



Safety and Operations Committee

Board Information Item III-A

WMATA/MITRE Partnership Update

Washington Metropolitan Area Transit Authority

Board Action/Information Summary

☐ Action ☒ Information

MEAD Number:
203391

Resolution:
☐ Yes ☒ No

TITLE:

MITRE Partnership Update

PRESENTATION SUMMARY:

WMATA became the first agency in the transit industry to form a partnership with MITRE in March 2022. This presentation provides the board with an update on the progress that WMATA and MITRE have made to date.

PURPOSE:

Provide the Board with an update on the progress made since WMATA and MITRE formed a partnership in March 2022.

DESCRIPTION:

MITRE is a federally funded not-for-profit that specializes in applying data sciences to advance safety in the transportation industry. MITRE has been retained to assist WMATA with assessing safety culture, improving voluntary safety reporting, and enhancing safety data analytics.

Key Highlights:

- The first objective of the MITRE partnership is to assess WMATA's safety culture by performing targeted interviews, conducting a safety culture survey, and facilitating focus groups.
- MITRE and WMATA completed 16 interviews with key stakeholders and conducted the safety culture survey over two weeks in September.
- Approximately six to eight focus groups are being planned for completion during the months of October and November.

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 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 multi-year period. WMATA's ASP has been approved by the Senior Executive Team (SET), Board of Directors, Washington Metrorail Safety Commission (WMSC), and self-certified with the FTA.

Discussion:

In March 2022, WMATA became the first agency in the transit industry to establish a partnership with MITRE, a federally-funded not-for-profit that has partnered with the federal government (including the Federal Aviation Administration) for over 50 years. MITRE's work has directly contributed to making aviation the safest mode of transportation in the world. The agency's vision is to become the industry leader in safety, and this partnership exemplifies the commitment to making this vision a reality. As a first step, WMATA and MITRE are assessing the current state of the agency's safety culture by performing targeted interviews, conducting a safety culture survey, and facilitating focus groups. A positive safety culture is critical to the long-term, sustained success of WMATA's SMS.

MITRE assesses safety culture against their Safety Culture Maturity Model, which is composed of four levels:

- Level 1: Policies, Procedures, and Guidelines Support Safety
- Level 2: Organizational Support for Safety
- Level 3: Demonstrated Commitment to Safety
- Level 4: Safety As a Way of Doing Business

Level 1 is the most basic form of safety culture maturity. At this level, the framework for an SMS has been established. The organization has formalized its commitment to safety by establishing safety policies, goals, and practices. Employees take these safety policies and procedures seriously and have a general understanding of how they apply to their work.

Level 2 maturity reflects that SMS has advanced beyond the initial framework. Safety reporting mechanisms are in place. Supervisors provide support for safety beyond the traditionally discipline-centric responses (i.e.,

listening and addressing employee safety concerns). Safety communications are visible and share relevant information about safety decisions and the reasons behind them. Safety-related training has also been developed and implemented.

Level 3 maturity reflects that positive safety culture is permeating throughout the agency. A commitment to safety is visible from employees and management at every level. Employees feel comfortable and encouraged to speak up when they have safety concerns. Actions are promptly taken in response to safety concerns and the results are actively promoted, which instills a sense of ownership. Employees feel like they are truly involved in improving safety performance.

Level 4 is the most advanced level of safety culture maturity. The SMS has advanced to the point where the people, processes, and tools combine to enable consistent, repeatable data-driven risk management that results in actions taken proactively, before incidents have the opportunity to occur. When a safety concern is reported, the reporting employee is routinely engaged from receipt, planning, action, and follow-up. The actions taken to mitigate risk are celebrated with employee recognition and promotional campaigns. An environment conducive to a virtuous cycle has been created, where lessons learned fuel continuous improvement.

MITRE and WMATA have completed 16 targeted interviews over the summer and conducted a safety culture survey in September. The survey was administered both electronically and manually (paper). The Joint Labor and Management Safety Committee (JLMSC) helped with establishing distribution and collection points, as well as employee engagement and promotion. Over the course of October and November, six to eight focus groups will be completed. The collective results from the interviews, survey, and focus groups will be processed by MITRE. The results will determine the current level of WMATA's safety culture maturity (i.e., WMATA's safety culture baseline). Additionally, the results will be used to inform the strategy going forward that will be implemented to shape WMATA's safety culture. MITRE recommends conducting the safety culture assessment every two years to measure progress against the original baseline. This will help the agency understand what is working well, what is not, and refresh the strategy going forward accordingly.

FUNDING IMPACT:

Development and implementation of SMS is accounted for in the budget. This presentation is a report on the progress being made in accordance with the ASP.	
Project Manager:	Theresa Impastato
Project Department/Office:	Department of Safety (SAFE)

TIMELINE:

Previous Actions	As documented in the ASP.
Anticipated actions after presentation	Implementation of SMS throughout WMATA is planned as a multi-year process. No change to the timeline is proposed. The Operations Department has been prioritized for baseline implementation. Implementation in support offices will follow that of operational departments.

MITRE Partnership Update

Safety & Operations Committee
October 13, 2022



Background

- First transit agency to partner with MITRE in March 2022
 - **Assess Safety Culture**
 - Improve Voluntary Safety Reporting
 - Enhance Safety Data Analytics

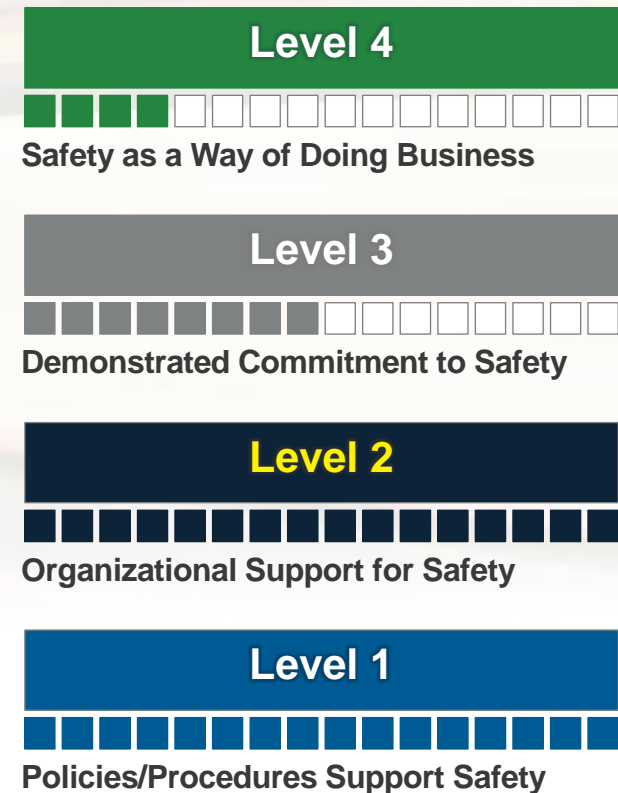


Bedford, Mass., and McLean, Va., April 13, 2022 – MITRE and the Washington Metropolitan Area Transit Authority (Metro) are pleased to announce a collaboration that is designed to strengthen Metro's Safety Management System (SMS).

Assessment Objectives

- Identify organizational enablers and barriers to positive safety culture
- Create baseline for tracking progress over time in strengthening the safety culture
- Provide formalized data-driven recommendations for addressing safety culture barriers and improving strengths
- Inform Voluntary Safety Reporting Program improvements

Baselining Safety Culture Maturity



Safety Culture Survey

- Benchmark research-based, proven safety culture survey
- Measure 10 critical dimensions of positive safety culture
- Tailor to Metro's needs – based on input from key stakeholders
- Assess safety culture maturity



Safety Culture Assessment Path Forward

Stakeholder Interviews

- Conducted 16 interviews
- Collected data on desired and current safety culture
- Determined how best to distribute the survey to workforce

Safety Culture Survey

- Administered 15-minute survey 9/13 to 9/26
- Administer survey every ~24 months to measure progress

Focus Groups

- Conduct six to eight focus groups
- Dig into survey results
- Obtain suggestions for strengthening safety culture
- Identify best practices

Findings & Recommendations

- Develop report of findings and recommendations
- Deliver briefing to executives and stakeholders
- Publish results

Leadership Response

- Hold leadership action planning session
- Develop roadmap for strengthening Metro's safety culture