OFFICE OF INSPECTOR GENERAL

Transportation Security Administration Needs a Crosscutting Risk-Based Security Strategy

Homeland Security

September 9, 2016

OIG-16-134

DHS OIG Highlights

Transportation Security Administration Needs a Crosscutting Risk-Based Security Strategy

September 9, 2016

Why We Did This Audit

We sought to determine whether the Transportation Security Administration (TSA) has an intelligence-driven, risk-based security strategy that informs security and resource decisions across all transportation modes.

What We Recommend

TSA should develop and implement a risk-based security strategy that encompasses all transportation modes; ensure risk management oversight and support are provided for all transportation modes; and establish a formal budget planning process that uses risk to help inform resource allocations.

For Further Information:
Contact our Office of Public Affairs at (202) 254-4100, or email us at DHS-OIG.OfficePublicAffairs@oig.dhs.gov

What We Found

TSA is charged with securing the Nation's transportation systems — highway, freight rail, aviation, mass transit, and pipeline — to ensure freedom of movement for people and commerce. TSA directly manages security programs such as passenger and baggage screening for the aviation mode, but its primary role for surface (non-aviation) modes is oversight and regulation. Since 2011, TSA has publicized that it uses an "intelligence-driven, risk-based approach" across all transportation modes.

We determined that TSA lacks an intelligence-driven, risk-based security strategy that informs security and resource decisions across all transportation modes. TSA's publicized "intelligence driven, risk-based approach" was designed for the aviation mode and chiefly for air passenger screening. Though TSA has security programs for the surface modes, its agency-wide risk management organizations provide little oversight of these programs. In addition, TSA lacks a formal process to incorporate risk in its budget formulation decisions. A crosscutting risk-based security strategy would help ensure all transportation modes consistently implement risk-based security and help decision makers align resources effectively.

TSA Response

TSA concurred with our recommendations.

OFFICE OF INSPECTOR GENERAL
Department of Homeland Security

Washington, DC 20528 / www.oig.dhs.gov

SEP 9 2016

MEMORANDUM FOR: Dr. Huban A. Gowadia
Deputy Administrator
Transportation Security Administration

FROM: for Mark Bell
Assistant Inspector General for Audits

SUBJECT: *Transportation Security Administration Needs a Crosscutting Risk-Based Security Strategy*

For your action is our final report, *Transportation Security Administration Needs a Crosscutting Risk-Based Security Strategy.* We incorporated the formal comments provided by your office.

The report contains three recommendations aimed at improving the Transportation Security Administration's management of risk-based security. Your office concurred with all recommendations. Based on information provided in your response to the draft report, we consider recommendations 1 through 3 open and unresolved. As prescribed by the Department of Homeland Security Directive 077-01, *Follow-Up and Resolutions for the Office of Inspector General Report Recommendations*, within 90 days of the date of this memorandum, please provide our office with a written response that includes your (1) agreement or disagreement, (2) corrective action plan, and (3) target completion date for each recommendation. Also, please include responsible parties and any other supporting documentation necessary to inform us about the current status of the recommendation. Until your response is received and evaluated, the recommendations will be considered open and unresolved.

Please send your response or closure request to OIGAuditsFollowup@oig.dhs.gov.

Consistent with our responsibility under the *Inspector General Act*, we will provide copies of our report to congressional committees with oversight and appropriation responsibility over the Department of Homeland Security. We will post the report on our website for public dissemination.

Please call me with any questions, or your staff may contact Donald Bumgardner, Deputy Assistant Inspector General for Audits, at (202) 254-4226.

Background

The Transportation Security Administration (TSA) is charged with securing the Nation's transportation systems — highway, freight rail, aviation, mass transit, and pipeline — to ensure freedom of movement for people and commerce. To fulfill its mission, TSA works with transportation system stakeholders as well as its partners in the law enforcement and intelligence communities. TSA directly manages security programs such as passenger and baggage screening for the aviation mode, but its primary role for surface (non-aviation) modes is oversight and regulation. Since 2011, TSA has publicized that it uses an "intelligence-driven, risk-based approach" across all transportation modes.

According to TSA, various TSA program offices and entities are responsible for risk management and resource decisions; for example:

- The Office of the Chief Risk Officer (OCRO), established in February 2014, is charged with providing overall leadership, vision, and direction for risk management activities across the organization.

- TSA's Executive Risk Steering Committee (ERSC), comprising the OCRO and 10 assistant administrators, has overarching responsibility for defining strategy and managing risk TSA-wide.

- TSA's Surface Division is responsible for engaging state, local, and industry partners to assess risk, reduce vulnerabilities, and improve security through collaborative efforts, as well as developing regulatory policies. The Surface Division works with governments and private sector stakeholders to develop and implement initiatives such as:
    - coordinating with TSA's Office of Security Operations in the deployment of inspectors to conduct voluntary assessments and compliance inspections of surface transportation systems;
    - developing standards and best practices for security programs;
    - Working with the Federal Emergency Management Agency for transportation-related funding of DHS Preparedness Grant programs; and
    - providing resources for security training and exercises to stakeholders.

- TSA's Office of Finance and Administration (OFA) oversees budget development and advises the chief financial officer and TSA leadership on budget issues.

In fiscal year 2015, TSA dedicated about 80 percent of its nearly $7.4 billion budget to aviation security and about 2 percent to surface transportation

security. Its remaining resources were spent on support and intelligence functions.

Our audit objective was to determine whether TSA has an intelligence-driven, risk-based security strategy that informs security and resource decisions across all transportation modes.

Results of Audit

TSA lacks an intelligence-driven, risk-based security strategy that informs security and resource decisions across all transportation modes. TSA's publicized "intelligence driven, risk-based approach" was designed for the aviation mode and chiefly for air passenger screening. Though TSA has surface transportation security programs, TSA's agency-wide risk management organizations, ERSC and OCRO, provide little oversight of these programs. In addition, TSA lacks a formal process to incorporate risk in its budget formulation decisions. Without a crosscutting risk-based strategy for all transportation modes, TSA cannot ensure it consistently prioritizes security and resource allocation decisions to protect the traveling public and the Nation's transportation systems.

TSA's "Intelligence-Driven, Risk-Based Approach" Applies to the Aviation Mode

In 2011, TSA began publicizing that it uses an "intelligence-driven, risk-based approach" across all transportation modes. However, TSA specifically designed this approach to replace its one-size-fits-all approach to air passenger screening. TSA's Risk-Based Security Working Group, chartered in January 2011, recommended air passenger screening options that would focus resources on the most likely threats while improving air passengers' experience at airport security checkpoints. TSA developed the PreCheck program based, in part, on the working group's recommendations. TSA has also continued to enhance risk-based aviation security efforts such as the Secure Flight initiative, behavior detection officers, and canine activities.

TSA Does Not Have a Crosscutting Risk-Based Security Strategy

According to the ERSC's charter, "the overall goal of the ERSC is to determine an appropriate crosscutting, risk-based strategy that will enable the use of threat, vulnerability, and consequence information to make risk-informed resource allocations and decisions across all transportation modes under TSA's purview." However, neither the ERSC nor any other TSA entity developed a risk-based security strategy that encompasses all transportation modes. Although TSA drafted a Risk-Based Security Strategic Plan in 2015, this plan applies exclusively to the aviation mode; the surface transportation modes are

not mentioned in the plan. In addition, OCRO provides little oversight for the surface transportation modes.

A risk-based security strategy comprising all modes would help ensure all transportation modes consistently implement risk-based security and help decision makers align resources effectively.

TSA's Budget Formulation Does Not Formally Include Risk

TSA did not incorporate formal risk management methods and practices in its agency budget formulation, as required by the 2011 DHS *Integrated Risk Management* directive. OFA does not have documented procedures for prioritizing resource requests according to risk.

OFA staff explained that they develop budget recommendations based on their understanding of agency and program priorities garnered through frequent, informal interaction with TSA program offices. TSA program offices do not provide annual budget requests to OFA, and program office staff does not normally attend OFA budget recommendation meetings. OFA staff said they informally prioritize their budget recommendations to the TSA Administrator.

A formal process that incorporates risk into budget formulation would help TSA ensure it best determines and prioritizes the resources necessary to fulfill its mission. TSA began taking steps to formalize its budget process in October 2015.

Recommendations

We recommend that the Deputy Administrator, Transportation Security Administration:

Recommendation 1: Develop and implement a crosscutting risk-based security strategy that encompasses all transportation modes. The strategy should, at a minimum:

- define intelligence-driven, risk-based security;
- identify objectives for an intelligence-driven, risk-based security approach;
- identify steps for all transportation modes to achieve risk-based security objectives;
- provide guidelines for aligning resources with risk;
- establish priorities, milestones, and performance measures to gauge the effectiveness of the strategy; and
- establish responsible parties and timelines for strategy implementation.

Recommendation 2: Direct the Office of the Chief Risk Officer and the Executive Risk Steering Committee (or another entity) to provide risk management oversight and support for all transportation modes.

Recommendation 3: Establish a formal budget planning process that uses risk to help inform resource allocations.

Management Comments and OIG Analysis

TSA concurred with our recommendations and provided comments to the draft report. A summary of TSA's management comments and our analysis follows. We have included a copy of TSA's management comments in their entirety in appendix A. TSA also provided technical comments to our report, which we incorporated, as appropriate.

Recommendation #1: TSA concurred. TSA included two documents with its response that were not previously provided to our auditors. According to TSA, one document, developed in 2014, outlines its risk-based strategy for non-aviation transportation. The second document illustrates its work with the Federal Emergency Management Agency on risk analysis for the transportation security grant programs. TSA stated that those risk analysis results are used to inform its efforts with surface transportation systems operators and surface transportation security inspectors.

TSA also indicated that it is finalizing a strategy document that incorporates risk-based security principles and is applicable to all transportation modes. Once this strategy is finalized, TSA intends to consolidate aviation and surface risk-based security strategy documents into a single product that addresses the elements contained in this recommendation.

OIG Analysis: TSA's planned actions are responsive to this recommendation. This recommendation will remain unresolved and open until TSA provides an estimated completion date for a crosscutting risk-based security strategy that encompasses all transportation modes.

Recommendation #2: TSA concurred. According to TSA, the Chief Risk Officer's staff is working with the Office of Security Policy and Industry Engagement to document its office-level risks. This effort should provide the Chief Risk Officer and Executive Risk Steering Committee with a better understanding of surface transportation risks and response strategies.

OIG Analysis: TSA's planned actions are responsive to this recommendation. This recommendation will remain unresolved and open until TSA provides a target date for the Chief Risk Officer and Executive Risk Steering Committee to incorporate office-level risk registers into their broader enterprise risk register.

Recommendation #3: TSA concurred. TSA acknowledged that improving and maturing the planning, programming, budgeting, and execution process is a critical element for its future success. As a first step toward implementing this recommendation, TSA conducted a series of crosscutting program reviews and developed resource planning guidance. TSA plans to continue using these two efforts to help inform future resource allocation decisions. TSA also explained how its enterprise risk management maturity model will create strong links between risk and budget once it reaches full maturity.

OIG Analysis: TSA's planned actions are responsive to this recommendation. This recommendation will remain unresolved and open until TSA provides an estimated completion date and documentation supporting that it established a formal budget planning process that uses risk to inform resource allocations.

Objective, Scope, and Methodology

The Department of Homeland Security Office of Inspector General (OIG) was established by the *Homeland Security Act of 2002* (Public Law 107–296) by amendment to the *Inspector General Act of 1978*.

Our audit objective was to determine whether TSA has an intelligence-driven, risk-based security strategy that informs security and resource decisions across all transportation modes. To achieve our objective, we researched and analyzed Federal laws concerning transportation security; risk management guidance from the Office of Management and Budget and the Government Accountability Office; the 2011 DHS *Integrated Risk Management* directive; the DHS Risk Management Fundamentals; the 2010 and 2014 DHS *Quadrennial Homeland Security Review*; DHS Strategic Plans between FYs 2010–2015; and 2013, 2014, and 2015 TSA Transportation Security Sector Risk Assessments.

We interviewed officials from the following TSA Offices: Chief Risk Officer, Finance and Administration, Global Strategies, Inspections, Intelligence and Analysis, Law Enforcement/Federal Air Marshal Service, Security Capabilities, Security Operations, and Security Policy and Industry Engagement.

We conducted this performance audit between June 2015 and January 2016 pursuant to the *Inspector General Act of 1978*, as amended, and according to generally accepted government auditing standards. Those standards require

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

Office of Audits major contributors to this report are Lisa Vonder Haar, Director; Anne M. Mattingly, Audit Manager; Marisa Coccaro, Program Analyst; Heidi Einsweiler, Program Analyst; Jeanette Hyatt, Auditor; Victor Leung, Program Analyst; Ardeth Savery, Auditor; Elizabeth Argeris, Communications Analyst; and Armando Lastra, Independent Referencer.

Appendix A
TSA Comments to the Draft Report

U.S. Department of Homeland Security
601 South 12th Street
Arlington, VA 20598

JUL 14 2016

Transportation Security Administration

MEMORANDUM FOR: Mark Bell
Assistant Inspector General for Audits
U.S. Department of Homeland Security

FROM: Huban A. Gowadia, Ph.D.
Deputy Administrator
Transportation Security Administration

SUBJECT: Management's Response to OIG Draft Report: "TSA Needs a Crosscutting Risk-Based Security Strategy" (Project No. 15-120-AUD-TSA)

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

Between June 2015 and January 2016, OIG completed the subject audit to determine whether TSA has an intelligence-driven risk-based security (RBS) strategy that informs resource decisions across all transportation modes. The results of that audit identified three broad deficits in the Agency's current approach to applying RBS concepts beyond passenger screening, and using risk-based principles to inform resource allocation decisions. Shortfalls identified in the draft report were: 1) TSA's intelligence-driven risk-based approach applies to the aviation mode; 2) TSA does not have a cross cutting risk-based security strategy; and 3) TSA's budget formulation does not formally include risk.

We appreciate the efforts of the OIG team in completing this audit. The recommendations provided in the draft report identify important steps needed to strengthen and mature TSA's risk management program as a whole. Implementing the recommendations will improve the application and oversight of risk-based security principles across all transportation modes and enhance the use of risk information for budget development and resource allocation decisions.

The draft report contains three recommendations with which the Department concurs. We are committed to implementing these recommendations as soon as practical. Specifically:

Recommendation 1: Develop and implement crosscutting risk-based security strategy that encompasses all transportation modes. This strategy should, at a minimum:

- Define intelligence-driven, risk-based security;
- Identify objectives for an intelligence-driven risk-based security approach;
- Identify steps for all transportation modes to achieve risk-based security objectives;
- Provide guidelines for aligning resources with risk;
- Establish priorities, milestones, and performance measures to gauge the effectiveness of the strategy; and
- Establish responsible parties and timelines for strategy implementation.

Response: Concur. TSA does apply RBS principles to surface transportation modes. During 2014, TSA developed the "Implementing Risk-Based Security in the Surface Transportation Environment" document within the TSA Office of Security Policy and Industry Engagement (OSPIE) that outlines the RBS strategy for non-aviation transportation. Additionally, TSA works closely with the Federal Emergency Management Agency (FEMA) on risk-analysis for the purposes of transportation security grant programs. The results of which also inform OSPIE's focus with surface transportation systems operators as well as establishing priorities for the efforts of the agency's Transportation Security Inspectors – Surface (e.g., which surface systems should be subject to Baselines Assessment for Security Enhancement (BASE) program reviews). The risk methodology is explained in the "Risk Methodology, Fiscal Year 2015 Report to Congress: Calculating Risk for the fiscal year (FY) 2015 DHS Preparedness Grant Programs" dated December 21, 2015. Copies of both these documents have been provided to the OIG audit team.

The agency is finalizing a TSA Strategy document that applies to all transportation modes with risk-based security principles woven throughout. This strategy should be released soon and will guide Agency direction and efforts over an extended time horizon. Once the higher level TSA Strategy is finalized, TSA intends to consolidate the aviation and surface RBS strategy documents into a single product that outlines the RBS strategy for all transportation modes, as referenced in the OIG report. The consolidated RBS Strategy will address the specific elements contained in this recommendation.

ECD: To be determined and provided in the 90-day update.

Recommendation 2: Direct the Office of the Chief Risk Officer (OCRO) and the Executive Risk Steering Committee (or other entity) to provide risk management oversight and support for all transportation modes.

Response: Concur. An essential component of a mature TSA Enterprise Risk Management (ERM) program is the development of office-level Risk Registers that link to the broader Enterprise Risk Register. Direct responsibility for surface transportation

security policy resides with OSPIE, and OCRO staff is actively working with OSPIE to develop that specific office-level risk register. Once completed, this effort will provide the Chief Risk Officer (CRO) and Executive Risk Steering Committee with improved understanding and visibility into surface transportation risks and response strategies.

ECD: To be determined and provided in the 90-day update.

Recommendation 3: Establish a formal budget planning process that uses risk to help inform resource allocations.

Response: Concur. Improving and maturing the Planning, Programming, Budgeting, and Execution (PPBE) process is a critical element for the future success of the Agency. TSA is instituting a robust PPBE process, which is a key objective within the TSA Strategy document, and is a top priority of the Administrator and Deputy Administrator. Prior to the submission of TSA's Resource Allocation Proposal (RAP) for the Fiscal Year 2018 budget, TSA took two important steps toward realizing the intent of this recommendation. First, TSA's Office of Finance and Administration (OFA) led a team that conducted a series of crosscutting program reviews across the Agency. TSA's Chief Financial Officer (CFO) and CRO were directly involved with the planning for this effort, and OCRO staff was embedded as part of the review team. Second, TSA's CFO and CRO jointly developed the Agency's resource planning guidance informed by the draft TSA Strategy and risk. The Agency plans to continue these two efforts when developing future budgets as part of a broader effort to strengthen the PPBE process and expressly link risks and budget to inform resource allocation decisions.

TSA's ERM Maturity Model recognizes the importance of a close link between Agency risks and the budgeting processes. The efforts taken thus far to establish these links are reflective of TSA's current ERM maturity level, but not the desired end state. When TSA initially established its ERM program in March 2014, the Agency set achieving maturity level 3 by the end of calendar year 2016 as the initial target. Our most recent maturity assessment indicates TSA remains on track to achieve that goal. Over the next few months, TSA will be developing a plan to reach maturity level 5, which contains strong links between risk and budget. Specific ERM maturity elements related to this recommendation are:

- Risk appetite is defined and considered when planning and budgeting and evaluating new programs, products, and services;
- Risk response plans are integrated with the management and budgetary processes of the enterprise;
- Data for strategic planning, budgeting, and resource allocation flow seamlessly; and
- Systems for strategic planning, budgeting and resource allocation are integrated with those for enterprise risk management.

ECD: To be determined and provided in the 90-day update.

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

Appendix B
Report Distribution

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