to PIH officials, helps them monitor risks and mitigation actions that PIH is actively pursuing. Officials told us that the risk division prepares and presents this dashboard to the Risk Committee quarterly. The dashboard provides a snapshot view for the current period, analysis of mitigation action to date, and trends for the projected risk. It tracks the highest level risks to PIH as determined by the Risk Committee, along with the corresponding mitigation plans. Currently, officials told us PIH is managing the top risks using the dashboard. Risk division staff continually update the dashboard to concisely display the status of both risk and mitigation efforts.

Figure 8: Public and Indian Housing Risk and Mitigation Strategies Dashboard

		MITIGATION STRATEGIES				RISK METRICS				
	Status: (not yet started, ongoing, complete, abandoned)	Percent complete	On Track?	Projected Completion Date	FY14 Risk Score	Variance (FY15-FY14)	Last Quarter Dashboard	Current Dashboard	Next Quarter Trend	
Risk 1										
Mitigation strategy #1	ongoing	25%	●	6/1/2016	-	-	→	↑	↑	
Mitigation strategy #2	ongoing	75%	●	12/15/2015						
Risk 2										
Mitigation strategy #1	abandoned	0%			20	-	→	→	↑	
Mitigation strategy #2	not yet started	0%	●	9/30/2015						
Risk 3										
Mitigation strategy #1	complete	100%	●	N/A	20	-	→	→	→	
Mitigation strategy #2	N/A									
Risk 4										
Mitigation strategy #1	not yet started	0%	●	3/31/2016	16	-	→	↑	↓	
Mitigation strategy #2	ongoing	55%	●	12/31/2015						
Risk 5										
Mitigation strategy #1	complete	100%			16	-	→	→	↓	
Mitigation strategy #2	complete	100%								
Risk 6										
Mitigation strategy #1	abandoned	50%								
Mitigation strategy #2	complete	100%								

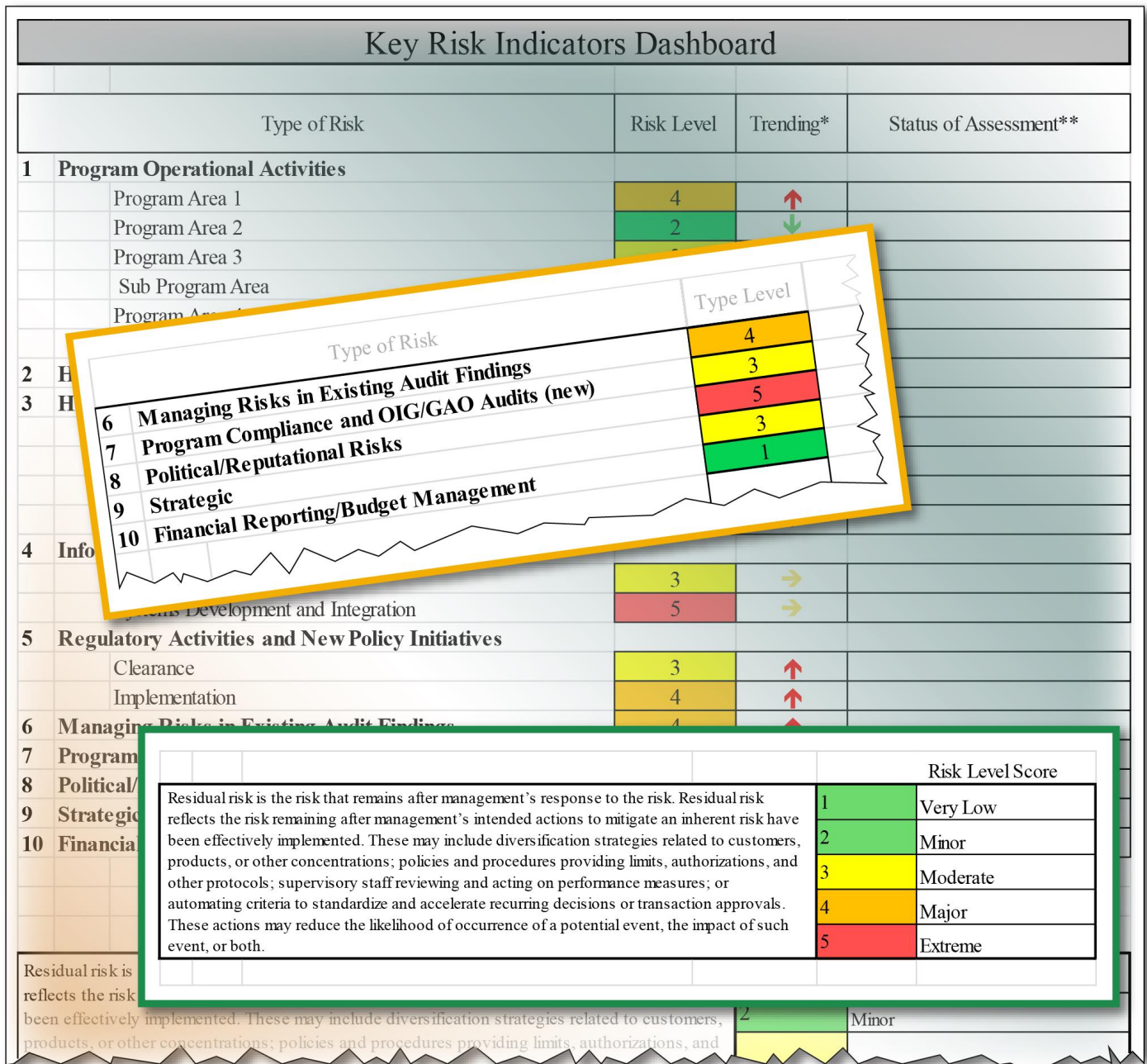
→	Risk is stable
↓	Risk is decreasing
↑	Risk is increasing
●	Mitigation strategy is ahead of schedule
●	Mitigation strategy is behind schedule
●	Mitigation strategy is on target

Source: Department of Housing and Urban Development Office of Public and Indian Housing. | GAO-17-63

The second dashboard in figure 9, Key Risk Indicators Dashboard, monitors external, future risks to PIH's mission. Agency officials told us that the dashboard is used as an early-warning system for emerging risks, which the Risk Committee must address before the next annual risk assessment cycle begins. The dashboard includes a risk-level column that documents the residual risk, and is measured on a five-point scale with one being the lowest and five being the highest, which is assigned by

the relevant Deputy Assistant Secretary and Risk Division staff. A trending column indicates whether the risk is projected to increase, decrease, or remain the same. There is also a link to a document that summarizes the risk assessment including the risks and measures to address the risk and anticipated impact. The Risk Committee reviews the dashboard as needed, but not less than quarterly.

Figure 9: Public and Indian Housing Key Risk Indicators Dashboard



Source: Department of Housing and Urban Development Office of Public and Indian Housing. | GAO-17-63

These two dashboards show how an agency uses the continuous risk review cycle. The cycle allows leaders to treat risks until they are satisfied the risk is under control or successfully treated or managed.

Good Practice: Share Information with Internal and External Stakeholders to Identify and Communicate Risks

The following examples illustrate how selected agencies are sharing information with internal and external stakeholders to identify and communicate risks. These include how they have:

- incorporated feedback on risks from internal and external stakeholders to better manage risks, and
- shared risk information across the enterprise.

This good practice most closely relates to Communicate and Report on Risks in the Essential Elements of Federal Government ERM shown in table 1.

Two Agencies Use A Memorandum of Understanding to Share Accountability and Ownership for Risks from a Shared Satellite Program

Effective information and communication are vital for an agency to achieve its objectives and this often involves multiple stakeholders, inside and outside the organization. ERM programs should incorporate feedback from internal and external stakeholders because their respective insights can help organizations identify and better manage risks. For example, the National Oceanic and Atmospheric Administration (NOAA) and the National Aeronautics and Space Administration (NASA) are creating and sharing inter-agency risk information as part of their joint management of the Joint Polar Satellite System (JPSS) program.²³ JPSS is a collaborative effort between NOAA and NASA; the program was created with the President's Fiscal Year 2011 Budget Request to acquire, develop, launch, operate and sustain three polar-orbiting satellites. The purpose of the JPSS program is to replace aging polar satellites and provide critical environmental data used in forecasting such weather events as the path and intensity of a hurricane and measuring climate variations. These two agencies have a signed agreement, or

²³Given the criticality of satellite data to weather forecasting, the likelihood of a significant satellite data gap, and the potential impact of a gap on the health and safety of the U.S. population and economy, the issue was added to our High Risk List in 2013. In 2014, we recommended that NOAA track completion dates for risk mitigation activities, update its data gap assessment, address shortfalls in its contingency plan, prioritize mitigation projects most likely to address a gap, and report progress on all mitigation projects. NOAA implemented the recommendation to track completion dates for risk mitigation activities, and we have closed it as of July 2015.

memorandum of understanding, to share ownership for risk that details the responsibilities for delivering the satellite and overall cost and schedule performance. In particular, NOAA has overall responsibility for the cost and schedule of the program, as well as the entire JPSS program. NOAA manages the ground segment elements needed for data collection and distribution, while NASA manages the system acquisition, engineering, and integration of the satellite, as well as the JPSS Common Ground System.

Because of this management arrangement, the Joint Polar Satellite System (JPSS) program also required “joint” risk tracking and management. Other program documentation also points to the agencies’ close collaboration on risk management. The March 2014, *JPSS Risk Management Plan* describes how risk management practices are planned for consistency with NASA’s risk management requirements and outlines roles and responsibilities. NOAA officials stated that they share programmatic and technical information across the two agencies, and that certain high-level risks are elevated through Commerce quarterly. Our review of meeting agendas and presentations show that NASA and NOAA officials met monthly as part of a NOAA held Agency Program Management Council (APMC) to track JPSS’s progress and that of other satellite programs. These meetings also allowed participants to discuss and approve courses of action for top program risks. During the APMC meetings, the JPSS program director presented status updates and other information including risks. Participants discussed risks, cost, performance, schedule, and other relevant issues for each program.

Sharing information helps promote trust within and outside of the organization, increases accountability for managing risks, and helps stakeholders understand the basis for identified risks and resulting treatment plans. Further, internal and external stakeholders may be able to provide new expertise and insight that can help organizations identify and better manage risks. Both the NASA Program Managers and the NOAA Program Director or their representatives attend meetings to discuss potential issues, according to NOAA officials. Each major satellite program also has an independent Standing Review Board. At defined program/project milestones, the Standing Review Board reviews relevant data and writes up its conclusions, presents an independent review of the program/project, and highlights key risks to the convening authorities. NOAA officials said that having a joint risk-sharing process established for JPSS and other joint programs allows them to elevate risks both internally up through the agency, and externally, more quickly and efficiently. For

example, for another satellite program, NOAA had to reschedule its launch date due to a problem that arose with the launch service provider.

After it became clear that the program was going to miss its schedule baseline, it was elevated up through NOAA. According to NOAA, NASA officials then explained to the APMC the steps they were taking to address the risk. As a result of having a process to elevate the risk, NOAA was able to discuss risks associated with the launch vehicle and how it planned to proceed with a new launch date range. According to NOAA officials, because the APMC discussion developed joint information, this information was available to pass on more quickly to Congress.

IRS Uses a Decision-Making Tool that Includes Input from Stakeholders Across the Enterprise

When discussing potential risks, gathering input from across an enterprise helps to ensure decisions work for all agency groups affected. It also gives groups an opportunity to share any concerns or ideas that can improve outcomes. Appropriate and timely sharing of information within an organization ensures that risk information remains relevant, useful, and current. The CFOC and PIC Playbook also notes that informed decision making requires the flow of information regarding risks and clarity about uncertainties or ambiguities—up and down the hierarchy and across silos—to the relevant decision makers so they can make informed decisions. For example, IRS uses the Risk Acceptance Form and Tool (RAFT) as shown in figure 10 to document business decisions within a consistent framework. As part of the RAFT development process, IRS considers the views of internal and external stakeholders. According to agency officials, the RAFT assists IRS business units in making better risk-based decisions and elevating risks to the appropriate level. IRS officials said the RAFT also encourages units to consider how decisions may affect other units, as well as external stakeholders. As a result, business units often collaborate on key decisions by completing the RAFT, including considering and documenting risks associated with those decisions.

Figure 10: Internal Revenue Service Risk Acceptance Form and Tool Decision-Making Tool

Decision Making Framework Risk Acceptance Form and Tool (RAFT)

Purpose: The purpose of this form is to provide a consistent framework for the Service that can be leveraged within a unit's existing governance or management approval processes to clearly document business decisions in the context of risk appetite and /or acceptance. This document can be used in various ways, including the following: 1) a framework to assess various options in making decisions for achievement of objectives, 2) a guide to articulate rational behind those decisions within the context of risk appetite, and 3) a documentation trail to support these business decisions.

Name/Title of RAFT		Date RAFT created/revised
Business Operating Division	Functional Operating Division	Special Unit (if applicable)

Office (if applicable)

External stakeholders affected

Objective (Provide a brief problem statement, challenge, and/or the opportunity)

Background (Provide a summary of the background of the situation that the organization is facing and other relevant facts)

Assessment and rationale

Decision or proposed decision (Provide a brief overview of the decision)

Description of risk acceptance (Provide a description of the risk that is being accepted as a result of the assessment to articulate risk appetite. Consider what exposures result from the decision.)

Additional monitoring

Source: Department of the Treasury and Internal Revenue Service. | GAO-17-63

According to IRS officials, the RAFT is used as a guide to articulate rationales behind decisions within the context of risk appetite and serves as a documentation trail to support these business decisions. IRS agency officials told us that one goal of its ERM program is to look at risk across the enterprise rather than taking a narrow approach to risk management. This also applies when making risk informed decisions, such as those that would be documented on a RAFT. As such, the RAFT includes the following instructions: “If the decision impacts or involves multiple organizations, coordinate with the respective points-of-contact to ensure all relevant information regarding the risk(s) are addressed in each section.” The form also allows users to identify other business units involved in the decision and external stakeholders affected by the decision.

Agency Comments and GAO Responses

We provided a draft of this report to Office of Management and Budget (OMB) and the 24 Chief Financial Officer (CFO) Act agencies for review and comment.²⁴ OMB staff provided us with oral comments and stated they generally agreed with the essential elements and good practices as identified in this report. They also provided technical comments that we incorporated as appropriate. We received written responses from the Social Security Administration (SSA) and Department of Veterans Affairs (VA) reprinted in appendices II and III. The SSA and the VA neither agreed nor disagreed with our findings. However, VA mentioned that enterprise risk management should be monitored at a minimum as part of the quarterly reviews of Agency Priority Goals because of the high-level audience led by the Deputy Secretary and suggested that monitoring risks more frequently should be emphasized as a practice that most agencies should follow, among other things. SSA stated that they are adopting the good practices identified in the report.

Of the remaining 22 CFO Act agencies, we received technical comments from 10 agencies, which we incorporated as appropriate, 10 had no comments, and two others did not respond.

²⁴31 U.S.C. § 901(b). The 24 CFO Act agencies, generally the largest federal agencies, are the Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, Homeland Security, Housing and Urban Development, the Interior, Justice, Labor, State, Transportation, the Treasury, and Veterans Affairs, as well as the Agency for International Development, Environmental Protection Agency, General Services Administration, National Aeronautics and Space Administration, National Science Foundation, Nuclear Regulatory Commission, Office of Personnel Management, Small Business Administration, and Social Security Administration.

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

If you or your staff members have any questions about this report, please contact me at (202) 512-6806 or mihmj@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.

A handwritten signature in black ink that reads "J. Christopher Mihm". The signature is written in a cursive style with a large, stylized "J" and "M".

J. Christopher Mihm
Managing Director, Strategic Issues

Appendix I: Subject Matter Specialists

Todd Grams, Association of Federal Enterprise Risk Management (AFERM), President; Deloitte & Touche LLP, Managing Director; Internal Revenue Service, former Chief of Staff, Chief Financial Officer (CFO) and Chief Information Officer; and Department of Veterans Affairs, former CFO and Performance Improvement Officer

Frank Martens, Director, PricewaterhouseCoopers (PwC), Risk Assurance Services and Project Lead Director on the PwC team working with the Committee of Sponsoring Organizations of the Treadway Commission to update the Enterprise Risk Management Framework- Aligning Risk with Strategy, exposure draft June 2016

Linda Springer, former Executive Director, Ernst & Young, LLP; former Director of the Office of Personnel Management and former Controller and former, Director, Office of Federal Financial Management at OMB

Thomas Stanton, AFERM, Past President; Fellow at Johns Hopkins University, and author of articles and books on ERM in the public sector

Dr. Doug Webster, AFERM, Co-founder and Past President; George Washington University Center for Excellence in Public Leadership, Senior Fellow; author of articles and a book on ERM in the public sector; and Director, Risk Management at the U.S. Agency for International Development, Office of the Chief Financial Officer.

Appendix II: Comments from the Social Security Administration



SOCIAL SECURITY
Office of the Commissioner

October 27, 2016

Mr. J. Christopher Mihm
Managing Director, Strategic Issues
United States Government Accountability Office
441 G. Street, NW
Washington, DC 20548

Dear Mr. Mihm:

Thank you for allowing us to review the draft report, "ENTERPRISE RISK MANAGEMENT: Selected Agencies' Experiences Illustrate Good Practices in Managing Risks" (GAO-17-63). We appreciate your work in identifying essential elements and good practices of Enterprise Risk Management (ERM). The draft report accurately reflects our activities for this engagement and we have no additional comments.

We are adopting many of the best practices outlined in this report as we move forward with implementation of ERM. We recently met with the Office of Management and Budget (OMB) to outline our ERM implementation plans, and OMB has indicated that they are pleased with our overall approach, plans, and progress to date.

If you have any questions, please contact me at (410) 965-4991. Your staff may contact Gary S. Hatcher, Senior Advisor for the Audit Liaison Staff, at (410) 965-0680.

Sincerely,

A handwritten signature in blue ink that reads "Frank Cristaudo".

Frank Cristaudo
Executive Counselor to the Commissioner

SOCIAL SECURITY ADMINISTRATION BALTIMORE, MD 21235-0001

Appendix III: Comments from the Department of Veterans Affairs



DEPARTMENT OF VETERANS AFFAIRS
WASHINGTON DC 20420

November 1, 2016

Mr. J. Christopher Mihm
Managing Director, Strategic Issues
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Mihm:

The Department of Veterans Affairs (VA) has reviewed the Government Accountability Office's (GAO) draft report, "**ENTERPRISE RISK MANAGEMENT: Selected Agencies' Experiences Illustrate Good Practices in Managing Risks**" (GAO-17-63).

The enclosure provides our general comments. VA appreciates the opportunity to comment on your draft report.

Sincerely,

A handwritten signature in black ink, appearing to read "Gina S. Farrisee".

Gina S. Farrisee
Deputy Chief of Staff

Enclosure

Enclosure

Department of Veterans Affairs (VA) Comments to
Government Accountability Office (GAO) Draft Report
***"ENTERPRISE RISK MANAGEMENT: Selected Agencies' Experiences Illustrate
Good Practices in Managing Risks"***
(GAO-17-63)

General Comments:

There are two areas mentioned in this report that are key to having an Enterprise Risk Management (ERM) process that has a real impact on the operations of an agency and that give the process a lasting effect, "Aligning the ERM process to agency goals and objectives" and "Monitoring Risks." The report gives general coverage to both areas, but language should be stronger and more prescriptive. While aligning ERM to agency goals and objectives is important, it is equally as important for enterprise risks to be cascaded to enterprise-level performance metrics, and in some cases, along with operational metrics. ERM issues should also be monitored, at a minimum, as part of the quarterly review of the "Agency Priority Goals" because that gives the process and the identified risks a high-level audience led by the Deputy Secretary to review these issues. While this was mentioned as a best practice by the Department of Treasury, it should be emphasized as a general practice that most agencies should follow.

Appendix IV: GAO Contact and Staff Acknowledgements

GAO Contact

J. Christopher Mihm, (202) 512-6806 or mihmj@gao.gov

Staff Acknowledgements

In addition to the individual named above, William M. Reinsberg, Assistant Director, Carole J. Cimitile, Analyst-in-Charge, Shea Bader, Crystal Bernard, Amy Bowser, Alexandra Edwards, Ellen Grady, Erin E. Kennedy, Erik Kjeldgaard, Robert Gebhart, Sharon Miller, Anthony Patterson, Laurel Plume, Robert Robinson, Cynthia Saunders, Stewart W. Small, Katherine Wulff, and Jessica L. Yutzky made major contributions to this report.

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