Bus Safety and Security Program

# Safety, Security, and Emergency Preparedness Excellence – A Framework

*For Small, Rural and Community Transit*

Prepared by the Office of Safety and Security

**Guidelines at a glance**

These guidelines identify both common and key elements of bus transit safety, security and emergency preparedness programs and serve to establish a National Framework. FTA understands that not all elements may be applicable to all bus transit systems and that when they are applicable, the elements will be scalable in implementation. FTA's Bus Safety and Security Program is *voluntary* and we hope that these guidelines will help you incorporate successful and well-established industry practices.

Federal Transit Administration

## Preface

The Nation's transit bus industry is constantly evolving, not only in terms of the impact of technology and the provision of service, but also in terms of responding to safety and security concerns. The industry, like the nation, is reflective of trends that exist in all levels of society. During the years of private sector ownership, safety and risk management were part of each company's bottom line. The cost of settling liability claims was balanced against the cost of preventing them. Safety training, operating procedures and even the color schemes of the transit vehicles were considered "dollars and cents" issues to be determined by the impact on the transit company's balance sheet.

Today's environment is much more complex. As government assumed a larger role in funding the provision of transit services, new objectives were developed for the industry. Social concerns such as providing service to senior citizens and persons with disabilities competed with demands for expanded and cheaper service. Recently, events involving hazards and threats, both natural and man-made, have placed additional responsibilities, real and perceived, upon transit agencies.

The delivery of transit services carries with it an inherent risk. Operating transit vehicles full of passengers in fixed route and demand response modes requires a constant focus on safety and security concerns with life and death consequences. There is an inherent expectation on the part of passengers, taxpayers, government leaders and advocacy groups that public transit service is first and foremost a safe and secure mode of transportation. The information presented here is designed to serve that goal and establish a National Framework for program development and implementation.

The Framework's elements have been developed with guidance from industry professionals as well as national, state, and local stakeholders. The goal was to develop guidance for agencies in identifying key strategies to assist in creating practical and system specific ways to implement effective safety, security, and emergency preparedness programs.

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# OVERVIEW

The Federal Transit Administration (FTA), through the Office of Safety and Security, oversees a host of programs focused on achieving the highest level of safety and security in America's public transit systems. The Office of Safety and Security is responsible for guiding the development and implementation of programs and initiatives to continually improve the safety and security of passengers, employees, emergency responders, and all others who come into contact with the public transportation system. A cornerstone in meeting this mission is the re-engineered and revitalized FTA Transit Bus Safety and Security Program. The Transit Bus Safety and Security Program encompasses public transit bus agencies of all sizes, including urban, small urban, rural and community transit, and FTA is committed to the broadest possible application of this program's strategies and tools.

The FTA Transit Bus Safety and Security Program utilizes the following implementation strategies:

- Collaborate with the transit industry through the Program Working Group that has been established to: 1) assist in the development of Program policy; 2) facilitate information exchange between FTA and the public transit bus industry; and 3) coordinate in the development and delivery of technical assistance materials. The Program Working Group is a collection of transit industry professionals representing all types and sizes of transit agencies, state departments of transportation, and a variety of other governmental and industry functions. Working Group members share a common concern for transit safety and security, and bring their unique experiences and knowledge to the safety and security program.
- Develop and collect effective safety and security practices for distribution to public transit bus providers.
- Enhance the distribution of safety and security-related technical assistance materials to public transit bus providers via an online resource library.
- Provide ongoing evaluation of Program implementation and effectiveness through voluntary onsite technical reviews and public transit bus provider self-assessment checklists.
- Use available safety and security data and risk assessment models to assist transit agencies in reducing the most frequent and/or catastrophic risks to passengers,

employees, emergency responders, and others who come into contact with public transportation systems.

## Purpose

FTA's Transit Bus Safety and Security Program is founded on established practices for bus transit safety, security, and emergency preparedness excellence. Incorporating successful industry practices and ongoing research, these guidelines identify both common and key elements of bus transit safety, security, and emergency management programs. Each element/sub-element of these guidelines contains an overview of the topic's importance and relevance to enhancing safety, security, and emergency preparedness. FTA understands that not all elements – or sub-elements – may be applicable to all bus transit systems. FTA further recognizes that elements and sub-elements will be scalable in implementation. FTA uses this understanding for the development of technical assistance materials that are practical and useful.

Of course, it is up to the individual bus transit system to identify those elements that are applicable to its own program. This guidance and technical assistance information is not presented in any way as a tool to assess or measure compliance. It is critical that transit agencies understand that FTA's Transit Bus Safety and Security Program is completely ***voluntary***. FTA does not assume that there is only one way to implement effective safety, security, and emergency preparedness activities; rather, each transit system must review its own programs within the context of its own resources and on-the-ground reality to determine those areas where enhancement can or should be made. To support these efforts, FTA has developed a resource website to assist transit systems in identifying tools and information that can positively impact their internal safety and security efforts. Specific elements within each of the functional areas will assist transit agencies in evaluating their safety, security, and emergency preparedness needs. By performing this evaluation, the transit bus agency is then in a position to reinforce its safety, security, and emergency preparedness program consistent with its own individual operating reality.

# KEY FUNCTION: MANAGEMENT

The foundation of any transit bus agency's safety and security program is the strength of the management team and its commitment to the mission. This commitment to safety and security is reflected in organizational goals and objectives and the way an agency's structure reinforces safety, security, and emergency preparedness values and priorities. Management has to be proactive in planning its safety and security initiatives, including those that impact procurement of equipment and technology, information sharing, and training to assist in carrying out those initiatives. The transit system management team effectively leads its workforce and contractors through both example and direction as they address the difficult challenges to all-hazards program planning and implementation.

## Element: Management Commitment

Management commitment is exemplified by resource allocation, planning efforts and the development and adoption of safety and security policies that flow across all agency activities. Management's commitment to safety, security, and emergency preparedness programs starts at the very top of the agency, including its transit board or oversight entity, and ensures polices and/or protocols are developed to support communication up, down, and across the agency. Employee participation and accountability are critical to success. Effective policies are developed with input from agency stakeholders, including managers, supervisors and front line employees, and endorsed by the highest levels of leadership including those responsible for monitoring and oversight of the transit system. It is critical that management's role in safety, security, and emergency management is clearly identified and includes ongoing involvement in support of the safety and security functions.

## Element: Mission, Goals, and Objectives

A well-written mission statement helps an agency maintain focus on its primary purpose and clarifies management's expectations of the agency's performance. Agency-wide strategic planning exercises are a tool to develop mission statements, goals, and objectives. The cornerstone of any transit agency mission statement is ensuring employee and passenger safety and security. Excellent service requires an environment that is safe and secure as well as ability for the system to effectively manage incidents that threaten passengers, employees or assets. Executive management uses the mission statement to communicate to the entire organization

what the agency aspires to achieve in service of its customers. Formal and quantifiable goals and objectives provide a compass for organizational safety and security success. The objectives will reflect the core values and culture of an agency and help define its best use of resources.

## Element: Organizational Structure

A transit agency's organizational structure defines the resources, authority, and responsibilities necessary for the agency to carry out its mission and meet its goals and objectives. The agency's structure defines how it will meet the safety and security needs of both customer and community. The organizational structure is designed to promote processes for open and timely communication.

An organization chart depicts reporting relationships and provides a map of departmental functions and responsibilities. Effective organizational structure defines safety, security, and emergency preparedness roles and determines how they are able to impact the highest level of decision-making.

## Element: Safety Plan Development

Safety refers to hazards caused by unintentional acts; an ongoing and dynamic process. All transit agencies strive to provide safe service to their passengers and safe work environments for their employees. All agencies address safety in some way through procedures or policies. Additionally, agencies may document their approach to implementation in an overall safety plan.

A safety plan helps clarify the safety responsibilities and activities to be carried out by the transit agency and communicates the philosophy and specific goals and objectives of the agency's safety program. Safety plans build the basis for effectively managing safety initiatives and help promote a healthy safety culture within the organization.

Safety plans are reviewed and revised as necessary to ensure they remain consistent with agency operating realities and objectives. Executive management formally endorses the safety plan as well as authorizes any subsequent revisions. Safety plans are shared with agency employees as appropriate to ensure employees are guided in safely carrying out their jobs.

## Element: Security Plan Development

Security refers to threats caused by intentional acts; an ongoing and dynamic process. Security planning is a major step in addressing agency security concerns and is based on assessing threats and reducing vulnerability to the transit agency, its employees and customers, and the larger community.

Effective security plans are created based on the size, resources, and operating environment of the transit system. Small transit operations often choose to develop security and emergency preparedness plans in partnership with local government or regional planning entities to reduce direct costs and expand resources. Security plans define roles and responsibilities for monitoring the effectiveness of transit operations and support activities within the area of security-related tasks. Successful security planning incorporates input from all employees to effectively address realities on the ground. In addition, key external stakeholders such as Federal and state government, local emergency managers, and community first responders provide input into the process.

Security plans are reviewed and revised as necessary to ensure they remain consistent with agency operating realities and objectives. Executive management formally endorses the security plan as well as authorizes any subsequent revisions. Security plans are shared with agency employees as appropriate to ensure employees are guided in securely carrying out their job assignments. Given the potentially sensitive nature of the contents of security plans, they are marked as "sensitive security information" and their distribution is strictly controlled.

## Element: Procurement Strategies

The approach to procurement of services, vehicles and equipment, and other materials necessary for the implementation of service has a direct impact on the safety and security of an agency's operations, its employees, and the riding public. Procurement of transit system assets or services is partially driven by relationships with outside entities such as Federal and state government agencies. These entities often define the parameters under which the procurement should be requested, budgetary limits on the procurement itself, and the amount of involvement and flexibility allowed to the individual transit system in determining its choices in asset acquisition. Often, larger agencies have greater decision-making power, while smaller agencies have a

somewhat more limited role due to state and local oversight. The FTA, state governments and local governments all have requirements for bidding and awarding contracts, whether for services or tangible assets. The transit system has to review and follow all applicable procurement laws, regulations, and guidelines throughout the procurement process.

Each transit agency has to approach the procurement process with the goal of maximizing the safety and security of the system within the budget provided. This includes employees and passengers that may be impacted by the design and function of the asset being procured. The process is enhanced by obtaining information from outside sources on safety and security-related design, vendor products and services, and peer evaluations of those offerings.

## Element: Contractor Management

Many transit agencies outsource and/or contract for part or all of their operations or maintenance functions. In these situations, the contractor "stands in the shoes" of the transit system and must be monitored. The system and its governing body are responsible for the contractor's actions under the agreement between the agency and the contractor. It is the transit system's responsibility to ensure that contractor work practices meet the established safety and security standards of the agency and any and all Federal, state, and local regulations and requirements.

It is important that contract language delineates the safety, security, and training responsibilities of the contractor. It is equally important that the transit agency monitor contractor compliance and impose penalties for non-compliance that is clearly defined in the contract specifications. Compliance is documented throughout the life of the contract with regular reports of contractor performance supplied to the governing body of the transit system. Significant violations of the contract, particularly in the areas of safety and security, are addressed by the governing body and can include termination of the contract or other legal action.

## Element: Insurance

There are a variety of ways that a transit agency can insure its assets and protect against liability. These range from the purchase of coverage from a broker or carrier, to participation in an insurance consortium, to being self-insured. In order to determine the best insurance strategy, the agency needs to have access to detailed information including the types of insurance coverage

available as well as coverage approaches taken by peer transit agencies from around the region, state, and country. Critical issues related to the safety, security, and emergency preparedness impact on transit insurance include the effects of agency policies, procedures, and training on insurance cost, and the impact of accidents or incidents on insurance coverage. Also significant is whether or not coverage will remain in force in the event that transit vehicles and resources are used as a part of emergency evacuation activities directed by local emergency management.

Various resources are available to help transit system management make sound decisions about insurance coverage. National and state level associations, such as associations of county or municipal governments, and transit and insurance industry groups can provide information about prudent risk management and underwriting practices. It is important that transit system management is knowledgeable about the basics of risk management, underwriting practices, and their relationship to safety and security programs.

## Element: Labor/Management Relations

The relationship between an agency's management and its employees directly affects the agency's ability to implement effective safety and security practices and develop and maintain a successful safety and security culture. Effective transit agencies maintain a positive relationship between management and front-line employees regardless of whether or not employees are unionized or part of a collective bargaining agreement. Where labor agreements between agency management and collective bargaining groups exist, it is important that these agreements include clearly defined safety and security rules, responsibilities, and penalties for non-compliance that have been agreed to by both parties.

An agency's safety and security efforts are enhanced by efforts that provide frontline employees input into safety and security decision making processes, maximize timely safety and security-related communication, and minimize employee vulnerability to hazards and threats. Developing programs that support employee reporting of safety and security hazards, threats, and vulnerabilities boosts transit agency effectiveness. Safety committees and/or working groups are excellent tools to facilitate working relationships between management and labor. Award programs for consistent, positive safety and security performance gain employee buy-in to the system safety and security policies of the agency.

# KEY FUNCTION: VEHICLES, FACILITIES, EQUIPMENT & SYSTEMS

Transit bus agencies are only as strong as their infrastructures and supporting mechanisms. It is critical that infrastructure be maintained consistent with established regulations, standards, and manuals. Safety and security has to be a top priority in the design and acquisition of transit facilities and assets. The operation and maintenance functions of a transit agency are best managed with the well-being of both employees and passengers at the forefront of decision-making. Good record keeping and documentation positively impact efficiency and effectiveness and reduce organizational liability. The success of creating and maintaining vehicles, facilities, equipment, and systems' infrastructure can be gauged and improved by the use of safety and security-related organizational performance measures.

## Element: Regulations and Standards

As there are numerous Federal and state regulations that govern different aspects of public transportation service, it is critical that transit agency management is familiar with these regulations as well as any applicable standards. A transit agency's commitment to its safety and security mission requires ongoing awareness of changes in Federal and state regulations and standards and accompanying revision of agency policies, procedures, and protocols as appropriate.

It is important the agency develops mechanisms to ensure compliance with all relevant regulations and standards and establishes schedules and procedures for performing reviews of the agency's status. While these mechanisms may vary between agencies, most Federal and state regulations can be obtained directly from the regulating authority or through Internet sources. Failure to comply with Federal and state regulations and standards can result in penalties and fines and may place employees and passengers in harm's way. Ignorance of regulations is never an excuse for non-compliance and often can result in negative consequences.

## Element: Safety and Security in Design, Acquisition, and Procurement

Vehicles, facilities, equipment, and systems are the backbone of any transit operation. Decisions about design, acquisition, and modification of system assets and services are based not only on

operational needs for effectiveness and efficiency, but also on safety and security implications. There is value in soliciting input into the design and acquisition process from transit employees whose expertise adds insight. The process is supported by the agency having access to a wide range of information on facility design, vehicles, equipment, systems, and technology. Decision-making is enhanced by taking advantage of information from outside resources such as industry trade organizations, state agencies, and local government experts that are involved in the design, purchase, and deployment of equipment and facilities. The best decisions are those that are based on a thorough knowledge of an issue gathered from a variety of sources.

## Element: Passenger and Operator/Driver-Related Safety Concerns

A top priority for any transit agency is the on-board safety of employees and passengers. This begins with keeping operational safety-related equipment, such as fire extinguisher, first-aid kit, web cutter, bio-hazard kit, and triangles on the vehicle. Another important element of on-board safety is having policies and procedures related to the transporting of passengers, including those with special needs. These policies and procedures address such issues as storing passenger portable oxygen tanks, allowing service animals, transporting young children, and securing non-traditional personal mobility devices. The foundation of passenger and employee safety is the delivery of effective training in areas like lift operation and securement, general passenger assistance, responding to passenger and vehicle emergencies, and requirements for seat belt use.

Appropriate policies, procedures, protocols, and training programs are best developed by evaluating the needs of passengers and how these needs can best be met without creating risk to the safety of other passengers, employees, the vehicle, the agency, or members of the community. As a part of this analysis, it is important that the transit agency obtain information on relevant regulations and industry best practices. There are several non-profit and government agencies that can provide information relative to passengers with special needs. Vendors of equipment such as wheelchair lifts and securement devices are also excellent sources of training and technical assistance.

Policies and procedures impacting passenger and employee safety have to be clearly communicated to employees and to the passengers for whom the policies have been developed. Placing emphasis on how policies improve both on-board safety and customer service is an

effective strategy in reaching passengers. Systems may expand their reach to customers by including passenger-related policies in system marketing programs and other outreach efforts.

## Element: Maintenance Planning and Guidance

A transit agency's facility and vehicle maintenance efforts require a formalized and detailed plan that promotes the safety of employees and passengers while meeting industry standards, guidelines, and regulations. Maintenance plans include specific goals and objectives for the agency's maintenance program, and describes how the objectives are going to be met, including what procedures will be performed and how often. Maintenance plans provide a methodology to guide all maintenance-related activity, including the monitoring of compliance with schedules and performance standards outlined in the plan.

Maintenance planning addresses the preventive and defect maintenance of both vehicles and facilities. Input in the planning process can be obtained from government agencies, industry experts, vendors, peer transit agencies, insurance providers, and appropriate internal transit employees. Facility maintenance plans are best created consistent with Federal and state guidelines. Vehicle maintenance plans are generally based on the vendor or manufacturers-recommended procedures and schedules including attention to the most stringent duty cycle requirements, sometimes called "commercial service" or "severe service" use. This ensures that maintenance is performed frequently and thoroughly enough to maintain equipment and facilities in the safest condition, while protecting the life of the asset and meeting the manufacturers' warranty requirements.

## Element: Maintenance Procedures

Maintenance planning provides the foundation for all maintenance activities. Maintenance procedures define how these activities are to be carried out. Transit maintenance procedures direct employee activity over a wide spectrum of agency functions, including preventive and defect maintenance, vehicle inspection, vehicle assignment, vehicle identification, and on-board vehicle safety equipment. Maintenance procedures also apply to facilities, including their maintenance and upkeep, fire prevention, underground fuel storage, alternative fuel considerations, and maintenance shop safety. These functions have serious safety and liability

implications and many are governed by strict regulations and guidelines. It is critical that transit maintenance staff is aware of the safety and liability impact of their actions.

Specific maintenance procedures and protocols that govern the work performed by maintenance staff ensure that maintenance goals and objectives are met. Tools such as shop manuals or job aids like pre- and post-trip inspection checklists support the ability of employees to perform each maintenance task. The importance of maintenance activities from the perspective of safety, liability, and regulatory requirements demands diligent oversight and monitoring of these functions. Regular training and skill assessment of maintenance employees is critical, particularly given the rapid change of technology in the transit industry.

## Element: Operations and Maintenance Performance Measures

Using standard and formalized performance measures to evaluate the safety and security of transit operations and maintenance is a powerful tool for organizational success. Performance measures allow a transit agency to compare itself with peer agencies, but their primary usefulness is in identifying internal positive or negative safety and security trends. Performance measures can be used to monitor the agency's progress toward meeting existing operations and maintenance goals and objectives. Performance measures can also help the agency create new goals and objectives that are both ambitious and practical.

Many standardized operations and maintenance performance measures focusing on safety and security have been developed within the transit industry. The Transportation Research Board (TRB) publications are an excellent starting point for finding information about maintenance performance measures. Other sources include state departments of transportation and industry trade associations. Transit agencies should choose those standardized performance measures most beneficial to their organizations. Management can also modify the standard measures and tailor them specifically to their agency's needs.

## Element: Maintenance Records and Documentation

All vehicle and facility maintenance requires documentation that needs to be maintained to ensure regulatory compliance, improve safety efficiency and effectiveness, and limit organizational liability. These records include activities related to vehicle preventive maintenance, defect

maintenance, and vehicle inspection, as well as all aspects of facility maintenance. Although computer-based maintenance software can assist in management, it is important that hard copies of all vehicle and facility maintenance activities be filed and retained according to appropriate protocol and the agency's record retention policy. It is critical that all maintenance documentation required by the agency be kept current and accurate.

## Element: Hazardous Materials Program

Transit agencies often deal with a wide variety of potentially hazardous materials. These materials may involve blood borne pathogen spills on vehicles, products used to clean transit facilities, or materials stored and used within the transit vehicle maintenance function. Strict regulatory requirements exist and dictate how transit agencies should manage hazardous materials. These regulations include requirements for maintaining a formal inventory of on-site hazardous materials, storing hazardous materials in approved containers and locations, maintaining and ensuring Material Safety Data Sheets (MSDS) are readily available for employee review, and having an approved plan of hazardous material disposal. Federal regulations also require agencies to meet "right to know" employee training and orientation requirements for all employees that may come into contact with hazardous materials as a part of their job function.

In addition to the regulatory requirements pertaining to hazardous material storage and disposal, it is important that transit agencies develop a plan for responding to emergencies involving hazardous material spills or releases. This plan focuses on hazardous material emergencies directly involving the transit agency as well as external community emergencies such as a hazardous material release within the transit service area.

## Element: Radio/Communication Equipment

A transit operation's effectiveness is directly impacted by the quality and reliability of its communication equipment. Communication equipment has an obvious role in scheduling, dispatching, and customer service, as well as a critical role in responding to safety and security-related emergencies. When choosing new or assessing existing communication systems, transit agencies are best served by taking into account the operational requirements of equipment used, system coverage and dead spots, back-up systems, and if the equipment provides access to first responder radio channels during emergencies. Additionally, the transit agency may have to

follow state policy or procedures regarding procurement of radio equipment and related technology. Transit agency management is wise to consult with local and state public safety and department of transportation personnel to help determine the best configuration for the agency's communication system.

Communication policies and procedures for both normal and emergency operations are essential. These procedures address a variety of issues including how operators/drivers and dispatchers are to communicate with each other, how agency technology, such as silent alarm systems, is to be employed, and establishing verbal codes to request law enforcement response to emergencies. The transit agency's communication policy explains the operating parameters of the system, such as the hours of dispatcher and system coverage, and who the vehicle operators should contact when dispatchers are not on duty. In addition to addressing everyday and emergency procedures, communication protocols need to be sensitive to the Health Insurance Privacy and Portability Act (HIPPA) and any other laws, regulations, or policies that apply to confidentiality of passenger information.

# KEY FUNCTION: HUMAN RESOURCES

Human Resource policies, procedures, and practices provide a broad range of services that help to ensure the safety and security of the transit system and the system's most valuable assets – its employees and customers. Human Resource functions include:

- employee recruitment and selection,
- developing various administrative and operating policies and procedures, and
- administering drug and alcohol, fitness for duty, and employee assistance programs.

Functions also include administering workplace violence awareness programs and agency worker compensation programs. Other functions may include:

- overseeing employee discipline and termination practices,
- participating in bargaining agreement negotiations,
- defining basic job functions and descriptions,
- establishing employee training requirements, and
- managing training and employee development activities.

Employee safety and security effectiveness, to a large extent, is determined by how well each employee has been trained to perform his/her duties, and how well the employee is supported by the transit agency in carrying out these duties. As transit employees are responsible for performing their jobs in accordance with established policies and procedures, the transit agency is responsible for ensuring these employees have been provided with the appropriate tools, resources, and up-to-date training to successfully perform their jobs.

## Element: Agency Policies and Procedures

Transit agency Human Resource activities are normally carried out consistent with a formal personnel policy that sets the standard for all employee actions. This personnel policy is communicated and distributed to agency employees and signed for upon receipt. Clear operating policies and procedures, including operator/driver handbooks consistent with the agency's personnel policy, are the hallmark of an effective transit agency. Operator/driver handbooks define the roles and responsibilities of operators/drivers and the actions to be taken for specific situations such as vehicle inspections, breakdowns, passenger assistance, emergency procedures,

and hazardous conditions. Documentation is kept on file to verify that employees have received copies of and orientations on all agency policies and handbooks.

Many transit agencies distribute a separate policy document to customers that addresses the parameters of passenger assistance and the rules for passenger behavior on transit system vehicles. This policy defines the agency's rules for and expectations of passengers when they are using transit services. Specifically addressed are passenger behaviors that could have a potentially dangerous impact on the safety or security of other passengers, employees, the vehicle, or the system as a whole.

Orientation training for new employees and periodic refresher training for current employees is held for the purpose of reviewing all policies and procedures set out in the various handbooks and policy statements. Training sessions allow for questions and feedback from the employees, and give transit system management a way to deliver a consistent message about system policies and procedures.

## Element: Drug and Alcohol Program

A transit agency's drug and alcohol program is directed by Federal regulation as defined in 49 CFR, Part 40 and Part 655 respectively. Additionally, some transit agencies must adhere to Federal Motor Carrier Safety Administration (FMCSA) regulations. Compliance with these regulations includes requirements for program management, testing and collection procedures, laboratory analysis, medical review activities, substance abuse counseling, and record keeping. Because of the direct impact drug and alcohol programs have on the safety and security of a transit agency and its operations, transit agencies rely on established means through which program compliance can be monitored. This includes periodic compliance audits, post-accident, pre-hire, and/or random drug screening of employees, and other activities deemed necessary by the transit agency to ensure program compliance. The use and abuse of prescription and/or over-the-counter medications are often also addressed by a transit agency's drug and alcohol program. The transit agency's drug and alcohol programs are required to establish policies for contracted personnel and services in safety sensitive positions.

## Element: Workplace Violence

Workplace violence is becoming an increasingly important concern of the transit industry. Transit agencies address this concern through the development and administration of Workplace Violence Prevention Programs. These programs encompass management and employee training and orientation, identification and reporting procedures for harassing or potentially violent behavior, and employee counseling options. An Employee Assistance Program (EAP) can also be used to help employees resolve or mitigate domestic disputes, which can often result in workplace violence incidents. When feasible, transit agencies also take advantage of outside resources and expertise.

## Element: Wellness/Fitness for Duty

A transit employee's ability to perform in a safe manner on a daily basis or to respond to safety and security emergencies is determined by their wellness and fitness for duty. Transit agencies are well-served by monitoring employees through pre-hire medical examinations and periodic medical examinations thereafter, as well as through evaluations of employee functional performance. Transit agencies often develop a Fitness for Duty policy which clearly defines the agency's processes for monitoring employee wellness and fitness for duty and what actions will be taken if an employee's fitness for duty is found to be adversely affecting his/her job performance and/or the safety of passengers or the system.

Employee wellness and fitness for duty programs include addressing the issue of fatigue management. It is important that transit agencies are aware of any regulatory requirements governing assignment of work hours and develop policies defining the maximum lengths of time employees can work without rest. Fatigue management programs operate with a process for tracking operator/driver work hours to avoid driver fatigue as a consequence of poor scheduling or job rotation. Employees receive fatigue awareness training so they will be able to recognize the signs of fatigue and be capable of taking the appropriate actions to avoid potentially dangerous situations. Since many transit vehicle operators/drivers work second and third jobs, a reasonable policy for monitoring outside employment is often necessary. While employees may consider this type of policy intrusive, it is common for many private sector firms and government agencies to require employees to keep the agency informed of outside work commitments. This

allows management to avoid scheduling operators who may have worked several hours at another job before the transit system shift assignment.

## Element: Employee Recruitment and Selection

The quality of a transit agency's workforce impacts safety and security success so a well-managed recruitment and selection process is critical. Job descriptions are the tools that drive the recruitment and selection process and are necessary for each key position. Accurate and up-to-date job descriptions also reflect the specific safety and security-related requirements and responsibilities of positions. Performing periodic reviews of all job descriptions and revising them as needed to reflect current circumstances is an important transit agency function. A good first step is to write a job description that lists specific tasks and activities that must be performed by the person in the position. This is followed by an analysis of the particular set of knowledge, skills, abilities, and past experience required to perform the listed tasks and activities. This process will both help to reduce discriminatory hiring and help to ensure that qualified individuals are hired.

Significant to the recruitment and selection process are in-depth background checks of all job candidates. These checks include previous employer history, driver license records, and national criminal background checks. Interviews are most effectively conducted using a formally structured interview template that allows both fair and comprehensive evaluation of each candidate. Interview questions are best written out and reviewed in advance by someone in the agency that is knowledgeable about laws and regulations that govern hiring and selection. Using written interview questions, limiting follow-up questions, and using two or more interviewers helps to reduce the possibility of discriminatory hiring practices and the resulting liability exposure. It is important that agencies maintain records of all interviews and interview results.

## Element: Training Management

Comprehensive training programs are needed to orient employees on the transit agency's policies, procedures, and protocols. Training programs develop the specific safety and security skills necessary to ensure employees are capable of providing safe, secure, reliable, and high quality service.

Developing a training program begins with the performance of a "needs assessment" of the skills required to fulfill specific job functions. This assessment starts with a review of the job descriptions for each position and is followed by a hands-on evaluation of incumbent on-the-job skills. Based on the needs assessment results, the transit agency then develops a Training Plan that includes initial, refresher, and re-training criteria and curriculum for each job function. The Training Plan is reviewed and revised as operating conditions or skill requirements evolve, new equipment or systems are procured, facilities are constructed or modified, or as a result of policy or procedural change.

Establishing mechanisms for monitoring the effectiveness of training programs and trainers is central to training management. Training program initiatives also address any necessary specialized training or certifications required within the operations or maintenance functions.

It is essential that records of all training and re-training provided to and completed by employees are maintained by the transit agency. There are three primary reasons for this documentation:

- If an incident or accident occurs, safety training records indicating that the personnel involved had the proper safety training and therefore acted in the proper manner can save your agency from possible litigation.
- If it is proven that one of your employees performed in an irresponsible and dangerous manner, that employee will be unable to maintain that she or he was not properly trained and therefore was unprepared for the situation that occurred.
- You will be able to easily ascertain the safety competence of your personnel by referring to your training records.

## Element: Training Delivery

The delivery of safety and security-related training to all appropriate operations and maintenance employees is undoubtedly one of the most powerful tools available to transit management in creating an environment for agency safety and security awareness and success. Safety and security is impacted by nearly every action taken by operations, maintenance, and other transit employees during the day-to-day performance of their jobs or during emergency operations.

Effective training is based on formal and well-structured lesson plans involving both classroom and hands-on instruction. Lesson plans are kept on file and reviewed periodically to ensure they are up-to-date and reflect any changes in regulations or industry practices. Operator/Driver training includes a focus on vehicle inspection, defensive driving, customer assistance, emergency/crisis management, and skills specific to the transit agency. Maintenance training addresses vehicle and facility maintenance skills and safe work practices within the maintenance shop environment. Providing training to dispatchers, schedulers, supervisors, managers and administrative staff is also important, as is agency-wide security awareness training.

The success of overall employee training and development efforts is contingent upon having qualified, well-trained, and effective instructors. Transit agencies need to ensure instructors are provided with adequate resources and information that allows them to remain up-to-date with the latest industry regulations, standards, and best practices. Transit system trainer skills are enhanced through participation in certified train-the-trainer programs and other offerings available from institutes, trade associations, or private non-profit groups.

## Element: Retraining and Refresher Training

Refresher training is defined as "training provided on a periodic basis to all employees within a job function." Retraining is defined as "training provided on the basis of a performance deficit to selected employees within a job function." As the definitions suggest, although similar in that both types of training focus on enhancing and reinforcing safety and security related skills, they are distinctly different. Refresher training is important to maintaining a necessary skill set. For example, it is particularly important to provide refresher training on emergency and crisis management, as these skills are not normally used during the day-to-day activities of most employees and without periodic review employees' knowledge/skill set will begin to decline. Retraining is required when an employee has failed to demonstrate his/her ability to fulfill assigned duties according to transit system policies and procedures. Often retraining is provided as a result of an accident or incident that could have been prevented if the employee had performed appropriately or used the skills he/she had been previously trained on.

Transit agencies periodically review the criteria they feel is necessary to require refresher training or retraining of employees. Refresher training may be linked to periodic delivery based on a set time schedule while retraining may be linked to a specific inappropriate action or failed response.

The transit agency delivers refresher training or retraining using the same standards for structured lesson plans, trainer qualifications, and documentation that is used in conjunction with its new hire training efforts.

## Element: Rules/Procedures Review

Maintaining up-to-date rules and procedures helps to ensure that safe, secure, and reliable service is provided to customers of the transit agency. A transit agency's formal policies, procedures, and rules build the foundation for normal day-to-day transit activities as well as emergency/crisis response activities. Since the transit work environment is always evolving based on external and internal realities, it is important that transit agencies perform routine reviews of their operating rules, policies, and procedures to ensure they are consistent with the most current regulations, requirements, agency goals and objectives, and "on-the-ground" realities.

Documents requiring periodic review and revision include operator/driver handbooks, standard and emergency operating procedures, vehicle and system maintenance manuals and procedures, training materials and programs, human resource policies and procedures, and safety and security programs, plans, and procedures. Any changes to an agency's policies, procedures, or rules need to be clearly communicated in a formal and timely manner to all affected employees with documentation of that communication.

# KEY FUNCTION: SAFETY ACTIVITIES

Safety activities focus on addressing hazards caused by unintentional acts. The first step in effective safety management is to ensure safety roles and responsibilities within the organization have been formalized. Transit agencies then need to develop a process for identifying, analyzing, and mitigating or resolving safety hazards. This includes methods for investigating accidents and incidents to identify root causes and other contributing safety factors. Critical safety activities involve inspections and audits of the safety of operations and maintenance practices, facility infrastructure, and employee and contractor activities. Once hazard identification and analysis is completed and documented, safety planning assists the agency and its employees in reducing safety vulnerabilities and creating initiatives that enhance the agency's safety culture.

## Element: Roles and Responsibilities

It is important that the transit agency develop formal lines of organizational authority and accountability with well-defined safety roles and responsibilities. Effective safety practices include developing mechanisms for communicating to employees their safety responsibilities and ensuring those responsibilities are being met.

## Element: Hazard Management

A hazard can be defined as any set of conditions, internal or external to the system or system operation, which can cause injury, illness, death, or damage to/loss of equipment or property. Transit agencies are responsible for ensuring that their operations and services, employees, and contractors provide passengers with the highest achievable level of safety. This is achieved by using hazard identification, analysis, and resolution methods.

The objective of the hazard identification and resolution process is to identify and define significant dangerous conditions related to the operation and services of a transit agency and to eliminate or control these conditions prior to their causing or contributing to an accident/incident, injury, death or other major loss. All employees of a transit agency are responsible for identifying, reporting, and, when possible, eliminating or controlling hazards that they encounter during their daily duties. Once hazards have been identified and fully evaluated, the transit agency then focuses on taking appropriate actions to mitigate, control, or eliminate the hazard.

## Element: Accident Reporting, Investigation, and Review

Vehicle accidents and employee or passenger incidents can occur at any time and require strategic and effective decision-making by both management and front-line employees. Once the accident or incident is under control, transit agencies have responsibility for initiating formal procedures on accident/incident reporting, investigation, and review. It is essential that these activities are clearly defined in agency policies and procedures and include specific employee roles and responsibilities. The process of accident/incident reporting, investigation, and review is enhanced and made consistent through the use of standardized protocols and documentation forms.

The goal of accident/incident investigation is to identify root causes of the event so appropriate corrective actions can be taken to prevent recurrence. The accident/incident investigation and review process can be managed through either an employee tasked with that responsibility or through an accident review committee composed of both management and front-line employees. Thorough documentation of the overall accident/incident review process is important.

## Element: Safety Data Acquisition and Analysis

Safety-related data, such as that gained through accident/incident investigations, hazard management practices, and industry guidance, provide transit managers with opportunities to learn from past internal events and the experiences of peers. The information gained through this process can be used to improve agency performance and, when used properly, can highlight agency accident/incident and hazard trends. Tracking this data over time also provides useful information regarding the effectiveness of the agency's safety program and where safety-related improvements can be made. To be effective, the safety data acquisition and analysis process requires orderly, systematic, and comprehensive record keeping. Although larger transit agencies use information technology to assist in safety data acquisition and analysis, smaller transit agencies often rely on simpler methodologies to collect data, such as a spreadsheet or a file of written reports from accidents, complaints, and employee reports of incidents. By watching for trends in accidents/incidents, passenger complaints, and "near miss" reports, transit management has the potential to identify and resolve problems before critical accidents/incidents occur. Information from the National Transit Database (NTD) can be very helpful in the trending analysis process.

## Element: Internal Safety Audit and Review Process

The goal of the internal safety audit and review process is to verify that safety programs and practices have been developed and implemented in accordance with Federal and state requirements and as mandated by internal transit agency policies and procedures. This internal audit and review process can be used to measure transit agency safety program performance.

Internal safety audit and review activities are often documented using standard checklists as a guide for individuals tasked with performing the audit and review. These checklists are designed to assess the effectiveness of the agency's safety program and practices, to identify potential system hazards, to verify that corrective actions have taken place, and to develop and implement additional safety improvements.

## Element: Maintenance Audit and Inspections

Effective maintenance programs and practices are critical to transit agency service and delivery, vehicle and equipment repair and replacement costs, meeting Federal and state requirements, and overall agency safety. Audits and inspections of maintenance practices and shop areas are conducted to gather information on the quality of the maintenance work carried out, to measure program performance and compliance, and to identify and eliminate or mitigate potential hazards.

Because of the technical nature of the work performed by the maintenance function, it may be of value for the transit agency to utilize subject matter experts, either internal or external, to conduct maintenance audits and inspections. The transit agency's maintenance audit and inspection process is best performed in a manner consistent with the transit agency's internal safety audit and review process and directly tied to the agency's hazard management program.

Maintenance audits and inspections include visual observation of actual maintenance practices and shop safety protocols, inspection of vehicles, equipment, and facilities, comprehensive reviews of maintenance documentation and recordkeeping, and interviews of maintenance personnel. Standardized checklists are used and all audit and inspection results documented in a formal audit or inspection report.

## Element: Facility Inspections

It is important to conduct periodic inspections of all transit facilities including agency buildings and yards, transfer centers, and bus stops. The purpose of these inspections is to identify potential hazards and repair needs. The inspections focus on agency-specific facility hazards, and state and Federal requirements including, when appropriate, those of the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA). Because of the widely varied nature of most transit facilities and the complexity of government standards, it may be necessary for the transit agency to educate an internal inspection team or use outside resources to accurately identify hazards and repair requirements.

The facility inspection process is best linked to the transit agency's hazard management and safety data acquisition and analysis practices, as well as the internal safety audit and review process. Standard checklists are helpful when performing and documenting facility inspections. Post-inspection reports include inspection findings and recommended corrective actions.

## Element: Contractor Safety Audits

If a transit agency contracts for any part of its operation or maintenance functions, it has the responsibility to ensure these services are performed safely and in accordance with applicable Federal, state, and local regulations, in addition to the agency's own contract requirements. To ensure contractor requirements are being met, the transit agency is helped by developing and following a method for monitoring contractor compliance uniform with contract specifications which include penalties for failure to meet contractual safety requirements.

While a formal audit schedule may be useful for monitoring contractor compliance, unannounced audits and inspections of contractor activities are equally valuable. Contractor audits and inspections are best performed and documented using standard checklists of all safety-related requirements contained within the contract executed between the agency and the contractor(s).

The results of the contractor audits and inspections are explained in audit/inspection reports that outline findings, proposed corrective actions, a timeline for implementing the corrective actions, and the consequences that may be incurred by the contractor if the corrective actions are not met

by the established deadline. Follow-up inspections are performed to verify that corrective actions have been implemented.

# KEY FUNCTION: SECURITY ACTIVITIES

Security activities refer to protecting against threats caused by intentional acts. The FTA, along with the Department of Homeland Security (DHS), and the Transportation Security Administration (TSA), have established regulations, guidelines, recommended practices, and various other resources to assist transit agencies in developing, administering, and continually improving their system security programs. These resources include TSA's and FTA's joint Security and Emergency Management Action Items for Transit Agencies.

FTA has identified several basic elements of system security management that can be developed and administered by transit agencies. These elements include creating a comprehensive Security Plan that clearly defines the agency's security policies and employee security roles and responsibilities. The elements also include a process for performing threat and vulnerability assessments, working with outside agencies to stay aware of changing security circumstances and potential system threats, and instituting programs for continually monitoring the security of the agency's operations, services, facilities, equipment, passengers, employees, contractors, and other assets.

## Element: Threat and Vulnerability Assessment

Threat and Vulnerability Assessments (TVAs) are performed consistent with FTA and TSA's recommended practices. A TVA is performed by a transit agency for the first time to serve as a baseline evaluation of system security. TVAs are performed periodically thereafter when changes within the transit operating environment have occurred as a result of external activities that impact the security of the agency's operations, services, passengers, employees, contractors, and other assets.

TVAs are performed and documented using a standardized template and, whenever possible, coordinated with outside stakeholders such as local emergency management, law enforcement, and fire departments to gain the benefit of their expertise, and to establish working relationships with their personnel. In performing the TVA, the transit agency identifies all of its critical assets, including capital and human, and evaluates the importance of these assets to the system and their vulnerability to internal and external security threats. This process assists the transit agency in

identifying system threats and vulnerabilities, while prioritizing what actions can be taken to eliminate or control the threat or vulnerability.

TVA findings and results are always documented and linked to proposed recommendations for correcting any identified system security weaknesses and reducing system security vulnerabilities. Transit system actions based on the results of the security assessment are best when tailored to the size and type of the agency. Wherever possible, it is helpful for the transit agency to identify more than one approach for mitigating or eliminating a threat or vulnerability. The associated costs and operational requirements are then estimated for each approach along with a brief comparison of the cost benefit. This gives the transit system management some flexibility in responding to the threats or vulnerabilities while staying within the agency budget.

Because of the sensitive nature of security-related information, a transit agency develops mechanisms to ensure the TVA report remains confidential and in the control of the agency at all times. TVA results should only be shared with appropriate external stakeholders, such as emergency management, law enforcement and other impacted governmental entities.

## Element: Security Awareness and Reporting

A transit agency's front-line employees and passengers are sometimes described as the security "eyes and ears" of the system and the community. They work in and ride the system each day and are often in the best position to notice suspicious activities, people, vehicles, or items, as well as any other events that may pose a security threat or vulnerability to the agency's operations and services. It is therefore important that transit agencies recognize their employees and passengers as key resources in assisting the enhancement of system and community security. Efforts that stress the value of security awareness to employees and passengers are an important element of a transit agency overall security program.

Training programs and informational sharing efforts that emphasize security awareness and reporting have the potential to reduce security vulnerabilities. Security awareness and reporting programs have applicability to a variety of transit agency activities including vehicle inspection, vehicle storage, visitor control systems, suspicious item response, bomb threat and dangerous mail response, theft and burglary concerns, and reacting to potentially dangerous people.

Reporting procedures and accompanying documentation are best designed to be as simple and as easy as possible for employees to follow or complete, requiring just enough information so that a supervisor or manager can determine what, if any, follow up action is required. It is critical to stress to all employees that any unusual and potentially suspicious behavior or items should be reported. Collecting this information allows management to determine if there is a pattern of activity that signals impending criminal or terrorist acts. It is necessary that agencies keep written records of all security-related reports so they can be fully evaluated and analyzed to identify and react to potential security threats or vulnerabilities. The analysis of security-related data should be conducted on a periodic basis consistent with the level of real and perceived threat.

## Element: Revenue Facilities and Procedures

Since transit revenue provides an enticement for criminal behavior, the security of revenue facilities and procedures is a concern. To address this security concern, transit agencies assess the revenue handling process to identify possible weaknesses and to reduce or control the impact of potential threats and vulnerabilities. Based on the results, the agency is in the position to evaluate methods for improving revenue handling and transfer practices. These methods can include using surveillance cameras, controlling access to revenue facilities, secure handling of fare boxes at probing stations, sealing of revenue transfer containers, storing revenues in a secured vault, and/or timely transferring of revenues to a bank. As with all other security related practices of the transit agency, revenue facility security and revenue handling and transfer procedures are best re-evaluated on a periodic basis to ensure they remain effective. The goal of making the revenue handling process more secure is not only to reduce the possibility of theft by employees, but also to reduce the vulnerability of employees to external criminal activity.

## Element: Vehicle Storage and Transit Facility Protection

Effectively securing access to vehicle storage areas and transit facilities is often a challenge to transit agencies due to various constraints such as agency size, location, and resources. Regardless, it is important that transit agencies utilize available resources to put into place the highest level of vehicle storage and transit facility security possible.

Methods for improving vehicle and transit facility security may include locked and/or controlled perimeter fencing, external and internal lighting, surveillance equipment, alarm systems, locked

and/or controlled facility entrances, roving security patrols, or some combination of these threat reduction strategies. In many cases, however, transit agencies will not be able to implement all of these improvements. Instead, the agency will have to select the option that is the most cost-effective and practical for their needs. The selection of security options requires a thorough analysis of all facilities and vehicle storage areas combined with a realistic appraisal of identified threats and vulnerabilities. Common sense, the advice of local law enforcement or emergency management, and the agency's insurance carrier can be valuable resources for deciding how to best secure storage areas and facilities.

## Element: Security Data Acquisition and Analysis

Transit agency security is enhanced through the development and administration of a security data acquisition and analysis process that relies on the documentation of past internal security events and peer agency experiences. Security-related events such as criminal or terrorist behavior on transit vehicles, in and around transit facilities, or within the community, needs not only to be reported to appropriate authorities, but also tracked to identify potential system security threats and vulnerabilities. This information can be used to measure and improve agency security-related performance.

Tracking security data over time provides useful information regarding the effectiveness of the agency's security program in comparison to other agencies and where improvements can be made. To be effective, the security data acquisition and analysis process requires orderly, systematic, and comprehensive record keeping. This requires transit agencies to develop formal yet easy-to-use mechanisms for gathering and analyzing security data. These mechanisms can range from sophisticated information technology to a simple spreadsheet or a paper filing system where security incident forms are kept. The critical concern is that the data is analyzed and used to identify trends in security threat and develop initiatives to reduce security vulnerabilities.

## Element: Internal Security Audit Process

The goal of the internal security audit and review process is to verify that security programs and practices have been developed and implemented in accordance with Federal and state requirements and as mandated by internal transit agency policies and procedures. This internal audit and review process can be used to measure agency security program performance.

Internal security audit and review activities are often documented using standard checklists as a guide for individuals tasked with performing the audit and review. These checklists are designed to assess the effectiveness of the agency's security program and practices, to identify potential security threats, to verify that corrective actions have taken place, and to develop and implement additional security improvements. Due to the sensitive nature of security-related information, security audit reports need to be kept confidential and controlled, and only shared with appropriate external stake holders, such as law enforcement or emergency management.

### Element: Contractor Security Audits

If a transit agency contracts for any part of its operation or maintenance functions, it has the responsibility to ensure these contracted services are performed with a focus on security and in accordance with applicable Federal, state, and local regulations, in addition to the agency's own contract requirements. To ensure requirements are being met, the agency is well served by developing and following a process for monitoring contractor compliance consistent with specifications which include penalties if the contractor fails to meet contractual security-related requirements.

While a formal audit schedule may be useful for monitoring compliance, unannounced audits and inspections of contractor security-related activities are equally valuable. Contractor audits and inspections are best performed and documented using standard checklists of all security-related requirements contained within the contract executed between the agency and the contractor(s).

The results of the contractor audits and inspections are explained in audit/inspection reports that identify findings, proposed corrective actions, a timeline for implementing the corrective actions, and the consequences that may be incurred by the contractor if the corrective actions are not met by the established deadline. Follow-up security-related inspections are performed to verify that corrective actions have been implemented. Due to the sensitive nature of security-related information, security audit reports need to be kept confidential and controlled, and only shared with appropriate external stake holders, such as law enforcement or emergency management.

# KEY FUNCTION: EMERGENCY/ALL-HAZARDS MANAGEMENT

The development of an all-hazards approach to safety, security, and emergency preparedness assists transit agencies in responding to their own internal safety and security concerns and illuminates their role as a part of a broader network of community emergency management. A basic tool in emergency and all-hazards management is a transit-specific safety, security, and emergency preparedness plan. The transit readiness and response role is enhanced by focusing on internal incident management and addressing the agency's responsibilities for reporting external security concerns. The scheduling and dispatching functions integrate safety and security components into service delivery and radio protocols are established to respond to emergencies. It is critical that transit management and staff are trained on incident response and recovery. Emergency information dissemination guidelines require formalization. Developing crisis management skills and protocols is essential to effective transit agency response to safety and security related events. It is important that transit's specific role in emergency community evacuation be defined and formalized within the community emergency management plan.

## Element: Preparation

Increasing emphasis is being placed on transit agencies to develop internal safety, security, and emergency preparedness plans. These plans establish internal safety, security, and emergency preparedness responsibilities, identify and document hazards, threats, and vulnerabilities, contain all required emergency response protocols, and define the relationship between the transit agency and external emergency management and first responders. Formal safety, security, and emergency preparedness plans require executive approval, are distributed to key external stakeholders, and the contents are communicated to impacted internal staff. These plans, whether contained in a single internal document, developed as multiple internal documents, or included as part of a larger external document, are living and dynamic documents and therefore are reviewed periodically for accuracy and appropriateness. Any planning document that contains sensitive security information needs to be kept confidential and controlled and shared only with key external stakeholders on a need-to-know basis.

## Element: Incident Management

Transit's incident management initiatives include developing protocols for reacting to identified threats and hazards, and are at least partially driven by previously experienced safety and security

events. The incident management process reinforces the responsibility of front-line employees to be on the lookout for, respond to, and report safety and security-related activities and events in the service area. The scheduling and dispatching process is an important component of the overall transit incident management system since the people who perform these functions are often an integral part of agency response.

Transit industry management is presently being urged by the Federal government to become National Incident Management System (NIMS) certified and to develop the internal crisis management skills of its workforce. As part of this incident management initiative, transit agencies are encouraged to develop employee protocols for responding to a wide range of safety and security events involving transit operations. Recent community emergencies created by acts of nature have underlined the importance of transit systems' role in providing resources for emergency community evacuation efforts. Transit's role also may include helping emergency management identify and locate transportation dependent populations that may require evacuation assistance. The stronger the working relationship between transit agencies and entities such as local human service agencies, elderly housing complexes, nursing homes, and assisted living facilities, the easier it will be for transit to prepare for and participate in special needs population evacuation.

In the event of a large-scale incident, system facilities may not be accessible. Emergency checklists, contact lists, procedures, protocols and any other incident management-related documentation is best kept in several secure locations that are easily accessible to key staff.

## Element: Recovery

A transit system is greatly assisted by having strategies for short and long-term post-incident recovery. These strategies include addressing clean up and inspection, documentation of incident agency resource use, preparation of after-incident reports, making necessary insurance contacts, restoration of service, and follow-up counseling of staff. It is important that recovery strategies are formally documented and communicated to key internal and external stakeholders.

In addition to short and long-term post-incident recovery strategies, an immediate incident recovery concern is the length of time it takes for emergency responders to arrive at the scene of a safety or security event involving a transit vehicle or facility.

It is a good practice for transit system managers to keep recovery related information with them at all times so they are in a position to respond in an effective and timely manner after an incident.

### Element: Coordination with Emergency Responders

It is valuable for transit agency management to build an effective working relationship with local, regional, state, and, as appropriate, Federal emergency management agencies. This relationship often includes entering into agreements for the provision of cooperation, coordination, communication, and support in the event of transit or community emergencies and community evacuations. These agreements may be included in local, regional, or state emergency response plans, or may be stand-alone agreements between the transit system and external agencies.

The transit agency is well served by pursuing the opportunity to participate in Local Emergency Planning Committees (LEPC). Open communication and interaction with law enforcement and fire departments is an important goal of transit emergency management. This relationship includes cross-training activities with law enforcement and fire personnel being oriented on transit vehicle operation and transit employees being trained on how to respond to vehicle fires and perpetrators on vehicles. Special attention needs to be given to training public safety and/or other appropriate personnel on the operation of wheelchair lift and securement equipment. Additionally, training is helpful for first responders on the structural design of transit vehicles so they can find the fastest and safest access points in the event they have to gain entrance to the vehicle after an accident in order to evacuate passengers.

### Element: Drills, Simulations, and Exercises

The transit agency benefits from holding internal hands-on emergency response training and participating whenever possible in external emergency drills, simulations, and exercises. These internal and external activities can range from tabletop exercises to single response drills to full-scale functional exercises. Practicing emergency response capabilities develops management and employee skills and crystallizes response protocols. Regularly repeated training and testing of transit employees on emergency response skills will help to ensure that employees are as prepared as possible for any emergency. A part of such training includes the assessment of employee skill levels and additional coaching as necessary.

Post-action reports on all drills, simulations, and exercises are a means of documenting the event and provide an opportunity for analysis and improvement of response.

# CONCLUSION

These voluntary and non-compliance based "Elements of Safety, Security, and Emergency Preparedness Excellence in Small, Urban, Rural and Community Transit" are offered as general guidance and technical assistance to support transit agency mission achievement. The Federal Transit Administration (FTA), through the Office of Safety and Security, understands the challenges faced by smaller transit agencies as they address a wide spectrum of critical priorities with limited resources. These definitions of elements considered important to the success of safety, security, and emergency preparedness programs are presented to help bus transit agencies evaluate their individual programs. The FTA Bus Safety and Security Program web site is structured consistent with these elements and provides a formal self-assessment process and resources to enhance agency activities. FTA and its partners believe that, when given guidance and assistance, agencies will make effective and practical decisions based on need and resource availability in their pursuit of safety, security, and emergency preparedness excellence.