

# Surface Transportation Security – Rail and Mass Transit



# Overview of Surface Transportation

America's passenger and freight transportation system is a dynamic, interconnected network. It consists of overlapping sub-networks and multiple organizations, with a variety of governance structures and a mix of public and private ownership. In terms of security, decentralized systems such as this are more difficult to "control," but they also have advantages. They present more operational uncertainty to those who seek to do them harm, and they are more robust in the face of catastrophic failure of any single component of their networks.

# It's HUGE

- Americans took 9.4 billion trips using public transportation in 2003. The 30 largest
- transit systems in the U.S. carry most (almost 80 percent) of the Nation's transit
- passenger trips. There is now some form of rail transit (light rail, subway, or commuter
- rail) operated by 53 different transit agencies located in 33 cities and 23 States. These
- rail systems provide a combined 11.3 million passenger trips each weekday, compared to
- 1.8 million domestic emplanements per day nationwide.

# Heavy Rail

- Approximately 28 percent of all transit trips and 77 percent of all rail transit trips are on
- heavy rail. There are 14 heavy rail transit systems (also known as subways) in the U.S.,
- consisting of more than 2,000 route miles, with over 1,000 stations and approximately
- 10,500 subway cars. The New York City subway system is the largest in the U.S.,
- carrying about 75 percent of the nation's heavy rail passengers, with half of the stations
- and more than 6,000 scheduled trains per day carrying over 3 million riders. In New
- York's Penn Station alone, more than 1,600 people *per minute* pass through dozens of
- access points during a typical rush hour.

# INTER-CITY RAIL

- Intercity passenger rail service is provided by two entities:
- Amtrak and the Alaska Railroad Corporation (ARRC), which is a public corporation of the State of Alaska.
- The ARRC provides freight and passenger service from Whittier, Seward and Anchorage to Fairbanks, Denali National Park and military installations.
- Amtrak carries approximately 25 million passengers per year or an estimated 68,000 passengers per day, operating as many as 300 trains per day and serving over 500 stations in 46 States.
- In many large cities, Amtrak stations are co-located with stations serving rail transit, intercity bus, and other modes of transportation.
- Amtrak operates over more than 22,000 route miles. It owns 650 route miles, primarily between Boston and Washington, DC, and in Michigan. In other parts of the country, Amtrak trains use tracks owned by freight railroads.

# FREIGHT RAIL

- U.S. freight railroads operate over a network spanning more than 140,000 route miles. This system is vital to the economy, linking businesses and ensuring products reach consumers in an efficient, safe, and cost-effective manner.
- Recent events, such as the accidental derailment in Graniteville, SC, that resulted in the release of chlorine gas, have highlighted the need to focus additional attention on the potential security risks associated with freight rail.
- Over 64 percent of toxic inhalation hazard chemicals are currently transported by rail.
- In 2003, over 60,000 tank cars of chlorine or anhydrous ammonia chemicals were shipped, each carrying an average of 90 tons of chlorine or 30,000 gallons of anhydrous ammonia.

# ATTACKS ON RAIL

- The Madrid train attacks in 2004 and the London subway and bus attacks on July 7 and 21 of this year have further reminded us that our trains, subways and buses may be terrorist targets.

- Heavy rail transit systems in the U.S., like the London Underground, are particularly high consequence targets in terms of potential loss of life and economic disruption.
- These systems carry large numbers of people in a confined environment,
- offer the potential of targeting specific populations at particular destination stations, and
- often have stations located below or adjacent to high profile government buildings, major office complexes,
- or public icons.
- Threats to particular economic sectors, like government or financial institutions, may also be carried out through attacks on public transit.

# CHANGING THREATS

- In the face of unpredictability and rapid change in terms of threats, our approach to security in every transportation sector must be based on flexibility and adaptability.
- it is no longer *sufficient* to protect ourselves against known or suspected terrorists; we must protect ourselves against people with no known affiliation to terrorism.
- it is no longer *sufficient* to focus on finding weapons and common explosives; we must enhance our ability to recognize suspicious behavioral patterns and demeanors to identify people who may have devised a new means to attack our transportation systems or passengers.

- it is no longer *sufficient* to subject every passenger to the same basic security procedures; we must create uncertainty and an element of randomness in security operations in order to disrupt terrorist planning and attempts.
- it is no longer *sufficient* to focus solely on identifying the actors, like suicide bombers; we must integrate our security measures with local law enforcement to identify those who make the bombs and provide support.

# DHS 4-PHASE STRATEGY

- **First, we will use risk/value analysis to make investment and operational decisions.**
- **Second, we will avoid giving terrorists or potential terrorists an advantage based on our predictability.**
- **Third, we will continue to intervene early based on intelligence, and focus our security measures on the terrorist, as well as the means for carrying out the threat.**
- **And, finally, we will build and take advantage of security networks.**

# GRANTS

- To date, DHS has provided more than \$255 million to State and local transit agencies
- The FY 2006 appropriations bill includes an additional \$390 million in discretionary grants specifically for surface transportation security programs, including \$150 million for rail and transit security,

# Security Exercises and Training

- TSA has held numerous security exercises that bring together stakeholders, Federal, State, and local first responders, and security experts to test preparedness and response and identify best practices and lessons learned.
- We are also seeking new and improved ways to exercise and train for prevention methods, which will help strengthen a national prevention capability.
- TSA has trained over 400 law enforcement officers, transit police, and first responders through the Land Transportation Anti-Terrorism Training Program.
- TSA has also contracted with the FTA's National Transit Institute to develop a CD-ROM-based interactive training program for passenger and freight rail employees.

# VISAT

- **Self-Assessment Tool.** TSA has developed the Vulnerability Identification Self-Assessment Tool (VISAT), a multi-modal tool that public transportation agencies may voluntarily use to self-assess vulnerabilities within their systems. Specific modules focus on mass transit (heavy rail/subways), rail passenger stations,

# Surface Transportation Security Inspector Program

- The Department of Homeland Security Appropriations Act for FY 2005 provided \$12 million to TSA for rail security, including \$10 million to deploy 100 Federal security compliance inspectors and Congress has continued this funding in FY 2006.
- TSA has made substantial progress in developing a robust and comprehensive surface transportation security compliance inspector program with emphasis on hiring, training, and logistical and procedural planning.
- All 100 inspectors are now on board.
- Among other tasks, the security compliance inspectors will identify gaps in security and validate compliance with TSA's security directives.

# QUESTIONS?

Please Contact

Peter Roe

Branch Chief

U.S. Department of Homeland Security

Transportation Security Administration

Office: 571-227-2226

Email: [peter.roe@dhs.gov](mailto:peter.roe@dhs.gov)