

Transit Cooperative Research Program
Sponsored by the Federal Transit Administration
RESEARCH RESULTS DIGEST

May 2003—Number 59

Subject Areas: IA Planning and Administration and
VI Public Transit

Responsible Senior Program Officer: S. A. Parker

A Guide to Public Transportation Security Resources

This digest provides a listing of available or soon-to-be-available resources through various public transportation systems, organizations, associations, institutions, and other venues. It was prepared for TCRP Project J-10(3), "A Guide to Public Transportation Security Resources." This digest was prepared by McCormick, Taylor & Associates, Inc. (MTA) and authored by John N. Balog, Principal Investigator, and Jamie Beth Strongin.

CONTENTS

INTRODUCTION, 2

KEY PLAYERS, 2

FTA MULTI-PRONGED APPROACH, 2

APTA SECURITY INITIATIVES, 3

TRB SECURITY RESEARCH, 3

ORGANIZATION OF THIS GUIDE, 4

 Table 1: Training Institutions, 4

 Table 2: Study Organizations, 12

CONCLUSIONS, 12

TRB RESOURCES FOR EMERGENCY PREPAREDNESS, 20

INTRODUCTION

Since the attacks of September 11, 2001, public transportation systems across the nation have assessed and upgraded their security functions and capabilities. As a result, the transportation industry has produced an abundance of security-related resources, such as training courses and materials, guides, manuals, reports, projects, programs, seminars, and conferences.

The Transit Cooperative Research Program (TCRP) has recognized the need to organize this collective knowledge in a straightforward fashion. *A Guide to Public Transportation Security Resources* (Guide) lists many of the resources recently made available to public transportation systems across the United States. Transportation providers can now easily acquire and learn from these resources.

KEY PLAYERS

Numerous initiatives are underway to produce quality training courses and research-based materials concerning security in the public transportation industry. Leading actors involved in these recent transit security initiatives are the Federal Transit Administration (FTA) and the American Public Transportation Association (APTA). The FTA and APTA have produced many valuable security resources, a number of them through specific security-related TCRP projects.

Shortly after September 11, the APTA executive committee formed a Security Task Force (STF) under the leadership of Richard A. White, CEO of the Washington Metropolitan Area Transit Authority (Metro). The STF prioritized the direction for APTA's initiatives, including serving as the steering group for determining security projects implemented by more than \$2 million in TCRP funding.

Recent transportation security training programs and publication resources also have been produced by the following organizations:

- American Association of State Highway & Transportation Officials (AASHTO);
- Federal Highway Administration (FHWA);
- Federal Motor Carrier Safety Administration (FMCSA); and
- United States Department of Transportation (USDOT).

These four entities also support specific security-related research in the National Cooperative Highway Research Program (NCHRP) and the Commercial Truck and Bus Safety Synthesis Program (CTBSSP).

For instance, AASHTO formed its own STF, which steered \$2.25 million in FY2002/2003 NCHRP projects. AASHTO's STF, chaired by Missouri Department of Transportation (DOT) Director Henry Hungerbeeler, was formed to coordinate the assessment of state security needs and the development of guidelines for hardening security at key transportation infrastructure.

The Transportation Research Board (TRB) manages the TCRP, NCHRP, and CTBSSP research programs on behalf of their sponsors.

Other producers of important resources in the transportation security arena include the Transportation Safety Institute (TSI), FTA-funded transit programs at the USDOT, and the FTA-funded National Transit Institute (NTI), based out of Rutgers, The State University of New Jersey. The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) established NTI in order to support the national training and development needs of the public transportation industry.

The Transportation Security Administration (TSA) is developing surface transportation security resources. The Aviation and Transportation Security Act (ATSA) of November 19, 2001, established TSA within the US DOT. It moved to the Department of Homeland Security in March 2003.

FTA MULTI-PRONGED APPROACH

Since September 11, FTA has moved forward with security program initiatives, which provide context, as well as substantive information, for developing scalable guidelines in the areas of

- Access management and credentialing,
- Transportation design and infrastructure,
- Systems integration,
- Bus vehicle security systems,
- Rail vehicle security systems, and
- Communications.

FTA has established relationships and is working with USDOT's Research and Special Programs Administration (RSPA) and USDOT's John A. Volpe National Transportation Systems Center (Volpe) to accomplish initiatives in each of these focus areas. Trade associations, such as APTA and the Community Transportation Association of America (CTAA), have also adopted a comprehensive approach to transportation security and have coordinated with FTA on numerous projects.

FTA-sponsored projects began under an aggressive five-part initiative to enhance the security

of the nation's public transportation systems and help public transportation agencies cope with new threats, emphasizing

- Assessment,
- Planning,
- Testing,
- Training, and
- Technology.

These five approaches have been outlined and addressed by specific projects.

For instance, at the close of 2001, FTA began to deploy expert security assessment teams to the 32 largest transit systems in the United States. The teams used proven threat and vulnerability assessment methodologies to assess the security gaps in high-consequence assets owned by the systems. They also made specific recommendations for reducing risks to acceptable levels.

On the planning side, FTA took the TCRP update of two recent FTA publications, adapted to FTA's priorities, and in January 2003 posted on the FTA website the *Public Transportation System Security and Emergency Preparedness Planning Guide*.

To satisfy the training element of its multi-pronged approach, FTA launched a series of conferences titled *Connecting Communities: Emergency Preparedness and Security Regional Forums*. These regional forums began in May 2002 in Orlando, Florida, and continued on to 16 additional cities across the country. The forums are designed to educate mid-size transit agency management and security personnel, police and fire personnel responsible for emergency management coordination, emergency medical services and hospital disaster relief facilitators, and state and local government emergency management coordinators.

In addition, FTA, through NTI, sponsors the development and delivery of two transit-specific training courses for front-line employees and supervisors—"System Security Awareness for Transit Employees" and "Security Incident Management for Transit Supervisors." These courses and the accompanying materials are available to transit organizations free of charge through NTI. They were designed specifically for the transit industry in cooperation with federal agencies, including FTA, FAA, and the FBI; transit agencies; labor unions; and security professionals.

APTA SECURITY INITIATIVES

Prior to the attacks of September 11, APTA was already familiar with establishing security-related programs and activities. APTA had formed a

standing committee on transit security called the Committee on Public Safety. Other groups within APTA, such as the Rail Safety Committee and Bus Safety Committee, also supported the similar security functions of information sharing and resource development of emergency response preparedness activities.

In addition to these earlier, ongoing initiatives, the September 11 acts of terrorism prompted APTA's Executive Committee to immediately form its current STF. Projects sponsored through TCRP have included an International Transit Associations Security Summit and projects in the categories of Prevention and Mitigation and Preparedness and Response.

Other current and ongoing security issues addressed by the APTA Executive Committee STF include the industry's need for effective security intelligence information and the implementation of expected TSA requirements for a national Transportation Worker Identification Credential (TWIC) for transit employees who work in secure areas.

Earlier this year, USDOT designated APTA as Sector Coordinator to promote physical and cyber security for the public transportation industry. Under a grant from FTA, APTA has retained counter-terrorism and intelligence community experts to operate the Information Sharing and Analysis Center (ISAC) for the sharing of security-related intelligence information among various decision-making transportation entities.

TRB SECURITY RESEARCH

From within the National Academies, TRB has coordinated security-related research on behalf of FTA and APTA through TCRP, and on behalf of AASHTO and FHWA through NCHRP. TCRP and NCHRP are applied, contract research programs that develop near-term, practical solutions to problems facing transportation agencies.

The objective of TCRP's and NCHRP's major security-related endeavors, Projects J-10 and 20-59, respectively, is to provide flexible, ongoing, quick-response research on transportation issues related to emergency incident prevention, preparedness, response, and recovery, paying particular attention to potential terrorist threats. Project listings are found in Tables 1 and 2.

Additionally, TRB and FMCSA collaborated to create the Commercial Truck and Bus Safety Synthesis Program (CTBSSP). This new research effort was authorized in late 2001 and began in 2002 in support of the FMCSA's safety research programs.

The CTBSSP initiates three to four synthesis studies annually that address concerns in the area of commercial truck and bus safety. A synthesis report is a relatively short document (40 to 60 pages) that summarizes existing practice in a specific technical area based typically on a literature search and a survey of relevant organizations (e.g., state DOTs, enforcement agencies, commercial truck and bus companies, or other organizations appropriate for the specific topic).

Many new resources are available or under development through the cooperative research programs. The TRB Transportation System Security website brings together much of this information. It includes links to related websites that contain discussions of issues, actions that can be taken, guidance, and training opportunities. The TRB Transportation System Security website is sponsored by the TRB Committee on Critical Transportation Infrastructure Protection and is updated regularly.

ORGANIZATION OF THIS GUIDE

Many organizations, such as the ones mentioned above, have already invested available funds to develop quality security-related training courses and research projects. Others are still completing the development of security resources intended for use by the transportation industry. Most of these valuable resources, both completed and in process, are identified throughout this Guide.

Tables 1 and 2 are provided for reference. Table 1 provides information on available training; Table 2 provides information on research conducted. Organizations are listed alphabetically.

Table 1: Training Institutions

Table 1 lists organizations, such as universities, associations, government groups, and other institutions that have delivered and provided courses

and training sessions on public transportation security topics. Table 1 is not intended to be a comprehensive list of the institutions and companies offering security-related public transportation training courses and programs. However, the information presented in Table 1 is representative of the type of security training currently available to public transportation systems.

For more information, readers may also want to visit the following websites:

- ◆ APTA Public Transportation Security Issues: apta.com/services/security
- ◆ FHWA Operations Security: ops.fhwa.dot.gov/OpsSecurity
- ◆ FTA Transit Security: www.transit-safety.volpe.dot.gov/Security
- ◆ TRB Transportation System Security: www4.trb.org/trb/homepage.nsf/web/security
 - TCRP Public Transportation Security Research: www4.trb.org/trb/crp.nsf/All+Projects/TCRP+J-10
 - NCHRP Surface Transportation Security Research: www4.trb.org/trb/crp.nsf/All+Projects/NCHRP+20-59
- ◆ TSA: www.tsa.gov

TABLE 1 Security training sponsors and institutions

SPONSOR:	American Association of State Highway and Transportation Officials (AASHTO)
INSTITUTION:	AASHTO in conjunction with the National Highway Institute (NHI)
CONTACT INFORMATION:	Dr. Anthony R. Kane (Tony) Director, Engineering and Technical Services 444 N. Capitol Street, NW, Suite 249 Washington, DC 20001 202-624-5812, f. 202-624-5469 akane@aaashto.org www.transportation.org/aashto/home.nsf
TITLE/AVAILABILITY:	Transportation Security Course/2003

Also see NCHRP and NTI for other courses sponsored and co-sponsored by AASHTO.

SPONSOR:	American Public Transportation Association (APTA)
INSTITUTION:	APTA
CONTACT INFORMATION:	Vivienne Williams 1666 K Street, NW, Suite 1100 Washington, DC 20006 202-496-4857, f. 202-496-4331 vwilliams@apta.com www.apta.com/
TITLE/AVAILABILITY:	Risk Management Seminar

Also see TCRP and FLETC for other courses sponsored and co-sponsored by APTA.

SPONSOR:	Bay Area Rapid Transit (BART)
INSTITUTION:	BART
CONTACT INFORMATION:	See below
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • ACT Program – Security Awareness Training for Front-Line Operations Employees and Managers/2002 Melissa Miller Marketing, BART 800 Madison Street Oakland, CA 94604 510-464-7161 mmiller@bart.gov • Nuclear, Biological, and Chemical (NBC) Training for Front-Line Employees/by written request Anthony Cooper Digital Media Employee Development Specialist, BART 150 Sandoval Way, HTC Building #2 Hayward, CA 94544 510-476-3725 ACooper@bart.gov

TABLE 1 continued

SPONSOR:	Community Transportation Association of America (CTAA)
ORGANIZATION:	CTAA
CONTACT INFORMATION:	Scott Bogren Associate Director of Communications 1341 G Street, NW, 10 th Floor Washington, DC 20005 202-661-0204, f. 202-737-9197 bogren@ctaa.org www.ctaa.org
TITLE /AVAILABILITY:	Emergency Evacuation Workshop
SPONSOR:	Federal Emergency Management Agency (FEMA)
INSTITUTION:	FEMA
CONTACT INFORMATION:	500 C Street, SW Washington, DC 20472 202-566-1600 webmaster@fema.gov www.fema.gov/
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • Emergency Responders Courses/2002 • Terrorism Training and Resources/2002
SPONSOR:	Federal Highway Administration (FHWA)
INSTITUTION:	National Highway Institute (NHI)
CONTACT INFORMATION:	Rick Barnaby, Team Leader of State Programs, and Danielle Mathis-Lee, NHI Scheduler Arlington Center Building 4600 N Fairfax Drive, Suite 800 Arlington, VA 22203 703-235-0528, f. 703-235-0593 nhi.scheduler@fhwa.dot.gov www.nhi.fhwa.dot.gov
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • Incident Management Course/2002 • Transportation Security Course/2003
SPONSOR:	Federal Law Enforcement Training Center (FLETC)
INSTITUTION:	FLETC Security Specialties Division
CONTACT INFORMATION:	Federal Law Enforcement Training Center Building 67, Glynco, GA 31524 www.fleetc.gov <ul style="list-style-type: none"> • Susan Davis, Program Specialist 912-267-3186, f. 912-267-3114 sdavis@fleetc.treas.gov • Training Admissions Specialist (federal) Training and Analysis Coordination Division 912-267-2421 pnewman@fleetc.treas.gov • Training Technician (state and local) Office of State and Local Training 912-261-4522 aharper@fleetc.treas.gov

TABLE 1 continued

TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • Critical Incident Response Training Program (CIRTP)/2002 • Critical Infrastructure Protection Training Program (CIPTP)/2002 • Crisis Management Training Program (CMTP)/2002 • Land Transportation Antiterrorism Training Program (LTATP)/2002 • Law Enforcement Media Relations Training Program (LEM RTP)/2002 • Physical Security Training Program (PSTP)/2002 • Seaport Security Antiterrorism Training Program (SSATP)/2002 • Weapons of Mass Destruction Training Program (WMDTP)/2002
----------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Contact FLETC for a current schedule.

These training courses are considered to be law enforcement sensitive by the FLETC and are only available to personnel sponsored by a federal law enforcement agency.

SPONSOR:	Federal Transit Administration (FTA)
INSTITUTION:	FTA
CONTACT INFORMATION:	400 Seventh Street, SW Washington, DC 20590 www.fta.dot.gov <ul style="list-style-type: none"> • Harry Saporta Office of Safety & Security 202-366-2233, f. 202-366-4380 harry.saporta@fta.dot.gov • Michael Taborn 202-366-3526 Michael.Taborn@fta.dot.gov
TITLE/AVAILABILITY:	Connecting Communities: Emergency Preparedness and Security Forums/2002

Also see TRB (TCRP), APTA, CTA, NTI, TSI, Volpe, and others for additional courses sponsored and co-sponsored by FTA.

SPONSOR:	Cambria County Transit Authority (CCTA or CamTran)
INSTITUTION:	CCTA or CamTran
CONTACT INFORMATION:	For video and workbook materials, contact: James Parks Director of Operations, CamTran 726 Central Avenue Johnstown, PA 15902 814-535-5526, ext. 214 jparks726@hotmail.com
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • Introduction to Urban Transit Bus Accident Experience: Emergency and Accident Procedures Training • Emergency and Accident Procedures Training for the Neoplan Corporation Urban Transit Bus • Emergency and Accident Procedures Training for the Flxible Corporation Urban Transit Bus • Emergency and Accident Procedures Training for the GMC/RTS Corporation Transit Bus

TABLE 1 continued

SPONSOR:	Institute for Catastrophic Loss Reduction (ICLR)
INSTITUTION:	ICLR
CONTACT INFORMATION:	<p>info@iclr.org www.iclr.org</p> <ul style="list-style-type: none"> • Toronto office 151 Yonge Street, Suite 1900 Toronto, Canada M5C 2W7 416-362-6112, f. 416-361-5952 • London office 1389 Western Road London, Canada N6A 5B9 519-661-3234, f. 519-661-4273
TITLE/AVAILABILITY:	Dealing with Disasters (Workshop)/ 2002
SPONSOR:	National Transit Institute (NTI)
INSTITUTION:	NTI
CONTACT INFORMATION:	<p>Renee Haider and Chris Kozub Assistant Directors of Workplace Safety & Security 120 Albany Street, 7th Floor, Suite 705 New Brunswick, NJ 08901-2163 732-932-1700 (exts. 23 & 49), f. 732-932-1707 rhaider@nti.rutgers.edu and ckozub@nti.rutgers.edu www.ntionline.com</p>
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • System Security Awareness for Transit Employees (instructor-led and interactive CD-ROM training versions) • System Security Awareness for Commuter Rail Employees • System Security Awareness for Transportation Workers • System Security Awareness for Ferry System Employees • System Security Awareness for Motorcoach Company Employees • Security Incident Management for Transit Supervisors • Security Incident Management for Transportation Supervisors • Security Incident Management for Motorcoach Company Supervisors • Violence in the Transit Workplace • Safety Conscious Planning • ITS for Transit: Solving Real Problems
SPONSOR:	New York Metropolitan Transit Authority (NYMTA) Police Department
INSTITUTION:	NYMTA Police Department
CONTACT INFORMATION:	<p>James D. O'Donnell Chief, NY MTA Police 212-878-1146 jodonnell@mtahq.org</p>
TITLE/AVAILABILITY:	Emergency First Responder Training/2002

TABLE 1 continued

SPONSOR:	Regional Transportation District (RTD) – Denver, CO
INSTITUTION:	RTD-Denver
CONTACT INFORMATION:	John Tarbert Manager, System Security 1600 Blake Street Denver, CO 80202 303-299-2379, f. 303-299-2961 john.tarbert@rtd-denver.com
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • Industrial Terrorism Awareness [produced in conjunction with the Rocky Mountain Education Center and Occupational Safety and Health Administration (OSHA) Training Institute] • Emotionally Disturbed Persons • Bomb Threat Emergency Procedure • Security and Public Transportation • Suspicious Mail and Packages Training • Violence in the Workplace: A Manager's Approach to a Safe Environment • Suspicious Packages
SPONSOR:	Public Entity Risk Institute (PERI)
INSTITUTION:	PERI
CONTACT INFORMATION:	11350 Random Hills Road, #210 Fairfax, VA 22030 703-352-1846, f. 703-352-6339 www.riskinstitute.org
TITLE/AVAILABILITY:	Evaluating Community Emergency Services (Internet Symposium)/2002
SPONSOR:	Somerset County Division of Transportation (Bridgewater, NJ)
INSTITUTION:	Somerset County Division of Transportation
CONTACT INFORMATION:	For video and workbook materials, contact: Yvonne C. Manfra Transportation Director Somerset County Division of Transportation 750 East Main Street, Bridgewater, NJ 08807 908-231-7116, f. 908-302-0509 manfra@co.somerset.nj.us
TITLE/AVAILABILITY:	Paratransit Driver Emergency Evacuation Procedures (ParaDEEP) Training Course/1997
SPONSOR:	The Infrastructure Security Partnership (TISP)
INSTITUTION:	TISP
CONTACT INFORMATION:	1801 Alexander Bell Drive Reston, VA 20191 703-295-6234, f. 703-295-6276 tisponline@asce.org www.tisp.org
TITLE/AVAILABILITY:	First Annual TISP Congress on Infrastructure Security in the Built Environment/2002

TISP is sponsored by the American Society of Civil Engineers (ASCE).

TABLE 1 continued

SPONSOR:	The International Emergency Management Society (TIEMS)
INSTITUTION:	TIEMS
CONTACT INFORMATION:	PO Box 2777 Solli, N-0204 Oslo, Norway www.tiems.org
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • Disaster Management, Planning for Emergencies and Crisis: Facing the Realities of the Third Millennium – Ninth World Conference on Emergency Management/2002 • Emergency Management in a Changing World – Tenth World Conference on Emergency Management/2003
TIEMS is affiliated with George Washington University (GWU).	
SPONSOR:	Transportation Safety Institute (TSI)
INSTITUTION:	TSI Transit Safety and Security Division
CONTACT INFORMATION:	PO Box 25082 Oklahoma City, OK 73125-9967 405-954-3682, f. 405-954-0367 transit@tsi.jccbi.gov www.tsi.dot.gov
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • Crime Prevention Through Environmental Design Seminar/2002 • Effectively Managing Transit Emergencies/2001 • Emergency Response and Access to Alternative Fuels, Facilities, and Equipment/2002 • Response to Weapons of Mass Destruction/2002 • Transit Bus System Safety/2002 • Threat Management and Emergency Response to Bus Hijackings Seminar/2000 • Threat Management and Emergency Response to Rail Hijackings Seminar/2002 • Transit Explosives Incident Management Seminar/2002 • Transit Rail Incident Investigation/2002 • Transit System Security/2001
Contact TSI for current schedules.	
SPONSOR:	United States Army Medical Research Institute of Chemical Defense (USAMRICD)
INSTITUTION:	Chemical Casualty Care Division
CONTACT INFORMATION:	USAMRICD ATTN MCMR-UV-ZM 3100 Ricketts Point Road Aberdeen Proving Ground, MD 21010-5400 410-436-2230, f. 410-436-3086 CCC@apg.amedd.army.mil http://ccc.apgea.army.mil
TITLE/AVAILABILITY:	Field Management of Chemical and Biological Casualties Course (FCBC)/2003

TABLE 1 continued

SPONSOR:	United States Office of Personnel Management
INSTITUTION:	Eastern Management Development Center (EMDC)
CONTACT INFORMATION:	Barbara Smith Director, EMDC 101 Lowe Drive Shepherdstown, WV 25443-9601 304-870-8000 emdc@opm.gov www.leadership.opm.gov
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • Alternative Dispute Resolution • Homeland Defense: Critical Infrastructure Protection • Homeland Defense: Understanding the Enemy <p>Contact EMDC for current schedules.</p>
INSTITUTION:	Federal Executive Institute (FEI)
CONTACT INFORMATION:	Joe Riddle Acting Director, FEI 1301 Emmet Street Charlottesville, VA 22903-4899 434-980-6200 fei@opm.gov www.leadership.opm.gov
TITLE/AVAILABILITY:	Collaborating Across Organizational Boundaries/2003
INSTITUTION:	Western Management Development Center (WMDC)
CONTACT INFORMATION:	Joe Wienand Director, WMDC Cherry Creek Place 151 South Vaughn Way, Suite 300 Aurora, CO 80014-3513 303-671-1010 wmdc@opm.gov www.leadership.opm.gov
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • Conflict Resolution Skills: Positive Approaches to Difficult People • Countering Terrorism Conference • National Security Policy: A Strategic Overview • Understanding Weapons of Mass Destruction <p>Contact WMDC for current schedules.</p>
SPONSOR:	West Virginia Department of Transportation (WVDOT)
INSTITUTION:	WVDOT
CONTACT INFORMATION:	Susan O'Connell Director, Public Transit Division Building 5, Room A-104D Capitol Complex Charleston, WV 25305-0128 304-558-0428, f. 304-558-0174 soconnell@dot.state.wv.us www.state.wv.us/wvdot
TITLE/AVAILABILITY:	Transit and Terrorism: Threat Management and Emergency Response/2001

Table 2: Study Organizations

Table 2 represents organizations, such as associations, government bodies, individual state DOTs, and others that have played an active role in providing valuable resources to public transportation systems regarding security topics.

Table 2 also is not comprehensive. However, it does include those organizations believed to be representative of the industry's current state of the art with some emphasis on those that have made the largest impact on the public transportation security environment since the terrorist attacks of September 11, 2001.

CONCLUSIONS

Most resources listed in this Guide address security issues regarding terrorist activity, which has been the focus of the public transportation industry since the attacks of September 11. However, many of the training programs and published works can also relate to natural disasters and accidents. This all-hazards approach can include a transportation industry response to earthquakes, hurricanes, tornadoes, floods, collisions, derailments, hazardous material spills, and releases. The public transportation industry, applying the resources in this Guide, can better support the various emergency needs in the communities it serves.

TABLE 2 Organizations producing security-related resources

SPONSOR:	American Association of State Highway and Transportation Officials (AASHTO)
ORGANIZATION:	AASHTO
CONTACT INFORMATION:	Dr. Anthony R. Kane (Tony) Director, Engineering and Technical Services 444 N. Capitol Street, NW, Suite 249 Washington, DC 20001 202-624-5812, f. 202-624-5469 akane@aaashto.org security.transportation.org
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • TRB/AASHTO Security Survey/2001 • National Needs Assessment for Ensuring Transportation Infrastructure Security/2003 • A Guide to Updating Highway Emergency Response Plans for Terrorist Incidents/2002 • A Guide to Highway Vulnerability Assessment for Critical Asset Identification and Protection/2002

Also see TRB (NCHRP), which is sponsored by AASHTO.

TABLE 2 continued

SPONSOR:	American Public Transportation Association (APTA)
ORGANIZATION:	APTA
CONTACT INFORMATION:	Greg Hull Director, Operations Safety and Security Programs 1666 K Street, NW, Suite 1100 Washington, DC 20006 202-496-4815, f. 202-496-4323 ghull@apta.com www.apta.com
TITLE/ AVAILABILITY:	<ul style="list-style-type: none"> • America Under Threat: Transit Responds to Terrorism (Passenger Transport Special Report)/2001 • Checklists for Emergency Response Planning and System Security/2001 • Control of Public Space/1999 • National Summit Looks at Surface Transportation Security Issues/2001 • Resource Kit: Emergency Preparedness Plans (CD-ROM)/2000 • The Use of Technology in Preparing Subway Systems for Chemical/Biological Terrorism/1999 • Transit Industry Prepares for Anniversary of Sept. 11 with Increased Security (Passenger Transport Article)/2002 • Transit Safety in the Wake of September 11th/2001 • Contractor's Report on the 2002 APTA/FTA Security Workshops: New York City, San Francisco, Atlanta, Chicago/2002 • Security White Paper on Public Transportation System Nuclear, Biological, and Chemical Decontamination Procedures/2002 • Security White Paper on Public Transportation System Technology Clearinghouse/2002 • International Transportation Associations Transit Security Summit/2002

Also see TRB (TCRP), which is co-sponsored by APTA.

SPONSOR:	Argonne National Laboratory (ANL)
ORGANIZATION:	ANL
CONTACT INFORMATION:	Tony Policastro Environmental Assessment 9700 S. Cass Avenue Argonne, IL 60439 630-252-2000, f. 630-252-3379 policastro@anl.gov www.anl.gov
TITLE/AVAILABILITY:	Guidelines for Managing Suspected Chemical and Biological Agent Incidents in Rail Tunnel Systems/2001

This document is considered to be law enforcement sensitive by the FTA. It is only available to the General Managers of Transit Systems and the Chiefs of Transit Security.

TABLE 2 continued

SPONSOR:		Center for Urban Transportation Research (CUTR)
ORGANIZATION: CONTACT INFORMATION:	CUTR Dr. Steven E. Polzin Deputy Director, Institutes University of South Florida 4202 E. Fowler Ave., CUT 100 Tampa, FL 33620-5375 813-974-3120, f. 813-974-5168 polzin@cutr.eng.usf.edu www.cutr.eng.usf.edu/research/nuti/nuti.htm	
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • Cops, Cameras, and Enclosures: A Synthesis of the Effectiveness of Methods to Provide Enhanced Security for Bus Operators/2001 • Perceptions of Transit Safety/2001 	
SPONSOR:		Community Transportation Association of America (CTAA)
ORGANIZATION: CONTACT INFORMATION:	CTAA Scott Bogren Associate Director of Communications 1341 G Street, NW, 10 th Floor Washington, DC 20005 202-661-0204, f. 202-737-9197 bogren@ctaa.org www.ctaa.org	
TITLE /AVAILABILITY:	<ul style="list-style-type: none"> • Preparedness (special issue of Community Transportation magazine) www.ctaa.org/ct/winter2002 • Emergency Preparedness for Older People (Issue Brief) • CTAA's Community Transportation Training and Safety Review Program 	
SPONSOR:		Federal Emergency Management Agency (FEMA)
ORGANIZATION: CONTACT INFORMATION:	FEMA 500 C Street, SW Washington, DC 20472 202-566-1600 webmaster@fema.gov www.fema.gov	
TITLE/AVAILABILITY:	A Nation Prepared: FEMA Strategic Plan/FY 2003-2008	
RESOURCE SPONSOR:		Federal Highway Administration (FHWA)
ORGANIZATION: CONTACT INFORMATION:	FHWA David Price Program Manager for Transportation Security Office of the Administrator 400 Seventh Street, SW Washington, DC 20590 202-366-0507, f. 202-493-2084 david.price@fhwa.dot.gov www.fhwa.dot.gov/OpsSecurity	
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • Intelligent Transportation System (ITS)/Operations Resource Guide/2001 • What Have We Learned About Freeway, Incident, and Emergency Management and Electronic Toll Collection? – Chapter 2 of What Have We Learned About Intelligent Transportation Systems?, in conjunction with US DOT/2001 	

TABLE 2 continued

See TRB (NCHRP). FHWA sponsors NCHRP research activities.

SPONSOR:	Federal Motor Carrier Safety Administration (FMCSA)
ORGANIZATION:	FMCSA
CONTACT	Martin Walker
INFORMATION:	Chief, Research Division FMCSA Administration 400 Virginia Avenue, SW, MC-RTT, Suite 600 Washington, DC 20024 202-358-5018 martin.walker@fmcsa.dot.gov
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • Commercial Truck and Bus Safety Synthesis Program (CTBSSP), Synthesis 2, Security Measures in the Commercial Truck and Bus Industry/2003 • Hazardous Materials Risk Assessment
SPONSOR:	Federal Transit Administration (FTA)
ORGANIZATION:	FTA
CONTACT	Lewis Clopton
INFORMATION:	Office of Research Management 400 Seventh Street, SW, Room 9407 C Washington, DC 20590 202-366-9157, f. 202-366-3765 www.transit-safety.volpe.dot.gov/Security
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • Advanced Public Transportation Systems: The State of the Art Update/2000 • Assessment of ITS Architecture for Security Systems/2003 • Communication of Threats: A Guide – TCRP Report 86: Public Transportation Security: Volume 1/2002 • Criteria for Safe Placement of Transit Centers and Shops/2003 • Critical Incident Management Guidelines/1998 • Design Specifications and Requirements for Transit Systemwide Security/2003 • Evacuation and Rescue of Elderly and Disabled Passengers from Paratransit Vans and Buses/1984 • Incorporating Security into the Oversight Program/2000 • ITS Integration Program – Security/2003 • K9 Units in Public Transportation: A Guide for Decision Makers – TCRP Report 86: Public Transportation Security: Volume 2/2002 • Post 9/11 Security Initiative (article)/2002 • PROTECT Communication System (Pending Approval FY02)/2003 • PROTECT [Department of Defense (DOD) Supplemental]/2003 • Public Transportation System Security and Emergency Preparedness Planning Guide/2003 • Real-time Communication for Emergency Response/2003 • Standard Protocols for Managing Security Incidents Involving Surface Transit Vehicles (Volpe), co-sponsored with US DOT/2002 • System Management & Operations Security/2003

TABLE 2 continued

TITLE/AVAILABILITY (continued):	<ul style="list-style-type: none"> • Transit Passenger Security (Proposed)/2003 • Transit Security Handbook/1998 • Transit Security Procedures Guide/1994 • Transit System Security Program Planning Guide/1994 • Transit Security Technology Research/2003 • Transit Standards Consortium for Counter-Terrorism/2002 • Trespass Intrusion Detection Systems/2003 • Tunnel Ventilation re: Lethal Substance Incidents/2003
----------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Also see TRB (TCRP), NTI, TSI, and Volpe for security research activities sponsored and co-sponsored by FTA.

SPONSOR: **Mineta Transportation Institute (MTI)**

ORGANIZATION: MTI
CONTACT INFORMATION: Brian Michael Jenkins
Principal Investigator, Security Research
San José State University
PO Box 1055
Beverly Hills, CA 90213
408-924-7560, f. 408-924-7565
iistps@iistps.cob.sjsu.edu
transweb.sjsu.edu/mithome.htm

TITLE/AVAILABILITY:

- MTI Report 01-14: Protecting Public Surface Transportation Against Terrorism and Serious Crime: An Executive Overview/2001
- MTI Report 01-07: Protecting Public Surface Transportation Against Terrorism and Serious Crime: Continuing Research on Best Security Practices/2001
- MTI Report 97-04: Protecting Surface Transportation Systems and Patrons from Terrorist Activities/1997

SPONSOR: **National Academies Press (NAP)**

ORGANIZATION: National Research Council (NRC)
CONTACT INFORMATION: S. A. Parker
Senior Program Officer, Cooperative Research Programs
Transportation Research Board of the National Academies
Keck Center
500 Fifth Street, NW
Washington, DC 20001
202-334-2554, f. 202-334-2006
saparker@nas.edu
www.nationalacademies.org/trb/ or www.trb.org

TITLE/AVAILABILITY:

- Countering Terrorism: Lessons Learned from Natural and Technological Disasters/2002
- High-Impact Terrorism: Proceedings of a Russian-American Workshop (in conjunction with the Office for Central Europe and Eurasia Development and in cooperation with the Russian Academy of Sciences)/2002
- Protecting People and Buildings from Terrorism: Technology Transfer for Blast-effects Mitigation/2001

Also see TRB. NAP is responsible for printing most TRB publications.

TABLE 2 continued

SPONSOR:	National Infrastructure Protection Center (NIPC)
ORGANIZATION: CONTACT INFORMATION:	NIPC Steve York Training Unit J. Edgar Hoover Building 935 Pennsylvania Avenue, NW Washington, DC 20535-0001 202-324-9198, f. 202-323-2079 nipc.watch@fbi.gov www.nipc.gov
TITLE/AVAILABILITY:	Critical Foundations: Protecting America's Infrastructures by the Report of the President's Commission on Critical Infrastructure Protection (unclassified version with likely classified annexes)/1997
SPONSOR:	National Transit Institute (NTI)
ORGANIZATION: CONTACT INFORMATION:	NTI National Transit Institute Rutgers, The State University of New Jersey 120 Albany Street New Brunswick, NJ 08901-2163 732-932-1700 safety@nti.rutgers.edu www.ntionline.com
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • Employee Guide to System Security (Versions for Bus Operations, Bus Maintenance, Light Rail, Heavy Rail, and Commuter Rail) • WARNING SIGNS (A 15-minute fast-paced video presentation on the key aspects of system security for transit employees)
SPONSOR:	Texas Transportation Institute (TTI)
ORGANIZATION: CONTACT INFORMATION:	TTI Texas A&M University System 3135 TAMU College Station, TX 77843-3135 979-845-4853, f. 979-845-9356 tti.tamu.edu
TITLE/AVAILABILITY:	Emergency Management Planning for Texas Transit Agencies: A Guidebook/1999
SPONSOR:	Transportation Research Board (TRB)
ORGANIZATION: CONTACT INFORMATION:	TRB S. A. Parker Senior Program Officer, Cooperative Research Programs Transportation Research Board of the National Academies Keck Center 500 Fifth Street, NW Washington, DC 20001 202-334-2554, f. 202-334-2006 saparker@nas.edu www.nationalacademies.org/trb/ or www.trb.org

TABLE 2 continued

TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • Commercial Truck and Bus Safety Synthesis Program (CTBSSP), Synthesis 2, Security Measures in the Commercial Truck and Bus Industry/2003 • Making the Nation Safer: The Role of Science and Technology in Countering Terrorism/2002 • Securing Intermodal Connections: Meeting the Challenges of Rail-Aviation Passenger Facilities/2001 • Transportation Research Information Services (TRIS) Database • Transportation Security Workshops and Sessions at the Annual TRB Meeting/2002/2003 • TRB/AASHTO Security Survey/2001 • TRB Special Report 270: Deterrence, Protection, and Preparation: The New Transportation Security Imperative/2002
ORGANIZATION:	National Cooperative Highway Research Program (NCHRP) Surface Transportation Security Projects
CONTACT INFORMATION:	www.trb.org/trb/crp-nsf/All+Projects/NCHRP+20-59
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • A Guide to Updating Highway Emergency Response Plans/2002 • A Guide to Highway Vulnerability Assessment for Critical Asset Identification and Protection/2002 • Project 20-59(2): Bridge/Tunnel/Highway Infrastructure Vulnerability Workshops/2003 • Project 20-59(5): National Needs Assessment for Ensuring Transportation Infrastructure Security/2002 • Project 20-59(8): Emergency Transportation Operations Preparedness and Response Workshops for Statewide Applications/2003 • Project 20-59(10): Secure Communication Infrastructure/2003
ORGANIZATION:	Transit Cooperative Research Program (TCRP) Public Transportation Security Projects
CONTACT INFORMATION:	www.trb.org/trb/crp-nsf/All+Projects/TCRP+J-10
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • Electronic Surveillance Technology on Transit Vehicles/2001 • Emergency Preparedness for Transit Terrorism/1997 • Guidelines for the Effective Use of Uniformed Transit Police and Security Personnel/1997 • Improving Transit Security/1997 • Project J-10(1): Transit Security Roundtables/2002 • Project J-10(2): Decontamination & Clearinghouse White Papers/2002 • Project J-10(3): A Guide to Public Transportation Security Resources/2003 • Project J-10A(1): Update: Transit System Security Program Planning Guide and FTA Transit Security Handbook: Public Transportation System Security and Emergency Preparedness Planning Guide/2002 • Project J-10A(2): Security-Related Training and Customer Communications: Lessons Learned from September 11 by Transportation Providers/2003 • Project J-10A(3): Intrusion Detection for Public Transportation Facilities/2002 • Project J-10A(4): Scan for Tools for Prioritizing Anti-Terrorist Security Measures/2003

TABLE 2 continued

TITLE/AVAILABILITY (continued):	<ul style="list-style-type: none"> • Project J-10B(1): Emergency Response Mobilization Strategies and Guidelines for Transit/2003 • Project J-10B(2): Use of Portable Explosive Detection Devices/2003 • Project J-10B(3): Robotic Devices/2003 • Project J-10B(4): Communication of Threats: A Guide – TCRP Report 86: Public Transportation Security: Volume 1/2002 • Project J-10B(5): K9 Units in Public Transportation: A Guide for Decision Makers – TCRP Report 86: Public Transportation Security: Volume 2/2002
SPONSOR:	Transportation Security Administration (TSA)
ORGANIZATION: CONTACT INFORMATION:	<p>TSA Paul Takemoto Senior Advisor, Task Force Program 400 Seventh Street, SW Washington, DC 20590 202-385-1253, f. 202-385-1254 www.tsa.dot.gov/</p>
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • Acting Under Secretary ADM James M. Loy: Sharing My Thoughts on September 11 – One Year Later (article)/2002 • Transportation Security Administration Progress as of September 10, 2002/2002/2002 • Transportation Security Administration Progress as of September 4, 2002 • Transportation Security Administration Progress as of August 20, 2002/2002 • Accomplishments of the TSA Since its Inception on November 19, 2001/2002 • Report to Congress on Enhanced Security Measures/2002 • Deployment of Screening Systems/2002 • 180 Day Report to Congress – Transportation Security Administration Performance Targets and Action Plan/2002 • Transportation Security Administration Meets First Security Requirements/2001 • TSA Fact Sheet: Explosives Trace Detection (ETD) and Explosives Detection Systems (EDS)/2002
SPONSOR:	United States General Accounting Office (GAO)
ORGANIZATION: CONTACT INFORMATION:	<p>GAO 441 G Street, NW Washington, DC 20548 202-512-4292 www.gao.gov</p>
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • Mass Transit: Federal Action Could Help Transit Agencies Address Security Challenges/2002 • Mass Transit: Challenges in Securing Transit Systems/2002 • Transportation Security: Post-September 11th Initiatives and Long-Term Challenges/2003 • Transportation Security: Coordination Needed in Selecting and Implementing Infrastructure Vulnerability Assessments/2003 • Bioterrorism: The Centers for Disease Control and Prevention’s Role in Public Health Protection/2001 • Chemical Safety: Emergency Response Community Views on the Adequacy of Federally Required Chemical Information/2002

TABLE 2 continued

TITLE/AVAILABILITY (continued):	<ul style="list-style-type: none"> • Combating Terrorism: Considerations for Investing Resources in Chemical and Biological Preparedness/2001 • Critical Infrastructure Protection: Federal Efforts Require a More Coordinated and Comprehensive Approach for Protecting Information Systems/2002 • Critical Infrastructure Protection: Significant Challenges Need to Be Addressed/2002 • Homeland Security: Intergovernmental Coordination and Partnership Will Be Critical to Success/2002 • National Preparedness: Integrating New and Existing Technology and Information Into an Effective Homeland Security Strategy/2002 • National Preparedness: Technologies to Secure Federal Buildings/2002
SPONSOR:	Volpe National Transportation Systems Center (Volpe)
ORGANIZATION: CONTACT INFORMATION:	<p>Volpe Alison Thompson Transportation Industry Analyst Infrastructure Protection and Operations Division, DTS-78 55 Broadway, Kendall Square Cambridge, MA 02142 617-494-2000, f. 617-494-2902 thompsona@volpe.dot.gov www.volpe.dot.gov</p>
TITLE/AVAILABILITY:	<ul style="list-style-type: none"> • Development of a Graphics Based Automated Emergency Response System (AERS) for Rail Transit Systems/1998 • Disseminating Safety Information on the Nation's Transit Systems/2002 • DOT Research, Development, and Technology Plan, FY 2002 (Report to Congress)/2002 • United States Postal Service Hazardous Materials in the Mail/2002 • Vulnerability Assessment of the Transportation Infrastructure Relying on Global Positioning System/2002

TRB RESOURCES FOR EMERGENCY PREPAREDNESS

Emergencies arising from terrorist threats highlight the need for transportation managers to minimize the vulnerability of people and assets through incident prevention, preparedness, response, and recovery. Managers are seeking to reduce the chances that transportation vehicles and facilities are targets or instruments of terrorist attacks and to be prepared to respond to and recover from such possibilities. The Transit Cooperative Research Program has budgeted \$2.4 million for security-related research in FY 2002 through FY 2003 (see www4.trb.org/trb/crp.nsf/All+Projects/TCRP+J-10). The National Cooperative Highway Research Program has budgeted \$3.75 million in FY 2002

through FY 2004 for work in this research area (see www4.trb.org/trb/crp.nsf/All+Projects/NCHRP+20-59).

Although a wealth of new resources is now available or under development through the cooperative research programs, TRB and the National Academies have generated extensive information on these issues in recent years. The TRB Transportation System Security website (at www4.trb.org/trb/homepage.nsf/web/security) brings together much of this information. Also included are links to other related websites that contain discussions of issues, actions that can be taken, guidance and training opportunities. The TRB Transportation System Security website is sponsored by the TRB Committee on Critical Transportation Infrastructure Protection (see san-antonio.tamu.edu/trba5021/trba5021.html), and is updated regularly.