



Safety and Operations Committee

Board Information Item III-B

**Safety Management System (SMS)
Semi-Annual Review**

Washington Metropolitan Area Transit Authority

Board Action/Information Summary

☐ Action ☒ Information

Document
Number:
205565

Resolution:
☐ Yes ☒ No

Presentation Name:

Safety Management System Semi-Annual Review

Project Manager:

Theresa Impastato

Project Department:

Safety and Readiness

Purpose/Key Highlights:

To keep Metro leadership informed and engaged on the strategy and progress associated with implementing SMS.

Key Highlights

- Significant progress has been made implementing the SMS
- At mid-year, all projects are progressing with no projects noted at-risk for non-completion by calendar year-end.

Interested Parties:

MITRE is a federally funded, non-profit that specializes in applying data sciences to advance safety in the transportation industry. MITRE has been commissioned to assist Metro with the development and implementation of its Voluntary Safety Reporting Program and the Safety Culture Assessment. **Origami** is providing the system for consolidating safety data.

Background:

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.

Two years later, the FTA published 49 CFR Part 673 Public Transportation Agency Safety Plan (ASP), which requires transit operators that receive federal funds (under the FTA's Urbanized Area Formula Grants) to develop ASPs that specify how SMS will be implemented over the course of a three-year period. Metro's third ASP was approved by the Board on September 22, 2022, which included its Strategic Roadmap. The SMS Strategic Roadmap is organized around the four components of SMS: Safety Policy, Safety Risk Management (SRM), Safety Assurance, and Safety Promotion.

A requirement of the ASP is to establish safety performance targets utilizing data from the National Transit Database (NTD). Metro benchmarks its performance of these metrics with other agencies and reviews progress on an annual basis.

Please note that the realignment of Metro's organizational structure created the Department of Safety and Readiness, of which the Department of Safety (hereafter Safety) is a part.

Discussion:

Strategy Summary:

Metro's vision is to become the transit industry leader in safety. To realize this vision, Metro's mission is to develop and implement a world class SMS. Metro has developed a Strategic Roadmap, which is organized based on the four components of SMS (Safety Policy, Safety Risk Management, Safety Assurance, and Safety Promotion). The SMS Strategic Roadmap highlights the top priorities established to accomplish this mission. The ASP describes how those priorities will be achieved. The following summarizes the progress made in the first half of CY2023 and next steps envisioned for the remainder of the year:

Safety Policy

2023 Mid-Year Achievements: Metro's ASP was self-certified with the FTA in December of 2022 in compliance with the deadline required by 49 CFR Part 673 *Public Transportation Agency Safety Plan*. An SMS Project Manager leads development of the tactical action plans required to ensure a formalized, deliberate approach is taken toward achieving the milestones reflected on the SMS Strategic Roadmap. Metro has completed embedding safety values & behaviors into performance management and job descriptions in partnership with Human Capital.

2023 Next Steps: Metro will continue to partner with Metro's IT Governance Board to implement a mature framework for evaluating the safety implications of new technologies under consideration. This milestone was carried over from 2022 and is anticipated to be completed by year-end. Additional efforts are underway to ensure systems are configured to enable robust data collection and visualization. Metro has begun reviewing the alignment of policies with our efforts to implement Just Culture throughout the organization. These efforts are on-target to be completed by year-end.

Safety Risk Management

2023 Mid-Year Achievements: As part of our 2022 efforts, Metro stood up our Joint Labor Management Safety Committee in advance of the timelines required under the Bipartisan Infrastructure Law. In 2023, we have expanded the purview of the JLMSC to include additional responsibilities regarding goal setting, document review and ongoing safety promotion. The JLMSC is a critical component of the agency's safety promotion efforts and provides a direct line of communication with our labor partners.

Metro has completed benchmarking assessments of our safety rules and procedures which have led to the drafting of a new operating rulebook. The operating rule book is being printed with a launch date of September 1, 2023. Metro has also advanced improvements to Roadway Worker Protection Protocols and continues to refine our processes.

Revised and expanded workplace safety programs governing silica protection, hazard communication and hearing protection have been implemented in operations and infrastructure. Additional programs are slated for revision and implementation over the remainder of the year.

2023 Next Steps: Implementation of the Safety Risk Management process will continue to expand across the operations and infrastructure teams throughout the year. We are on-target to complete baseline implementation throughout both departments by year-end, in alignment with our multi-year timeline for implementation.

Metro's safety department has developed a job hazard analysis program that is on-target to launch in operations and infrastructure by year-end. The team is also progressing improvements to the strategy to perform safety audits of front-line operations with anticipated completion by year-end.

Safety Assurance

2023 Mid-Year Achievements: Building upon the prior year efforts to improve our approach to investigations of events and near-misses, we have embedded Just Culture principles into our investigation practices. Staff have been trained regarding just culture principles and an algorithm for decision-making.

The integrated safety system has launched. This system integrates multiple inspection data streams into one system of record and offers stakeholders the ability to monitor progress and performance of systems with a safety impact. Data visualization is now possible for inspections and tracking of performance is underway with stakeholders.

2023 Next Steps: Metro is continuing to improve our employee safety reporting programs with MITRE and have developed several new processes for dispositioning of reports. These efforts are underway with the JLMSC and will continue through the year.

Under the new Safety & Readiness organizational structure, the quality and safety team are synergizing the implementation of our Quality Management System with the Safety Management System. The team is working to unify data from both systems into an integrated system of record that enables safety risk-management in an environment of process-based performance management. These efforts to fuse data will continue throughout the year.

The Incident Management Framework has launched on July 10. Baseline training has been completed and additional efforts will be implemented over the coming months with full implementation anticipated by year end.

Safety Promotion

2023 Mid-Year Achievements: Building upon the results of 2022's safety culture survey, Metro has expanded the implementation of interactive SMS dashboards to support better dissemination of information to enable data-driven decision making. These dashboards are being used within the revised and expanded safety committee structure. The new framework for safety committees creates further clarity regarding the escalation process for safety concerns and establishes common tools and governance of committees.

2023 Next Steps: As the SMS continues to mature, a robust strategy that encompasses Just Culture, employee engagement, training, and communication will be critical to shaping the culture required to ensure its long-term success. Led by the Safety Promotions Manager, this strategy includes capitalizing on Metro's partnership with MITRE and the JLMSC to address the results of the Safety Culture Survey. Implementation of the strategy is underway with multiple communications vehicles being deployed to enhance understanding and participation. Training for employees is being developed and deployed with completion anticipated by year-end. The development and implementation of a world class SMS is a multi-year journey and Metro would like every stakeholder to feel like they are coming along for the ride.

Funding Impact:

The implementation of SMS as through the identified milestones is accounted for in the budget.

Previous Actions:

As documented in the ASP.

Next Steps:

Organizational implementation of SMS is planned as a multi-year process. No change to the timeline is proposed.

Recommendation:

Information Only

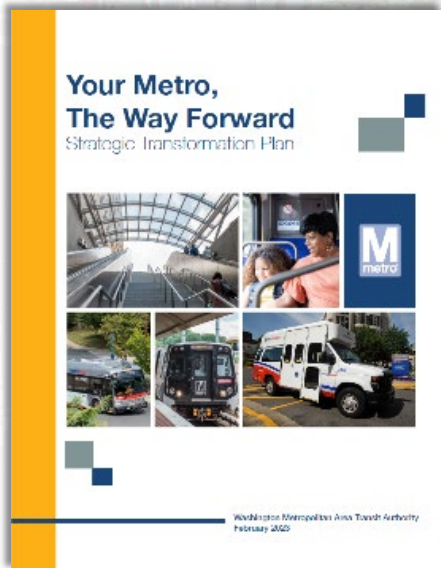
Safety Management System

Semi-Annual Review

Safety and Operations Committee
July 13, 2023



Strategic Transformation Plan: Guides long term strategy and day-to-day decision making of Metro over the next five + years



Guiding



Day-to-day decisions

- Customer interactions
- Service schedules
- Communications



Long-term strategy

- Budget allocation
- Capital improvements
- Priority projects



Goals — Our priorities to achieve the vision

Service Excellence

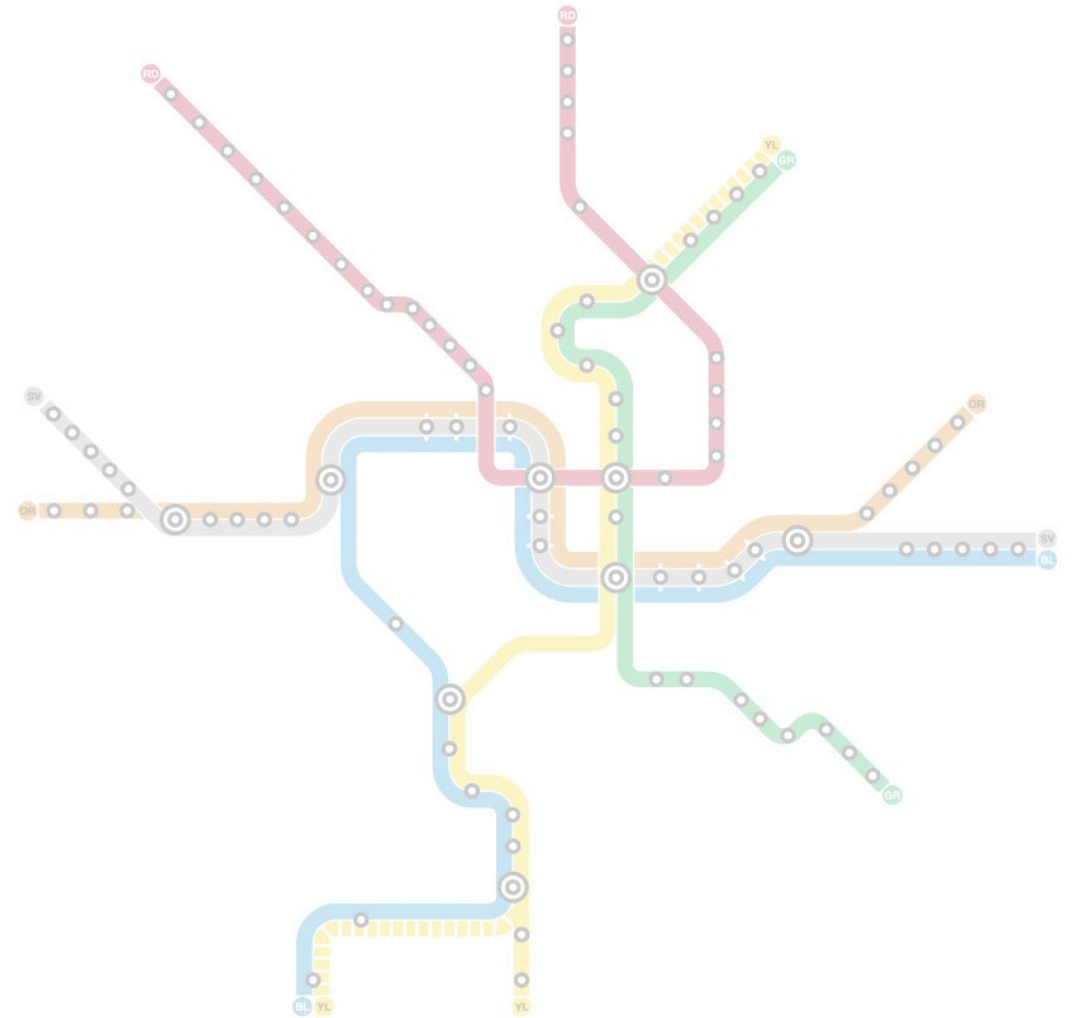
Talented Teams

Regional
Opportunity and
Partnership

Sustainability

SMS Strategy Summary

- Vision
 - Metro is the transit industry leader in safety
- Mission
 - Develop and implement a world-class SMS
- Roadmap
 - Sets the strategic priorities for accomplishing the mission
- Plan
 - Agency Safety Plan describes how those priorities will be achieved



CY2023

CY2024

CY2025

SMS Roadmap as of 07/01/2023

Mature & Collaborate

Expand and Refine

Evaluate and Improve

Safety Policy

- ☐ Continue and Pilot framework for evaluating technologies
- ☐ Partner with IT to prepare systems to support SMS
- ☐ Partner with owners to begin alignment of policies with Just Culture principles
- ✓ Partner with Human Capital to embed safety values & behaviors into performance mgmt. and job descriptions

- ☐ Complete alignment of agency policies with Just Culture principles
- ☐ Perform Assessment of Safety Policy Implementation

- ☐ Agency Safety Plan Maturity Assessment
- ☐ Pursue certifications/accreditations

Safety Risk Mgmt.

- ✓ Launch JLMSC expansion
- ✓ Complete overhaul of Safety Rules and Procedures
- ☐ Complete SRM rollout across Operations & Infrastructure
- ☐ Launch Job Hazard Analysis program
- ☐ Develop Line Operations Safety Audit Strategy
- ✓ Partner with Ops & Infrastructure to implement workplace safety programs
- ✓ Complete benchmarking and best practices assessment for RWP and Safety Rules

- ☐ Launch Environmental Compliance project
- ☐ Initiate Safety Risk Management Implementation beyond Ops & Infrastructure
- ☐ Launch OSH Project partnering with RISK
- ☐ Launch Fitness-for-Duty project partnering with Health and Wellness

- ☐ Perform SRM maturity assessment
- ☐ Perform Job Hazard Analysis maturity assessment

- ☐ Expand safety data sharing across transit industry

- ☐ Expand Safety Data Analytics
- ☐ Mature integrated risk-based inspection program

- ☐ Investigations Project
- ☐ Fire Marshall Project
- ☐ Submit emergency prep accreditation

- ☐ Oversight Project
- ☐ Emergency Preparedness Project

- ☐ Safety training catalogue reconciliation

- ☐ Complete IMF Implementation
- ✓ Incorporate Just Culture principles into investigations
- ☐ Partner with Quality to align data from SMS with QMS
- ✓ Complete process overhaul of Employee Safety Reporting Program
- ✓ Launch integrated safety inspection system

- ✓ Implement SMS Engagement Strategy
- ☐ Develop SMS training for employees and management

- ✓ Implement Safety Committee Improvement Plan
- ✓ Expand and advance interactive SMS dashboards

Mature SMS

Proactive

Reactive

Safety Assurance

Safety Promotion

Status

- Continue and Pilot framework for evaluating technologies
- Partner with Information Technology to prepare systems to support SMS
- Partner with owners to begin alignment of policies with Just Culture principles
- ✓ Partner with Human Capital to embed safety values & behaviors into performance management and job descriptions

Key:

- ✓ Milestone Achieved
- On-Target for Year-end
- Behind Schedule, Anticipated to complete by year-end
- At-risk for non-completion by year-end



Status

- ✓ Launch Joint Labor Management Safety Committee task expansion
- Develop Line Operations Safety Audit Strategy
- ✓ Complete assessments and overhaul of Roadway Worker Protection and Safety Rules and Procedures
- Complete Safety Risk Management rollout across Operations & Infrastructure
- Launch Job Hazard Analysis program
- ✓ Partner with Operations and Infrastructure to implement workplace safety programs



Status

- Complete Incident Management Framework Implementation
- ✓ Incorporate Just Culture principles into investigations
- Partner with Quality to align data from SMS with QMS
- Complete process overhaul of Employee Safety Reporting Program
- ✓ Launch integrated safety inspection system



Status

- Implement SMS Engagement Strategy
- Develop SMS training for employees and management
- ✓ Implement Safety Committee Improvement Plan
- ✓ Expand and advance interactive SMS dashboards



Path Forward

- Apply Project Management Approach for SMS
 - Each Roadmap milestone has an owner, action plan
 - SMS operating rhythm tracks progress
 - Executive Safety Committee Oversight
 - Progress reported to Safety and Operations Committee