## Washington Metropolitan Area Transit Authority Board Action/Information Summary

Action ■ Information
 MEAD Number: Resolution:
 202208
 Yes ■ No

#### TITLE:

Safety Mgmnt. System/Agency Safety Plan Training

#### PRESENTATION SUMMARY:

This presentation describes Metro's Agency Safety Plan (ASP), the role of Safety Management Systems, and the Board of Directors role in the ASP's implementation.

#### **PURPOSE:**

Metro has developed its Agency Safety Plan to reflect the new Federal Transit Administration (FTA) requirements.

#### **DESCRIPTION:**

There are no interested parties to this matter.

#### **Key Highlights:**

A Safety Management System (SMS) is a comprehensive, collaborative approach that brings management and labor together to build on the transit industry's existing safety foundation to control risk better, detect and correct safety problems earlier, share and analyze safety data more effectively, and measure safety performance more carefully.

SMS is about applying resources to risk and is based on ensuring that a transit agency has the organizational infrastructure to support decision-making at all levels regarding the assignment of resources. Some key parts of SMS include:

- Defined roles and responsibilities;
- Strong executive safety leadership;
- Formal safety accountabilities and communication;
- Effective policies and procedures; and
- Active employee involvement.

#### **Background and History:**

On July 19, 2018, FTA published the Public Transportation Agency Safety Plan (PTASP) Final Rule, which requires certain operators of public transportation systems that receive federal funds under FTA's Urbanized Area Formula Grants to develop safety plans that include the processes and procedures to implement Safety Management Systems (SMS).

The PTASP rule became effective on July 19, 2019.

FTA published a Notice of Enforcement Discretion on April 22, 2020 effectively extending the PTASP compliance deadline from July 20, 2020 to December 31, 2020.

Metro must certify they have a safety plan in place meeting the requirements of the rule by December 31, 2020. The plan must be updated and certified by the transit agency annually.

The ASP is similar to the existing System Safety Program Plan (SSPP) that Metro currently uses to manage safety, but information is re-ordered and streamlined to reflect a performance-based and continuous improvement methodology. Once fully implemented, the SMS will replace the SSPP.

#### Discussion:

Per 49 CFR 263, the ASP, and subsequent updates, must be signed by the Accountable Executive and approved by the agency's Board of Directors. This training provides the Board with the required information to review the ASP and approve in October's session.

#### **FUNDING IMPACT:**

Necessary funding is within approved annual budget		
Project Manager:	Theresa Impastato	
Project Department/Office:	Department of Safety and Environmental Management	

#### TIMELINE:

presentation Safety Plan	•	October 2020 – Board approval of the Agency Safety Plan
--------------------------	---	--



### Purpose

 Provide the Board through this training session with an overview of Safety Management Systems, and its role with approving Metro's Agency Safety Plan







## Safety Challenges

- Identify safety issues before accident occurs
- Ensure safety is considered during and after changes
- Consistent safety reporting process at all levels
- Budget constraints





metro

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

## System to Answer Five Questions

- What can go wrong?
- How do you know?
- What are you doing about it?
- Is it working?
- How do you know it's working?





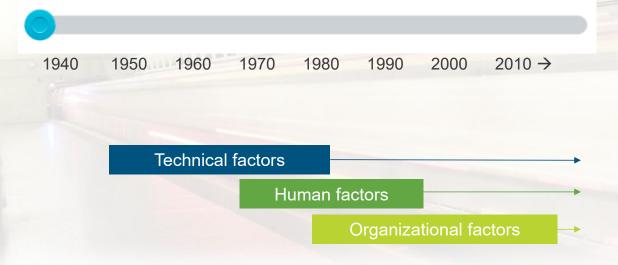
### **Enter SMS**

- SMS is to ensure agencies have timely information on safety risks in order to proactively address them
- SMS provides the foundation for an effective and robust system to manage safety risk through the development and monitoring of safety risk mitigations





# History of Safety



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

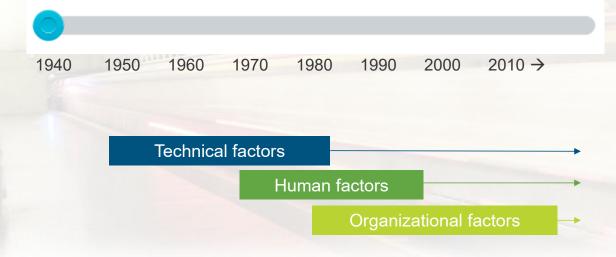
#### Technical factors



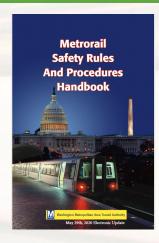
- From 1942-1945, for every one WWII casualty there were eight industrial accidents that caused death or permanent disability
- Focus became improving technical (machinery and equipment) factors



# History of Safety



#### Human factors

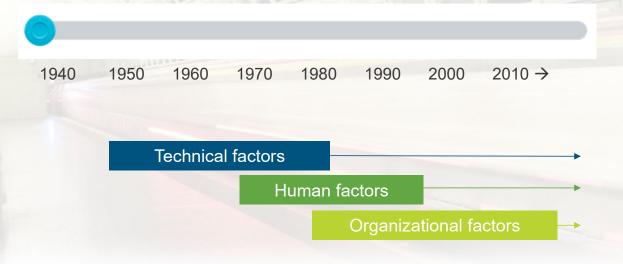


- Human error became the primary cause of incidents
- Focus became rules and procedures
- Safety improved significantly
- Efforts were still largely reactive



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

# History of Safety



Organizational factors





- Focus shifted to organizational factors
- Systematic approach to safety that is designed to be proactive and preventive



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

## History

9

- WMATA has historically managed safety through the System Safety Program Plan (49 CFR 659)
- On July 19, 2018, FTA published the Public Transportation Agency Safety Plan (PTASP) Final Rule
- The PTASP rule became effective on July 19, 2019
- Transit operators also must certify they have an Agency Safety Plan (ASP) in place meeting the requirements of the rule by December 31, 2020
- The plan must be updated and certified by the transit agency annually

Metro

## **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."

- The Board of Directors approval indicates the ASP:
  - Complies with each requirement of the PTASP regulation; and
  - Will effectively guide the transit operator in the management of safety risks



# System Safety Program Plan / ASP Differences

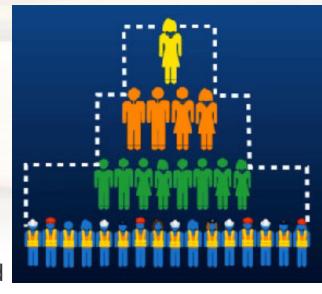


Major Difference	SSPP	ASP
Regulatory Structure	Compliance-based	Performance-based
Responsibility for Safety	Safety Department	Accountable Executive
Approach	21 fixed safety program elements	Integrated systemwide processes that are scalable and flexible
Safety Decision Making	Hazard analysis available, if requested	Safety risk analysis integral to decision making and investments



## Four Guiding Principles of SMS

- 1. Formal written down; must be thoughtful, documented, and embraced by the agency
- 2.<u>Top-down</u> supported at the organization's highest levels; includes the CEO or GM or Board; management is ultimately responsible for implementation and effectiveness
- 3. Organization-wide everybody must be involved, including the front line
- 4. <u>Data-driven</u> must collect and use data to support analysis and decisions; data is essential to identify hazards and safety risks; everyone must be involved in collecting and using data





### **SMS Framework**

- Four Components:
  - Safety Management Policy
  - Safety Risk Management
  - Safety Assurance
  - Safety Promotion





## Safety Management Policy

- Foundation of Safety Management
- Sets agency safety objectives
- Documents commitment
- Identifies roles and responsibilities

### Signs of Effectiveness:

- Visible evidence of leadership commitment, demonstrated by example
- Clear lines of safety accountabilities throughout the organization
   Activities are fully resourced
- Employees *express confidence and trust* in organization's reporting program



## Safety Risk Management

- Identifies safety concerns
- Evaluates danger posed by those concerns
- Develops strategies to eliminate or mitigate risk



### **Signs of Effectiveness:**

- Uses all relevant and available data
- Assesses hazards systematically and in a timely manner
- Identifies trends and actionable information
- Relies on subject matter expertise
- Provides accountability for risk acceptance
- Ensures trained and qualified safety analysts
- Develops meaningful mitigations and effectiveness targets



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

## Safety Assurance

- Ongoing Process
- Interacts with Safety Risk Management throughout the lifetime of the agency
- Ensures that mitigations are working to address the hazards
- Verify the SMS is helping meet safety performance objectives
- Demonstrates the SMS is working properly

### Signs of Effectiveness:

- Safety Performance Indicators are defined and monitored
- Effectiveness of mitigations is verified
- Investigation causal factors include organizational performance
- Ops/maintenance processes audited & analyzed for safety concerns
- Changes are proactively assessed
- Areas for *improvement* are acted upon



## Safety Promotion

- Relies on communication and training
- Promotes safety culture of the organization
- Provides employees with information and skills required to carryout their safety responsibilities

### **Signs of Effectiveness:**

- Personnel are trained and competent to perform their duties
- Training program is monitored for effectiveness and updated, as needed
- Safety communication tools and processes are well-defined and used
- All employees understand <u>their role with respect to safety</u>



## **Employee Safety Reporting Program**

- Most critical aspect of a successful SMS can't survive without data
- Most important source for information is employees who deliver the service
- Identify safety concerns that management may not be aware of and give feedback on changes
- A strong reporting system aids proactive resource allocation
- Data should be proactive instead of reactive



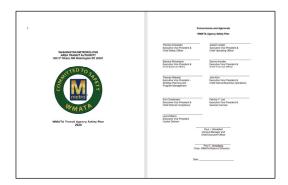
### **Board Expectations**

### **Next Steps**

- Review the provided Agency Safety Plan
- In October, officially approve the Plan per regulation
- WMATA will provide approved Plan to the WMSC per regulation

### Ongoing

- Ensure resources for SMS
- Support the Accountable Executive





Page 23 of 25

# Questions



