

Incorporating Transportation Security Awareness into Routine State DOT Operations and Training

DETAILS

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NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM

NCHRP REPORT 793

**Incorporating Transportation
Security Awareness
into Routine State DOT
Operations and Training**

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in cooperation with the Federal Highway Administration

TRANSPORTATION RESEARCH BOARD

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NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM

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The needs for highway research are many, and the National Cooperative Highway Research Program can make significant contributions to the solution of highway transportation problems of mutual concern to many responsible groups. The program, however, is intended to complement rather than to substitute for or duplicate other highway research programs.

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The research team acknowledges Texas DOT for allowing the inclusion of its Security Reporting Procedure Flowchart as an example in report.


FOREWORD

By **Stephan A. Parker**

Staff Officer

Transportation Research Board

NCHRP Report 793: Incorporating Transportation Security Awareness into Routine State DOT Operations and Training highlights the importance of security awareness for all state DOT employees and contractors. The report outlines a flexible “campaign” approach providing techniques to integrate all-hazards security awareness concepts and reminders into routine state DOT operations, maintenance, and training. This report should be very helpful for state DOTs to improve the security of transportation systems within existing resource and budgetary constraints. Information contained in the report may also be valuable for transportation training organizations such as the Local/Tribal Technical Assistance Program (LTAP/TTAP), National Highway Institute (NHI), and other organizations that develop security training for transportation agencies.

In most states, accountability for security may reside in state emergency management or homeland security organizations. Because of this, the perception by many state DOTs and DOT employees is “security is not DOT business.” Though state DOTs might not be directly responsible for patrolling state-owned infrastructure, DOTs do have the responsibility for controlling access to critical components, establishing coordination with law enforcement to ensure quick response to incidents, conducting infrastructure risk and vulnerability assessments, and taking action to mitigate the effects of those risks and vulnerabilities. As a result, state DOTs do play a significant role in infrastructure security.

Under NCHRP Project 20-59(43), Countermeasures Assessment and Security Experts, LLC, and Western Management and Consulting, LLC, were asked to develop a guide for incorporating transportation security awareness into routine state DOT operations and training. The project team undertook a phased approach to gather information to develop the guide. For the literature review, the team reviewed all-hazards security and training research, compiled current transportation training programs related to security and security awareness, and identified effective security awareness programs and training approaches. A scanning survey was then done to identify and review existing transportation safety and security training. An electronic version was distributed to all fifty state DOTs; Puerto Rico; Washington, D.C.; the American Association of State Highway and Transportation Officials (AASHTO); the American Public Transportation Association (APTA); the Association of Metropolitan Planning Organizations (AMPO); the American Association of Railroads (AAR); the National Association of Counties (NACO); and the Local Technical Assistance Program (LTAP), using an online survey tool to track responses and results. In-depth telephone interviews were then conducted with DOT training managers, LTAP representatives, and staff at the National Transit Institute (NTI). The focus of the interviews was to identify successful security awareness programs and training concepts that could be incorporated into the development of the guide.

The team used the information obtained through the literature review, survey, and interviews to develop the guide. Section 1 provides a brief introduction to transportation security and the current role of the state DOTs in security. Security awareness is defined and differentiated from security training. The section also presents the importance of security awareness for all transportation executives, employees, and contractors. Section 2 addresses issues of organizational readiness and includes five key “Questions to Ask” to ensure that an agency is ready to have and support an effective security awareness program. Section 3 identifies the core components of a security awareness campaign, utilizing examples from current practices. The section includes general messages for all employees and suggested messages and delivery methods for operations and maintenance staff. Section 4 provides methods for promoting security awareness within a state DOT that can be relatively inexpensive to implement. Additional material is provided in the Appendices: an overview of current training available with links to training resources and training courses, a contact list for training organizations, and a directory of resources relevant to transportation security.

In addition to the guide, a methodology report and a PowerPoint presentation describing the entire project are available on the TRB website (www.trb.org) by searching for “NCHRP Report 793.”



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P R E F A C E

How to Use This Guide

NCHRP Report 793: Incorporating Transportation Security Awareness into Routine State DOT Operations and Training highlights the importance of security awareness for all state DOT employees and contractors. Through a flexible “campaign” approach, the Guide outlines techniques to integrate all-hazards security awareness concepts and reminders into routine state DOT operations, maintenance, and training.

The Guide is designed for use by state DOTs to improve the security of transportation systems within existing resource and budgetary constraints. Information contained in the Guide may also be valuable for transportation training organizations such as the Local/Tribal Technical Assistance Program (LTAP/TTAP), National Highway Institute (NHI), and other organizations that develop security training for transportation agencies.

Section 1 provides a brief introduction to transportation security and the current role of the state DOTs in security. Security awareness is defined and differentiated from security training. The section also presents the importance of security awareness for all transportation executives, employees, and contractors.

Section 2 addresses organizational readiness and includes five key “Questions to Ask” to ensure that an agency is ready to implement and support an effective security awareness program.

Section 3 identifies the core components of a security awareness campaign, utilizing examples of existing security awareness campaigns for transportation agencies. General messages for all employees and suggested messages and delivery methods for operations and maintenance staff are included in the section.

Section 4 provides methods for promoting security awareness that can be relatively inexpensive to implement within a state DOT.

Additional material is provided in the Appendices. Appendix A provides an overview of the current training available for transportation security, with links to training resources and training courses in a range of formats including classroom sessions, train-the-trainer, and online courses. Appendix B provides a contact list of training organizations relevant to transportation security. Appendix C provides a directory of resources relevant to transportation security.



SECTION 1

Introduction

Transportation systems are vulnerable to a variety of hazards and threats. Natural events such as earthquakes, floods, and wind events can damage or destroy roads, bridges, tunnels, and other transportation assets. Accidents, especially those with resulting fires, can do extensive damage to systems. Likewise, intentional acts such as criminal activity or terrorism can result in injury or loss of life, along with damage or destruction of transportation facilities and infrastructure.

NCHRP Report 525, Volume 14, Security 101: A Physical Security Primer for Transportation Agencies (2009) defines security as “freedom from harm resulting from intentional acts or circumstances.” All-hazards circumstances include natural events or technological failures, such as a serious accident.

The American Association of State Highway and Transportation Officials (AASHTO) summarized the security role of State DOTs in *Protecting America’s Roads, Bridges, and Tunnels: The Role of State DOTs in Homeland Security* (2005) as “all-hazards emergency management” and critical asset protection, along with the “traditional functions to better protect transportation systems and preserve user safety.”

The state DOT role in security was further defined in an AASHTO subcommittee white paper, *Roles and Implications of Transportation Systems in Homeland Security* (2005). According to that white paper, state DOTs have five fundamental responsibilities:

1. Prevent incidents within their control and responsibility.
2. Protect transportation users, agency personnel, and critical infrastructure.
3. Support regional/state/local emergency responders with resources including facilities, equipment, and personnel.
4. Recover swiftly from incidents.
5. Evaluate response(s) and continually improve plans, training, skills, and protocols.

In most states, accountability for security may reside in state emergency management or homeland security organizations. Because of this, the perception by many state DOTs and DOT employees is “security is not DOT business.” Though state DOTs might not be directly responsible for patrolling state-owned infrastructure, DOTs do have the responsibility for controlling access to critical components, establishing coordination with law enforcement to ensure quick response to incidents, conducting infrastructure risk and vulnerability assessments, and taking action to mitigate the effects of those risks and vulnerabilities. As a result, state DOTs do play a significant role in infrastructure security.

All transportation employees contribute to security. Because of their varied responsibilities and work locations, employees are often the first to notice or learn about suspicious activity and are best positioned to recognize threats or security concerns. An employee’s presence alone

can deter unlawful acts. Because of their constant presence on agency premises, employees are uniquely positioned to identify issues, problems, and deviations from the usual.

Employees may believe that the security systems—fences, cameras, access cards—and management are responsible for security and may not see themselves as a vital part of the security “system.” Employees need to know that they have security responsibility too. Because they are the “eyes and ears” of the agency, they should be encouraged to be aware of suspicious activity and know who to call to report matters of a suspicious or dangerous nature.

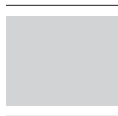
Directly akin to keeping safety “top of mind,” establishing a security mindset of awareness in all employees can increase an agency’s security effectiveness. Security awareness is *the cornerstone of a security culture*. In a security culture, security is an integral part of the daily routine. The importance of security to daily work is understood by all employees, and each one takes responsibility to know the security risks that exist and the corresponding, appropriate measures to address potential and actual security issues.

There have been a number of national security awareness programs for both highways and transit over the years. Employee-watch programs have long been recognized as an important security awareness tool. Over time, the security awareness programs have changed and matured in line with the increased understanding of the role of state DOTs. Today, security awareness programs such as *If You See Something, Say Something*[™] are more commonly implemented—programs that focus on making employees aware of potential risks and teaching them how to report a security threat.

The following sections provide the concepts and techniques of an all-hazards security awareness program for transportation agencies. Integral to the success of any security awareness program is the knowledge that security is everyone’s responsibility. Transportation employees must understand that they are the most important part of the security program.

“Awareness is not training . . .
The purpose of awareness is simply
to focus attention on security.”

National Institute of Standards and
Technology Special Publication 800-16:
Information Technology Security Training
Requirements



SECTION 2

Organizational Readiness

This section focuses on key **QUESTIONS TO ASK** to be sure an agency is ready to implement and support an effective security awareness program.

There are fundamental capabilities that must be in place for a security awareness program. This section provides the five key questions to ask to ensure that a transportation agency is ready and can support an effective security awareness program.

1. Is there management support for security awareness?

Security awareness programs with top-level support are more successful. As with safety, security in a transportation agency is a “top-down” organizational activity. The rest of the agency takes its lead from the senior executives. Senior leaders act as role models and establish what should be focused on by the rest of the organization.

Management must demonstrate to all employees that security awareness is important and can be integrated into normal daily operations and maintenance processes. If there is strong support, senior management participation can be incorporated in the program, e.g., the CEO can send out a message to the entire organization that briefly summarizes threats and states that security is the responsibility of everyone in the organization.

2. Has a reporting structure been identified and/or articulated, e.g., what gets reported and to whom?

Establishing a reporting structure in advance—who to tell and how to describe something suspicious—is critical to a security awareness program. What are the internal reporting procedures that should be followed? There are a number of reporting contacts, both internal and external, used by transportation agencies. Internal transportation agency contacts include an appropriate supervisor such as a dispatcher, immediate or designated manager, or designated internal security personnel. Based on the evaluation of the employee report, an internal agency contact may then contact law enforcement or the state or federal Department of Homeland Security. External contact options include calling 911 or a local designated law enforcement contact.

Once a reporting structure has been identified, employees need to know:

- Who should be contacted, e.g., internal supervisory or security contact, or external law enforcement agency contact.
- How to contact them, e.g., using emergency hotlines, 911, etc.
- What key information should be reported (the Who, What, Where, When, and details of involved persons, objects, or vehicles).

3. What awareness behaviors should be recommended and reinforced, e.g., what should employees look out for?

It is important to focus security awareness on supporting business needs and processes. What are the agency's priorities? What are the areas of concern for the agency? Common areas for transportation security include:

- Critical infrastructure such as bridges, overpasses, and tunnels.
- State DOT vehicles, maintenance equipment, and maintenance stations.
- Physical security of operations and information technology (IT) facilities.

Examples of common awareness behaviors include:

- Recognizing and reporting indicators of criminal and/or terrorist activity such as trespassing, surveillance, theft, vandalism, and sabotage.
- Recognizing and reporting unusual or unattended objects such as packages or vehicles.
- Recognizing and reporting unusual or suspicious people or activities.

The key to establishing the security behaviors as a part of everyone's daily routine is to utilize common knowledge so users can exercise common sense. In addition, focusing on actions to accomplish is more successful than telling people that what they should not be doing.

4. Are there documented security procedures and reporting mechanisms in place?

Integrating the reporting structure with existing internal security procedures can simplify and increase the effectiveness of a security awareness program. Are there existing security procedures in place? Have they been documented? Can the internal procedures be used for the employee security awareness program?

5. Are there existing organizational relationships with law enforcement, e.g., can employees call an established external contact number?

Having employees contact external law enforcement is a common practice for security awareness programs. For example, the national Department of Homeland Security's program *If You See Something, Say Something*TM recommends calling 911 to report suspicious behavior or objects. It should be noted that some transportation agency policies require employees to notify local or onsite security first so that they can coordinate a 911 response. If an agency has existing organizational relationships with local law enforcement, that may provide a reporting option to be utilized. Does the agency have an established contact number for law enforcement? Can employees use the established number to report suspicious people, activities, or objects as part of the security awareness program?



SECTION 3

“Security Is Everybody’s Business”

This section provides examples of security awareness campaigns for transportation agencies based on effective awareness programs.

Messages for each of the main elements of a security awareness program are provided:

- General messages
- Knowing the risks
- Recognizing security risks
- Reporting a security threat

There are three key principles underlying transportation security awareness programs:

1. Security is everybody’s business.

Security is not an occasional activity accomplished only by certain personnel or through security audits. Security is a shared responsibility that is part of everyone’s “day job.” Transportation employees and contractors are the best positioned to know what is usual and unusual, and can help their agency protect its employees, information, data, and facilities. Employees need to understand that they are an integral part of their organization’s security solution.

2. Talking about security is just as important as doing something physical about security.

The greatest obstacle to effective security awareness is employees’ lessened vigilance due to infrequent security incidents. The most critical success factors for security awareness are consistency and perseverance. It takes a consistent effort to make security awareness part of the culture.

3. It is important that leadership supports and reinforces the security awareness program.

Because an agency takes its lead from the senior executives, DOT leaders must demonstrate that security awareness is important to their agency. Reinforcing the program does not necessarily require a major commitment from DOT leaders. There are little things that leadership can do to demonstrate that security is an agency priority, such as telling employees to be aware—e.g., to say, “*If you see something, say something*”—at every opportunity.

The main elements of a security awareness program are:

- General Messages—conveying the need for security awareness.
- Knowing the Risks—becoming aware of risks and understanding the potential consequences.
 - Recognizing and/or Observing Security Risks—knowing how to detect and identify potential security risks.
 - Reporting a Security Threat—knowing how to respond to and report a security threat.

Effective Security Awareness Messages are:

- Relevant and appropriate
- Realistic
- Consistent
- Actual examples from agency

The following sections provide examples of messages for a transportation security awareness campaign based on effective awareness programs. Security awareness messages should be delivered in a manner consistent with an agency’s culture. The best messages have the right combination of spirit and structure—keeping it light while still reinforcing employee responsibility and commitment to security. Incorporating agency success stories or other positive examples

increases the validity and effectiveness of the messages by highlighting to employees that security is important to the agency and that their role as observers/reporters is an integral part of maintaining a secure transportation system.

General Security Awareness Messages

- Security is everyone's business. All employees contribute to an organization's security by acting as "eyes and ears" in the field.
- Security begins with you! All employees have a responsibility to help their agency protect its employees, information, data, and facilities.
- YOU are the most effective security tool in your organization.
- Be alert and be aware—you are the Eyes, Ears . . . and Mouths of the DOT.
- Security is everyone's job. Take it seriously!
- Following security policies and procedures is important and helps to protect the lives and livelihoods of employees, contractors, and the public.
- Observing and reporting suspicious people or behavior is important to the safety and security of everyone.
- It is important for ALL employees to be vigilant for anything unusual at their workplace that could threaten security.

Knowing the Risks

One critical part of a security awareness program is making each employee aware of the security risks that exist in their workplace and the potential consequences to transportation systems and assets. Messages to employees about the risks can include a general overview of the risks to transportation agency systems and more specific, job-related messages such as highlighting risks to vehicles/maintenance equipment and facilities for maintenance employees.

Common areas of concern for transportation security include:

- Critical infrastructure such as bridges, overpasses, tunnels, and transportation management centers (TMCs).
- State DOT vehicles, maintenance equipment, and maintenance stations.
- Physical security of operations and information technology (IT) facilities.

Potential security risks include:

- Terrorism including chemical, biological, radiological, and nuclear weapons (CBRNs), and improvised explosive devices (IEDs).
- Crimes such as trespassing, theft, vandalism, sabotage, and cyber-sabotage.
- Workplace violence such as minor assaults, major assaults, and assaults with conventional weapons.
- Bomb threats.
- Hijack and/or hostage situations.

Specific transportation security risks may include:

- Unauthorized persons or vehicles in restricted areas.
- Tampering with surveillance cameras, safety systems, machinery, or other sensitive equipment.
- People photographing, videotaping, sketching, measuring, or taking notes on infrastructure, equipment, and facilities.
- Unusual markings or unexplained damage on infrastructure or facilities.
- Watching, visiting, or passing by a location repeatedly over time by the same person or vehicle.
- Outsiders asking for details about infrastructure, equipment, or workplace.

8 Incorporating Transportation Security Awareness into Routine State DOT Operations and Training

Recognizing/Observing a Security Risk

How to detect and identify potential security threats is a key component of a security awareness program. There are basic, common-sense messages for employees about what they can do to recognize a security risk.

- Be aware. Know the area, note suspicious activities and objects, and report things that do not seem right.
- Avoid complacency and use common sense.
- Observe the situation with all your senses.
- Be prevention-oriented. Integrate security awareness into your daily routine.
- Know your co-workers, your community, and your work environment. Be aware of unusual changes in your surroundings.

Other recognizing/observing messages explain the importance of observing, identifying, and reporting suspicious people, behavior, or objects. Some provide additional information on what to look for, such as how to identify suspicious behavior and objects that might indicate potential security threats.

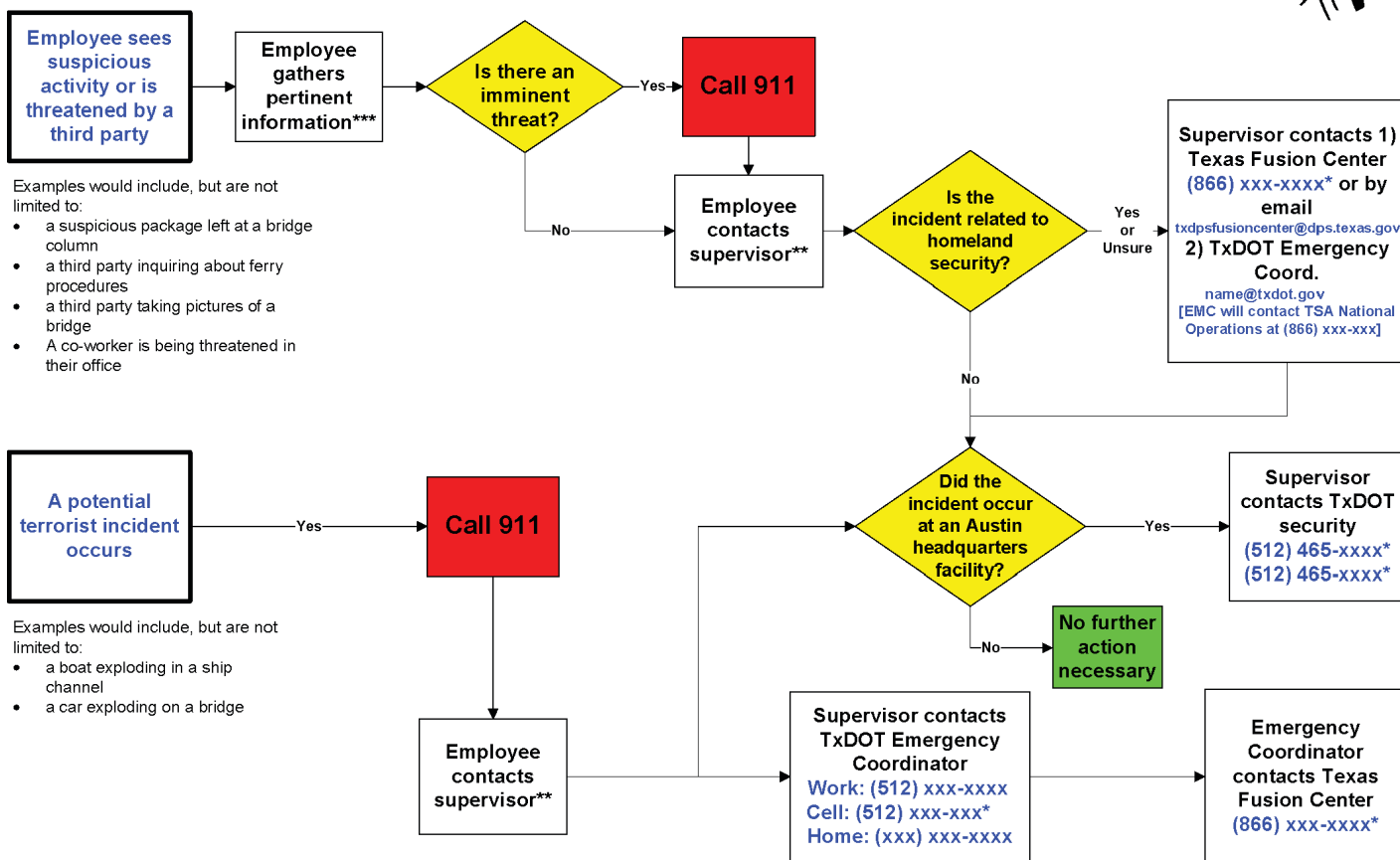
- Observing and reporting suspicious people or behavior is important to the safety and security of everyone.
- It is important for ALL employees to be vigilant for anything unusual at their workplace that could threaten security.
- It can be difficult to know what “something suspicious” looks like, but trust yourself when something does not feel quite right.
- It is better to be safe than sorry. Do not be afraid to report anything that seems suspicious.
- Practice awareness by:
 - Becoming more aware of your work area and recognizing any usual changes in it.
 - Becoming more aware of people’s behaviors that may indicate attempts to compromise security.
 - Becoming more aware of what to do or whom to call if you suspect security may be compromised.
- Observe and report people, activities, and things that are out of place or out of the ordinary.
- Look for and report system security weaknesses such as broken fences or doors, malfunctioning locks, or inadequate or non-working lighting.
- Learn to recognize suspicious behavior or indicators of criminal and/or terrorist activity.
- Learn to recognize unusual or unattended objects.
- If someone asks you for details about your workplace, smile and change the subject. Never discuss details about the transportation system or your workplace with outsiders.

Security Awareness DOs and DON'Ts: Keeping Yourself Safe

- DO report unusual or suspicious people or items right away.
 - DO record as many details as possible.
 - DO NOT take risks that could harm yourself or others.
 - DO NOT try to “handle it” yourself.
 - DO NOT confront a suspicious individual.
 - DO NOT touch, move, or cover a suspicious substance or object.
 - DO NOT allow an unauthorized person access to restricted areas.
-



Homeland Security Reporting Procedures



* Phone numbers are available 24/7

** Supervisor will contact district or division office and may take any additional actions as necessary

*** Employees should not endanger themselves by picking up suspicious packages, confronting suspects, etc.

Revised 8/2012

Figure 1. Security reporting procedure flowchart example.

Reporting a Security Threat

Effective security awareness messages about reporting potential security threats or situations address whom to tell and what to include in the report. They are designed so that employees are encouraged to report unusual or suspicious activities immediately and understand how to make a report using appropriate agency security procedures.

General reporting awareness messages include:

- Immediately communicate anything unusual (following the agency procedures).
- Find out in advance whom to contact if you see something suspicious.
- Know how to report security threats, security incidents, and suspicious behavior or objects.

Specific information on how to report security threats includes whom to contact, how to contact them, and what information to provide—the Who, What, Where, When, and details of involved persons, objects, or vehicles. Figure 1 provides an example of a reporting procedure flowchart from the Texas Department of Transportation. Posters, employee handouts, and wallet cards are ideal methods to distribute the specific reporting details throughout the agency.



SECTION 4

Promoting Security Awareness within DOTs

This section provides information on how to promote Security Awareness within state DOTs and other transportation agencies.

Mainstreaming all-hazards security awareness in transportation agencies today is a challenge. This section provides methods for promoting security awareness within a state DOT. The techniques included have been found effective and can be relatively inexpensive to implement.

General tips for keeping security in the front of employees' minds include:

- Looking for opportunities to tell the security story.
- Taking easy steps that remind people about security.
- Keeping messages short and simple.
- Repeating messages to support retention.

Specific approaches to incorporate security awareness into routine state DOT operations and training include:

1. Suggesting that senior leaders and management include security awareness in all their communications to employees.

- Senior leadership can discuss security at every opportunity, for example, closing every meeting with a security reminder such as “Security is everybody’s business” or “If you see something, say something.”
- Management and supervisors can talk about security at regular meetings, such as reminding employees to follow good security practices and procedures or discussing how to integrate security into daily work routines—for example, including security sweeps in pre- and post-trip vehicle inspections and always checking depots for suspicious activity, packages, or devices.

2. Discussing security at the small unit level.

- Managers and supervisors can establish a routine for discussing “things out of kilter” and the importance of security awareness.
- “Tailgate” sessions can include security topics to highlight “things to look out for” or to focus on how to report unusual or suspicious people or items. The ideal is to highlight security along with safety as an essential part of the workplace routine.

3. Incorporating security awareness into existing training.

- Security awareness can be included in new or existing employee training. A short 10–15 minute module on security awareness can be incorporated into the existing training session, or employees can be directed to Federal Emergency Management Agency (FEMA) or DHS/TSA training materials.
- Security awareness can be included in position-specific training where relevant. For example, Texas DOT incorporates awareness information into bridge inspector training, highlighting the need to be vigilant and to pass along information. The module includes what to look out

for during inspections, such as noting suspicious graffiti or unusual damage on a bridge. The fracture-critical module includes information about the importance that nothing be placed on certain places on a bridge, and stresses being vigilant about looking for unusual or suspicious objects.

4. Including security awareness messages in regular agency internal communications and at special events.

- Agency newsletters and email can be used to send awareness reminders and security tips.
- Posters, in-box reminder sheets, and employee wallet cards with clear, well-communicated security messages and information can be distributed within the agency. As noted in the previous section, posters, employee handouts, and wallet cards are ideal methods to distribute the specifics of how to report any suspicious objects/people or security threats.
- Occasional awareness messages can be attached to paychecks, inspections reports, and other relevant agency documents.
- Highlighting secure work areas and practices at special events can keep employees motivated and aware.



APPENDIX A

Transportation Security Training Courses

Appendix A provides an overview of the current training available for transportation security with links to training resources and training courses in a range of formats including classroom sessions, train-the-trainer, and online courses.

Training is available from the following sources:

Department of Homeland Security (DHS)/Transportation Security Administration (TSA)	12
National Transit Institute (NTI)	14
Transportation Research Board	14
Center for Transportation Safety, Security and Risk (CTSSR)	15
Federal Highway Administration (FHWA)	16
Federal Transit Administration (FTA)	16
Federal Motor Carrier Safety Administration (FMCSA)	16
Pipeline and Hazardous Materials Safety Administration (PHMSA)	17
Federal Emergency Management Agency (FEMA) Security Training	18
Other Federal Training	19
State Emergency Management Agency (SEMA) Training	20
Rural Domestic Preparedness Consortium (RDPC)	20
Other Sector Training Resources	21
Other Security Training Resources	21

Department of Homeland Security (DHS)/ Transportation Security Administration (TSA)

If You See Something, Say Something™ (video—10 minutes)
<http://www.dhs.gov/if-you-see-something-say-something%E2%84%A2-campaign>

This video was released as part of the Department of Homeland Security campaign to raise public awareness of the indicators of terrorism and violent crime, and to emphasize the importance of reporting suspicious activity.

First Observer™ Training
<http://www.tsa.gov/first-observer/first-observer-highway-motor-carrier>

First Observer™ is a voluntary program designed to provide transportation professionals with information that will enable them to effectively observe, assess, and report suspicious individuals, vehicles, packages, and/or objects. The program is intended for transportation operators, dispatch/control center personnel, and frontline employees. The training teaches how to observe, assess, and report suspicious individuals, vehicles, packages, and objects via mechanisms where and when appropriate. First Observer™ training is designed to be available online with 24/7 access

for all surface transportation modes, including highway motor carrier, mass transit, freight rail, maritime, and pipeline.

TSA Security Training & Security Awareness Brochures

The Transportation Security Administration (TSA) provides security training focused on specific transportation modes such as highway, freight rail, and pipeline and has published guides and training materials available from the TSA website.

Highway Security Counterterrorism Guides

<http://www.tsa.gov/stakeholders/documents-and-reports-0>

Specific counterterrorism guides for trucking, motorcoach, school bus, and infrastructure are available in a pocket-sized flip chart format covering: Pre-Incident Indicators; Targets and Threats; Tactics; Prevention/Mitigation; Security Exercises; Chemical, Biological, Radiological, Nuclear (CBRN); Licensing and Identification; and Points of Contact.

Highway Security Awareness Training Materials

<http://www.tsa.gov/stakeholders/documents-and-reports-0>

Security awareness brochures, tip cards, and posters for trucking, motorcoach, and school bus cover: Identifying Threats and Incidents, Recommended Procedures for Employees, Monitoring Suspicious Activities & Items, Surrounding Awareness, Collecting Information, and Responding to an Incident.

School Transportation Security Awareness (STSA)

<http://www.tsa.gov/stakeholders/school-transportation-security-awareness>

The School Transportation Security Awareness (STSA) program focuses on terrorist and criminal threats to school buses, bus passengers, and destination facilities. It provides school bus drivers, administrators, and staff members with information that will enable them to effectively identify and report perceived security threats, as well as the skills to appropriately react and respond to a security incident should it occur. The STSA program consists of a 24-minute DVD of a simulated school bus hijacking and web-based self-study modules offered in both English and Spanish. The program has been designed so that the information can be obtained in a classroom setting or by individual self-guided study online.

IED Recognition and Detection for Railroad Industry Employees Training CD

<http://www.tsa.gov/stakeholders/resources>

TSA has produced a CD-ROM-based training program titled, “IED Recognition and Detection for Railroad Industry Employees.” This is a self-paced program that leads users through four separate modules which focus on heightening rail employees’ awareness of suspicious activity. Topics include an overview of the terrorist threat, high-risk targets, improvised explosive device recognition, and inspection and response procedures.

Freight Rail Security Awareness Brochure

<http://www.tsa.gov/stakeholders/resources>

The brochure, a supplement to the IED Recognition and Detection for Railroad Industry Employees CD training, is available as a PDF file and can be customized by companies to meet their needs.

Intermodal Security Training Exercise Program (I-STEP)

<http://www.tsa.gov/stakeholders/i-step>

The Intermodal Security Training Exercise Program (I-STEP) is being utilized by the TSA’s Transportation Sector Network Management (TSNM) division for conducting transportation

security exercises. I-STEP is designed to address the unique transportation security issues found in the intermodal environment of the nation's transportation security network.

National Transit Institute (NTI)

<http://www.ntionline.com/>

The National Transit Institute at Rutgers University in New Jersey provides training, education, and clearinghouse services in support of transportation. NTI has developed a course, System Security Awareness for Transportation Employees, directed toward frontline transportation department employees and their immediate supervisors and managers. This training provides the basic skills of where to look, what to look for, and what to report to observe, report, and react effectively to suspicious activities and security incidents. State DOTs can tailor the course to address specific needs of their constituents.

The Federal Transit Administration has worked with NTI to develop several training tools for transit employees, such as a course titled "Security Awareness for Transit Employees." The course "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. A focus is also placed upon an employee's initial priorities at the scene of a threat or incident."

Other NTI security training includes:

- Employee Guide to System Security, Commuter Rail (Pocket Guide)
- Employee Guide to System Security, Bus Operations (Pocket Guide)
- Employee Guide to System Security, Light Rail (Pocket Guide)
- Employee Guide to System Security, Commuter Bus (Pocket Guide)
- Employee Guide to System Security, Bus Maintenance (Pocket Guide)
- Employee Guide to System Security, Heavy Rail (Pocket Guide)
- Employee Guide to System Security, Workplace Violence Prevention (Pocket Guide)
- System Security Awareness for Transit Employees, Student Guide
- System Security Awareness for Transit Employees—Warning Signs
- Security Incident Management for Transit Supervisors, Student Guide
- Terrorist Awareness Recognition and Reaction (TARR)

Transportation Research Board

<http://www.trb.org/>

System Security Awareness for Transportation Employees

<http://www.trb.org/Main/Blurbs/157466.aspx>

TRB's *National Cooperative Highway Research Program (NCHRP) Report 525, Surface Transportation Security, Volume 7: System Security Awareness for Transportation Employees* is a CD-based interactive multimedia training course designed to help transportation employees, supervisors, and managers define their roles and responsibilities in transportation system security, recognize suspicious activities and objects, observe and report relevant information, and minimize harm to themselves and others. Course modules focus on system security, reducing vulnerability, suspicious activity, suspicious objects, top priorities, and preparation.

Incorporating Security into the Transportation Planning Process

<http://www.trb.org/Main/Blurbs/155903.aspx>

TRB's *NCHRP Report 525, Surface Transportation Security, Volume 3: Incorporating Security into the Transportation Planning Process* examines the status, constraints, opportunities, and

strategies for incorporating security into transportation planning at the state and metropolitan levels. The report also examines security-related projects in state and metropolitan priority programming decisions.

Security-Related Customer Communications and Training for Public Transportation Providers
<http://www.trb.org/Main/Blurbs/154638.aspx>

TRB's *Transit Cooperative Research Program (TCRP) Report 86, Public Transportation Security, Volume 5: Security-Related Customer Communications and Training for Public Transportation Providers* is designed to provide improved tools for security-related customer communications and training. This report is in electronic format on CRP-CD-43. The CD contains a 15-minute video on the importance of training for transit emergencies, a PowerPoint overview of the report, the final report in portable document format (PDF), and templates of communication devices.

TCRP Synthesis 80, Transit Security Update: A Synthesis of Transit Practice
http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_syn_80.pdf

TCRP Synthesis 80 (2009), an update of the original *TCRP Synthesis of Transit Practice 21: Improving Transit Security* (1997), addresses terrorism and anticrime security measures and practices. Crime and security incident trends, major issues and obstacles to security and policing management, and employee security and policing training practices were identified and summarized.

Other TRB reports provide relevant security training information:

- *NCHRP Report 525*
 - *Vol. 1: Responding to Threats: A Field Personnel Manual*
 - *Vol. 8: Continuity of Operations (COOP) Planning Guidelines for Transportation Agencies*
 - *Vol. 13: A Guide to Traffic Control of Rural Roads in an Agricultural Emergency*
 - *Vol. 14: Security 101: A Physical Security Primer for Transportation Agencies*
 - *Vol. 16: A Guide to Emergency Response Planning at State Transportation Agencies*
- *NCHRP Report 86, Volume 1: Communication of Threats: A Guide*

Center for Transportation Safety, Security and Risk (CTSSR)

<http://policy.rutgers.edu/ctssr/>

The Center for Transportation Safety, Security and Risk (CTSSR) at Rutgers University serves as a National Transportation Security Center of Excellence (NTSCOE) for the U.S. Department of Homeland Security. CTSSR creates relevant security training products for the transportation industry.

Training offered includes:

- All-Hazards Crisis Communication Training for School Bus Drivers
- Bus Operator Behavioral Awareness Training
- Chemical and Biological Weapons Preparedness and Response for Transit
- Crisis Communication Training for Frontline Transit Employees

CTSSR Security Training Videos

<http://policy.rutgers.edu/ctssr/videos/index.php>

- *Rail Sabotage Awareness and Reporting*—video aimed at freight rail, passenger rail, and transit workers whose jobs put them in direct daily exposure to railroad track and infrastructure.

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The video alerts workers to the threat of sabotage on U.S. rail targets, instructs them about where and how to look for threats, and emphasizes the importance of reporting suspected sabotage activities. An accompanying poster highlights the rail security awareness message for display in employee depots and lunchrooms.

- *Chemical and Biological Terrorism Preparedness and Response*—a 20-minute training video on awareness, preparedness, and response to chemical and biological weapon attacks in a transit environment. There are two versions of the video: one applicable to the transit industry in general and a second version with additional information specific to the Washington Metropolitan Area Transit Authority (WMATA) system. Along with the video, additional training materials include a supporting pamphlet and transit manager’s resource guide available in hard copy or PDF formats.
- *Addressing Needs of Limited English Proficiency Populations in Transit Emergencies*—a 15-minute instructional video focusing on strategies frontline transit employees can use to communicate effectively with limited English proficient (LEP) customers during routine operations and crises. Also available are a discussion/resource guide and pocket translation tool. The pocket translator is a quick, customizable reference tool for frontline employees that contains important contact numbers, prompts, pictograms, and common phrases in both Spanish and English.

Federal Highway Administration (FHWA)

<http://www.fhwa.dot.gov/security/emergencymgmt/profcapacitybldg/>

The FHWA Highway Infrastructure Security and Emergency Management Professional Capacity Building website provides information and tools about infrastructure security and emergency management training, publications, and state contacts.

Examples of security training courses listed on the site include:

- FHWA Freight Security Awareness Training—computer-based training available at <http://ops.fhwa.dot.gov/freight/fpd/fsap/fsap.htm>
- FHWA Risk Management for Terrorist Threats to Bridges and Tunnels Workshop
- FHWA Blast Design & Analysis for Bridge Structures Workshop
- FHWA First Responder Awareness to Terrorist Threats for Bridges and Tunnels Workshop

Federal Transit Administration (FTA)

<http://transit-safety.volpe.dot.gov/Training/new/OnlineResources.aspx>

The Federal Transit Agency has a number of employee training resources available online.

Warning Signs: System Security Awareness for Transit Employees

A 15-minute video designed to increase transit personnel’s awareness of what to look for and what to do regarding suspicious activity, packages, devices, and substances.

Federal Motor Carrier Safety Administration (FMCSA)

http://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/Safe_and_Secure_Transportation_of_Food_Whats_Your_Role_Brochure.pdf

The FMCSA jointly with the U.S. Department of Agriculture (USDA) has produced training materials on the safe and secure transportation of food products.

Safe and Secure Transportation of Food: What's Your Role?

A two-page brochure designed to address the role of motor vehicle and rail safety inspectors in food safety and security of transport that includes what to look for, what information to report, and whom to contact.

Pipeline and Hazardous Materials Safety Administration (PHMSA)

<http://www.phmsa.dot.gov/hazmat/training/publications/modules>

The Office of Hazardous Materials Safety has prepared training modules that meet the requirements for General Awareness Training as prescribed in Title 49 CFR, Part 172, Subpart H. The modules can be used to provide general awareness/familiarization training, or may be used along with customized training materials, as a basis for function-specific training.

Hazardous Materials Transportation Training Modules

This CD-ROM interactive training program for individual instruction contains nine modules, plus one introductory module. Classroom-style training materials are designed to be used with the CD-ROM training tool. These additional materials include an Instructor Guide, a Student Guide, and a PowerPoint presentation for each module. Instructor Guides are provided in PDF format. Each individual module can be used to train larger groups on the materials presented in the CD-ROM training.

TSA Pipeline Security Training Materials

<http://www.tsa.gov/stakeholders/training-and-exercises>

TSA has developed pipeline security training materials as well as brochures for the pipeline industry and infrastructure security partners. The training materials can be ordered from the TSA website.

Pipeline Security Awareness for the Pipeline Industry Employee

This training CD, intended for pipeline companies and their employees, provides a basic level of awareness and understanding of pipeline security for heightening pipeline employees' awareness of suspicious activity, as well as stressing the importance of each employee's role in keeping pipeline systems secure.

Pipelines: Countering IEDs

This DVD training program is meant to familiarize pipeline company employees and contractors with the threat posed by improvised explosive devices (IEDs). Four modules familiarize viewers with the threat posed by IEDs, how to spot potential IEDs, how to respond to suspicious objects, and how to work with responding agencies in the event an IED is discovered or detonated on company property.

Protecting Pipeline Infrastructure: The Law Enforcement Role

The DVD provides a basic understanding of how pipeline systems function and the principal products they transport, including a discussion of the threats and vulnerabilities to pipelines that is intended to enhance the law enforcement community's understanding of pipeline systems and their security issues.

Pipeline Security Awareness for Employees Brochure

This brochure supplements the information contained in the Pipeline Security Awareness CD training. It is available as a PDF file that can be customized to meet company needs.

Good Neighbors! A Pipeline Security Neighborhood Watch Brochure

This brochure assists with pipeline companies' neighborhood outreach efforts and promotes the reporting of suspicious activity or incidents. The brochure is sent as a PDF file and can be customized to meet company needs.

Federal Emergency Management Agency (FEMA) Security Training

FEMA National Training and Education Division (NTED)

<https://www.firstrespondertraining.gov/content.do>

NTED serves the nation's first responder community, offering more than 150 courses to help build critical skills that responders need to function effectively in mass consequence events. NTED primarily serves state, local, and tribal entities in 10 professional disciplines, but has expanded to serve the private sector and citizens in recognition of their significant role in domestic preparedness. Instruction is offered at the awareness, performance, and management and planning levels.

FEMA Training Operations Course Catalog

https://www.firstrespondertraining.gov/webforms/pdfs/gt_catalog.pdf

The FEMA Training Operations Course Catalog provides a broad range of security courses offered through federally sponsored programs and the National Preparedness Consortium. Security-related online independent study courses include:

- *Workplace Security Awareness (IS-906)*
<http://training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=is-906>
This course provides guidance to individuals and organizations on how to improve security in the workplace.
- *Surveillance Awareness: What You Can Do (IS-914)*
<http://www.training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=IS-914>
The purpose of this course is to make critical infrastructure employees and service providers aware of actions they can take to detect and report suspicious activities associated with adversarial surveillance.
- *Active Shooter: What You Can Do (IS-907)*
<http://training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=is-907>
All employees can help prevent and prepare for potential active shooter situations. This course provides guidance to individuals, including managers and employees, so that they can prepare to respond to an active shooter situation.
- *Critical Infrastructure Security: Theft and Diversion—What You Can Do (IS-916)*
<http://www.training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=IS-916>
This course introduces critical infrastructure personnel to the information they need and the resources available to them to identify threats and vulnerabilities to critical infrastructure from the theft and diversion of critical resources, raw materials, and products that can be used for criminal or terrorist activities. The course also identifies actions that participants can take to reduce or prevent theft and diversion.
- *Workplace Violence Awareness Training 2014 (IS-106.14)*
<http://www.training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=IS-106.14>
The goal of this course is to give employees awareness of violence in the workplace, how to recognize the warning signs, and what actions to take to prevent or minimize violence.
- *Protecting Critical Infrastructure Against Insider Threats (IS-915)*
<https://training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=IS-915>
This course provides guidance to critical infrastructure employees and service providers on how to identify and take action against insider threats to critical infrastructure.

Emergency Management Institute (EMI)<http://training.fema.gov/is/>

EMI offers self-paced courses designed for people who have emergency management responsibilities and the general public. Security-related courses include:

- Principles of Emergency Management (IS 230)
- Emergency Planning (IS 235)
- NIMS/ICS Training, such as IS 700 NIMS
- Training & Exercises (HSEEP)
- National Response Plan (IIS 800)

Other Federal Training**U.S. Department of Transportation (DOT),
Research and Innovative Technology Administration
(RITA), Transportation Safety Institute (TSI)**<http://www.tsi.dot.gov/>

The Transportation Safety Institute provides training to transportation personnel on traffic safety and transit safety & security. Specific transit-related training courses include:

- System Security
- Crime Prevention through Environmental Design
- Rail Safety and Security Audits
- Effectively Managing Transit Emergencies
- Transit Response to Bus and Rail Hijacking Seminars
- IED Threat Management

U.S. Fire Administration

The Critical Infrastructure Protection Process Job Aid: Emergency Management and Response-Information Sharing and Analysis Center, August 2007

<http://www.usfa.fema.gov/downloads/pdf/publications/fa-313.pdf>

The Job Aid is a guide to assist leaders of the Emergency Services Sector (ESS) with the process of critical infrastructure protection (CIP). The CIP process described was designed to be easily adapted to assist the infrastructure protection objectives of any community, service, department, agency, or organization.

**U.S. Department of Agriculture (USDA), Food Safety
and Inspection Service (FSIS)**

Food Safety and Security Guidelines for the Transportation and Distribution of Meat, Poultry, and Egg Products, June 2005

http://www.fsis.usda.gov/shared/PDF/Transportation_Security_Guidelines.pdf

The FSIS Security Guidelines are designed to aid those handling food products during transportation and storage. These guidelines provide a list of safety and security measures that can be taken to prevent contamination of meat, poultry, and egg products during loading and unloading, transportation, and in-transit storage. The second section of the Guidelines addresses security measures specifically intended to prevent the same forms of contamination due to criminal or terrorist acts.

Food and Drug Administration (FDA)/Dept. of Health and Human Services (HHS)

Food Defense Awareness Initiative ALERT Training

<http://www.fda.gov/food/fooddefense/toolseducationalmaterials/ucm353774.htm>

The FDA Food Defense Awareness Initiative ALERT is intended to raise the awareness of state and local government agencies and the food industry regarding food defense issues including the transportation of food. ALERT identifies five key points that industry and businesses can use to decrease the risk of intentional food contamination at their facility. Web-based training includes modules that:

- Describe the five parts of the ALERT initiative.
- List examples of preventive measures that can be taken to protect business and industry from intentional food contamination.
- Identify several elements that can become part of a continuous improvement plan.
- Increase awareness among personnel in the food industry and encourage them to adopt practices that help protect the food supply.

State Emergency Management Agency (SEMA) Training

State emergency management agencies provide training to other state agencies. Some examples include the following:

Iowa EMA

IEMA is working with ICS 300 and 400 instructors throughout the state in order to provide opportunities for jurisdictions to meet training requirements within the National Incident Management System (NIMS).

Pennsylvania SEMA

The Training and Exercise Management Division provides training to state and local emergency management personnel, elected and appointed officials, emergency responders, members of volunteer organizations active in disasters, and other professionals who prepare for and respond to emergencies. The division provides public education, professional development training, and technical training to public safety volunteers from state government and local communities across the commonwealth and conducts all-hazards related exercises to test preparedness of state agencies, local governments, community public service organizations, schools, hospitals, and others. They also administer a statewide Emergency Exercise Program and oversee the Pennsylvania Emergency Management Coordinator certification program.

Virginia Department of Emergency Management

State Employee Terrorism and Security Awareness Orientation Program

<http://www.vaemergency.gov/em-community/training/state-employee-terrorism-and-security-awareness-orientation-program>

This basic awareness course is designed to orient state employees on the subject of terrorism, to provide basic prevention and self-protection techniques, and to familiarize employees with their role and their agencies' role in responding to emergencies. A train-the-trainer course is also available for qualified state employees.

Rural Domestic Preparedness Consortium (RDPC)

<http://www.ruraltraining.org/training/courses/>

The Rural Domestic Preparedness Consortium is a DHS-funded program providing training and resources to rural first responders. RDPC courses are offered both in-person and

online, and are provided at no cost. Online courses are available at <http://www.ruraltraining.org/training/online/>

- *AWR 187-W: Terrorism and WMD Awareness in the Workplace*
This web-based “Terrorism 101” course prepares learners to successfully recognize, report, and react to potential terrorist incidents.
- *AWR 144: Port and Vessel Security for Public Safety and Maritime Personnel*
This web-based version of the classroom course offers an introductory view of the marine transportation system and the security requirements of maritime facilities located in rural communities. It details threats to the system, security levels, regulatory requirements, and other information designed to assist public safety responders and planners in their interface with navigable waterways.
- *MGT 335-W: Event Security Planning for Public Safety Professionals*
This self-paced, web-based course is designed to provide planning and management-level skills to officers from state and local law enforcement agencies.
- *PER 281-W: Homeland Security Terrorism Prevention Certificate for Law Enforcement*
The goal of the course is to build a common, minimum level of preparedness among the nation’s first responders in meeting the goals of the National Homeland Security Strategy.

Other Sector Training Resources

Chemical Sector Security Awareness Training

Web-Based Chemical Security Awareness Training

<https://chemsec.iac.anl.gov/chemsec/>

This web-based interactive tool is available free to chemical facilities nationwide to increase security awareness. The training is designed for all facility employees, not just those traditionally involved in security.

Dams Sector Security Awareness Training

- *Dams Sector: Security Awareness (IS-871.A)*
<https://training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=IS-871.a>
This FEMA course explains how security awareness is an important component of an overall risk management program. In addition, it provides owners and operators with information that assists in identifying security concerns, coordinating proper response, and establishing effective partnerships with local law enforcement and first responders.
- *Dams Sector Security Awareness Guide: A Guide for Owners and Operators*
<http://www.dhs.gov/publication/dams-sector-security-awareness-guide>
The Dams Sector Security Education Workgroup developed this guide to increase dam owners’ and operators’ security awareness by providing information on surveillance objectives, surveillance/suspicious activity indicators, and reporting incidents of surveillance/suspicious activity.

Other Security Training Resources

- **Federal Bureau of Investigation (FBI) Guide to Concealable Weapons**, FBI, 2003. Available at: <http://fas.org/irp/agency/doj/fbi/weapons.pdf>
- **DHS Bomb Threat Checklist**. Available at: http://emilms.fema.gov/is906/assets/ocso-bomb_threat_samepage-brochure.pdf
- **Improvised Explosive Device (IED) Safe Standoff Distance Cheat Sheet**, U.S. Army National Ground Intelligence Center.

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- **Terrorist Bomb Threat Standoff Card (Pocket Guide)**, Department of Defense Combating Terrorism Technical Support Office (CTTSO) Technical Working Group. Available at: <http://www.cttso.gov/?q=node/243>
- **Best Practices for Safe Mail Handling**, DHS Interagency Committee, September 2006. Available at: https://www.fbiic.gov/public/2010/nov/safe_Mail_Handling.pdf
- **Biological Attack Human Pathogens, Biotoxins, and Agricultural Threats**, National Academy of Sciences, 2004. Available at: www.nae.edu/nae/pubundcom.nsf/weblinks/CGOZ-642P3W?OpenDocument
- **Chemical Attack: Warfare Agents, Industrial Chemicals, and Toxins**, National Academy of Sciences, 2004. Available at: <http://www.nae.edu/File.aspx?id=11311>
- **Nuclear Attack**, National Academy of Sciences, 2004. Available at: <http://www.nae.edu/File.aspx?id=11313>
- **Radiological Attack: Dirty Bombs and Other Devices**, National Academy of Sciences, 2004. Available at: <http://www.nae.edu/File.aspx?id=11317>
- **Worker Training in a New Era: Responding to New Threats**, Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), NIOSH, October 2002. Available at: <http://www.cdc.gov/niosh/docs/2004-173/pdfs/2004-173.pdf>
- **Dirty Bombs Fact Sheet**, United States Nuclear Regulatory Commission, March 2003. Available at: <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-dirty-bombs.html>
- **Dirty Bombs—Fact Sheet**, Department of Health and Human Services, CDC, July 2003. Available at: <http://www.cdc.gov>
- **What You Should Do to Prepare for and Respond to Chemical, Radiological, Nuclear and Biological Terrorist Attacks**, RAND Corporation, 2003. Available at: http://www.rand.org/pubs/monograph_reports/MR1731z2.html
- **Suicide Bombing Awareness Guide**, Department of Homeland Security.

Training Center Resources

Local Technical Assistance Program (LTAP) and Tribal Technical Assistance Program (TTAP)

<http://www.ltap.org/>

The Local Technical Assistance Program (LTAP) and Tribal Technical Assistance Program (TTAP) are composed of a network of 58 Centers—one in every state, Puerto Rico, and regional Centers serving tribal governments. The LTAP/TTAP Centers provide a variety of training programs, an information clearinghouse, new and existing technology updates, personalized technical assistance, and newsletters. Each state is served by an LTAP and TTAP Center. Tribal groups are represented by one of the seven regional TTAP Centers. The LTAP website includes an interactive map to find the location and contact information for the LTAP/TTAP Center in each state or area.

<http://www.ltap.org/centers/>

A PDF version of the contact list is available at: http://www.ltap.org/downloads/FHWA_LTAPTTAP_Center_Handout.pdf (PDF size: 598K)

National Highway Institute (NHI)

1310 North Courthouse Road, Suite 300

Arlington, VA 22201

Phone (Local): (703) 235-0500

Phone (Toll-free): 1-877-558-6873

<http://www.nhi.fhwa.dot.gov/default.aspx>

The National Highway Institute (NHI), a division of the Federal Highway Administration (FHWA), provides transportation-related training in several formats including both classroom-based and online learning, as well as free web-based seminars and training materials.

Federal Highway Administration (FHWA)

FHWA Resource Center

<http://www.fhwa.dot.gov/resourcecenter/misc/training.cfm>

The FHWA Resource Center offers training and expert assistance in a variety of transportation technical areas. Training offerings are designed to meet the needs of FHWA Division offices, State DOTs, Metropolitan Planning Organizations, local agencies, and other customer segments throughout the United States.

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FHWA Highway Infrastructure and Emergency Management Professional Capacity Building Site
<http://www.fhwa.dot.gov/security/emergencymgmt/profcapacitybldg/#top>

The FHWA Professional Capacity Building Site provides security and emergency management training materials and documents with links to resources, websites, and information.

Transportation Security Administration (TSA) Office of Security Policy and Industry Engagement

The TSA Office of Security Policy and Industry Engagement leads the national effort to protect and secure the nation's intermodal transportation systems.

Highway Motor Carrier Branch, Office of Security Policy and Industry Engagement
<http://www.tsa.gov/stakeholders/highway-motor-carrier-branch>

The Highway Motor Carrier (HMC) Branch provides guidance and supporting information on highway and motor carrier security strategies and activities.

Other transportation systems supported by the Office include:

- Freight Rail—<http://www.tsa.gov/stakeholders/freight-rail>
- Port and Intermodal—<http://www.tsa.gov/stakeholders/port-and-intermodal>
- Mass Transit—<http://www.tsa.gov/stakeholders/mass-transit>
- Pipelines—<http://www.tsa.gov/stakeholders/pipeline-security>
- Air Cargo—<http://www.tsa.gov/stakeholders/air-cargo>
- Commercial Aviation—<http://www.tsa.gov/stakeholders/commercial-aviation>
- General Aviation—<http://www.tsa.gov/stakeholders/general-aviation>

Cross Modal Division (CMD)
<http://www.tsa.gov/stakeholders/cross-modal>

The CMD manages national transportation system counterterrorism protection and provides critical infrastructure and assessment data to support TSA risk management activities.

Department of Homeland Security (DHS)

Main phone number: 202-282-8000
<http://www.dhs.gov/topic/transportation-security>

The Department of Homeland Security was created to secure the nation with one goal: a safer, more secure America, which is resilient against terrorism and other potential threats.



APPENDIX C

Directory of Transportation Security Resources

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Transportation Security Guidance

Core guidance for transportation security training programs is available through federal security grant guidelines and transportation community practices. There are federal training requirements for security training of some transportation employees, predominantly for transit, HazMat, and food transporters.

NCHRP Report 525, Vol. 14, Security 101: A Physical Security Primer for Transportation Agencies (2010) includes an outline for a transportation security program, including suggested training elements for a state DOT security awareness program.

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_525v14.pdf

The transit community has established and adopted practices for security awareness training captured in the American Public Transportation Association’s *APTA Recommended Practice, Security Awareness Training for Transit Employees* (2012).

<http://www.apta.com/resources/standards/Documents/APTA-SS-SRM-RP-005-12.pdf>

The Department of Homeland Security National Terrorism Advisory System (NTAS) communicates 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. The NTAS 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.

- *NTAS Public Guide* provides an overview of the NTAS, NTAS Alerts, and frequently asked questions.
<http://www.dhs.gov/xlibrary/assets/ntas/ntas-public-guide.pdf>
- *NTAS Alerts* provide information to the public about threats, including, if available, the geographic region, mode of transportation, or critical infrastructure potentially affected by the threat; protective actions being taken by authorities; and steps that individuals and

communities can take to protect themselves and their families, and help prevent, mitigate, or respond to the threat.

<http://www.dhs.gov/national-terrorism-advisory-system>

Transportation Security Awareness Programs

There have been a number of national security awareness programs for both highway and transit in the past 10 years. This section provides an overview of the most commonly known programs.

If You See Something, Say Something™

One of the best security awareness campaigns has been the New York Metropolitan Transit Authority's "If You See Something, Say Something" campaign, which urges riders to tell a police officer or transit employee if they see anything suspicious. The MTA provided an easy-to-remember toll-free antiterrorism hotline telephone number, 1-800-NYC-SAFE, for riders to call.

Advertisement posters, in both English and Spanish, have been omnipresent on subways, commuter rails, and buses throughout the New York metropolitan region. Radio and television advertisements have also been aired from time to time.

The advertisements contain photographs of various types of suspicious bags and packages and offer specific instructions on what to look for, such as:

- Unattended packages or luggage.
- Suspicious behavior, such as someone nervously checking belongings.
- The wearing of inappropriate attire, such as bulky clothing in warm weather.
- Exposed wiring or other irregularities protruding from clothing, bags, or packages.
- Anyone tampering with surveillance cameras or entering unauthorized zones.

In 2010, DHS nationally launched "If You See Something, Say Something." Prior to the DHS launch, the program had been licensed and adopted by other transportation agencies.

According to DHS, the program is a simple and effective way "to engage the public and key frontline employees to identify and report indicators of terrorism and terrorism-related crime" and "to emphasize the importance of reporting suspicious activity to the proper transportation and law enforcement authorities."

First Observer™

Starting in 2008, DHS/TSA funded the First Observer™ program as a replacement for Highway Watch. The First Observer™ training program is a voluntary program designed to provide transportation professionals with information that will enable them to effectively observe, assess, and report suspicious individuals, vehicles, packages, and/or objects.

According to the DHS, the program is intended to:

- Teach transportation professionals to observe, assess, and report suspicious individuals, vehicles, packages, and objects via mechanisms where and when appropriate.
- Share security-related information with transportation professionals.
- Communicate critical security-related information.

Initially provided through both classroom and online training, starting in 2013 the First Observer™ program became available only through web-training modules. Along with a basic and general refresher course, there were modules designed for specific roles including



highway workers and such professionals working at Critical Infrastructure (CI)/Key Resources (KR) locations such as bridges, tunnels, etc. First Observer™ training is designed to be available online with 24/7 access for all surface transportation modes including highway motor carrier, mass transit, freight rail, maritime, and pipeline.

Highway Watch

Highway Watch was a national voluntary program administered by the American Trucking Associations (ATA) that trained truck drivers to become vigilant and aware of any security problems on U.S. highways. In 2003 DHS/TSA funded the Highway Watch program, expanding on the existing pre-2001 ATA safety program. The program had five major objectives:

1. Prevent commercial vehicles or cargo from being used as weapons against Americans.
2. Protect the nation's critical infrastructure of bridges, tunnels, and other potential terrorist targets.
3. Provide critical security data from the highway for information sharing and analysis.
4. Promote important safe driving skills and habits.
5. Improve coordination with federal, state, and local law enforcement officials.

Participants in the program received comprehensive security and safety training along with a unique identifying number to use to contact a 24-7-365 Call Center to report a highway incident or condition. The program was adopted and customized by some State DOTs to train their employees. Highway Watch was discontinued in 2008, replaced by First Observer™.



Transit Watch

Transit Watch was a nationwide “eyes and ears” security awareness campaign for transit passengers and employees originally launched in 2003, in partnership with the American Public Transportation Association (APTA) and the Amalgamated Transit Union (ATU), and then updated in 2006 in collaboration with DHS. The Transit Watch program identified “suspicious indicators” to help passengers and transit operators identify such behaviors and provided recommended “courses of action” if any were observed. The FTA website provided a Transit Watch tool kit containing a downloadable CD with the campaign logo and tag line, a brochure, signage and posters, a template press release and fact sheet, and a one-page guide entitled “5 Easy Steps to Launching Transit Watch.”



Suspicious Indicators from the U.S. Transit Watch Program

Behavior

If you spot any suspicious individuals engaged in questionable activity, look for the following:

- Visible signs of nervousness
- Excessive sweating
- Sprayer bottles or aerosol canisters
- Inappropriate clothing that is excessively baggy or too heavy in warm weather

Packages

If you spot an unattended package, look for the following:

- Placement in an out-of-the-way location
- Individuals in the act of abandoning the package and hastily departing the area
- Unusual attached batteries, wires, tanks, bottles, or bags that might contain chemicals
- An attached message
- A suspicious cloud, mist, gas, vapor, odor, or seeping fluid
- Nearby individuals showing signs of illness or distress

Recommended Course of Action

- Do not confront suspicious individuals.
- Contact a transit employee or the police immediately.
- In the event of a suspicious package, do not use a cellular phone until you are a safe distance away.

Source: Transit Watch Brochure, Federal Transit Administration, Washington, D.C.

Research Studies

“Security Awareness and Alertness Training in State Departments of Transportation” (Xin Chen, Shimon Y. Nof, Barry Partridge, Irvin Varkonyi, and Yuko J. Nakanishi, *Transportation Research Record: Journal of the Transportation Research Board*, No. 1942, 2006)

<http://trb.metapress.com/content/62444531144q4m03/>

This study provided a summary of how state DOTs train their employees for security awareness and alertness based on a 2004 survey of state DOTs. The purpose of the survey was to assist in the development of recommendations for a “comprehensive training program” and associated training materials for transportation security.

“Transportation Security Training and Education Resources, Techniques, and Strategies” (*TR News*, No. 238, May/June 2005)

<http://onlinepubs.trb.org/onlinepubs/trnews/trnews238.pdf>

This issue of *TR News* focuses on transportation security training and education and presents articles on programs and training techniques.

Table C-1. Security training content needs by audience.

Audience	Content Needs
Frontline	<ul style="list-style-type: none"> • Situational assessment of threats and incidents. • Observational skills and reporting dangerous substances, suspicious packages, and situations. • Appropriately reacting to all threats. • Proper use of security equipment or technology. <p>There was clear concern that training for frontline personnel not be too technical or provide too much in-depth information.</p>
Transportation Professionals Mid- to high-level managers and executives in operations, planning, safety, security, maintenance, and other related fields	<p>Same basic security awareness training as frontline employees, plus:</p> <ul style="list-style-type: none"> • Special high-level training and education needs in the area of security risk assessment and management, vulnerability assessment, and planning for resiliency. • May need to understand more clearly the difference between safety and security.
Contractors and Vendors	<ul style="list-style-type: none"> • Similar to frontline employee awareness training. • Reporting suspicious activity.
Emergency Responders	<ul style="list-style-type: none"> • Transportation system operations, hazards, and vulnerabilities. • Integrated communications and response practices/procedures. • Integrated incident management. <p>Needs for this group will not be much different from those of frontline employees in terms of emphasis on reporting suspicious and dangerous activities, but would vary in priority based on the proximity and access to critical infrastructure and operations (for maintenance workers) and to public areas.</p>

Source: "Assessment of Surface Transportation Security Training Needs and Delivery Preferences" (Lowrie et al., 2011)

"Assessment of Surface Transportation Security Training Needs and Delivery Preferences" (Karen W. Lowrie, Judy A. Shaw, and Michael R. Greenberg, CTSSR, Rutgers University, *Journal of Public Transportation*, Vol. 14, No. 4, 2011)
<http://www.nctr.usf.edu/wp-content/uploads/2011/12/Lowrie.pdf>

This study identified security training content needs and effective approaches through focus groups and interviews with representatives of 45 major surface transportation or security organizations, summarized in Table C-1 and Table C-2. The research recognized that all training approaches have challenges and identified ways to increase the effectiveness of each format.

TCRP Synthesis 80, Transit Security Update: A Synthesis of Transit Practice (2009)
http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_syn_80.pdf

This research synthesis, an update of the original *TCRP Synthesis of Transit Practice 21: Improving Transit Security* (1997), addresses terrorism and anticrime security measures and practices. Crime and security incident trends, major issues and obstacles to security and policing management, and employee security and policing training practices were identified and summarized.

Table C-2. Training format challenges and recommendations.

Training Format	Challenges	Recommendations
Instructor-Led Classroom Training	Expensive for agencies to pay for classroom training time.	<ul style="list-style-type: none"> • Designed to have flexible duration, for example, 10-minute modules that can be integrated into other meetings or trainings. • Incorporate into regular meetings or other training. • Offer shorter training and computer-based training, where possible.
Scenario-Based Training	Lack of mobility for managers or employees to attend training.	<ul style="list-style-type: none"> • Showing video of “live” scenarios is a viable alternative.
Online and Computer-Based Training	Lack of computer skills or limited access to computers.	<ul style="list-style-type: none"> • Keep computerized training simple and use it in combination with face-to-face training. • Post trainings online so they can be accessed easily from multiple or remote locations.
Webinars	Lack of face-to-face interaction.	<ul style="list-style-type: none"> • Allow for give-and-take and peer-to-peer learning found in classroom. • Balance with some face-to-face training.
Refresher Courses	Posting in locations where people will access them.	<ul style="list-style-type: none"> • Distribute bulletins, or distribute pocket guides that can be carried by employees. • Post refresher trainings online so they can be accessed easily from multiple or remote locations. Could be particularly useful for managers.

Source: “Assessment of Surface Transportation Security Training Needs and Delivery Preferences” (Lowrie et al., 2011)

Abbreviations and acronyms used without definitions in TRB publications:

A4A	Airlines for America
AAAAE	American Association of Airport Executives
AASHO	American Association of State Highway Officials
AASHTO	American Association of State Highway and Transportation Officials
ACI-NA	Airports Council International-North America
ACRP	Airport Cooperative Research Program
ADA	Americans with Disabilities Act
APTA	American Public Transportation Association
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
ATA	American Trucking Associations
CTAA	Community Transportation Association of America
CTBSSP	Commercial Truck and Bus Safety Synthesis Program
DHS	Department of Homeland Security
DOE	Department of Energy
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
HMCRRP	Hazardous Materials Cooperative Research Program
IEEE	Institute of Electrical and Electronics Engineers
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITE	Institute of Transportation Engineers
MAP-21	Moving Ahead for Progress in the 21st Century Act (2012)
NASA	National Aeronautics and Space Administration
NASAO	National Association of State Aviation Officials
NCFRP	National Cooperative Freight Research Program
NCHRP	National Cooperative Highway Research Program
NHTSA	National Highway Traffic Safety Administration
NTSB	National Transportation Safety Board
PHMSA	Pipeline and Hazardous Materials Safety Administration
RITA	Research and Innovative Technology Administration
SAE	Society of Automotive Engineers
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (2005)
TCRP	Transit Cooperative Research Program
TEA-21	Transportation Equity Act for the 21st Century (1998)
TRB	Transportation Research Board
TSA	Transportation Security Administration
U.S.DOT	United States Department of Transportation