

The Path Towards Safety Management Systems Implementation

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## Overview

- FTA Rulemaking Update
- SMS FTA Framework Review
- Implementing SMS
- SMS Development Project Plan
- Employee Safety Reporting
- Technical Assistance and Resources

## FTA SAFETY RULEMAKING UPDATE



#### **Rulemaking Timeline**

Regulatory Requirement	Federal Register Publication	
Transit Asset Management NPRM	Published 9/30/15 Final Rule under development	
Public Transportation Safety Program NPRM	Published 8/14/15 Final Rule under development	
National Public Transportation Safety Plan	Published 2/5/16 Final Rule under development	
Public Transportation Agency Safety Plan NPRM	Published 2/5/16 Final Rule under development	
Interim Provisions Safety Certification Training Program NPRM	Effective 5/28/15 Final Rule under development	
State Safety Oversight Final Rule	Published 3/16/16	
Transit Worker Assault NPRM	Under Development Statutory due date March 2017	

## Public Transportation Safety Program

- "Umbrella" document for all other Safety rulemakings and guidance
- Formally establishes FTA's safety policy Safety Management Systems (SMS)
- Sets rules of practice under FTA's enforcement authority
- Commits FTA to creating and implementing a National Public Transportation Safety Plan



## **Transit Asset Management**

- Transit Asset Management (TAM)
  - Business model designed to keep transit networks in a State of Good Repair (SGR)
- TAM uses condition of assets for transit agencies to prioritize and guide funding

#### National Public Transportation Safety Plan

#### It is not a rule

- It is...
  - FTA's strategic plan for improving transit safety performance
  - A policy document
  - A communication tool
  - A repository of standards, guidance, best practices, tools, technical assistance, and other resources

#### Public Transportation Agency Safety Plan

- Proposed rule would require transit agencies develop Agency Safety Plan
  - Agency Safety Plan requires agencies to implement SMS
- Minimum requirements for Safety Plan:
  - Plan approval
  - Safety risk identification and evaluation
  - Strategies to minimize exposure to hazards
  - Annual review and update
  - Safety performance targets
  - Adequately trained Safety Officer direct report to executive leadership
  - A comprehensive safety training program



#### National Public Transportation Safety Certification Training Program

- Authorizes training program for Federal and State employees who conduct safety audits of rail public transportation systems, and rail public transit employees directly responsible for safety oversight
  - Interim Provisions and NPRM only apply to rail fixed guideway systems
  - Bus agency participation is voluntary, but highly encouraged



## **Transit Worker Assault NPRM**

- FAST Act requires NPRM (Notice of Proposed Rulemaking) on transit driver/operator safety and risk of assault
  - Transit Advisory Committee on Safety (TRACS) delivered report on best practices and recommendations for preventing and mitigating assaults
  - Next step issue NPRM on protecting drivers/operators from risk of assault, considering
    - I. Different safety needs of drivers of different modes
    - 2. Differences in operating environments
    - 3. Use of technology to mitigate driver assault risks
    - 4. Existing experience of agencies and operators that already are using or testing driver assault mitigation infrastructure
    - 5. Impact of the rule on future rolling stock procurements and vehicles currently in revenue service

#### **Congressional Report on Safety Standards**

- I. Review public transportation system safety standards and protocols to examine efficacy of existing standards
  - https://www.transit.dot.gov/regulations-andguidance/safety/compendium-transit-safety-standards
- 2. Evaluate need to establish additional Federal minimum transit safety standards
- 3. Issue Final Report on review findings with comprehensive set of recommendations and further actions



## SMS FTA FRAMEWORK REVIEW



## **SMS Framework**

- Institutionalizes SMS components and subcomponents
- Establishes a common language for transit community
- Provides platform for advancing SMS



#### What FTA wants...from a safety perspective

- Improved safety performance make a safe industry even safer
- Increased accountability for safety decisions at highest levels of transit agency
- Greater consistency in identifying hazards and evaluating safety risk
- Increased use of data to monitor effectiveness of safety risk mitigations
- Strong safety culture within every transit system

## **Formal SMS Definition**

"SMS is the formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of safety risk mitigations. It includes systematic policies, procedures, and practices for the management of safety risk."

## SMS answers these critical questions

- I. What are our **most serious** safety concerns?
- 2. How do we **know** this?
- 3. What are we **doing** about it?
- 4. Is what we are doing working?
- 5. How do we **know** what we are doing is working?



## **SMS Framework Components**



#### Safety Management Policy Sub-Components





Safety Management Policy component provides organizational foundation for Safety Risk Management and Safety Assurance processes to thrive

#### Safety Risk Management Sub-components



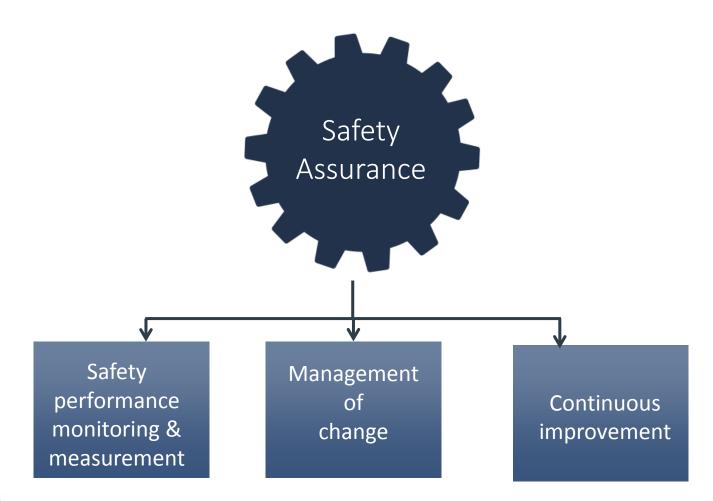


## Safety Risk Management

# Safety Risk Management activities are **forward looking**



#### Safety Assurance Sub-Components





## **Safety Assurance**

# Safety Assurance activities monitor the *present*



### **Safety Promotion Sub-Components**







## **Safety Promotion**

### Safety Promotion component supports organizational interactions required to build an effective SMS

## **IMPLEMENTING SMS**



#### **Compliance Approach**

Document current procedures and practices

Safety regulators are primary users of safety data

Focus on compliance with prescriptive regulations

Reactive – address safety concerns after accidents occur



#### Safety Management Systems Approach

Document strategies to address priority safety risks

Safety regulators, and agency leadership, employees and stakeholders are *all* primary users of safety data

Focus on measuring effectiveness of risk control strategies and achieving safety outcomes

Proactive – learn from close calls and address accident precursors to prevent events

## **Key Points on SMS Implementation**

- Can take months to years, depending on agency
- Certain activities are more appropriate for some agencies than others
- Not a "check the box" exercise; the SMS must be realistic and practical
- Not just a safety department effort
  - Those responsible for managing and operating the SMS should be involved in developing it
- Critical success factor CEO/executive leadership commitment

### **The SMS Implementation Process**

Phase 1 <b>Prepare</b>	Phase 2 Develop	Phase 3 Operationalize
<ul> <li>Engage key individuals and build a team</li> </ul>	<ul> <li>Design safety risk management process</li> </ul>	Put SMS policies, processes, and activities
Get familiar with SMS implementation	Build safety assurance function	into practice as they're approved by agency
<ul> <li>Identify gaps — SMS policies, processes, and activities agency needs to develop</li> <li>Make a plan for how to fill the gaps</li> </ul>	<ul> <li>Determine SMS-related training and communication</li> <li>Draft safety management policies to formally establish SMS processes and activities throughout agency</li> </ul>	
Key Outputs	Key Outputs	Key Outputs
<ul> <li>SMS gap analysis</li> <li>SMS Development Project Plan</li> <li>Safety Management Policy Statement</li> </ul>	<ul> <li>Public Transportation Agency Safety Plan (awaiting final rule)</li> <li>SMS policy documents</li> </ul>	A functioning SMS

## SMS DEVELOPMENT PROJECT PLAN



#### What is an SMS Development Project Plan?

- Describes details of who, what, where, when, and how agency will build its SMS
- Formalizes processes and procedures necessary to develop, operationalize, and verify implementation of SMS elements
- Project Plan items must be realistic
- If agency changes approach to implementation, Plan must be updated to reflect change

#### Why is an SMS Development Plan important?

- Formalizes and organizes SMS development
- Helps ensure key people are engaged and tasks are completed correctly
- Helps agency establish agreement and awareness on key aspects of SMS development
  - roles and responsibilities; key tasks; timelines and milestones; necessary resources and staffing
- Making key decisions early is efficient and minimizes disruption of day-to-day operations

#### Key Elements of the Plan



#### Recordkeeping

- Concurrences
  - Version number
  - Issue date
  - Signatures of all that approve Plan
- Document change record
  - Complete history of successive edits to Plan



#### **Plan Overview**

- Outcomes and objectives
- PurposeScope

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#### **Plan Management**

- Leadership commitment
- Revision and document control
- Inputs and updates



#### **Project Management**

- Leadership
- Support
- Tracking and accountability
- Document management
- Communication and coordination
- Budget



#### **SMS Development Activities & Timeline**

- Usually tracked in a Gantt Chart or similar planning tool
  - Tasks
  - Milestones and deliverables
  - Relationships and dependencies
  - Roles and responsibilities
  - Schedule





## EMPLOYEE SAFETY REPORTING



## **Effective Safety Reporting - Attributes**

- Training the messengers
  - People are not "natural messengers"
- Ease of reporting
  - Simple requisites
- Timely, accessible, and informative feedback
  - No feedback; program crumbles
- Protection
  - Information only used for the purposes it was collected
- Vehicle for change
  - Issues reported are solved

# SMS and Safety Reporting: Facts

- SMS does not work without data
- Nobody knows actual system performance better than employees delivering service
- Power of safety reporting
  - Safety data capture on previously unanticipated safety deficiencies
  - Safety data to confirm effectiveness of existing safety risk mitigations



# Safety Reporting Programs

- Types of safety reporting programs
  - Mandatory
  - Voluntary
- Employee reporting of safety hazards and concerns
- Near miss / close call reporting
- Confidentiality considerations



## **Close Call Reporting**

- Primary purpose improve overall safety
  - Encourages employees to voluntarily report unsafe conditions or acts that may otherwise go undetected
- Offers another tool to identify and assess safety risks in operations
- Participants must feel comfortable to report safety concerns without fear of potential discipline, reprisal, dismissal, or legal discovery



#### **Employee Safety Reporting Pilot Program**

- Office of Safety in conjunction with Office of Research to conduct pilot on Employee Safety Reporting programs
  - Including Close Call Reporting
- FTA will solicit participation from transit agencies
- Pilot will include rail and bus large, medium, and small transit agencies



## TECHNICAL ASSISTANCE AND RESOURCES



## SMS Rail/Bus Pilot Program

- FTA currently working with a large multi-modal agency and plans to start pilots with mid-size and small bus agencies in near future
- Through this program, FTA:
  - Provides onsite training, guidance, technical assistance, and expertise to help agencies implement SMS
  - Establishes agencies as role models for SMS implementation
  - Will apply lessons learned to develop guidance materials and technical assistance tools for transit industry
  - Develops insights on how to support industry-wide transition to SMS

## FTA Bus Safety Program

- Voluntary onsite reviews
- Orientation seminars
- Ongoing outreach
- Safety Training and Resource website



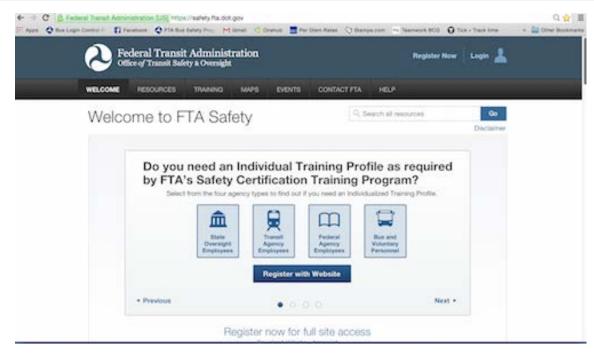


## FTA Bus Safety Program and SMS

- Seminars and presentations now include information on what SMS is and steps to consider for voluntary SMS implementation
- Onsite reviews focus on bus technical safety and include preliminary SMS Gap Analysis
  - Gives reviewed agency head start on SMS implementation
- Onsite review taking place at Lee Tran, Fort Myers - June 14 - 16

## FTA's New Safety and Training Resource Website

## http://safety.fta.dot.gov/



- SMS information
- Training
- News & Events
- Emails to registered users

## **Key Resources**

# Read, watch, and participate

- Review FTA's SMS Framework
- Participate in webinars explaining new regulations and guidance
- Visit FTA's YouTube page to view previous webinars
  - Read our newsletter TSO Spotlight

#### Get trained

Through FTA's safety website:

- Take the SMS Awareness online course
- Sign up for classroom courses
- Request an Individual Training Profile (ITP)
  - Courses based on your role

#### Sign up to receive updates

Sign up for GovDelivery

- FTA announcements and new documents
- https://public.govdeliv ery.com/accounts/US DOTFTA/subscriber/ new



Questions? Comments? Email us at FTASafetyStakeholder@dot.gov



# Thank you !

