Oversight Procedure 22 — Safety and Security Management Review

1.0 PURPOSE

The purpose of this Oversight Procedure (OP) is to describe the review, analysis, and recommended procedures and reporting requirements that the Federal Transit Administration (FTA) expects from the Project Management Oversight Contractor (PMOC) with regards to the implementation of Federal requirements for safety and security management.

While this OP focuses on Capital Investment Grant (CIG) projects, which have specific requirements by law, it also applies to all capital projects. FTA will issue Implementation Plans (IPs) to clarify the specific reviews and expected deliverables based on the project types.

2.0 BACKGROUND

FTA's Safety and Security Management Guidance for Major Capital Projects Circular (C 5800.1) identifies the minimum, specific activities required as part of the safety and security management program developed for capital projects (see Chapter II, paragraph 2). Depending on the size and nature of the project, the safety and security management activities may be:

- Included as a section or chapter of the Project Management Plan (typically for Small Starts, bus vehicle and facility replacement projects, smaller bus rapid transit projects, and smaller rail modernization and rehabilitation projects); or
- Documented in a separate Safety and Security Management Plan (SSMP) that is submitted as part of the Project Management Plan (PMP) and conforms to Chapter IV of FTA's C 5800.1 (typically for larger projects). The PMP shall contain a section that references and summarizes the separate SSMP.

The FTA Alternate Contracting Officer's Representative (ACOR) (previously referred to as "Task Order Managers") will determine whether a separate SSMP or a separate chapter in the PMP will suffice.

3.0 OBJECTIVE

The objective of this procedure is to guide the PMOC's efforts in evaluating the development and implementation of the project sponsor's SSMP over the course of a capital project.

4.0 REFERENCES

The PMOC shall become familiar with the following references to Federal legislation, regulation, and guidance before reviewing the project sponsor's work. These are the principal references, but this list is not exhaustive:

4.1. Legislative

- 49 U.S.C. Chapter 53, Public Transportation
- 49 U.S.C. 114(d), Transportation Security Administration
- Infrastructure and Investment Jobs Act (IIJA), Public Law 117-58, effective November 15, 2021 (also known as the "Bipartisan Infrastructure Law")

4.2. Regulations

- 49 CFR Parts 15 and 1520, Protection of Sensitive Security Information
- 49 CFR Part 611, Major Capital Investment Projects
- 49 CFR Part 633, Project Management Oversight (for projects requiring and assigned an oversight consultant by FTA)
- 49 CFR Part 665, Bus Testing
- 49 CFR Part 673, Public Transportation Agency Safety Plan
- 49 CFR Part 674, State Safety Oversight
- Federal Railroad Administration, Legislation & Regulations

4.3. Circulars

- C 5800.1, Safety and Security Management Guidance for Major Capital Projects (2007)

4.4. Guidance

- FTA's Safety and Security Management in Rail Transit Projects Guidebook (2009) (Available upon request from the FTA ACOR)
- Frequently asked Safety and Security Management Plan Questions
- FTA Project and Construction Management Guidelines (2016)
- FTA Quality Management System Guidelines (2019)
- Hazard Analysis Guidelines for Transit Projects (2000)
- Federal Railroad Administration (FRA) Collision Hazard Analysis Guide: Commuter and Intercity Passenger Rail Service (2007)
- Sensitive Security Information (SSI): Designation, Markings and Control (2009)
- PTASP Technical Assistance Center Libraries

4.5. Applicable FTA Oversight Procedures

- OP 20 Project Management Plan Review
- OP 21 Management Capacity and Capability Review
- OP 24 Quality Assurance/Quality Control (QA/QC) Review
- OP 25 Recurring Oversight and Related Reports

- OP 51 Readiness to Enter Engineering
- OP 52 Readiness to Execute FFGA/SSGA
- OP 53 Readiness to Procure Construction Work
- OP 54 Readiness for Service

A sample list of safety and security standards can be found in **Appendix J**.

5.0 PROJECT SPONSOR SUBMITTALS

Appendix B of this OP, Project Phase and Documentation Requirements, identifies typical interfaces between the SSMP and other project activities that FTA would expect to see referenced in documentation. Appendix B also includes a table of suggested documents for review by the PMOC during any adherence reviews that the PMOC may be perform (as directed by the FTA ACOR).

Rail Fixed Guideway projects that are not under the jurisdiction of the FRA are subject to State Safety Oversight Agency (SSOA) jurisdiction as specified in 49 CFR Part 674 and to the Public Transportation Agency Safety Plan (PTASP) regulation at Part 673.

The reviews conducted by the PMOC or FTA personnel require submittals from project sponsors appropriate to the stage of project development. The submittals shall conform to requirements and recommendations applicable to the project and the project sponsor's SSMP.

Depending on the project or the regulations required, project sponsors may have different names for similar documents. The project sponsor must identify any SSMP documents containing titles that are different from those generally accepted. The PMOC must be aware of these variations and work with the project sponsor to clarify needed submittals.

6.0 SCOPE OF WORK

The PMOC will review the adequacy and soundness of the project sponsor's SSMP. As directed by the FTA COR/ACOR, the PMOC or FTA personnel will perform the following activities:

- Initial Review: Conduct an initial review of the SSMP prior to the engineering phase.
- Follow-Up Reviews: Review the SSMP each time it changes substantially and provide formal comments. At a minimum, the SSMP is reviewed with every PMP update.
- Adherence Reviews: Conduct a SSMP adherence review during each major project phase and follow-up review to determine how well the project sponsor is implementing its program. This on-site activity requires document reviews, interviews, and field verifications regarding the implementation of the project sponsor's SSMP.
- Coordination: Coordinate and support, as directed, the implementation of other oversight procedures, such as OP 24 "Quality Assurance/Quality Control Review," OP 25 "Recurring Oversight and Related Reports," and OP 54 "Readiness for Service" for SSMP issues. Regardless of whether the SSMP review is assigned to a PMOC familiar with the project or to a specialist PMOC, FTA expects that review activities will be coordinated between the PMOC or FTA personnel providing the on-going monitoring,

the FTA Regional Office, including regional engineers, the FTA COR/ACOR, and the SSOA. Specifically, the PMOC or FTA personnel must coordinate the SSMP reviews with PMP reviews conducted following the relevant OPs. FTA's evaluation of the PMP cannot be completed until the SSMP is reviewed, because it is part of the PMP.

- Updates: Provide updates on the development and implementation of the SSMP in monthly reports or as directed.

Appendices referred to or helpful in complying with this section include:

- Appendix B: Project Phase and Documentation Requirements
- Appendix C: Sample Document Flow Chart
- Appendix D: Safety and Security Management Initial Review Checklist
- Appendix E: Safety and Security Management Areas for Consideration in the PMP Section
- Appendix F: Safety and Security Organization Structure
- Appendix G: Matrix of Responsibilities
- Appendix H: SSMP Adherence Review Report
- Appendix I: Adherence Review Worksheets
- Appendix J: Examples of Safety and Security Standards and Criteria
- Appendix K: Acronyms

The PMOC's review provides major input to FTA in determining the project sponsor's ability to perform safety and security management on the project. This input is used to help the FTA make decisions for future for project advancement.

6.1. Initial Review

As set forth in 49 U.S.C. Section 5327(a) and 49 CFR Part 633, within 60 days of receiving the PMP, FTA will approve or disapprove the plan, or will notify the applicant that FTA is not yet able to complete its review. As a critical component of the PMP approval process, the PMOC must conduct an initial review of the SSMP submittal.

The PMOC must use the checklist in Appendix D of this OP to complete its review. For each section in the checklist, the PMOC should assess if the SSMP meets the requirements. The checklist also requires the PMOC to identify and review any documents referenced in the SSMP describing the approach to performing specific safety and security management activities.

An SSMP must follow the sections and subsections in Chapter IV of Circular 5800.1 and should not include material that is not specified (such as project description, agency history, etc.). The PMOC must follow the process outlined in Chapter III of Circular 5800.1 for identifying and documenting activities that are "not applicable" to the SSMP. All "not applicable" items must be marked as such in the SSMP and in the checklist in Appendix D.

If the SSMP is addressed directly in the PMP, the PMOC should modify the checklist in Appendix D so that it only covers applicable items. Depending on the size and type of capital project, the PMOC may choose to develop its own checklist rather than alter Appendix D.

Appendix E of this OP contains the minimum safety and security management areas for consideration in the PMP section.

If the PMOC determines that additional information is needed while completing the initial review checklist, the PMOC must notify the project sponsor that additional information is required and then specify a timeframe for its submission.

During the initial review, the PMOC shall consult the SSOA in its assessment of the project sponsor's SSMP implementation.

6.1.1. Review of Safety and Security Organization

Beginning with its initial PMP, the project sponsor must establish a specific organization to manage safety and security for the project. The project sponsor must identify by name, title, and department or affiliation all staff and contractors assigned to this organization. In addition, the project sponsor must identify supporting committees.

The project sponsor must also identify who among the project team leadership has ultimate decision-making responsibilities for safety and security issues and their interface with the organization and committees. Section 673.5 specifies that the Chief Safety Officer "reports directly to a transit agency's chief executive officer, general manager, president, or equivalent officer." Section 673.5 also specifies that the Accountable Executive is the "single, identifiable person who has ultimate responsibility for carrying out the Public Transportation Agency Safety Plan of a public transportation agency."

Appendix F of this OP presents typical safety and security functions and committee structures.

6.1.2. Review of Activities to be Completed by Project Phase

Appendix B identifies the activities that may be performed by project phase for safety and security management. The PMOC should review this listing against the project sponsor's initial safety and security management submission. The PMOC should ensure that the project sponsor's initial submission adequately plans future safety and security management activities.

6.2. Follow-up Reviews

Periodically, the project sponsor will update its SSMP and resubmit it to FTA for review and approval. The PMOC must review the project sponsor's updated SSMPs and update the assessments made in the checklist provided in Appendix D of this OP.

As specified in paragraph 3 in Chapter II of FTA's Circular 5800.1, the PMOC should focus on the following throughout the lifecycle of the project:

- The project sponsor's assignment of responsibility for safety and security, including the process for maintaining responsibility over safety and security tasks it delegates to outside consultants or contractors;
- The effectiveness of the project sponsor's process to identify and communicate safety hazards and security vulnerabilities during each project phase;
- The project sponsor's capacity to support and maintain the levels of duties and responsibilities it identified for safety and security activities in the SSMP;

- The project sponsor's safety and security budget and schedule, including the determination regarding the resources it requires for the safety and security activities in the SSMP;
- The extent to which the project sponsor incorporates safety and security requirements into the project's technical specifications and contract documents;
- The extent to which the project sponsor incorporates the safety and security management program activities and requirements into the technical direction provided to contractors and project sponsor personnel;
- The effectiveness of the project sponsor's approach in managing the safety and security activities of contractors;
- The extent to which the project sponsor takes documented action to address safety and security concerns in a timely and appropriate manner;
- The effectiveness of the project sponsor's approach for verifying that contractors, staff, and committees built, installed, inspected, and tested all facilities, systems, and equipment in accordance with the adopted safety and security requirements, as reflected in the project's technical specifications, drawings, and contracts;
- The effectiveness of the project sponsor's QA/QC program and personnel in oversight and audit of safety and security requirements across the project phases, as described in the FTA approved quality management plan(s);
- The readiness of operations and maintenance personnel for revenue service;
- The effectiveness of the project sponsor's process for providing safety and security certification, issuing the Final Verification Report, and managing any identified restrictions or workarounds to full safety and security certification; and
- The effectiveness of the project sponsor's process for ensuring compliance with requirements specified by SSOAs, FRA, and Department of Homeland Security (DHS) agencies, including the Transportation Security Administration (TSA).

The PMOC should use Appendix B of this OP as a general guide to evaluate the project sponsor's progress and to identify when additional verification activities may be needed. Issues, needs, and concerns identified by the PMOC should be communicated to the FTA COR/ACOR in a timely and clear manner.

6.3. Adherence Review

The PMOC must conduct adherence reviews to assess the implementation of the SSMP. The goal of the adherence reviews is to determine if the project sponsor is following its SSMP and FTA's required activities identified in Chapter II of Circular 5800.1. The PMOC will determine the degree of adherence by evaluating the level of compliance with the SSMP requirements.

The adherence reviews should be performed a minimum of once for each phase and potentially several times per phase depending on the project and the agency, as determined by the FTA COR/ACOR.

This review can be divided into five activities:

1. **Planning the review**: Based on activities, documentation, committees, and responsibilities identified in the SSMP or PMP, prepare a list of documents and materials to review, individuals to interview, and sites to visit. The PMOC should be request any materials they do not have and the project sponsor should develop schedules for deliveries, interviews, and site visits.
2. **Reviewing plans, policies, and procedures**: Determine whether they are consistent with the SSMP or PMP section and with the FTA's intent for management of safety and security programs.
3. **Reviewing documentation, including memoranda, reports, records, and minutes of safety and security-related committees**: Verify that the program has been implemented and plans and procedures are being followed.
4. **Interviewing project sponsor and consultant staff (senior and middle managers and consultant personnel identified in the SSMP, PMP or others with safety and security responsibilities in the agency and throughout the project)**: Verify that personnel charged with carrying out the safety and security programs are aware of their responsibilities and are capable of meeting them. SSOA participation and interviews are also encouraged.
5. **Inspecting selected sites**: View evidence that safety and security programs are being implemented throughout the project area.

Appendix H of this OP contains a sample report outline for the adherence review and Appendix I contains worksheets for the PMOC to document the on-site review activities.

6.3.1. Planning the Review

The project sponsor will be asked to supply a considerable amount of material and to schedule interviews and site visits over a relatively short time span. Based on the volume of documents and the number of people to be interviewed, the PMOC may perform the review using a small team of safety and security experts.

To orient themselves to the project sponsor's SSMP for the capital project, the PMOC team may choose to attend the project sponsor's recurring meeting where safety and security management issues are discussed, such as a safety and security certification working group or a fire/life safety committee meeting. The PMOC also may consider an alignment tour led by the senior project staff members, including safety and security personnel.

Such a tour may assist the PMOC in finalizing the list of documents to be submitted by the project sponsor to support the review and in identifying the staff members to be interviewed. The PMOC should coordinate with the project sponsor on the documents the PMOC would like to review and the interviews they would like to conduct. It is a good practice to document this step with an informal progress report to the FTA COR/ACOR.

Several documents to be reviewed may be labeled Sensitive Security Information (SSI) in conformance with 49 CFR Part 15 and 1520. Since the PMOC's task order will not authorize access to SSI materials, the PMOC must obtain clearance from the FTA COR/ACOR.

For more information on handling SSI, refer to the document Sensitive Security Information (SSI): Designation, Markings and Control (see also 49 CFR Parts 15 and 1520).

6.3.2. Review of Plans, Policies, Procedures and Project Documents

Upon receipt, the PMOC should review all plans, policies, and procedures of the safety and security programs referenced in the SSMP or PMP. The PMOC must determine whether the SSMP or PMP and its supporting documents describe consistent, comprehensive, and effective safety and security programs. Supporting documents should be identified and should be consistent with sound safety and security practice and principles. The checklist in Appendix D of this OP also can be used to support this activity.

The PMOC should assess whether the safety and security programs described in the plans, policies, and procedures are being implemented. The review may include reports of committees with safety or security oversight responsibilities, especially to determine membership, meeting schedules, document control policies, and mechanisms for tracking open issues and bringing unresolved issues to the project sponsor's senior managers (See Appendix B of this OP for typical documents).

The PMOC should pay particular attention to changes in scope that may reduce the safety and security controls designed into the project. Change documents such as Value Engineering lists, risk assessment mitigation action lists, and construction contract modifications should be carefully reviewed for their safety and security implications**.**

The PMOC should assess the QA personnel role in oversight and audit of safety and security requirements across the project phases.

6.3.3. Interviews

Interviews are crucial for determining that those assigned responsibilities in the SSMP or PMP are aware of and understand their roles. The interviews aid both the project sponsor and the PMOC. The project sponsor's senior staff gains a better understanding of the importance of safety and security planning and management and the PMOC comes away assured that the SSMP or PMP reflects the roles of those overseeing the project.

The PMOC must identify individuals and work with the project sponsor to prepare an interview schedule. The SSMP will identify those with safety or security responsibilities (by title and responsibilities). The project sponsor's project organization charts may also help identify additional interview candidates. Appendix G of this OP provides a matrix of responsibilities for a large New Starts project that would require an SSMP. Smaller projects will have fewer participants and safety and security management activities.

The PMOC should include consultant or contractor personnel who are assigned full-time (seconded) to the project.

The interview process may take several days, depending on the number and availability of interviewees. It should begin with a meeting (an hour or less) with those who will be interviewed, the project sponsor's executive staff, SSOA staff and a representative of the FTA Regional office. This establishes the authority for the interviews, provides for introductions, and allows the PMOC to explain the purpose and importance of the review.

Interviews should be conducted in a 30-to-60-minute timeframe. They should be scheduled at 75-minute intervals to allow time for the PMOC to gather information and allow interviewees to ask questions.

The PMOC should prepare questions that are specific to each individual's role.

The PMOC should use the questionnaires for recording answers and making notes. Interviews should not be tape-recorded because interviewees may be uncomfortable speaking openly on tape. If the PMOC does intend to record the interviews, each interviewee should be asked if they are comfortable with being recorded. If the interviewee is not comfortable, they should not be recorded.

6.3.4. Field Inspections

Site inspections should include the proposed right-of-way, locations of proposed terminals, existing terminals, and major stations that will be part of the new system, parking lots, and rail or bus vehicle storage, repair, and maintenance facilities.

A senior project staff member or project safety officer should lead the visits. Unless scheduling is difficult, all PMOC team members should participate in the field tour. In addition to initial inspections, periodic inspections should be performed, especially during construction, to verify that safety and security procedures are being followed. Construction phase observations should include verification that contractors are wearing required personal protection equipment (PPE), that site security is in place, that precautions have been taken to protect the surrounding public and properties, and that similar construction-specific safety and security concerns are being addressed.

During the construction, testing, and pre-revenue phases, many contractual and integrated tests are being conducted for the purpose of validating proper operation of equipment being furnished and constructed for the project, such as: sprinkler systems, alarms, emergency management panels, fire management panels, ticket vending machines, and CCTV systems. If possible, the PMOC should participate in system integration and pre-revenue testing activities.

The SSMP should identify the project sponsor's process and plans for verifying that integrated tests, acceptance tests, and other inspections will be conducted to ensure that safety and security requirements have been effectively addressed. Integrated test plans and procedures should be reviewed by the PMOC as part of the inspection.

During inspections, the PMOC should examine project elements that were identified in Preliminary Hazard Analyses (PHAs) or Threat and Vulnerability Analyses (TVAs) and should determine whether appropriate mitigations are in place or planned. The PMOC should also be prepared to identify other potential hazards and vulnerabilities.

The PMOC should record observations, and, if appropriate, take photographs. Appendix I, "SSMP Adherence Review Worksheet," provides space to identify the elements to be reviewed in the field and a place to record the PMOC's determinations.

The PMOC should also plan to attend and observe safety and security related committee meetings as described in the procedures to assess project sponsor's implementation and compliance of the project's safety and security management requirements.

7.0 REPORTS, PAPERS, PRESENTATIONS

The PMOC shall provide the COR/ACOR with a written report, formatted in compliance with OP 01, of their findings, analyses, recommendations, professional opinions, and description of the review activities undertaken, as well as other supporting information.

After the COR/ACOR has transmitted formal acceptance of the report, the PMOC should share the report with the project sponsor. If there are differences of opinion between the PMOC and the project sponsor regarding the PMOC's findings, the COR/ACOR may direct the PMOC to reconcile their findings with the project sponsor and provide the COR/ACOR with a report addendum covering the modifications agreed upon by the project sponsor and PMOC.

When directed by the COR/ACOR, the PMOC shall perform data analysis and develop data models that meet FTA requirements using Microsoft Office products, such as Excel and Word, and use FTA templates when provided.

Upon approval by the COR/ACOR, the PMOC may add other software as required, but they should provide the COR/ACOR with documentation and report data when complete.

7.1. Final Report

The PMOC should prepare a final report reflecting the resolution of all open issues and correction of all deficiencies. FTA, at its discretion, will transmit the final report to the project sponsor and the SSOA.

In the event the project sponsor does not resolve the concerns identified in the final report within the time frame specified, FTA's COR/ACOR may request PMOC support in drafting and managing correspondence and communication with the project sponsor related to outstanding findings documented in the final report.

The PMOC should always keep the FTA COR/ACOR and the SSOA informed regarding any noncompliance items or concerns that may require FTA grant withholding action.

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APPENDIX A: ACCEPTABLE QUALITY LEVEL

	Desired Outcome	Performance Requirement	Checklist	Performance Measure	Acceptable Quality Level	Monitoring Method
1	The PMOC shall validate the thoroughness of the project sponsor's Safety and Security Management Plan (SSMP) as a major component of the PMP.	**R1a.** The PMOC shall develop and document a process for review, analysis, and recommendations for submission, revision, and resolution of deficiencies in the SSMP.	☐	**M1a.** Review of the process documentation.	**Q1a.** PMOC provides documentation of the process.	**MM1a.** Periodic review by FTA or its agent.
		R1b. The PMOC shall use its process and project management judgment to validate the thoroughness of the project sponsor's SSMP as a major component of the PMP.	☐	**M1b.** Documented review and analysis of the project sponsor's SSMP as a major component of the PMP.	**Q1b.** Review must be made and the PMOC provides internal verification that the process as documented has been followed.	**MM1b.** Periodic review by FTA or its agent and the PMOC's internal verification.
2	The PMOC shall assure FTA's access to a well-prepared SSMP that demonstrates the project sponsor's ability to manage Project safety and security and to continue to receive	**R2a.** The PMOC shall review the project sponsor's SSMP submittal(s) and supporting documentation and provide FTA with its opinion as to the soundness of the project sponsor's SSMP and the project sponsor's management of safety and security issues	☐	**M2a.** PMOC's review and opinion as to the soundness of the SSMP and project sponsor's safety and security management processes demonstrates the application of sound management and	**Q2a.** Professional opinion of the soundness of the project sponsor's SSMP and safety and security management processes.	**MM2a.** Periodic review by FTA or its agent.

	Federal funds for further project development.	compared with proven professional management practices for projects of similar scale.		engineering practices and professional experience.		
		R2b. The PMOC shall analyze the project sponsor's SSMP submittals and supporting documentation and provide FTA with its opinion of the adequacy of the project sponsor's implementation of the SSMP for the specific phase of the project addressed in the PMP.	☐	**M2b.** PMOC's analysis and opinion as to the project sponsor's implementation of the SSMP is based on sound management and engineering practices and professional experience.	**Q2b.** Professional opinion of the adequacy of the project sponsor's implementation of the SSMP.	**MM2b.** Periodic review by FTA or its agent.
		R2c. The PMOC shall provide FTA, and project sponsor when so directed by FTA, with its recommendations, based on review and analysis of the SSMP, to bring the SSMP to a level necessary for effective and efficient management of safety and security issues on the project.	☐	**M2c.** PMOC's review, analysis, recommendations, and opinion as to the project sponsor's SSMP and its ability to successfully manage safety and security issues on the project demonstrates sound management and engineering practices and professional experience.	**Q2c.** Professional opinion of the project sponsor's ability to successfully manage safety and security issues and recommendations to bring the SSMP to a level necessary for effective and efficient management of safety and security	**MM2c.** Periodic review by FTA or its agent.

					issues on the project.	
3	The PMOC shall provide FTA with a written report of its findings, analysis, recommendations, and professional opinions.	**R3.** The PMOC shall present its findings, analysis, recommendations, and professional opinions to FTA in a written report and, when so directed by FTA, seek to reconcile its findings with the project sponsor to the extent possible. A supplemental report shall be filed describing the results of reconciliation attempts.	☐	**M3.** Review of the PMOC's presentation of findings, analysis, recommendations, and professional opinions by the FTA.	**Q3.** Reports and presentations are professional, clear, concise, and well written. The findings and conclusions have been reconciled with other PMOC reports and have been reconciled with the project sponsor to the extent possible.	**MM3.** Periodic review by FTA or its agent.
4	The PMOC shall provide FTA with written reports and assessments regarding the quality of the project sponsor's implementation of its SSMP.	**R4.** The PMOC shall present its findings, analysis, recommendations, and professional opinions regarding the project sponsor's implementation of its safety and security program to FTA in a written report and, when so directed by FTA, seek to reconcile its findings with the project sponsor to the extent possible. A supplemental report shall be filed	☐	**M4.** Review of the PMOC's presentation of findings, analysis, recommendations, and professional opinions by the FTA.	**Q4.** Reports and presentations are accurate and assess the project sponsor's level of implementation of its SSMP. The findings and conclusions have been reconciled with other PMOC reports and have been reconciled with the project	**MM4.** Periodic review by FTA or its agent.

		describing the results of reconciliation attempts.			sponsor to the extent possible.	

APPENDIX B: PROJECT PHASE AND DOCUMENTATION REQUIREMENTS

In most instances, a well-prepared Safety and Security Management Program (SSMP) or Project Management Plan (PMP) section will use, by reference, other documents, including some that apply across the project sponsor's organization and some that are intended just for the project. For instance, some project sponsors with FTA-funded capital projects are established agencies with existing safety and security programs and plans. In Circular 5800.1, FTA encourages project sponsors to reference their existing programs and plans in the SSMPs they develop for their projects. Further, FTA understands that, as project sponsors with new fixed guideway systems and extensions move through the project phases, they will develop additional programs, plans, and documentation. FTA also encourages these project sponsors to reference to-be-developed and newly developed documents and procedures in their SSMPs.

For each project phase, critical interfaces for the SSMP that are referenced in documentation typically include the following project elements:

- **Organization Charts and Budgets:** To assess the authority, personnel, contractor resources and other resources devoted to the safety and security management program.
- **Project Solicitations (Request for Proposal [RFP], Invitation for Bid [IFB], other procurement vehicle)**: To identify activities to be performed by the project contractors to ensure that safety and security are designed into the system and delivered in the project received by the project sponsor.
- **Project Evaluation and Award Process:** To assess the quality of contractors' responses to the safety and security activities identified in the Solicitation and to request additional activities (if necessary) during negotiation of final contract.
- **Project Contracts:** To provide legal and administrative documentation of the safety and security activities to be performed by the contractor.
- **Quality Assurance/Quality Control (QA/QC) Program:** To ensure that activities performed for the project's quality management system incorporate safety and security requirements and that the results, in each project phase, are accessible to the designated safety and security functions. The PMOC shall review and assess the adequacy of the project sponsor's QA/QC procedures for handling safety critical nonconforming work. The PMOC shall verify that such QA/QC procedures define responsibilities and safety critical conditions that would cause work to stop and documentation procedures to record nonconforming work. Further, the PMOC shall review and assess the adequacy of the project sponsor's procedures for taking corrective action.
- **Engineering and Inspection Services:** To perform safety and security analysis, to perform or witness specific tests, and to provide technical expertise in specific project areas (software safety, electrification, etc.).

- **Design Criteria Manuals:** To ensure that safety and security requirements are clearly identified in the manuals and other references used to develop the preliminary and final designs and to prepare specifications.
- **Project Milestone Schedule (including design reviews):** To ensure that requirements to address safety and security are tied to project advancement and contractor payment.
- **Project Testing Program Plan:** To ensure performance of all tests necessary to verify that the delivered project complies with approved project specifications and that appropriate supporting verification documentation is filed with the safety and security certification program.
- **Operational Readiness Reviews:** To ensure that safety and security are addressed in operating and maintenance manuals and rules, standard and emergency operating procedures, training, and work- arounds and other activities developed to address change orders and deviations from the approved design during construction.
- **Auditing Services:** To ensure that contractors and others are following criteria, safety and security testing and acceptance standards, and safety and security management practices.

The table below contains a list of documents for consideration in the adherence review. The table shows the project phases when each document is likely to apply, and whether or not the document is likely to be SSI.

This list can help the PMOC prepare the document request to the project sponsor. This list may be tailored for a particular project, as recommendation by the PMOC to FTA. Once the PMOC has customized the list to suit the specific uses of the project sponsor and project, it should be included in a progress report submitted to the FTA COR/ACOR.

Symbol Legend	▲ Preliminary information required	● Element to be completed	○ Element to be modified or augmented with additional information as necessary

Safety and Security Management Program List of Activities			**Requesting Entry to Engineering**	**In Engineering and/or Requesting FFGA**	**In Bid/Award and/or Construction**	**In Testing and/or Pre-Revenue Operations**
Management Commitment and Philosophy						
	Safety and Security Policy Statement		●	○	○	○
	Purpose of SSMP The SSMP is an element of the PMP but is a stand-alone document that must comply with the requirements of the FTA Circular.		●	○	○	○
	Applicability and Scope		▲	●	○	○
	SSMP Goal		●	○	○	○
Safety and Security Integration into Project Development						
	Safety and Security Activities		●	○		
	Safety and Security Procedures and Resources		▲	●	○	○
		Public Transportation Agency Safety Plan (PTASP) This will likely not exist until late construction or testing and pre-revenue operation phase if it is the project sponsor's initial project.	▲	●	○	○
		Project Safety and Security Plan (PSSP)	▲	●	○	○

		Document is project-specific; it is distinct from the project sponsor's PTASP and will pertain to safety/security plans and policies for all project phases. It usually contains requirements of what must be included in contractor-submitted safety and security plans. It may be called by other names, such as Capital Improvement Program Management Plan or Project Safety Program.				
	Agency/Project Sponsor Management Interfaces		▲	●	○	○
		Organization Chart	▲	●		
		Identification of safety and security decision makers	▲	●		
		Defined Interfaces for sponsor staff and construction contractors	▲	●		
Safety and Security Responsibility Assignments						
	Responsibility and Authority		▲	●		
	Committee Structures		●	○		
		Safety and Security Review Committee	●	○		○
		Fire/Life Safety and Security Committee	●	○		○
		Safety and Security Change Review Board	●	○		
		Safety and Security Operations Review Committee	●	○		
	Safety and Security Responsibilities Matrix		●	○		
		Designated Function for Safety	●	○		
		Designated Function for Security	●	○		
		Construction Safety	●	○		

		Project Manager (Executive)	●	○		
		Operations Manager	●	○		
Safety and Security Analysis						
	Approach to Safety and Security Analysis		▲	●	○	○
		Hazard and Vulnerability Identification Program	▲	●	○	○
	Requirements for Safety and Security Analysis		▲	●	○	○
		Preliminary Hazard Analysis (PHA) Determine comprehensiveness and roles in analyses and procedures for implementing recommendations; should be compared with GAEC requirements. Document is normally finalized prior to entering engineering.	▲	●	○	○
		Threat and Vulnerability Analysis (TVA) Determine comprehensiveness and roles in analyses and procedures for implementing recommendations; should be compared with GAEC requirements. Document is normally finalized prior to entering engineering.	▲	●	○	○
		Subsystem Hazard Analysis	▲	●	○	○
		System Hazard Analysis	▲	●	○	○
		Failure Modes and Effects Analysis	▲	●	○	○
		Failure Modes, Effects and Criticality Analysis	▲	●	○	○
		Fault Tree Analysis	▲	●	○	○
		Operations Support Hazard Analysis	▲	●	○	○

		General Architect/Engineering Contractor (GAEC) contractual requirements for identifying/resolving hazards/threats and vulnerabilities. Materials determine responsibilities of GAEC, including general reporting requirements to project sponsor's safety/security personnel, and division of performance authority between project sponsor and GAEC for PHAs, TVAs, operating and maintenance procedures, training plans, System Integration Test Plans, etc.	▲	●	○	○
		Health Hazard Assessment	▲	●	○	
Safety and Security Design Criteria						
	Design Criteria Manual (DCM) and Approach Project sponsor document applied to all projects. If project sponsor has no DCM, documents that include safety and security design recommendations and requirements, particularly egress, train/bus and traffic control, lighting, cameras, emergency phones, and other elements of Crime Prevention Through Environmental Design (CPTED) and Situational Crime Prevention must be reviewed. The process for updating the DCM based on PHA, TVA, and other analyses must also be reviewed. Document is normally finalized prior to entering engineering.		●	○		
	Safety and Security Design Reviews		●	○		
	Safety and Security Design Change and Configuration Control Procedures		●	○	○	

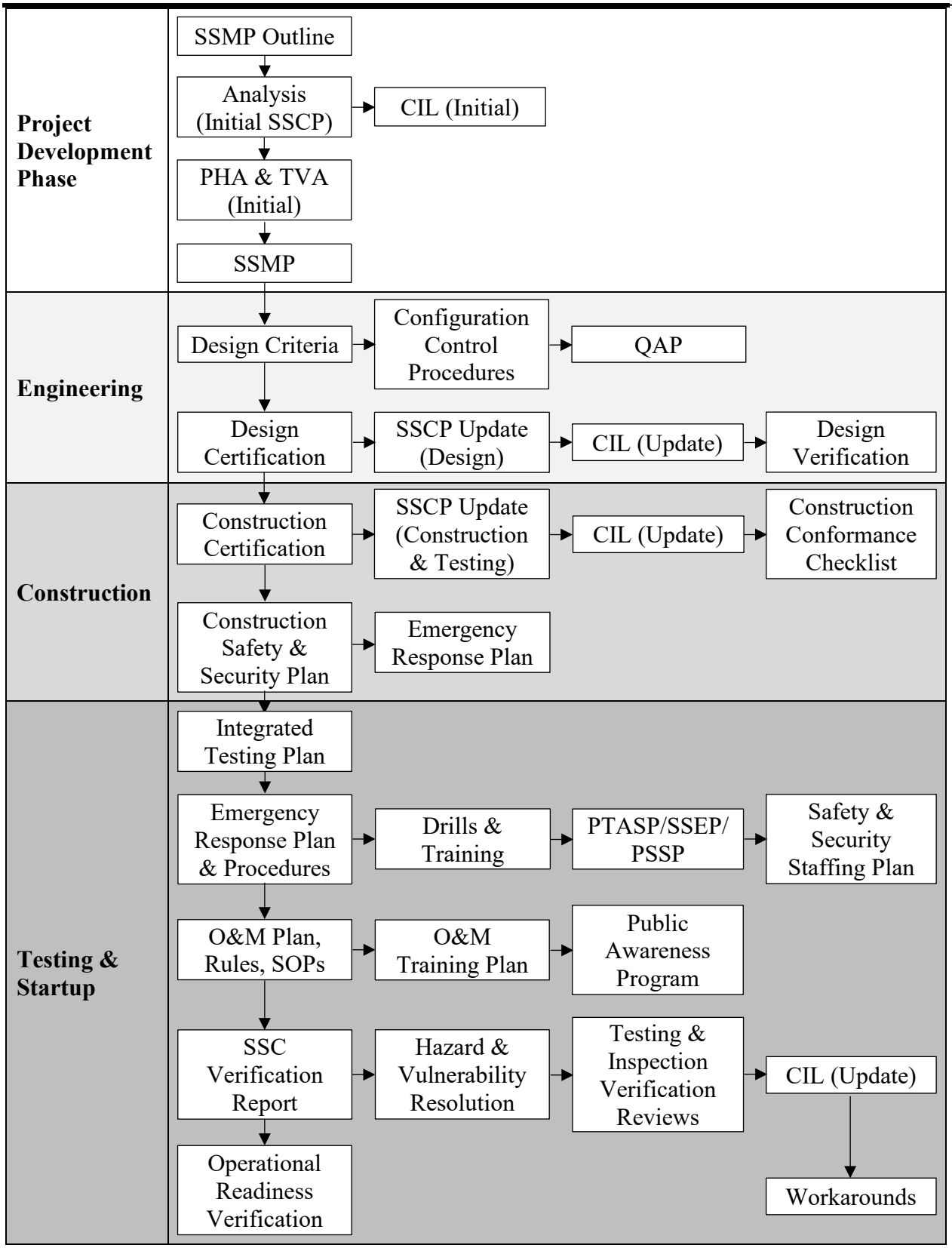
	Document should be examined to determine how design or configuration changes that may impact safety/security will be reviewed and approved by project sponsor and to ensure that safety and security management personnel are involved and have appropriate sign-off authority.				
Qualifying Operations and Maintenance Personnel					
	Operations and Maintenance Plan (OMP) and Requirements New plan for a project sponsor's initial project or revisions to an existing plan for a subsequent project; review for consistency with SSMP, timeliness of safety and security training requirements, and adequacy of personnel to provide required levels of safety and security after the start of revenue operations	▲	●	○	
	Standard Operating Procedures (SOPs) and Emergency Operating Procedures (EOPs) Some project sponsors have separate EOPs, and some include them in the SOPs. PMOC should review to assure conformance with SSMP to determine responsibilities for emergencies, particularly in agencies where there is no fully commissioned police force. Usually, completeness of SOPs and EOPs will increase as project moves through its phases.	▲	●	○	
	Training Program, Plans and Manuals	▲	●	○	
	Security and Emergency Preparedness Plan (SEPP) / Emergency Management Plan (EMP) / System Security Plan (SSP)	▲	●	○	

	Many project sponsors are combining the SSP and EMP into an SEPP. PMOC must be aware of the nomenclature within the project sponsor's agency to assure that proper documents are reviewed.				
	Public Awareness/Public Education Program Program is relevant if safety or security issues are required in outreach efforts. (Examples: grade crossing, noise abatement, trespass issues.)	▲	●	○	
Safety and Security Verification Process					
	Design Criteria Verification Process	▲	●	○	
	Construction Specification Conformance Process Normally includes the general safety and security responsibilities of the contractor, obligations to maintain a safe/secure site, requirement to submit a CSSP, and any specific safety and security requirements that the contractor must comply with during portions of the work.	▲	●	○	
	Testing/Inspection Verification	▲	●	○	
	Hazard and Vulnerability Resolution Verification	▲	●	○	
	Operational Readiness Verification [Pre-Revenue]	▲	●	○	
	Rail [or Bus] Fleet Management Plan New plan for a project sponsor's initial rail/bus project or revisions to an existing plan for a subsequent project; review for consistency with SSMP and adequacy of facilities to safely maintain fleet.	▲	●	○	
	Quality Assurance/Quality Control Program Plan	▲	●	○	

	PMOC should review to assess QA personnel role in oversight and audit of safety and security requirements across the project phases.				
	Safety and Security Certification Requirements/Safety and Security Certification Plan (SSCP) Document is normally created prior to entering Project Development for design certification and updated for construction certification and after the start of construction for testing and start-up, training, PRO, and other safety and security certification requirements. As applicable, the SSOA has primary oversight responsibility of the SSCP and corresponding activities. Should be reviewed for consistency with SSMP, adequacy of certification procedures and documentation requirements, and comprehensiveness of Certifiable Items List (CIL).	▲	●	○	
	Safety and Security Certification Verification Report (SSCVR) The project sponsor's document for final safety and security certification prior to the placement of the project in revenue service.			▲	●
Construction Safety and Security					
	Construction Safety and Security Program Elements/Contractor Safety and Security Plan (CSSP) Document produced by each contractor that details how the contractor will comply with the PSSP and/or other specific safety and security requirements identified in the bid documents	▲	●	○	
	Construction Phase Hazard and Vulnerability Analysis	▲	●	○	

	Safety and Security Incentives	▲	●	○
State Safety Oversight Agency (SSOA) Coordination Process				
	SSOA Coordination Activities	▲	●	○
	Implementation Schedule	▲	●	○
	Coordination Process	▲	●	○
FRA Coordination Process (if necessary)				
	FRA Waives and Coordination Activities Required for some projects that involve sharing of FRA-regulated rights of way.	▲	●	○
	Implementation Schedule	▲	●	○
	Coordination Process	▲	●	○
DHS Coordination Process				
	DHS Coordination Activities	▲	●	○
	Implementation Schedule	▲	●	○
	Coordination Process	▲	●	○

APPENDIX C: SAMPLE DOCUMENT FLOW CHART



APPENDIX D: SAFETY AND SECURITY MANAGEMENT INITIAL REVIEW CHECKLIST

No.	Checklist Item	Plan Requirements	Document Reference	Comments
1.1	Safety and Security Policy Statement	• A Safety and Security Policy Statement is developed for the Safety and Security Management Plan (SSMP). • The policy statement endorses the SSMP and confirms the project's commitment to safety and security throughout all project phases. • The policy statement is signed by the project sponsor's executive leadership.		
1.2	Purpose of SSMP	• The SSMP implements the Safety and Security Policy Statement. • The SSMP identifies the project sponsor's management structure and activities to be performed to integrate safety and security into all project phases.		
1.3	Applicability and Scope	• The SSMP applies to all project development activities from project development, engineering, construction, integrated testing, demonstration, and the initiation of operations.		

		• Depending on the nature of the project, this scope may encompass the following: o System-wide Elements; o Fixed Facilities; o Safety, Security, System Assurance, Operational, and Maintenance Plans and Procedures; and o Personnel Qualifications, Training and Drills/Exercises. • As applicable, the SSMP also includes activities to ensure compliance with requirements specified by the State Safety Oversight Agency (49 CFR Part 674) and/or the Public Transportation Agency Safety Plans regulation (49 CFR Part 673) and/or the Federal Railroad Administration (FRA), and/or the Department of Homeland Security, including the Transportation Security Administration (TSA) and the Office of Program Management.		
1.4	SSMP Goal	• Ensures that the final project initiated into revenue service is safe and secure for passengers, employees, public safety personnel, and the general public through a		

		formal program of safety and security certification. • Describes how the project sponsor's executive leadership has designated personnel and committees with the responsibility: o To establish safety and security requirements for the project; o To ensure that the design, acquisition, construction, fabrication, installation, and testing of all critical elements of the project will be evaluated for conformance with the established safety and security requirements; o To verify operational readiness; and o To ensure that a mechanism is provided to follow to completion the resolution of any restrictions to full safety and security certification.		
2.1	Safety and Security Activities	• Identifies the specific 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.		
2.2	Procedures and Resources	• Identifies the procedures and resources that will support performance of safety and security activities throughout the project phases. • Includes procedures for the management of sensitive security information (SSI).		
2.3	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 project sponsor'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.		

3.1	*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 project sponsor individual or committee responsible for oversight must be shown. • An organization chart must be provided.		
3.2	*Committee Structure*	• Describes the organization and responsibilities of the different safety and security committees, including: o Safety Committee (see IIJA); o Safety and Security Review Committee; o Fire/Life Safety Committee; o Safety and Security Change Review Board; o Safety and Security Operations Review Committee; and o Other comparable committees.		

3.3	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 project sponsor staff must report to a member of that staff who is responsible for that safety or security function.		
4.1	Approach to Safety and Security Analysis	• Describes the project sponsor's approach to the analysis of safety hazards and security vulnerabilities. • Known hazards and vulnerabilities must be: o Identified and categorized for their potential severity and probability of occurrence; o Analyzed for potential impact; and o Resolved by design, engineered features, warning devices, procedures and training, or other methods.		
4.2	Requirements for Safety and Security Analysis	• Specifies the distinct types of safety and security analysis to be		

		performed during the specific phases of the project. • Describes the mechanism for communicating analysis results throughout the project team. • Describes the process for assuring the resolution of identified hazards and vulnerabilities.		
5.1	*Approach to Development of Safety and Security Design Criteria*	• Describes the project's approach to creating suitable safety and security design criteria. • Identifies the resources, including standards prepared by such organizations as the American Public Transportation Association (APTA), the National Fire Protection Association (NFPA), Underwriters Laboratories (UL) and others that the project sponsor will use to develop safety and security requirements. • Explains how the project sponsor will identify safety and security certifiable elements and how identification of these elements will guide the development of safety and security design criteria. • Ensures that the final specifications and contract documents for the project will result in design that meets the project sponsor's requirements for safety and security		

		and addresses the certifiable elements.		
5.2	*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.		
5.3	Deviations and Changes	• Identifies procedures for ensuring that changes to safety and security design criteria are appropriately reviewed and approved prior to adoption.		
6.1	*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. • Emphasizes special needs of front-line personnel (i.e., operators, supervisors, station attendants, and mechanics).		
6.2	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 provides a schedule for their development.		
6.3	*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. • Provides a schedule for the development and offering of this training, and for completion of any qualifications or certifications required by employees. • Ensures the availability of documented evidence of personnel training and qualifications/certifications.		
6.4	*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).		

6.5	Public Awareness	• Identifies programs that support a commitment to on-going comprehensive public awareness, for both security awareness (such as the Transit Watch "eyes and ears" program) and emergency preparedness (such as emergency evacuation instructions to riders).		
7.1	Design Criteria Verification Process	• Describes the process used by the project sponsor 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.		
7.2	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.		
7.3	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.		
7.4	Hazard and Vulnerability	• Describes the process used to ensure that safety and security design		

	Resolution Verification	criteria and safety and security analysis have effectively identified, categorized, and resolved hazard and vulnerabilities to a level acceptable by management.		
7.5	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.		
7.6	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.		
8.1	Construction safety and Security Program Elements	• Describes the requirements to be implemented by contractors and reports to be received by the project sponsor's management for implementing and tracking		

		construction safety and security programs and plans.		
8.2	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.		
8.3	Safety and Security Incentives	• Describes any incentives that may be in place to support implementation of the construction safety and security program.		
9.1	Activities	• Identifies the activities that must be performed by the project sponsor to comply with State Safety Oversight Agency (SSOA) requirements implementing 49 CFR Parts 673 and 674. • If the SSOA has authorities that exceed 49 CFR Parts 673 and 674 minimum requirements, this section must also explain the project sponsor's approach for addressing these additional authorities.		
9.2	Implementation Schedule	• Provides an implementation schedule regarding the performance of activities required to meet SSOA requirements.		

9.3	Coordination Process	• Describes the processes to be used to communicate and coordinate with the SSOA. • Identifies by title and name the project sponsor's primary point of contact working with the SSOA.		
10.1	Activities	• Identifies the activities to be performed by project sponsors with projects that propose to share track with one or more FRA-regulated railroads or that will operate on, connected with, or share a corridor with, the general railroad system. • Identifies whether the project sponsor will be requesting waivers from FRA regulations or if they will be complying with them. • Each FRA regulation must be identified and the project sponsor's activity regarding that regulation must be specified.		
10.2	Implementation Schedule	• Provides a schedule regarding the project sponsor's activities to comply with FRA regulations or to meet requirements for FRA waivers.		
10.3	Coordination Process	• Describes the processes to be used to communicate and coordinate with FRA.		

		• Identifies by title and name the project sponsor's primary point of contact working with FRA.		
11.1	Activities	• Identifies the activities to be performed by project sponsors to meet requirements and programs managed by DHS agencies, including the applicable Security Directives issued by TSA.		
11.2	Implementation Schedule	• Provides a schedule regarding the project sponsor's activities to comply with DHS requirements and programs.		
11.3	Coordination Process	• Describes the processes to be used to communicate and coordinate with DHS. • Identifies the project sponsor's primary point of contact working with DHS.		

APPENDIX E: SAFETY AND SECURITY MANAGEMENT AREAS FOR CONSIDERATION IN PMP SECTION

When the project sponsor's safety and security management activities are included as a section or chapter of the PMP (typically for Small Starts, bus vehicle and facility replacement projects, smaller bus rapid transit projects, and smaller rail modernization and rehabilitation projects), the project sponsor should, at a minimum, address the following areas:

Management Commitment and Philosophy

a. Safety and Security Policy Statement
b. Purpose of SSMP
c. Applicability and Scope
d. Safety and Security Project Goal(s)

Integration of Safety and Security into Project Development Process

a. Safety and Security Activities
b. Procedures and Resources
c. Interface with Management

Assignment of Safety and Security Responsibilities

a. Responsibility and Authority
b. Committee Structure
c. Safety and Security Responsibilities Matrix

Development of Safety and Security Design Criteria

a. Approach to Development of Safety and Security Requirements and Design Criteria
b. Design Reviews
c. Deviations and Changes

Safety and Security Verification Process

a. Design Criteria Verification Process
b. Construction Specification Conformance Process
c. Testing/Inspection Verification
d. Hazard and Vulnerability Resolution Verification
e. Operational Readiness Verification
f. Safety and Security Certification Requirements

Requirements for 49 CFR Part 674, State Safety Oversight, and 49 CFR Part 673, Public Transportation Agency Safety Plan (if applicable)

FRA Coordination (if applicable) DHS/TSA Coordination (if applicable)

Other Agencies associated with the project, such as local law enforcement, fire, and emergency management, etc. (if applicable)

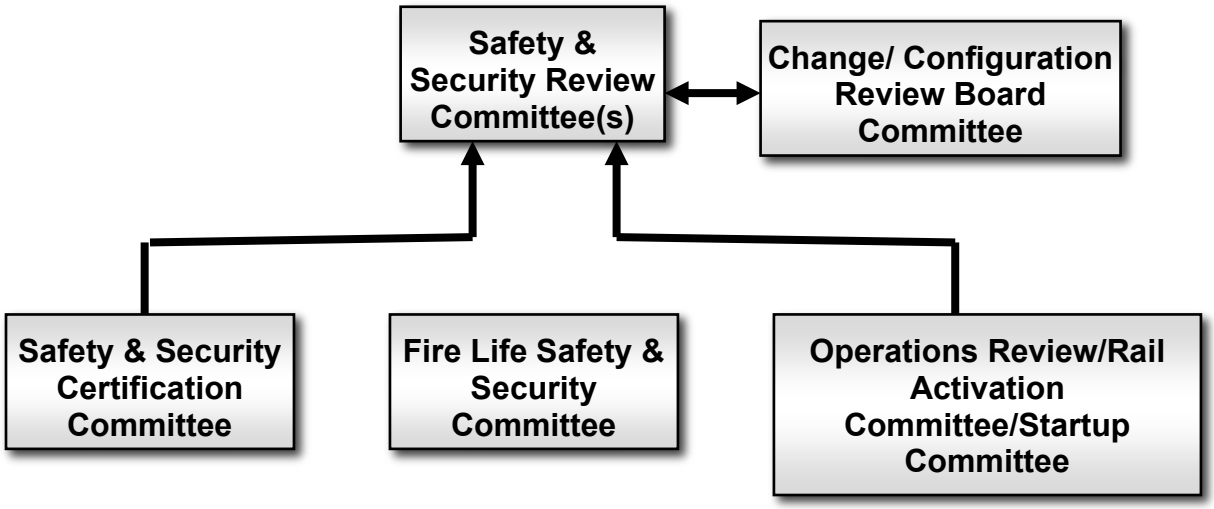
APPENDIX F: SAFETY AND SECURITY ORGANIZATION STRUCTURE

Safety And Security Management Program Organization

The following organizational elements are typically established to address safety and security in a major capital project:

- Designated Function for Safety
- Designated Function for Security
- Safety Review Committee
- Security Review Committee
- Fire/Life Safety Committee
- Safety and Security Change Review Board
- Safety and Security Operations Review Committee

Depending on the project's complexity, there may be multiple personnel assigned to designated function for safety and security, and multiple committees. Below is a sample committee structure diagram, which may vary depending on the project's requirements.



The organizational elements are briefly summarized below.

Designated Function (DF) for Safety: The DF for Safety typically reports to the Project Manager for project direction. The DF for Safety is the key contact and coordination point for the performance of all safety activities identified for the project. The DF role may be performed by one person throughout the entire project or may reside with different project personnel. For example, throughout the different project phases, the DF for Safety role may be assumed by the System Safety Manager, Project Systems Engineer, Contractor/Sub-contractor, System Safety Engineer, Security Engineer or Specialist, System Integration Engineer/Specialist, Project Engineer, Construction Safety Manager, Start-up/Activation Manager, and other personnel.

DF for Security: The DF for Security is responsible for all security planning activities specified in the SSMP.

Safety Review Committee: The goal of the Safety Review Committee, whether for a New Starts project or existing system, should be the effective and efficient accomplishment of the project safety objectives for that phase, including all activities specified in the SSMP. This goal may necessitate the involvement of different personnel and contractors from phase to phase and may even require different lead public agencies and project managers.

The Safety Review Committee is generally comprised of senior management personnel, or their designees, who represent the major project areas and activities, including engineering and systems integration, architectural design, quality assurance/quality control, industrial and construction safety, security, technical services, construction management, operations and maintenance, contracts administration, labor relations, public relations, cost and scheduling, and training. The Safety Review Committee is generally chaired by the agency's highest ranking safety official and generally managed, convened, and coordinated by the agency's System Safety Department. For New Start projects that have not yet developed an in-house staff or an in-house System Safety Department, the Safety Review Committee should fill this role until a fixed organizational element is designated to manage safety. The Safety Review Committee, through its system safety engineering function, is accountable to the project sponsor's executive leadership for the overall function, direction, coordination, control and conduct of the conduct of Safety Certification Program, and functional approval of certification documentation.

Security Review Committee: This committee mirrors the role of the Safety Review Committee, but for security. It conducts or oversees system-wide security assessments and identifies and addresses requirements from the Department of Homeland Security, the Transportation Security Administration, and the Office of Program Management as they relate to the project. The committee also ensures that new procedures and facilities incorporate security in their design. The committee reviews security training curriculum and programs affecting security. The committee also focuses on the current design measures, policies, and procedures in place to analyze and evaluate their effectiveness in meeting security challenges in all aspects of the operations. The results of these analyses could result in design modifications and proposed new procedures for security.

The Security Review Committee should be comprised of senior management personnel, or their designees, who represent the major project areas and activities, including engineering and systems integration, architectural design, quality assurance/quality control, industrial and construction safety, safety, technical services, construction management, operations and maintenance, contracts administration, labor relations, public relations, cost and scheduling, and training. The SRC is generally chaired by the agency's highest-ranking security official and generally managed, convened, and coordinated by the agency's System Security or Police Department. For those New Start projects that have not yet developed an in-house staff or an in-house System Security Department, the Security Review Committee should fill this role until a fixed organizational element is designated to manage security. The Security Review Committee, through its system security engineering function, is accountable to the project sponsor's executive leadership for the overall function, direction, coordination, control and conduct of the conduct of Security Certification Program, and functional approval of certification documentation.

Fire/Life Safety and Security Committee (FLSSC): The purpose of the FLSSC for the project is to serve as a liaison between the project sponsor and the fire jurisdictions and emergency response agencies during the project development process. This committee is typically comprised of local and state fire jurisdictions, local emergency response agencies, the project operations and maintenance liaison, the DF for Safety and Security, construction, and design managers along with project management staff and the general design consultant. The committee reviews standards and safety-related designs and tests to verify FLSS code and regulation compliance. In addition, the committee reviews fire/life safety compliance documents and recommends resolution to the Safety Review Committee for exceptions to the requirements. The committee also assists the DF for Safety and the Safety Review Committee.

The committee meets periodically to review proposed design changes that may affect FLSS, to debrief major incidents, which involve emergency response agencies, and to plan emergency response drills and exercises. The committee reviews and recommends revisions to emergency preparedness response plans, policies, and procedures; operating procedures which affect emergency response; changes to training plans and training programs pertaining to emergency response and personnel; and FLSS design changes.

Safety and Security Change Review Board: The Safety and Security Change Review Board reviews, evaluates, and manages proposed changes to the project's baseline configuration and related baseline operation for safety and security impacts. The Review Board makes recommendations for the disposition of proposed changes. The Review Board also ensures that the Safety and Security Design Verification and that Construction Specification Conformance reflect the correct versions of specifications, drawings and bid package materials. The Review Board coordinated closely with the configuration control/document control function established for the project.

Safety and Security Operations Review Committee: The Safety and Security Operations Review Committee is responsible for overseeing the project's commissioning activities including systems integration testing, start-up, activation, final safety and security certification, and operation and maintenance demonstration.

Safety and Security Certification Committee (SSCC): It is beneficial to create a SSCC, or equivalent multi-disciplinary group, to oversee the conduct of safety and security certification efforts for the projects. The SSCC is responsible for adequately monitoring the status, results, and issues of the certification process through periodic reviews, and provides related approvals, concurrences, guidelines, or direction for the resolution of identified hazards, safety critical concerns, or non-compliances, as appropriate. The SSCC is typically chaired by a full-time System Safety or Security Manager or the Certification Manager. The SSCC is typically comprised of safety and security personnel, or their designees, who represent the major project areas and activities as well as the contractor.

APPENDIX G: MATRIX OF RESPONSIBILITIES

Project Safety and Security Tasks and Responsibilities Legend: P – Primarily or lead S – Secondary function or assistance A – Approval authority C – Comment only	**Safety Officer (SO)**	**Chief of Security (COS)**	**Safety and Security Contractor (SSC)**	**Construction Safety (CS)**	**Project Manager (PM)**	**Design Manager (DM)**	**Construction Manager (CM)**	**Quality Manager (QM)**	**Test Manager (TM)**	**Operations Manager (OM)**
Program Management and Control										
Establish Safety and Security Policy Statement	P	S	S	C	A	C	C	C	C	C
Set safety and security policies, goals, and objectives	P	P	S	C	A	C	C	C	C	C
Develop safety and security task list	P	P	S	C	A	C	C	C	C	C
Establish safety organization (DF, committees, contractor support, etc.)	P	S	S	C	A	C	C	C	C	C
Establish security organization (DF, committees, contractor support, etc.)	S	P	S	C	A	C	C	C	C	C
Assign roles and responsibilities for safety activities	P	S	S	C	A	C	C	C	C	C
Assign roles and responsibilities for security activities	S	P	S	C	A	C	C	C	C	C
Develop Safety and Security Management Plan	P	P	S	C	A	C	C	C	C	C
Develop Safety and Security Milestone Schedule	P	P	S	C	A	C	C	C	C	C
Develop and disseminate Safety and Security Certification Program Plan	P	P	S	C	A	C	C	C	C	C

Develop and disseminate procedures to direct safety activities	P	S	S	C	A	C	C	C	C	C
Develop and disseminate procedures to direct security activities	P	S	S	C	A	C	C	C	C	C
Provide assistance on safety and security issues	P	P	S	C	A	C	C	C	C	C
Provide centralized procurement of safety and security contractors and consultants	P	P	C	C	A	C	C	C	C	C
Perform program reviews and audits for safety and security activities	P	P	C	C	C	S	S	P	S	C
Establish system for hazard and vulnerability tracking and resolution	P	P	S	C	A	S	S	S	S	C
Require hazard/vulnerability analysis to assess impacts of deviations from design criteria/design standards and project technical baseline specifications	P	P	S	C	A	S	S	S	S	C
Design Evaluation										
Establish project concept and component list applicable to safety and security	A	A	P	C	A	P	S	S	C	C
Identify codes, standards, regulations, or existing design criteria or manuals containing safety and security requirements for project	A	A	P	C	A	P	S	S	C	C
Develop Preliminary Hazards and Vulnerabilities List	A	A	P	C	A	S	C	S	C	C
Perform preliminary hazard analyses	A	S	P	C	A	S	C	S	C	C
Perform threat and vulnerability analysis	S	A	P	C	A	S	C	S	C	C
Develop safety and security requirements/design criteria for project	A	A	P	C	A	S	C	S	C	C
Perform additional safety and security analysis (as appropriate)	A	S	P	C	A	S	C	S	C	C
Develop a listing of elements which identifies contracts to be safety- and security-certified	A	A	P	C	A	S	C	S	C	C
Develop Safety and Security Certifiable Items List (CIL) to support preparation of design criteria and construction specification conformance checklists	A	A	P	C	A	S	C	S	C	C

Review 50%, 95%, and Final Designs and Update CIL	S	S	P	C	A	S	C	S	C	C
Review 60%, 95%, and Issued for Construction Designs and update CIL	S	S	P	C	A	S	C	S	C	C
Develop Design Criteria Verification Checklist requirements for each certifiable contract and verify inclusion in the system design through the CIL	S	S	P	C	A	S	C	S	C	C
Compliance and Verification										
Audit safety and security certification processes	S	S	P	C	A	S	C	S	C	C
Perform safety and security compliance assessments and complete Design Criteria Verification Checklists	S	S	P	C	A	S	C	S	C	C
Based on completed Design Criteria Verification Checklists, develop Construction Specification Conformance Checklists	S	S	P	C	A	S	C	S	C	C
Complete Construction Specification Conformance Checklists (verify inclusion of safety and security conformance criteria in as-built facilities and installed systems/equipment)	S	S	P	C	A	S	S	S	S	C
Issue/obtain permits and notices to support testing and pre-revenue operations	P	S	S	C	A	S	S	S	S	C
Document the findings of integrated testing for safety- and security-related elements	S	S	S	S	A	S	S	S	P	C
Verify that contractual vendor training classes have been provided	S	S	S	S	A	S	S	S	C	P
Monitor the identification and resolution of the system hazards and vulnerabilities assessment process to verify that no significant hazard is unresolved at system opening	P	P	S	S	A	S	S	S	C	P
Establish a construction safety and security plan	S	S	S	P	A	C	S	S	C	C
Establish an emergency response plan for construction	S	S	S	P	A	C	S	S	C	C

Conduct inspections of construction operations, equipment, storage areas, and facilities	S	S	S	P	A	C	S	S	C	C
Note unsafe acts, unhealthy conditions, or non-secure conditions on the construction site	S	S	S	P	A	C	S	S	C	C
Document serious or repeated construction safety and/or security violations	S	S	S	P	A	C	S	S	C	C
Conduct or monitor construction incident/mishap response and investigations	S	S	S	P	A	C	S	S	C	C
Conduct or monitor construction mishap trend analysis and response planning	S	S	S	P	A	C	S	S	C	C
Provide construction safety, security, and emergency response training	S	S	S	P	A	C	S	S	C	C
Conduct project demonstration evaluation and safety and security acceptance	S	S	S	S	A	C	S	S	P	S
Identify and resolve restrictions, deviations, and workarounds	S	S	S	S	A	C	S	P	P	S
Issue final safety and security certification certificates for design verification and construction specification conformance	P	P	S	S	A	C	S	S	S	S
Operations Support										
Coordinate with State Safety Oversight Agency regarding requirements for safety and security plans and procedures during operations	P	P	S	C	A	C	C	C	C	P
Coordinate with FRA Office of Safety Oversight and Regional Office regarding requirements for safety plans and procedures and shared track waiver submission	P	P	S	C	A	C	C	C	C	P
Develop System Safety Program Plan	P	P	S	C	A	C	C	C	C	P
Develop System Security Program Plan	P	P	S	C	A	C	C	C	C	P
Develop Emergency Response Plan	P	P	S	C	A	C	C	C	C	P

Perform safety and security review of preliminary operations & maintenance procedures	P	P	S	C	A	C	C	C	C	P
Develop safety rules and procedures	P	P	S	C	A	C	C	C	C	P
Develop security rules and procedures	P	P	S	C	A	C	C	C	C	P
Establish safety staffing and operational safety program	P	P	S	C	A	C	C	C	C	P
Establish security staffing and operational security program	P	P	S	C	A	C	C	C	C	P
Conduct safety incident response and investigations	P	P	S	C	A	C	C	C	C	P
Conduct security incident/mishap response and investigations	P	P	S	C	A	C	C	C	C	P
Perform crime pattern trending and response planning	P	P	S	C	A	C	C	C	C	P
Perform safety trend analysis and response planning	P	P	S	C	A	C	C	C	C	P
Develop and disseminate emergency safety and security procedures	P	P	S	C	A	C	C	C	C	P
Provide safety- and security-related training	P	P	S	C	A	C	C	C	C	P
Conduct operational readiness reviews	P	P	S	C	A	C	C	S	P	P
Conduct emergency response drill or exercise	P	P	S	C	A	C	C	S	P	P
Identify and resolve restrictions, deviations, and workarounds	P	P	S	C	A	C	C	S	P	P
Issue final safety and security certification certificates for operational readiness	P	P	S	C	A	C	C	S	S	S
Issue Final Safety and Security Verification Report	P	P	S	C	A	C	C	S	S	S

APPENDIX H: SSMP ADHERENCE REVIEW REPORT ONLINE

Outline for SSMP Adherence Review Report

Refer to OP 01 for additional requirements on report format. The SSMP report should specifically include the following:

1. Executive Summary (approximately two pages)
   a) Provide a simply written summary of the PMOC's most important findings regarding the compliance of the project's SSMP to FTA requirements and the adequacy of safety and security programs, as documented in the SSMP and supporting materials, and as implemented based on reviews of operating documents, interviews, and site inspections.
   b) Provide professional opinions, conclusions, and recommendations for improvement.
2. Table of Contents
3. Project Background/Description (approximately three pages)
   a) Describe the objectives of the SSMP review
   b) Introduction to the project
   c) Discussion of the project's objectives and benefits
   d) Current project status
   e) Describe the documents reviewed, the individuals interviewed, and the sites visited while performing this review (include supporting tables in an appendix to the report)
4. Body of Report – For each section or topic area provide findings, analysis, summary statement:
   a) Findings (include photos of site conditions to aid in understanding)
   b) Analysis, opinions, recommendations (specify time for performing recommended actions)
      i) SSMP Compliance Assessment
         (1) Provide a general assessment of the quality and compliance level of the SSMP to the applicable FTA requirements.
         (2) Provide an in-order specific assessment of how each specific FTA requirement is implemented, including a clear description of areas of deficiency and suggestions for resolving deficiencies. The letter C, M, or N should be shown to indicate that the Item is compliant, marginally compliant, or noncompliant with FTA requirements at the beginning or end of each assessment item.
      ii) SSMP Adherence Assessment
         (1) This section should present the results and conclusions from the review of support documentation, interviews, and site visits and indicate whether the SSMP requirements and safety and security programs are adequate for the current stage of the project, as planned, documented, and implemented. Findings that support the conclusion and any recommendations for improving or resolving program

deficiencies should be presented in descending order of importance. Detailed support for the findings, if required, should be placed in an appendix to the Report.

(a) Examples of the discussion of some findings and resultant recommendations are:

(i) The project sponsor does not have a functioning Safety and Security Working Group. The SSMP identifies a Safety and Security Working Group (SSWG) that will be established prior to start of PE to assure that safety and security requirements, including police and fire regulations are incorporated into all phases of the design. The project is requesting entrance into PE and the PMOC has found no evidence that a SSWG exists. The Director of Safety, who would normally be either chair or co-chair of a SSWG, was unable to state when a SSWG would become functional. The PMOC recommends that the project sponsor create a SSWG, as identified in the SSMP, and set a regular schedule for meetings. The SSWG should include participation from city, transit agency, and county agencies that the right of way traverses.

(ii) The project sponsor has not addressed egress and overcrowding on platforms during periods of heavy system use. Overcrowding and lack of adequate egress is hazardous and introduces security vulnerabilities; neither the PHA nor TVA has addressed this issue at the stations serving the college and the high school and the design criteria are silent on maximum platform loads. These issues must be resolved with the local academic institutions, which generate increased ridership during those months that classes are in session. The PMOC recommends assessments of maximum passenger loads on these platforms, and the rate of flow through egress points, through formal hazard analyses and TVAs.

iii) Issues and Analysis

(1) During the review, the PMOC may encounter safety and security issues that can affect or be affected by the project but do not constitute findings. These should be presented. Example: The PMOC identified three schedule changes that relate to project safety and security:

(a) The tunnel TVA originally planned for September 2006 is now forecast to be completed in January 2007. This will delay review of the TVA by the city, delay issuance of tunnel bid package, and reduce schedule float by at least two months.

(b) Changes in personnel in local police/fire departments have delayed formation of the Fire Life Safety and Security Committee (FLSSC) originally planned for April 2010. It is currently planned that the new police and fire commissioners, named in December 2010, will select their candidates for the

committee so that it can be formed and made operational in the following quarter.

(c) Late changes in establishing the alignment have resulted in design delays. The TVA and Emergency Evacuation Plan (EEP) cannot be formally completed until the right of way is finalized. In the opinion of the PMOC, this delay should not affect commencement of revenue operations because the safety and security departments are participating in the design revisions on a real-time basis.

5. Summary statements by section or topic area (Note that the Executive Summary requires further summarization of these section summary statements.)
   a) Present the major conclusions reached from the assessment as to the compliance of the SSMP with FTA Circular requirements and the adequacy of project sponsor adherence to the SSMP, as well as the overall project safety and security program.
   b) Present a numbered compilation of recommendations contained in other sections of the report. (Each recommendation should include a parenthetical reference to the section or subsection where the recommendation was made.)
6. Appendix
   a) Acronyms used.
   b) Supporting checklists, tables, spreadsheets, photos, etc.
   c) PMOC team – list personnel and their qualifications for performing the review (short blurb on each; altogether one or two pages max).

APPENDIX I: SSMP ADHERENCE REVIEW WORKSHEET

Safety and Security Management Program (SSMP) Adherence Review Worksheet									
Date of Review:		**Project Name:**		**Adherence Rating Legend** **1= Poor, Action Required** **2= Adequate, Comments Provided** **3= Acceptable, No Comments** **N/A= Not Applicable or Not Reviewed**					
No.	**Checklist Item**	**Plan Requirements**	**Document Reference**	**Evaluation**				**Audit Elements**	**Comments**
				1	**2**	**3**	**N/A**		
1.1	Safety and Security Policy Statement	• A Safety and Security Policy Statement is developed for the SSMP. • The policy statement endorses the SSMP and confirms the project's commitment to safety and security throughout all project phases. • The policy statement is signed by the project sponsor's executive leadership.							
1.2	Purpose of SSMP	• The SSMP implements the Safety and Security Policy Statement.							

		• The SSMP identifies the project sponsor's management structure and activities to be performed to integrate safety and security into all phases of the project development process.							
1.3	Applicability and Scope	• The SSMP applies to all project development activities through project development, engineering, construction, integrated testing, demonstration, and the initiation of operations. • Depending on the nature of the project, this scope may encompass the following: o System-wide Elements; o Fixed Facilities; o Safety, Security, System Assurance, Operational, and Maintenance Plans and Procedures; and o Personnel Qualifications, Training and Drills/Exercises. • As applicable, the SSMP also includes activities to ensure compliance with requirements specified by the State Safety Oversight							

		Agency (49 CFR Parts 673 and 674) and/or the Federal Railroad Administration (FRA), and/or the Department of Homeland Security, including the Transportation Security Administration (TSA) and the Office Program Management.							
1.4	SSMP Goal	• Ensures that the final project initiated into revenue service is safe and secure for passengers, employees, public safety personnel, and the general public through a formal program of safety and security certification. • Describes how the project sponsor's executive leadership has designated personnel and committees with the responsibility: o To establish safety and security requirements for the project; o To ensure that the design, acquisition, construction, fabrication, installation, and testing of all critical							

		elements of the project will be evaluated for conformance with the established safety and security requirements; o To verify operational readiness; and o To ensure that a mechanism is provided to follow to completion the resolution of any restrictions to full safety and security certification.							
2.1	Safety and Security Activities	• Identifies the specific 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. o One matrix may be prepared that combines safety and security activities by project phase, or separate matrices may be developed.							

2.2	Procedures and Resources	• Identifies the procedures and resources that will support performance of safety and security activities throughout the project phases. • Includes procedures for the management of sensitive security information (SSI).							
2.3	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 project sponsor'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.							
3.1	*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. o Each individual staff member must be identified by title and affiliation. o Each committee must be identified by name and acronym, with membership provided by title and affiliation. o For each authority delegated to a contractor, the project sponsor individual or committee responsible for oversight must be shown. o An organization chart must be provided.							
3.2	*Committee Structure*	• Describes the organization and responsibilities of the different safety and security committees, including:							

		○ Safety and Security Review Committee; ○ Fire/Life Safety Committee; ○ Safety and Security Change Review Board; ○ Safety and Security Operations Review Committee; and ○ Other comparable committees.							
3.3	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 project sponsor staff must report to a member of that staff who is responsible for that safety or security function.							

4.1	Approach to Safety and Security Analysis	• Describes the project sponsor's approach to the analysis of safety hazards and security vulnerabilities. • Known hazards and vulnerabilities must be: o Identified and categorized for their potential severity and probability of occurrence; o Analyzed for potential impact; and o Resolved by design, engineered features, warning devices, procedures and training, or other methods.							
4.2	Requirements for Safety and Security Analysis	• Specifies the distinct types of safety and security analysis to be performed during the specific phases of the project. • Describes the mechanism for communicating analysis results throughout the project team. • Describes the process for assuring the resolution of identified hazards and vulnerabilities.							

5.1	*Approach to Development of Safety and Security Design Criteria*	• Describes the project's approach to creating suitable safety and security design criteria. • Identifies the resources, including standards prepared by such organizations as APTA, NFPA, UL and others that the project sponsor will use to develop safety and security requirements. • Explains how the project sponsor will identify safety and security certifiable elements and how identification of these elements will guide the development of safety and security design criteria. • Ensures that the final specifications and contract documents for the project will result in design that meets the project sponsor's requirements for safety and security and addresses the certifiable elements.							
5.2	*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.							
5.3	Deviations and Changes	• Identifies procedures for ensuring that changes to safety and security design criteria are appropriately reviewed and approved prior to adoption.							
6.1	*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. • Emphasizes special needs of front-line personnel (i.e., operators, supervisors, station attendants, and mechanics).							
6.2	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 provides a schedule for their development.							
6.3	*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. • Provides a schedule for the development and offering of this training, and for completion of any qualifications or certifications required by employees. • Ensures the availability of documented evidence of personnel training and qualifications/certifications.							
6.4	*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).							
6.5	Public Awareness	• Identifies programs that support a commitment to on-going comprehensive public awareness, for both security awareness (such as the Transit Watch "eyes and ears" program) and emergency preparedness (such as emergency evacuation instructions to riders).							
7.1	Design Criteria Verification Process	• Describes the process used by the project sponsor 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.							
7.2	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.							
7.3	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.							
7.4	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.							
7.5	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.							
7.6	Safety and Security Certification Requirements	• Describes the requirements 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.							
8.1	Construction safety and Security Program Elements	• Describes the requirements to be implemented by contractors and reports to be received by the project sponsor's management for implementing and tracking construction safety and security programs and plans.							
8.2	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.							

8.3	Safety and Security Incentives	• Describes any incentives that may be in place to support implementation of the construction safety and security program.							
9.1	Activities	• Identifies the activities that must be performed by the project sponsor to comply with SSOA requirements implementing 49 CFR Part 674 and the requirements at 49 CFR Part 673 (PTASP). • If the SSOA has authorities that exceed 49 CFR Part 674 minimum requirements, this section must also explain the project sponsor's approach for addressing these additional authorities.							
9.2	Implementation Schedule	• Provides an implementation schedule for the performance of activities required to meet SSOA requirements.							
9.3	Coordination Process	• Describes the processes for communication and coordination with the SSOA.							

		• Identifies by title and name the project sponsor's primary point of contact working with the SSOA.							
10.1	Activities	• Identifies the activities to be performed by project sponsors with projects that propose to share track with one or more FRA-regulated railroads or that will operate on, connected with, or share a corridor with, the general railroad system. • Identifies whether the project sponsor will be requesting waivers from FRA regulations or if they will be complying with them. ○ Each FRA regulation must be identified and the project sponsor's activity regarding that regulation must be specified.							
10.2	Implementation Schedule	• Provides a schedule regarding the project sponsor's activities to comply with FRA regulations or to meet							

		requirements for FRA waivers.							
10.3	Coordination Process	• Describes the processes to be used to communicate and coordinate with FRA. • Identifies by title and name the project sponsor's primary point of contact working with FRA.							
11.1	Activities	• Identifies the activities to be performed by project sponsors to meet requirements and programs managed by DHS agencies, including the applicable Security Directives issued by TSA.							
11.2	Implementation Schedule	• Provides a schedule regarding the project sponsor's activities to comply with DHS requirements and programs.							
11.3	Coordination Process	• Describes the processes to be used to communicate and coordinate with DHS. • Identifies the project sponsor's primary point of contact working with DHS.							

APPENDIX J: EXAMPLES OF SAFETY AND SECURITY STANDARDS AND CRITERIA

- American Association of State Highway Transportation Officials (AASHTO)
- Americans with Disabilities Act (ADA)
- American National Standards Institute (ANSI)
- American Public Transportation Association (APTA)
- American Railway Engineering and Maintenance-of-Way Association (AREMA)
- American Society for Testing and Materials (ASTM)
- Construction Specification Institute (CSI)
- Federal Emergency Management Administration (FEMA)
- Federal Highway Administration (FHWA)
- Federal Railroad Administration (FRA)
- Federal Transit Administration (FTA)
- Institute of Electrical and Electronics Engineers (IEEE)
- International Building Code (IBC), published by the International Code Council (ICC), with local amendments
- International Fire Code (IFC), published by the International Code Council (ICC), with local amendments (ICC), with local amendments
- Manual on Uniform Traffic Control Devices (MUTCD)
- National Fire Protection Association (NFPA)
- National Environmental Policy Act (NEPA)
- Occupational Safety and Health Administration (OSHA)
- Transit Cooperative Research Program (TCRP)
- Underwriters Laboratories, Inc. (U.L.)

APPENDIX K: ACRONYMS

Acronym	Term
ACOR	Alternate Contracting Officer's Representative
ADA	The Americans with Disabilities Act
AGC	Associated General Contractors of America
ATC	Alternative Technical Concepts
AVS	Associate Value Specialist
BEA	Bureau of Economic Analysis
BLS	Bureau of Labor and Statistics
BRF	Beta Range Factor
BY	Base Year
CATEX or CE or CX or Exclusion	Categorical Exclusion
CCIP	Contractor Controlled Insurance Program
CE	Categorical Exclusion
CER	Cost Estimating Relationship
CFR	Code of Federal Regulations
CIG	Capital Investment Grant
CLIN	Contract Line Item Number
CM	Construction Manager

Acronym	Term
CM/GC	Construction Manager/General Contractor
CMAR	Construction Manager at Risk
COR	Contracting Officer's Representative
CPM	Critical Path Method
CPTED	Crime Prevention Through Environmental Design
CR	Constructability Review
CVS	Certified Value Specialists
DB	Design-Build
DBB	Design-Bid-Build
DBE	Disadvantaged Business Enterprise
DBF	Design-Build-Finance
DBFOM	Design-Build-Finance-Operate and Maintain
DBOM	Design-Build-Operate and Maintain
DEIS	Draft Environmental Impact Statement
DF	Designated Function
DHS	Department of Homeland Security
DTS	Department of Transportation Services
EA	Environmental Assessment
EIS	Environmental Impact Statement

Acronym	Term
EMP	Emergency Management Plan
ENR	Engineering News-Record
EPCM	Engineering/Procurement/Construction Management
ESWA	Early Systems Work Agreement
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FFGA	Full Funding Grant Agreement
FHWA	Federal Highway Administration
FLSSC	Fire/Life Safety and Security Committee
FONSI	Finding of No Significant Impact
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
GAO	Government Accountability Office
GC	General Contractor
GC/CM	General Contractor/Construction Manager
GMP	Guaranteed Maximum Price
HAZMAT	Hazardous Materials
IP	Implementation Plan
LONP	Letter of No Prejudice

Acronym	Term
LPA	Locally Preferred Alternative
MBE	Minority Business Enterprise
MCC	Management Capacity and Capability
MDBF	Mean Distance Between Failures
MPO	Metropolitan Planning Organization
NEPA	National Environmental Policy Act
NTE	Not-to-Exceed
NTP	Notice to Proceed
O&M	Operation and Maintenance
OCIP	Owner Controlled Insurance Program
ODCs	Other Direct Costs
OHA	Operational Hazard Analysis
OIG	Office of Inspector General
OMP	Operations and Management Plan
OP	Oversight Procedure
P3	Public Private Partnership
PCMG	Project and Construction Management Guidelines
PD	Project Development
PDM	Project Delivery Method

Acronym	Term
PHA	Preliminary Hazard Analysis
PMO	Project Management Oversight
PMOC	Project Management Oversight Contractor
PMP	Project Management Plan
POP	Project Oversight Plan
PTASP	Public Transportation Agency Safety Plan
QA/QC	Quality Assurance/Quality Control
R&D	Research and Development
RAMP	Real Estate Acquisition Management Plan
RAP	Rail Activation Plan
RCMP	Risk and Contingency Management Plan
RET	Risk Evaluation Tool
RFI	Request for Information
RFP	Request for Proposal
RFQ	Request for Qualifications
ROD	Record of Decision
ROW	Right-of-Way
RSD	Revenue Service Date
S/DBE	Small/Disadvantaged Business Enterprises

Acronym	Term
SABCE	Stripped and Adjusted Base Cost Estimate
SABS	Stripped and Adjusted Base Schedule
SAVE	Society of American Value Engineers
SCC	Standard Cost Category
SCIL	Safety Certifiable Items List
SGR	State of Good Repair
SIT	System Integration Testing
SITP	Systems Integration Test Plan
SOP	Standard Operating Procedure
SOW	Scope of Work
SSCVR	Safety Certification Verification Report
SSGA	Small Starts Grant Agreement
SSI	Sensitive Security Information
SSMP	Safety and Security Management Plan
STIP	Statewide Transportation Improvement Program
SYGA	Single Year Grant Agreement
TAR	Travel Authorization Request
TBM	Tunnel Boring Machine
TCC	FTA Office of the Chief Counsel

Acronym	Term
TCRP	Transit Cooperative Research Program
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIGER	Transportation Investment Generating Economic Recovery
TIP	Transportation Improvement Program
TOD	Transit-Oriented Development
TPE	FTA Office of Planning and Environment
TPM	FTA Office of Program Management
TRB	Transportation Research Board
TSA	Transportation Security Administration
TVA	Threat and Vulnerability Assessment
URA	Uniform Relocation Assistance and Real Property Acquisition Act
U.S.C.	United States Code
VE	Value Engineering
VECP	Value Engineering Change Proposals
WBE	Women Business Enterprise
WBS	Work Breakdown Structure
YOE	Year of Expenditure