



Safety and Operations Committee

Board Information Item III-B

March 10, 2022

Safety Assurance – Path Forward

Washington Metropolitan Area Transit Authority

Board Action/Information Summary

☐ Action ☒ Information

MEAD Number:
202347

Resolution:
☐ Yes ☒ No

TITLE:

Metro Safety Assurance Path Forward

PRESENTATION SUMMARY:

This presentation outlines the development of the Safety Assurance function as a critical step in the implementation of Metro's Safety Management System (SMS), and describes progress towards goals outlined in the Agency Safety Plan (ASP).

PURPOSE:

To keep Metro leadership informed and engaged on the strategy and progress associated with implementing Metro's Safety Management System (SMS).

DESCRIPTION:

Safety Assurance is defined as "processes within a transit agency's Safety Management System that functions to ensure the implementation and effectiveness of safety risk mitigation, and to ensure that the transit agency meets or exceeds its safety objectives through the collection, analysis, and assessment of information" (49 C.F.R. § 673.5). Safety Assurance helps to ensure that mitigations implemented to manage safety risk are being followed and working as intended. This enables potential safety issues to be detected and corrected earlier and informs risk management adjustments so that safety objectives are met. Metro has restructured its Safety Department to include an Office of Safety Assurance. The three main functions of this Office include: Safety Investigations, to identify the root causes and mitigations of safety events; Safety Data Analytics, to perform risk-based safety data analysis to identify trends, areas of greatest safety risk, and provide the basis for recommending mitigations; and Operations Safety Oversight, to verify compliance in the field.

WSP assists with the revision of the Metro Safety Rules and Procedures Handbook (MSRPH), a part of the SMS strategy. In addition, **MITRE** is a federally-funded non-profit that specializes in applying data sciences to advance Safety in the transportation industry.

Key Highlights:

- Developing the Operations Safety Oversight capability is an SMS Roadmap priority for Safety Assurance
- Historically stove-piped by mode, the Operations Safety Oversight team has been integrated with a Director of Operations Safety Oversight hired to standardize support across Metro
- Priorities include responding to voluntary employee safety reports, safety committee oversight, and targeted Roadway Worker Protection (RWP) compliance checks

Background and History:

In 2016, the Federal Transit Administration (FTA) published 49 CFR Part 670 Public Transportation Safety Program which states, “The FTA has adopted the principles and methods of Safety Management Systems (SMS) as the basis for enhancing the safety of public transportation in the United States.” (49 C.F.R. § 670.3). SMS is a comprehensive, collaborative approach that brings management and labor together to build on the transit industry’s existing safety foundation to continuously improve how safety risks are identified and assessed with mitigating actions taken before an accident or incident occurs.

In July of 2018, the FTA published 49 CFR Part 673 Public Transportation Agency Safety Plan. Transit operators that receive federal funds (under the FTA’s Urbanized Area Formula Grants) are required to develop Agency Safety Plans (ASPs) that specify how SMS will be implemented over the course of a three-year period. Metro’s ASP has been approved by the Executive Management Team (EMT), Board of Directors, WMSC, and certified with the FTA.

Discussion:

The Operations Safety Oversight team’s top three priorities include responding to Voluntary Employee Safety Reports, Safety Committee Oversight, and Roadway Worker Protection verification.

Employee safety reporting is an integral part of WMATA’s self-examination, as employees are aware of safety issues and risks that are present throughout the system. Employees primarily report safety concerns through the confidential close call reporting system (C3RS) and the Safety Hotline. In both cases, the employees can choose to have their identity kept confidential and the reporting concerns are analyzed and addressed. If the reporting employee provides their contact information, a Safety Specialist briefs them on the outcome of their report.

- The Operations Safety Oversight team has addressed over 500 (517) employee safety reports during the past two fiscal years. Topics range

from facility conditions to rule interpretations

- By building better process and relationships with Maintenance and Engineering departments, the average time to resolve and close out concerns is now approximately three days, down from an average of 20 from the past few years
- Going forward, Operations Safety Oversight will partner with Safety Promotions and Communications to ramp up promotion of voluntary reporting with a vision of recognizing actual employees and their experiences with a tagline of *reporting worked for them and it will work for you too!*

There are nearly 50 safety committees at Metro that meet on a monthly basis. The hierarchy starts with Local Safety Committees, followed by Department Safety Committees, and the overall governing body is the Executive Safety Committee. Discussion points include recent safety events, metrics, and safety concerns reported to the committee. While the structure provides a solid foundation for a safety operating rhythm, variation in the range of activities has evolved among the committees over time.

- Safety Officers from the Operations Safety Oversight team will be working with the safety committees to standardize incident review, track action items, and escalate issues to Department Safety Committees or the Executive Safety Committee as required
- The composition of all Safety Committees will be re-visited to ensure they reflect the population associated with their corresponding locality or department
- Safety Committees will become the drumbeat of SMS, using the Safety Risk Management process to proactively identify, assess, and mitigate safety risks with feedback from the Office of Safety Assurance used to inform the process

Metro's Roadway Worker Protection (RWP) program is designed to ensure the safety risks involved with performing work on or around the rail system have been effectively mitigated. A recent spike in RWP incidents triggered an increase in Operations Safety Oversight activities.

- Operations Safety Oversight developed RWP compliance criteria that was a combination of safety, operations, and training checklists. This criteria has been converted into an electronic checklist that is now used by all operational management and SAFE personnel. The findings from inspections are reported to operational management on a daily basis
- The results of this partnership have driven enhanced communication on common misinterpretations of the RWP rules, a company-wide stand down that served as a refresher for work zone set ups, and an increase in ROCC supervisory oversight when wayside personnel request foul

time through particularly hazardous areas on the track (known as hot spots)

- The immediate actions have led to a decrease in RWP incidents. Operations Safety Oversight and operational management continue to conduct site inspections and provide RWP compliance assistance to field work crews

Over the remainder of Calendar Year 2022, the Operations Safety Oversight team will continue to develop. The Safety Officer position will be converted to Senior Safety Specialist and Safety Specialist positions with responsibilities aligned to the principles of SMS Safety Assurance. The processes and tools used to implement various safety assurance techniques (audits, inspections, checks, etc.) will continue to mature. This will enable Safety Assurance to become a primary source of leading indicator data used to inform the Safety Risk Management process. In turn, as the Safety Risk Management process continues to develop, it will inform the priorities of Safety Assurance resulting in the closed loop, systematic approach to safety that continuously improves.

FUNDING IMPACT:

Development and implementation of SMS has already been accounted for in the budget. This presentation is a report on the progress being made.	
Project Manager:	Theresa Impastato
Project Department/Office:	SAFE

TIMELINE:

Previous Actions	Dec/2021 – WMSC Votes to approve WMATA's Agency Safety Plan (ASP) Jan/2022 – CY2022 SMS Strategic Overview presented Feb/2022 – SMS Safety Risk Management Progress Report presented
Anticipated actions after presentation	Implementation of the Safety Management System throughout Metro is planned as a multi-year process. No change to the timeline is proposed. COO groups are prioritized for baseline implementation.

RECOMMENDATION:

Stay the course: Continue to support SMS development and implementation in accordance with the ASP.

Metro Safety Assurance Path Forward

Safety and Operations Committee
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Safety Assurance – Oversees Risk Mitigations

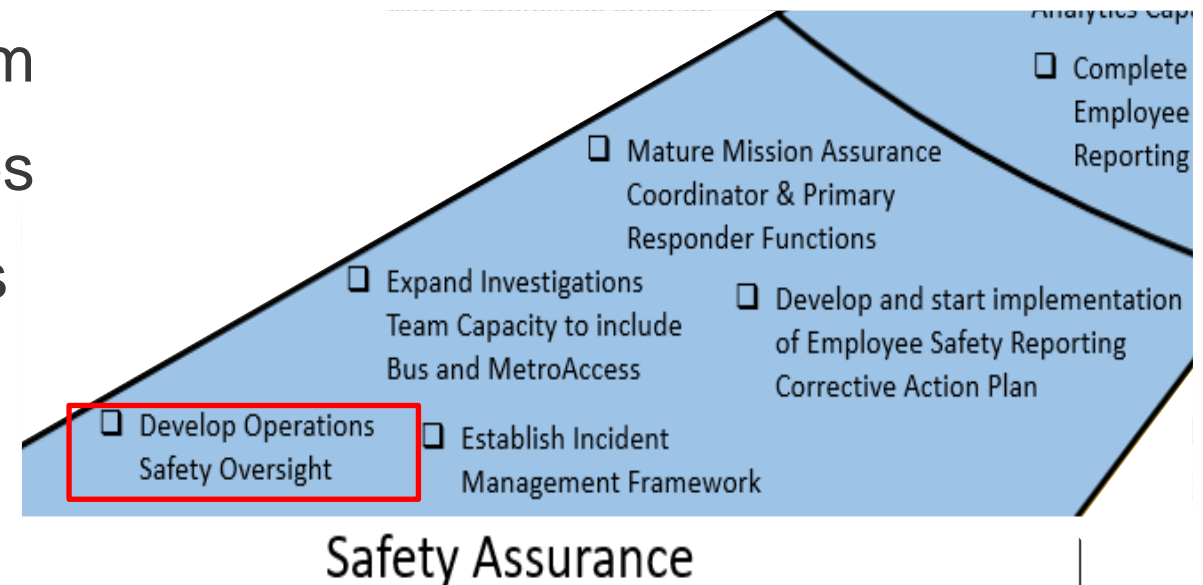
- Two primary functions
 - 1) **Verify compliance:** Are mitigations to reduce safety risk being followed?
 - 2) **Measure effectiveness:** Are mitigations working as intended?
- Safety Assurance is composed of
 - Safety Investigations
 - Safety Data Analytics
 - **Operations Safety Oversight**



Safety Management System Overview

Strategic Highlights

- **Develop Operations Safety Oversight**
 - Reorganized into one integrated team
 - Standardize support across all modes
 - Mature staffing, processes, and tools
- **Priorities**
 - Voluntary Safety Reporting
 - Safety Committees
 - Roadway Worker Protection



Agency Safety Plan's CY2022 Safety Management System Roadmap

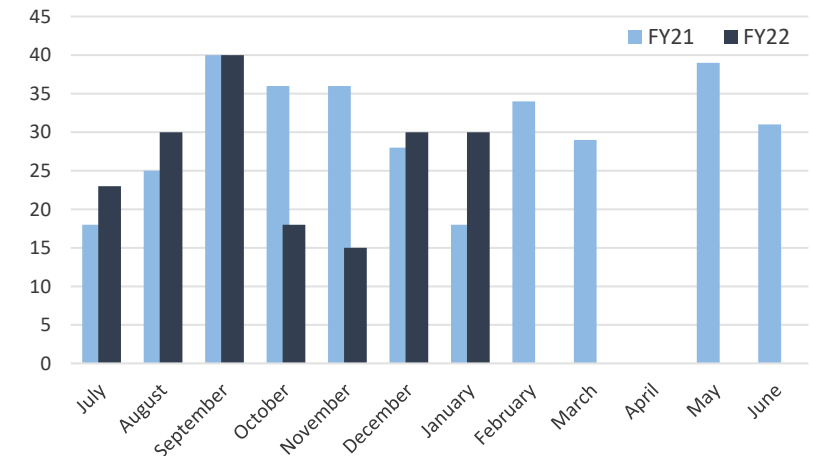
A Core Safety Service

- Primary programs
 - Confidential Close Call Reporting System (C3RS)
 - Safety Hotline
- Reporting averages
 - 27 employee reports/month
 - Three days to resolve/close
- Examples include COVID concerns, facility conditions, housekeeping, rule interpretations, and environmental conditions
- Moving forward, looking to ramp up program promotion, highlighting examples of results, and recognizing employees' use

Employee Safety Reporting Process



Employee Safety Reporting Counts

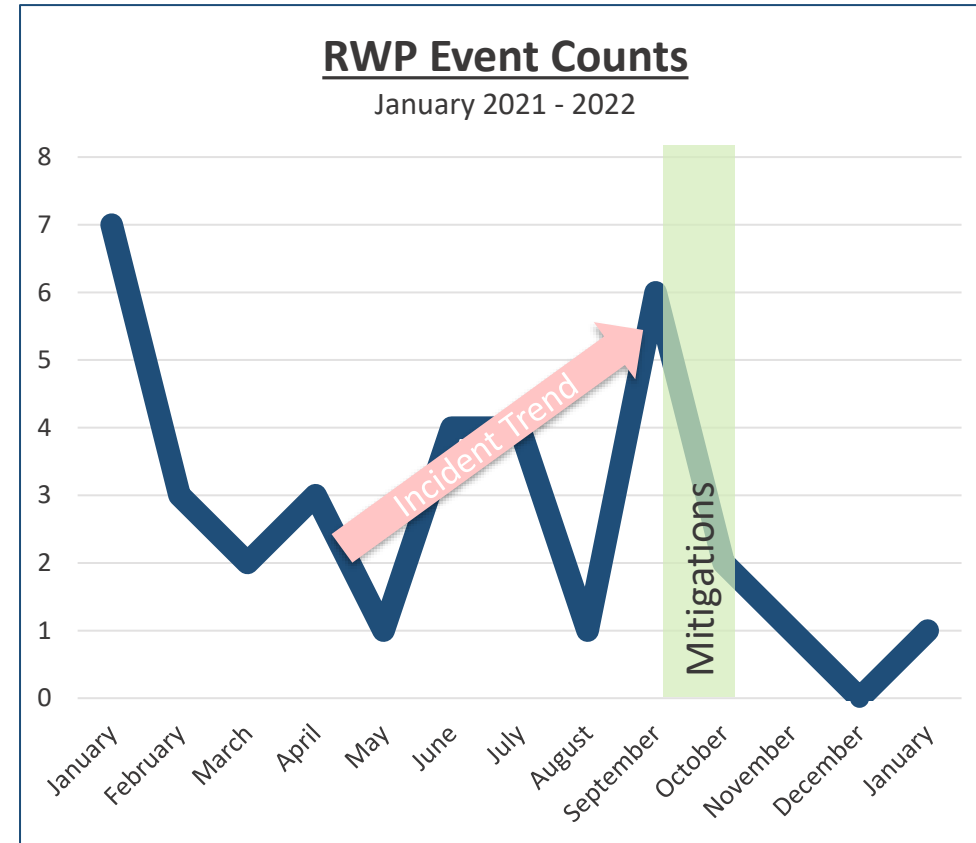


Back to Basics with Safety Committees

- Committees provide a framework for safety communication
- Local Safety committees feed monthly briefs at the executive level
- Range in current safety committees' levels of activity
- Improving basics to better identify hazards and manage risk
- Committees will become the drumbeat of SMS implementation

Targeted RWP Campaign

- Incident spike in mid 2021 led to increased mitigations and outreach efforts
- Partnered with Operations to improve RWP safety via compliance verification
- Mitigations developed in coordination with Operations
 - Safety stand down
 - Safety alerts and field communication
 - ROCC supervisory oversight
- Mitigations and increased oversight of RWP work zones led to a decrease in safety events



Next 10 Months

- Team Building
 - Refine Job Descriptions
 - Complete Recruiting
- Tighten Processes
 - Process for performing oversight
 - Audits, Inspections, Checks
- Better Use Safety Data
 - Convert results to leading indicators
 - Feed Safety Risk Management

