

**FEDERAL EFFORTS FOR RAIL AND SURFACE TRANSPORTATION  
SECURITY**

**TESTIMONY OF**

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**BEFORE THE UNITED STATES SENATE  
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION**

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Good morning Chairman Inouye, Vice Chairman Stevens and Members of the Committee. I am pleased to appear before you today to talk about our efforts in the field of rail and surface transportation security at the Transportation Security Administration (TSA). I would like to highlight some of the important steps that TSA and the Department of Homeland Security (DHS) are taking in partnership with the Department of Transportation (DOT), and our transportation network partners. Many of these important security steps are built upon and fortified by a solid safety foundation that has been developed over the years by our transportation partners and DOT.

**Raising the Security Baseline of an Interconnected Network**

As we continue to strive to improve the security of these vital transportation systems, we must not forget the principles that make them viable and efficient. Many of these systems were designed with mobility and ease of access as an enabling fundamental underlying their operational success. Our security efforts must work within the framework of these systems and not hamper them. That inherent openness and mobility also presents us with our greatest security challenge.

**Intelligence**

Non-linear risk drives everything we do. Instead of focusing on predicting the next attack, TSA takes a flexible approach and uses a risk based methodology to address risk.

TSA pursues a layered approach to security in transportation, including passenger transit, highway, pipeline, and rail security. This approach starts by leveraging the work of other United States Government entities that take place way beyond the doors of TSA and even beyond the soil of the United States through effective gathering, analysis, and dissemination of intelligence. As detailed below, we do this by working collaboratively with the transportation and shipper industries, as well as with state and local officials.

The recent disruption of the terror plot in the United Kingdom and of the developing plot targeting underwater tunnels connecting New York and New Jersey illustrate the necessity of this approach. The best defense is one that prevents the terrorists from ever entering the United States. TSA complements other efforts by creating visible, unpredictable deterrence environments to disrupt terrorists' planning capabilities and operational launching of their missions. For example, our aviation system security measures provide a significant barrier to entry for potential terrorists coming to our country. Our government's investments and improvements in terrorism watch lists, border security and intelligence networks significantly impact surface transportation security

### **Network Approach and Strategy**

To effectively address transportation security, we employ a network approach. The overall transportation system is a network. It has intersections and junctions; and while each transportation mode has its own security challenges, there are common vulnerabilities and mitigation strategies. In an effort to use our security resources efficiently, we work closely with transportation networks to leverage our security impact and determine risk-based priorities.

As we effectively leverage our resources and set security priorities, TSA implements a comprehensive strategy that applies a common methodology across all transportation networks, regardless of mode. That strategy is simple and straightforward. It consists of five elements:

- **Assess industry threat, vulnerability, and consequence;**
- **Develop baseline security standards;**
- **Assess actual security status against baseline security standards;**
- **Develop plans to close gaps between actual status and baseline security standards; and**
- **Develop enhanced systems of security.**

Next, let me discuss how this strategy works in practice for the freight rail, passenger rail and rail transit, highway (trucking) and pipeline industries.

### **Industry Threat Vulnerability and Consequence Assessments (TVC)**

The purpose of threat, vulnerability and consequence assessments is to focus efforts on and highlight risk areas. Since September 2001, many Federal agencies and industry partners have been involved in significant efforts to identify the highest risk areas for our security focus. Those efforts have centered on analyzing threats, assessing vulnerabilities and calculating consequences of potential terrorist attacks. Based upon this large body of work and our ongoing analysis, TSA determines the highest areas of risk for each mode of transportation so that we can properly focus on risk mitigation efforts.

Freight Rail-TVC. Over the past several years, TSA has completed a number of freight rail corridor assessments in high threat urban areas. The point of the corridor assessments is to focus on high risk areas and determine the vulnerabilities. We have completed regionally based assessments in New Orleans, LA; Washington, DC; Houston, TX; Buffalo, NY; Cleveland, OH; and several cities in New Jersey including Newark, Elizabeth and Perth Amboy. We are currently assessing Los Angeles, CA and plan to visit additional urban areas in 2007. The results of the initial six assessments demonstrated recognizable trends and risks. We identified railcars loaded with toxic inhalation hazard materials (TIH) sitting unattended as the highest risk potential as a terrorist target. While these shipments represent less than one percent of all rail shipments, if attacked they could create an airborne hazard and potentially endanger the lives of people living and working in those communities.

Passenger Transit-TVC. (Amtrak falls within our passenger transit division.) In assessing security in this area TSA is building upon a base of knowledge derived from 37 assessments of readiness to prevent, detect, deter, and respond to terrorist incidents, conducted by the Federal Transit Administration (FTA) and the Federal Railroad Administration (FRA). TSA has a 100 person Surface Transportation Security Inspection (STSI) force that is updating these earlier assessments and conducting additional field rail and passenger transit readiness assessments. TSA has utilized its inspection force to conduct assessments over the past year and a half and will continue to conduct these assessments in partnership with the rail industry and DOT.

The extensive field work conducted by TSA and FTA/FRA in conjunction with the industry has been utilized to set our priorities and identify industry baseline standards. TSA and FTA/FRA assessments, in addition to in-house risk analysis, focus on passenger transit operating procedures and high risk/high consequence assets.

Highway (Trucking) -TVC. TSA has been assessing the security risks of motor carriers through the Corporate Security Review (CSR) program, another form of assessment of industry readiness and vulnerabilities. Based up on our analysis we are focused on Toxic Inhalation Chemicals (TIH) and hazardous chemicals of concern, which include explosives, flammables and other poisonous materials.

Pipeline-TVC. Through the CSR program for pipelines, TSA has identified a number of pipeline systems that pose the highest security risk. TSA will also conduct a pipeline infrastructure study to identify the highest risk pipeline assets.

## **Baseline Standards**

The purpose of baseline standards is to create measurable risk reduction targets.

Freight Rail Baseline Standards. Because the potential risk posed by unattended TIH rail cars in high threat urban areas was identified as the highest risk area in rail, TSA developed a risk reduction goal of reducing the objectively-measured risk of TIH cars in high threat urban areas by 25 percent per year, starting in 2007. That risk factor takes into account car hours, the population of urban areas and the proximity to residential and commercial structures.

TSA has also identified 24 other focus areas as security action items for the rail industry to begin to address. The actions items were released to the industry in June and November 2006. The action items focus on security awareness training, security focused inspections, suspicious activity reporting, control of sensitive information and employee identification. TSA is assessing conformity with the security action items to evaluate how implementation of the action items reduces objectively measured risk.

Passenger Transit Baseline Standards. Based upon extensive assessments, in-house risk analysis performed at TSA and dialogue with the industry, TSA has developed baseline standards for the industry derived from six fundamental principles. Those principles are:

- Protect high risk/high consequence underground/underwater assets and systems;
- Protect other high risk/high consequence assets and systems identified in vulnerability assessments;
- Use visible, unpredictable deterrence;
- Plan and conduct awareness and response training for key personnel;
- Plan and conduct emergency drills and exercises; and
- Plan and conduct public awareness and preparedness campaigns.

Highway (Trucking) Baseline Standards. TSA has been working closely with a number of chemical shippers to develop a series of baseline security standards for both TIH and hazardous chemicals of concern. Those standards will address specific areas such as vehicle tracking, vehicle attendance, vehicle alarm systems, truck cab access controls, locking fifth wheel on tank trailers and security route and stop areas.

Pipeline Baseline Standards. TSA has been conducting corporate security reviews targeting the top 100 pipeline operators. From the results of these reviews, TSA has developed a series of security standards based upon the best operating practices of those companies. The pipeline standards address areas including security plans, employee security training, access controls and physical access security and employee background investigation.

**Assess Security Status.** The purpose of assessing security status is to determine how individual operations compare to the baseline standards. The assessment procedures vary

depending upon transportation mode. Assessments in rail and passenger transit are conducted by TSA's field inspector force, while highway and pipeline assessments are conducted by TSA's subject matter experts in each network management division. The assessments are structured to target key areas of concern and to capture essential data to evaluate current practice versus baseline standards.

Freight Rail Status. In order to evaluate the security baseline in freight rail, TSA in cooperation with the rail industry is developing a comprehensive database driven system to identify the specific locations where TIH risk is the highest. TSA inspectors will verify attended/unattended status and proximity to high risk structures. In addition to identifying high risk locations, the database will give TSA the ability to identify TIH cars in near real time. This capability will allow us to more effectively respond to emerging threat situations.

Further, TSA inspectors have conducted field interviews with key rail management and personnel. Over 2,600 interviews have been completed, focused on employee security awareness, security procedures and systems to locate and protect TIH cars.

Passenger Transit Status. The TSA inspector force has been conducting assessments of passenger rail transit systems (both commuter rail and other transit systems, including Amtrak). In addition to the TSA assessments, we expect self-assessments from the 50 largest transit agencies to be completed by the end of January 2007. TSA inspectors will then verify and confirm the assessment results. While the data gathered to date is preliminary, it does indicate varying security status among systems. Once data is confirmed by inspectors, we will have a much clearer understanding of how passenger transit systems compare to the six fundamental security principles and guide our plan to help us close those gaps.

Highway (Trucking) Status. TSA conducts highway corporate security reviews and assessments. Those assessments are targeted at companies hauling TIH and other hazardous chemicals of concern. TSA will compare actual practice to baseline standards.

Pipeline Status. TSA will use its ongoing corporate security review process to determine the implementation of baseline standards. TSA will continue to work with individual companies to improve their security status.

**Closing Gaps.** Once assessments have identified the gaps in actual practice versus baselines standards, TSA develops action plans to close the gaps and takes steps where necessary to close the gaps in all modes. We have a variety of capabilities at our disposal including industry agreements, voluntary measures, security directives, and regulatory action. TSA works with the Office of Grants and Training (G&T) through the Infrastructure Protection Program (IPP) grants program to enable transit agencies and

other surface transportation entities to apply for Federal funding to address the highest identified risks.

Freight Rail-Close Gaps. In order to reduce the gaps between actual practice and baseline standards, TSA pursued a two-pronged approach. We issued a Notice of Proposed Rulemaking (NPRM) on December 21, 2006, which includes several provisions to strengthen the security of the Nation's freight rail systems in the highest threat urban areas. The proposed rule establishes incident reporting procedures, codifies TSA's inspection authority, requires rail company security coordinators, and most importantly creates a positive chain of custody from beginning to end which requires secure handoffs when cars change hands.

While the proposed rule provides a number of important security initiatives, TSA was not satisfied with the timeframe of rulemaking alone. Risk reduction has a time component and we wanted to reduce the risk faster than rulemaking would allow. As a result, we reached an agreement with the rail industry to reduce unattended TIH standstill car time in high threat urban areas beginning in early 2007. A comprehensive database will be used to identify highest priority risk reduction opportunities and working in conjunction with TSA, the rail carriers will develop site-specific action plans to reduce or remove the TIH risks. In addition to reducing the TIH risks, TSA will work with rail carriers to improve the security performance in the security training and security procedures baseline. TSA is also developing an improvised explosive device (IED) training course for rail employees to be available in the second quarter of 2007.

Passenger Transit-Close Gap. The strategies to close security gaps start with high risk/high consequence assets.

As we know, an attack on underground, underwater, and other critical infrastructure can dramatically increase the consequences of an attack by magnifying the actual impact, complicating the response efforts and substantially prolonging the recovery time.

We must be focused on minimizing high consequence risks. TSA, in partnership with G&T, intends to leverage the Transit Security Grant Program funds to focus on reducing risk and increasing security capabilities in State and local transit systems with the most risk. We are engaged in research to expand our understanding of the vulnerabilities and the consequences of terrorist attacks on our critical infrastructure. We are partnering with the National Laboratories to complete assessments of a prioritized list of transit tunnels and are pursuing mitigation solutions with our industry partners now.

While transit agencies cannot harden every entry point, nor screen every passenger coming into busy stations, they can deploy visible, unpredictable mobile teams that disrupt terrorists' planning capabilities and provide high levels of security. We are accomplishing this by expanding our canine program and

leveraging our security network to create surge capacity with Visible Intermodal Protection Response (VIPR) Teams.

VIPR Teams, consisting of Surface Transportation Security Inspectors (STSIIs), canine teams, Federal Air Marshals (FAMs), and advanced screening technology, provide TSA the ability to leverage a variety of resources quickly and effectively. These deployments are designed to raise the level of security in any mode of transportation across the country in heightened security environments. The teams work with local security and law enforcement officials to supplement existing security resources, provide deterrent presence and detection capabilities, and introduce an element of unpredictability to disrupt potential terrorist planning activities. More than 25 VIPR exercises have been conducted at key commuter and regional passenger rail facilities, and more are planned throughout 2007.

Explosives detection canine teams are being trained, certified, and deployed by TSA to passenger transit systems. Since late 2005, TSA's National Explosive Detection Canine Team Program has worked in partnership with passenger transit systems to train, certify, and deploy 53 explosives detection canine teams to 13 major systems in a risk-based application of resources. Forty of these teams are currently in place and the other 13 are projected for training, certification, and deployment in the coming months.

I want to emphasize that our STSI workforce and the canine teams we fund for passenger transit are just the point of the spear. There are literally thousands of transit and rail law enforcement and security officers on duty night and day to provide security where they are needed for these segments of the transportation network. Furthermore, each rail and passenger transit system makes a deliberate and strategic decision when they develop their annual budgets as to where they should apply their revenues to close security vulnerabilities. This approach creates a more effective network of local security rather than deploying a far greater Federal workforce to perform these same functions.

Since the security of these systems is a shared responsibility among federal, State, and local partners, the Administration has provided significant resources to bolster these security efforts since 9/11. Funds from DHS grants programs may be used for planning, training, exercises, equipment, and other security enhancements. DHS has provided roughly \$18 billion in awards to State and local governments for programs and equipment that help to manage risk.

In addition to visible unpredictable deterrence, TSA believes that training for key personnel is essential to rail as its baseline of security. There are numerous passenger transit training courses available today. TSA is working with FTA to identify the specific type of training required for employees (i.e., train operators, station managers, and control system personnel, among others) in order to provide guidance to systems.

TSA and G&T are using the Infrastructure Protection Program (IPP) grants program to drive improvement in the six security fundamental areas mentioned earlier, including training for key personnel, drills and exercises and public awareness and preparedness.

The \$175 million IPP security grant program is the centerpiece of DHS's interagency strategy to close gaps in operator security status and baseline standards. Within the transportation sector the program covers transit, inter-city buses, and trucking security. For purposes of the IPP, "transit" includes Amtrak, which is eligible for \$8.3 million, and commuter ferry systems that are eligible for \$7.8 million. The IPP transit grant guidance emphasized the six fundamentals and we expect to direct transit grants awards based on our system assessments and security fundamental baselines. We use the grants program to close the gaps at high risk properties.

Highway (Trucking) Close Gaps. TSA is working on a number of strategies to close gaps in performance versus actual standards. We are currently considering a number of voluntary incentive programs and regulatory options.

Pipeline Close Gaps. TSA has had an extensive working relationship with the pipeline industry. TSA has prepared an employee security awareness training program for all pipeline employees, worked with operators to prepare or improve security plans, conducted site specific visits to evaluate security practices, and developed risk mitigation strategies for high risk assets. This cooperative relationship has resulted in improved conformity to baseline standards.

### **Enhanced Systems of Security**

The final part of our strategy is to enhance the systems of security. As we take actions to close gaps, we also need to improve security technology and practices that many of these technologies apply to multiple modes of transportation.

DHS is developing a number of screening techniques and technologies which may be implemented or deployed quickly to systems facing a specific threat, or in support of major events such as National Special Security Events (NSSEs). Pilot programs to test these technologies are already underway in several major American cities.

Through the DHS Science and Technology (S&T) Directorate's Rail Security Pilot (RSP), DHS has field tested the effectiveness of explosives detection techniques and imaging technologies in partnership with the Port Authority of New York and New Jersey.

The Systems Support Division (SSD) of G&T has conducted operational tests to evaluate manufacturer claims on ballistic resistant trash receptacles and published a report of its findings to help ensure mass transit systems, among others, have the

facts needed to guide critical procurement decisions. Similarly, SSD has published a closed circuit television (CCTV) technology handbook to provide a reference point on current CCTV technologies, capabilities and limitations.

Finally, we maintain mobile security equipment, which can fit into two standard size shipping containers, for rapid deployment for use in screening and detection at any major system in the country should the need arise.

In addition to technologies that may apply primarily to passenger modes, TSA is working closely with a number of parties to develop advanced railcar tracking systems with geofenced event-notification capabilities. TSA is also cooperating in efforts to develop next generation hazardous materials rail cars designed to better withstand terrorist attacks and operating accidents.

TSA is working with selected hazardous material carriers to test truck tracking and control technologies. We are also in the early stages of security technology applications to the pipeline industry. Two specific areas TSA is involved in are blast mitigation and unmanned aerial surveillance vehicles.

### **Presidential Action and TSA's Objectively Measured Risk Reduction Process**

On December 5, 2006, the President issued Executive Order 13416, which builds upon the improvements made in surface transportation security since September 11, 2001, specifically actions taken under Homeland Security Presidential Directive 7, "Critical Infrastructure Identification, Prioritization, and Protection" (HSPD-7). Executive Order 13416 requires the strengthening of our Nation's surface transportation systems by the facilitation and implementation of a comprehensive, coordinated, and efficient security program. As the Federal official with principal responsibility for protecting surface transportation infrastructure, Secretary Chertoff has the lead in implementing this policy in coordination with the Secretary of DOT and the heads of other relevant agencies. The order sets deadlines for key security activities including security assessments of each surface transportation mode and an evaluation of the effectiveness and efficiency of current Federal Government surface transportation security initiatives. We continue to build upon current security initiatives to develop a comprehensive transportation systems sector specific plan, as defined in the National Infrastructure Protection Plan (NIPP). The five-part strategy cited earlier in my testimony is meeting the requirements of the Executive Order.

### **Annexes to DHS-DOT Memorandum of Understanding**

Three annexes to a September, 2004 memorandum of understanding between DHS and DOT have been completed and signed, evidencing the close and continuous cooperation between TSA and DOT to leverage resources.

The first, between TSA and the Federal Railroad Administration (FRA), memorializes how we will coordinate our programs and initiatives at an agency level to better secure passenger and freight railroad transportation, and improve stakeholder relationships, and to include assisting railroads in prioritizing assets and addressing current and emerging threats and vulnerabilities. While TSA is responsible for rail security and FRA is responsible for rail safety, the annex provides detailed operational guidance to enable the two agencies to avoid duplication and maximize efficiency and cooperation in their planning, inspection, training and enforcement activities.

The second annex is between the Pipeline and Hazardous Materials Safety Administration (PHMSA) and TSA. This annex delineates our respective roles and responsibilities regarding pipelines and hazardous materials transportation security. It discusses sharing data and compliance information between the agencies, coordinating research and regulatory activities, providing joint public information and emergency response materials, collaboration in inspection and enforcement activities, and sharing technical support and budgets.

The third annex is between the Federal Transit Administration (FTA) and TSA. It similarly provides for close and continuous cooperation between the two respective agencies in matters relating to security of the Nation's transit systems.

Together, these annexes allow much more efficient use of the government's time and money, while maximizing the value of what these agencies can achieve for industry and the traveling public.

### **Summary**

TSA has a clear strategy to address surface transportation security. That strategy focuses first on identifying areas of high risk and then establishing baseline security standards to address those risks. Once baseline standards are established, we assess the actual status of security in the transportation industries, and in close coordination with stakeholders, devise strategies for bringing actual practices up to the standards we have established. Finally, we are developing advanced systems of security through a coordinated research and development program, to further enhance security beyond the baseline standards. In furtherance of this strategy, I have established an Office of Transportation Sector Network Management specifically to address the cross-cutting issues that affect all aspects of the transportation sector as a unified whole. They are implementing this strategy through cooperation with stakeholders where appropriate, regulation and inspection where necessary, and through the distribution of grants to assist the industry to implement these objectives we have set forth.

I understand that the Committee is considering new legislation to address further security measures for surface transportation. The Department and TSA look forward to working cooperatively with the Committee as we have done since you first took up the Aviation and Transportation Security Act (ATSA) in 2001. We appreciate your leadership in this area and the support that you have given to TSA.

Thank you for this opportunity to inform you of our efforts in freight rail, commuter rail and other transit, trucking and pipeline security. I would be happy to answer any questions that you might have.