United States Government Accountability Office

GAO

Report to the Chairman, Committee on Homeland Security, House of Representatives

June 2009

TRANSIT SECURITY GRANT PROGRAM

DHS Allocates Grants Based on Risk, but Its Risk Methodology, Management Controls, and Grant Oversight Can Be Strengthened





Highlights of GAO-09-491, a report to the chairman, Committee on Homeland Security, House of Representatives

Why GAO Did This Study

From fiscal years 2006 through 2008, the Department of Homeland Security (DHS) has allocated about \$755 million dollars to transit agencies through its Transit Security Grant Program (TSGP) to protect transit systems and the public from terrorist attacks. GAO was asked to evaluate the extent to which (1) TSGP funds are allocated and awarded based on risk; (2) DHS has allocated, awarded, and distributed TSGP grants in accordance with statutory deadlines and leading practices for collaborating agencies; and (3) DHS has evaluated the effectiveness of the TSGP and its investments. To address these objectives, GAO reviewed the TSGP risk model, fund allocation methodology and program documents, such as TSGP guidance, and interviewed DHS and transit officials, among other steps.

What GAO Recommends

GAO recommends, among other things, that DHS strengthen its methodology for determining risk by measuring variations in vulnerability, define Transportation Security Administration (TSA) and Federal Emergency Management Agency (FEMA) roles for managing and monitoring the TSGP, develop a plan with milestones for measuring TSGP performance, and develop a process to systematically collect data, track grant activities, and communicate the availability of grant funding to transit agencies. DHS concurred with GAO's recommendations and discussed actions to address them.

To view the full product, including the scope and methodology, click on GAO-09-491. For more information, contact Stephen M. Lord at (202) 512-8777 or lords@gao.gov.

TRANSIT SECURITY GRANT PROGRAM

DHS Allocates Grants Based on Risk, but Its Risk Methodology, Management Controls, and Grant Oversight Can Be Strengthened

What GAO Found

DHS has used a risk analysis model to allocate TSGP funding and award grants to higher-risk transit agencies, although transit agency officials have expressed concerns about changes that have occurred since the TSGP's inception, such as revised priorities. The TSGP risk model includes all three elements of risk—threat, vulnerability, and consequence—but can be strengthened by measuring variations in vulnerability. DHS has held vulnerability constant, which limits the model's overall ability to assess risk and more precisely allocate funds. Although TSA allocated about 90 percent of funding to the highest-risk agencies, lower-risk agency awards were based on other factors in addition to risk. In addition, TSA has revised the TSGP's approach, methodology and funding priorities each year since 2006. These changes have raised predictability and flexibility concerns among transit agencies because they make engaging in long-term planning difficult.

DHS met the statutory timeline requirements for allocating and awarding grants, but the two agencies that manage the TSGP—TSA and FEMA—lack defined roles and responsibilities, and only 3 percent of the funds awarded for fiscal years 2006 through 2008 have been spent as of February 2009. There is no documentation articulating the roles and responsibilities of the agencies, and grant information has not been passed between the two agencies which affected TSA's ability to share grant status information with transit agencies. DHS met statutory deadlines for releasing grant guidance and acting upon applications, but management and resource issues have resulted in delays in approving projects and making funds available, including (1) lengthy project negotiations between transit agencies and TSA; (2) a backlog of required environmental reviews; and (3) a reported lack of personnel to conduct required reviews. As a result, according to FEMA records, as of February 2009, transit agencies have spent about \$21 million of the \$755 million that has been awarded for fiscal years 2006 through 2008. This spending rate is, in part, caused by agencies receiving authorization to spend grant dollars late in the grant period. Despite concerns over delays, FEMA has not communicated time frames for providing funding. In April 2004, GAO reported that timely grant awards are imperative to provide intended benefits. DHS has reported taking some actions to address delays, including shortening project approval times and hiring staff, but the effectiveness of these efforts is unknown.

Although FEMA has taken initial efforts to develop measures to assess the effectiveness of its grant programs, TSA and FEMA lack a plan and related milestones for developing measures specifically for the TSGP, and thus DHS does not have the capability to measure the effectiveness of the program or its investments. Without such a plan, it will be difficult for TSA and FEMA to provide reasonable assurance that measures are being developed to assess the effectiveness of the program as intended. While FEMA is responsible for the financial controls and audits of the TSGP, it does not have a mechanism to systematically collect data and track grant projects throughout the grant process. As a result, FEMA cannot assess whether awards are timely or funds are being used effectively to reduce risk and increase transit system security.

United States Government Accountability Office

Contents

Letter				
	Background DHS Uses Elements of Risk to Allocate and Award Funds to Transit Agencies, but the Risk Model Can Be Strengthened and Transit Stakeholders Expressed Concerns about Funding			
	Flexibility TSA and FEMA Lack Documented Roles and Responsibilities for Administering the TSGP, and Although Statutory Timeline Requirements Were Met, Little Money Has Been Expended Additional Steps Needed to Develop Performance Measures to Assess TSGP Grant Project Effectiveness and to Fulfill			
	Administrative Responsibilities	34		
	Conclusions	38		
	Recommendations for Executive Action	40		
	Agency Comments and Our Evaluation	41		
Appendix I	Objectives, Scope, and Methodology			
Appendix II	Fiscal Year 2008 Project Effectiveness Groupings	50		
Appendix III	TSGP Risk Analysis Model	51		
Appendix IV	TSGP Tier I and II Regions	53		
Appendix V	Tier II National Review Panel Criteria, 2006 through 2008	55		
Appendix VI	TSGP Priorities 2006 through 2009	56		

Appendix VII	FEMA's Environmental and Historic Preservation		
	Review Project Types	58	
Appendix VIII	Comments from the Department of Homeland Security	59	
Appendix IX	GAO Contact and Staff Acknowledgments	62	
Tables			
	Table 1: TSGP Allocation for Fiscal Years 2006 through 2009 Table 2: Thirty Domestic Mass Transit and Passenger Rail Agencies	7	
	Interviewed	46	
	Table 3: TSGP Tier I Regions for 2009	53	
	Table 4: TSGP Tier II Regions for 2009	53	
Figures			
	Figure 1: Overview of the Grant Process for TSGP Funds for Fiscal Years 2007 through 2008	11	
	Figure 2: DHS's Scoring Methodology for Fiscal Year 2008	13	
	Figure 3: TSGP Funds Expended and Unexpended, Fiscal Years		
	2006 though 2008	31	
	Figure 4: Average Time for TSA and FEMA to Approve Projects for		
	Fiscal Year 2006 through 2007	32	
	Figure 5: TSGP Risk Model	52	

Abbreviations

APTA	American Public Transportation Association
BASE	Baseline Assessment for Security Enhancements

DHS Department of Homeland Security
DOT Department of Transportation

EHP Environmental and Historical Preservation FEMA Federal Emergency Management Agency

FTA Federal Transit Administration GAN Grant Adjustment Notice GPD Grant Programs Directorate

HSPD-7 Homeland Security Presidential Directive 7

IEDimprovised explosive deviceIIDimprovised incendiary deviceMOUMemorandum of Understanding

NIPP National Infrastructure Protection Plan

NRP National Review Panel

OEHP Office of Environmental and Historical Preservation

RTSWG Regional Transit Security Working Group
TSA Transportation Security Administration

TSGP Transit Security Grant Program

TS-SSP Transportation Systems-Sector Specific Plan

UASI Urban Area Security Initiative

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.



United States Government Accountability Office Washington, DC 20548

June 8, 2009

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

Dear Mr. Chairman:

American transit passengers, who take approximately 34 million trips each weekday, rely on mass transit and passenger rail systems to provide efficient, reliable, and safe transportation. However, terrorist attacks on mass transit systems around the world—such as the 2005 attack on London's underground rail and bus systems, which resulted in 52 fatalities and over 700 injuries—highlight the vulnerability of mass transit systems and the need for increased focus on securing these systems. In an effort to strengthen the security of the nation's mass transit and passenger rail systems against risks associated with potential terrorist attacks, the Department of Homeland Security (DHS) has awarded grant funding to the nation's transit agencies that DHS has deemed to be of highest risk.¹ From 2003 to 2008, DHS provided over \$1 billion in federal grant funding to U.S. mass transit and passenger rail agencies for a variety of security activities, including developing security plans, purchasing or upgrading security

¹ Mass transit and passenger rail systems consist of various bus and passenger rail transit systems. Transit bus systems include inter-city bus or trolleybus systems. Transit rail includes heavy, commuter, light and intercity rail systems. Heavy rail is an electric railway that can carry a heavy volume of traffic. Heavy rail is characterized by high speed and rapid acceleration, passenger rail cars operating singly or in multicar trains on fixed rails, separate rights-of-way from which all other vehicular and foot traffic is excluded, sophisticated signaling, and high-platform loading. Most subway systems are considered heavy rail. Commuter rail is characterized by passenger trains operating on railroad tracks and providing regional service, such as between a central city and its adjacent suburbs. Light rail systems typically operate passenger rail cars singly (or in short, usually two-car, trains) and are driven electrically with power being drawn from an overhead electric line. Amtrak operates the nation's primary intercity rail system.

equipment, and providing security training to transit employees.² In fiscal year 2009, DHS plans to award an additional \$373 million to mass transit and passenger rail agencies through the Transit Security Grant Program (TSGP) to protect the traveling public from acts of terrorism, major disasters, and other emergencies. Furthermore, the American Recovery and Reinvestment Act of 2009 appropriated an additional \$150 million to DHS for the TSGP.³

Since fiscal year 2005, the federal government has provided funding for mass transit and passenger rail security through the TSGP—one of six grant programs that constitute DHS's transportation security grant portfolio. The TSGP provides funds to owners and operators of mass transit and passenger rail systems (which include intracity bus, commuter bus, and all forms of passenger rail, including Amtrak) to protect critical surface transportation infrastructure. While the TSGP provides funding for mass transit, passenger rail (Amtrak) and other systems, this report focuses exclusively on funds provided for mass transit because they represent most of the funding.

² DHS began providing grant funding specifically for transit security in 2003 through the Urban Area Security Initiative (UASI) grant program. In 2003 and 2004, the UASI program distributed \$65 million and \$50 million, respectively, in grant monies to mass transit and passenger rail agencies. The UASI program is designed to provide funding to enhance urban areas overall security and preparedness levels to prevent, respond to, and recover from acts of terrorism. UASI funding is available to urban areas for a variety of activities, including planning, organization, equipment, training, exercises, and management and administration. The program is not limited to providing money to transportation systems. In 2005, the TSGP program was introduced and has since been the primary source of federal grant funding for transit security.

³ Pub. L. No. 111-5, 123 Stat. 115, 164 (2009). The \$150 million was appropriated for both the TSGP and the Freight Rail Security Grant Program which provides a separate funding stream for freight rail security.

⁴ Amtrak, the largest passenger rail service in the United States, has its own dedicated funding stream through the Intercity Passenger Rail Security Grant Program. Additionally, there is also a separate funding stream for freight rail security through the Freight Rail Security Grant Program, which received \$15 million in fiscal year 2009. Ferry systems may apply for funding either through the TSGP or through DHS's Port Security Grant Program, which allocated \$5 million to ferry systems in fiscal year 2009.

You requested that we evaluate the TSGP, including the risk analysis model and risk-based allocation methodology used to guide grant awards, as well as the management of the program. Specifically, this report addresses the extent to which

- 1. TSGP funds are allocated and awarded based on risk, and grant requirements have changed since 2006;
- DHS has allocated, awarded, and distributed TSGP grants in accordance with statutory deadlines and leading practices for collaborating agencies; and
- 3. DHS has evaluated the effectiveness of the TSGP as well as investments made using funds awarded through the TSGP.

To assess the extent to which TSGP funds were allocated and awarded based on risk and grant requirements have changed since 2006, we analyzed DHS documents, including those related to the TSGP risk analysis model for fiscal years 2007 through 2008, TSGP guidance, and TSGP priorities, and attended TSGP presentations held by the Transportation Security Administration (TSA) and Federal Emergency Management Agency (FEMA). To provide a basis for examining DHS's efforts to carry out risk management principles, we compared DHS's riskbased methodology—which includes its TSGP risk analysis model—to both the National Infrastructure Protection Plan (NIPP) and the risk management framework that we developed based on best practices and other criteria. We also reviewed the steps that TSA and FEMA took to ensure the reliability of the risk model by interviewing officials responsible for managing the model as well as reviewing DHS's documentation on the model. We determined that the model's inputs and results were sufficiently accurate for our purposes. To assess the extent to which grant requirements have changed since 2006, we interviewed TSA and FEMA officials about the TSGP grant determination process used in fiscal years 2006, 2007, and 2008 and about the changes made to the

⁵ Department of Homeland Security *National Infrastructure Protection Plan* (NIPP) (Washington, D.C.: June 30, 2006, and February 2009 update) and GAO, *Risk Management: Further Refinements Needed to Assess Risks and Prioritize Protective Measures at Ports and Other Critical Infrastructure*, GAO-06-91 (Washington, D.C.: Dec. 15, 2005). The overarching goal of the NIPP is to build a safer, more secure, and more resilient America by preventing, deterring, neutralizing, or mitigating the effects of deliberate efforts by terrorists to destroy, incapacitate, or exploit elements of our nation's critical infrastructure and key resources and to strengthen national preparedness, timely response, and rapid recovery of critical infrastructure and key resources in the event of an attack, natural disaster, or other emergency.

process for fiscal year 2009. In 2006, TSA began managing the policy aspect of the TSGP, such as establishing grant priorities. For this reason, we focused our review of the TSGP from this point through the beginning of the fiscal year 2009 grant process.

To review whether DHS has administered the TSGP in accordance with statutory deadlines and leading practices for collaborating agencies, and to determine the status of grant expenditures, we reviewed TSGP guidance, applicable laws, and grant project data from TSA for fiscal years 2006 through 2008. We also obtained grant approval data from TSA and financial data from FEMA that allowed us to examine whether statutory deadlines in the DHS appropriations acts were being met, as well as the time that elapsed between award notification and grant disbursement. To verify the reliability of the project approval dates and funding amounts provided by TSA, we compared them to the total funding provided to each region and found that these amounts matched. For the purposes of our report, we concluded that TSA data on project approval dates and funding amounts were sufficiently reliable. We also analyzed any policies and procedures in place for managing the program with criteria on leading practices for collaborating agencies and our Standards for Internal Control in the Federal Government. Additionally, we conducted site visits at, or held teleconferences with, a total of 30 mass transit operators in the United States that represent 75 percent of the nation's total mass transit and passenger rail ridership to solicit their perspectives on the management of the grant process. During these site visits, we interviewed transit agency grant management personnel as well as state administrative agency personnel from nine states who were responsible for administering the TSGP grants at the state level. 8 We used specific criteria to select these mass transit and passenger rail agencies, including eligibility for grant funding, high levels of ridership, and a diversity of risk levels as

 $^{^6}$ Because of changes in FEMA's financial recording procedures for fiscal year 2006, we computed total time from TSA award date to FEMA's funding release date for 2006 grants differently than for fiscal year 2007 and 2008 grants. However, we still concluded that FEMA data were reliable for the purposes of this audit.

⁷ GAO, Results-Oriented Government: Practices That Can Help Enhance and Sustain Collaboration among Federal Agencies, GAO-06-15 (Washington, D.C.: Oct. 21, 2005) and Standards for Internal Control in the Federal Government, GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999).

State administrative agency responsibilities included submitting grant applications, disbursing funds to the transit agencies, and submitting required financial and administrative paperwork.

determined by TSA. While the information we obtained from these 30 transit agencies cannot be generalized to all transit agencies, it enhanced our understanding of the types of projects initiated using TGSP funds and the period of time that elapsed between the grant award and the receipt of such funds by transit agencies.

To determine the extent to which DHS has evaluated the effectiveness of the TSGP as well as investments made using funds awarded through the TSGP, we analyzed DHS's strategic plan for transportation security and available performance data and measures related to the grant program. To determine what performance measurement data DHS had collected that TSA or FEMA could use to understand the progress of the TSGP, we interviewed grant officials from TSA's Transportation Sector Network Management Office and FEMA's Grants Program Directorate. To verify the reliability of the FEMA data on the amount of TSGP funding distributed and held, we compared the data to state administrative agency and transit agency records. Any discrepancies in the data were resolved through discussions with FEMA officials. For the purposes of our report, we concluded that FEMA data on distribution and held funding amounts were sufficiently reliable. We also compared TSA's and FEMA's efforts to evaluate their programs with guidance on performance measurement contained in previous GAO reports.9

We conducted this performance audit from September 2007 to June 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

⁹ GAO, Tax Administration: IRS Needs to Further Refine Its Tax Filing Season Performance Measures, GAO-03-143 (Washington, DC.: Nov. 22 2002) and Agency Performance Plans: Examples of Practices That Can Improve Usefulness to Decisionmakers, GAO/GGD/AIMD-99-69 (Washington, DC.: Feb. 26, 1999).

Background

Overview and Vulnerabilities of U.S. Mass Transit Systems

Mass transit includes four main components—heavy rail, commuter rail, light rail, and bus. 10 Heavy rail systems—subway systems like New York City's transit system and Washington, D.C.'s metro—typically operate on fixed rail lines within a metropolitan area and have the capacity for a heavy volume of traffic. Commuter rail systems typically operate on railroad tracks and provide regional service (e.g., between a central city and adjacent suburbs). Light rail systems are typically characterized by lightweight passenger rail cars that operate on track that is not separated from vehicular traffic for much of the way. Large bus transit service is characterized by vehicles powered by diesel, gasoline, battery, or alternative fuel engines contained within the vehicle. According to the American Public Transportation Association (APTA), 10.7 billion trips were taken on mass transportation in 2008—the highest number of trips taken on U.S. mass transportation in 52 years. According to TSA, transit officials, and transit experts, certain characteristics of mass transit systems, such as multiple access points and limited barriers to access, make them inherently vulnerable to terrorist attack and therefore difficult to secure. High ridership, expensive infrastructure, economic importance, and location in large metropolitan areas or tourist destinations also make them attractive targets for terrorists because of the potential for mass casualties and economic damage.

Grant Funding for Mass Transit Security Because of the expense of operating and securing a transit system, the costs are often shared among several entities. According to the Department of Transportation's (DOT) Federal Transit Administration (FTA), almost all U.S. mass transit systems receive funds from public and private sector sources to maintain a public service that is provided and managed locally, since revenues from customer fares, on average, account for 40 percent of system operating costs. For example, FTA provides financial assistance to public transportation through its Large Urban Cities Grant Program which provides funding to urban areas through a formula-

¹⁰ Mass transit systems also include passenger ferry boats, trolleybuses, cable cars, monorail, and demand response services. However, for this report, mass transit will refer only to four components: heavy rail, commuter rail, light rail, and bus.

based allocation.¹¹ Owners and operators of public transit systems are also responsible for ensuring the security of their systems. According to a 2004 APTA survey, transit agencies had more than \$6 billion in transit security investment needs.¹²

To help defray the costs of securing U.S. transit systems, DHS has provided transit security grant funding to transit agencies since 2003. Beginning in fiscal year 2005, the DHS appropriations acts have provided annual appropriations for mass transit security, including the TSGP, which focused specifically on mass transit security. Table 1 outlines the TSGP allocations for fiscal year 2006 through fiscal year 2009.

Dollars in millions ^a						
	FY 2006	FY 2007	FY 2008	FY 2009 ^b	Total	
Intracity-rail and bus	\$131.0	\$250.5	\$356.1	\$348.0	\$1,085.6	
Intercity rail (Amtrak)°	7.2	13.4	25.0	25.0	\$70.6	
Total	\$138.2	\$263.9	\$381.1	\$373.0	\$1,156.2	

Source: GAO analysis of TSGP Grant Guidance.

Both DHS appropriations acts and the Implementing Recommendations of the 9/11 Commission Act (9/11 Commission Act) outline requirements for

^aThese dollar amounts have not been adjusted for inflation.

^bThis is the target allocation for fiscal year 2009.

AMTRAK is provided specific intercity rail funding each year, which was not the focus of this review.

¹¹ This program makes federal resources available to urbanized areas and to governors for transit capital and operating assistance in urbanized areas and for transportation related planning. Eligible uses for funds include planning, engineering design and evaluation of transit projects and other technical transportation-related studies; capital investments in bus and bus-related activities, crime prevention and security equipment and construction of maintenance and passenger facilities; and capital investments in new and existing fixed guideway systems.

¹² American Public Transportation Association, Survey of United States Transit System Security Needs and Funding Priorities (Washington, D.C.: April 2004).

 $^{^{13}}$ Pub. L. No. 108-334, 118 Stat. 1298, 1309 (2004); Pub. L. No. 109-90, 119 Stat. 2064, 2076 (2005); Pub. L. No. 109-295, 120 Stat. 1355, 1369 (2006); Pub. L. No. 110-28, 121 Stat. 112, 142 (2007); Pub. L. No. 110-161, 121 Stat. 1844, 2062 (2007); Pub. L. No. 110-329, 122 Stat. 3574, 3671 (2008).

 $^{^{14}}$ The fiscal year 2005 TSGP provided \$150 million for intercity passenger rail transportation, freight rail, and transit security grants.

security funding for mass transit and provide timelines for the issuance of grant program guidance and decisions. In addition to appropriating funding to the TSGP, DHS appropriations acts have provided deadlines for the issuance of grant guidance, the application period, and when DHS must act on applications. The 9/11 Commission Act required the Secretary of Homeland Security to establish a program for making grants to eligible public transportation agencies for security improvements, and DHS fulfilled this requirement through the TSGP. Although the TSGP considered risk prior to the passage of the 9/11 Commission Act, the act created additional requirements for the TSGP, including that recipients of public transportation funds be selected based on risk and that projects address items identified in security assessments or plans. It also outlined permissible use of funds and placed a limitation on the percentage of funds used for operational costs.

Responsibility for administering mass transit security funding has changed numerous times within DHS since 2003. DHS's Office of Domestic Preparedness administered the Urban Area Security Initiative (UASI) grant program from fiscal year 2003 to fiscal year 2005. During fiscal year 2006, the administration of the TSGP was transferred to TSA and the Office of Grants and Training within DHS's Preparedness Directorate. TSA became the lead federal agency for determining the security priorities eligible for funding and developing the criteria for evaluating applications, while DHS's Office of Grants and Training became responsible for grant management. 16 The Post-Katrina Emergency Management Reform Act of 2007 transferred most offices within the Preparedness Directorate into FEMA; however, policy responsibilities, such as setting grant priorities and funding decisions, remained with TSA. 17 As a result, during fiscal year 2007, the Office of Grants and Training was transferred to FEMA. In fiscal year 2008, FEMA's Grant Programs Directorate became responsible for administering TSGP grants.

¹⁵ Pub. L. No. 110-53, § 1406, 121 Stat. 266, 405-08 (2007).

¹⁶ TSA has been given the legal mandate pursuant to the Aviation and Transportation Security Act of 2001 and the Homeland Security Act of 2002 to manage the Department's transportation security programs and ensure the security of the transit industry. Pub. L. No. 107-71, 115 Stat. 597 (2001); Pub. L. No. 107-296, 116 Stat. 2135 (2002).

 $^{^{17}}$ The Post-Katrina Emergency Management Reform Act of 2006 was enacted as Title VI of the Department of Homeland Security Appropriations Act, 2007, Pub. L. No. 109-295, 120 Stat. 1355, 1394 (2006).

Risk Management Practices Associated with the TSGP

Risk management has been endorsed by Congress, the President, the Secretary of Homeland Security, GAO, and others as a way to direct finite resources to areas that are most at risk of terrorist attack. Risk management is a continuous process that includes the assessment of threats, vulnerabilities, and consequences to determine what actions should be taken to reduce or eliminate one or more of these elements of risk. DHS released the NIPP, which created, in accordance with Homeland Security Presidential Directive 7 (HSPD-7), a risk-based framework. The NIPP, issued in 2006 and updated in 2009, sets forth guidance for agencies with critical infrastructure protection responsibilities, such as TSA, for the prioritization of protection initiatives and investments across sectors to ensure that government and private sector resources are applied where they offer the most benefit for mitigating risk.

TSA created six transit security fundamentals that it states are the foundations for a successful security program, and the agency uses these fundamentals to prioritize TSGP projects. For the fiscal year 2008 and 2009 grant cycles, TSA established a systematic process to rank these priorities in awarding grant funds. To do this, TSA established project effectiveness groupings—groups of project types that TSA ranked in order of priority based on their ability to reduce risk—into which transit agency projects were placed. For example, in fiscal year 2008, there were four possible groupings (project types) for agency projects. The highest priority for that year focused on projects aimed at developing security plans and providing employee security training. See appendix II for the project effectiveness groupings for fiscal year 2008.

DHS uses a risk model to help determine the transit agencies eligible for TSGP funds. Both TSA and FEMA share responsibility for the TSGP risk model, with TSA providing most of the data inputs to the model that is managed by FEMA. The TSGP's risk methodology is similar to the methodology used to determine eligibility for other DHS state and local grant programs. For example, the methodology for determining basic

¹⁸ HSPD-7 directed the Secretary of Homeland Security to establish uniform policies, approaches, guidelines, and methodologies for integrating federal infrastructure protection and risk management activities.

¹⁹ TSA's transit security fundamentals are: (1) protection of high risk underwater/ underground assets and systems; (2) protection of other high-risk assets that have been identified through systemwide risk assessments; (3) use of visible, unpredictable deterrence; (4) targeted counterterrorism training for key frontline staff; (5) emergency preparedness drills and exercises; and (6) public awareness and preparedness campaigns.

eligibility for the TSGP is derived from the UASI grant program—both models identify and use the same urban areas and both the UASI and the TSGP risk models calculate risk scores for each urban area. See appendix III for additional details on the TSGP model.

The Process for Awarding TSGP Funds

There are three stages of the TSGP grant cycle; allocation, award, and distribution, as discussed in figure 1. TSGP grant guidance is created annually by TSA and FEMA and provides an overview of the TSGP, the application materials needed to apply for funding under the program, and DHS management requirements.

STAGE I STAGE I **Allocation** Allocation Based on risk model, DHS allocates funding to tiers and regions. Tier I Tier II Higher risk Agencies have 45 days Lower risk to apply. DHS has 60 days to STAGE II STAGE II act on applications received. **Award** Award Tier II agencies compete for funds. Agencies' projects are reviewed by NRP and Executive Commitee and ranked based on risk and other factors. TSA and Tier I agencies agree on basic outline of projects to fund. DHS announces final allocations, but projects are not finalized. STAGE III **Distribution** When transit agencies fulfill all grant requirements and FEMA completes review, funds are released. Tier II agencies receive final funding decisions on their projects when the award After award announcement, is announced. Tier I agencies have 90 days to detail how they will implement the project.

Figure 1: Overview of the Grant Process for TSGP Funds for Fiscal Years 2007 through 2008

Sources: GAO analysis of DHS, TSA, and FEMA data and Art Explosion clipart.

Notes: The fiscal year 2006 award process was competitive for all eligible transit agencies, and award decisions were made by a national review panel (NRP). For fiscal year 2007 and 2008, DHS introduced a new negotiation process for higher-risk (Tier I) agencies and used the above award process. The process for lower-risk (Tier II) agencies remained competitive.

For fiscal year 2007, DHS had 75 days to release the grant guidance once the appropriations act had passed, and for fiscal year 2008, DHS had 30 days to release the grant guidance once the appropriations act had passed.

Beginning in fiscal year 2009, Tier I transit agencies submit specific project information for award decisions prior to DHS award announcements.

Allocation

Using the TSGP risk analysis model, DHS develops risk scores, which are used to identify the highest-risk regions and the transit agencies within those regions that are eligible for funding.²⁰ These regions are then placed into one of two tiers based on their risk scores to determine initial funding allocations; however, these allocations may change when DHS begins reviewing projects.

- Tier I: DHS determines the regions at the highest risk of a terrorist attack and selects transit agencies within those regions eligible to receive Tier I funding. Each Tier I region is given a target allocation based on its share of risk (as determined by the model). Each region, through discussions among transit agencies and TSA officials in the regional transit security working groups (RTSWG), decides which projects to fund on a collaborative basis. Each Tier I region has a RTSWG that includes eligible transit agencies, law enforcement agencies, and Amtrak (if stations exist in the region).
- Tier II: Lower-risk regions and certain transit agencies in those regions make up the Tier II group.²¹ The Tier II allocation is a set amount of funding allocated for all Tier II regions combined. Transit agencies in this tier apply for funding on a competitive basis—whereby their projects are evaluated against all other Tier II agency projects proposals, instead of funding decisions being determined collaboratively, as with the Tier I RTSWGs.²²
- After DHS announces target allocation amounts through the release of the grant guidance, Tier I and Tier II transit agencies have 45 days from the release of the guidance to apply for funding.

During the award process, DHS evaluates transit agencies' projects and determines which projects to fund, although the evaluation process for

Award

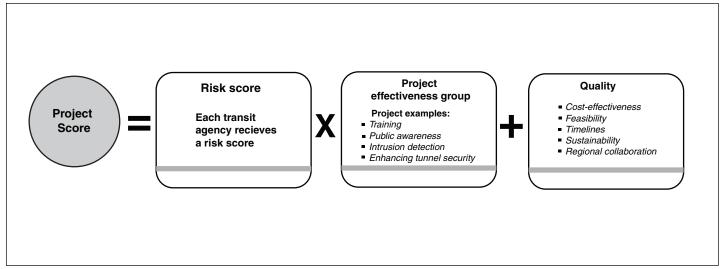
²⁰ See app. IV for a listing of Tier I and Tier II regions.

²¹ Eligible Tier II transit agencies are determined by using FTA's National Transit Database, which identifies transit agencies by ridership. Transit agencies that are not in the top 100 for unlinked transit passenger trips are not eligible for funding. (An unlinked transit passenger trip is a trip on one transit vehicle regardless of the type of fare paid or transfer presented).

 $^{^{22}}$ An overview of allocations for fiscal years 2006 through 2009 was discussed earlier in this report (see table 1).

Tier I and Tier II agencies is different. Once the application period closes for Tier I and II, the DHS appropriations act states that DHS has 60 days to act upon the application, which DHS has defined as the length of time taken to review the applications, make the award decisions, and announce final allocations. ²³ In fiscal year 2008, as shown in figure 2, DHS created a three-part scoring methodology for evaluating projects that included an agency's risk score, its project effectiveness grouping, and a project quality score, that included a regional collaboration factor. ²⁴

Figure 2: DHS's Scoring Methodology for Fiscal Year 2008



Source: GAO analysis of TSGP grant guidance.

In fiscal year 2009, DHS used a similar scoring methodology, although this methodology was applied differently to Tier I and Tier II agencies, as described below.

²³ The DHS appropriations acts for fiscal years 2007 through 2009 established these deadlines for the respective grant cycles. Pub. L. No. 109-295, 120 Stat. 1355, 1369 (2006); Pub. L. No. 110-161, 121 Stat. 1844, 2062 (2007); and Pub. L No. 110-329, 122 Stat. 3574, 3671 (2008).

²⁴ DHS has encouraged all TSGP applications to have a regional coordination component that demonstrates an investment strategy based on a regional security strategy. Many Tier I and Tier II regions have more than one transit agency operating, so coordination of federal TSGP investments is encouraged and is reflected in the regional collaboration component of the overall project score.

Tier I: In fiscal year 2006, each region's eligible transit agencies competed for the target allocation. Under this process, transit agencies' applications were reviewed by an NRP consisting of subject matter experts from DHS, TSA, and FTA. An executive committee, consisting of senior officials from TSA, reviewed the NRP recommendations, the Secretary of Homeland Security made the final selections for funding, and awards were announced.

In fiscal year 2007, DHS introduced a new process to award grants to Tier I agencies that involved direct negotiations between TSA and each RTSWG to identify the grant-funded projects that TSA would approve. Under this approach—known as the cooperative agreement process—award announcements were made, and transit agencies had 90 days to submit to DHS their investment justifications which provided additional details on how the transit agency would implement the awarded security projects. TSA collaborated with the transit agencies to finalize the investment justifications. Once these steps were completed, TSA officially approved the projects.

In fiscal year 2008, TSA applied a more systematic approach for determining project funding. For Tier I regions, project scores were determined by weighing various factors, including the project effectiveness grouping, the transit agencies' risk scores, and a regional collaboration factor. According to TSA officials, project quality was not as important a factor for Tier I agencies because TSA participated in the project development process through the RTSWG, which they believed helped ensure quality. DHS made award announcements to Tier I agencies based on the project concepts discussed in the RTSWG; however, as in the fiscal year 2007 process, final project approval was not completed at that time. DHS officials plan to use the same procedures in fiscal year 2009, except that they expect investment justifications to be completed prior to the award announcements and final project approvals are to be completed at the time of award.

Tier II: DHS has used a competitive approach for awarding funds to Tier II agencies. From fiscal year 2006 to fiscal year 2008, projects submitted were reviewed and ranked by an NRP. After reviewing the transit agency risk scores and submitted projects, the panel developed a recommended slate of projects, including proposed funding amounts. An executive committee consisting of senior officials from TSA, DHS, and FTA then reviewed the recommendations as well as the risk scores of the transit agencies. The Secretary of Homeland Security made the final selections for funding, and then funding was announced. The evaluation criteria used

by the panel have evolved from fiscal years 2006 through 2008, as shown in appendix V. Unlike Tier I agencies, Tier II agencies received their final project funding amount for each fiscal year at the time of award announcement. DHS plans to continue with this approach for Tier II agencies for fiscal year 2009.

Distribution

TSGP funds cannot be disbursed to transit agencies until FEMA ensures the agency's compliance with federal grant management requirements, such as the National Environmental Policy Act. Since fiscal year 2008, TSA has approved transit agency projects (for both Tier I and II projects) and then forwarded them to FEMA's Grant Programs Directorate (GPD) for review. 25 GPD is responsible for ensuring that all grant projects adhere to federal grant requirements, including all environmental and historical preservation (EHP) requirements.²⁶ FEMA's Office of Environmental and Historical Preservation (OEHP) assists with the EHP reviews. GPD reviews projects identified as having limited EHP impacts, while OEHP reviews projects needing a more extensive environmental and historical review.²⁷ Until FEMA is satisfied that all requirements have been met, no grant funding can be released to transit agencies to begin projects. However, once funds are awarded, transit agencies must complete the grant project within the designated performance period for the grant year. The TSGP's performance periods have ranged from 24 to 36 months depending on the grant year and project type to be completed. FEMA has discretion to extend the performance period, if necessary.

For Tier I regions with multiple states, one state administrative agency is designated for the entire region. The DHS Appropriations Act for fiscal

 $^{^{\}rm 25}$ Prior to fiscal year 2008, DHS's Office of Grants and Training was responsible for conducting these reviews.

²⁶ FEMA's EHP review ensures that all FEMA-funded activities comply with various federal laws, including the National Environmental Policy Act, National Historic Preservation Act, Endangered Species Act and executive orders on floodplains, wetlands, and environmental justice.

²⁷ FEMA has established three project categories—A, B, and C—to help distribute project reviews between GPD and OEHP. Type A and B projects are considered the least likely to have an environmental impact and are not reviewed by OEHP. For example, the training of employees is considered to have no environmental impact and, therefore, would be labeled as a Type A project. Type B projects—involving buildings less than 50 years old or that break no new ground—are reviewed and approved by GPD. Type C projects—such as physical security enhancements that directly or indirectly involve ground-disturbing activities beyond areas previously disturbed—are viewed as more likely to have an environmental impact, and GPD submits them to OEHP for review.

year 2009 required funding to be provided directly to the transit agencies, removing the state administrative agency from the grant process. As a result, going forward transit agencies will be responsible for all state administrative agency duties, including submitting grant applications.

DHS Uses Elements of Risk to Allocate and Award Funds to Transit Agencies, but the Risk Model Can Be Strengthened and Transit Stakeholders Expressed Concerns about Funding Flexibility DHS has established an approach for allocating and awarding TSGP funds using a risk model that incorporates the elements of risk and is intended to allocate funding to the highest-risk regions and transit agencies; however, the model could be strengthened to measure variations in vulnerability across regions. Furthermore, TSA revised its process and focus for the TSGP on numerous occasions since 2006, but transit stakeholders expressed concern about these revisions and their impact on funding flexibility.

DHS's TSGP Risk Model Incorporates Elements of Risk, but Could Be Strengthened to Measure Variations in Vulnerability

DHS uses a model to assess the risk to each transit agency region that includes the three elements of risk—threat, vulnerability, and consequence; however, the model does not measure variations in vulnerability, which limits the model's overall ability to assess risk. As we reported in June 2008, measuring vulnerability is considered a generally accepted practice in assessing terrorism risk. However, DHS did not specifically measure vulnerability for each region and the associated transit agencies in the model. DHS reported that it did not measure region and transit agency vulnerability because it lacked data on the differences in vulnerability among transit agencies. Therefore, DHS decided to hold this variable constant in the risk formula. However, holding vulnerability constant may be problematic because, for example, a region may be highly vulnerable to one mode of attack but have a low level

²⁸ GAO, Homeland Security: DHS Risk-Based Grant Methodology Is Reasonable, But Current Version's Measure of Vulnerability is Limited, GAO-08-852 (Washington, D.C.: June 27, 2008).

of vulnerability to another depending on a variety of factors, such as countermeasures already in place.²⁹

TSA officials acknowledged the need to incorporate vulnerability into the risk model as a method for refining the results, but cautioned that measuring variations in vulnerability would require time and resources. As a result, officials reported that they were considering using transit agency vulnerability assessment results as a source of vulnerability information. To do this, FEMA officials acknowledged that they must be able to consistently compare assessments across agencies and regions, which may prove difficult given the variations in scope and methodology of these assessments. A FEMA official stated that the risk model is designed to incorporate other data, including vulnerability information, when it becomes available. A TSA official noted that TSA is considering looking into past vulnerability assessments and its Baseline Assessment for Security Enhancements (BASE) reviews for vulnerability information that might be used in the model.³⁰ TSA officials also remarked that they consider ridership to be the major known vulnerability factor. A TSA official remarked that ridership represents the number of people exposed by an attack, which is a proxy for the openness of the system, station, or both. However, the risk model also uses ridership to measure consequence, so its link to vulnerability does not add additional information about how risk may vary across regions. Without accounting for variations in vulnerability, the effectiveness of the risk analysis model may be limited in that it may not fully consider important differences in regions and transit systems that could affect their vulnerability to attack and the risk scores may not be as precise. A more precise risk analysis could affect the allocations of funds to Tier I or Tier II regions because allocation is determined in part by the risk share.

²⁹ A countermeasure is any action taken or physical equipment used principally to reduce or eliminate one or more vulnerabilities.

³⁰ Under the BASE program, TSA's transportation security inspectors gather vulnerability data by reviewing a transit agency's implementation of its security programs to help identify shortfalls in security. Since 2006, TSA has conducted BASE reviews at most of the 100 largest mass transit agencies in the nation and has initiated follow-on BASE reviews to determine if previously identified security shortfalls have been corrected.

The TSGP Risk Model Allocates Funding between Tier I and II and among Tier I Regions Based on Risk

Using its TSGP risk model, DHS placed transit agencies into one of two tiers based on the risk of a terrorist attack occurring within a region, and then allocated funding to those tiers based on risk. In the fiscal year 2007 model, Tier I represented approximately 80 percent of the total risk of all regions assessed by the model, and Tier II represented the other 20 percent.³¹ In the fiscal year 2008 model, Tier I represented approximately 93 percent of the total risk to all regions assessed by the model, and Tier II represented the other 7 percent. Our analysis of the risk model and the funding allocated through the TSGP for fiscal years 2007 and 2008 showed that almost 90 percent of grant funds were allocated to the highest-risk transit agencies—that is, those agencies in Tier I.32 Furthermore, during fiscal years 2007 and 2008, the funding allocated to Tier I regions was based on a region's risk share, which was determined by its share of the total risk for all Tier I regions in the model. Our analysis of the three grant cycles between fiscal year 2007 and 2008 showed that almost 90 percent of grant funds were allocated to the highest risk transit agencies—that is, those agencies in Tier I. Tier II received approximately 10 percent of the grant funds.

After DHS allocated funds to Tier I regions, transit agencies worked within their respective RTSWGs in negotiating with TSA to identify which projects would be funded with the target allocation—known as the cooperative agreement process. TSA officials believe that the cooperative agreement process ensured project quality because under this approach TSA was able to work closely with transit agencies to develop security projects. Additionally, in an effort to ensure that grant money is spent on worthwhile projects, the grant guidance permits TSA to transfer funding among regions if fewer quality applications are submitted from one region and higher-priority security projects exist elsewhere. As a result, during fiscal year 2008, TSA transferred funds between Tier I regions and from Tier II to Tier I regions. Although TSA worked with each Tier I region during the fiscal year 2008 grant cycle, TSA officials reported that some regions did not submit enough projects that exceeded the minimum project score required to receive funding. As a result, one Tier I region saw a reduction in its target allocation. According to TSA officials, these reductions occurred because they did not want to fund poor quality

³¹ We analyzed the model for fiscal years 2007 and 2008.

³² In addition to Tier I and II agencies, the risk model calculates a risk score for Amtrak; however, the DHS appropriations acts have generally provided a minimum threshold of funding for Amtrak grants.

projects just because funds were available in a particular region. As a result, in fiscal year 2008, Tier I gained an additional \$13.7 million from Tier II, and \$7.5 million from the Freight Rail Security Grant Program, for a total of \$21.2 million. Five of the eight Tier I regions received awards above their target allocations such as the New York City region, which received \$21 million more than its target allocation. The San Francisco Bay Area, which was the only Tier I region to see a reduction, received \$2.8 million less than its target allocation.

Although Allocation to Tiers Was Risk Based, Funding of Tier II Transit Agency Awards Was Tied to DHS's Assessments of Project Quality

Although DHS allocated funding to tiers based on risk, the specific Tier II transit agency awards were not closely linked to risk. Unlike its cooperative agreement process used to award funds for Tier I agencies, DHS uses a competitive awards process for Tier II agencies and does not negotiate the approval of security projects with the Tier II agencies as it does with the Tier I agencies. Before fiscal year 2008, the executive committee considered agency risk after the NRP had scored the agency projects based on their investment justifications; however, the risk score was not part of a standard methodology or formula for determining funding. This process changed in fiscal year 2008 when TSA began using Tier II agency risk scores as one part of its three-part scoring methodology to determine project competitiveness.33 Because applicants compete for Tier II funds on a project-by-project basis, Tier II grant awards were not solely based on transit agency risk. Rather, other factors also determined grant funding. Specifically, our review of the NRP scores showed that project quality was a major factor in determining if an agency received grant funding.³⁴ For example, a lower-risk agency with a high-quality project was more likely to receive funding than a higher risk agency with a low-quality project, based on the NRP's assessment.

TSA reported that Tier II agencies submitted projects with proposed investments totaling \$37 million during fiscal year 2008, although DHS initially awarded \$16.9 million of the total \$36 million allocated to Tier II agencies. TSA officials reported that this occurred because many projects were ineligible because of such things as insufficient information, lack of live monitoring for closed-circuit television projects, or a focus on law enforcement instead of security. Because there were not enough high-

 $^{^{33}}$ The risk scores used in the formula were unclassified scores derived from the risk model.

³⁴ Project quality consists of an evaluation of the investment justification against the following criteria: cost effectiveness, feasibility, timelines, and sustainability.

quality projects submitted to fulfill the \$36 million allocation for Tier II, according to TSA, the Secretary of Homeland Security made the decision to recompete—that is, allow agencies to resubmit projects for funding for an additional \$6 million. To accomplish this, TSA provided written feedback to Tier II agencies that received partial funding or no funding from the initial fiscal year 2008 grant cycle and invited them to reapply for the \$6 million. 35 The initial and recompeted TSGP funding for fiscal year 2008 resulted in DHS awarding about \$23 million to all Tier II agencies. DHS officials stated that the decision to recompete \$6 million ensured that the fiscal year 2008 funding for Tier II agencies was equal to the amount of funding Tier II agencies received in fiscal year 2007. TSA officials stated that all eligible projects recommended by the NRP were funded with the initial \$16.9 million. However, TSA officials commented that during the recompete, there were more eligible requests than funding available because of their efforts to provide feedback on unsuccessful applications. Transit agencies submitted \$9.1 million worth of eligible projects for the \$6 million in funds, thus projects were funded based on total project scores until the funds were exhausted. TSA officials noted that several initially deficient applications were modified based on feedback, resubmitted, and then approved.

TSA Has Revised Its Grant Project Focus and Scoring Methodology since 2006, Raising Transit Stakeholder Concerns about Flexibility

Transit Agency Stakeholders Expressed Concerns about Shifts in Grant Project Focus since 2006 The types of projects eligible for funding and the specific projects TSA has focused on have changed each grant year since 2006—making long-term planning difficult, according to officials we interviewed from 8 of 30 transit agencies and numerous stakeholders at TSGP after-action

 $^{^{35}}$ The remaining \$13.7 million allocated to Tier II agencies was transferred to Tier I regions that requested additional funding for their top-priority projects.

conferences held in September and October 2008.36 These changes, such as the projects that would receive priority for funding, concerned transit agencies because they meant that the agencies had to change their proposals in some cases. For example, results from 28 TSA BASE reviews completed from December 2006 through January 2007 indicated that security training was an area needing improvement at many transit agencies and was a critical vulnerability that needed to be addressed immediately. As a result, after DHS released the fiscal year 2007 grant guidance in January 2007, TSA officials notified all transit stakeholders in February 2007 that the top funding priority for fiscal year 2007 would be changed to training for key frontline employees.³⁷ TSA informed the transit agencies that this training would be given elevated priority when the investment justifications were evaluated for funding merit, and projects that included training would be funded ahead of other projects. While this change may have been necessary to adjust to a changing security environment, the change resulted in transit agencies having less than 2 weeks to decide whether they wanted to change their grant applications and refocus them on this priority area. See appendix VI for a listing of grant priorities for fiscal years 2006 through 2009.

Grant Project Scoring Methodology Has Changed, and Stakeholders Have Expressed Concerns Regarding Flexibility Another change in the grant program that transit stakeholders expressed concern about occurred in the fiscal year 2008 grant cycle when DHS changed its methodological approach for evaluating applications. Before fiscal year 2008, the NRP evaluated Tier II grant projects for project quality—including how those projects addressed the grant priorities. In contrast, Tier I grant projects were determined by negotiations between TSA and the RTSWG. However, in 2008 DHS introduced a new scoring methodology for Tiers I and II, which was explicitly outlined in DHS's grant guidance that year. According to TSA officials, the change in scoring methodology was based on stakeholder feedback that DHS be more

 $^{^{36}}$ TSA held two after-action conferences in 2008 for the TSGP. The first was in Seattle, Washington on September 29 and the second was in Arlington, Virginia on October 15. GAO staff attended both conferences as did representatives from 35 agencies, including stakeholders from transit agencies, state administrative agencies, law enforcement agencies, and city and county departments of transportation.

³⁷ According to the 9/11 Commission Act, frontline transit employees include employees of public transportation agencies who are transit vehicle drivers or operators, dispatchers, maintenance and maintenance support employees, station attendants, customer service employees, security employees, or transit police, or any other employees who have direct contact with riders on a regular basis, and any other employees of public transportation agencies that the Secretary of Homeland Security determines should receive security training. Pub. L. No. 110-53, § 1402(4), 121 Stat. 266, 401 (2007).

transparent and clear about funding priorities and exactly how projects would be prioritized and ranked.

However, 28 of 40 transit stakeholders we interviewed (30 transit agencies and 10 state administrative agencies) and numerous stakeholders at TSGP after action conferences held in September and October 2008 noted that the TSGP provides limited flexibility to pursue projects that have been identified as transit agency security needs. Officials from one state administrative agency said that prioritizing security projects puts forwardthinking agencies at a disadvantage because if they have already completed projects that address TSA's highest funding priorities, then obtaining funding for alternative projects is difficult. Transit officials from one agency said the grant priorities provide incentives for agencies to potentially buy things they do not want or need, and that these technologies will eventually just sit on the shelf. TSA officials stated that the TSGP is a limited fund that must be allocated to best maximize the use of scarce resources based on risk. TSA officials also reported that they receive requests in excess of available funding, and therefore cannot fund all eligible requests, necessitating a prioritization and ranking schema and clear guidance on allowable project types.

Officials from five large Tier I transit agencies that have chemical biological detection systems, or would like to install such systems, expressed concerns that they could no longer receive funding to install these detection systems. The TSGP listed chemical and biological detection as an allowable expense for the grant program from fiscal years 2005 through 2007; however, TSA did not fund chemical and biological projects during fiscal years 2007 and 2008 and listed them as an unallowable expense for the first time in the fiscal year 2008 guidance. TSA made this determination because its threat reports and security assessments determined that improvised explosive devices (IED) and improvised incendiary devices (IID) are the most common means of attacking mass transit, and the training of frontline employees needed to be addressed immediately. However, in fiscal year 2009 chemical and biological detection systems became eligible, and TSA officials stated that they may fund chemical and biological detection systems for fiscal year

³⁸ Several transit agencies began installing chemical and biological detection systems using federal grant funds after September 11, 2001, such as the PROTECT system at Washington Metropolitan Area Transit Agency in Washington, D.C. The PROTECT system is aimed at providing an early warning crisis management capability in the event of a chemical agent attack in a subway system (and potentially in other transit modes).

2009 because some agencies have demonstrated that they can use this technology effectively and restoring this eligibility may allow agencies to enhance their response and recovery capabilities.

Similar concerns over flexibility were outlined in recommendations from the Mass Transit Security Sector Coordinating Council to the Government Coordinating Council led by TSA in December 2007. 39 The transit industry members of the council were concerned about the imbalance among the priorities listed in the fiscal year 2007 grant guidance and noted that transit agencies are in the best position to determine the balance of funding between capital and operating initiatives. They specifically noted that more predictability and flexibility in implementing priorities cited in the grant guidance is needed to allow agencies to engage in long-term planning of security initiatives, allowing agencies to more easily fund projects on a multiyear basis. According to TSA officials, the collaborative efforts between TSA and eligible transit agencies in the Tier I regions, combined with the project effectiveness groupings that cite eligible security enhancement measures in a prioritized listing, are intended to enhance predictability and flexibility. In an effort to improve the TSGP, TSA and FEMA held a conference in September 2008 to obtain feedback from transit agencies and state administrative agency officials on the fiscal year 2008 grant cycle. At that conference, transit agency stakeholders continued to express concerns about the need for greater flexibility and that funding decisions should be informed by the regional strategies that they have put into place.40

For fiscal year 2009, DHS has reported changing the scoring methodology to address transit agency concerns over limited flexibility. Specifically, DHS added a grouping for other mitigation activities that allows some of the project types that were previously excluded. Furthermore, DHS has

³⁹ The Mass Transit Security Government Coordinating Council/Sector Coordinating Council (GCC/SCC) includes TSA, DHS, DOT and mass transit and passenger rail stakeholders. According to the Transportation Systems-Sector Specific Plan (TS-SSP) Mass Transit Modal Annex—the sector-specific plan for mass transit that outlines the unique characteristics of the mass transit sector and provides the means by which the NIPP is implemented in a mass transit environment—this council facilitates coordination on developing security strategies, programs, and initiatives and allows for more effective execution of the executive order on surface transportation security.

⁴⁰ In fiscal year 2005, DHS required transit agencies to develop risk-based security and emergency preparedness plans and regional transit security strategies to be eligible for grant funding. These plans must address the prevention, detection, and response to incidents involving IEDs and chemical, biological, radiological, and nuclear devices.

not explicitly excluded any type of project and has enabled transit agencies to explain to DHS the priority groupings into which they believe their project should be placed. The decision about project placement, however, continues to lie with DHS and projects that fall outside of the established project effectiveness groupings are given the lowest-priority score. While this change could alleviate transit agencies' concerns about limited flexibility, it is too soon to determine whether it will address agency concerns and allow them to secure funding for their highest security needs.

TSA and FEMA Lack Documented Roles and Responsibilities for Administering the TSGP, and Although Statutory Timeline Requirements Were Met, Little Money Has Been Expended DHS has met the statutory timeline requirements in allocating and awarding grants. However the two agencies that manage the TSGP—TSA and FEMA—lack defined roles and responsibilities, and the approval of grant projects and completion of administrative requirements for grants awarded in fiscal years 2006 through 2008 took many months. Additionally, delays also occurred after projects were passed to FEMA for administrative and environmental reviews because of backlogs and reported resource constraints. TSA and FEMA have attempted to address these delays by approving projects earlier in the grant process, issuing guidance, and adding resources. Because of these delays, project funds were often not available to transit agencies for months, and in some cases years, after being awarded, and as a result, only 3 percent of grant money has been spent as of February 2009.

TSA and FEMA Have Not Defined Roles and Responsibilities for Managing the TSGP

While TSA and FEMA share responsibility for managing the TSGP, the two agencies have not defined and documented their roles and responsibilities in a memorandum of understanding (MOU), or through similar means. TSA's responsibilities fall primarily in the award process and include, among other things, identifying grant priorities, while FEMA's responsibilities include administering the grant management process to ensure compliance with applicable laws, rules, and regulations. The roles and responsibilities of the two agencies related to the award and postaward processes are in the grant guidance. For example, the guidance states that FEMA has the lead for designing and operating the administrative mechanisms needed to manage the grant program. However, there is no documentation articulating the working arrangement between the two agencies. For example, it is not part of FEMA's procedures to notify TSA when funding is released to the state administrative agencies and transit agencies, despite TSA officials reporting several requests for access to this information. As a result, TSA officials reported that because they do not have this information, it is

difficult for them to respond when transit agencies contact them with questions about their grants.

As we reported in October 2005, many agencies face a range of barriers when they attempt to work collaboratively. 41 To enhance and maintain effective collaboration, we reported that agencies engage in practices such as establishing joint strategic plans to achieve common outcomes as well as instituting compatible policies, procedures, and other means to operate across agency boundaries. Additionally, agencies can strengthen their commitment to work collaboratively by articulating their agreements in documents, such as MOUs, interagency guidance, or interagency planning documents. Standards for Internal Control in the Federal Government also requires agencies to delegate authority and responsibility throughout their organizations. 42 Articulating roles and responsibilities for managing the TSGP could strengthen TSA and FEMA's ability to ensure that activities, processes, and resources are aligned to achieve a common outcome and ensure smooth coordination during the grant process. TSA officials stated that a formal MOU and guidance documents between TSA and FEMA would be beneficial, while FEMA officials stated that they believed the two agencies are working together effectively.

DHS Met Statutory Requirements to Release Grant Guidance and Act on Grant Applications, Although Some Projects Were Approved Months after the Award

DHS met the requirements of the TSGP to release grant guidance and act on grant applications as defined by DHS; however, additional agency actions are to be completed before specific transit agency projects and funding levels are approved and transit agencies can begin projects. Since fiscal year 2007, DHS appropriations acts have established timelines for DHS to release the TSGP guidance and act upon transit agency applications. For fiscal years 2007 through 2009, DHS met the requirements to release the grant guidance within 75 days for fiscal year 2007 and 30 days for fiscal years 2008 and 2009. The appropriations acts also set timelines for DHS to act upon the grant applications within 60 days, but until 2009, this did not include approving projects. DHS policy defined the requirement to act upon grant applications as reviewing the applications, making the award decisions, and announcing final

⁴¹ GAO-06-15.

⁴² GAO/AIMD-00-21.3.1.

⁴³ For fiscal year 2007, DHS had 75 days to release the grant guidance once the appropriations act had passed, and for fiscal years 2008 and 2009, DHS had 30 days to release the grant guidance once the appropriations act had passed.

allocations. DHS met the requirements to act upon the grant applications within 60 days, as defined by DHS, for fiscal years 2007 and 2008. While there are specific statutory deadlines for releasing grant guidance and acting on grant applications, there are no statutory deadlines once the projects are approved and are passed to FEMA for review and funding release to transit agencies.

However, even though allocation amounts were announced by DHS within the statutory time frames during fiscal years 2006 through 2008, none of the Tier I regions had their projects approved by TSA at the time of award because TSA procedures allowed for approval after the award. For example, during fiscal year 2007, TSA did not begin approving Tier I projects until more than 5 months after the award date. One Tier I region did not receive project approval for its fiscal year 2007 grant projects until November 2008, or 15 months after the award date. As such, although DHS met the statutory deadlines for acting upon grant applications within the time frames established in legislation, project approval was not yet completed. In contrast, all Tier II agencies involved in the competitive process, which evaluates all projects at once, had all of their projects approved by TSA when the awards were announced.

Delays in approving grant projects after awards were announced have been attributed to TSA and the transit agencies involved in the cooperative agreement process taking months to agree upon projects. According to TSGP grant guidance, the cooperative agreement process is valuable because it provides greater flexibility and allows TSA to work directly with transit agencies to quickly adapt to changes as situations arise during the grant cycle. However, this cooperative process has also resulted in significant time passing between the award and final project approval dates. According to TSA data, during the fiscal year 2006 grant cycle, the average project took 9.7 months to receive approval. During the initial grant cycle in fiscal year 2007, the average project approval took 7.1 months. During the supplemental grant cycle in fiscal year 2007, the average project approval took 5.5 months. ⁴⁴ Furthermore, at the time of our review, there was still one Tier I region whose project from a previous grant cycle had not yet been approved. Specifically, as of January 2009, a

⁴⁴ TSA data also show that during the fiscal year 2006 grant cycle, 71 percent of Tier I projects were approved within 7 months of the award; during the initial grant cycle in fiscal year 2007, 65 percent of projects were approved within 5.4 months; and during the supplemental grant cycle in fiscal year 2007, 61 percent of projects were approved within 3.6 months.

Chicago region project totaling \$2.9 million had not been approved from the fiscal year 2006 grant cycle even though the fiscal year 2006 performance period ended in March 2009. In contrast, Tier II agencies involved in the competitive process have their projects approved at the time of the award and thus do not experience these delays.

TSA officials stated that some of the delays were caused by a provision in the DHS appropriations act for fiscal year 2009, which provided that the program could not include a cost share requirement for grants made available for fiscal years 2008 and 2009. According to TSA officials, the removal of this cost share requirement caused a disruption because some transit agencies had to modify their projects, their budgets, or both, which resulted in final project approval and disbursement delays. One state administrative agency official in a Tier I region said that delays in funding approval make program performance period extensions a necessity. Further, the official stated that because some projects are complex and involve multiple partners, delays can have a ripple effect and slow project completion. In addition, as grant program periods are extended, it is possible for multiple grant years to occur simultaneously, making them a greater challenge to manage effectively. A TSA official reported that as of late March 2009, all Tier I projects for fiscal year 2008 were approved.

A TSA official said that TSA has made progress in managing project approval time frames by changing some of its procedures for fiscal year 2009, but also noted that some of the delays in previous years could be attributed to transit agency procedures as well. For example, a TSA official noted that some transit agencies are required to have projects approved by their boards of directors or state legislatures—efforts which contributed to the length of time between award and project approval. For example, one state administrative agency official said that transit agencies cannot begin projects until state legislatures approve the projects. The official noted that this process can take time, especially if the legislature is not in session. According to TSA, during fiscal year 2009 funds are to be awarded directly to individual transit agencies; therefore, when DHS announces the awards, each transit agency's funding amount must be finalized at that time. On April 8, 2009, in conjunction with the award announcement, DHS issued final allocation amounts for transit agencies for fiscal year 2009. As a result of this administrative change, TSA officials noted that they expected the project approval letters to be sent to FEMA soon after the award announcement.

Postaward Delays Can Also Be Attributed to FEMA's Backlog of Environmental Reviews and Reported Resource Constraints

Once TSA approves projects and award amounts are finalized, FEMA takes responsibility for ensuring compliance with federal requirements; however, backlogs in FEMA's review processes have resulted in delays in distributing project funding. One requirement that has caused delays involves ensuring compliance with the National Environmental Policy Act, which requires the consideration of the environmental impacts of proposed actions as well as reasonable alternatives to those actions. FEMA's GPD works in conjunction with FEMA's OEHP to complete the Environmental and Historical Preservation (EHP) reviews of each project. GPD reviews projects that have no, or limited, EHP impacts, and OEHP reviews those projects needing a more comprehensive environmental and historical preservation review. Before April 2007, DHS's Office of Grants and Training and TSA shared responsibility for managing the TSGP. According to OEHP officials currently managing the EHP review process, when FEMA assumed responsibility for administering the TSGP in April 2007, they discovered that the EHP requirements had not been fully integrated into the TSGP and that there was a lack of institutional knowledge among DHS's staff about how to manage the EHP process and TSGP requirements. This lack of experience, in combination with the lengthy process of collecting the necessary EHP information from grant applicants, led to a backlog of EHP reviews from fiscal years 2005 through 2007.

According to FEMA officials, there is a need for additional personnel to address the EHP backlog and other anticipated workload issues. According to GPD officials, the backlog created by pending EHP reviews led to a sizable workload for GPD's limited staff. In addition, GPD officials estimated that when transit agencies begin applying directly to FEMA for TSGP grants in fiscal year 2009, instead of going through their state administrative agencies, this approach will generate a fivefold increase in TSGP applications as individual transit agencies apply rather than state administrative agencies. In February 2009, GPD officials reported that several efforts are under way to manage their workload. For example, GPD expects to hire six more program analysts—in addition to the two already in place—to manage the expected workload increase. FEMA officials also reported in February 2009 that they expected to have these new staff hired and in place by March or April 2009. Additionally, GPD reported that it augmented its staff with contractor support in December 2007, to reduce the time for EHP reviews and expedite the release of funds. In March 2009, GPD officials said that they planned to expand the contract within 2 months to include another person for EHP support. They also reported that they are in the process of conducting a workforce study, to commence in late spring 2009, to determine staffing needs for the

additional workload, and expect to have this study completed by the end of fiscal year 2009.

EHP Backlog Remains Despite FEMA's Efforts to Address It

In a separate effort to address the backlog of EHP reviews, in 2007 OEHP developed new guidance for conducting environmental reviews. The new guidance is aimed at addressing the backlog and heavy workload brought about by the integration of GPD grants into FEMA by focusing GPD and OEHP staff resources on project reviews with the greatest potential for environmental impact. 45 FEMA officials reported that the backlog prior to the release of the guidance resulted in projects taking several weeks to several months for EHP approval, depending on the complexity and level of review. Officials also reported that the internal processing time has improved by 50 percent since the EHP guidance was released, and the guidance has also helped to identify the need for EHP training for external and internal stakeholders. See appendix VII for FEMA's EHP review project types. Additionally, DHS revised its grant guidance for fiscal year 2009 to clarify to grant recipients the EHP information that they should submit so that FEMA can begin reviewing their projects. The intention of this revision was to reduce the amount of time between collecting the information and beginning the EHP review process.

Despite these efforts, there remains a backlog of grant projects awaiting review. According to FEMA officials, as of March 2009, 72 projects were still in review, accounting for \$88 million. Twenty-four were projects from fiscal year 2006, and 48 projects from fiscal year 2007. ⁴⁶ FEMA officials further noted that a large number of these projects were in EHP review. As of March 2009, FEMA's EHP regulations were disaster focused, and have not been revised since 1996—before DHS existed. FEMA officials reported in March 2009 that the agency would revise its environmental regulations to be more inclusive of all types of projects, including non disaster

⁴⁵ The guidance identified three project types, A, B, and C. Type A and B projects are considered the least likely to have an environmental impact and are not reviewed by OEHP. For example, training projects have no environmental impact and, therefore, would be labeled as a Type A project. Type B projects—involving buildings less than 50 years old or that break no new ground—are reviewed and approved by GPD's EHP liaison before funds are released. Type C projects—such as physical security enhancements that directly or indirectly involve ground-disturbing activities beyond areas previously disturbed—are viewed as more likely to have an environmental impact, and GPD submits them to OEHP for review.

 $^{^{46}}$ The total number of grant projects that have been approved by TSA for FEMA review for fiscal year 2006 and fiscal year 2007 is 325 projects.

homeland security grants, that FEMA funds. However, FEMA did not have a timeline for when the new regulations would be published. Best practices for project management call for milestone dates, among other factors, in carrying out a project successfully.⁴⁷ Establishing milestones could help FEMA ensure that revisions to its environmental regulations are conducted as management intended.

A Small Amount of Grant Funds Has Been Spent Because of the Length of Time to Make Funds Available

From fiscal years 2006 through 2008, DHS awarded about \$755 million in transit security grants; however, as of February 2009, only about \$21 million, or 3 percent, of this total had been expended by transit agencies largely because of TSA's lengthy cooperative agreement process, the EHP backlog, and delays in receiving disbursement approval from FEMA. 48 As of February 2009, for fiscal years 2006 through 2008, approximately \$334 million dollars has been distributed to transit agencies and approximately \$421 million is still being held pending review (with the majority of the held funds from fiscal year 2008). As might be expected, more recent fiscal vears showed higher unexpended balances. However, low grant expenditures by transit agencies was commonly reported across all TSGP grant years, as shown in figure 3, and are related to many transit agencies receiving authorization to spend their grant dollars near the end of each 2 to 3 year grant performance period. 49 FEMA officials reported that transit agencies may choose to draw down their award at any time during the performance period.

 $^{^{47}}$ The Project Management Institute, The Standard for Program Management © (2006).

 $^{^{48}}$ Expend refers to the actual spending of money; unexpend refers to the amount of obligated and un-obligated balances.

 $^{^{49}}$ Grant performance period refers to the amount of time agencies have to complete grant projects.

Grant dollars (in millions) 800 700 600 500 400 300 200 100 2006 2007 2008 Total Grant year Expanded funds 7,853,153 9.476.631 4,163,444 21.493.231 128.144.937 253.394.039 351.945.127 733.484.103 Unexpanded funds

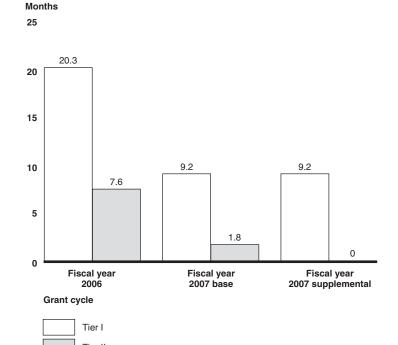
Figure 3: TSGP Funds Expended and Unexpended, Fiscal Years 2006 though 2008

Source: GAO analysis of FEMA data as of February 2009.

Our analysis of TSA project approval and FEMA grant adjustment notices (GAN) from fiscal year 2006 or release of funds memos for fiscal year 2007 showed that it could take up to 20 months for transit agencies to receive approval to begin projects, which accounted for a significant portion of the grant performance period. FEMA used GANs and release of funds memos to notify the state administrative agency and the transit agency that they may begin a project. In fiscal year 2006, state administrative agencies may have received more than one GAN for each project. The first GANs were to notify the state administrative agencies to "obligate and expend" the funds, which meant that they could begin the projects. However, this did not mean that they could draw down any funding. Only upon receipt of the "obligate, expend, and draw down" GAN could the funds be withdrawn. This two-part GAN process created some confusion among transit stakeholders and, in fiscal year 2007, FEMA clarified the GAN process. In fiscal year 2008, FEMA changed this procedure again to include the use of a single release of funds memo, which allowed transit

agencies to draw down funds. ⁵⁰ See figure 4 for the average amount of time it took for transit agencies to receive approval from TSA and FEMA to begin projects after the grant award date.

Figure 4: Average Time for TSA and FEMA to Approve Projects for Fiscal Year 2006 through 2007



Source: GAO analysis of TSA and FEMA data as of February 2009 and Tier II data as of December 2008. Note: Tier II fiscal year 2007 supplemental funds that were released were available the same day as the award. Fiscal year 2008 projects have not yet been approved by FEMA for distribution.

In addition to the delay between announcing awards and obtaining final project approvals, 25 of 40 transit stakeholders we interviewed, including state administrative agency officials, also reported time delays in receiving their grant monies. Furthermore, numerous transit stakeholders attending the TSGP after-action conferences raised concerns about the time it took to receive awarded funds after projects were approved, and stated that

⁵⁰ Obligations occurs when an agency places an order, signs a contract, awards a grant, purchases a service, or takes other actions that require the government to make payments to the public or from one government account to another. Drawdown refers to the amount of money agencies have had paid to them from their grant award.

they believed the process was broken. They also reported that they believed the performance period needed to start when the GANs were received, not when awards were announced. For example, during fiscal year 2006, one Tier I transit agency was awarded \$4 million for a new integrated security response center, but the agency did not receive approval to begin the project until June 11, 2008. As a result, unless this transit agency receives an extension, it will have less than 10 months to complete the project to stay within the original 30-month performance period. A transit agency official told us that the agency requested an extension until June 30, 2010, to complete this project, and was awaiting FEMA's response. In addition, in December 2008, a state administrative agency official for one state sent a request to FEMA for a 2-year extension to the performance period for the entire state's fiscal year 2006 TSGP grant because the "delays from the federal level have left many of these projects without a chance of success during the performance period."

Transit stakeholders also said that concerns about funding delays have hampered their ability to effectively plan for and manage projects. For example, one transit agency official said that because of delays in receiving grant funding the agency is constantly seeking extensions, which are often not approved for longer than 3 months. In addition, another transit agency official stated that state procurement processes can take additional time to complete, which can also reduce the amount of available time to complete the project within the performance period. FEMA officials noted that 2006 was an unusual year for the grant program because the multiple GANs they issued to state administrative agencies resulted in confusion among transit agencies about when projects could begin or when they could start spending money. As a result of the delays encountered in the fiscal year 2006 grant process, FEMA officials stated in March 2009 that they were notifying transit agencies of one-year extensions for all fiscal year 2006 grants that were set to end on March 31, 2009. Despite the concerns over funding delays, FEMA has not established or communicated time frames for providing grant funding to transit agencies once projects have been approved by TSA. In April 2004, we reported that timely awarding of grant funds is imperative to provide the intended benefit of the grant program. 51 Additionally, the purpose of the TSGP is to provide funding to owners and operators of transit systems to

⁵¹ GAO, National Emergency Grants: Labor Is Instituting Changes to Improve Award Process but Further Actions Are Required to Expedite Grant Awards and Improve Data, GAO-04-496 (Washington, D.C.: Apr. 16, 2004).

protect critical surface transportation infrastructure and the traveling public. Ensuring the timely distribution of grant funds is essential for ensuring that transit system owners and operators receive necessary funds early enough in the performance period to complete their security projects.

Additional Steps
Needed to Develop
Performance
Measures to Assess
TSGP Grant Project
Effectiveness and to
Fulfill Administrative
Responsibilities

TSGP Lacks a Plan and Related Milestones for Developing Performance Measures

While the purpose of the TSGP is to provide funds to protect critical surface transportation infrastructure and the traveling public, the program lacks a plan and related milestones for developing measures to track progress toward achieving program goals. While FEMA reported that it was beginning to develop measures to better manage its portfolio of grants, TSA and FEMA have not collaborated to produce performance measures for assessing the effectiveness of TSGP-funded projects, such as how funding is used to help protect critical transportation infrastructure and the traveling public from possible acts of terrorism. Further, FEMA does not yet have performance measures in place for its administrative duties, such as measuring the time taken to complete reviews of financial and administrative requirements. As we reported in October 2005, to enhance and maintain effective collaboration, agencies should engage in practices to achieve common outcomes and establish compatible policies, procedures, and other means to operate across agency boundaries.⁵² Additionally, according to best practices for project management, the development of a project management plan—which defines how the project is executed, monitored and controlled, and closed—is a key element of project management. 53 Best practices for project management

⁵² GAO-06-15.

⁵³ Project Management Institute, *The Standard for Program Management* © (2006).

also call for milestone dates, among other factors, in carrying out a project successfully.

FEMA officials reported in October 2008 that while they were in the process of establishing baselines and targets for measures identified through the Program Assessment Rating Tool (PART) requirement, additional work was needed to develop meaningful measures. 54 FEMA officials stated that performance measures for the TSGP are likely to focus on the increased security capabilities of the transit agencies, such as the number of canine teams a transit agency deploys. In addition, FEMA has also been developing a cost-to-capability assessment that officials report will allow them to analyze grant program accomplishments from fiscal years 2003 through 2007. Still in its early stages, the cost-to-capability assessment focuses on efforts to measure a jurisdiction's capability to prevent and respond to various types of disasters compared to a target level of capability. 55 Although TSA has lead responsibility for surface transportation security, a TSA grant program official stated that TSA does not have any role in FEMA's cost-to-capability assessment and only learned about it in late 2008. This official also reported that the assessment raised some concerns as it might not be tailored appropriately to each transportation mode.

TSA officials reported that they are considering using the BASE review and TSA inspectors to develop and monitor performance measures for the TSGP; however, TSA officials reported not taking any action to develop performance measures because of resource constraints for managing the program. As we have reported, federal programs contributing to the same or similar results should collaborate to ensure that goals are consistent

⁵⁴ The PART was developed to assess and improve program performance so that the Federal government can achieve better results. A PART review helps identify a program's strengths and weaknesses to inform funding and management decisions aimed at making the program more effective. The PART therefore looks at all factors that affect and reflect program performance including program purpose and design; performance measurement, evaluations, and strategic planning; program management; and program results. Because the PART includes a consistent series of analytical questions, it allows programs to show improvements over time and allows comparisons between similar programs.

⁵⁵ According to FEMA, the cost-to-capability assessment is to provide the means to obtain a relevant measure of dollars for capability improvement and to analyze and improve the performance of GPD's portfolio of grants. It will allow FEMA to better manage its portfolio of federal preparedness grant programs by (1) quantifying the benefits of preparedness grant programs, (2) streamlining grant application and reporting processes across grant programs, and (3) identifying investment efficiencies across the preparedness grant portfolio.

and, as appropriate, program efforts are mutually reinforcing.⁵⁶ Until TSA and FEMA collaborate to develop a plan with related milestones, it will be difficult for the agencies to provide reasonable assurance that measures are being developed to ensure that the program is achieving its stated purpose of protecting critical surface transportation infrastructure.

FEMA Lacks Mechanisms to Systematically Collect Data and Track Grant Activities for Administrative Purposes

FEMA is responsible for conducting both a budget review and programmatic review of grant projects including reviews of EHP requirements. However, despite this role, FEMA does not have a mechanism for systematically collecting data on the status of individual grant projects throughout this review process, including tracking the status of the reviews it conducts and the release of funds to transit agencies. Although FEMA has systems to track financial information related to all of its grant programs, these systems do not allow FEMA to track the status of grant reviews, such as EHP reviews. As a result, GPD staff reported that they created a spreadsheet to track this information, including identifying when TSGP funds were released once requirements were met. Under this tracking process, each program analyst was responsible for maintaining accurate records in the spreadsheet. However, TSA did not have access to it and, until February 2009, the information was not monitored for accuracy. Further, we found inconsistencies between FEMA's spreadsheets and data collected through FEMA's financial systems, including the amount of funding being held pending EHP and other reviews. For example, we found that the total amount of funds on hold in the GPD internal spreadsheets was not equal to the hold amounts in FEMA's financial systems. GPD officials told us that FEMA's financial systems were the official record for the awards.

A FEMA official reported that there are multiple information systems involved in managing the TSGP. FEMA is in the process of implementing a new consolidated grants management system—expected to be operational for the TSGP by October 2009. According to FEMA, the new system is to include functions that support the application process and is expected to be fully operational throughout DHS in 2011. Although the system will not initially support the tracking of grant disbursements, FEMA officials reported that their intention is to have the system support these functions in future releases. However, FEMA officials did not have a specific date for

⁵⁶ GAO-06-15.

when these capabilities would be available.⁵⁷ In addition, as of March 2009, there was no mechanism for TSA to gain access to grant review or financial information, even though TSA officials reported requesting information regarding when funds were released to transit agencies so that they could track this information. *Standards for Internal Control in the Federal Government* requires agencies to ensure that pertinent information is recorded and communicated to management and others within the entity in a form and within a time frame that enables them to carry out their internal control and other responsibilities.⁵⁸ Moreover, systematically collecting data on the status of grant projects throughout the grant process could strengthen FEMA and TSA's ability to effectively manage the program.

Similarly, the GPD is responsible for the financial controls and audits of the TSGP to ensure that funds are appropriately disbursed and used in accordance with grant requirements. However, the agency does not have a plan for targeting its monitoring activities related to the use of grant funds once projects have been implemented. GPD officials said that their office conducts on-site visits to transit agencies to collect information on the use of grant funds, but because of a lack of staff resources, their efforts have mostly been limited to the largest Tier I transit agencies that either have not spent their grant funding or were not able to complete projects within the designated grant period. GPD officials said that they also conduct document reviews, including reviewing quarterly financial reports, progress reports, and special conditions to release funds. Although they reported having limited resources, GPD officials said that they were able to conduct approximately 24 site visits during fiscal years 2006 through 2008, attend numerous RTSWG meetings, and interact with transit agencies at conferences as part of their efforts to monitor the awards. GPD officials also reported creating a monitoring tool for the fiscal year 2007 grant cycle to be used during on-site visits, and officials stated that the agency plans to modify the tool each grant year based on the specific grant requirements for that year. GPD officials also reported that the tool has been used by GPD program analysts during their site visits.

While GPD's monitoring tool will likely strengthen the agency's ability to monitor grant activities, GPD lacks a plan to delineate how and when this

⁵⁷ A FEMA official reported that there were multiple phases for the new grants management system, and when completed it will cover the full grant lifecycle.

⁵⁸ GAO/AIMD-00-21.3.1.

monitoring will take place. GPD officials acknowledged that a robust monitoring plan needs to be implemented with processes in place to ensure that the agency visits each transit agency at least once a year. According to grants management best practices, monitoring grantee performance helps ensure that grant goals are reached, and it is important that agencies identify, prioritize and manage potential at-risk recipients.⁵⁹ For example, one federal agency with grant-making responsibilities has created monitoring plans that include criteria to perform risk assessments, which consider factors affecting a grantees ability to effectively manage grants. 60 This information could be used to prioritize monitoring activities given GPD's limited personnel. In addition, in September 2006 we reported on the value of feedback provided through performance monitoring plans and tools such as site visits. 61 Moreover, TSA officials stated that their agency currently has no role in the oversight of grant expenditures, but believed that the use of its inspectors to provide grant oversight would be a key component of the overall approach to mass transit security. TSA's surface transportation security inspectors, who are located throughout the United States, interact with transit agencies for other purposes on a regular basis, and could be used for on-site monitoring. In October 2005, we reported that leveraging resources is vital to achieving effective collaboration. 62 A monitoring plan would provide GPD with a road map for how it will carry out its monitoring activities to help ensure that it is effectively using its limited resources. In addition, by working collaboratively with TSA and its surface inspectors, who have security expertise, GPD could leverage existing resources to ensure that transit agencies are complying with security specifications set out in TSGP grant guidance and the agencies' own investment justifications.

Conclusions

As terrorist attacks on transit systems overseas have made clear, even with a variety of security precautions in place, mass transit systems that move high volumes of passengers daily remain vulnerable to attack. Risk

⁵⁹ Domestic Working Group, *Guide to Opportunities for Improving Grant Accountability* (Washington, D.C.: October 2005).

⁶⁰ GAO, Low-Income and Minority Serving Institutions: Department of Education Could Improve Its Monitoring and Assistance, GAO-04-961 (Washington, D.C.: Sept. 21, 2004).

⁶¹ GAO, Grants Management: Enhancing Performance Accountability Provisions Could Lead to Better Results, GAO-06-1046 (Washington, D.C.: Sept. 29 2006).

⁶² GAO-06-15.

management has been endorsed by the federal government as a way to direct finite resources to those areas at greatest risk of a terrorist attack. While DHS uses a risk-based process to allocate funding for the TSGP, without considering possible variations in vulnerability in the risk model, the risk scores developed through the model are not as precise as they could be, which could affect the allocation of funds to Tier I and Tier II agencies. In addition, articulating roles and responsibilities for managing the TSGP could strengthen TSA and FEMA's ability to ensure that activities, processes, and resources are aligned to achieve a common outcome and ensure smooth coordination during the grant process. Further, TSA's delays in approving projects and FEMA's backlog of project reviews are contributing to delays, which negatively affect the ability of transit agencies to complete their projects within grant performance periods. However, TSA has made changes to the project approval process for fiscal year 2009, which resulted in all projects being approved at the same time as the grant award announcement. FEMA has also reported plans to modify its approach for managing the administrative requirements of the TSGP, including revising its environmental regulations to be more inclusive of all the types of projects, including nondisaster homeland security grants. While FEMA has not reported a time frame for completing this process, establishing milestones to complete this modification could help FEMA ensure that revisions to its environmental regulations are conducted in a timely manner.

We have also previously reported on the importance of performance monitoring in grant programs. Monitoring the implementation of TSGP grant projects is vital to ensure that transit agencies are complying with security specifications set out in the TSGP guidance and in the agencies' own investment justifications. A monitoring plan that details how and when monitoring will take place could improve GPD's ability to plan for this important oversight function and help it ensure that it is effectively using its limited resources. A monitoring plan, which includes a method for leveraging TSA resources, would also put GPD in a better position to monitor grant implementation by working collaboratively with TSA to leverage the security expertise of TSA's surface transportation security inspectors which will help FEMA address its resource limitations related to monitoring. In addition, while FEMA's consolidated grants management system should allow FEMA to better manage data collection, the system being developed is not expected to allow FEMA to collect data on the status of grant activities throughout the grant process or to provide TSA with access to this information, both of which are vital to ensuring effective program management. Moreover, until the system is established and able to track TSGP grants to allow for effective oversight and

management of TSGP funds, FEMA could benefit from establishing an interim process that tracks the necessary information and share this information with TSA, its TSGP partner. Finally, performance measures are fundamental to the successful management of federal programs. As we have reported, federal programs contributing to the same or similar results should collaborate to ensure that goals are consistent and, as appropriate, program efforts are mutually reinforcing. Until TSA and FEMA collaborate to develop a plan with related milestones for jointly measuring the effectiveness of TSGP, it will be difficult for the agencies to provide reasonable assurance that measures are being developed to ensure that the program is achieving its stated purpose of protecting critical surface transportation infrastructure and that accountability and effective stewardship of public resources exist. Finally, the absence of information on the expected time frames for making funds available to transit agencies once projects are approved can hinder transit agency efforts to design and implement projects within the designated performance periods of the grant.

Recommendations for Executive Action

We are making seven recommendations to help strengthen the implementation and oversight of the TSGP.

To strengthen DHS's methodology for determining risk, we are recommending that the Secretary of Homeland Security develop a cost-effective method for incorporating vulnerability information into future iterations of the TSGP risk model.

To strengthen the administration, oversight, and internal controls of the TSGP, we are recommending that the Secretary of Homeland Security direct TSA and FEMA to take the following four actions:

- Define TSA's and FEMA's respective roles and responsibilities for managing the TSGP in an MOU or similar document.
- Develop a cost-effective plan for monitoring the use of grant funds once projects have been implemented, including a strategy for leveraging resources that could allow TSA surface transportation security inspectors to assist in monitoring the grant projects to ensure that the projects meet the security requirements set out in TSGP guidance.
- Develop an interim solution to systematically collect data and track grant activities until FEMA's grants management system can perform

these functions, and ensure that both agencies have access to these data.

• Collaborate to develop a plan and milestones for measuring the effectiveness of the TSGP and its administration.

In addition, we recommend that the Secretary of Homeland Security direct FEMA to take the following actions:

- Establish a time frame for revising environmental regulations to be more inclusive of nondisaster homeland security grant programs.
- Establish and communicate time frames for making funds available to transit agencies once FEMA receives project approvals from TSA.

Agency Comments and Our Evaluation

We provided a draft of this report to DHS and DOT for review and comment. DOT did not provide comments. DHS provided written comments on May 15, 2009, which are reprinted in appendix VIII. In commenting on the report, DHS reported that it concurred with all seven recommendations and discussed actions it has taken or planned to take to implement them.

With regard to our first recommendation that DHS strengthen its methodology for determining risk by developing a cost-effective method for incorporating vulnerability information into future iterations of the TSGP risk model, DHS concurred with the recommendation and said that it would make appropriate adjustments in the fiscal year 2010 grant cycle.

DHS concurred with our second recommendation that TSA and FEMA's respective roles for the administration and oversight of the TSGP be defined and documented in an MOU or similar document. DHS reported that TSA and FEMA will work collaboratively to develop the MOU before the fiscal year 2010 grant cycle and share it with external stakeholders to ensure that the responsibilities and relationships between TSA and FEMA are clear.

DHS also concurred with our third recommendation that it develop a costeffective plan for monitoring the use of grant funds and leverage TSA surface transportation security inspectors to assist in monitoring these projects. Specifically, DHS reported that FEMA would work toward developing a cost-effective monitoring plan to include the use of surface transportation security inspectors in such instances when their transit security expertise would be appropriate for monitoring grant program functions. Because FEMA would be utilizing TSA personnel with numerous other responsibilities to help with this monitoring, it is especially important that the two agencies work together to coordinate this effort and conduct the monitoring as efficiently as possible. For example, TSA's surface transportation security inspectors currently monitor transit agencies through the BASE reviews and could monitor grant implementation concurrently with those reviews.

DHS stated that it concurred with our fourth recommendation that TSA and FEMA develop an interim solution to systematically collect data and track grant activities until FEMA's grants management system can perform these functions, and ensure that both agencies have access to these data. DHS also stated that TSA and FEMA will identify appropriate channels for data collection and tracking as well as information sharing so that both agencies have access to all appropriate information to ensure accurate and consistent record keeping. In addition, DHS reported that it has taken action to modify FEMA tracking logs and project spreadsheets to collect additional information to track projects to improve its collection and tracking of grant information. However, given that FEMA does not know when the grants management system will be able to systematically collect data and track grant activities, it is critical that FEMA develop and implement this interim solution to collect and track key grant information as quickly and accurately as possible.

With regard to our fifth recommendation that TSA and FEMA collaborate to develop a plan and milestones for measuring the effectiveness of the TSGP and its administration, DHS stated that it concurred with the recommendation. DHS reported that a collaborative written plan with established goals and milestones will be designed and implemented as part of the MOU or other formal agreement between TSA and FEMA.

DHS concurred with our sixth recommendation that FEMA establish a time frame for revising environmental regulations that consider nondisaster homeland security grant programs. However, in its comments on this recommendation, DHS stated that FEMA's environmental regulations apply to nondisaster grants. We did not intend to suggest that the regulations did not currently apply to nondisaster grants. Rather, we are recommending that FEMA establish a time frame for completing its plans to revise regulations that are currently focused on emergency management program issues to be more inclusive of the types of issues associated with nondisaster grant programs. In response to this comment,

and to clarify our point, we revised the recommendation to reflect that the environmental regulations apply to all FEMA grant programs, but that FEMA should establish time frames for revising the regulations to be more inclusive of nondisaster grants. DHS also stated that FEMA is currently working with DHS to update these procedures and is targeting completion of this effort for the end of calendar year 2009. However, DHS noted that these efforts could be extended if delays occur because of additional time needed to complete procedural changes.

With regard to our seventh recommendation that FEMA establish and communicate time frames for making funds available to transit agencies once FEMA receives project approvals from TSA, DHS concurred. Specifically, DHS also reported that FEMA will make every reasonable effort to establish and communicate time frames for releasing funds to TSGP grantees once FEMA receives approval of grant projects from TSA. However, DHS noted that the release of funds often depends on the responsiveness of grantees in submitting required documents and thus FEMA would work proactively to obtain required information. DHS also reported that FEMA would release grant funds within 3 to 5 days, if all required EHP and budget information is received from grantees, and appropriate clearances are provided by OEHP and the FEMA financial analyst. However, our recommendation also intended that FEMA establish timeframes for when its internal reviews would be completed once it receives all of the required documents to facilitate a timely distribution of TSGP awards. FEMA's OEHP already has time frames for completing its EHP review process and a related performance metric to assess its effectiveness in meeting these time frames. Establishing such time frames for its other internal reviews and communicating those to transit agencies could help improve transit agency efforts to implement projects within the designated performance periods of the grant.

As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the Secretary of Homeland Security, the Secretary of Transportation, the Director of the Office of Management and Budget, and interested congressional committees. The report also is available at no charge on the GAO Web site at http://www.gao.gov.

If you or your staff have any questions concerning this report, please contact me at (202) 512-8777 or lords@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix VIII.

Sincerely yours,

Stephen M. Lord

Director, Homeland Security and Justice Issues

Appendix I: Objectives, Scope, and Methodology

The objectives of this report were to determine the extent to which (1) Transit Security Grant Program (TSGP) funds are allocated and awarded based on risk, and grant requirements have changed since 2006; (2) the Department of Homeland Security (DHS) has allocated, awarded, and distributed TSGP grants in accordance with statutory deadlines and leading practices for collaborating agencies; and (3) DHS has evaluated the effectiveness of the TSGP as well as investments made using funds awarded through the TSGP.

To determine the extent to which TSGP funds are allocated and awarded based on risk, we analyzed guidance documents outlining best practices for effectively implementing a risk management framework, including the DHS National Infrastructure Protection Plan (NIPP), the Transportation Security Sector Specific Plan (TS-SSP), and GAO's risk management framework. We obtained the Transportation Security Administration (TSA) and the Federal Emergency Management Agency's (FEMA) risk analysis model for the TSGP for fiscal years 2007 and 2008. We analyzed the model for these fiscal years to determine the process by which DHS used the model to estimate risk—by incorporating threat, vulnerability, and consequence information—as well as how the model was used to divide regions into Tier I (higher risk) and Tier II (lower risk), and make allocations to tiers and regions and the extent to which these allocations were tied to the region's or transit agency's share of risk. We also interviewed officials from TSA and FEMA as well as FEMA's contractor, Digital Sandbox, to understand what information was included in the model and how the model was managed between the two agencies. We did not evaluate the quality of the information or data included in the model, but instead evaluated the model for how it incorporated the required elements of risk. We determined the reliability of the model by discussing methods of entering and maintaining data with agency officials. On the basis of these discussions, and our review of the processes used to collect the data, we determined that the data were sufficiently reliable for the purposes of this report.

To determine the extent to which grant requirements have changed since fiscal year 2006, we analyzed TSA's grant guidance and grant priorities for fiscal years 2006 through 2009, and attended TSA and FEMA presentations to transit agencies prior to the release of the grant guidance as well as after-action conferences for the fiscal year 2008 grant cycle. Additionally, we interviewed TSA and FEMA officials about the TSGP grant determination process used in fiscal years 2006, 2007, and 2008—including TSA's scoring methodology for Tier I and II and the national review panel criteria used for Tier II—and about the changes made to the process for

fiscal year 2009. We also interviewed 30 mass transit and passenger rail operators that have applied for, received grant funding, or both to gain their perspectives on how the grant requirements have changed since fiscal year 2006 and the impact that these changes have had on the grant process. The agencies we interviewed represent 75 percent of the nation's total mass transit and passenger rail ridership based on information we obtained from the Federal Transit Administration's National Transit Database and the American Public Transportation Association. We selected this nonprobability sample of transit agencies based on (1) varying levels of ridership, (2) eligibility to receive TSGP grants, (3) varying levels of risk (Tier I versus Tier II), (4) expert recommendation, and (5) geographic dispersion. Because we selected a non-probability sample of mass transit and passenger rail agencies, the information obtained from these site visits cannot be generalized to all transit agencies nationwide. Table 2 lists the mass transit and passenger rail agencies we included in our interviews.

Transit agency	Urban area served
Bay Area Rapid Transit (BART)	San Francisco-Oakland, California
Broward County Office of Transportation (BCT)	Pompano Beach, Florida
CALTRAIN	San Francisco and San Jose, California
Chicago Transit Authority (CTA)	Chicago, Illinois
Dallas Area Rapid Transit/Trinity Railway Express (DART)	Dallas, Texas
Delaware River Port Authority (PATCO)	New Jersey, and Philadelphia, Pennsylvania
Fort Worth Transportation Authority (The T)	Fort Worth, Texas
King County Department of Transportation – Metro Transit Division (King County Metro)	Seattle, Washington
Los Angeles County Metropolitan Transportation Authority (LACMTA)	Los Angeles, California
Maryland Transit Administration (MTA)	Greater Washington. D.C., and Maryland
Massachusetts Bay Transportation Authority (MBTA)	Boston, Massachusetts
METRA Commuter Rail	Chicago, Illinois
Metropolitan Atlanta Rapid Transit Authority (MARTA)	Atlanta, Georgia
Metro Transit	Minneapolis, Minnesota
Metropolitan Transit Authority of Harris County (Houston Metro)	Houston, Texas
Miami Dade Transit	Miami, Florida
New Jersey Transit	Newark, New Jersey - New York, New York
New York Metropolitan Transit Authority (NY-MTA)	New York, New York
Orange County Transportation Authority (OCTA)	Orange, California

Transit agency	Urban area served
Pierce County Transportation Benefit Area Authority (Pierce Transit)	Tacoma, Washington
Port Authority Trans-Hudson (PATH)	Jersey City, New Jersey
Santa Clara Valley Transportation Authority (VTA)	San Jose, California
South Florida Regional Transportation Authority (Tri-Rail)	Pompano Beach, Florida
Southern California Regional Rail Authority (Metrolink)	Greater Los Angeles, California
San Francisco Municipal Railway (MUNI)	San Francisco, California
Sound Transit (Sounder)	Seattle, Washington
Southeastern Pennsylvania Transportation Authority (SEPTA)	Philadelphia, Pennsylvania
TRIMET	Portland, Oregon
Virginia Railway Express (VRE)	Northern Virginia, Greater Washington D.C.
Washington Metropolitan Area Transit Authority (WMATA)	Washington, D.C.

Source: GAO.

During site visits to mass transit and passenger rail agencies, we interviewed grant managers and transit agency security officials responsible for developing TSGP grant applications. Further, we interviewed state administration agency officials directly involved in the TSGP to determine how the administration of the program worked between the state administration agencies and TSA and FEMA. We discussed the TSGP, either in person or by teleconference, with the SAA's in Washington, D.C., and the following states: Washington, Illinois, Minnesota, California, Texas, Georgia, Florida, Massachusetts, and New York.

To determine the extent to which DHS has allocated, awarded, and distributed TSGP grants in accordance with statutory deadlines and leading practices for collaborating agencies, we reviewed a variety of applicable laws, guidelines, and best practices. To determine DHS's compliance with statutory deadlines, we analyzed TSGP requirements in the DHS appropriations acts for fiscal years 2007, 2008, and 2009 against DHS's TSGP actions to release grant guidance and act upon grant applications. Additionally, we interviewed officials from FEMA's Grants Preparedness Directorate (GPD) and the Office of Environmental and Historical Preservation (OEHP) to determine what actions were being taken to meet the requirements of the National Environmental Policy Act. To determine DHS's compliance with federal guidance, we compared FEMA controls for the TSGP, including how grant monies are monitored through FEMA's financial systems and spreadsheets, with criteria in

Standards for Internal Controls in the Federal Government. ⁶³ To determine the extent to which DHS followed leading practices for collaborating agencies, we compared plans and procedures in place between TSA and FEMA to manage the program with criteria in our October 2005 report. ⁶⁴

To determine the status of grant funding since 2006, we reviewed the length of time between grant allocation and grant distribution. This required reviews of extensive grant documentation, including reviewing original grant award dates for fiscal years 2006 through 2008, analyzing grant project approval dates from TSA, reviewing grant adjustment notice (GAN) and release of funds memos from FEMA, as well as grant distribution and drawdown information from FEMA's financial system and internal spreadsheets. We compared this information against the records of three state administrative agencies for states with large Tier I transit agencies to determine the accuracy of the dates and financial information we gathered and returned to FEMA for explanations when we found discrepancies. We also reviewed grant guidance and grant requirements to determine the performance period during which agencies had to spend grant funding. Additionally, we interviewed TSA grant management officials and FEMA GPD and OEHP officials to gain additional information on how the grant process works at each stage—allocation, award, and distribution. Our analysis also included interviews with officials from the transit agencies listed in table 2 to gain additional information on how grants are allocated and awarded as well as the length of time involved to complete the grant process.

To determine the extent to which DHS has evaluated the effectiveness of the TSGP as well as investments made using funds awarded through the TSGP, we reviewed the following documents for guidance on performance measures for infrastructure protection grant programs as well as for any measures related to the TSGP: the *National Preparedness Guidelines*, the NIPP, the TS-SSP–mass transit modal annex, and the TSGP grant guidance. Additionally, we reviewed the guidance on leading practices for collaborating agencies as well as best practices for project management. To determine whether TSA or FEMA had implemented any measures for

⁶³ GAO, Standards for Internal Control in the Federal Government, GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999).

⁶⁴ GAO, Results-Oriented Government: Practices That Can Help Enhance and Sustain Collaboration among Federal Agencies, GAO-06-15 (Washington D.C.: Oct 21, 2005).

Appendix I: Objectives, Scope, and Methodology

the administration of the TSGP, we interviewed TSA grant management officials as well as officials in FEMA's GPD and OEHP. Finally, to identify the extent to which TSA and FEMA are measuring TSGP investments, we reviewed the Office of Management and Budget's Program Assessment Rating Tool, which identified baselines and targets for measures for the infrastructure protection grants.

We conducted this performance audit from September 2007 to June 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: Fiscal Year 2008 Project Effectiveness Groupings

Project effectiveness group score	Description	Project type
4	Training, operational deterrence, drills, public awareness activities	 Developing security plans Training: Security awareness DHS-approved behavior recognition detection courses Countersurveillance Immediate actions for security threats/incidents Employee security threat assessments (e.g., background checks) Operational deterrence Canine teams Mobile explosives screening teams Visible intermodal protection response teams Crowd assessment Public awareness
3	Multi-user high-density key infrastructure protection	Antiterrorism security enhancement measures, such as intrusion detection, visual surveillance with live monitoring, alarms tied to visual surveillance system, recognition software, tunnel ventilation and drainage system protection, flood gates and plugs, portal lighting, and similar hardening actions for Tunnel hardening, High-density elevated operations, and Multi-user high-density stations
2	Single-user high-density key infrastructure protection	 Hardening of supervisory control and data acquisition systems Antiterrorism security enhancement measures for High-density stations and High-density bridges
1	Key operating asset protection	 Physical hardening of control centers Bollards Stand off Access control Secure parked trains, engines, and buses for bus/rail yards Maintenance facilities

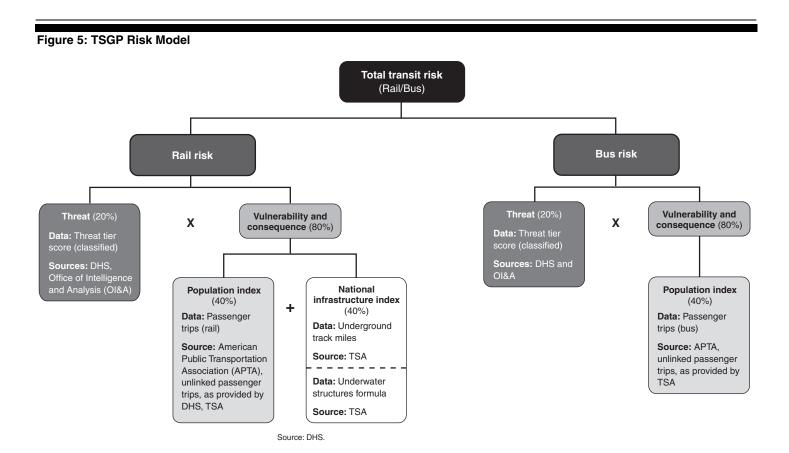
Source: DHS

Note: In fiscal year 2009, DHS added an additional project effectiveness grouping, "other mitigation activities," which included the following project types: evacuation plans, interoperable communication, and antiterrorism security enhancement measures for low-density stations.

Appendix III: TSGP Risk Analysis Model

The TSGP risk model accounts for risk to both intracity rail (subway and commuter rail) and bus systems. The rail and bus scores are combined to determine the total transit risk for the region. Within each mode, the threat index accounts for 20 percent of the total risk score while the vulnerability and consequence indexes account for 80 percent. DHS's measurement of vulnerability and consequence is mainly a function of the consequences of a successful terrorist attack, represented by a population index, the total number of trips made on a system in a given year, and a national infrastructure index, which focuses on critical assets that if attacked would cause severe losses of life because of their particular vulnerabilities and damage mechanisms. ⁶⁵ Figure 5 shows the TSGP risk model.

 $^{^{65}}$ A trip represents the entire end-to-end ride by a passenger. These data are collected from the American Public Transportation Association and, for the fiscal year 2008 model, represent 2006 data. The national infrastructure index primarily accounts for the toll on human life caused by an attack on these critical transit system assets.



Appendix IV: TSGP Tier I and II Regions

Table 3 shows the Tier I regions for 2009, and table 4 shows the Tier II regions for 2009.

Table 3: TSGP Tier I Regions for 2009	
State	Urban Area
California	San Francisco Bay Area
	Greater Los Angeles
Washington, D.C./Maryland/Virginia	Greater National Capital Region
Georgia	Atlanta area
Illinois/Indiana	Chicago area
Massachusetts	Boston area
New York/New Jersey/Connecticut	New York City/Northern New Jersey
Pennsylvania/New Jersey	Philadelphia area

Source: DHS.

State	Region
Arizona	Phoenix area
	Tucson area
California	Fresno area
	Sacramento area
	San Diego area
Colorado	Denver area
Florida	Jacksonville area
	Miami/Fort Lauderdale area
	Orlando area
	Tampa area
Hawaii	Honolulu area
Illinois	Urbana-Champaign area
Indiana	Indianapolis area
Kentucky	Louisville area
Louisiana	New Orleans area
Massachusetts	Springfield area
Michigan	Detroit area
	Lansing area
Minnesota	Twin Cities area

State	Region
Missouri	Kansas City area
	St. Louis area
Nevada	Las Vegas area
	Reno area
New Mexico	Albuquerque area
New York	Albany area
	Buffalo area
	Rochester area
North Carolina	Charlotte area
Ohio	Cincinnati area
	Cleveland area
	Columbus area
	Dayton area
Oregon	Portland area
	Eugene area
Pennsylvania	Pittsburgh area
Puerto Rico	San Juan area
Rhode Island	Providence area
Tennessee	Memphis area
	Nashville area
Texas	Austin area
	Dallas/Fort Worth/Arlington area
	Houston area
	El Paso area
	San Antonio area
Utah	Salt Lake City area
Virginia	Norfolk area
	Richmond area
Washington	Seattle area
	Spokane area
Wisconsin	Madison area
	Milwaukee area

Source: DHS.

Appendix V: Tier II National Review Panel Criteria, 2006 through 2008

200	106	20		20	08
1. 2. 3. 4. 5.	Rail and bus specific project types and priorities ^a Cost-effectiveness Ability to reduce risk of catastrophic events Sustainability Relevance to national preparedness goal and National Strategy for Transportation	1. 2. 3. 4. 5.	Transit security fundamentals Cost-effectiveness Risk reduction Sustainability Timelines Use of section 5307 grants ^b	1. 2. 3. 4. 5. 6.	Project Effectiveness Grouping° Cost effectiveness Risk score grouping Sustainability Timelines Feasibility
 7. 	Security Relevance to Regional Transportation Security Strategy, Urban Area Homeland Security Strategy, and State Homeland Security Strategy Timelines				
8.	Innovativeness				

Source: DHS.

^aBus project types included inventory control improvements, increased perimeter security, training and awareness, emergency response and preparedness, and implementation of technology-driven surveillance. Rail project type included use of passive measures, development and enhancement of improvised explosive devices, mitigation capabilities, and mitigation of high consequence risks.

^bFederal Transit Administration section 5307 grant program distributes funds to urbanized areas and to governors for transit capital and operating assistance in urbanized areas and for transportation-related planning. Eligible purposes include planning, engineering design and evaluation of transit projects, and other technical transportation-related planning.

°See app. II for project effectiveness groupings.

Appendix VI: TSGP Priorities 2006 through 2009

Fiscal	D-2	P.v.
year	Rail	Bus
2006	Protection of underwater and other deep-bore tunnels and associated track mileage from attacks	Development and enhancement of capabilities to improve inventory control
	Development and enhancement of capabilities to prevent, detect, and respond to terrorist attacks employing improvised explosive devices	Increased perimeter security at intracity bus depots and yards
	Mitigation of other high-consequence risks identified through individual transit system risk assessments	Development of training and awareness among intracity bus operators and employees
		Development of emergency response and preparedness capabilities
		Implementation of technology-driven surveillance
		Suspicious activity detection and behavior pattern recognition
2007	Protection of high-risk/high-consequence underwater and underground rail assets	Same as Rail.
	Protection of other high-risk/high-consequence assets and systems that have been identified through system-wide assessments	
	Use of visible, unpredictable deterrence	
	Targeted counterterrorism training for key frontline staff	
	Emergency preparedness drills and exercises	
	Public awareness and preparedness campaigns	
	Efforts in support of the national preparedness architecture	
2008	Training, operational deterrence, drills, public awareness activities ^a	Same as Rail.
	Multi-user high-density key infrastructure protection ^b	
	Single-user high-density key infrastructure protection°	
	Key operating asset protection ^d	
2009	Training, operational deterrence, drills, and public awareness activities	Same as Rail.
	Multi-user high-density key infrastructure protection	
	Single-user high-density key infrastructure protection	
	Key operating asset protection	
	Other mitigation activities ^e	

Source: DHS

^aOperational deterrence activities include canine teams, mobile explosive screening teams, and Visible Intermodal Protection Response teams.

^bProjects include intrusion detection, visual surveillance with live monitoring, alarms tied to visual surveillance system, recognition software, tunnel ventilation and drainage system protection, flood gates and plugs and portal lighting.

 $\overline{\text{Appendix VI: TSGP Priorities 2006 through 2009}}$

Projects include antiterrorism security enhancement measures for: high-density stations and high-density bridges.

^dProjects include: physical hardening/security of control centers; securing stored/parked trains, engines, and buses; and securing bus/rail yards, and maintenance facilities.

^eProjects include interoperable communications, evacuation plans, and antiterrorism security enhancement measures for low-density stations.

Appendix VII: FEMA's Environmental and Historic Preservation Review Project Types

Category A projects	Category B projects	Category C projects
Purchases such as vehicles, patrol boats, ID cards, handheld or portable equipment, and navigation or communication equipment for vehicles, boats, or other mobile units	Security and surveillance equipment, including but not limited to closed-circuit television cameras, motion detection systems, and ID card readers	Communication towers New construction and renovation
Classroom and Web-based training, conferences, and workshops	Physical security enhancements, including but not limited to lighting, barriers, fencing, and gates	Physical security enhancements that directly or indirectly involve ground-disturbing activities beyond areas previously disturbed
Personnel, administrative, fiscal, and management activities	Installation of generators	Modification to or renovation/alteration of existing facilities that are 50 years old or
Development and distribution of information bulletins	Field exercises	greater
Technical assistance activities		
Installation of security measures on mobile units (buses, train cars, ferries, etc.) as long as these mobile units are less than 50 years old		
Placement of floating barriers		

Source: FEMA.

Appendix VIII: Comments from the Department of Homeland Security

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



May 15, 2009

Mr. Stephen M. Lord Director, Homeland Security and Justice Issues Government Accountability Office 441 G Street, NW Washington, DC 20548

Dear Mr. Lord:

The Department of Homeland Security (DHS) appreciates the opportunity to review and comment on the Government Accountability Office's (GAO) draft report GAO-09-491 titled, Transit Security Grant Program: DHS Allocates Grants Based on Risk but its Risk Methodology, Management Controls, and Grant Oversight Can Be Strengthened. The findings in the report will be useful in strengthening the effectiveness and efficiency in how we execute and measure a risk-based approach to allocating transit security grants.

The Transit Security Grant Program (TSGP) has evolved greatly since fiscal year 2006 based on internal and external stakeholder feedback, lessons learned and streamlined processes. While several improvements have been made, we recognize the need to continue to improve the process, including addressing the recommendations raised in this report.

DHS concurs with the GAO's recommendations to strengthen the Transit Security Grant Program. Following are our recommendation-specific responses; technical comments have been provided under separate cover.

<u>Recommendation 1</u>: Develop a cost-effective method for incorporating vulnerability information into future iterations of the Transit Security Grant Program risk model.

DHS Concurs: DHS recognizes the value of including agency and asset vulnerability information to support all decisions based on risk considerations such as allocation of funds and project selections. We will make appropriate adjustments in the Fiscal Year (FY) 2010 grant cycle.

Recommendation 2: Define TSA and FEMA's respective roles and responsibilities for managing the TSGP in a memorandum of understanding or similar document.

-2-

<u>DHS Concurs</u>: The Transportation Security Administration (TSA) and the Federal Emergency Management Agency (FEMA) will collaboratively develop the Memorandum of Understanding (MOU) before the FY 2010 grants cycle, and share it with external stakeholders to ensure the responsibilities and relationship between TSA and FEMA are clear in the management of the Transit Security Grant Program.

Recommendation 3: Develop a cost-effective plan for monitoring the use of grant funds once projects have been implemented, which includes a strategy for leveraging resources that could allow TSA surface transportation security inspectors to assist in monitoring the grant projects to ensure that the projects meet the security requirements set out in the TSGP guidance.

DHS Concurs: FEMA will work towards development of a cost effective monitoring plan to include the use of TSA surface transportation security inspectors in such instances when their expertise in transit security would be appropriate in monitoring grant program functions. Since FEMA has the statutory grant management responsibility for the TSGP including monitoring and oversight, monitoring of grant program activity will remain a FEMA function. Also, FEMA has and will continue to increase its staffing levels to aid in accomplishing robust monitoring of grant programs. As an example, the addition of five (5) new Full-Time Employees (FTE's) in the Grant Programs Directorate's Transportation Infrastructure Security Branch will allow for an improved programmatic monitoring capability in FY 2009-2010.

<u>Recommendation 4:</u> Develop an interim solution to systematically collect data and track grant activities until FEMA's grants management system can perform these functions and ensure that both agencies have access to this data.

DHS concurs: Proactive, documented, and continual information sharing and communication are essential to the successful implementation and management of a grant program. Methods of information sharing and data tracking, such as transmitting formal approval letters and release of funds memos between TSA and FEMA, not only strengthen the management and oversight of the grant program, but also increase accountability and responsiveness when questions arise about any part of the process. TSA and FEMA will identify appropriate channels for data collection, information sharing and tracking, and reconciliation so both agencies have access to all appropriate information to ensure accurate and consistent record keeping. Examples that are already being implemented by FEMA include updating tracking logs and project spreadsheets to include applications, awards, Environmental and Historic Preservation processes, Release of Funds memos, and grant monitoring reports; all of which is to be shared by FEMA with TSA. Likewise, TSA will provide FEMA with data it collects on grant funded projects and activities from TSA outreach efforts to TSGP grantees and stakeholders.

<u>Recommendation 5</u>: Collaborate to develop a plan and milestones for measuring the effectiveness of the TSGP and its administration.

- 3 -

<u>DHS Concurs</u>: DHS concurs that a collaborative written plan with established goals and milestones will be designed and implemented as part of the MOU or other formal agreement between TSA and FEMA.

<u>Recommendation 6</u>: Establish a timeframe for revising environmental regulations that consider non-disaster homeland security grant programs.

<u>DHS Concurs</u>: FEMA's environmental regulations currently apply to non-disaster grants. FEMA is currently working with DHS Headquarters (HQ) to update these procedures and is targeting completion for the end of the calendar year contingent on any delay which may result from the time necessary to complete identified procedural changes.

Recommendation 7: Establish and communicate timeframes for making funds available to transit agencies once FEMA receives project approvals from TSA.

DHS Concurs: FEMA will make every reasonable effort to establish and communicate timeframes for releasing funds to TSGP grantees once FEMA receives approval of grant projects from TSA. However, release of funds is often dependent upon the responsiveness of grantees in submitting required documents (e.g. Environmental and Historic Preservation (EHP) and detailed budgets) and questions related thereto. Given this, FEMA will work proactively to follow up with grantees on requests for information. Once all required EHP and budget information is received from grantees, and appropriate clearances are provided by the Office of Environmental and Historic Preservation and the financial analyst, FEMA will release funds within 3-5 days.

The Department of Homeland Security appreciates the work done by GAO to review our Transit Security Grant Program; we look forward to working with you on future homeland security issues.

Sincerely,

Departmental GAO.OIG Liaison Office

Page 61

Appendix IX: GAO Contact and Staff Acknowledgments

GAO Contact

Stephen M. Lord, (202) 512-8777 or lords@gao.gov

Acknowledgments

In addition to the contact named above, Dawn Hoff, Assistant Director; Daniel Klabunde, Analyst-in-Charge; and Martene Bryan, Senior Analyst, managed this assignment. Jason Berman, Charlotte Gamble, and Su Jin Yon made significant contributions to the work. Chuck Bausell and William Chatlos assisted with design, methodology, and data analysis. Linda Miller and Lara Kaskie provided assistance in report preparation, and Tracey King provided legal support.

GAO's Mission	The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.
Obtaining Copies of GAO Reports and Testimony	The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's Web site (www.gao.gov). Each weekday afternoon, GAO posts on its Web site newly released reports, testimony, and correspondence. To have GAO e-mail you a list of newly posted products, go to www.gao.gov and select "E-mail Updates."
Order by Phone	The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's Web site, http://www.gao.gov/ordering.htm.
	Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.
	Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.
To Report Fraud,	Contact:
Waste, and Abuse in	Web site: www.gao.gov/fraudnet/fraudnet.htm
Federal Programs	E-mail: fraudnet@gao.gov Automated answering system: (800) 424-5454 or (202) 512-7470
Congressional Relations	Ralph Dawn, Managing Director, dawnr@gao.gov, (202) 512-4400 U.S. Government Accountability Office, 441 G Street NW, Room 7125 Washington, DC 20548
Public Affairs	Chuck Young, Managing Director, youngc1@gao.gov , (202) 512-4800 U.S. Government Accountability Office, 441 G Street NW, Room 7149 Washington, DC 20548