

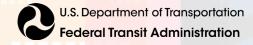
# 2025 FTA JOINT STATE SAFETY OVERSIGHT AND RAIL TRANSIT AGENCY WORKSHOP

May 6-8, 2025 | Arlington, VA



# Session #14

# **Safety Certification**



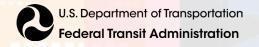
## 2025 Joint SSO and RTA Workshop

#### Dan Gardella

SSO Program Manager, Office of Transit Safety and Oversight Federal Transit Administration

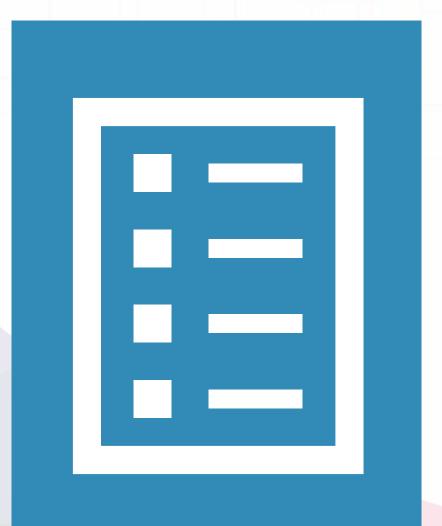
#### Joe Powell

SSO Program Manager, Office of Transit Safety and Oversight Federal Transit Administration



# Agenda

- 1. Overview of Safety Certification
- 2. Effective Practices for Safety Certification Oversight and Verification
- 3. Panel Discussion



## **Session Focus**



RTA requirements and effective practices for Safety Certification of projects



SSOA responsibilities for verifying Safety Certification

## What is Safety Certification?

As described in FTA Circular 5800.1, Safety Certification is both a series of processes and a document related to the construction, expansion, rehabilitation, or modernization of a fixed guideway:

- Series of processes that collectively verify the safety readiness of a project for public use
- Transit agency document that self-certifies that a Safety Certification program for a qualifying project has been developed and executed prior to starting revenue service



RTA conducts, affirms, and verifies Safety Certification as part of its responsibilities as a recipient



SSOA verifies RTA Safety
Certification as part of its
oversight responsibilities for
systems in construction and
engineering



## What is Safety Certification?

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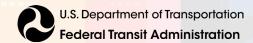
As described in C5800.1, RTAs must conduct Safety Certification for qualifying projects, but Safety Certification is:

- NOT approved by FTA
- NOT the same for every project
- Management Oversight (PMO)

NOT the same as SSOA oversight or FTA Project

RTA conducts, affirms, and verifies Safety Certification as part of its responsibilities as a recipient

SSOA verifies RTA Safety Certification as part of its oversight responsibilities for systems in construction and engineering



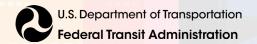
# When is Safety Certification required?

Safety Certification is required when a project is considered a Major Capital Project covered under 49 CFR part 633

 Involves the construction, expansion, rehabilitation, or modernization of a fixed guideway that: (1) has a total project cost of \$300M or more and receives Federal funds of \$100M or more; and (2) is not exclusively for the acquisition, maintenance, or rehabilitation of vehicles or other rolling stock

OR

A project that the FTA Administrator determines to be a major capital project



## Documents that "Govern" Safety Certification

#### **Requirements and Guidelines for RTAs**

- 49 CFR part 633 Project Management Oversight (PMO) regulation
  - Requirements for FTA funded major capital projects
- FTA Circular 5800.1 (C5800.1) Safety and Security Management Guidance for Major Capital Investment Projects
  - Outlines safety activities to be evaluated by the PMO or PMO Contractor (PMOC)

#### Requirements for SSOAs

49 CFR § 674.25(c) – SSO regulation

 SSOA responsibilities for projects in engineering or construction



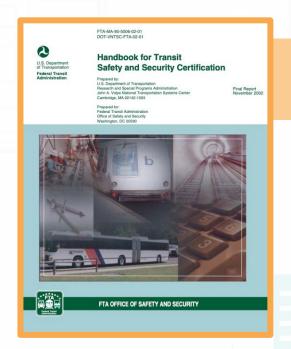
Oversight Procedure 54 (OP54) – Readiness for Service

Informs PMO evaluation





## **Safety Certification Guidelines**

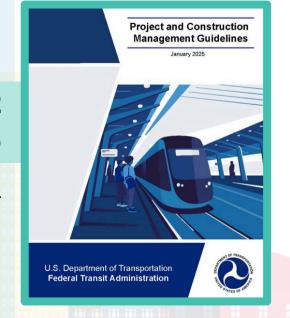


# **Safety and Security Certification Plan (SSCP) Handbook**

Guidelines for certification, including safety and security management and SSMP guidance for major capital projects

# Project and Construction Management Guidelines (updated 2025)

Guidelines for managing major transit capital projects to implementation, including Safety Certification criteria



## SSMP and SSCP

#### **Safety and Security Management Plan**

Per § 633.25(m) and C5800.1, recipients must include safety and security management in their Project Management Plan (PMP) or in a separate SSMP referenced in the PMP

#### **Safety and Security Certification Plan**

Plan for verifying that safety and security related requirements are incorporated into the project in preparation for Safety and Security Certification and revenue service.



## SSMP and SSCP

#### Safety and Security Management Plan

C5800.1 identifies the following SSMP sections:

- 1. Management commitment and philosophy
- 2. Integration of safety and security (S&S) into project development process
- 3. Assignment of S&S responsibilities
- 4. S&S analysis
- 5. Development of S&S design criteria
- 6. Process for ensuring qualified operations and maintenance personnel
- 7. S&S verification process
- 8. Construction S&S
- 9. SSOA coordination
- 10. Federal Railroad Administration (FRA) coordination
- 11. Department of Homeland Security (DHS) coordination

#### **Safety and Security Certification Plan**

Plan for verifying that safety and security related requirements are incorporated into the project in preparation for Safety and Security Certification



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- 11. Department of Homeland Security (DHS)

## U.S. Department of Transportation Federal Transit Administration

### **Safety and Security Certification Plan**

The SSCP Handbook (pg. 14) suggests the following SSCP sections:

- Identify Certifiable Elements and Items
- Perform preliminary hazard analyses (PHA) and threat and vulnerability assessments (TVA) and develop S&S design criteria
- Develop and complete design criteria conformance checklist
- Perform construction specifications conformance
- Identify additional S&S test requirements
- Monitor and verify testing and validation
- Monitor and verify system integration tests (SIT)
- Manage "open items"
- Verify PRO conformance and operational readiness
- S&S certification

## **Typical Project Phases**

**Project Development** 

Engineering

Final Design

Construction

Testing

Pre-Revenue / Startup



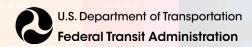
RTAs generally begin planning for Safety
Certification during early engineering
phase to ensure workers understand
expectations



SSOAs generally begin coordination with RTAs on plans for Safety Certification as early as possible, sometimes even before the SSOA is Federally required to start safety oversight for projects in engineering and construction

# **Typical Activity and Documentation**

Activity and Documentation						
PMP	PMP and subplans					
	SSMP					
	SSCP					
	PHA, TVA, and Safety Critical Items List					
Safety & Security	Certifiable Elements List					
	Design Criteria Checklist					
	Construction Conformance					
	Operations Hazard Analysis					
SIT	SIT Plan, schedule, test procedures					
311	Test/SIT Certification					
Pre-Revenue Planning	Emergency Preparedness, updated Rulebook and SOPs					
Safety Certification	Safety Certification Verification Report					



Activity and Documentation $\downarrow$ Phase $ ightharpoonup$		Engineering	Final Design	Construction	Testing	Pre-Revenue
PMP	PMP and subplans	Outline	Finalize	Update —		<b>—</b>
	SSMP	Develop	Finalize	Update —		-
	SSCP	Develop	Finalize			
	PHA, TVA, and Safety Critical Items List	Develop	Finalize			Certify
Safety & Security	Certifiable Elements List	Finalize	Update			<b></b>
Occurry	Design Criteria Checklist	Develop	Certify			
	Construction Conformance		Develop	Certify		
	Operations Hazard Analysis			Develop	Finalize	Certify
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	Test/SIT Certification				Certify —	-
Pre-Rev. Planning	Emergency Preparedness, updated Rulebook and SOPs			Develop	Finalize	Certify
Safety Cert.	Safety Certification Verification Report				Outline	Certify





Activity and	Documentation \	Phase →	Engineering	Final Design	Construction	Testing	Pre-Revenue
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	SSCP		Develop	Finalize			
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	Certifiable Elements List		Finalize	Update			-
	Design Criteria Checklist		Develop	Certify			
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Pre-Rev. Planning	Emergency Preparedness, updated Rulebook and SOPs			Develop	Finalize	Certify
Safety Cert.	Safety Certification Verification Report				Outline	Certify

# **Examples of Activities an SSOA May Conduct to Oversee Projects in Engineering and Construction**

1

Identify RTA, State, Federal requirements

Coordinate with RTA for SSCP review

2

Develop safety oversight activities and schedule (oversight plan)

Identify potential safety risks, monitor Safety Certification progress

3

Review RTA Safety Certification Verification Report

Conduct Safety Readiness Reviews and Inspections



# **Example SSOA Safety Certification Oversight and Verification Activities**

Inspections, observations, & audits

Oversight of safety risk management



Coordination with stakeholders



Pre-revenue Safety Review



Participation in review of key documents



## **Panel Discussion**



## [SSOA Information]

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