



**Safety and Operations Committee**

**Board Action Item III-A**

**October 14, 2021**

**Approval of Agency Safety Plan Update**

Washington Metropolitan Area Transit Authority

## Board Action/Information Summary

☒ Action ☐ Information

MEAD Number:  
202308

Resolution:  
☒ Yes ☐ No

### TITLE:

Approve Metro Agency Safety Plan Annual Revision

### PRESENTATION SUMMARY:

The Agency Safety Plan (ASP) describes how Metro will develop and implement an industry leading Safety Management System (SMS) in accordance with 49 CFR Part 670 Public Transportation Safety Program and 49 CFR Part 673 Public Transportation Agency Safety Plan. First approved by the Board of Directors and Washington Metrorail Safety Commission (WMSC) in CY2020, the ASP requires an annual review and refresh. This discussion is an overview of the ASP and summarizes the CY2021 changes.

### PURPOSE:

To obtain Board approval of Metro's ASP (Revision A, dated October 11, 2021).

### DESCRIPTION:

**WSP** assists with the revision of the Metro Safety Rules and Procedures Handbook (MSRPH), a part of the SMS strategy reflected in the ASP. In addition, **MITRE** will be assisting with the Voluntary Safety Reporting Program and Safety Data Analytics, as part of the SMS strategy reflected in this ASP. **MITRE** is a federally funded non-profit that specializes in applying data sciences to advance Safety in Transportation.

### Key Highlights:

- A mature SMS is based on four components: Safety Policy; Safety Risk Management; Safety Assurance; and Safety Promotion.
- The ASP has been updated to reflect the progress made, account for lessons learned, and refresh the path forward.
- The SMS Strategic Roadmap has been incorporated into the ASP, which was introduced to the Board in February and used to report SMS progress in July.

### Background and History:

In 2016, the FTA formally “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 CFR § 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 resulting in the completion of mitigating actions before an accident or incident occurs.

In July of 2018, the FTA published 49 CFR Part 673 *Public Transportation Agency Safety Plan*. Pursuant to 49 CFR Part 673, operators of public transportation systems that receive Federal financial assistance under 49 U.S.C. Chapter 53 are required to develop ASPs that specify how SMS will be implemented over the course of a multi-year period. The initial compliance deadline for ASP submissions was December 31, 2020. Metro’s ASP was signed by the GM and approved by the Board of Directors and WMSC, and Metro certified its compliance with 49 CFR Part 673 in December 2020. The focus has shifted toward implementing SMS and maintaining the ASP annually.

### **Discussion:**

A mature SMS provides every employee at Metro with the ability to understand and engage in an ongoing dialogue around answering the following three questions:

1. What are the top safety risks that your department or team is facing?
2. What is being done to reduce those risks?
3. Are the mitigations working as intended?

The questions might seem simple but achieving a future state where the answers are data driven, formalized, and consistent requires a system of people, processes, and tools enabled by a safety culture where employees feel included and comfortable speaking up. Metro’s ASP is designed to describe the strategy and tactics that will be taken year-over-year to drive WMATA toward realizing this future state and becoming the transit industry leader in safety.

### **Safety Policy**

The Safety Policy outlines the key safety objectives and outcomes Metro intends to achieve; emphasizes the importance of Employee Safety Reporting, which is an essential leading indicator; and formalizes the GM/CEO as the Accountable Executive along with accountabilities and responsibilities for Metro leadership and employees throughout the Authority. Additionally, the SAFE Department Organizational Future State has been added to this revision of the ASP, clarifying how the department is being positioned to ensure the long-term success of SMS.

### **Safety Risk Management**

As part of developing the ASP, Safety Risk Coordinators (SRCs) were designated from each Metro Department. SAFE is partnering with each SRC to roll out the proactive Safety Risk Management process in their respective departments, which the ROCC piloted in CY 2021. The process focuses on identifying safety risks proactively, assessing those risks based on likelihood and severity, and then developing corresponding risk mitigations (actions) to reduce the risks as low as reasonably practicable. The ASP has been updated to refine and improve the process based on lessons learned from the ROCC pilot.

### **Safety Assurance**

SAFE has invested in establishing a Safety Assurance function that is designed to independently perform oversight to assure that risk mitigations are being followed (compliance) and working as intended (effectiveness). In CY 2021, the position of Deputy Chief of Safety Assurance was established along with the positions: Director of Safety Data Analytics, Director of Operations Safety Oversight, and Director of Safety Investigations. This leadership team is maturing the Safety Assurance function with a vision to produce results that feed the Safety Risk Management process, thereby creating the foundation for systematic continuous improvement.

### **Safety Promotion**

The safety culture at Metro will ultimately determine the long-term success of SMS. The ASP outlines an engagement strategy that includes improving training, increasing communications, and revising policies to align with Just Culture principles. SAFE will partner with MITRE to perform a Safety Culture assessment and establish Metro's safety culture baseline in CY 2022. The results will inform SAFE's promotion strategy and serve as a benchmark for measuring progress going forward.

### **Next Steps**

Upon receiving the Board's approval, the ASP will be submitted to the WMSC for approval. After securing the WMSC's approval, Metro will certify compliance with 49 CFR Part 673 to the FTA by the end of December in accordance with the regulatory requirement. SAFE will continue to lead the development and implementation of SMS in accordance with the ASP. A progress update to the Board has been scheduled for January.

### **FUNDING IMPACT:**

Initiatives to implement the SMS are included in the Board-approved budget.	
Project Manager:	Theresa Impastato
Project Department/Office:	Safety, Environmental Management and Emergency Preparedness

### **TIMELINE:**

<b>Previous Actions</b>	October 2020 – Board approval of Agency Safety Plan
<b>Anticipated actions after presentation</b>	January 2022 – Safety Management System Status Against Plan  October 2022 – Board approval of updates to the Agency Safety Plan

**RECOMMENDATION:**

Board approval of the CY2021 Agency Safety Plan updates.

# Public Transportation Agency Safety Plan – Annual Review and Approval

Safety & Operations Committee

October 14, 2021





## Purpose

- To obtain Board approval of Metro's Public Transportation Agency Safety Plan (Rev A, dated October 11, 2021)
  - Defines how Metro is developing a Safety Management System



# Four Components of SMS





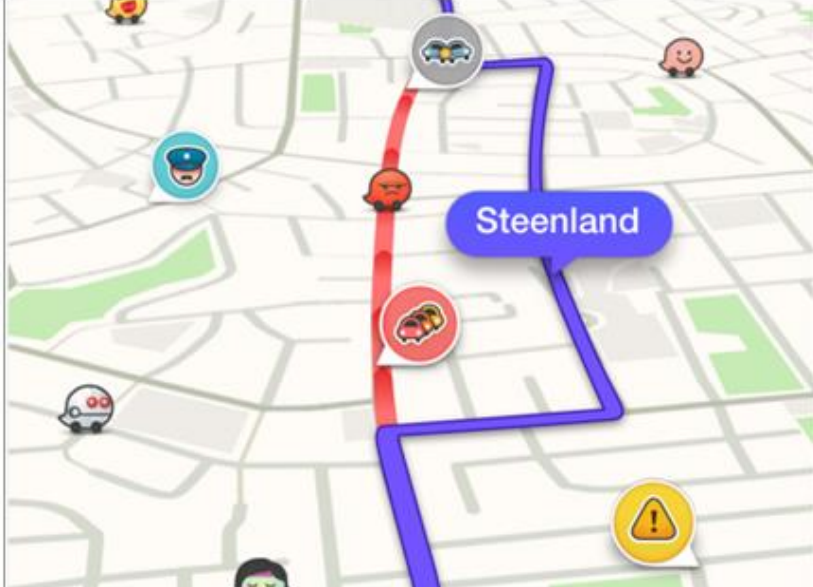
# What's Different about SMS

### Traditional Safety



- Compliance-focused
- Reactive
- Punitive culture

### SMS



- Performance-focused
- Proactive
- Collaborative culture

# What good looks like: Answering Three Questions

### **Federal Transit Administration mandates the implementation of principles and methods of Safety Management Systems (SMS)**

- 49 CFR § 670.3 – “Adopting the principles and methods of Safety Management Systems”
- WMATA’s compliance with PTASP rule certified to FTA in December 2020

### **SMS means everyone can answer:**

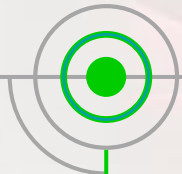
- 1) What are our top safety risks?
- 2) What are we doing to reduce those risks?
- 3) Is it working?

## Background

FTA publishes 49 CFR Part 673 requiring the submission of an Agency Safety Plan by December of 2020

Commence SMS implementation in accordance with the ASP, ROCC prioritized to set the standard

2016



FTA publishes 49 CFR Part 670  
“Adopting the principles and methods  
of Safety Management Systems”

2018

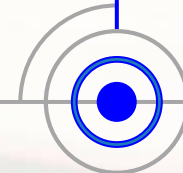


2020



WMATA's Agency Safety Plan signed by  
GM/CEO and approved by Board and WMSC.  
WMATA compliance certified with FTA

2021



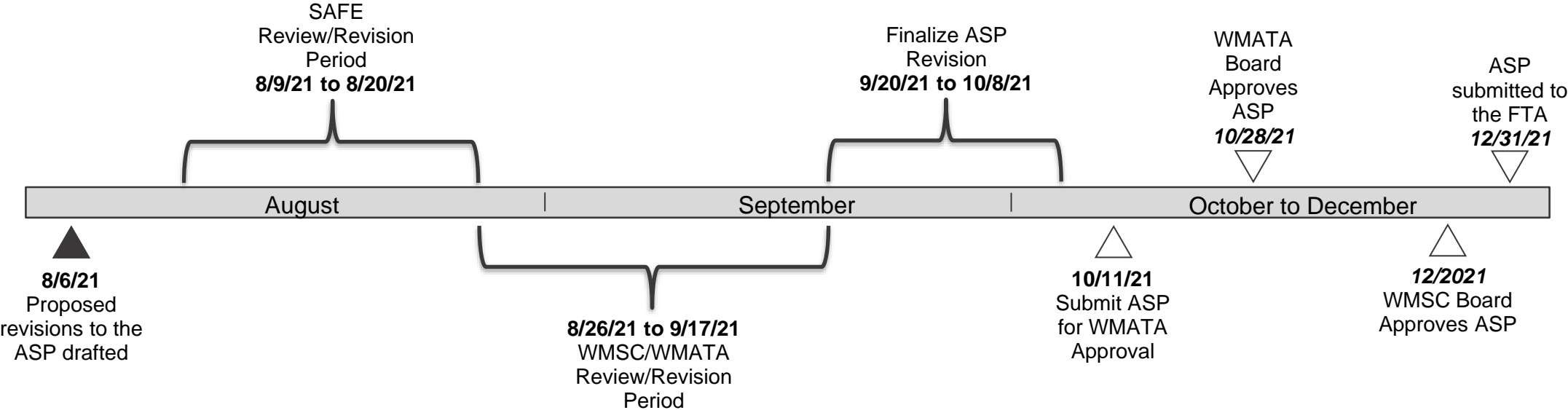
# ASP Approval

- Per the PTASP regulation:

*“The Public Transportation Agency Safety Plan, and subsequent updates, must be signed by the Accountable Executive and approved by the agency's Board of Directors, or an Equivalent Authority.”*

- Board of Directors approval indicates the ASP:
  - Is satisfactory;
  - Complies with each of the requirements of the PTASP rule; and
  - Will effectively guide the transit operator with the management of safety risks

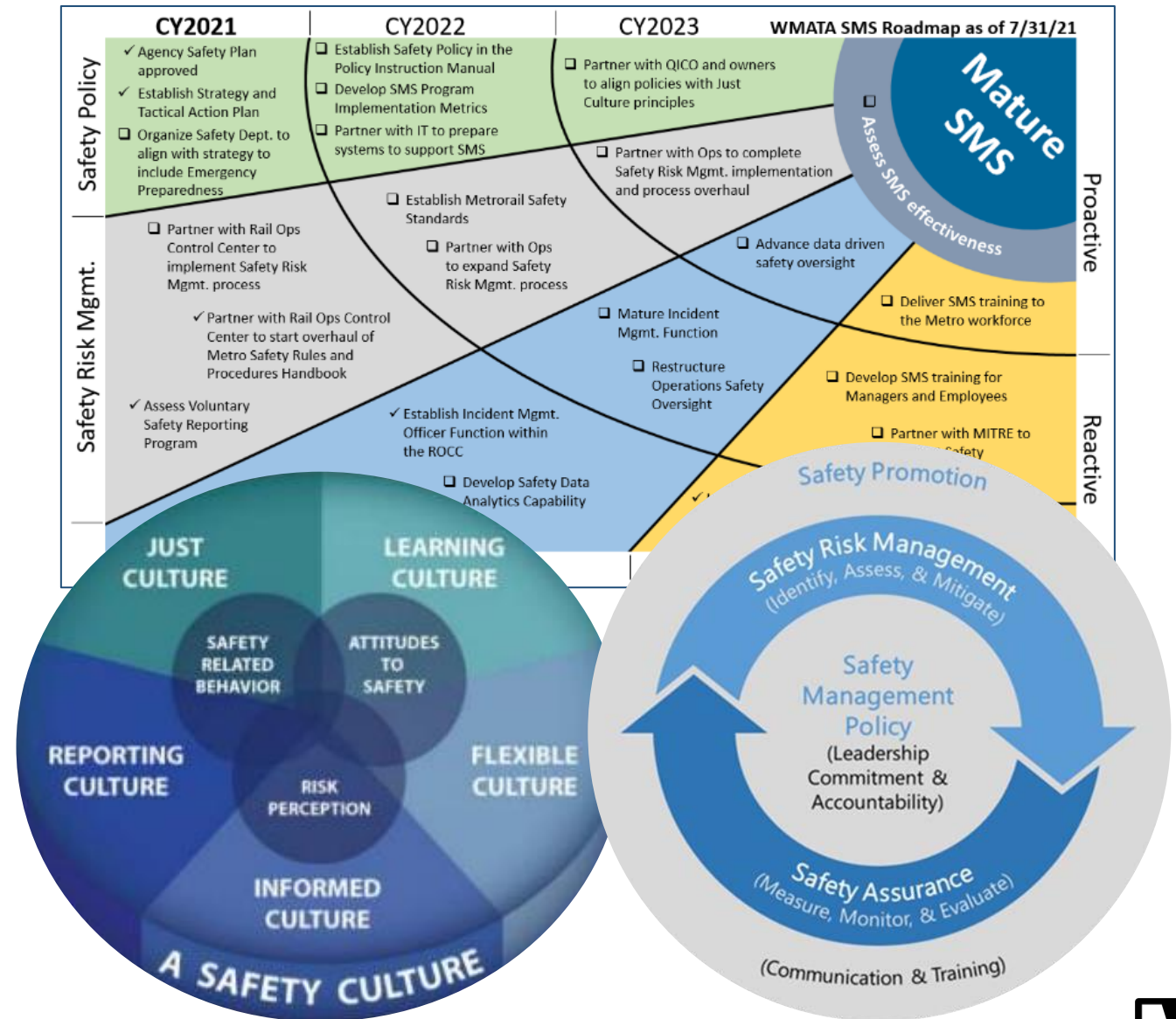
# Annual ASP Revision Timeline





# What's Changed?

- Incorporates SMS Strategic Roadmap
- Accounts for progress made and lessons learned
- Refreshes the path forward





# Safety Management Policy

Requirement	Activities
Safety Objectives	<ul style="list-style-type: none"><li>■ Incorporate departmental safety goals as part of business and performance planning</li><li>■ Review and analyze targets at safety committees</li></ul>
Employee Safety Reporting	<ul style="list-style-type: none"><li>■ Participate in:<ul style="list-style-type: none"><li>• Confidential Close Call Reporting Program</li><li>• Safety Hotline</li><li>• OIG Hotline</li></ul></li></ul>
Accountabilities & Responsibilities	<ul style="list-style-type: none"><li>■ Identify for the Accountable Executive, Chief Safety Officer, agency leadership, key staff responsible for safety</li></ul>

# Safety Risk Management

Requirement	Activities
Identify Safety Hazards	<ul style="list-style-type: none"> <li>■ Conduct and participate in:                             <ul style="list-style-type: none"> <li>• Incident investigations</li> <li>• Safety observations</li> <li>• Employee reporting</li> <li>• Safety committees</li> </ul> </li> </ul>
Assess safety risks	<ul style="list-style-type: none"> <li>■ Evaluate hazards to determine risk in terms of likelihood and severity (MIL-STD-882E Methodology)</li> <li>■ Prioritize based on assessment results</li> </ul>
Implement safety risk mitigations	<ul style="list-style-type: none"> <li>■ Take action(s) designed to reduce the risk before an incident occurs</li> </ul>

# Safety Assurance

Requirement	Activities
Safety Performance Monitoring and Measurement	<ul style="list-style-type: none"> <li>▪ Oversight and data analysis of risk mitigation activities</li> <li>▪ Results inform Safety Risk Management</li> </ul>
Management of Change	<ul style="list-style-type: none"> <li>▪ Identify and assess changes to the transit system that may introduce safety risk</li> <li>▪ Results inform Safety Risk Management</li> </ul>
Continuous Improvement	<ul style="list-style-type: none"> <li>▪ Evaluate the effectiveness of the SMS by:                             <ul style="list-style-type: none"> <li>• Identify root causes of sub-standard performance</li> <li>• Recommend Corrective and Preventive Actions that inform Safety Risk Management</li> </ul> </li> </ul>

# Safety Promotion

Requirement	Activities
Comprehensive safety training program	<ul style="list-style-type: none"> <li>▪ Establish safety-training requirements</li> <li>▪ Instruct in the safe methods of operation and safety procedures</li> <li>▪ Evaluate and maintain proficiency demonstrations and certifications for operations and maintenance personnel</li> </ul>
Communicate agency's safety performance throughout organization	<ul style="list-style-type: none"> <li>▪ Convey safety-critical information to personnel via newsletters, podcasts, and safety committees</li> <li>▪ Reinforce employee safety reporting mechanisms</li> </ul>
Just Culture	<ul style="list-style-type: none"> <li>▪ Partner to revise policies to align with Just Culture principles</li> </ul>

# Next Steps

- Submit Board-approved ASP to the Washington Metrorail Safety Commission
- Certify PTASP compliance in FTA's Transit Award Management System
- Continue to implement ASP in accordance with Strategic Roadmap and report progress

# Questions





SUBJECT: PUBLIC TRANSPORTATION AGENCY SAFETY PLAN

RESOLUTION  
OF THE  
BOARD OF DIRECTORS  
OF THE  
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

WHEREAS, Federal Transit Administration (FTA) regulation 49 C.F.R. § 673.11(a)(1) requires the Board of Directors to approve WMATA's Public Transportation Agency Safety Plan (PTASP); and

WHEREAS, In accordance with FTA regulation 49 C.F.R. § 673.11(a)(5), staff has conducted an annual review of and updated the PTASP (Attachment A to this Resolution); and

WHEREAS, The General Manager and Chief Executive Officer has signed the PTASP and certified to the Board of Directors that the PTASP is satisfactory and complies with each of the requirements of the PTASP rule (49 C.F.R. Part 673), and that the PTASP effectively will guide WMATA with the management of safety risks; and

NOW, THEREFORE, be it

*RESOLVED*, That the Board of Directors approves the Public Transportation Agency Safety Plan set forth in Attachment A; and be it finally

*RESOLVED*, That this Resolution shall be effective 30 days after adoption in accordance with Compact Section 8(b).

Reviewed as to form and legal sufficiency,

/s/  
Patricia Y. Lee  
Executive Vice President and General Counsel

WMATA File Structure No.:  
22.6.1 Federal Transit Administration (FTA) Safety Oversight

**Agency Safety Plan**

**Will be forwarded separately, pending conditional approval by WMSC.**