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Security Operations for Public Transit

Abstract: This document proposes recommended practices for operations of or at transit passenger facilities to enhance the security of people, operations, assets and infrastructure.

Keywords: assessment, balanced security, considerations, operations, security program

Summary: This *Recommended Practice* provides security operations strategy and background information. It offers an overview and description of the applicability of the operations pillar. It also includes discussions about how security operations may be integrated with other security standards and best practices used by transit agencies to enhance their security programs.

Scope and purpose: This *Recommended Practice* is a derivative document of the security program considerations series of infrastructure security recommended practices and other documents prepared for transit passenger facilities. Other infrastructure security specific program topics developed for this series will address the remaining components of the four pillars of security-planning, physical security, and equipment and technology-and will also be provided to the transit industry for consideration and use.

Participants

The American Public Transportation Association greatly appreciates the contributions of **Bill Pitard**, who provided the primary effort in the drafting of this *Recommended Practice*.

At the time this standard was completed, the working group included the following members:

Sean Ryan, MNR, *Chair*
Randy Clarke, MBTA, *Vice Chair*

Bill Pitard, *PB-Heery Americas*
Gabriela Amezcua, *CTA*
John Plante, *CTA*
Brian Taylor, *Halifax*
Charles Rappleyea, *CATS*
Rick Gerhart, *FTA*
Chris McKay, *TSA*
Jevon D'Souza, *TSA*
David Hahn, *APTA*
Allen Smith, *SPAWAR*
Mark Mahaffey, *VTA*
Brad Baker, *MBTA*
Eric Hartman, *OCTA*
Harry Saporta, *TriMet*
Melanie Maxwell, *Parsons Brinckerhoff*
Gardner Tabon, *RPTA*
Ken Cummins, *Sound Transit*

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Security Operations for Public Transit

1. Introduction

Public transit operates in inherently open environments. It provides ease of access and gathers volumes of people in confined spaces to provide passengers with efficient and convenient transportation through regions and their communities. These unique attributes make public transportation vulnerable to adversarial targeting and threats. For these reasons, a sound understanding of security planning is necessary to assist agencies to implement approaches to effectively manage the risks of their environments.

While transit security programs may implement or operate using different strategies, measures or solutions, a "Security 101" basic level of appropriate strategies should be understood to reduce risk and enhance the posture of all transit properties. The "Security Program Considerations" series of infrastructure security *Recommended Practices* prepared for transit passenger facilities provides such information (see **Table 1**).

TABLE 1
APTA Security Standards Program Documents

APTA Number	Document Title
APTA SS-SIS-RP-001-10	"Security Lighting for Transit Passenger Facilities"
APTA SS-SIS-RP-002-10	"Security Lighting for Nonrevenue Transit Passenger Facilities"
APTA SS-SRM-RP-003-09	"Recommended Practice: Conducting Nonrevenue Vehicle Security Inspections"
APTA SS-SIS-RP-003-10	"Fencing Systems to Control Access to Transit Facilities"
APTA SS-SRM-WP-002-10	"White Paper on Random Inspections of Carry-On Items in Transit Systems"
APTA SS-SIS-RP-004-10	"Chain Link, Mesh or Woven Metal Fencing Systems to Control Access to Transit Facilities"
APTA SS-SIS-RP-005-10	"Gates to Control Access to Transit Facilities"
APTA SS-SIS-RP-006-10	"Ornamental Fencing Systems to Control Access to Transit Facilities"
APTA SS-SIS-RP-007-10	"Crime Prevention Through Environmental Design for Transit Facilities"
APTA SS-SRM-RP-006-11	"Random Counterterrorism Measures on Transit Systems"
APTA SS-SIS-RP-001-12	"Anti-Vehicle Barriers for Public Transit"
APTA SS-SIS-10-12	"Security Program Considerations for Public Transit"
APTA SS-SRM-RP-005-12	"Security Awareness Training for Transit Employees"

2. Planning pillar overview

The planning pillar is created by incorporating some or all elements of any one or several pillars together into a system that provides a uniform approach to applying a security solution. When effectively applied, these elements provide an agency with guidance or direction to mitigate risk and plan a balanced and effective

security program. Adversaries target people, operations, assets and infrastructure in the transit environment. To reduce the risk from these threats, the effective implementation of security planning should be considered.

Examples of similarly structured *Recommended Practice* documents that describe a broad scope of infrastructure security and derivative topics are described in Table 1. Other Security Standards Program documents are also listed as resources herein to aid the development of a balanced security program and should be used where applicable by accessing APTA's Security Standards and Recommended Practices page at www.aptastandards.com/Documents/PublishedStandards/Security/tabid/329/language/en-US/Default.aspx.

2.1 Stakeholder considerations

Transit agencies should understand and buy into transit security planning to enhance the security posture of the environment(s) where they must operate. To the extent possible, the application of any or all of the topics of this *Recommended Practice* should be considered to assist agencies to meet their security program requirements and enhance their safe operations.

2.2 Benefits

An agency's security program that includes security planning provides its people, operations, assets and infrastructure the following benefits:

- Fosters transit domain awareness (TDA).
- Creates pride of ownership by transit users and employees.
- Ensures transit employees, operators and first responders an understanding of response procedures.
- Enables the transit agency the opportunity to coordinate with federal, state, county, tribal and local host area government partners.
- Enhances the safety and security experience of its ridership within the transit environment.

3. Security risk assessment

Transit agencies should complete a systemwide security risk assessment to determine exposure to their systems' people, assets, operations and infrastructure. A risk-based approach that factors threat, vulnerability and consequence should be used to assess transit systems. The findings should be used to select security measures that mitigate risk to and enhance the protection of people, assets, operations and infrastructure. For more information regarding various security risk assessment methodologies, see:

- National Infrastructure Protection Plan (Department of Homeland Security [DHS])
- FEMA 452 - Risk Assessment: A How-To Guide to Mitigate Potential Terrorist Attacks (Federal Emergency Management Agency [FEMA])
- A Guide to Highway Vulnerability Assessment for Critical Asset Identification and Protection (American Association of State Highway and Transportation Officials [AASHTO])
- Public Transportation System Security and Emergency Preparedness Planning Guide (Federal Transit Administration [FTA])
- Security Vulnerability Assessment Methodology for Petroleum and Petrochemical Industries, (National Petrochemical & Refiners Association [NPRA])
- *Risk Analysis and Security Countermeasure Selection*, by T. L. Norman (CRC Press, Boca Raton, FL, 2010)

4. Security operations

This pillar delineates security-specific program information and functions. For instance, development of operations for agency staff and employees to implement during certain events or incidents; identifying

staffing requirements, posts or positions that should be filled; the contents of an agency's security awareness training program; and guidance for implementing security outreach for operators and ridership preparedness.

4.1 Types of security operation plans, guides and other documents

Operations security involves agency management and staff who implement procedures to reduce hazards and enhance safety and security for the system and the ridership it serves. Law enforcement and/or security staff also provide an operations security function through plan, policy and/or procedure development and implementation. Based on several factors, other operational security functions performed by transit agencies are described below. The list is not exhaustive and may include additional functions:

- Electronic security system oversight
- Access and entry control
- Random screening
- Fare enforcement
- Perimeter inspections
- Audits
- Random and directed patrols
- Countersurveillance activities

4.1.1 Deterrence, Protection, and Preparation: The New Transportation Security Imperative

Transportation security implemented by transit agencies should be achieved through coherent security systems that are well integrated with transportation operations and are deliberately designed to deter terrorists even as they selectively guard against and prepare for terrorist attacks by adversaries. In particular, layered security systems, characterized by an interleaved and concentric set of security features, have the greatest potential to deter and protect. Layered systems cannot be breached by the defeat of a single security feature—such as a gate or a guard—as each layer provides backup for the others, so that impermeability of individual layers is not required. Moreover, "Deterrence, Protection, and Preparation: The New Transportation Security Imperative" interwoven layers can confound the would-be adversary. Calculating the odds of breaching a multitiered system of defense is far more difficult than calculating the odds of defeating a single perimeter protection.

4.1.2 Security Manpower Planning Model (SMPM)

The SMPM supports and closely aligns with FTA and TSA transit security fundamentals (including random and unpredictable roving patrols/inspections) and transit security program priorities (such as targeted training for transit security personnel).

The SMPM is a flexible decision support tool created to enable transit security planners the ability to assess impacts of strategic decisions on resources and staffing. Based on the data inputted, the model identifies staffing levels and budgeting. The SMPM is flexible in the sense that it can be used by any transit agency with existing or planned security resources, regardless of operating mode(s) or size. Further, the model can assist security by assessing impacts of various scenarios on resource and deployment strategies, including:

- changes in revenue service operations (e.g., adding a new rail line, restructuring existing routes or special event service planning);
- changes in ridership patterns, crime/incident rates and threat information;
- changes in security personnel configurations (e.g., alternative mixes of internal/external security resources);
- changes in how security forces are deployed;

- adjustments to security coverage levels; and
- implementation of proof-of-payment fare enforcement or other related security duties.

4.1.3 Advancing the Security Baseline (ASB)

TSA has developed and implemented several programs for mass transit that are described below, to enhance a transit agency's security posture. They are:

- **Transit Security Grant Program (TSGP):** Transit Security Grant Program (TSGP): As a component to ASB, DHS allocates grant funding to the nation's mass transit and passenger rail systems. TSGP provides funds to owners and operators of public transit systems to protect critical transportation infrastructure and the traveling public from acts of terror. Funding priorities include operational activities such as security training, public awareness, drills and exercises; visible unpredictable deterrence efforts; and, remediation of critical transit infrastructure. The TSGP is jointly managed by TSA and the Federal Emergency Management Agency (FEMA). TSA provides subject matter expertise on all matters relating to transportation security and other programmatic updates, and FEMA operates the administrative mechanisms needed to implement and manage the program.
- **Baseline Assessment and Security Enhancement (BASE):** TSA surface transportation security inspectors (STSIs) assess a transit system's security posture on the 17 Security and Emergency Preparedness Action Items. Particular emphasis is placed on the six core transit security fundamentals (See Appendix A). The BASE program aims to elevate security generally, to expand TSA's awareness and understanding of security posture in the passenger rail and mass transit mode, to enable more effective targeting of security programs and technical assistance to elevate security, and to facilitate sharing of best security practices.
- **Security Analysis and Action Program (SAAP):** TSA inspectors offer the SAAP, which can provide a systematic vulnerability assessment of a mass transit or passenger rail system. Using several different tools to identify vulnerabilities based on specific scenarios to a system, SAAPs can be conducted on individual critical infrastructure facilities or entire rail systems, with particular emphasis on critical control points.

4.1.4 Canine (K9) resources

Explosives detection K9 teams provide strong detection and deterrent capabilities to a mass transit agency. They can be sent quickly to key junction points across systems, stations, terminals or other facilities to reinforce security operations as force multipliers.

4.1.5 Visible Intermodal Prevention and Response (VIPR)

A VIPR team is a TSA program that may consist of federal air marshals, transportation security inspectors, transportation security officers, explosives-detection K9 teams, behavioral detection officers, explosives security specialists, and necessary supporting equipment. The teams work with local security and law enforcement officials to supplement existing security resources. VIPR teams offer the ability to raise the level of security in any mode of transportation anywhere in the country; quickly and effectively provide deterrent presence and detection capabilities; and introduce an element of unpredictability to disrupt potential terrorist planning activities.

4.1.6 Passenger security inspections (PSIs)

PSIs are believed to both deter and detect terrorist activity and are being used by larger multimodal agencies and by ferry systems. They are suspicionless inspections of transit passengers by transit security or staff. A benefit of PSIs is the relative ease with which screening intensity (rates), method and location can be altered based on the threat level and other intelligence information. Because the Fourth Amendment requires warrants

or individual suspicion to conduct inspections, PSIs are legally permissible only if they can be justified. Therefore, legal and other issues need to be carefully considered by transit agencies before implementation.

4.1.7 National Terrorism Advisory System (NTAS)

NTAS alerts will be issued by the Department of Homeland Security (DHS) only when credible information is available (see Appendix B). These alerts will include a clear statement that there is an imminent threat or elevated threat. NTAS alerts will be based on the nature of the threat: In some cases, alerts will be sent directly to law enforcement or affected areas of the private sector, while in others, alerts will be issued more broadly to the American people through both official and media channels. During periods of an elevated sector NTAS threat alerts, transit agencies should implement protective measures for managing trash and recycling containers. For example:

- Remove all non-blast-resistant trash receptacles transit facilities.
- If unable to remove, secure the receptacle's aperture in place to prevent its use.
- Non-blast-resistant trash receptacles and recyclable containers that cannot be removed should be secured from use.

Transit agencies should refer to the References section at the end of this document for guidance to develop responses to credible NTAS alerts and threats.

5. Security Awareness

5.1 Transit domain awareness (TDA)

A key component of an active, layer-protected and balanced security program, TDA is the effective understanding of activities within or associated with the transit domain that could impact the security, safety, economy or environment of an agency. TDA is supported by other agency operations, plans and videos.

5.2 "On the Tracks: Rail Sabotage Awareness and Reporting"

This educational video aims to provide those responsible for the safety and security of the nation's rail system with information on the nature of rail sabotage threats and the necessary steps to take in safeguarding against its execution. The video addresses where to look for potential sabotage threats, the categories of threats to be on alert for and the steps to take in reporting objects or activities that appear out of the ordinary. This information reinforces the important role of front-line employees, who have firsthand knowledge and experience working in the field every day, in helping to deter a terrorist attack on the rail system.

5.3 Transit Watch

A nationwide public awareness outreach campaign, Transit Watch encourages the active participation of transit passengers and employees in maintaining a safe transit environment. The campaign was also designed to help foster the role of transit as a safe haven in communities across the country. A useful toolkit was created that enabled transit agencies to customize the materials with local information and select the campaign and accompanying visuals that would most effectively address specific community interests and concerns to maximize interest and involvement. Information about the Transit Watch program is available from the FTA website in English and Spanish language versions.

5.4 Not On My Shift

The Not On My Shift (NOMS) campaign encourages "ownership" of the of transit systems security by agency employees. Professionally designed templates allow each agency to personalize the posters and cards by including logos and photographs of their own employees at work. Additionally, the NOMS posters may include quotes from transit agency's management, operators, staff and other employees.

5.5 "The Mark"

A fast-paced training video, "The Mark" depicts fictionalized version of a threat against a metropolitan transit system. It demonstrates to transit employees how asking the questions and following their instincts when faced with suspicious and unusual circumstances could ultimately mean the difference between life and death.

5.6 If You See Something, Say Something

This public awareness campaign is a simple and effective program to raise public awareness of indicators of terrorism and violent crime, and to emphasize the importance of reporting suspicious activity to the proper state and local law enforcement authorities. The If You See Something, Say Something campaign was originally used by New York's Metropolitan Transportation Authority (MTA), which has licensed the use of the slogan to the Department of Homeland Security for anti-terrorism and anti-crime efforts.

5.7 Connecting Communities

The National Transit Institute's (NTI) Connecting Communities course is designed prepare transit systems, emergency service agencies and other emergency management partners to collaborate, share resources and implement plans to best mitigate injury, loss of life and damage to property and assets when incidents occur. This workshop training provides a forum to discuss all aspects of the challenges of large-scale, multi-agency response and incident management with selected representatives from public transit systems; private transportation companies; emergency services; various levels of transportation departments; health-care facilities; and state, local and federal governments.

5.8 System Security Awareness (series)

Another of NTI's topics includes a series of courses that specify system security awareness for employees in the commuter rail, passenger vessel, transit and transportation disciplines. The training covers skill sets for observing, determining and reporting activities, packages and substances that are suspicious or out of place. It encourages employees to use common sense when faced with various circumstances so operations can run safely, smoothly and efficiently. The training also places a focus upon an employee's initial priorities at the scene of a threat or incident. APTA Security Standards Program documents relating to system security awareness are listed in **Table 1**.

5.9 Private security officer guide

The ASIS International "Private Security Officer Selection and Training Guideline" provides a framework private security officer job descriptions and recommended minimum selection criteria, as well as an outline for the design and delivery of private security officer training by employers and other agencies.

5.10 Screening of Passengers by Observation Techniques (SPOT)

The SPOT program is a behavior observation and analysis program designed to provide the TSA behavior detection officers with a means of identifying people who pose or may pose potential transportation security risks by focusing on behaviors indicative of high levels of stress, fear or deception. The program is a derivative of other behavioral analysis programs that have been successfully employed by law enforcement and security personnel both in the U.S. and around the world.

6. Training considerations

There are no training considerations associated with this *Recommended Practice*. However, training considerations will be addressed, where applicable in derivative series *Recommended Practices*.

7. Maintenance considerations

There are no maintenance considerations associated with this *Recommended Practice*.

Appendix A. Transit Security Fundamentals

Described below are the activities that ensure that transit systems enhance their capabilities by implementing the six core fundamentals that provide the essential foundation for effective security programs:

1. **Protection of high-risk underwater/underground assets and systems.** Because of the consequences of attacks employing improvised explosive devices (IEDs) in an enclosed environment where there may also be large concentrations of riders, protecting riders and the integrity of the transit system against such attacks is essential. Transit agencies should focus countermeasures on programs that can prevent an attack or mitigate the consequences of an incident. Active coordination and regular testing of emergency evacuation plans can also greatly reduce loss of life.
2. **Protection of other high-risk assets that have been identified through systemwide risk assessments.** It is imperative that transit agencies focus countermeasure resources on their highest-risk, highest-consequence assets. For example, a systemwide assessment may highlight the need to segregate critical security infrastructure from public access. One solution could be an integrated intrusion detection system, controlling access to these critical facilities or equipment. Transit systems should consider security technologies to help reduce the burden on security manpower. For example, using smart video security systems in remote locations can help free up security patrols to focus on more high-risk areas.
3. **Use of visible, unpredictable deterrence.** Visible, random and unpredictable security patrols have proved to be very successful for instilling confidence and calm in the riding public and, most importantly, in deterring attacks. These kinds of patrols, especially those employing explosives detection K9 teams or mobile screening or detection equipment, represent effective means to prevent and deter IED attacks. Security patrols should be properly trained in counterterrorism surveillance techniques. An understanding of terrorist behavior patterns helps security patrols more effectively intervene during terrorist surveillance activities or the actual placing of an IED.
4. **Targeted counterterrorism training for key frontline staff.** Appropriate training enhances detection and prevention capabilities and ensures a rapid, prepared response in the first critical minutes after an attack—steps that can significantly reduce the consequences of the attack. For example, well-trained and rehearsed operators can help ensure that if an underground station has suffered a chemical agent attack, trains—and the riding public—are quickly removed from the scene, thus reducing their exposure and risk.
5. **Emergency preparedness drills and exercises.** Experience has taught transit agencies that well-designed and regularly practiced drills and exercises are fundamental to rapid and effective response and recovery. Transit agencies should develop meaningful exercises, including covert testing, that test their response effectiveness and how well they coordinate with first responders. In addition to large regional drills, transit systems should also conduct regular, transit-focused drills. Drills should test response and recovery to both natural disasters, as well as terrorist attacks.
6. **Public awareness and preparedness campaigns.** Successful security programs in all industries understand the value and power of the public's "eyes and ears." Awareness programs should be well designed and employ innovative ways to engage the riding public to become part of their transit security system. Advertisement campaigns using media and celebrity support have proved to be very successful. Including the riding public in preparedness and evacuation drills also has been shown to be effective in raising public awareness. A transit agency's awareness campaign should also extend to its employees. Appropriate counterterrorism training, coupled with a strong security awareness campaign, will yield significantly heightened security awareness in transit systems.

Appendix B: National Terrorism Advisory System

The National Terrorism Advisory System, or NTAS, replaced the color-coded Homeland Security Advisory System (HSAS). This new system will more effectively communicate information about terrorist threats by providing timely, detailed information to the public, government agencies, first responders, airports and other transportation hubs, and the private sector.

It recognizes that Americans all share responsibility for the nation's security and should always be aware of the heightened risk of terrorist attack in the United States and what they should do.

After reviewing the available information, the secretary of Homeland Security will decide, in coordination with other federal entities, whether an NTAS alert should be issued. NTAS Alerts will be issued only when credible information is available.

These alerts will include a clear statement that there is an imminent threat or elevated threat. Using available information, the alerts will provide a concise summary of the potential threat, information about actions being taken to ensure public safety, and recommended steps that individuals, communities, businesses and governments can take to help prevent, mitigate or respond to the threat.

The NTAS alerts will be based on the nature of the threat: In some cases, alerts will be sent directly to law enforcement or affected areas of the private sector, while in others, alerts will be issued more broadly to the American people through both official and media channels.

Sunset provision

An individual threat alert is issued for a specific time period and then automatically expires. It may be extended if new information becomes available or the threat evolves.

NTAS alerts contain a sunset provision indicating a specific date when the alert expires; there will not be a constant NTAS alert or blanket warning that there is an overarching threat. If threat information changes for an alert, the secretary of Homeland Security may announce an updated NTAS alert. All changes, including the announcement that cancels an NTAS alert, will be distributed the same way as the original alert.

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Definitions

all-hazard preparedness: An integrated planning and capability building for safety, security and emergency management to optimize and continuously improve the use of resources and the management of risks from hazards, threats, vulnerabilities and adverse events or incidents for transit agencies.

Abbreviations and acronyms

AASHTO	American Association of State Highway and Transportation Officials
APTA	American Public Transportation Association
ASB	Advancing the Security Baseline
ASIS	formerly the American Society for Industrial Security
BASE	Baseline Assessment and Security Enhancement
CFR	Code of Federal Regulation
COOP	continuity of operations
CPTED	Crime Prevention Through Environmental Design
DHS	Department of Homeland Security
FTA	Federal Transit Administration
FEMA	Federal Emergency Management Agency
IED	improvised explosive device
K9	canine
MTA	Metropolitan Transportation Authority (New York)
NOMS	Not On My Shift
NTAS	National Terrorism Advisory System
NTI	National Transit Institute
PSI	passenger security inspections
SAAP	Security Analysis and Action Program
SEMAI	Security and Emergency Management Action Items
SEPP	Security and Emergency Preparedness Plan
SSI	Sensitive Security Information
SMPM	Security Manpower Planning Model
STSI	surface transportation security inspectors
SSP	System Security Plan
TCRP	Transit Cooperative Research Program
TDA	Transit Domain Awareness
TRB	Transportation Research Board
TSA	Transportation Security Administration
TSGP	Transit Security Grant Program
VIPR	Visible Intermodal Prevention and Response