



U.S. Department
of Transportation

**Federal Transit
Administration**

CIRCULAR

**PROPOSED
FTA C XXXX.XX**

October X, 2006

**Subject: SAFETY AND SECURITY MANAGEMENT GUIDANCE FOR MAJOR
CAPITAL PROJECTS**

1. PURPOSE. This Circular provides guidance to grantees regarding safety and security management activities for major capital projects. This Circular also provides methods for documenting safety and security management activities in a Safety and Security Management Plan (SSMP). The SSMP is a component of the Project Management Plan (PMP) prepared by a grantee as a condition of Federal financial assistance for major capital projects.
2. CANCELLATION. This Circular cancels Chapter II, paragraph 6 of FTA Order 5200.1A, "Full Funding Grant Agreements," dated 12-5-02.
3. REFERENCES. Note: In typing the website address, one should not type the brackets.
 - a. Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Pub. L. 109-059, August 10, 2005. SAFETEA-LU may be viewed at [http://www.fta.dot.gov/17003_ENG_HTML.htm].
 - b. FTA regulation, "Project Management Oversight," 49 C.F.R. Part 633. See [http://www.access.gpo.gov/nara/cfr/waisidx_00/49cfr633_00.html].
 - c. FTA regulation, "Major Capital Investment Projects," 49 C.F.R. Part 611. See [http://www.fta.dot.gov/legal/federal_reister/2000/364_1668_ENG_HTML.htm].
 - d. FTA regulation, "49 CFR Part 659, Rail Fixed Guideway Systems; State Safety Oversight." See [<http://transit-safety.volpe.dot.gov/Safety/SSO/Regulation.asp>].
4. APPLICABILITY. This Circular applies to all major capital projects regardless of the project's transportation mode (i.e., rail transit, commuter rail, bus or bus rapid transit).
 - a. Major Capital Projects. As defined in 49 CFR Part 633, these projects must receive Federal funding and (1) involve the construction of a new fixed guideway or extension of an existing fixed guideway; or (2) involve the rehabilitation or modernization of an existing fixed guideway with a total project cost in excess of \$100 million. The Administrator of FTA can also designate a federally-funded project as a "major capital project."
 - (1) "New Starts" Fixed Guideway Systems and Extensions. These major capital projects, which include new construction and extensions for rail transit, commuter rail, and

certain types of bus service operating in dedicated vehicle lanes, are also described in 49 CFR Part 611.

- (2) Other Projects. Other types of major capital projects include modernization of existing rail transit systems and the purchase of bus and bus-related equipment and facilities.
 - b. Project Development Phases. This Circular covers FTA's project development phases, including Preliminary Engineering, Final Design, Application for FFGA, Construction, Integrated Testing, and Pre-Revenue Operations. All of these phases may not occur with each major capital project.
5. WAIVER. To the extent permitted by law, the FTA Administrator reserves the right to waive any provision of this Circular.
6. EFFECTIVE DATE. This Circular is effective as of [insert Month, Date, and Year].

SAFETY AND SECURITY MANAGEMENT PLAN CIRCULAR

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CHAPTER I

INTRODUCTION AND BACKGROUND

1. THE FEDERAL TRANSIT ADMINISTRATION. FTA is one of ten modal administrations within the U.S. Department of Transportation. Headed by an Administrator, who is appointed by the President of the United States, FTA functions through a Washington, DC, headquarters office and ten regional offices which assist transit agencies in all 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, Northern Mariana Islands, and American Samoa.

Public transportation includes buses, subways, light rail, commuter rail, monorail, passenger ferry boats, trolleys, inclined railways, and people movers, as well as vans in demand response service.

The Federal government, through FTA, provides financial assistance to develop new transit systems and improve, maintain, and operate existing systems. FTA oversees thousands of grants to hundreds of State and local transit providers, primarily through its ten regional offices. These grantees are responsible for managing their programs in accordance with Federal requirements, and FTA is responsible for ensuring that grantees follow Federal mandates along with statutory and administrative requirements.

2. AUTHORIZING LEGISLATION. The Safe, Accountable, Flexible, Efficient Transportation Act, a Legacy for Users (SAFETEA-LU) (Pub. L. 109-059), enacted on August 10, 2005, authorizes Federal surface transportation programs through FY 2009.
3. NEED FOR SAFETY AND SECURITY MANAGEMENT. Historically, grantees for FTA-funded major capital projects have described project safety and security management strategies and controls as sub-elements of other required Project Management Plan (PMP) sections. Some grantees elected to perform specific safety and security activities, such as safety and security certification or pre-revenue operational readiness assessments, while other grantees did not. There was no consistent approach to safety and security in major capital projects. With this Circular, FTA addresses these shortcomings and strengthens the role of safety and security oversight and management in all phases of project development.
4. HOW TO CONTACT FTA. Inquiries related to this Circular should be directed to the Office of Safety and Security at FTA Headquarters in Washington, DC:

Federal Transit Administration
400 7th Street, SW
Washington, DC 20590
Office of Safety and Security

Phone: (202) 366-1651
Fax: (202) 366-7951

5. DEFINITIONS. All definitions in 49 U.S.C. Section 5302(a) apply to this circular, as well as the following definitions:
- a. Contractor: A private sector enterprise engaged to provide services or products within agreed limits specified by a procuring activity.
 - b. Final Verification Report: The report developed to document the results of safety and security certification for the project. Also called the Safety and Security Certification Verification Report (SSCVR).
 - c. Fire/Life Safety Committee: The committee that serves as a liaison between the grantee and the fire jurisdictions and emergency response agencies (police, EMS, etc.) throughout the project development phases.
 - d. Hazard: Any real or potential condition that can cause injury, death, or damage to or loss of equipment or property.
 - e. Hazard Analysis: Formal analysis performed to identify and classify hazards for the purpose of their elimination or control. Examples include preliminary hazard analysis (PHA), systems hazard analysis (SHA), and a variety of reliability analyses, including Failure Modes Effects and Criticality Analysis (FMECA).
 - f. Hazard Resolution: The analysis and subsequent action taken to reduce, to the lowest level practical, the consequences associated with an identified hazard.
 - g. Passenger: A person who rides a transit vehicle excluding the operator and any other crew members.
 - h. Resolution: Changes made in the system or subsystem design, procedures, or activities which eliminate or control the identified hazard to an acceptable level.
 - i. Revenue Service: The time when transit vehicles are available to the general public and there is an expectation of carrying passengers. These passengers either directly pay fares or are subsidized by public policy or contractual arrangement.
 - j. Safety and Security Certification: The process of verifying that safety- and security-related requirements are incorporated into a project, thereby demonstrating that it is operationally ready for revenue service and safe and secure for passengers, employees, emergency responders, and the general public. The process for each project is described in that project's Safety and Security Certification Plan (SSCP).
 - k. Safety and Security Change Review Board: Committee that reviews, evaluates and manages the changes proposed to the project's documents for safety and security impacts. This body also makes recommendations for the disposition of proposed changes.

- l. Safety and Security Design Criteria: A listing of safety and security codes, regulations, rules, design procedures, standards, recommended practices, handbooks and manuals prepared to provide guidance to designers in the development of technical specifications.
- m. Safety and Security Operations Review Committee: The committee responsible for overseeing commissioning activities, including systems integration testing, start-up, activation, final safety and security certification, and operations and maintenance demonstration.
- n. Safety and Security Requirements: The specification of safety and security design criteria into the technical documents and drawings that comprise the detailed designs, procedures, plans and processes required to deliver the project.
- o. Safety and Security Review Committee: The committee that oversees the accomplishment of the safety and security objectives for each project development phase; this committee may receive the final safety and security certification and Final Verification Report.
- p. Security: Freedom from intentional danger.
- q. System Safety Program Plan (SSPP): The document that explains the tasks and activities of an agency to enhance operational effectiveness by satisfying the system safety requirements in a timely, cost-effective manner.
- r. System Security Plan (SSP): The document that explains the tasks and activities of an agency to enhance operational effectiveness by satisfying the system security requirements in a timely, cost-effective manner.
- s. Vulnerability: Characteristics of passengers, employees, vehicles, and/or facilities which increase the probability of a security breach.
- t. Vulnerability Analysis: A systematic analysis of a system operation performed to identify vulnerabilities and make recommendations for their elimination or mitigation during all revenue and non revenue operation.
- u. Verification: Documented conformance, demonstrated through testing, inspection, or other means, that the designed or delivered project, system, subsystem, or item ensuring the accuracy or correctness in comparison with a safety requirement.

CHAPTER II

AUTHORITY, ACTIVITIES, FTA EVALUATION CRITERIA, AND PROTECTION OF SENSITIVE SECURITY INFORMATION

1. AUTHORITY. FTA's authority to require safety and security management activities for major capital projects is derived from section 5327 of Title 49 United States Code, as amended by SAFETEA-LU. This section was amended to include "safety and security management" as one of the required elements of the PMP.
2. SAFETY AND SECURITY MANAGEMENT ACTIVITIES. The grantee must perform the following safety and security activities for major capital projects, and must document them in the SSMP as specified in Chapter IV of this Circular:
 - a. Prepare Policy Statement. A signed statement, issued by the grantee's executive leadership, must be developed, endorsing the SSMP and stating the project's commitment to safety and security.
 - b. Identify Safety and Security Interfaces. A project organization chart must be developed showing the grantee's project management team and key points of interface regarding safety and security issues. Names, titles and departments/affiliations must be identified.
 - c. Establish Safety and Security Organization. A project safety and security organization must be established by the grantee to manage safety and security for the major capital project. All staff and contractors assigned to this organization must be identified by name, title, and department/affiliation. Committees established to support this organization must be identified by name and acronym, with membership provided by title and affiliation. For each authority delegated to a contractor, a grantee staff member or committee must be responsible for oversight. An organization chart must be provided.
 - d. Identify Specific Safety and Security Activities by Project Phase. The grantee must identify the specific safety and security management activities to be performed by project phase, including Preliminary Engineering, Final Design, Application for FFGA, Construction, and Pre-Revenue Operations. At a minimum, these activities must ensure that:
 - (1) Throughout project development, safety hazards and security vulnerabilities have been identified and assessed, through formal analysis techniques, and that documented action has been taken to resolve and track them.
 - (2) Appropriate codes, guidelines, and standards have been reviewed to provide a basis for safety and security consideration in the project design criteria, and that project drawings, technical specifications and contracts are in conformance with the adopted design criteria.

- (3) Facilities, systems, and equipment have been constructed, installed, inspected and tested in accordance with adopted safety and security requirements, design criteria and manuals.
 - (4) Verification tests, safety/security/emergency plans, operating and maintenance procedures and manuals, and rulebooks have been developed for revenue operations, and their implementation meets project standards, project design criteria, and management expectations.
 - (5) Qualifications and training programs have been established for all personnel who will operate and maintain the project in revenue service. These programs must reflect the safety and security elements of plans, rules, operating procedures, emergency procedures and manuals established for the system.
 - (6) Documented verification is available to ensure that personnel have been trained and are qualified to operate and maintain the system and to respond to emergencies, and that emergency response organizations are familiar with the project's revenue operations and the agency's emergency procedures.
 - (7) Documentation is provided that open safety and security items, resulting from design deviations and change orders, are identified, and that action has been taken to evaluate and resolve any outstanding issues, through temporary measures (if necessary), and that these actions are tracked until final closure or acceptance.
 - (8) Emergency exercises or drills are conducted prior to the placement of the project into revenue service, and the results are evaluated in an after action report or equivalent document.
 - (9) Final safety and security certification is made prior to the placement of the project in revenue service, and this certification is documented in a Final Verification Report for the project.
- e. Ensure Construction Safety and Security. The grantee must develop an approach to construction safety and security that specifies requirements to be implemented by contractors at construction sites, ensures grantee oversight of contractors, identifies any safety and security analyses that must be performed for the construction site, and uses applicable incentives for contractors.
- f. Ensure Coordination with External Agencies. As appropriate, the grantee must identify required activities and develop schedules to ensure compliance with requirements specified by local and state agencies, and by other agencies, including the State Safety Oversight Agencies (SSOAs), as required by 49 CFR Part 659, Rail Fixed Guideway Systems; State Safety Oversight; the Federal Railroad Administration (FRA), and the Department of Homeland Security (DHS), including the Transportation Security Administration (TSA), the Office of Grants and Training (G&T), and other DHS agencies as appropriate. In addition, the grantee should document coordination with the applicable metropolitan planning organization (MPO) for the purposes of ensuring consistency,

compatibility, and an open line of communication with operators of the rest of region's transportation infrastructure, as well as police, fire, and emergency services organizations.

3. FTA EVALUATION CRITERIA. Whenever submission of the PMP is required, FTA will review the SSMP, and the grantee's implementation of the SSMP, according to procedures developed for the Project Management Oversight (PMO) program and shared with the grantee. In implementing these procedures, FTA will assess each of the elements identified in items a. through l. below. Each of these elements is given equal weight in the review process. Results of the FTA review will be documented in comments provided to the grantee. FTA's PMO contractors will follow-up on any findings, and work with the grantee to bring them to closure.

- a. The grantee's assignment of responsibility for safety and security, and how the agency will maintain responsibility over safety and security tasks that are delegated during the project's life, particularly those assigned to outside consultants and/or contractors.
- b. The effectiveness of processes used to identify and communicate safety hazards and security vulnerabilities during each project phase.
- c. The grantee's technical capacity to support and maintain the levels of duties and responsibilities identified for safety and security activities.
- d. The safety and security budget and schedule to determine whether it provides sufficient resources and time to implement the safety and security activities of the project.
- e. The extent that SSMP activities and requirements are incorporated into the project's technical specifications and contract documents.
- f. The extent that SSMP activities and requirements are incorporated into technical direction provided to contractors and project personnel.
- g. The effectiveness of the approach used by the grantee to oversee the safety and security activities of contractors.
- h. The extent to which documented action is taken to address safety and security concerns in a timely and appropriate manner.
- i. The staff and/or committees and their processes used to verify that the project's facilities, systems, and equipment have been constructed, installed, inspected, and tested in accordance with adopted safety and security requirements, design criteria, and manuals.
- j. The staff and/or committees and their processes used to verify the readiness of operations and maintenance personnel for revenue service.
- k. The process used to provide safety and security certification, to issue the Final Verification report, and to manage any identified restrictions or work-arounds.

1. The process used by staff and/or committees to ensure coordination and compliance with requirements specified by SSOAs, FRA, and DHS agencies, including TSA.

4. SENSITIVE SECURITY INFORMATION MANAGEMENT. DOT regulation “Protection of Sensitive Security Information,” 49 CFR Part 15, specifies that each grantee shall control the release of “sensitive security information” (SSI). DOT published “Interim Policies and Procedures for 49 CFR Part 15, Protection of Sensitive Security Information” on June 7, 2005. This DOT policy and procedures apply to all DOT employees and to all DOT contractors, grantees, consultants, licensees, and regulated entities that have access to or receive SSI. Following this DOT guidance, procedures established by grantees for managing SSI materials must be referenced in the SSMP and used to guide the sharing of SSI materials with FTA and other external agencies, including, if applicable, the SSOA, the FRA, and DHS agencies.

CHAPTER III

PROCESS FOR PREPARING THE SSMP

1. OVERVIEW. The grantee's approach to performing the safety and security management activities identified in Chapter II must be documented in the SSMP. The SSMP must contain each of the 11 sections discussed in Chapter IV.
2. IDENTIFICATION OF SECTIONS THAT ARE NOT APPLICABLE: In the event that Section 9, Section 10 and/or Section 11, as described in Chapter IV, are not applicable, the grantee shall include these sections in the SSMP and insert the phrase "Not Applicable."
3. DEVELOPMENT PROCESS – NEW STARTS PROJECTS. For "New Starts" projects, as part of the PMP, a current SSMP must be submitted and conditionally approved before entry into each major project development phase.
 - a. Preliminary Engineering. The initial version of the SSMP submitted with the request for entry into preliminary engineering must provide a level of detail commensurate with the level of detail in other PMP elements.
 - b. Final Design. The version of the SSMP submitted with the request for entry into final design must fully address the requirements specified in Chapter IV.
 - c. Application for FFGA. The SSMP submitted with the request for a FFGA must be updated to reflect activities actually completed in earlier phases and must also include any changes intended for the remaining project phases.
 - d. Construction and/or Other Times Required by Circumstances. The SSMP submitted in response to specific requests from FTA during construction operations must be updated to reflect completed activities and any specific activities remaining.
 - e. Integrated Testing and Pre-Revenue Operations. The SSMP submitted in response to specific requests from FTA during testing or pre-revenue operations must be updated to reflect completed activities and any specific activities remaining.
4. DEVELOPMENT PROCESS – OTHER MAJOR CAPITAL PROJECTS: For other major capital projects, such as rail modernization projects and procurement of bus vehicles and bus-related equipment and facilities, the SSMP must be developed, updated and submitted whenever the PMP is required.
5. REFERENCING. To integrate project safety and security into the grantee's overall safety and security programs, and to avoid duplication in preparing the SSMP, grantees are encouraged to include, by reference, specific documents, sections of documents, and procedures from the grantee's safety and security program that support the SSMP. References should include the document name, chapter or title, and appropriate page numbers. All referenced materials must be available to FTA for review, following

appropriate procedures established for SSI materials as necessary. Examples of documents that can be referenced include the following:

- a. Other Sections of the PMP. The grantee may reference other appropriate sections of the PMP, including those sections relating to the project's quality assurance and quality control (QA/QC) program for design and construction; the grantee's process for design reviews; the grantee's process for integrated testing; and the grantee's approach to pre-revenue operations and demonstration, including activation activities and coordination with external agencies, such as SSOAs, FRA, and DHS agencies.
- b. Other Plans. The grantee may reference other plans, or sections of plans, it has developed, or will develop, to address specific safety and security issues, including the Safety and Security Certification Plan (SSCP), the Construction Safety and Security Plan, the System Safety Program Plan (SSPP), the System Security Plan (SSP), the emergency response plan, staffing and training plans, rules and procedures, maintenance manuals, and plans for emergency exercises and drills, and any documents necessary for compliance with requirements specified by SSOAs, FRA and DHS agencies. In addition, the grantee may reference applicable portions of the metropolitan plan that relate to system-wide consideration of safety and security, as well as documents prepared as part of the metropolitan planning process that relate to key systems communication provisions.
- c. Contract Specifications and Project Documents. The grantee may also reference: contract and project requirements for hazard and vulnerability analysis; plans and procedures for the verification of safety and security requirements in final specifications and contract documents; safety and security construction specification conformance, testing and acceptance procedures and forms; and submissions and waiver requests to external agencies.

CHAPTER IV

REQUIRED SSMP CONTENTS

The SSMP prepared by the grantee, and submitted to FTA as part of the PMP, must be organized according to the 11 sections identified below.

1. SECTION 1: MANAGEMENT COMMITMENT AND PHILOSOPHY. The first section of the SSMP shall include the following:
 - a. Safety and Security Policy Statement. Provides a signed statement, issued by the grantee's executive leadership, endorsing the SSMP and confirming the project's commitment to safety and security.
 - b. Purpose of SSMP. Describes the SSMP as the document that will guide the grantee's integration of safety and security into each phase of the project development process.
 - c. Applicability and Scope. Describes the applicability of the SSMP to all project activities through Preliminary Engineering, Final Design, Application for FFGA, Construction, Integrated Testing, and Pre-Revenue Operations. The project-specific SSMP ends with the start of revenue operations, but for applicable rail transit projects, its scope must include assuring that an SSOA-approved SSPP and System Security Plan is in place at the start of revenue operations. For all major capital projects, the SSMP must also ensure that a mechanism is provided to follow to completion the resolution of any restrictions to full safety and security certification.
 - d. SSMP Goal. Clarifies that the grantee will use the SSMP to ensure that the final project initiated into revenue service is safe and secure for passengers, employees, public safety personnel, and the general public.
2. SECTION 2: INTEGRATION OF SAFETY AND SECURITY INTO PROJECT DEVELOPMENT PROCESS. The second section of the SSMP shall include the following:
 - a. Safety and Security Activities. Identifies the safety and security tasks that must be performed for the project through all phases. Includes both a text description of the activities and a matrix listing these activities and the project phases during which they will be performed. One matrix may be prepared that combines safety and security activities by project phase, or separate matrices may be developed.
 - b. Procedures and Resources. Identifies the procedures and resources that will support performance of safety and security activities throughout the project phases, including procedures for the management of sensitive security information (SSI).
 - c. Interface with Management. Identifies the process and lines of communication by which safety and security issues will be communicated to senior management and used by senior management in decision-making. An organization chart showing the grantee's project management team and key points of interface regarding safety and security issues

must also be provided. The organization chart shall identify the relationships from the safety and security staff and organizations to construction management, project management, and executive management. The chart shall also identify relationships to construction contractors and subcontractors.

3. SECTION 3: ASSIGNMENT OF SAFETY AND SECURITY RESPONSIBILITIES. The third section of the SSMP shall include the following items:
 - a. Responsibility and Authority. Identifies, by title and department, all staff, contractors, and committees assigned to manage the safety and security activities specified in Section 2 of the SSMP. Each individual staff member must be identified by title and affiliation; each committee must be identified by name and acronym, with membership provided by title and affiliation. For each authority delegated to a contractor, the grantee staff member or committee responsible for oversight must be shown. An organization chart must be provided for the project's safety and security organization.
 - b. Committee Structure. Describes the organization and responsibilities of the different committees that may be used for the project, including the Safety and Security Review Committee; the Fire/Life Safety Committee; the Safety and Security Change Review Board; and the Safety and Security Operations Review Committee, or other comparable committees.
 - c. Safety and Security Responsibilities Matrix. Presents the responsibility and reporting relationships for safety and security in the form of a matrix. Separate matrices may be used for safety and security authorities and responsibilities, or a single matrix may be used. Individuals having authority for safety or security functions who are not part of the grantee's staff must report to grantee representative.
4. SECTION 4: SAFETY AND SECURITY ANALYSIS. The fourth section of the SSMP shall include the following:
 - a. Approach to Safety and Security Analysis. Describes the grantee's approach to the analysis of safety hazards and security vulnerabilities. Known hazards and vulnerabilities must be identified, categorized as to their potential severity and probability of occurrence, analyzed for potential impact, and resolved by design, engineered features, warning devices, procedures and training, or other methods.
 - b. Requirements for Safety and Security Analysis. Specifies the distinct types of safety and security analysis to be performed and by whom during the specific phases of the project. It also shall describe the mechanism for communicating analysis results throughout the project team; and describe the process for assuring the resolution of hazards and vulnerabilities.

5. SECTION 5: DEVELOPMENT OF SAFETY AND SECURITY DESIGN CRITERIA. The fifth section of the SSMP shall include the following:
 - a. Approach to Development of Safety and Security Design Criteria. Describes the project's approach to creating suitable safety and security design criteria. It shall discuss the resources, including standards prepared by such organizations as the American Public Transportation Association (APTA), the National Fire Protection Association (NFPA), Underwriters Laboratories (UL), etc., that the grantee will use to develop its design criteria; how the project will identify safety and security certifiable elements; how it will guide the development of safety and security design criteria, and what analyses it will perform to ensure the final specifications and contract documents will result in design that meets the grantee's requirements for safety and security.
 - b. Design Reviews. Identifies how safety and security activities will be addressed during design reviews to ensure incorporation of safety and security requirements into the final project design.
 - c. Deviations and Changes. Identifies procedures for ensuring that changes to safety and security design criteria are appropriately reviewed and approved prior to adoption.
6. SECTION 6: PROCESS FOR ENSURING QUALIFIED OPERATIONS AND MAINTENANCE PERSONNEL. The sixth section of the SSMP shall include the following:
 - a. Operations and Maintenance Personnel Requirements. Identifies the number of personnel and their specific job classifications required to operate and maintain the project in revenue service. Specifies the qualifications and core competencies, required by job classification, for these personnel to ensure their abilities to provide safe and secure service and to respond to emergencies. Special emphasis must be placed on the requirements for front-line personnel (i.e., operators, supervisors, station attendants, and mechanics).
 - b. Plans, Rules and Procedures. Identifies by name the specific safety, security and emergency plans, rules, procedures, and manuals to be developed for operations and maintenance personnel, and also provides a schedule for their development.
 - c. Training Program. Lists the elements of training to be provided to employees, by job classification, to ensure their capabilities to provide safe and secure service and to respond effectively to emergencies. Also, a schedule must be provided for the development and offering of this training, and for completion of any qualifications or certifications required by employees. Documented evidence of personnel training and qualifications/certifications must be kept in files maintained by the grantee.
 - d. Emergency Preparedness. Identifies any exercises, drills, tabletops or other activities that will be performed to ensure the readiness of the project placed in revenue service to respond to emergencies, and how the results of these activities will be assessed (i.e., after action report or equivalent document).

- e. Public Awareness. Identifies programs that support a commitment to ongoing comprehensive public awareness, for both security awareness (such as the Transit Watch Program) and emergency preparedness (such as emergency evacuation instructions to riders).
7. SECTION 7: SAFETY AND SECURITY VERIFICATION PROCESS (INCLUDING FINAL SAFETY AND SECURITY CERTIFICATION). The seventh section of the SSMP shall include the following:
 - a. Design Criteria Verification Process. Describes the process used by the grantee to verify that safety and security design criteria have been addressed in project specifications and contract requirements and that all required inspections and tests have been incorporated into project test plans.
 - b. Construction Specification Conformance Process. Describes the process used to ensure that elements of the system provided under construction, procurement and installation contracts conform to the specifications.
 - c. Testing/Inspection Verification. Describes the process used to ensure that the as-built (or delivered) configuration contains the safety- and security-related requirements identified in the specifications and other contract documents.
 - d. Hazard and Vulnerability Resolution Verification. Describes the process used to ensure that safety and security design criteria and safety and security analysis have effectively identified, categorized and resolved hazard and vulnerabilities to a level acceptable by management.
 - e. Operational Readiness Verification. Describes the process used to ensure that rules and procedures are developed to effectively incorporate all safety and security requirements specified during design and identified through safety and security analysis. This includes the process to ensure that the project has provided training to personnel and is using qualified and capable operations and maintenance personnel to initiate revenue service.
 - f. Safety and Security Certification Requirements. Describes the requirements that must be met to deliver final certification that the project is safe and secure for passengers, employees, public safety personnel, and the general public, including individual certificates issued for specific elements to be verified.
 8. SECTION 8: CONSTRUCTION SAFETY AND SECURITY. The eighth section of the SSMP shall include the following:
 - a. Construction Safety and Security Program Elements. Describes the requirements to be implemented by contractors and reports to be received by the grantee's management for implementing and tracking construction safety and security programs and plans.

- b. Construction Phase Hazard and Vulnerability Analysis. Describes the analyses that must be done to identify and resolve or mitigate hazards or threats and vulnerabilities that may be unique to the construction phase.
 - c. Safety and Security Incentives. Describes any incentives that may be in place to support implementation of the construction safety and security program.
9. SECTION 9: REQUIREMENTS FOR 49 CFR PART 659, RAIL FIXED GUIDEWAY SYSTEMS; STATE SAFETY OVERSIGHT. The ninth section of the SSMP shall address activities to coordinate with the SSOA to comply with 49 CFR Part 659 requirements with the initiation of revenue service. This section is only required for rail fixed guideway systems meeting the definition specified in 49 CFR Part 659. It shall include a description and schedule of implementation activities and shall describe how the project will coordinate with the SSOA regarding implementation of 49 CFR Part 659 requirements. If the SSOA has authorities that exceed 49 CFR Part 659 minimum requirements, this section must also explain the grantee's approach for addressing these additional authorities. Specifically for rail transit projects, the SSMP must describe the process through which the grantee will develop, adopt and implement both a System Safety Program Plan (SSPP) and System Security Plan (SSP) that comply with the standards established by the SSOA prior to passenger operations.
10. SECTION 10: FRA COORDINATION. The tenth section of the SSMP is applicable only to projects that propose to share track with one or more FRA-regulated railroads or that will operate on the general railroad system. For these projects, this section shall address the activities and schedules for meeting the requirements for the FRA applications, approvals, deviations, and/or waivers, and the coordination of the grantee's activities with appropriate FRA personnel to support FRA review and approvals. For Commuter or Passenger Railroads, regulated by FRA, the SSMP must describe the process through which the grantee will develop an SSPP and submit it to FRA for review and approval. The SSPP must conform to the American Public Transportation Association (APTA) *Guidelines for the Development of Commuter Rail System Safety Program Plans*. In addition, the grantee must submit for FRA review and approval plans for completion of a collision/derailment hazard analysis that conforms to the hazard management process in the approved SSPP or the *FRA Guide to Collision/ Derailment Hazard Analysis*.
11. SECTION 11: DHS COORDINATION. The eleventh section of the SSMP shall address how the project will meet the requirements and programs managed by DHS agencies, including the applicable Security Directives issued by TSA. This section shall identify the activities to be performed and schedules for meeting the requirements.