United States Government Accountability Office

GAO

Testimony before the Committee on Commerce, Science, and Transportation, U.S. Senate

For Release on Delivery
Expected at 10:00 a.m. EDT
Thursday, January 18, 2007

PASSENGER RAIL SECURITY

Enhanced Federal Leadership Needed to Prioritize and Guide Security Efforts

Statement of Cathleen A. Berrick, Director
Homeland Security and Justice Issues

January 18, 2007

PASSENGER RAIL SECURITY

Enhanced Federal Leadership Needed to Prioritize and Guide Security Efforts

GAO Accountability · Integrity · Reliability

Highlights

Highlights of GAO-07-225T, a testimony before the Committee on Commerce, Science, and Transportation, U.S. Senate

Why GAO Did This Study

The July 2005 London subway bombings and July 2006 rail attacks in Mumbai, India dramatically revealed the vulnerability of passenger rail and other surface transportation systems worldwide to terrorist attack and demonstrated the need for increased focus on the security of these systems.

This testimony, which is based primarily on GAO's September 2005 report on passenger rail security (GAO-05-851) and selected program updates obtained in January 2007 provides information on (1) how the Department of Homeland Security (DHS) has assessed the risks posed by terrorism to the U.S. passenger rail system; (2) actions TSA and other federal agencies have taken to enhance the security of U.S. rail systems; and (3) rail security practices implemented by domestic and selected foreign passenger rail operators.

What GAO Recommends

GAO's September 2005 report recommended, that the Transportation Security Administration (TSA) complete its methodology for conducting risk assessments, and develop rail security standards that reflect industry best practices. GAO also recommended that DHS determine the feasibility of implementing certain security practices used by foreign rail operators. DHS, DOT, and Amtrak generally agreed with the report's recommendations.

www.gao.gov/cgi-bin/getrpt?GAO-07-225T.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Cathleen Berrick at (202) 512-3404 or berrickc@gao.gov.

What GAO Found

The DHS Office of Grants and Training has conducted risk assessments of passenger rail systems to identify and protect rail assets that are vulnerable to attack, such as stations and bridges. TSA has also begun to conduct risk assessments of passenger rail assets. While TSA has begun to establish a methodology for analyzing and characterizing risks, as of January 2007, the agency has not completed a comprehensive risk assessment of the U.S. passenger rail system. Until TSA does so, the agency may be limited in its ability to prioritize passenger rail assets and help guide security investments. DHS has also begun developing a framework to help agencies and the private sector develop a consistent approach for analyzing and comparing risks among and across different transportation sectors. However, until this framework is finalized, it may not be possible to compare risks across different sectors, prioritize them, and allocate resources accordingly.

After September 11, 2001, the Department of Transportation initiated a number of efforts to improve passenger rail security. After its creation, TSA also took a number of actions, including issuing rail security directives, testing rail security technologies, developing training tools for rail workers, and issuing a proposed rule in December 2006 regarding passenger and freight rail security, among other efforts. However, federal and rail industry stakeholders have questioned the extent to which TSA's directives were based on industry best practices and expressed confusion about how TSA would monitor compliance with the directives. DHS and DOT also signed a memorandum of understanding (MOU) that delineated the two departments' respective roles and responsibilities for promoting the safe, secure, and efficient movement of people and goods throughout the transportation system. TSA has recently completed specific agreements with the Federal Transit Administration (FTA) and the Federal Railroad Administration (FRA) to further delineate security-related roles and responsibilities for passenger rail.

U.S. and foreign passenger rail operators GAO visited have also taken actions to secure their rail systems. Most had implemented customer security awareness programs, increased security personnel, increased the use of canines to detect explosives, and enhanced employee training programs. GAO also observed security practices among foreign passenger rail systems that are not currently used by U.S. rail operators or by the U.S. government, which could be considered for use in the U.S. For example, some foreign rail operators randomly screen passengers or use covert testing to help keep employees alert to security threats. While introducing these security practices in the U.S may pose political, legal, fiscal, and cultural challenges, they warrant further examination. TSA has reported taking steps to identify foreign best practices for rail security.

Mr. Chairman and Members of the Committee:

Thank you for inviting me to participate in today's hearing on federal efforts to secure rail and surface transportation systems. Since September 11, 2001, TSA has focused much of its efforts and resources on meeting legislative mandates to strengthen commercial aviation security. However, TSA has recently placed additional focus on securing surface modes of transportation, particularly in the area of passenger rail security. Surface transportation, which includes passenger and freight rail, mass transit, highways, and pipelines, are inherently open and difficult to secure. One of the critical challenges facing these federal agencies, and rail system operators they oversee or support, is finding ways to protect rail systems from potential terrorist attacks without compromising the accessibility and efficiency of rail travel. The Madrid commuter rail attacks in March 2004, London rail bombings in July 2005, and Mumbai, India train bombings just last year, highlight the vulnerabilities of passenger rail and other surface transportation systems and made clear that even when security precautions are put into place, these systems remain vulnerable to attack. While securing surface transportation systems is a daunting task—a shared responsibility requiring coordinated action on the part of federal, state, and local governments and the private sector—it is important nonetheless to take the necessary steps to identify and mitigate risks to these systems.

As we have reported previously, the sheer number of stakeholders involved in securing surface transportation modes, including passenger rail, can sometimes lead to communication challenges, duplication of effort, and confusion about roles and responsibilities. Regarding passenger rail security, key Department of Homeland Security (DHS) stakeholders with critical roles include the Transportation Security Administration (TSA), which is responsible for securing all modes of transportation, and the Office for Grants and Training (OGT), which provides grant funds to rail operators and conducts risk assessments for passenger rail agencies. Within the Department of Transportation (DOT), the Federal Transit Administration (FTA) and Federal Railroad Administration (FRA) have responsibilities for passenger and freight rail safety and security. In addition, public and private passenger rail operators also share responsibility for securing their systems.

At the federal level, another significant challenge related to securing passenger rail systems involves allocating resources based on risk. Within and among all modes of transportation, there is competition for resources, as federal, state, and local agencies and transportation operators seek to

identify and invest in appropriate security measures to safeguard these systems while also investing in other capital and operational improvements. Moreover, given competing priorities and limited homeland security resources, difficult policy decisions have to be made by Congress and the executive branch to prioritize security efforts and direct resources to areas of greatest risk within and among transportation modes and across other nationally critical sectors.

In this regard, to help federal decision makers determine how to best allocate limited resources, we have advocated, the National Commission on Terrorist Attacks Upon the United States (the 9/11 Commission) has recommended, and the Intelligence Reform and Terrorism Prevention Act of 2004 provides that a risk management approach be employed to guide decision making related to homeland security resources. A risk management approach entails a continuous process of managing risks through a series of actions, including setting strategic goals and objectives, assessing and quantifying risks, evaluating alternative security measures, selecting which measures to undertake, and implementing and monitoring those measures.

My testimony today focuses on the progress federal agencies and domestic passenger rail operators have made in setting and implementing security priorities in the wake of September 11, 2001, terrorist attacks, and the security practices implemented by foreign passenger rail operators. In particular, my testimony highlights three key areas: (1) the actions that DHS and its component agencies have taken to assess the risks posed by terrorism to the U.S. passenger rail system; (2) the actions that TSA and other federal agencies have taken to enhance the security of the U.S. passenger rail system; and (3) the security practices that domestic and selected foreign passenger rail operators have implemented to mitigate risks and enhance security. My comments today are based on GAO's September 2005 report addressing the security of the U.S. passenger rail system and selected updates on this program obtained in January 2007.[1] This report was based on work at DHS, DOT and Amtrak, as well as work that included 32 passenger rail operators in the U.S., and 13 passenger rail operators in 7 European and Asian countries. We conducted our work in accordance with generally accepted government auditing standards.

[1]GAO, *Passenger Rail Security: Enhanced Federal Leadership Needed to Prioritize and Guide Security Efforts*, GAO-05-851 (Washington, D.C.: Sept. 9, 2005).

We have been requested by the Chairman of the House Homeland Security Committee to conduct a follow-on review of passenger rail security, which we expect to initiate in the near future. In addition, we have been requested to assess the security of other surface modes of transportation—including freight rail, commercial vehicles and highway infrastructure—which we have underway or will initiate later this year.

In Summary:

- The DHS Office of Grants and Training has developed and conducted risk assessments of passenger rail systems to identify and protect rail assets that are vulnerable to attack, such as stations and bridges. TSA has also begun to conduct risk assessments, including a threat assessment of mass transit and passenger rail and assessments of individual critical rail assets. While TSA has begun to establish a methodology for determining how to analyze and characterize the risks identified, the agency has not completed a comprehensive risk assessment of the U.S. passenger rail system. Until TSA completes this effort, the agency may be limited in its ability to prioritize passenger rail assets and help guide security investment decisions about protecting them. At the department level, DHS has begun developing, but has not yet completed a framework to help federal agencies and the private sector develop a consistent approach for analyzing and comparing risks to transportation and other critical sectors. Until this framework is finalized and shared with stakeholders, it may not be possible to compare risks across different sectors, prioritize them, and allocate resources accordingly.

- Before and after September 11, 2001, FTA and FRA undertook a number of initiatives to enhance passenger rail security, including conducting security readiness assessments, providing grants for emergency response drills and training, and developing security awareness programs for rail passengers and employees. In March 2004, after terrorist attacks on the rail system in Madrid, TSA issued security directives for passenger rail and mass transit. These directives were intended to establish standard protective measures for all passenger rail operators, including Amtrak. However, federal and rail industry stakeholders have questioned the extent that these directives were based on industry best practices and expressed confusion about how TSA would monitor compliance with the directives. In the 15 months since the completion of our work on passenger rail security, TSA has reported taking additional actions strengthen the security of the passenger rail system. For example, TSA has tested rail security technologies, developed training tools for rail workers, and issued a

proposed rule in December 2006 regarding passenger and freight rail security, among other efforts. TSA has also taken steps to better coordinate with DOT regarding rail security roles and responsibilities. The memorandum of understanding between DHS and DOT has been recently updated to include specific agreements between TSA and FTA and FRA to delineate security-related roles and responsibilities, among other things, for passenger rail and mass transit.

- Domestic and foreign passenger rail operators we contacted during our prior work on passenger rail security had taken a range of actions to secure their systems. Most had implemented customer awareness programs to encourage passengers to remain vigilant and report suspicious activities, increased the number and visibility of security personnel, increased the use of canine teams to detect explosives, enhanced employee training programs, upgraded security technology, tightened access controls, and made rail system design improvements to enhance security. We also observed security practices among certain foreign passenger rail systems or their governments that are not currently used by the domestic rail operators we contacted, or by the U.S. government, which could be considered for use in the U.S. For example, some foreign rail operators randomly screen passengers or utilize covert testing to help keep employees alert to security threats, and some foreign governments maintain centralized clearinghouses on rail security technologies and best practices. While introducing any of these security practices into the U.S. rail system may pose political, legal, fiscal, and cultural challenges, they nevertheless warrant further examination. Since our report on passenger rail security was issued, TSA has reported taking steps to coordinate with foreign passenger rail operators and governments to identify security best practices.

In our September 2005 report on passenger rail security, we recommended, among other things, that TSA establish a plan with timelines for completing its methodology for conducting risk assessments and develop security standards that reflect industry best practices and can be measured and enforced. These actions should help ensure that the federal government has the information it needs to prioritize passenger rail assets based on risk, and evaluate, select, and implement measures to help the passenger rail operators protect their systems against terrorism. In addition, we recommended that the Secretary of DHS, in collaboration with DOT and the passenger rail industry, determine the feasibility, in a risk management context, of implementing certain security practices used by foreign rail operators. DHS, DOT, and Amtrak generally agreed with the report's recommendations. As of January 2007, DHS had not provided a

formal response indicating if or how it has implemented these recommendations.

Background

Overview of the Passenger Rail System

Each weekday, 11.3 million passengers in 35 metropolitan areas and 22 states use some form of rail transit (commuter, heavy, or light rail).[2] Commuter rail systems typically operate on railroad tracks and provide regional service between a central city and adjacent suburbs. Commuter rail systems are traditionally associated with older industrial cities, such as Boston, New York, Philadelphia, and Chicago. 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. Amtrak operates the nation's primary intercity passenger rail service over a 22,000-mile network, primarily over freight railroad tracks. Amtrak serves more than 500 stations (240 of which are staffed) in 46 states and the District of Columbia, and it carried more than 25 million passengers during FY 2005.

Passenger Rail Systems Are Inherently Vulnerable to Terrorist Attacks

According to passenger rail officials and passenger rail experts, certain characteristics of domestic and foreign passenger rail systems make them inherently vulnerable to terrorist attacks and therefore difficult to secure. By design, passenger rail systems are open, have multiple access points, are hubs serving multiple carriers, and, in some cases, have no barriers so that they can move large numbers of people quickly. In contrast, the U.S. commercial aviation system is housed in closed and controlled locations with few entry points. The openness of passenger rail systems can leave them vulnerable because operator personnel cannot completely monitor or control who enters or leaves the systems. In addition, other characteristics of some passenger rail systems—high ridership, expensive infrastructure, economic importance, and location (large metropolitan areas or tourist destinations)—also make them attractive targets for terrorists because of the potential for mass casualties and economic damage and disruption. Moreover, some of these same characteristics

[2]The American Public Transportation Association compiled this fiscal year 2003 ridership data from FTA's National Transit Database. These are the most current data available. Rail transit systems in the District of Columbia and Puerto Rico are included in these statistics.

make passenger rail systems difficult to secure. For example, the numbers of riders that pass through a subway system—especially during peak hours—may make the sustained use of some security measures, such as metal detectors, difficult because they could result in long lines that could disrupt scheduled service. In addition, multiple access points along extended routes could make the cost of securing each location prohibitive. Balancing the potential economic impacts of security enhancements with the benefits of such measures is a difficult challenge.

Multiple Stakeholders Share Responsibility for Securing Passenger Rail Systems

Securing the nation's passenger rail systems is a shared responsibility requiring coordinated action on the part of federal, state, and local governments; the private sector; and rail passengers who ride these systems. Since the September 11th attacks, the role of federal government agencies in securing the nation's transportation systems, including passenger rail, have continued to evolve. Prior to September 11th, FTA and FRA, within DOT, were the primary federal entities involved in passenger rail security matters. In response to the attacks of September 11th, Congress passed the Aviation and Transportation Security Act (ATSA), which created TSA within DOT and defined its primary responsibility as ensuring the security of all modes of transportation, though its provisions focus primarily on aviation security.[3] The act also gave TSA regulatory authority for security over all transportation modes, though its provisions focus primarily aviation security. With the passage of the Homeland Security Act of 2002, TSA was transferred, along with over 20 other agencies, to the Department of Homeland Security.[4]

Within DHS, the Office of Grants and Training (OGT), formerly the Office for Domestic Preparedness (ODP), has become the federal source for security funding of passenger rail systems.[5] OGT is the principal

[3]Pub. L. No. 107-71, 115 Stat. 597 (2001).

[4]Pub. L. No. 107-296, 116 Stat. 2135 (2002).

[5]OGT originated within the Department of Justice's Office of Justice Programs in 1998 as the Office for Domestic Preparedness (ODP). Pursuant to the Homeland Security Act of 2002, ODP was transferred to DHS in March 2003. See Pub. L. No. 107-296, § 403(5), 116 Stat. at 2178 (codified at 6 U.S.C. 203(5)). In March 2004, the Secretary of Homeland Security consolidated ODP with the Office of State and Local Government Coordination to form the Office of State and Local Government Coordination and Preparedness (SLGCP). SLGCP, which reports directly to the DHS Secretary, was created to provide a "one-stop shop" for the numerous federal preparedness initiatives applicable to state and local governments. Recently, SLGCP was incorporated under the Preparedness Directorate as OGT.

component of DHS responsible for preparing the United States for acts of terrorism and has primary responsibility within the executive branch for assisting and supporting DHS, in coordination with other directorates and entities outside of the department, in conducting risk analysis and risk management activities of state and local governments. In carrying out its mission, OGT provides training, funds for the purchase of equipment, support for the planning and execution of exercises, technical assistance, and other support to assist states, local jurisdictions, and the private sector to prevent, prepare for, and respond to acts of terrorism. OGT created and is administering two grant programs focused specifically on transportation security, the Transit Security Grant Program and the Intercity Passenger Rail Security Grant Program. These programs provide financial assistance to address security preparedness and enhancements for passenger rail and transit systems. During fiscal year 2006, OGT provided $110 million to passenger rail transit agencies through the Transit Security Grant Program and about $7 million to Amtrak through the Intercity Passenger Rail Security Grant Program.

While TSA is the lead federal agency for ensuring the security of all transportation modes, FTA conducts safety and security activities, including training, research, technical assistance, and demonstration projects. In addition, FTA promotes safety and security through its grant-making authority. FRA has regulatory authority for rail safety over commuter rail operators and Amtrak, and employs over 400 rail inspectors that periodically monitor the implementation of safety and security plans at these systems.[6]

State and local governments, passenger rail operators, and private industry are also important stakeholders in the nation's rail security efforts. State and local governments may own or operate a significant portion of the passenger rail system. Passenger rail operators, which can be public or private entities, are responsible for administering and managing passenger rail activities and services. Passenger rail operators can directly operate the service provided or contract for all or part of the total service. Although all levels of government are involved in passenger rail security, the primary responsibility for securing passenger rail systems rests with passenger rail operators.

[6]FRA administers and enforces federal laws and regulations that are designed to promote safety on railroads, such as track maintenance, inspection standards, equipment standards, and operating practices. FRA exercises jurisdiction over all areas of railroad safety pursuant to 49 U.S.C. § 20103.

Assessing and Managing Risks to Rail Infrastructure Using a Risk Management Approach

Risk management is a tool for informing policy makers' decisions about assessing risks, allocating resources, and taking actions under conditions of uncertainty. In recent years, the President, through Homeland Security Presidential Directives (HSPDs), and Congress, through the Intelligence Reform and Terrorism Prevention Act of 2004, provided for federal agencies with homeland security responsibilities to apply risk-based principles to inform their decision making regarding allocating limited resources and prioritizing security activities. The 9/11 Commission recommended that the U.S. government should identify and evaluate the transportation assets that need to be protected, set risk-based priorities for defending them, select the most practical and cost-effective ways of doing so, and then develop a plan, budget, and funding to implement the effort.[7] In addition, DHS issued the National Strategy for Transportation Security in 2005 that describes the policies the DHS will apply when managing risks to the security of the U.S. transportation system.[8] We have previously reported that a risk management approach can help to prioritize and focus the programs designed to combat terrorism. Risk management, as applied in the homeland security context, can help federal decision-makers determine where and how to invest limited resources within and among the various modes of transportation.

The Homeland Security Act of 2002 also directed the department's Directorate of Information Analysis and Infrastructure Protection to use risk management principles in coordinating the nation's critical infrastructure protection efforts.[9] This includes integrating relevant information, analysis, and vulnerability assessments to identify priorities

[7] National Commission on Terrorist Attacks upon the United States, The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks upon the United States (Washington, D.C.: 2004). The 9/11 Commission was an independent, bipartisan commission created in late 2002, to prepare a complete account of the circumstances surrounding the September 11, 2001 terrorist attacks, including preparedness for and the immediate response to the attacks. The Commission was also mandated to provide recommendations designed to guard against future attacks.

[8] The Intelligence Reform and Terrorism Prevention Act of 2004 requires the Secretary of Homeland Security, working jointly with the Secretary of Transportation, to develop, prepare, implement, and update, as needed a National Strategy for Transportation Security and transportation modal security plans. Pub. L. No. 108-458, §4001, 118 Stat. 3638, 3710-12 (codified at 49 U.S.C. § 114(t)).

[9] In 2006, DHS reorganized their Information Analysis and Infrastructure Protection division. The functions of the Directorate of Information Analysis and Infrastructure Protection were moved to the Office of Intelligence Analysis and Office of Infrastructure Protection.

for protective and support measures by the department, other federal agencies, state and local government agencies and authorities, the private sector, and other entities. Homeland Security Presidential Directive 7 and the Intelligence Reform and Terrorism Prevention Act of 2004 further define and establish critical infrastructure protection responsibilities for DHS and those federal agencies given responsibility for particular industry sectors, such as transportation. In June 2006, DHS issued the National Infrastructure Protection Plan (NIPP), which named TSA as the primary federal agency responsible for coordinating critical infrastructure protection efforts within the transportation sector.[10] The NIPP requires federal agencies to work with the private sector to develop plans that, among other things, identify and prioritize critical assets for their respective sectors. As such, the NIPP requires TSA to conduct and facilitate risk assessments in order to identify, prioritize, and coordinate the protection of critical transportation systems infrastructure, as well as develop risk based priorities for the transportation sector.

To provide guidance to agency decision makers, we have created a risk management framework, which is intended to be a starting point for applying risk based principles. Our risk management framework entails a continuous process of managing risk through a series of actions, including setting strategic goals and objectives, assessing risk, evaluating alternatives, selecting initiatives to undertake, and implementing and monitoring those initiatives. DHS's National Infrastructure Protection Plan describes a risk management process that closely mirrors our risk management framework.

Setting strategic goals, objectives, and constraints is a key first step in applying risk management principles and helps to ensure that management decisions are focused on achieving a purpose. These decisions should take place in the context of an agency's strategic plan that includes goals and objectives that are clear and concise. These goals and objectives should identify resource issues and external factors to achieving the goals. Further, the goals and objectives of an agency should link to a department's overall strategic plan. The ability to achieve strategic goals depends, in part, on how well an agency manages risk. The agency's

[10]HSPD-7 directed the Departments of Transportation and Homeland Security to collaborate on all matters relating to transportation security and transportation infrastructure protection. In 2003, DHS designated TSA as the lead agency for addressing HSPD-7 as it relates to securing the nation's transportation sector.

strategic plan should address risk related issues that are central to the agency's overall mission.

Risk assessment, an important element of a risk based approach, helps decision makers identify and evaluate potential risks so that countermeasures can be designed and implemented to prevent or mitigate the effects of the risks. Risk assessment is a qualitative and/or quantitative determination of the likelihood of an adverse event occurring and the severity, or impact, of its consequences. Risk assessment in a homeland security application often involves assessing three key elements—threat, vulnerability, and criticality or consequence. A threat assessment identifies and evaluates potential threats on the basis of factors such as capabilities, intentions, and past activities. A vulnerability assessment identifies weaknesses that may be exploited by identified threats and suggests options to address those weaknesses. A criticality or consequence assessment evaluates and prioritizes assets and functions in terms of specific criteria, such as their importance to public safety and the economy, as a basis for identifying which structures or processes are relatively more important to protect from attack. Information from these three assessments contributes to an overall risk assessment that characterizes risks on a scale such as high, medium, or low and provides input for evaluating alternatives and management prioritization of security initiatives. The risk assessment element in the overall risk management cycle may be the largest change from standard management steps and can be important to informing the remaining steps of the cycle.

DHS Has Taken Steps to Assess Risk to Passenger Rail Systems, but Additional Work Is Needed to Guide Security Investments

DHS component agencies have taken a variety of steps to assess the risk posed by terrorism to U.S. passenger rail systems. The DHS OGT developed and implemented a risk assessment methodology intended to help passenger rail operators better respond to terrorist attacks and prioritize security measures. Passenger rail operators must have completed a risk assessment to be eligible for financial assistance through the fiscal year 2007 OGT Transit Security Grant Program, which includes funding for passenger rail. To receive grant funding, rail operators are also required to have a security and emergency preparedness plan that identifies how the operator intends to respond to security gaps identified by risk assessments. As of January 2007, OGT had completed or planned to conduct risk assessments of most passenger rail operators. According to rail operators, OGT's risk assessment process enabled them to prioritize investments based on risk and are allowing them to target and allocate resources toward security measures that will have the greatest impact on reducing risk across their system.

TSA has also begun to assess risks to the passenger rail system. TSA had completed an overall threat assessment for both mass transit and passenger and freight rail modes. TSA also conducted criticality assessments of nearly 700 passenger rail stations and had begun conducting assessments for other passenger rail assets such as bridges and tunnels. TSA plans to rely on asset criticality rankings to prioritize which assets it will focus on in conducting vulnerability assessments to determine which passenger rail assets are vulnerable to attack. For assets that are deemed to be less critical, TSA has developed a software tool that it has made available to passenger rail and other transportation operators for them to use on a voluntary basis to assess the vulnerability of their assets. Until all three assessments of passenger rail systems—threat, criticality, and vulnerability—have been completed, and until TSA determines how to use the results of these assessments to analyze and characterize the level of risk (high, medium, or low), it will be difficult to prioritize passenger rail assets and guide investment decisions about protecting them. Finalizing a methodology for assessing risk to passenger rail and other transportation assets and conducting risk assessments are also key steps used in producing the Transportation Sector Specific Plan (TSSP) required by HSPD-7.[11] According to TSA, the TSSP and supporting plans for each mode of transportation have been completed and are currently being reviewed by DHS and the White House Homeland Security Council. As of January 2007, TSA had not completed a comprehensive risk assessment of the passenger rail system.

As TSA, OGT, and other federal agencies, including DOT, move forward with risk assessment activities, DHS is developing a framework intended to help these agencies work with their stakeholders to assess risk. This framework is intended to help the private sector and state and local governments develop a consistent approach to analyzing risk and vulnerability across infrastructure types and across entire economic sectors, develop consistent terminology, and foster consistent results. The framework is also intended to enable a federal-level assessment of risk in general, and comparisons among risks, for purposes of resource allocation and response planning. DHS has informed TSA that this framework will

[11]HSPD-7 defines critical infrastructure protection responsibilities for DHS, sector-specific agencies (those federal agencies given responsibility for transportation, energy, telecommunications, and so forth), and other departments and agencies. The Directive instructs federal departments and agencies to identify, prioritize, and coordinate the protection of critical infrastructure to prevent, deter, and mitigate the effects of terrorist attacks.

provide overarching guidance to sector-specific agencies on how various risk assessment methodologies may be used to analyze, normalize, and prioritize risk within and among sectors. Because neither this element nor the framework as a whole has been finalized or provided to TSA or other sector-specific agencies, it is not clear what impact, if any, DHS's framework may have on ongoing risk assessments conducted by, and the methodologies used by, TSA, OGT, and others, and whether or how DHS will be able to use these results to compare risks and prioritize homeland security investments among sectors. Until DHS finalizes this framework, and until TSA completes its risk assessment methodology, it will not be possible to determine whether different methodologies used by TSA and OGT for conducting threat, criticality, and vulnerability assessments generate disparate qualitative and quantitative results or how they can best be compared and analyzed. In addition, coordinated risk assessments will help TSA and others avoid duplicative efforts and determine whether other agencies' risk assessment methodologies, and the data generated by these methodologies, can be leveraged to complete assessments required for the transportation sector.

Multiple Federal Agencies Have Taken Actions to Enhance Passenger Rail Security

In addition to the ongoing initiatives to enhance passenger rail security conducted by the FTA and FRA before and after September 11, 2001, TSA issued security directives to passenger rail operators after the March 2004 terrorist attacks on the rail system in Madrid. However, federal and rail industry stakeholders have questioned the extent that these directives were based on industry best practices and expressed confusion about how TSA would monitor compliance with the directives. Since the completion of our work on passenger rail security, TSA has reported taking additional actions to strengthen the security of the passenger rail system. For example, TSA has tested rail security technologies, developed training tools for rail workers, and issued a proposed rule in December 2006 regarding passenger and freight rail security, among other efforts. TSA has also taken steps to better coordinate with DOT regarding rail security roles and responsibilities. The memorandum of understanding between DHS and DOT had been recently updated to include specific agreements between TSA and FTA and FRA to delineate security-related roles and responsibilities, among other things, for passenger rail and mass transit.

DOT Agencies Led Initial Efforts to Enhance Passenger Rail Security

Prior to the creation of TSA in November 2001, FTA and FRA, within DOT, were primarily responsible for the security of passenger rail systems. These agencies undertook a number of initiatives to enhance the security of passenger rail systems after the September 11th attacks that are still in

place today. Specifically, FTA launched a transit security initiative in 2002 that included security readiness assessments, technical assistance, grants for emergency response drills, and training. FTA instituted the Transit Watch campaign in 2003—a nationwide safety and security awareness program designed to encourage the participation of transit passengers and employees in maintaining a safe transit environment. The program provides information and instructions to transit passengers and employees so that they know what to do and whom to contact in the event of an emergency in a transit setting. FTA planned to continue this initiative, in partnership with TSA and OGT, and offer additional security awareness materials that address unattended bags and emergency evacuation procedures for transit agencies. In addition, FTA has issued guidance, such as its Top 20 Security Program Action Items for Transit Agencies, which recommends measures for passenger rail operators to implement into their security programs to improve both security and emergency preparedness. FTA has also used research and development funds to develop guidance for security design strategies to reduce the vulnerability of transit systems to acts of terrorism. In November 2004, FTA provided rail operators with security considerations for transportation infrastructure. This guidance provides recommendations intended to help operators deter and minimize attacks against their facilities, riders, and employees by incorporating security features into the design of rail infrastructure.

FRA has also taken a number of actions to enhance passenger rail security since September 11, 2001. For example, it has assisted commuter railroads in developing security plans, reviewed Amtrak's security plans, and helped fund FTA security readiness assessments for commuter railroads. In the wake of the Madrid terrorist bombings in March 2004, nearly 200 FRA inspectors, in cooperation with DHS, conducted inspections of each of the 18 commuter railroads and Amtrak to determine what additional security measures had been put into place to prevent a similar occurrence in the United States. FRA also conducted research and development projects related to passenger rail security. These projects included rail infrastructure security and trespasser monitoring systems and passenger screening and manifest projects, including explosives detection. Although FTA and FRA now play a supporting role in transportation security matters since the creation of TSA, they remain important partners in the federal government's efforts to strengthen rail security, given their role in funding and regulating the safety of passenger rail systems. Moreover, as TSA moves ahead with its passenger rail security initiatives, FTA and FRA are continuing their passenger rail security efforts.

TSA Issued Rail Security Directives, but Faces Challenges Related to Compliance and Enforcement

In May 2004, TSA issued security directives to the passenger rail industry to establish standard security measures for all passenger rail operators, including Amtrak.[12] However, as we previously reported, it was unclear how TSA developed the requirements in the directives, how TSA planned to monitor and ensure compliance, how rail operators were to implement the measures, and which entities were responsible for their implementation. According to TSA, the directives were based upon FTA and American Public Transportation Association best practices for rail security. Specifically, TSA stated that it consulted a list of the top 20 actions FTA identified that rail operators can take to strengthen security. While some of the directives correlate to information contained in the FTA guidance, the source for many of the directives is unclear. Amtrak and FRA officials also raised concerns about some of the directives. For example, FRA officials stated that current FRA safety regulations requiring engineer compartment doors be kept unlocked to facilitate emergency escapes[13] conflicts with the TSA security directive requirement that doors equipped with locking mechanisms be kept locked. Other passenger rail operators we spoke to during our review stated that TSA did not adequately consult with the rail industry prior to developing and issuing these directives.

With respect to how the directives were to be enforced, rail operators were required to allow TSA and DHS to perform inspections, evaluations, or tests based on execution of the directives at any time or location. TSA officials stated the agency has hired 100 surface transportation inspectors, whose stated mission is to, among other duties, monitor and enforce compliance with TSA's rail security directives. However, some passenger rail operators have expressed confusion and concern about the role of TSA's inspectors and the potential that TSA inspections could be duplicative of other federal and state rail inspections. TSA rail inspector staff stated that they were committed to avoiding duplication in the program and communicating their respective roles to rail agency officials. According to TSA, since the initial deployment of surface inspectors, these inspectors have developed relationships with security officials in passenger rail and transit systems, coordinated access to operations centers, participated in emergency exercises, and provided assistance in

[12]TSA issues security related regulations and directives pursuant to its 49 U.S.C. § 114(1) rulemaking authority.

[13]See 49 C.F.R. § 238.235.

enhancing security. We will continue to assess TSA's enforcement of rail security directives during our follow-on review of passenger rail security.

TSA Has Taken Other Actions to Strengthen the Security of the Passenger Rail System and Coordinate Its Efforts with Other Federal Agencies

In January 2007, TSA provide us an update on additional actions they had taken to strengthen passenger rail security. We have not verified or evaluated these actions. These actions include:

National explosive canine detection teams: Since late 2005, TSA reported that it has trained and deployed 53 canine teams to 13 mass transit systems to help detect explosives in the passenger rail system and serve as a deterrent to potential terrorists.

Visible Intermodal Prevention and Response Teams: This program is intended to provide teams of law enforcement, canines, and inspection personnel to mass transit and passenger rail systems to deter and detect potential terrorist actions. Since the program's inception in December 2005, TSA reported conducting more than 25 exercises at mass transit and passenger rail systems throughout the nation.

Mass Transit and Passenger Rail Security Information Sharing Network: According to TSA, the agency initiated this program in August 2005 to develop information sharing and dissemination processes regarding passenger rail and mass transit security across the federal government, state and local governments, and rail operators.

National Transit Resource Center: TSA officials stated that they are working with FTA and DHS OGT to develop this center, which will provide transit agencies nationwide with pertinent information related to transit security, including recent suspicious activities, promising security practices, new security technologies, and other information.

National Security Awareness Training Program for Railroad Employees: TSA officials stated that the agency has contracted to develop and distribute computer based training for passenger rail, rail transit, and freight rail employees. The training will include information on identifying security threats, observing and reporting suspicious activities and objects, mitigating security incidents, and other related information. According to TSA, the training will be distributed to all passenger and freight rail systems.

Transit Terrorist Tool and Tactics: This training course is funded through the Transit Security Grant Program and teaches transit employees

how to prevent and respond to a chemical, biological, radiological, nuclear, or explosive attack. According to TSA, this course was offered for the first time during the fall of 2006.

National Tunnel Security Initiative: This DHS and DOT initiative aims to identify and assess risks to underwater tunnels, prioritize security funding to the most critical areas, and develop technologies to better secure underwater tunnels. According to TSA, this initiative has identified a list of 29 critical underwater rail transit tunnels.

TSA has also sought to enhance passenger rail security by conducting research on technologies related to screening passengers and checked baggage in the passenger rail environment. TSA conducted a Transit and Rail Inspection Pilot. The pilot was a $1.5 million effort to test the feasibility of using existing and emerging technologies to screen passengers, carry-on items, checked baggage, cargo, and parcels for explosives. TSA officials told us that based upon preliminary analyses, the screening technologies and processes tested would be very difficult to implement on heavily used passenger rail systems because these systems carry high volumes of passengers and have multiple points of entry. However, TSA officials added that the screening processes used in the pilot may be useful on certain long-distance intercity train routes, which make fewer stops. Further, TSA officials stated that screening could be used either randomly or for all passengers during certain high-risk events or in areas where a particular terrorist threat is known to exist. For example, screening technology similar to that used in the pilot was used by TSA to screen certain passengers and belongings in Boston and New York rail stations during the 2004 Democratic and Republican national conventions. According to TSA, the agency is also researching and developing other passenger rail security technologies, including closed circuit television systems that can detect suspicious behavior, mobile passenger screening checkpoints to be used at rail stations, bomb resistant trash cans, and explosive detection equipment for use in the rail environment.

More recently, in December 2006, TSA issued a proposed rule regarding passenger and freight rail security requirements. TSA's proposed rule would require that passenger and freight rail operators, certain facilities that ship or receive hazardous materials by rail, and rail transit systems take the following actions:

- Designate a rail security coordinator to be available to TSA on a 24 hour, seven day a week basis to serve as the primary contact for the receipt of intelligence and other security related information.
- Immediately report incidents, potential threats, and security concerns to TSA.
- Allow TSA and DHS officials to enter and conduct inspections, test, and perform other duties within their rail systems.
- Provide TSA, upon request, with the location and shipping information of rail cars that contain a specific category and quantity of hazardous materials within one hour of receiving the request from TSA.
- Provide for a secure chain of custody and control of rail cars containing a specified quantity and type of hazardous material.

Public comments on the proposed rule are due in February 2007. TSA plans to review these comments and issue a final rule in the future.

With multiple DHS and DOT stakeholders involved in securing the U.S. passenger rail system, the need to improve coordination between the two agencies has been a consistent theme in our prior work in this area. In response to a previous recommendation we made,[14] DHS and DOT signed a memorandum of understanding (MOU) to develop procedures by which the two departments could improve their cooperation and coordination for promoting the safe, secure, and efficient movement of people and goods throughout the transportation system. The MOU defines broad areas of responsibility for each department. For example, it states that DHS, in consultation with DOT and affected stakeholders, will identify, prioritize, and coordinate the protection of critical infrastructure. The MOU between DHS and DOT represents an overall framework for cooperation that is to be supplemented by additional signed agreements, or annexes, between the departments. These annexes are to delineate the specific security related roles, responsibilities, resources, and commitments for mass transit, rail, research and development, and other matters. TSA signed annexes to the MOU with FRA and FTA describing the roles and responsibilities of each agency regarding passenger rail security. These annexes also describe how TSA and these DOT agencies will coordinate security related efforts, avoid duplicating these efforts, and improve coordination and communication with industry stakeholders.

[14] *Transportation Security: Federal Action Needed to Help Address Security Challenges*, GAO-03-843 (Washington, D.C.: June 2003).

U.S. and Foreign Rail Operators Have Taken Similar Actions to Secure Rail Systems, and Opportunities for Additional Domestic Security Actions May Exist

U.S. passenger rail operators have taken numerous actions to secure their rail systems since the terrorist attacks of September 11, 2001, in the United States, and the March 11, 2004, attacks in Madrid. These actions included both improvements to system operations and capital enhancements to a system's facilities, such as tracks, buildings, and train cars. All of the U.S. passenger rail operators we contacted have implemented some types of security measures—such as increased numbers and visibility of security personnel and customer awareness programs—that were generally consistent with those we observed in select countries in Europe and Asia. We also identified three rail security practices—covert testing, random screening of passengers and their baggage, and centralized research and testing—utilized by foreign operators or their governments that were not utilized by domestic rail operators or the U.S. government at the time of our review.

U.S. and Foreign Rail Operators Employ Similar Security Practices

Both U.S. and foreign passenger rail operators we contacted have implemented similar improvements to enhance the security of their systems. A summary of these efforts follows.

Customer awareness: Customer awareness programs we observed used signage and announcements to encourage riders to alert train staff if they observed suspicious packages, persons, or behavior. Of the 32 domestic rail operators we interviewed, 30 had implemented a customer awareness program or made enhancements to an existing program. Foreign rail operators we visited also attempted to enhance customer awareness. For example, 11 of the 13 operators we interviewed had implemented a customer awareness program.

Increased number and visibility of security personnel: Of the 32 U.S. rail operators we interviewed, 23 had increased the number of security personnel they utilized since September 11th, to provide security throughout their system or had taken steps to increase the visibility of their security personnel. Several U.S. and foreign rail operators we spoke with had instituted policies such as requiring their security staff, in brightly colored vests, to patrol trains or stations more frequently, so they are more visible to customers and potential terrorists or criminals. These policies make it easier for customers to contact security personnel in the event of an emergency, or if they have spotted a suspicious item or person. At foreign sites we visited, 10 of the 13 operators had increased the number of their security officers throughout their systems in recent years because of the perceived increase in risk of a terrorist attack.

Increased use of canine teams: Of the 32 U.S. passenger rail operators we contacted, 21 were suing canines to patrol their facilities or trains. Often, these units are used to detect the presence of explosives, and may be called in when a suspicious package is detected. In foreign countries we visited, passenger rail operators' use of canines varied. In some Asian countries, canines were not culturally accepted by the public and thus were not used for rail security purposes. As in the United States, and in contrast to Asia, most European passenger rail operators used canines for explosive detection or as deterrents.

Employee training: All of the domestic and foreign rail operators we interviewed had provided some type of security training to their staff, either through in-house personnel or an external provider. In many cases, this training consisted of ways to identify suspicious items and persons and how to respond to events once they occur. For example, the London Underground and the British Transport Police developed the "HOT" method for its employees to use to identify suspicious items in the rail system. In the HOT method, employees are trained to look for packages or items that are Hidden, Obviously suspicious, and not Typical of the environment.

Passenger and baggage screening practices: Some domestic and foreign rail operators have trained employees to recognize suspicious behavior as a means of screening passengers. Eight U.S. passenger rail operators we contacted were utilizing some form of behavioral screening. Abroad, we found that 4 of 13 operators we interviewed had implemented forms of behavioral screening. All of the domestic and foreign rail operators we contacted have ruled out an airport-style screening system for daily use in heavy traffic, where each passenger and the passenger's baggage are screened by a magnetometer or X-ray machine, based on cost, staffing, and customer convenience factors, among other reasons.

Upgrading technology: Many rail operators we interviewed had embarked on programs designed to upgrade their existing security technology. For example, we found that 29 of the 32 U.S. operators had implemented a form of closed circuit television (CCTV) to monitor their stations, yards, or trains. While these cameras cannot be monitored closely at all times, because of the large number of staff that would be required, many rail operators felt that the cameras acted as a deterrent, assisted security personnel in determining how to respond to incidents that had already occurred, and could be monitored if an operator had received information that an incident may occur at a certain time or place in their system. Abroad, all 13 of the foreign rail operators we visited had CCTV

systems in place. In addition, 18 of the 32 U.S. rail operators we interviewed had installed new emergency phones or enhanced the visibility of the intercom systems they already had. As in the United States, a few foreign operators had implemented chemical or biological detection devices at these rail stations, but their use was not widespread. Two of the 13 foreign operators we interviewed had implemented these sensors, and both were doing so on an experimental basis. In addition, police officers from the British Transport Police—responsible for policing the rail system in the United Kingdom—were equipped with pagers to detect chemical, biological, or radiological elements in the air, allowing them to respond quickly in case of a terrorist attack using one of these methods.

Access control: Tightening access control procedures at key facilities or rights-of-way is another way many rail operators have attempted to enhance security. A majority of domestic and selected foreign passenger rail operators had invested in enhanced systems to control unauthorized access at employee facilities and stations. Specifically, 23 of the 32 U.S. operators had installed a form of access control at key facilities and stations. All 13 foreign operators had implemented some form of access control to their critical facilities or rights-of-way.

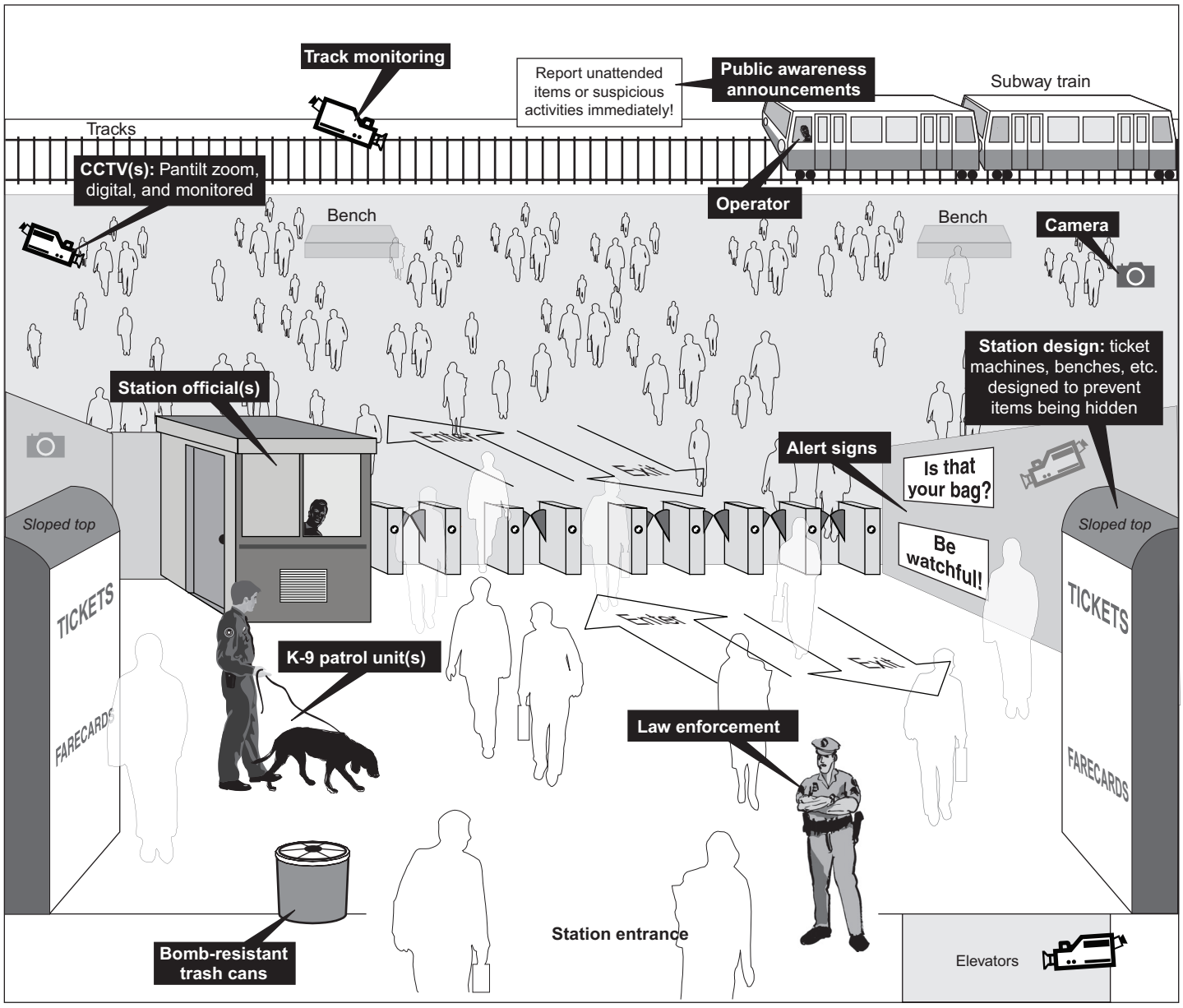
Rail system design and configuration: In an effort to reduce vulnerabilities to terrorist attack and increase security, passenger rail operators in the United States and abroad have been, or are now beginning to, incorporate security features into the design of new and existing rail infrastructure, primarily rail stations. For example, of the 32 domestic rail operators we contacted, 22 of them had removed their conventional trash bins entirely, or replaced them with transparent or bomb-resistant trash bins, as TSA instructed in its May 2004 security directives. Foreign rail operators had also taken steps to remove traditional trash bins from their systems. Of the 13 operators we visited, 8 had either removed their trash bins entirely or replaced them with blast-resistant cans or transparent receptacles.

Many foreign rail operators are also incorporating aspects of security into the design of their rail infrastructure. Of the 13 operators we visited, 11 had attempted to design new facilities with security in mind and had retrofitted older facilities to incorporate security-related modifications. For example, one foreign operator we visited was retrofitting its train cars with windows that passengers could open in the event of a chemical attack. In addition, the London Underground incorporates security into the design of all its new stations as well as when existing stations are modified. We observed several security features in the design of

Underground stations, such as using vending machines that have no holes that someone could use to hide a bomb, and sloped tops to reduce the likelihood that a bomb can be placed on top of the machine. In addition, stations are designed to provide staff with clear lines of sight to all areas of the station, such as underneath benches or ticket machines, and station designers try to eliminate or restrict access to any recessed areas where a bomb could be hidden.

Figure 1 shows a diagram of several security measures that we observed in passenger rail stations both in the United States and abroad.

Figure 1: Composite of Selected Security Practices in the Passenger Rail Environment



Source: GAO and NOVA Development Corporation.

Amtrak Faces Challenges Specific to Intercity Passenger Rail in Securing Its System

In our past work, we found that Amtrak faces security challenges unique to intercity passenger rail systems. First, Amtrak operates over thousands of miles, often far from large population centers. This makes its route system more difficult to patrol and monitor than one contained in a particular metropolitan region, and it causes delays in responding to incidents when they occur in remote areas. Also, outside the Northeast Corridor, Amtrak operates almost exclusively on tracks and in stations owned by freight rail companies. This means that Amtrak often cannot make security improvements to others' rights-of-way or station facilities and that it is reliant on the staff of other organizations to patrol their facilities and respond to incidents that may occur. Furthermore, with over 500 stations, only half of which are staffed, screening even a small portion of the passengers and baggage boarding Amtrak trains is difficult. Finally, Amtrak's financial condition has never been strong—Amtrak has been on the edge of bankruptcy several times.

Amid the ongoing challenges of securing its coast-to-coast railway, Amtrak has taken some actions to enhance security throughout its intercity passenger rail system. For example, Amtrak initiated a passenger awareness campaign, began enforcing restrictions on carry-on luggage that limit passengers to two carry-on bags, not exceeding 50 pounds; began requiring passengers to show identification after boarding trains; increased the number of canine units patrolling its system looking for explosives or narcotics; and assigned some of its police to ride trains in the Northeast Corridor. Also, Amtrak instituted a policy of randomly inspecting checked baggage on its trains. Lastly, Amtrak is making improvements to the emergency exits in certain tunnels to make evacuating trains in the tunnels easier in the event of a crash or terrorist attack.

Three Foreign Rail Security Practices Are Not Currently Used in the United States

While many of the security practices we observed in foreign rail systems are similar to those U.S. passenger rail operators are implementing, we identified three foreign practices that were not currently in use among the U.S. passenger rail operators we contacted as of September 2005, nor were they performed by the U.S. government. These practices are as follows.

Covert testing: Two of the 13 foreign rail systems we visited utilized covert testing to keep employees alert about their security responsibilities. Covert testing involves security staff staging unannounced events to test the response of railroad staff to incidents such as suspicious packages or setting off alarms. In one European system, this covert testing involves security staff placing suspicious items throughout their system to see how

long it takes operating staff to respond to the item. Similarly, one Asian rail operator's security staff will break security seals on fire extinguishers and open alarmed emergency doors randomly to see how long it takes staff to respond. TSA conducts covert testing of passenger and baggage screening in aviation, but has not conducted such testing in the rail environment.

Random screening: Of the 13 foreign operators we interviewed, 2 have some form of random screening of passengers and their baggage in place. Prior to the July 2005 London bombings, no passenger rail operators in the United States were practicing random passengers or baggage screening. However, during the Democratic National Convention in 2004, the Massachusetts Bay Transportation Authority (MBTA) instituted a system of random screening of passengers.

National government clearinghouse on technologies and best practices: According to passenger rail operators in five countries we visited, their national governments had centralized the process for performing research and development of passenger rail security technologies and maintained a clearinghouse of technologies and security best practices for passenger rail operators. No U.S. federal agency has compiled or disseminated information on research and development and other best practices for U.S. rail operators.

Implementing covert testing, random screening, or a government-sponsored clearinghouse for technologies and best practices in the U.S. could pose political, legal, fiscal, and cultural challenges because of the differences between the U.S. and these foreign nations. Many foreign nations have dealt with terrorist attacks on their public transportation systems for decades, compared with the United States, where rail has not been specifically targeted by terrorists. According to foreign rail operators, these experiences have resulted in greater acceptance of certain security practices, such as random searches, which the U.S. public may view as a violation of their civil liberties or which may discourage them from using public transportation. The impact of security measures on passengers is an important consideration for domestic rail operators, since most passengers could choose another means of transportation, such as a personal automobile. As such, security measures that limit accessibility, cause delays, increase fares, or otherwise cause inconvenience could push people away from rail and into their cars. In contrast, the citizens of the European and Asian countries we visited are more dependent on public transportation than most U.S. residents and therefore may be more willing to accept intrusive security measures. Nevertheless, in order to identify

innovative security measures that could help further mitigate terrorism-risks to rail assets—especially as part of a broader risk management approach discussed earlier—it is important to consider the feasibility and costs and benefits of implementing the three rail security practices we identified in foreign countries. Officials from DHS, DOT, passenger rail industry associations, and rail systems we interviewed told us that operators would benefit from such an evaluation. Since our report on passenger rail security was issued, TSA has reported taking steps to coordinate with foreign passenger rail operators and governments to identify security best practices. For example, TSA reported working with British rail security officials to identify best practices for detecting and handling suspicious packages in rail systems.

Conclusions

In conclusion, Mr. Chairman, the July 2005 London rail bombings made clear that even when a variety of security precautions are put into place, passenger rail systems that move high volumes of passengers daily remain vulnerable to attack. DHS components have taken steps to assess the risks to the passenger rail system. However, enhanced federal leadership is needed to help ensure that actions and investments designed to enhance security are properly focused and prioritized so that finite resources may be allocated appropriately to help protect all modes of transportation. Specifically, both DHS and TSA should take additional steps to help ensure that the risk management efforts under way clearly and effectively identify priority areas for security-related investments in rail and other transportation modes. TSA has not yet completed its methodology for determining how the results of threat, criticality, and vulnerability assessments will be used to identify and prioritize risks to passenger rail and other transportation sectors. Until the overall risk to the entire transportation sector is identified, TSA will not be able to determine where and how to target limited resources to achieve the greatest security gains. Once risk assessments for the passenger rail industry have been completed, it will be critical to be able to compare assessment results across all transportation modes and make informed, risk-based investment trade-offs. It is important that DHS complete its framework to help ensure that risks to all sectors can be analyzed and compared in a consistent way. Until this framework is complete, it will be difficult for agencies to reconcile information from different sectors to allow for a meaningful comparison of risk.

Apart from its efforts to identify risks, TSA has taken steps to enhance the security of the passenger rail system. The issuance of security directives in 2004 was a well-intentioned effort, but did not provide the industry with

security standards based on industry best practices. It is also not clear how TSA will enforce these directives. Consequently, neither the federal government nor rail operators can be sure they are requiring and implementing security practices proven to help prevent or mitigate disasters. While foreign passenger rail operators face similar challenges to securing their systems and have generally implemented similar security practices as U.S. rail operators, there are some practices that are utilized abroad that U.S. rail operators or the federal government have not studied in terms of the feasibility, costs, and benefits. In our September 2005 report on passenger rail security, we recommended, among other things, that TSA establish a plan with timelines for completing its methodology for conducting risk assessments and develop security standards that reflect industry best practices and can be measured and enforced. These actions should help ensure that the federal government has the information it needs to prioritize passenger rail assets based on risk, and evaluate, select, and implement measures to help the passenger rail operators protect their systems against terrorism. In addition, we recommended that the Secretary of DHS, in collaboration with DOT and the passenger rail industry, determine the feasibility, in a risk management context, of implementing certain security practices used by foreign rail operators. DHS, DOT, and Amtrak generally agreed with the report's recommendations, but as of January 2007, they have not told us what specific actions they are taking to implement them. We will continue to assess DHS and DOT's efforts to secure the U.S. passenger rail system during follow-on work to be initiated later this year.

Mr. Chairman, this concludes my statement. I would be pleased to answer any questions that you or other members of the Committee may have at this time.

Contact Information

For further information on this testimony, please contact Cathleen A. Berrick at (202) 512- 3404. Individuals making key contributions to this testimony include John Hansen, Assistant Director, Chris Currie, and Tom Lombardi.

Related GAO Products Released Since September 11, 2001

Passenger Rail Security: Evaluating Foreign Security Practices and Risk Can Help Guide Security Efforts. GAO-06-557T. Washington, D.C.: March 29, 2006.

Passenger Rail Security: Enhanced Federal Leadership Needed to Prioritize and Guide Security Efforts. GAO-06-181T, Washington, D.C.: October 20, 2005.

Passenger Rail Security: Enhanced Federal Leadership Needed to Prioritize and Guide Security Efforts. GAO-05-851. Washington, D.C.: September 9 2005.

Transportation Security: Systematic Planning Needed to Optimize Resources. GAO-05-357T. Washington, D.C.: February 15, 2005.

Rail Security: Some Actions Taken to Enhance Passenger and Freight Rail Security, but Significant Challenges Remain. GAO-04-598T. Washington, D.C.: March 23, 2004.

Transportation Security: Federal Action Needed to Enhance Security Efforts. GAO-03-1154T. Washington, D.C.: September 9, 2003.

Transportation Security: Federal Action Needed to Help Address Security Challenges. GAO-03-843. Washington, D.C.: June 30, 2003.

Rail Safety and Security: Some Actions Already Taken to Enhance Rail Security, but Risk-based Plan Needed. GAO-03-435. Washington, D.C.: April 30, 2003.

Transportation Security: Post-September 11th Initiatives and Long-term Challenges. GAO-03-616T. Washington, D.C.: April 1, 2003.

Mass Transit: Federal Action Could Help Transit Agencies Address Security Challenges. GAO-03-263. Washington, D.C.: December 13, 2002.

Mass Transit: Challenges in Securing Transit Systems. GAO-02-1075T. Washington, D.C.: September 18, 2002.

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, GAO posts newly released reports, testimony, and correspondence on its Web site. To have GAO e-mail you a list of newly posted products every afternoon, go to www.gao.gov and select "Subscribe to Updates."

Order by Mail or Phone

The first copy of each printed report is free. Additional copies are $2 each. A check or money order should be made out to the Superintendent of Documents. GAO also accepts VISA and Mastercard. Orders for 100 or more copies mailed to a single address are discounted 25 percent. Orders should be sent to:

U.S. Government Accountability Office
441 G Street NW, Room LM
Washington, D.C. 20548

To order by Phone: Voice: (202) 512-6000
TDD: (202) 512-2537
Fax: (202) 512-6061

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Web site: www.gao.gov/fraudnet/fraudnet.htm
E-mail: fraudnet@gao.gov
Automated answering system: (800) 424-5454 or (202) 512-7470

Congressional Relations

Gloria Jarmon, Managing Director, JarmonG@gao.gov (202) 512-4400
U.S. Government Accountability Office, 441 G Street NW, Room 7125
Washington, D.C. 20548

Public Affairs

Paul Anderson, Managing Director, AndersonP1@gao.gov (202) 512-4800
U.S. Government Accountability Office, 441 G Street NW, Room 7149
Washington, D.C. 20548