MBTA'S SAFETY AND SECURITY CERTIFICATION PROGRAM

ACEC MA Transportation Agencies Liaison Committee July 17, 2024



Massachusetts Bay Transportation Authority



SAFETY AND SECURITY CONSULTING SERVICES, INC.





Safety and Security Certification (SSC)

Defined by the Federal Transit Administration (FTA) as:

The series of processes that collectively verify the <u>Safety and Security Readiness</u> of a project for public use

SSC integrates Safety and Security Requirements into the project lifecycle to achieve *acceptable* risk through MBTA's Safety Risk Management (SRM) and Risk-Based Hazard Analysis (RBHA) processes.





Safety and Security Certification

- Managed and executed via the MBTA SSC Program Plan (SSCPP)
 - Current plan was adopted by the MBTA July 1, 2024
 - The 2015 plan remains in effect for projects initiated prior to July 1, 2024
- Mandated by the Federal Transit Administration
 - Requirements are incorporated into 49 CFR Part 673, 633, and 674
 - Recommended practices found in the FTA Handbook for Transit Safety and Security Certification (2002)
- Mandated by the Federal Railroad Administration in 49 CFR Part 270
- Applies to any project that affects the safety and security of the MBTA





Program Modifications

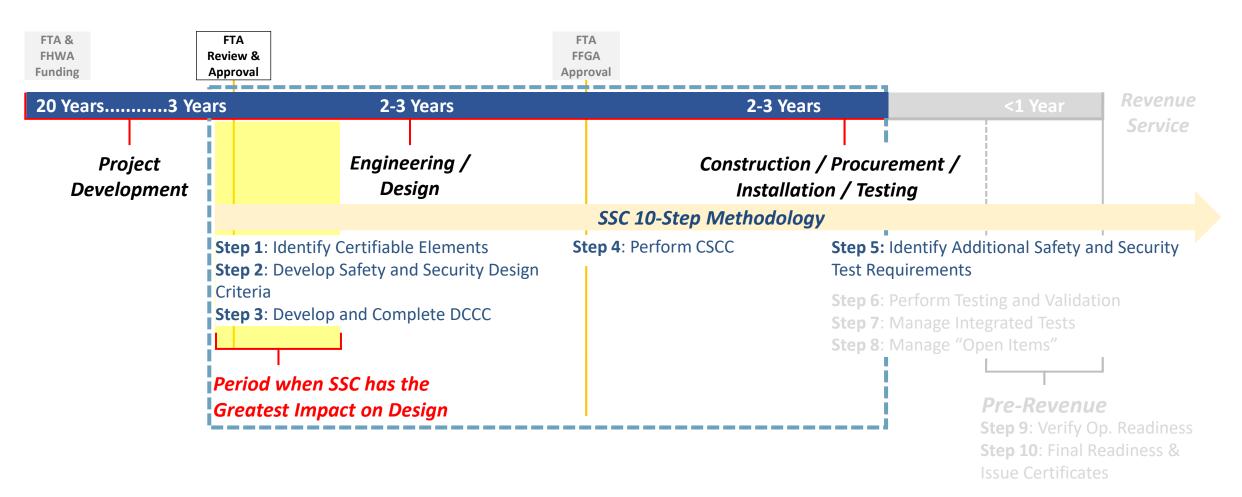
- Better defined Roles and Responsibilities
- Incorporation of 49 CFR Part 673 and 270 requirements
- New Project Assessment Form (PAF)
- Revised contract specifications
- Clarified guidance for the 10-Step Process
- Consideration for multiple contract types







Project Lifecycle and Certification







Design and the SSC Process

- A systematic approach to Safety Risk Management
- Begins with design and continues into the start of revenue service by:
 - Identifying potential hazards and security vulnerabilities as early as possible
 - **Developing** mitigations that will reduce the level of risk acceptable to the MBTA
 - Incorporating accepted mitigations into design
 - Tracking and Verifying that mitigations are incorporated into all project phases
- Responsible parties include:
 - MBTA PM Team, **Design Consultant**, Construction Manager, Installer, Testing and Commissioning Manager, MBTA Safety, Subject Matter Experts (SME's)





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Preliminary Hazard Analysis (PHA)		Р								
Security Assessment (SA)		Р								
Certifiable Items List (CIL)		Р								
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- Responsibilities are defined in SSCPP Sections 2.1 and 7.2
- Responsibilities are based on the individual project needs
- SSC activities will be specified in the Project Assessment Form
- Identify a qualified SSC representative
 - Qualified means the individual has completed a recognized SSC training course as identified in the standard specification.

* SSCPP Table 25, Example Responsibility Matrix





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Project-Specific SSCP

A management tool used to execute the SSC program for individual projects; it establishes roles and responsibilities and defines key activities.





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Certifiable Elements List (CEL)

Compilation of all identified certifiable elements* for a project; the CEL also includes sub-elements for each identified element.

*Certifiable Element: Project components that can affect the safety and security of transit agency passengers, employees, contractors, emergency responders, or the general public. These elements define the scope of the project's certification program.





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Preliminary Hazard Analysis (PHA)

The process to identify and categorize potential hazards associated with the operation of a proposed or early-stage project.





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Security Assessment

Process for identifying, assessing, and mitigating security threats and vulnerabilities. *ref. Threat and Vulnerability Assessment*





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Operational Hazard Analysis (OHA)

An analysis used to identify, document, analyze, and mitigate operational hazards caused by operating and support (i.e., maintenance) personnel.





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Conformance Checklist (CSCC)

A comprehensive checklist outlining construction and installation specifications associated with each certifiable item.





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Additional Resources

2024 Safety & Security Certification Program Plan

https://www.mbta.com/engineering/safety-resources



- ✓ 2024 Safety & Security Certification Program Plan
- ✓ Safety and Security Certification Workbook
- ✓ Safety and Security Certification Workbook (FRA Only)
- Project Assessment Form

MBTA SSCPP Training Program

Register Online in Cornerstone https://massdot.csod.com/



The Safety and Security Certification Program Training is now open to all consultants involved in the Safety and Security Certification Program. Consultants will be required to complete at least part of the Safety and Security Certification Program training **if they are responsible for participating in the certification process**. Coordinate with your MBTA PM to determine which modules are required.

MBTA's Safety and Security Certification Program Thank You

For more information related to the Safety and Security Certification at MBTA, contact <u>SafetyandSecurityCertification@mbta.com</u>



