Washington Metropolitan Area Transit Authority

Board Action/Information Summary

Action / Information	MEAD Number:	Resolution:
(●) Action ( ) Information	202308	(●) 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 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:

Previous Actions	October 2020 – Board approval of Agency Safety Plan
Anticipated actions after presentation	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.

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

Public Transportation Agency Safety Plan

DOCUMENT NUMBER:	RELEASE/REVISION:	RELEASE/REVISION DATE:
400-SAFE-ADM-01-01	A	**October 8, 2021**

CONTENT OWNER:

Department of Safety, Environmental Management, and Emergency Preparedness

Washington Metropolitan Area Transit Authority

600 5th St., NW Washington, DC 20001

Concurrences and Approvals

WMATA Public Transportation Agency Safety Plan

Theresa Impastato
Executive Vice President &
Chief Safety Officer

Joseph Leader
Executive Vice President &
Chief Operating Officer

Barbara Richardson
Executive Vice President &
Chief External Affairs

Dennis Anosike
Executive Vice President &
Chief Financial Officer

Thomas Webster
Executive Vice President -
Strategy Planning and
Program Management

John Kuo
Executive Vice President &
Chief Internal Business Operations

Eric Christensen
Executive Vice President &
Chief Internal Compliance

Andy Off
Executive Vice President
Capital Delivery

Provided in Appendix F
Paul J. Wiedefeld
General Manager and
Chief Executive Officer

Contents

Executive Summary

In April of 2017, General Manager (GM) / Chief Executive Officer (CEO) Paul J. Wiedefeld announced the priorities for the Washington Metropolitan Area Transit Authority (WMATA) by introducing the Keeping Metro Safe, Reliable, and Affordable (KMSRA) plan. The following year, the Federal Transit Administration (FTA) published 49 CFR Part 673 Public Transportation Agency Safety Plan. The FTA adopted the principles and methods of Safety Management Systems (SMS) as the basis for enhancing the safety of public transportation in the United States. This regulation requires transit operators (that receive federal funds under the FTA's Urbanized Area Formula Grants) to develop Agency Safety Plans (ASPs) that specify how an SMS-based program will be developed and implemented. A planning phase ensued to determine how WMATA would continuously improve its current safety program while transitioning to a robust SMS.

In September of 2020, WMATA's Executive Management Team (EMT) and Board of Directors approved the first iteration of this ASP. In conformance with 49 CFR 673, the Washington Metrorail Safety Commission (WMSC), the State Safety Oversight Agency (SSOA) for WMATA Metrorail approved the ASP in November of 2020. Following the WMSC's approval, the ASP was submitted to the Federal Transit Administration (FTA) in December of 2020. With the ASP in place, WMATA transitioned from planning for SMS to development and implementation. WMATA is not content with meeting regulatory requirements, which reflect the minimum standard. WMATA is committed to becoming the transit industry leader in Safety through the development and implementation of a robust SMS in alignment with the KMSRA plan. In February of 2021, an SMS Strategic Roadmap was introduced to the board that outlines the key priorities and milestones required to establish a baseline SMS. This update to the ASP includes the SMS Strategic Roadmap, describes the progress made to date, and outlines the path forward. Another key update is the introduction of the System Safety, Environmental Management, and Emergency Preparedness (SAFE) future state organization. Positioning the SAFE Department in alignment with the SMS strategy is foundational to its long-term success. The following describes the organizational changes made to date (to include Emergency Preparedness joining the SAFE Department) and path toward completing this transformational re-organization in calendar year 2022.

Since Metro's founding on February 20, 1967, WMATA's commitment to providing customers and employees with a safe experience has never wavered. WMATA has continued to provide a safe, reliable, and affordable service throughout the COVID-19 pandemic, demonstrating that WMATA is always there for its community, especially when needed the most. As WMATA begins to expand services and increase ridership, every employee is committed to keeping Metro safe, affordable, and reliable for the Capital region. This ASP reflects how WMATA intends to be thoughtful, strategic, and deliberate in owning that commitment to safety.

Theresa M. Impastato

Theresa M. Impastato
Executive Vice President / Chief Safety Officer
Washington Metropolitan Area Transit Authority

1.0 General Requirements

The FTA's 49 CFR Part 673 *Public Transportation Agency Safety Plan*, Subpart C *Safety Management Systems* provides the minimum requirements for development of an SMS. In addition, 49 CFR Part 674 *State Safety Oversight* and the WMSC's Program Standard provides specific requirements to which WMATA Metrorail is required to conform. The general requirements reflected in this section include providing specific Transit Agency Information; the timeline associated with ASP development, updates, and approvals; reference to the planning associated with emergency preparedness and response; and specific safety performance targets. This section also includes the plan for re-organizing the System Safety, Environmental Management, and Emergency Preparedness (SAFE) Department and provides an overview of the SMS strategic roadmap, which is addressed in more detail as part of the sections for each SMS component.

1.1 Transit Agency Information

Transit Agency Name	Washington Metropolitan Area Transit Authority		
Transit Agency Address	600 5th St., NW Washington, DC 20001		
Name and Title of Accountable Executive	Paul J. Wiedefeld		
Name and Title of Chief Safety Officer	Theresa M. Impastato		
Authority for State Safety Oversight Program	Washington Metrorail Safety Commission		
Mode(s) of Service Covered by This Plan	Rail, Bus, and Automobile	**List All FTA Funding Types (e.g., 5307, 5337, 5339)**	5307, 5340, 5337, 5339, 5310
Mode(s) of Service Provided by the Transit Agency (Directly operated or contracted service)	Directly operated: Rail and Bus Contracted service: Paratransit (automobile)		

The GM/CEO is ultimately accountable for ensuring that SMS is impmented throughout the Metro system in accordance with this ASP. Additionally, the GM/CEO is accountable for ensuring action is taken to address substandard performance in WMATA's SMS when required. The Executive Vice President (EVP) / Chief Safety Officer (CSO) has been designated by and reports to the GM/CEO. The EVP/CSO is a safety professional that has been adequately trained, holding both the U.S. Department of Transportation (DOT) Transit Safety and Security Program (TSSP) and Public Transportation Safety Certification Training Program (PTSCTP) certificates (among other credentials). The EVP/CSO has been empowered with the responsibility for day-to-day implementation and operation of WMATA's SMS. The EVP/CSO does not serve in any other operational or maintenance capacities.

1.2 Plan Development, Approval, and Updates

Name of Entity That Drafted This Plan	Theresa M. Impastato, Executive Vice President and Chief Safety Officer	
Signature by the Accountable Executive	**Signature of Accountable Executive**	**Date of Signature**
	Refer to Appendix F PTASP General Manager Certification Record	XX/XX/XXXX
Approval by the Board of Directors or an Equivalent Authority	**Name of Individual/Entity That Approved This Plan**	**Date of Approval**
	Board of Director's Resolution – XXXX-XX	XX/XX/XXXX
	Relevant Documentation (Title and Location)	
	Refer to Appendix G Board of Director's Resolution Record	
Certification of Compliance	**Name of Individual/Entity That Certified This Plan**	**Date of Certification**
	Washington Metrorail Safety Commission	11/10/2020
	Relevant Documentation (Title and Location)	
	Refer to Appendix H PTASP SSOA Certification	

Version Number and Updates

The complete history of successive versions of this plan.

Version Number	Section/Pages Affected	Reason for Change	Date Issued
New	New Document	This was the first iteration of WMATA's ASP.	10/08/2021
A	Executive Summary	New section, provides an overview by the CSO	
	Entire Document	Added 1.0 General Requirements section to improve organization, the rest of the ASP has re-numbered accordingly	
	Entire Document	Incorporated the SMS Strategic Roadmap	

Annual Review and Update of the Public Transportation Agency Safety Plan		
Timeline	**Activity or Milestone**	**Responsibility**
January 1 to December 31	ASP is made available year-round on WMATA's intranet for review and comment. WMATA will also take comments directly through email and other means.	The Director of Safety Policy and Promotion ensures the document is posted, the comment form is available, and ensures the opportunity to review and provide feedback is promoted. All comments (regardless of how they were received) will be logged and maintain on SAFE's SharePoint.
May 1-30	Conduct ASP General Review	The Director of Safety Policy and Promotion will work with SAFE leadership to perform an inventory of inputs resulting from comments made, investigations, policy changes, Corrective Action Plans (CAPs), risk mitigations, Safety Committees, Safety Risk Coordinators (SRCs), and other sources. This review will include partnering with Quality Assurance, Internal Compliance and Oversight (QICO) to ensure interconnected policies, procedures, work instructions, job responsibilities (etc.) that may be affected are accounted for and addressed.
June 1-30	Prepare ASP Draft	The Director of Safety Policy and Promotion works within SAFE to draft the next revision of the ASP.
July 1-31	WMSC comment period	The proposed draft ASP revision is submitted to the WMSC through the shared site (or email) for their review with feedback sent directly back to SAFE.
	WMATA comment period	WMATA leadership and employees invited to review and comment on the proposed draft ASP revision through dedicated intranet site.
August 1-31	Finalize ASP Revision	The Director of Safety Policy and Promotion works within SAFE to ensure comments received on the proposed draft ASP revision are addressed.
September 1-30	WMSC/WMATA review period	A final review is conducted to ensure all required feedback has been addressed, conditional approval from the WMSC is secured at the end of this review period and no further material changes are made. The GM/CEO approves the ASP.

October 1 to December 31	WMATA Board Approval of ASP	The ASP is submitted to the Board for review and asked to vote on a resolution to approve the latest revision
	WMSC Board Approval of ASP	After securing approval from WMATA's Board. The ASP is submitted to the WMSC for approval.
	ASP Submission to the FTA	The Director of Safety Policy and Promotion partners with Strategy, Planning and Program Management (SPPM) to submit the latest ASP to the FTA through Transit Award Management System (TrAMS)
	ASP Revision Published	The Safety Promotion Manager partners with Customer Service, Communications and Marketing (CSCM) to communicate, distribute, and promote the publishing of the latest ASP and ensure SMS training and New Employee Orientation are updated (along with other training courses, as applicable).

1.3 Emergency Preparedness and Response Plan

The Office of Emergency Preparedness (OEP) has become a part of the SAFE Department, reporting to the Vice President (VP) / Assistant Chief Safety Officer (ACSO) of SMS Oversight.

The department develops, maintains, and takes the lead in implementing security and emergency management documentation as required by 49 CFR 673.11(a)(6), hereby incorporated by reference as recommended by FTA.

Jurisdictional agreements, including Memoranda of Agreement/Understanding (MOA/MOU), are also maintained by OEP. Corrective action arising out of Emergency Preparedness, including After Action Report/Improvement Plan, is the responsibility of OEP in coordination with the other areas and departments.

The documentation listed below specifies agency-wide plans, programs, and processes to manage the public safety and emergency management functions:

- Emergency Operations Plan (EOP);
- Continuity of Operations Plan (COOP);
- Flood Emergency Response Plan (FERP);
- Severe Weather Plan;
- Family Assistance Plan;
- Station Emergency Response and Evacuation Plan
- Procedures governing Sensitive Security Information and Significant Security Concern Reporting per 49 CFR 1580; and
- Standard Operating Procedures, and other departmental safety-critical documentation of daily tasks and activities.

The EOP provides an overall framework for emergency operations for WMATA's role in supporting incident or event operations throughout its service area in the National Capital Region. The EOP assigns roles and responsibilities to across the Metro Transit Police Department (MTPD), SAFE, OEP and WMATA departments and individuals for their preparedness prior to, and their implementation during, an incident or event. MTPD General Orders provide additional guidance for MTPD operations. Additionally, the EOP identifies employee responsibilities during an emergency and provides detail on the coordination with Federal, state, regional, and local officials with roles and responsibilities for emergency preparedness and response in WMATA's service area.

These documents are available for review through SAFE's OEP.

1.4 Safety Performance Targets

Each department/functional area has established internal safety performance targets for their safety-critical functions, which feed into these overall targets, supported by WMATA's Office of Transit Performance (PERF). The following safety performance targets have been established in alignment with the safety performance measures established by the FTA's National Public Transportation Safety Plan. Materials to include guidance and templates have been made available on the PERF webpage of WMATA's intranet. This includes measure sheets for each ASP metric to define key terms, normalization factors, and calculation methods and assumptions.

Targets for Calendar Year (CY) 2022 were developed in coordination with PERF using a methodology to account for the dynamic ridership and service conditions as a result of the COVID-19 pandemic. Both ridership and service levels are expected to increase over the next year, with absolute injury counts expected to increase compared to the previous year. The incident rates have been established based on a review of data both before and during the pandemic. Targets for the rates are established based on maintaining 2-year baseline performance with respect to the rates.

Safety Performance Targets										
Mode	**Fatalities (Total)**	**Fatalities (Rate)***	**Injuries (Count)**	**Injuries (Rate)***	**Percent Reduction**	**Safety Events (Count)**	**Safety Events (Rate)***	**Percent Reduction**	**System Reliability**	**Percent Reduction**
Bus	0	0	244	85.4	3.2%	236	64.7	3.6%	7,800 miles (MDBF)	5%
Rail	0	0	311	31.0	4.9%	84	10.6	3.6%	254k Miles (MDBD)	5%
Metro Access	0	0	37	8.2	2.6%	14	8.3	4.8%	21,000 (MDBF)	5%

*per 10 million Vehicle Revenue Miles

Safety Performance Target Coordination		
As required by 49 CFR 673.15, WMATA's safety performance targets are coordinated with the Metropolitan Washington Council of Governments (MWCOG). WMATA's EVP/CSO shares the ASP, including safety performance targets, with the MWCOG each year after its approval by the WMSC. Prior to this submission, draft targets are submitted to the MWCOG for coordination while the ASP is being circulated among internal departments for its annual review. This coordination will also include WMATA's PERF and Office of Government Relations (GOVR) personnel. In addition to MWCOG target coordination, internal safety performance targets are reported publicly through WMATA's Quarterly Performance Report.		
Targets Transmitted to the State	**State Entity Name**	**Date Targets Transmitted**
	Washington Metrorail Safety Commission (WMSC) and the States of DC, MD, VA	8/27/2021
Targets Transmitted to the Metropolitan Planning Organization(s)	**Metropolitan Planning Organization Name**	**Date Targets Transmitted**
	Transportation Planning Board, Metropolitan Washington Council of Governments	9/10/2021 and 9/28/2021

1.5 Development and Implementation of a Safety Management System

Establishing and implementing a robust SMS that is appropriately scaled to the size, scope, and complexity of WMATA require a strategic, deliberate multi-year effort. Therefore, WMATA has established an SMS Strategic Roadmap (depicted in Figure 1) that reflects the key priorities and milestones that will be accomplished to establish the SMS baseline. The roadmap is organized in accordance with the four components of SMS: Safety Management Policy, Safety Risk Management, Safety Assurance, and Safety Promotion against a multi-year timeline.

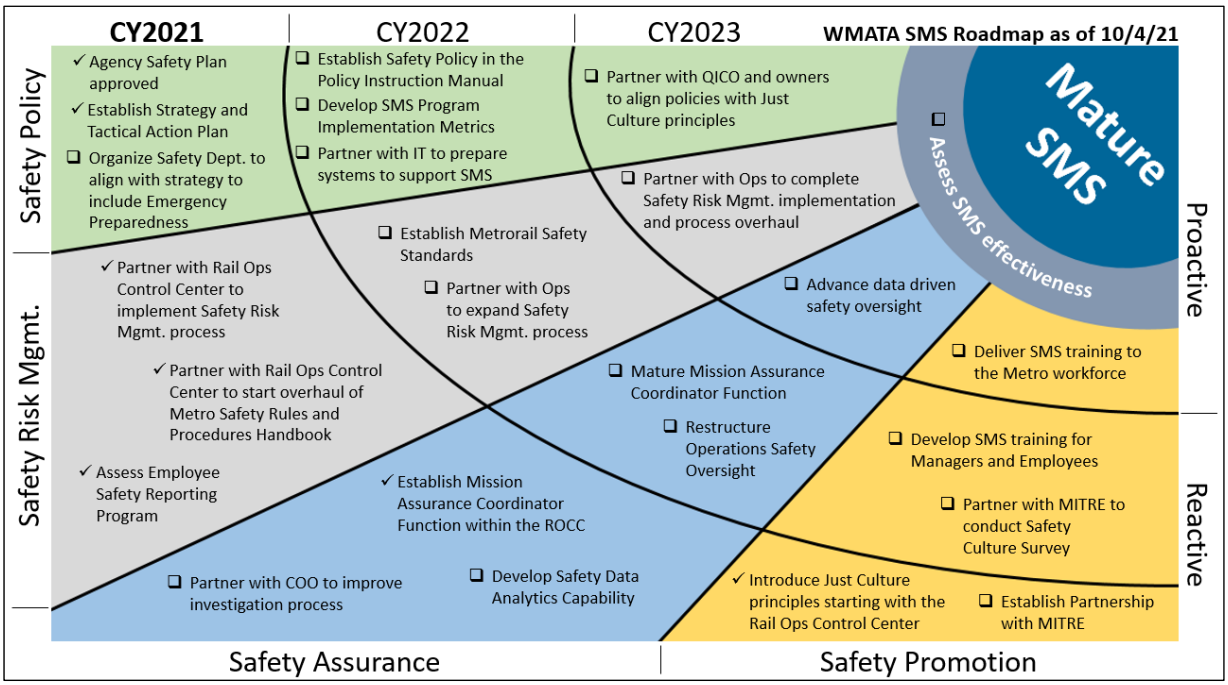
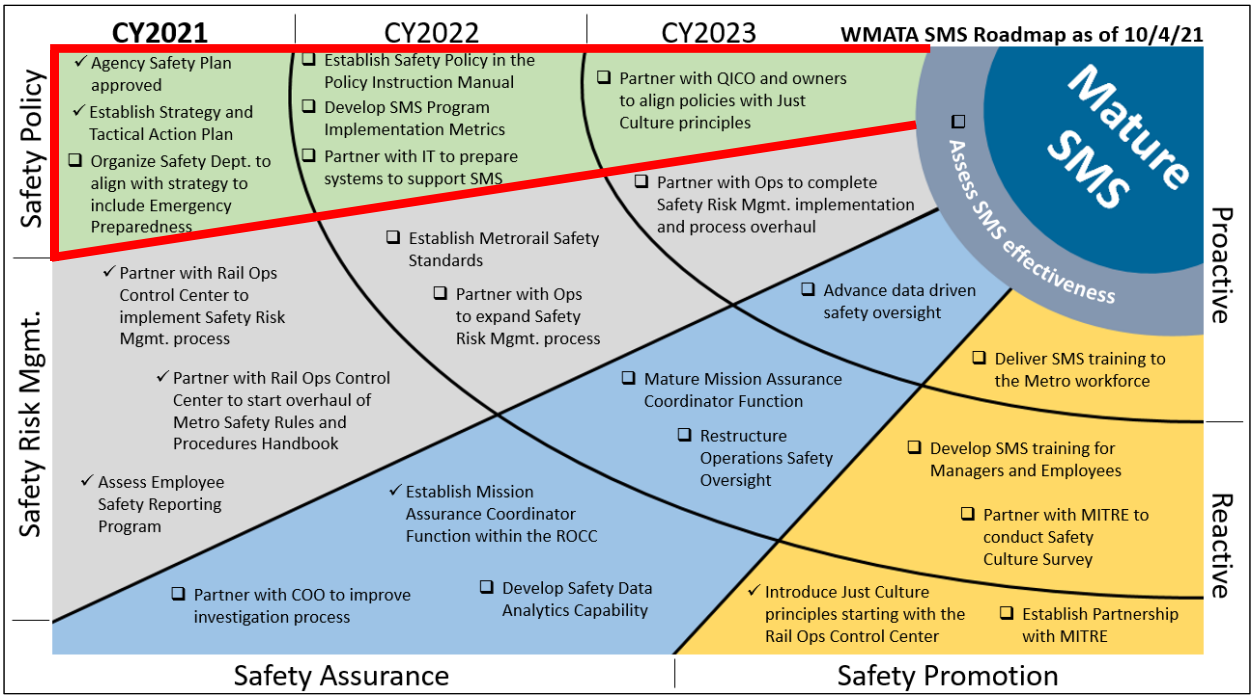


Figure 1 SMS Strategic Roadmap

Following submission of this ASP with the FTA in December of 2020, the EVP/CSO introduced the SMS Strategic Roadmap to WMATA's Board of Directors in February of 2021. The SAFE Department hired an SMS Project Manager to ensure each milestone in the roadmap has an owner, action plan, and timeline. A meeting rhythm that meets monthly (at a minimum) within the SAFE Department ensures that progress is actively managed. Additionally, progress reports are provided to WMATA's board regularly through the Safety and Operations Committee. The SMS Strategic Roadmap is considered a living document that is updated regularly to reflect the latest priorities, additional milestones, and progress completed. Each lane of this roadmap is addressed in more detail throughout this ASP.

2.0 Safety Management Policy



In CY2021, the milestone *Agency Safety Plan Approved* was completed with the submission of WMATA's to the FTA in December of 2020, reflecting the first accomplishment on the journey toward establishing and implementing a robust SMS. In accordance with 49 CFR Part 673.23 *Safety Management Policy*, this section of the ASP includes:

- 2.1 – Safety Management Policy
- 2.2 – Employee Safety Reporting Program
- 2.3 – Communication of the Safety Management Policy
- 2.4 – Necessary Authorities, Accountabilities, and Responsibilities

The milestone *Establish Strategy and Tactical Action Plan* was achieved with the introduction of the SMS Strategic Roadmap and hiring of the SMS Project Manager, who proceeded to assign milestone owners and work with them to develop tactical action plans. The milestone *Organize the Safety Department to align with strategy to include Emergency Preparedness* is addressed in 2.4 *Necessary Authorities, Accountabilities, and Responsibilities*.

In CY2022, the milestone *Establish Safety Policy in the Policy Instruction Manual* reflects the action to take Safety Management Policy established as part of developing this ASP and convert to a standalone document included in Metro's Policy and Instruction Manual (PIM). In addition to the aforementioned Safety Performance Targets reflected in 1.4, the milestone to *Develop SMS Program Implementation Metrics* reflects the objective to measure progress and effectiveness toward implementing SMS against the multi-year timeline established. The milestone *Partner with IT to prepare systems to support SMS* reflects SAFE's intention to collaborate with IT to ensure WMATA's software capabilities mature and evolve in coordination with development and implementation of SMS.

2.1 Safety Management Policy

The GM/CEO's Safety Management Policy Statement:

In accordance with the safety management philosophy and approach, one of the GM/CEO's main responsibilities is to build and maintain an industry-leading safety culture and SMS in accordance with the FTA's adoption of the SMS approach in its National Public Transportation Safety Program. This ASP establishes WMATA's FTA-compliant SMS as the primary strategy to achieve this goal. This Policy Statement also certifies that the ASP is compliant with 49 CFR Part 673 *Public Transportation Agency Safety Plan,* 49 CFR Part 674 *State Safety Oversight* and the WMSC's Program Standard.

Safety management is a core value of WMATA. All levels of management and all employees are accountable for appropriately identifying and effectively managing risk in all activities and operations in order to deliver continuous safety improvement and reduce safety risks as low as reasonably practicable in service delivery, starting with the GM/CEO.

In accordance with the FTA's National Public Transportation Safety Plan, and 49 CFR 673.23(a), WMATA's safety objectives are:

- Support the management of safety through the provision of appropriate and sufficient resources in order to reduce risks to as low as reasonably practicable; and to achieve an organizational culture that fosters safe practices, encourages effective employee safety reporting and communication, and actively prioritizes the management of risk
- Integrate the management of safety among the responsibilities of all departments/offices and employees;
- Define for staff, executive management, technical management and front-line employees alike, their accountabilities and responsibilities for the delivery of the organization's safety performance;
- Establish and operate effective safety risk identification, assessment, and mitigation activities based on SMS safety risk management principles, including an employee safety reporting program that provides a fundamental source for safety concerns and hazard identification, in order to proactively mitigate safety risks;
- Ensure that no action will be taken against any employee who discloses a safety concern unless disclosure indicates an illegal act, gross negligence, or a deliberate or willful disregard of regulations or procedures;
- Comply with, and wherever possible exceed, legislative and regulatory requirements and standards;
- Ensure that skilled and trained human resources are available to implement SMS processes;
- Ensure that communications and training result in employees knowing their role within SMS and how to implement the associated processes and tools that are commensurate with their skillset to drive its effectiveness;
- Establish safety performance targets and measure against data-driven safety performance indicators;
- Continually improve our safety performance through management processes that ensure that appropriate mitigating action is taken and effective; and

Ensure the products and services provided in support of Metro's operations are implemented in compliance with SMS as specified in this ASP. This policy will be visibly communicated through my own direct efforts, the efforts of the EMT, and through WMATA training programs and procedures.

I affirm this commitment:

Paul J. Wiedefeld, General Manager and Chief Executive Officer Accountable Executive	Date

2.2 Employee Safety Reporting Program

WMATA has multiple avenues by which employees and contractors can report risks and hazards. All hazard reports are properly documented by the receiving party, no matter the source. Investigations of hazards are also properly documented per Policy/Instruction (P/I) 10.4 *Incident and Accident Investigation* and distributed according to that P/I and related procedures.

WMATA's SMS requires all employees to identify hazards, mitigate them immediately if possible, and to report them regardless of action taken. This includes reporting a Close Call when involved directly or witnessing a near-miss incident, or if a reported safety concern persists. WMATA strives for a culture where employees and contractors feel comfortable brining safety concerns to their direct supervisor as soon as they are discovered. However, WMATA understands there may be circumstances where employees and contractors prefer reporting outside their chain of command to maintain confidentiality, anonymity, and to avoid retaliation. WMATA's Safety Management Policy specifically prohibits retaliation but the concern may still exist. Consequently, the following reporting methods are available:

- The Safety Risk Submission Form, which sends the report directly to their department's Safety Risk Coordinator for response and action. Upon receipt, the Safety Risk Coordinator enters the submission and corresponding actions into WMATA's Safety Measurement System to document, track, and report on the response.
- Employees may report any perceived safety issue or hazard to a local safety committee (LSC) representative for investigation and resolution. LSCs capture these concerns on locally managed trackers to document and track to completion. However, concerns are escalated through the Safety Measurement System when a concern may extend beyond the local level or additional help is needed.
- The Safety Hotline is available for reporting safety concerns 24 hours a day; 7 days a week. Reports can be made by dialing 202-249-SAFE (7233) or access the electronic form on SAFE's website. Refer to OAP 600-12 *Safety Hotline Process*.

  Once reported to the Safety Hotline, a Safety Officer will be assigned to investigate the reported issue(s) and coordinate with the responsible department to implement mitigations, which are tracked in WMATA's Safety Measurement System. Once implemented the Safety Officer will follow up with the employee if contact information is provided. The employee will have the option of speaking to a Safety Officer at any time while maintaining their confidentiality.
- Safety concerns received by the Office of Customer Service (CSVC) directly or through social media are reviewed by a Safety Officer and coordinated with the responsible department to implement mitigations, which are tracked in WMATA's Safety Measurement System. Actions taken are reported to CSVC for response to customers.
- The Office of the Inspector General (OIG) may forward safety concerns to SAFE. If anonymity has been requested, this will be maintained by OIG and SAFE. A Safety Officer will review the concern and coordinate with the responsible department to implement mitigations. If an investigation is required (either deemed required by SAFE or requested by the OIG), the resulting Internal Corrective Action Plans (ICAPs) will be coordinated with the responsible

department for action. These ICAPs are tracked by SAFE along with all other Safety ICAPs in WMATA's internal Safety Measurement System with the results reported back to the OIG.

WMATA became the first transit agency to launch a Confidential Close Call Transit Safety Reporting System (C3RS) in July 2013. The C3RS program builds upon the other initiatives Metro has put in place to encourage employees to report safety concerns. The Close Call reporting program allows WMATA to gather information about unsafe conditions and near misses, investigate potential hazards and act to prevent more serious safety incidents, address practical drift or identify and monitor emerging trends.

Close Call is available 24 hours a day; 7 days a week. Employees shall report a Close Call when they are involved directly or witness a near-miss incident, or if a reported safety concern persists. Under the program, the employee's information is kept confidential with the federal law Confidential Information Protection and Statistical Efficiency Act, making the employees information free from being subpoenaed or requested through the Freedom of Information Act (FOIA). Violation of CIPSEA carries penalties of up to $250,000 and/or up to 5 years imprisonment.

To report a Close Call, the employee use closecall.bts.gov or call 1-888-568-2377 within 24 hours. Once the report is received, a joint peer review team made up of union partners and WMATA personnel review the report and provides the Chief Operating Officer (COO) and Chief Safety Officer (CSO) with preventive safety actions to mitigate the reported close call. Once approved, the preventive safety actions are assigned to a responsible party and implemented.

There are conditions when a reporting employee is not protected from discipline, per the BTS MOU. The following events do not qualify for protection from discipline under the Program:

- The employee's action or lack of action was intended to damage WMATA's operations or equipment, or injure other employees, or the employee's action or lack of action purposely places others in danger (i.e., sabotage);
- The employee's action or lack of action involved a criminal offense;
- The employee's action or lack of action violated a traffic safety law leading to a citation (e.g., red light cameras, speed cameras, or observed by law enforcement);
- The employee's behavior involved substance abuse or inappropriate use of controlled substances;
- The close call report contains falsified information;
- The event resulted in a transit agency accident/incident and/or has caused or alleged to have caused any injury, illness, or medical treatment of any kind to any person involved in the event;
- The event resulted in an identifiable release of a hazardous material/major reportable spill;

In addition, the following specific events may not qualify for protection under the Program:

- Rail
    - Station overrun of more than one door leaf
    - Exceeding the limits of an absolute or permissive block

- Red signal violation by train or work equipment
- Wrong side door opening
- An employee is not exempt from discipline for a violation that WMATA identifies contemporaneously (e.g., any rail vehicle passes a red signal without proper authorization and the control point (ROCC/Interlocking Operator) notices it before the vehicle completely clears the associated switch) before the employee files a close call report. In such situations WMATA may use event recorder information to support discipline. For example, a WMATA official who observes a revenue or maintenance vehicle operate past a signal that requires a stop may use any relevant data recorded by the train's event recorder in pursuing disciplinary action against the employee(s), regardless of whether he/she/they timely file a close call report.

- ROCC
  - Third Rail Power restoration violations to include restoring third rail power when personnel have not cleared and giving personnel permission to restore a Red Tag or Supervisory Outage when personnel have not cleared the work location

- Bus
  - Rollaway bus involving the operator's failure to follow procedures for proper vehicle securement.

SAFE responds to safety-related reports and shares outcomes directly with employees and contractors, through employee communications (such as articles in *MetroVoices*, Safety Bulletins, and Safety Alerts), on the SAFE page of the WMATA's intranet, and through promotional campaigns. Additionally, as WMATA's SMS matures, each department's SMS dashboard will provide employees with information on the risks being actively managed, status of corresponding mitigations, metrics that measure effectiveness, and the ability to report concerns or provide feedback. The first dashboard launched with the ROCC in CY2021 and rollout will continue over the course of CY 2022 and 2023.

2.3 Communication of the Safety Management Policy

As reflected in the SMS Strategic Roadmap, the milestone *Establish Safety Policy in the Policy Instruction Manual* reflects the action to take the Safety Management Policy established as part of developing this ASP and convert to a standalone document included in Metro's Policy and Instruction Manual (PIM). As part of completing this milestone, the policy will be distilled down to key takeaways and actively communicated throughout WMATA. The primary safety communication methods include Safety Alerts and Safety Bulletins. Additionally, SAFE partners with the Department of Customer Service, Communications and Marketing (CSCM) to integrate safety messaging into corporate communications. SAFE has a recurring section in WMATA's employee newsletter *MetroVoices* and participates in corporate campaigns, such as *That's Doing Your Part* as depicted in Figure 2.

Figure 2. Example of Employee Safety Communication

Effective safety communication is one of the foundational philosophies of SMS. Its purposes are to:

- Ensure that personnel are aware of the SMS;
- Convey safety-critical information;
- Explain why particular safety actions are taken;
- Explain why safety procedures are introduced or changed; and
- Provide feedback on employee-reported hazards and safety concerns.

The primary safety communication responsibility of Executive Management at WMATA under the requirements of 673.23(c) is to actively and personally communicate the Safety Management Policy to employees and contractors. Any changes to the Safety Management Policy must be approved and distributed by the ESC to all employees and contractors.

This is primarily implemented through the committee process, but every executive is also required to visibly endorse the Safety Management Policy to employees in the area they control. This is demonstrated by the EMT's approval of this ASP, their cascading of Safety Communications, designation of Safety Risk Coordinators, and partnership in driving the implementation of SMS, which is essential for long-term success.

2.4 Necessary Authorities, Accountabilities, and Responsibilities

The scope and magnitude of SMS encompasses the entire organization. Consequently, the success of SMS depends on support from across WMATA. At a minimum, every employee and contractor at WMATA has the responsibility to report safety concerns when they are identified. This responsibility includes actively engaging in the processes described in 2.2 *Employee Safety Reporting*. Beyond these minimum requirements, the following Responsible, Accountable, Consulted, and Informed (RACI) matrix summarizes the support required from WMATA leadership and key staff to ensure the successful establishment and implementation of SMS. The ensuing sub-sections expand on the matrix to outline the specific needs identified for each position.

Role and Title		General Requirements	Safety Management Policy	Safety Risk Management	Safety Assurance	Safety Promotion
AE	**General Manager and Chief Executive Officer**	A	A	A	A	A
SMS Exec	**Executive Vice President and Chief Safety Officer**	R	R	R	R	R
Agency Leadership and Executive Management	**Executive Vice President and Chief Operations Officer**	R	R	R	R	R
	Executive Vice President and Chief External Relations	C	C	C	C	R
	Executive Vice President and Strategy Planning and Program Management	C	C	C	C	C
	Executive Vice President and Chief Internal Compliance	C	R	R	R	C
	Executive Vice President and Chief Financial Officer	C	C	C	C	C
	Executive Vice President and Chief Internal Business Operations	C	C	C	C	C
	Executive Vice President and Capital Delivery	C	C	R	R	R
Key Staff	**Vice President of SMS Administration**	R	C	R	C	C
	Vice President of SMS Oversight	R	C	C	R	C
	Director of Safety Policy and Promotion	R	R	C	C	R
	Safety Risk Coordinators	C	C	R	R	R

2.4.1 Accountable Executive

The GM/CEO is WMATA's Accountable Executive. The GM/CEO is ultimately accountable for ensuring that SMS is implemented throughout the Metro system in accordance with this ASP. Additionally, the GM/CEO is accountable for ensuring action is taken to address substandard performance in WMATA's SMS when required.

WMATA's GM and CEO meets the FTA criteria for the Accountable Executive designation:

- Has the final authority over Metrorail, Metrobus and MetroAccess operations and maintenance;
- Controls the financial resources required for the operations and maintenance of WMATA's public transportation system; and
- Controls the human resources required for the operations and maintenance of WMATA's public transportation systems.

As the Accountable Executive, the GM and CEO has the following responsibilities for ensuring the SMS:

- Is properly implemented and performed throughout the WMATA organization, including employee reporting programs;
- Is actively and continuously communicated throughout WMATA;
- Is implemented in a manner that ensures that all executive level personnel are held responsible for their spheres of control; and each actively and continuously communicates the WMATA SMS Policy and the area-specific SMS requirements to all employees in their areas;
- Is the signatory to this ASP and the TAMP, and is responsible to know and understand the contents of both documents;
- Is appropriately addressed system wide; and participates actively on the ESC to guide WMATA in safety and risk management, understand all risks at the agency, actively directs resource allocation activities and monitors safety performance of all areas; and
- Directs all required actions to mitigate SMS non-compliances, unacceptable and undesirable risks and implement continuous improvement activities

2.4.2 SMS Executive

WMATA's EVP/CSO has been designated by and reports to the GM/CEO. The EVP/CSO is a safety professional that has been adequately trained, holding both the DOT Transit Safety and Security Program (TSSP) and Public Transportation Safety Certification Training Program (PTSCTP) certificates (among other credentials). The EVP/CSO has been empowered with the responsibility for day-to-day implementation and operation of WMATA's SMS. The EVP/CSO leads the SAFE Department and does not serve in any other operational or maintenance capacities. The SAFE Department is being reorganized and positioned to ensure the long-term, sustained success of SMS. The organizational current state of the SAFE Department has been included as Appendix B. The planned organizational future state of the SAFE Department is depicted in Figure 3.

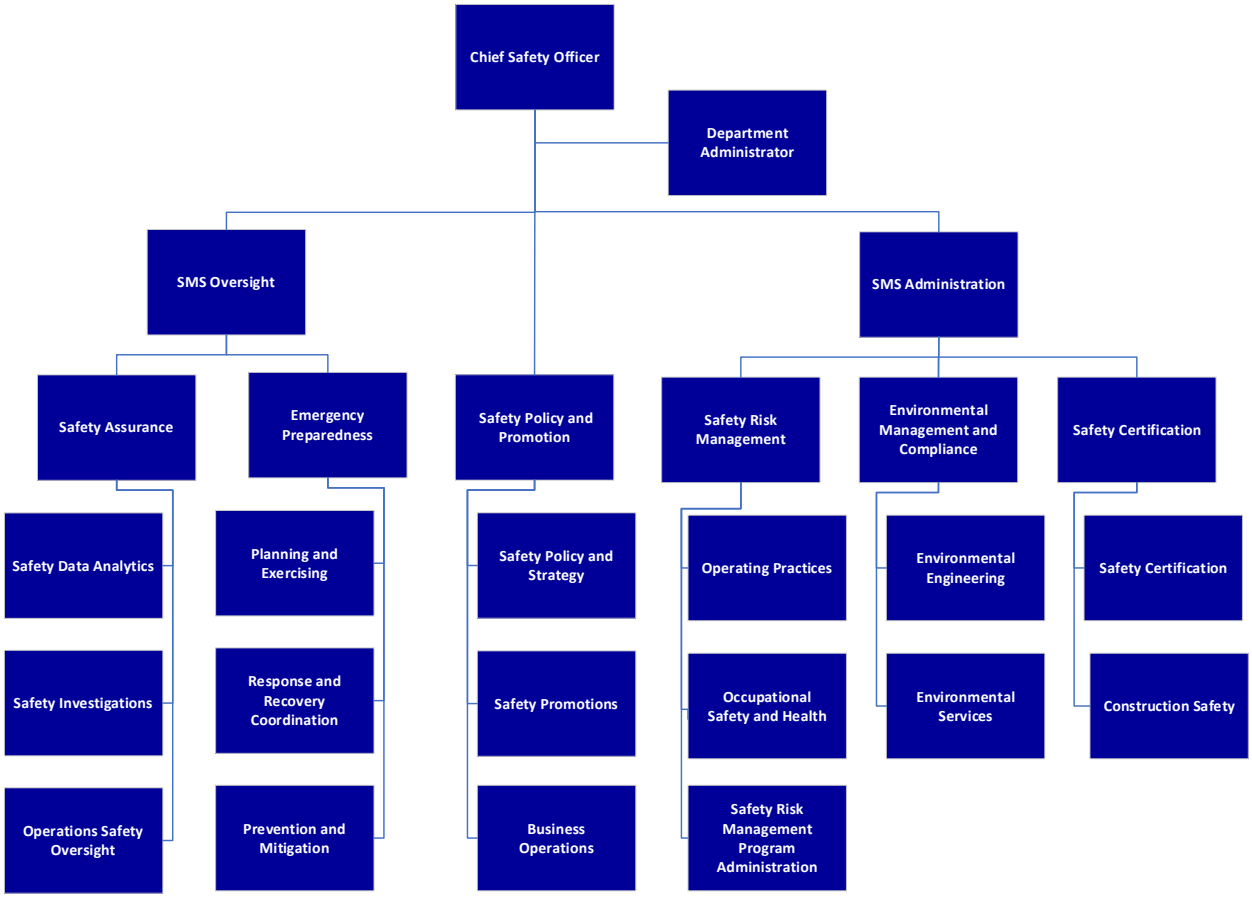


Figure 3. SAFE Department Organizational Future State

The SAFE Department will complete the transition to the future state depicted over the course of CY2022. The re-organization aligns SAFE with the principles of SMS. The EVP and CSO has two Vice President (VP) and Assistant Chief Safety Officers (ACSO) that are tasked with administering and overseeing WMATA's SMS.

2.4.2.1 SMS Oversight

The VP and ACSO of SMS Oversight is responsible for the Safety Assurance and Emergency Preparedness functions. The Safety Assurance function includes the teams performing Safety Data Analytics, Safety Investigations, and Operations Safety Oversight.

1) The Safety Data Analytics team is responsible for measuring the effectiveness of WMATA's SMS in terms of mitigating safety risks. Additionally, the Safety Data Analytics team measures, tracks, and reports on WMATA's performance against the targets outlined in this ASP, complies with Safety Data regulatory reporting requirements, and conducts analysis on patterns, trends, and other performance indicators to inform priorities and mitigating actions.

2) The Safety Investigations team is responsible for performing investigations in accordance with SOP 800-01 *Incident and Accident Investigations of Rail, Bus, and MetroAccess*. The resulting Recommend Corrective Actions (RCAs) are managed in WMATA's Safety Measurement System to ensure implementation is actively overseen, tracked, and managed to completion.

3) The Operations Safety Oversight team is responsible for assuring that safety risk management process is being followed (compliance) and working as intended (effectiveness). This includes safety performance monitoring, audits, inspections, reviews, and responding to reported safety concerns to ensure they are documented in the Safety Measurement System and coordinated with the responsible department for action.

The Emergency Preparedness function is composed of three teams that work together to improve performance and reduce risk in how WMATA manages incidents. While these teams lead the efforts outlined, there are also specific roles in emergency preparedness and emergency operations across Metrorail departments, which are described explicitly in the EOP, companion polices, and SOPs.

1) The Planning and Exercising team is responsible for developing and maintaining emergency preparedness plans, response procedures, and evacuation processes, and also owns the design and development of incident management exercising and trainings for Metro staff and jurisdictional first responder agencies.

2) The Response and Recovery Coordination team staffs the Incident Management Officer (IMO) / Mission Assurance Coordinator (MAC) role in the ROCC, 24/7. The standard operating procedures, training, and roles and responsibilities of the IMO/MAC are undergoing finalization to fully and accurately integrate into the overall ROCC emergency preparedness and incident management function with the overall objective of effective emergency response and incident management with customer safety being the mission of the IMO/MAC.

3) The Prevention and Mitigation team is responsible for preventing incidents through proactive identification and mitigation of fire-life-safety hazards in accordance with 700-WI-001 *Fire Inspection Procedure*, and coordinating the Incident After Action process, identifying lessons and managing Corrective Action Plans across multiple departments to improve the management of incidents in the future.

2.4.2.2 Safety Policy and Promotion

The Director of Safety Policy and Promotion is responsible the Policy, Promotion, and Business Operations functions.

1) The Safety Policy and Strategy team is composed of Project Managers that are responsible for maintaining the Safety Management Policy, this ASP, and the SMS Strategic Roadmap. This includes the SMS Roadmap's tactical action plans, which are designed to ensure the milestones established are being implemented in a methodical, disciplined manner. The Safety Policy and Strategy also manages key strategic initiatives such as aligning polices and procedures with Just Culture principles (which are discussed in more detail in 5.0 Safety Promotion) and introduction of the document management system, *MetroDocs*.

2) The Safety Promotions team is also responsible for developing and implementing the Safety employee and contractor engagement strategy in partnership with CSCM. This includes targeted campaigns to encourage employee safety reporting (such as the *Be a Hero Before we Need One* and *That's Doing Your Part* campaigns), safety communications (such as videos, bulletins, and articles in WMATA's newsletter, *MetroVoices*), recognition events (such as

MetroAwards), and other activities. The Safety Promotions team is also responsible for developing training related to SMS, maintaining the SAFE page on the intranet, and partnering with CSCM on customer and community engagement.

3) The Business Operations team is responsible for managing internal operations of the SAFE department related to Human Resources, financial management, procurement, and other administrative requirements.

2.4.2.3 SMS Administration

The VP and ACSO of SMS Administration is responsible for the Safety Risk Management, Environmental Management and Compliance (EMAC), and Safety Certification functions. Safety Risk Management includes the following teams: Operating Practices, Occupational Safety and Health, and Safety Risk Management Program Administration.

1) The Operating Practices team is responsible for maintaining Metro Safety Standards and managing the Rail Safety Standards Committee. This includes supporting the initiative to overhaul the Metro Safety Rules and Procedure Handbook (MSRPH), issuing Temporary Orders and Permanent Orders, and associated coordination activities.

2) The Occupational Safety and Health team is responsible for administering the programs required to ensure compliance with OSHA requirements as reflected in 29 CFR Part 1910 *Occupational Safety and Health Standards* and internal WMATA workplace safety requirements. This includes maintaining the process, coordinating with responsible departments, and ensuring the training, equipment, and services are in place as required.

3) Safety Risk Management Program administration includes the program administrators responsible for facilitating the implementation of proactive Safety Risk Management across WMATA as reflected in 3.0 *Safety Risk Management*. Additionally, this team include subject matter expertise in Human Factors.

EMAC includes the teams performing Environmental Engineering and Environmental Services. The Environmental Engineering team is responsible for ensuring the controls required to comply with regulatory requirements are in place and working as intended. The Environmental Services team ensures compliance to managing hazardous materials and disposal of hazardous waste, among other services to effectively manage and reduce pollution.

Safety Certification is a series of processes that collectively verify the safety and security readiness of a project for public use. Safety Certification encompasses the entire project lifecycle and requires continuous involvement to ensure that hazards are proactively mitigated to reduce safety risks, resulting in the avoidance of safety events. The Safety Certification function is performed in accordance with the *Safety and Security Certification Program Plan*. Additionally, the Construction Safety team reports to the Deputy Chief of Safety Certification and Engineering and has the responsibility to perform oversight of WMATA construction projects to ensure contractors are in compliance with local, federal, and WMATA's safety polices and requirements.

2.4.3 Agency Leadership and Executive Management

In addition to the GM/CEO and EVP/CSO, the EMT includes the EVP and Chief Operations Officer (COO), EVP and Chief of External Relations (EXRL), EVP of Strategy Planning and Program Management (SPPM), EVP and Chief of Internal Compliance (INCP), EVP and Chief Financial Officer (CFO), EVP and Chief of Internal Busines Operations (IBOP), and EVP and of Capital Delivery (CAPD). At a minimum, each of these leaders has been consulted on the development of this ASP, has been afforded the opportunity to review and provide input, and ultimately approved. The following sub-sections provide an overview on each of their respective departments to include additional responsibilities, accountabilities, and authorities related to SMS where applicable.

2.4.3.1 Operations

The EVP/COO reports directly to the GM/CEO. The EVP/COO actively participates on the ESC, champions the Safety Policy, implements Safety Risk Management, cooperates with Safety Assurance, and participates in Safety Promotion as outlined in this ASP.

The COO's mission is to move the region through safe, reliable, and affordable public transportation. COO staff operate buses and trains; maintain Metro vehicle fleets, facilities, and rail infrastructure; execute certain capital programs; and ensure a safe and secure environment for passengers and employees. The department consists of Rail Services (RAIL), Bus Services (BUS), Access Services (ACCS), Metro Transit Police (MTPD), the Office of Budget, Planning, and Performance (OBPP), Reliability Engineering and Asset Management (REAM), Supply Chain Management (SCM), and Facilities, Systems and Vertical Transportation (FSVT). As the COO's office has the largest exposure to safety risk, the departmental summaries are provided below.

The Rail Services (RAIL) division operates and maintains Metro's rail system in a safe, reliable, and efficient manner providing service across 118 miles of track and 91 stations, 40 of which are in Washington, D.C., 26 in Maryland and 25 in Virginia. RAIL is responsible for rail operations including station operations, train operations, and the maintenance of all assets necessary to move customers through the system including railcars, track, traction power and the automatic train control system.

The Rail department is composed of the following groups:

- Rail Administration (RAIL ADM)
- Rail Transportation (RTRA)
- Chief Mechanical Officer (CMOR), which includes:
    - Car Maintenance (CMNT) and
    - Chief Engineer Vehicles (CENV)
- Silver Line Operations and Maintenance (SLOM)
- Rail Infrastructure Maintenance and Engineering (RIME), which includes:
    - Track and Structures (TRST)
    - Automatic Train Control Maintenance (ATCM)
    - Traction Power Maintenance (TRPM), and
    - Maintenance of Way Engineering (MOWE)

The Rail Operations Control Center (ROCC) reports to the EVP of Capital Delivery (CAP-D). The Director of the ROCC also has a direct access (dotted-line reporting) to the GM/CEO. The ROCC is responsible for directing all train, equipment, and personnel movement within Metrorail's mainline right-of-way. The

ROCC performs critical functions in areas such as emergency response, removal and restoration of power, and Roadway Worker Protection (RWP). In additional to rail traffic control, the other functions within the ROCC include the Rail Operations Information Center (ROIC) and Maintenance Operations Center (MOC). The ROIC is responsible for coordinating station operations, making public announcements, monitoring for delays or abnormal operating conditions, sending digital communications to customers and across WMATA departments, and updating the Passenger Information Display System (PIDS). The MOC is responsible for coordinating maintenance activities related to power, Automatic Train Control (ATC) and signals, car maintenance, elevators and escalators, and associated communications.

The MTPD protects and serves WMATA customers and employees through best practices in law enforcement and community outreach. MTPD police officers have jurisdiction and arrest powers throughout the 1,500 square mile Transit Zone that includes Maryland, Virginia, and the District of Columbia for crimes that occur in or against Transit Authority facilities. MTPD is the only tri-jurisdictional police agency in the country and serves a population of 3.2 million. MTPD personnel serve as the WMATA Incident Commander during any incident involving life safety as reflected in the EOP. Additionally, MTPD and SAFE coordinate the investigation of safety incidents in accordance with PI 10.4/1 *Incident and Accident Investigation* and MTPD participates in SAFE OEP's Exercise program.

The Department of Bus Services (BUSV) is committed to providing safe, equitable, reliable, and cost-effective public transit. WMATA's transit system serves the District of Columbia, Maryland, and Northern Virginia. Metrobus operates over 260 routes, transporting customers to six Metrorail Lines (Red, Green, Yellow, Orange, Silver and Blue), 11 Transit Centers in Maryland and Virginia, and 91 Metrorail Stations. Metrobus serves the nation's capital seven days per week, 24 hours a day with 1,500 buses. MTPD Officers protect and serve a population throughout the 1,500 square mile transit zone that includes the District of Columbia, State of Maryland and Commonwealth of Virginia by providing a variety of law enforcement and public safety functions. Both uniformed and plain clothes sworn police officers are charged with the duty of enforcing the laws of the signatories; the laws, ordinances, and regulations of the political subdivisions in the Transit Zone; and the rules and regulations of Metro. Police Officers have arrest powers for crimes committed upon, to or against Metro facilities throughout the Transit Zone. MTPD also consists of the Office of Professional Responsibility (OPRI) and Inspections Office of Security and Infrastructure (OSI).

The mission of the Office of Facilities, Systems, and Vertical Transportation Maintenance (FSVT) is to support Metrobus and Metrorail operations and maintain infrastructure and equipment systems in a state of good repair by providing a coordinated approach to maintain elevators and escalators, electro-mechanical equipment systems, infrastructure, facilities, and grounds.

FSVT offices include:

- Office of Elevators and Escalators (ELES) which manages and maintains all vertical transportation equipment within the auspices of the Authority;
- Office of Plant Maintenance (PLNT) that manages and maintains Metro's facilities, grounds, and mechanical equipment systems in support of Metrorail and Metrobus operations;
- Facilities Asset Management Office (FAMO);
- Office of Systems Maintenance (SMNT) which manages the electronic and electrical maintenance activities related to Metrorail wayside operations. SMNT is composed of the following:

- Office of Automatic Fare Collection Section (AFCS) manages the installation, maintenance, and repairs of fare collection and parking lot equipment;
- Office of Communications Sections (COMM) maintains Metro's communications systems in support of Metrobus, Metrorail and Metro Transit Police Department operations, as well as fire/life safety systems to help ensure public safety;
- Office of Low Voltage Electrical Maintenance (LVEM) maintains and distributes all 480-volt electrical systems for Metro's facilities; and
- Office of Shops and Material Support (SAMS) provides component-level repair and supports procurement actions for all SMNT.

The Office of Budget, Performance and Planning (OBPP) provides administrative and analytical support for COO, using data effectively to facilitate decisions and improve operational performance. Operations Management Services (OPMS) ensures Metro's internal clients are well equipped to serve our customers, providing direct support to the COO organization in areas of budgetary development/ management, all-inclusive training for technical skills and rail transportation, and consistent accountability to improve workforce availability. The Office of Performance (CPO) assists Metro in achieving its strategic goals by measuring and publicly reporting results via a set of Key Performance Indicators (KPIs), producing and presenting the quarterly Metro Performance Report to the Board of Directors, communicating why performance has changed and what actions will be taken to improve any deficiencies. CPO works collaboratively across the agency to turn data into performance information to help prioritize decision making through performance reporting, target-setting, monthly performance stat meetings, industry benchmarking and business plan development. Office of Intermodal Planning (IPLN) conducts operations planning for rail and bus operations, including headway and route definitions, manpower and vehicle requirements. In addition, IPLN coordinates the implementation of all changes for work assignments, signage changes, facility improvements and coordination efforts with other local carriers and jurisdictions.

The Department of Supply Chain Management (SCM) offices are designed to provide supply chain solutions to their respective internal customers. The offices include:

- Office of Supply Chain Planning and Analytics: Develops and provides supply chain business intelligence and supply chain data governance to the Authority, enhancing asset availability and service delivery.

- Office of Supply Chain Contract Management: Provides advanced acquisition planning, contract management, and procurement compliance services for all inventory materials/supplies across the Authority, enhancing asset availability and service delivery.

- Office of Supply Chain Warehousing and Logistics: Provides timely and quality warehousing and logistical solutions for the Authority to ensure that the right parts are in the right place at the right time, enhancing asset availability and service delivery.

The Reliability Engineering and Asset Management (REAM) centralizes the Office of Reliability Centered Maintenance Planning (RCMP) and Transit Asset Management Office (TAMO) under a single functional group. The following offices to provide subject matter expertise:

- Reliability Engineering and Performance Analysis (REPA): Serves as the central office for reporting on reliability performance as well as facilitating Reliability Centered Maintenance analyses.

- Maintenance Planning and Scheduling (MPLN): Serves as the central office for providing maintenance planning and scheduling services.
- Transit Asset Management Office (TAMO): Serves as the central office for driving Asset Management initiatives and ensuring the Authority remains compliant with our Federally mandated obligations.

The Department of Access Services (ACCS) ensures the accessibility of public transportation including all Metro facilities and Metro-owned bus stops, vertical transportation, fixed-route transit, and equipment for people with disabilities. Access Services also administers Metro's Reduced Fare Program for people with disabilities, as well as the Free Ride Program for customers who are conditionally eligible for paratransit service. The department, through its three program offices, (ADA Policy and Planning, Eligibility Certification and Outreach, and MetroAccess Service), ensures the continuous improvement of all of Metro's accessible services and facilities. These improvements benefit the public and have important safety ramifications. Continually promoting and educating people with disabilities on the safe and independent use of Metro's accessible fixed-route services helps ensure that paratransit services are conserved for those individuals who truly need them.

2.4.3.2 External Relations

The EVP and Chief of EXRL, reports to the GM/CEO. The EVP/EXRL actively participates on the ESC and has been consulted on establishment and implementation of SMS in accordance with this ASP. EXRL is responsible for building and maintaining strong relationships with Metro's stakeholders, partners, and customers to include regional elected officials, business, community groups, and the Board of Directors.

Key priorities include:

- Work with jurisdictions and Congress to ensure needed operating and capital funding support
- Engage stakeholders in support of Metro's business goals and objectives, as well as coordinate with federal agencies and safety oversight organizations
- Improve customer experience and public confidence in Metro through in-system passenger information, media relations, and marketing channels

2.4.3.3 Strategy, Planning and Program Management

The EVP and Chief of SPPM reports to the GM/CEO. The EVP actively participates on the ESC and has been consulted on establishment and implementation of SMS in accordance with this ASP. SPPM drives Metro's strategy and transforms how Metro does business and serves its customers. SPPM builds and oversees Metro's prioritized capital program and is the lead organization responsible for (1) business transformation, (2) planning, (3) sustainability, (4) capital programming and project development, evaluation and accountability, and (5) capital budgeting and funds management. SPPM also provides oversight and reporting, ensuring Metro's capital program advances safety, service reliability and financial stability, and invests federal, jurisdictional and dedicated funding wisely.

2.4.3.4 Internal Compliance

The EVP and Chief of INCP reports directly to the GM/CEO. The EVP actively participates on the ESC and has responsibility for policy support and collaborating with SAFE on Safety Risk Management and Safety Assurance as well as reinforcing Safety Promotion. INCP is an internal management function.

Committed to driving improvement Authority-wide, INCP ensures departments are fulfilling business objectives, addressing corrective actions and complying with federal, state and local requirements and recommendations by deploying planned oversight and compliance activities.

Through its Offices of Quality Assurance, Internal Compliance and Oversight (QICO), Management Audits, Risk & Compliance (MARC), and Special Projects Office (SPEC), INCP performs internal reviews, audits and compliance assessments, and coordinates their related corrective action plans (CAPs). The department's activities comprise a key component of Metro's safety, risk and quality assurance frameworks, promoting improved safety, better business practices and greater service reliability across the organization.

QICO provides independent internal reviews and quality assurance assessments of service delivery, engineering and maintenance, capital program management and safety, and security functions. QICO coordinates and oversees the closure of corrective/preventive actions that address regulatory safety recommendations and required actions. QICO also manages Metro's Policy Instruction Manual, leads the development and implementation of Metro's Quality Management System Plan (QMSP), and conducts the triennial Internal Safety Reviews.

MARC is Metro's Internal Audit function and provides objective internal auditing and advisory services to Metro management that add value and enable change for strong organizational governance, internal controls and effective risk management. MARC is also responsible for facilitating enterprise risk management (ERM) across the organization and facilitates organizational wide training on internal controls, risk management and compliance.

Special Projects Office (SPEC) leads and manages special and strategic projects at the direction of the General Manager/CEO and other senior management.

2.4.3.5 Finance

The EVP and CFO reports to the GM/CEO. The EVP actively participates on the ESC and has been consulted on establishment and implementation of SMS in accordance with this ASP. The Department of Financial Operations plans, allocates and manages the Authority's financial resources, policies and priorities to ensure fiscal integrity and alignment with Metro's overarching vision to move the region forward by connecting communities and improving mobility for our customers. Financial Operations facilitates fiscal responsibility and sound investment of funds through active management, rigorous monitoring and timely, transparent reporting. The Office of Management and Budget (OMB) is responsible for the development and formulation of the annual operating budget, long-range financial planning and revenue management. The Office of Accounting (ACCT) manages payroll operations, accounts payable, accounts receivable and financial reporting. The Office of the Treasurer (TRES) is responsible for financial risk management, revenue collection, liquidity management, corporate investments, and debt management as well as fare media sales and distribution. The Office of Real Estate and Parking (LAND) optimizes Metro's real estate and parking portfolios.

2.4.3.6 Internal Business Operations

The EVP and Chief of IBOP reports directly to the GM/CEO. The EVP actively participates on the ESC and has been consulted on establishment and implementation of SMS in accordance with this ASP. IBOP consists of six business functions that play integral roles in supporting all operating components of Metro: Human Resources, Information Technology, Labor Relations, Occupational Health and Wellness

(OHAW), Procurement, and Fair Practices. IBOP provides administrative, technical and operational solutions to all Metro departments and offices. IBOP implements and supports information management solutions, provides acquisition services, manages unionized employment matters, provides clinical services (drug screening, sleep apnea, etc.) to employees and prospective employees, as well as health and wellness offerings to current employees and ensures compliance with Title I of the Americans with Disabilities Act (ADA). IBOP also sources and supports the selection of highly qualified talent, provides employee performance management programs, employee development and training opportunities, and promotes an engaged, diverse and inclusive organization free from discrimination. The department is focused on business innovation through organizational transformation and integrating strategic priorities across functions with the goal of establishing a culture of high performance at all levels of the organization.

2.4.3.7 Capital Delivery

The EVP, Capital Program Delivery reports directly to the GM/CEO. The EVP/CAP-D actively participates on the ESC, champions the Safety Policy, implements Safety Risk Management, cooperates with Safety Assurance, and participates in Safety Promotion as outlined in this ASP. The Department of Capital Delivery (CAPD) provides leadership and expertise in management and delivery of capital projects in support of Metro's overall mission to deliver safe, reliable and affordable transportation options throughout the region. CAPD's organization structure consists of four main divisions: Office of Project Development and Implementation Planning (PDIP), Office of Engineering and Architecture (ENGA), Office of Project Implementation and Construction (PICO) and Office of Technical Services and Portfolio Management (TSPM).

- PDIP's core function is to generate the solution set for major projects to enable informed decisions, maximize project outcomes, and develop the delivery strategy for each project to maximize value for the Authority, considering scope bundling, impact to operations and optimal contracting strategies for design, construction and owner's side responsibilities.
- ENGA is responsible for providing Authority-wide engineering and project management services, including the development of design criteria and standards. ENGA works closely with maintenance and operations departments to ensure that the transit system is maintained, and that any engineering issues on existing systems are properly evaluated and remediated.
- PICO's program delivery arm consists of Infrastructure Renewal Program (IRPG), Major Capital Projects (MCAP) and Silver Line Extension Program (DULS). These divisions assure projects comprising Metro's Capital Improvement Program are completed within scope, schedule and budget.
- TSPM provides a wide range of technical services and strategic portfolio management to the capital program through improvement and standardization of project management and business operations processes.

2.4.4 Key Staff

The SAFE Department VP/ACSO of SMS Administration, VP/ACSO of SMS Oversight, and Director of Safety Policy and Promotion have been tasked by the EVP/CSO with establishing WMATA's SMS as outlined in this ASP. The Safety Risk Coordinators (SRCs) are responsible for leading the implementation of the Safety Risk Management process and supporting implementation of safety policy, safety

assurance activity, and safety promotion. While the SAFE Department and SRCs have specific responsibilities associated with leading SMS implementation, every WMATA employee from the executive office to the frontline has the inherent responsibility to perform their work safely and use the SMS processes and tools made available to them.

SRCs will be assigned by each EVP office at a minimum. The SRCs may delegate actions to subject matter experts when appropriate to support the ASP implementation. The SRCs also provide guidance and support to WMATA's Enterprise Risk Management program. The list of SRCs by job title may be found in Appendix C. The ideal employee to serve in the role of SRC has the following attributes:

- Professional with at least 4+ years of experience in their area of responsibility
- Experience participating in safety activities (e.g., serving on Safety Committees)
- Experience implementing CAPs, responding to Safety Concerns, and taking action to reduce risks

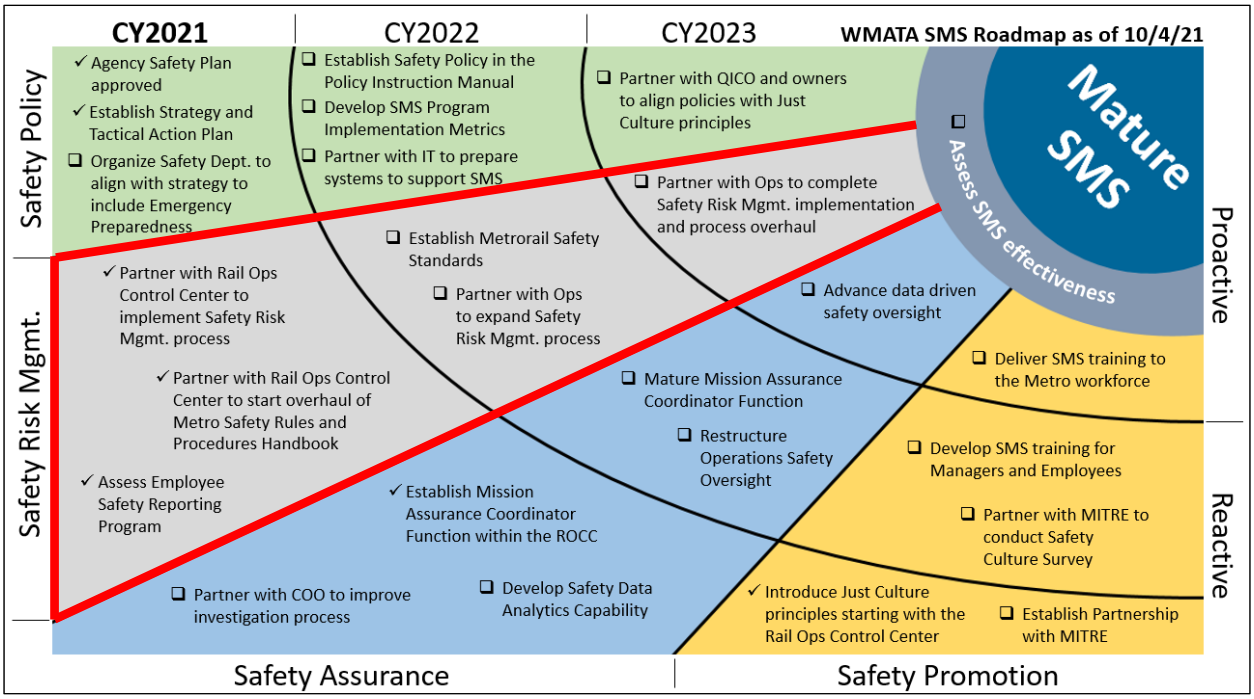
Upon being designated an SRC, the initial baseline requirements include: One (1) hour course on SMS Awareness (FTA/TSI e-Learning); Two (2) hour course on Safety Assurance (FTA/TSI E Learning) and a 20-hour course on SMS Principles for Transit (FTA/TSI, instruction-led). The virtual classes must be completed within 12 months of designation, and the instructor led course is contingent upon local class availability by the DOT. As the SMS matures, SAFE will develop additional WMATA-specific SMS training over the course of CY2022. Until then, SRCs receive hands-on coaching and mentorship from SAFE's Safety Risk Management Program Administrators.

The primary responsibilities of the SRCs include, but are not limited to:

- Implement Safety Risk Management as described in 3.0 *Safety Risk Management* of this ASP resulting in the proactive identification, assessment, and mitigation of safety risks
- Coordinate the identification, documentation, and assessment of safety risks;
- Perform oversight and monitoring as described in 4.0 *Safety Assurance* of this ASP to verify risk mitigations are being followed (compliance) and working as intended (effectiveness);
- Ensure that all safety-related corrective action plans are being managed and addressed in coordination with senior leadership;
- Ensure that local and departmental safety committees are held, and hazards brought forth are tracked and mitigated;
- Monitor and ensure safety incident investigations are thorough and completed per P/I 10.4 *Incident and Accident Investigation*;
- Monitor the Safety Risk Submissions for leading indicators of potential hazards, if applicable;
- Assist in maintaining documentation associated with the Agency's SMS;

- Attend and report on SMS-related activities at all departmental safety committees and respective STAT meetings (for COO offices); and
- Assist Accountable Executive or Chief Safety Officer (SMS Executive) in developing, implementing, and operating the agency's SMS as directed.

3.0 Safety Risk Management



In CY2021, the milestone *Partner with Rails Ops Control Center to implement Safety Risk Management Process* reflects the shift from planning (securing approval of this ASP) to implementation. The ROCC was a logical choice for launch of this deliberate and methodical approach to implementation given its core responsibilities for ensuring safe movement throughout the Metro system. The results of audits from WMSC also served to inform this prioritization. Concurrently, the milestone *Partner with Rail Ops Control Center to start overhaul of the Metro Safety Rules and Procedures Handbook* reflects the partnership that SAFE established with the ROCC Transformation Team to initiate the refresh of Metro's safety standards and supporting processes and procedures. Both efforts contribute to establishing the ROCC as the center of excellence for SMS, which creates a solid foundation for expansion across the COO Department and beyond. In accordance with 49 CFR Part 673.25 *Safety Risk Management*, this section of the ASP includes:

- 3.1 – Safety Risk Management Process
- 3.1.1 – Safety Hazard Identification
- 3.1.2 – Safety Risk Assessment
- 3.1.3 – Safety Risk Mitigation
- 3.2 – Ongoing Management of Safety Risk

A capable Employee Safety Reporting Program is a cornerstone of SMS, providing a critical source of leading indicators that enable the shift toward proactive Safety Risk Management. The *milestone Assess Employee Safety Reporting Program* was performed to assess the current state of WMATA's employee safety reporting program by the QICO division of INCP. In CY2022, the findings resulting from this

assessment will be used to drive continuous improvement in employee engagement, report processing, responsiveness, data analysis, and mitigating actions taken.

As Safety Risk Management implementation progresses into CY2022 and 2023, the COO divisions have been prioritized as follows with the intent of completing implementation across the entire operation. These priorities are subject to change based on the incorporation of input from a variety of sources to include safety performance indicators, internal input (such as the EMT or ESC), and external input (such as the WMSC). Prior to SMS, managing safety risk has always been a component of WMATA's overall framework for Enterprise Risk Management. Those efforts will continue simultaneously with SMS Safety Risk Management implementation, led by the MARC division of INCP and in partnership with SAFE. Additionally, the effort to refresh Metro's safety standards and supporting processes and procedures will continue to expand beyond the ROCC to encompass the entire operation.

Baseline SMS Safety Risk Management Implementation Priority		
Priority	**Organization**	**Launch Timing**
1	ROCC – Rail Operations Control Center	CY2021
2	SCM – Supply Chain Management	CY2021
3	FSVT – Facilities, Systems, and Vertical Transportation Maintenance	CY2022
4	BMNT – Bus Maintenance	CY2022
5	BTRA – Bus Transportation	CY2022
6	RIME – Rail Infrastructure, Maintenance, and Engineering	CY2022
7	REAM – Reliability Engineering, Asset Management	CY2023
8	RTRA – Rail Transportation	CY2023
9	CMOR – Mechanical	CY2023
10	ACCS – Access Services	CY2023

3.1 Safety Risk Management Process

The following Safety Risk Management process emphasizes the proactive identification, assessment, and mitigation of safety risks. This process is based on the methodology outlined in MIL-STD-882E *System Safety Standard Practice* and aligns with the FTA's *National Public Transportation Safety Plan.* Safety Risk Management Program Administrators from SAFE partner with each of the Safety Risk Coordinators designated across WMATA to assist in their implementation of this process. This process was developed over course of CY2021 and will be used to develop WMATA-specific SMS training in CY2022.

3.1.1 Safety Hazard Identification

The first step in the Safety Risk Management process is to identify hazards (any real or potential condition that can cause injury, illness, or death; damage to or loss of facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment). An initial series of workshops led by the SRC and supported by SAFE are scheduled to engage the workforce. During the workshops, brainstorming sessions are held to discuss historical safety performance (e.g., *what are the incidents or injuries that have occurred in the past?*), current safety performance (e.g., *is there anything keeping you up at night?*), and anticipated safety performance (e.g., *what do you think the next incident or injury is going to be and why?*). A safety risk submission form is also introduced. The safety risk submission form is a simple reporting mechanism that allows employees to submit safety reports directly to their SRC. The safety risk submission form is made available on the organization's internal

homepage on WMATA's intranet. In addition to the feedback collected from the workforce, information is regularly monitored and collected from a variety of sources:

- External Agencies (WMSC/FTA/NTSB)
- Employee Safety Reporting Program
- Inspections or Audits
- Investigations
- Safety Committees
- Safety Performance Indicators
- Data Analysis
- Industry Data

After the initial workshops are completed, the SRC compiles the information gathered and groups into themes based on patterns and commonalities. In partnership with SAFE, the results are interpreted to identify the risks in terms of *who* is exposed to *what* (e.g., *customers use escalators like stairs when a malfunction occurs resulting in slips, trips, and falls*). The drafted risks that were identified are then brought to the Local Safety Committee for review and feedback. When finalized with the Local Safety Committee, the identified risks are loaded into the Safety Measurement System. As new information becomes available, the SRCs use the Safety Measurement System to determine whether an existing risk has already been identified or a new safety risk needs to be drafted. New information associated with existing risks will be reviewed to determine if the risk definition needs to be updated or assessment needs to change (as outlined in 3.1.2). New information that drives the identification of a new risk will be drafted by the SRC and brought to the Local Safety Committee for review when required.

3.1.2 Safety Risk Assessment

The identified risks are subjected to an assessment based on the likelihood and severity formula benchmarked from MIL-STD-882E *System Safety Standard Practice*. Likelihood is measured based on the frequency or how often risk is expected to occur. A combination of quantitative and qualitative data is used to assess likelihood. Safety Performance Indicators such as injury or incident rates associated with each risk are reviewed along with existing mitigations, employee reporting, feedback from management, results from Quality or Safety Assurance oversight, and findings from the WMSC (as well as other external agencies). The SRC collects these inputs and then holds a session with the Local Safety Committee to assess the likelihood of each risk based on a discussion and interpretation of this data. The likelihood scale has a letter-based value range of A to E. The higher the grade, the more likely the risk is expected to be realized.

Probability	Value	Qualitative Meaning	Quantitative Meaning
Frequent	A	Opportunity for risk to be realized expected to occur often	Probability of occurrence greater than or equal to 10^{-1} (10%)
Probable	B	Opportunity for risk to be realized expected on a recurring basis	Probability of occurrence less than 10^{-1} (10%) but greater than or equal to 10^{-2} (1%)
Occasional	C	Opportunity for risk to be realized expected to occur	Probability of occurrence less than 10^{-2} (1%) but greater than or equal to 10^{-3} (0.1%)
Remote	D	Opportunity for risk to be realized not expected to occur but possible	Probability of occurrence less than 10^{-3} (0.1%) but greater than or equal to 10^{-6} (0.0001%)
Improbable	E	Opportunity for risk to be realized not expected to occur and almost inconceivable	Probability of occurrence less than 10^{-6} (0.0001%)

Severity is measured based on the consequences expected from the risk occurring. A combination of quantitative and qualitative inputs is also used to assess severity. Safety Performance Indicators such as the nature of the injury experienced, extent of property damage, and length of service disruption are reviewed along with existing mitigations, employee reporting, feedback from management, results from Quality or Safety Assurance oversight, and findings from the WMSC (as well as other external agencies). After likelihood is assessed, the Local Safety Committee assesses the severity of each risk based on a discussion and interpretation of this data. The severity scale has a number-based value range from 1 to 4. The lower the number value assigned, the more severe the consequence is expected to be.

Severity	Value	Meaning
Catastrophic	1	Risk realization expected to result in one or more of the following: death, permanent total disability, loss of passenger/crew occupied volume with equipment damage causing separations in structure, infrastructure damage that suspends service through the affected area for greater than 24 hours.
Critical	2	Risk realization expected to result in one or more of the following: permanent partial disability, injuries/illness that results in hospitalization, loss of passenger/crew occupied volume with equipment damage that causes openings but no separations in structure, infrastructure damage that suspends service through the affected area for greater than 2 and up to 24 hours.
Marginal	3	Risk realization expected to result in one or more of the following: injury or illness resulting in one or more lost work day(s), loss of passenger/crew occupied volume with equipment damage that causes no openings in structure, infrastructure damage that suspends service through the affected area for more than 30 minutes and up to 2 hours.
Negligible	4	Risk realization expected to result in one or more of the following: injury or occupational illness that does not result in a lost work day, no loss of passenger/crew occupied volume, equipment or infrastructure damage that does not suspend service nor cause a delay through the affected area for more than a maximum of 30 minutes.

The definitions for these scales may be customized as needs dictate to support targeted risk assessments. Upon completing the risk assessment for each risk, the SRC enters the results in WMATA's safety software, creating a risk profile. The risk assessment matrix is embedded with the stoplight criteria resulting in the assessment for each risk depicted as high (red), medium (yellow) or low (green) and informing how the safety risks will be prioritized.

Risk Probability	Risk Severity			
	Catastrophic 1	Critical 2	Marginal 3	Negligible 4
Frequent – A	**1A**	**2A**	**3A**	**4A**
Probable – B	**1B**	**2B**	**3B**	**4B**
Occasional – C	**1C**	**2C**	**3C**	**4C**
Remote – D	**1D**	**2D**	**3D**	**4D**
Improbable – E	**1E**	**2E**	**3E**	**4E**

Risk Index		
Red	1A, 2A, 3A, 1B, 2B, 3B, 1C, 2C, 1D	CEO, COO, and CSO approval required to continue activity without level-changing mitigations in place.
Yellow	4A, 4B, 3C, 2D, 3D, 1E, 2E, 3E	VP level approval required to continue activity without level-changing mitigations in place.
Green	4C, 4D, 4E	Risk effectively mitigated or considered so unlikely its acceptable as-is.

3.1.3 Safety Risk Mitigation

After the risk assessment is complete, the risk mitigation step involves determining what actions need to be taken to reduce them to as low as reasonably practicable. The risks assessed as high are prioritized accordingly, followed by medium risks, and then low risks (as required). The SRC performs research to determine whether there are risk mitigations already in place as well as any other mitigations that are already in work (e.g., as part of a CAP in response to an audit finding). The SRC compiles this information for each risk and then holds a session with their Local Safety Committee. The following criteria (based on the *Hierarchy of Controls*) is applied when developing risk mitigations:

- Elimination: Mitigations designed into the operation that eliminate the potential for exposure to the risk (e.g., *the station is shut down when an escalator malfunctions, eliminating the possibility of customers getting hurt while using them as stairs*)

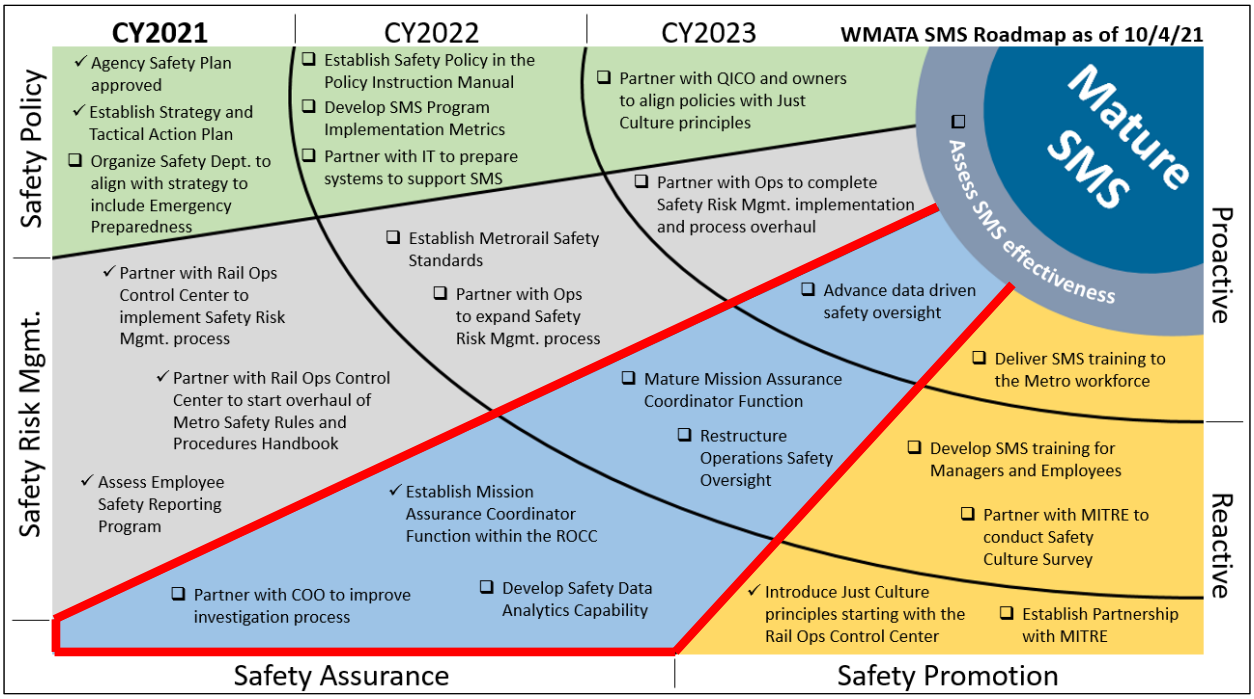
- Substitution: Mitigations designed into the operation that result in avoiding the potential for risk exposure (e.g., *the station remains open when an escalator malfunctions, but customers are re-directed to actual steps or elevators to avoid use of the malfunctioning escalator*)
- Engineering Controls: Mitigations designed into the operation that trigger controls when the potential for risk exposure increases (e.g., *an automatic gate is activated when an escalator shuts down, creating a barrier that deters customers*)
- Administrative Controls: Mitigations designed to change human performance or behaviors in response to the risk (e.g., *every three minutes, the station will announce the escalator is out of service and advise customers to use the actual stairs or elevators*)
- Personal Protective Equipment (PPE): Mitigations designed to protect from exposure to the risk while an activity is performed (e.g., *an attendant will hand out helmets to customers so in case they fall while climbing a shutdown escalator, their head is protected*).

At the LSC, the mitigation criteria are applied with the most feasible and effective mitigations prioritized accordingly. Any risk mitigations that require additional resources (personnel, funding, etc.) are elevated to the Department Safety Committee or ESC by the SRC, as needed. The SRC ensures that each mitigating action is assigned an owner and estimated completion date. After the risk mitigations have been established, the risk assessment step is performed again as part of a goal setting exercise to forecast how much each risk will be reduced. For example, if the 30 customers a month were getting injured on malfunctioning escalators, the risk mitigations being implemented in response may target a reduction to less than five injuries per month. The outcome is a future state risk profile that defines what mitigating the risks as low as reasonably practical means to the organization. As risk mitigations are implemented, the SRC meets with the Local Safety Committee to assess progress and adjusts risk levels and priorities accordingly.

3.2 Ongoing Management of Safety Risk

The results of Safety Assurance, QICO internal safety reviews, WMSC audits, employee voluntary reporting, safety performance indicators, changes to the system or operation, and other variables will drive the SRC to re-visit the risks identified, prioritization, and mitigations on a regular basis. To enable the long-term, systematic implementation of the Safety Risk Management process, SRCs will establish a recurring meeting rhythm within their departments that meets no less than monthly. Existing local safety committees will be leveraged where available. However, additional dedicated meetings or integrating the process into other existing meetings will occur as deemed necessary. These meetings will be composed of representation from every level of the organization (e.g., individual contributors, supervision, and management) with subject matter experts and additional support from SAFE and other departments included as needs dictate. WMATA's Safety Measurement System is used to capture the risk identified, perform risk assessments, and track mitigations. An SMS dashboard will be established for each department that provides employees to access safety risks, peruse mitigation plans, review how effectiveness is measured, and submit reports to their Safety Risk Coordinator. Safety Risk Coordinators will develop standard operating procedures that specify how implementation of Safety Risk Management will occur within their departments in alignment with this ASP.

4.0 Safety Assurance



In CY2021, improving Safety Performance Monitoring and Measurement was the top priority in Safety Assurance. The milestone *Establish Mission Assurance Coordinator Function within the ROCC* was accomplished, providing dedicated 24/7 monitoring to assure that when incidents occur, the response is conducted in accordance with SOP 1A *Command, Control, and Coordination of Emergencies on the Rail System.* Additionally, the milestone *Develop Safety Data Analytics Capability* reflects the intent to integrate data from multiple sources and align with the data management occurring within COO to improve the efficiency and visibility of Metro's safety performance. Another priority centered around improving the CAPs resulting from safety investigations, resulting in the milestone *Partner with COO to Improve Investigation Process*. Thorough safety investigations that drive CAPs based on sound root cause analysis are the key to effectively mitigating the risk of recurrence, which drives the shift toward proactive Safety Risk Management.

In CY2022, the focus on continuously improving the Mission Assurance Coordinator function and by extension, WMATA's management of incidents will continue to be a priority. The milestone *Mature Mission Assurance Coordinator Function* includes incorporating lessons learned from Incident After Action Review, establishing position requirements, and formalizing procedures. The safety investigation process will also continue to improve as root cause analysis drives robust Corrective Action Plans developed in coordination with the COO. The SAFE Department has integrated its bus and rail safety oversight teams. The milestone *Restructure Operations Safety Oversight* reflects the intent to create a new leadership position (Director of Operations Safety Oversight) to position this team to provide the same level of oversight across all WMATA's modes of transportation. Additionally, the positions of Sr. Director of Safety Assurance, Director of Safety Data Analytics, and Director of Safety Investigations have been established to round out the leadership team responsible for the implementation of Safety Assurance, which in accordance with 49 CFR Part 673.27 *Safety Assurance* includes:

- 4.1 – Safety Performance Monitoring and Measurement
- 4.2 – Management of Change
- 4.3 – Continuous Improvement
- 4.4 – Corrective Action Plans

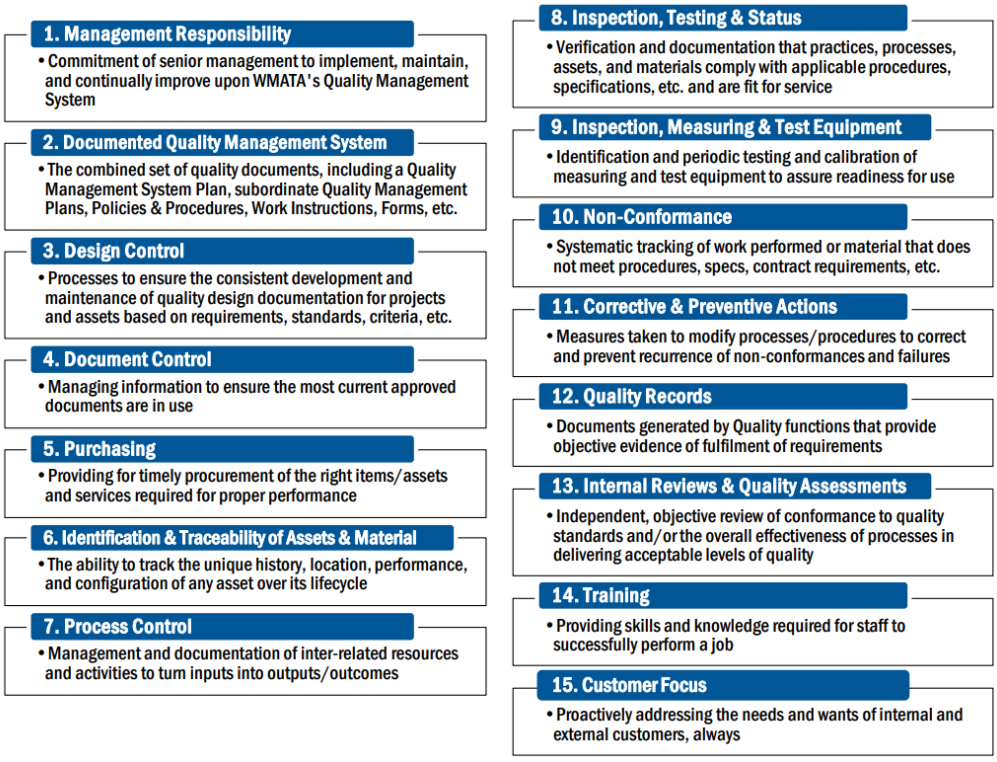
4.1 Safety Performance Monitoring and Measurement

The focus of Safety Performance Monitoring and Measurement is to oversee Metro's safety performance to assure that risk mitigations are being followed and working as intended (effective). Assuring compliance with operations and maintenance procedures is a priority focus. Additionally, Safety Performance Monitoring and Measurement includes conducting safety investigations and safety data analysis on leading and lagging safety performance indicators.

4.1.1 Monitoring Operations and Maintenance Procedures

The Quality Management System Plan (QMSP) is used to monitor compliance with, and sufficiency of, departmental procedures for operations and maintenance. It is used both internally and externally to guide personnel through WMATA's expectations and standards that must be met and maintained to ensure compliance with requirements. The responsibilities, procedures, and documents comprising the Quality Management System (QMS) apply to all offices, departments, and projects within the Authority's responsibility. The QMSP is also used externally to introduce the QMS to the Authority's customers, stakeholders, contractors, suppliers, and vendors. The QMS is structured to address 15 core standards, as summarized below. These have been developed based on international standards (ISO 9001:2015) as tailored to a transit-specific context.

Core QMS Standards



Quality Management Plans (QMPs) describe a chief level office's procedural approach to align the QMSP requirements with the specifics of that department's deliverables. It describes those activities to ensure quality delivery of services and assets. Its purpose is to describe and define the processes necessary for quality operations. The QMP development and implementation is a phased process, similar to the ASP. Each applicable chief level office's QMP includes:

- Inspection and testing requirements
- Desired results or end states
- Process steps to capture practices, and procedures
- Assignment of responsibility and authority
- References to specifications and standards
- Documented procedures for capturing and approving changes and modifications
- Metrics to capture achievements
- Minimum frequency of review/updates appropriate to ensure the department remains adaptive to changing conditions and priorities.

The QMP and supporting documents (procedures and work instructions) integrate requirements of the QMSP. In this way, each office develops its own best way of contributing to the safety, reliability, and fiscal responsibility of WMATA. By complying with quality procedures, WMATA employees meet or exceed the requirements of their responsibilities in a consistent, repeatable manner. The QMP with supporting documents describes the practices, assigns the personnel (by name or position), the inspection and testing requirements, and the acceptance criteria. It includes any legal requirements, regulations, industry standards, organizational policies, internal guidelines, and best practices necessary to provide the desired outcome. The QMP:

- Assures conformance to requirements
- Meeting internal and external requirements
- Provides traceability
- Provides a basis for training.

The COO divisions that perform maintenance are required to coordinate with departments across WMATA to develop and maintain Maintenance Control Plans that include:

- All inspections, their intervals and requirements, and their documentation, verification and distribution.
- The standards (regulatory, industry and internal) for all aspects of maintenance.
- Procedures for all aspects of maintenance and where they are found (OEM manuals, Maintenance Management of Information System, etc.).
- Testing processes and procedures for all maintenance activities.

- Standards and requirements for scheduled maintenance, deferred maintenance and determination (destruction/condemnation/disposal).
- Sources of reporting for deficiencies.
- Equipment, and small and large tools required to perform the maintenance activities, including IT systems, software and hardware; and
- Minimum training requirements for personnel engaged in maintenance activities

4.1.2 Monitoring of Operational Safety Risk Mitigations

WMATA has multiple internal safety reviews to monitor compliance with its SMS as described in this plan. These reviews are required under 49 CFR 673.27(b)(2), and include:

1. The triennial internal safety review program. This program, also required under 49 CFR 674.27(a)(4), is owned and implemented by QICO. Each department and functional area is reviewed for compliance with this ASP once every three years. Non-compliances, deficiencies and failures of SMS require corrective action to be developed and implemented by the department or functional area.

   QICO has a procedure manual and fully documents all triennial review activities using Procedure Number: QICO-PRO-P01-01 *Internal Safety Review Notification and Reporting Procedure*. As stated in this procedure, QICO notifies the WMSC and submits any checklists or procedures that will be used during the review, as per the Program Standard, at least 30 calendar days prior to the start of each review. On or before February 1st of each year, QICO submits an annual Safety Review Report to the WMSC under the Accountable Executive's signature. This report includes the following elements:

   - A summary of all completed ISRs performed during the past year.
   - The completed ISR checklists.
   - Findings generated as a result of each ISR; and
   - iCAPAs generated as a result of each ISR.

   WMSC will review and approve the report in accordance with process reflected in their Program Standard.

   All reviews are available for ESC review, the department or office reviewed, and are made fully available to all other departments and areas. The ESC provides oversight and executive management review of this process to ensure consistency and the integrity of the internal safety review process.

2. Reviews of safety standards and requirements to ensure they are current. FTA's guidance documentation for implementation of 49 CFR 673.27(b)(1) states that the Agency Safety Plan must address the following:

- Identification of all operations and maintenance procedures (safety standards and requirements, both internal to the agency as well as in recognition of any SSOA or FTA safety standards and requirements) subject to this section.
- Activities for reviewing safety standards and requirements to ensure they are current.
- Activities a transit agency will implement to monitor compliance with documented safety standards and requirements.

Under these requirements, each department will conduct a review of applicable safety standards as part of its internal controls process as described in item 3 below. The process will be fully documented in the internal controls report, and corrective action will follow all requirements for the internal control process.

3. Internal Controls. Each department and functional area will annually audit its own SMS compliance (i.e., its safety policy compliance) to ensure that hazards are identified and addressed through the SRM process, which results in safety risk mitigations monitored through the SA process by persons trained and qualified to do so through safety promotion activities, including its progress toward its safety targets. This program is called internal controls. The Safety Risk Management Program Administrators from SAFE work with the SRCs to establish their internal assessment process, such as 700-ROCC-ADM-26-00 *ROCC Internal Assessment Process* was established with the ROCC's SRC. Safety Officers from the Operations Safety Oversight team will perform the oversight required to ensure compliance. The internal controls must be performed annually prior to the start of the revision process to the ASP so that any appropriate necessary modifications to the ASP can be incorporated during the revision process. This requirement aligns with the expectation FTA has expressed in its guidance documentation that continuous improvement activities should be completed in conjunction with the annual review and update of the ASP.

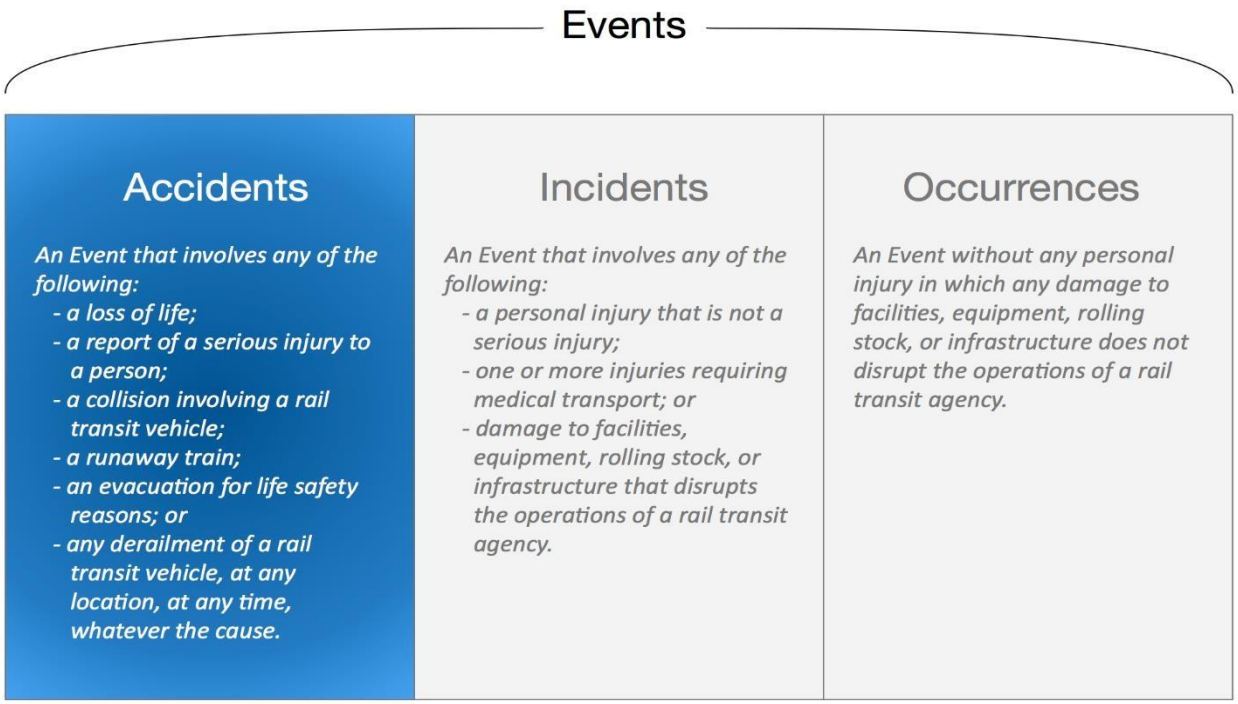
4. The Safety Data Analytics team works with the SRCs to determine how the effectiveness of risk mitigations will be measured. Each risk will have key performance indicators that inform whether mitigations are working as indented or if additional action needs to be taken. For example, Maximo work order completion might be a measure of effectiveness for mitigating the risk of a fire and smoke condition. The higher the work order completion rate would theoretically drive a lower incident rate.

5. Monitor information reported through any internal safety reporting programs. Under the requirements of 49 CFR 673(b)(4), FTA has required the SSOA to oversee all internal safety reviews conducted by a transit agency and has provided direction in its guidance documentation that "this section has been expanded to include 'any' internal safety reporting programs, such as an Employee Safety Reporting Program." Pursuant to this requirement, each department and functional area is required to monitor employee reporting in its area and report out monthly on activities related to employees who report safety issues directly to their departments for investigation and remediation. In accordance with P/I 10.2/4 *Safety Committees*, this is achieved through the LSCs and captured in an Action Log and meeting minutes, which are posted on the SAFE Safety Committee page of the intranet. As the SMS matures dashboards will be utilized to continuously improve how this information is shared and displayed.

SAFE will conduct monthly assessments of the Safety Hotline and any reporting that it or the OIG receives directly, unless the OIG's information is related to an ongoing investigation of SAFE, or anonymity is compromised where it was specifically requested. The OIG will report separately on any investigation of SAFE under Board direction. Departmental and area monthly monitoring information will be provided to the EVP monthly for each area under the EVP's control through the departmental SMS Dashboards safety committees and discussed at the ESC if requested by the Committee. In addition, employee reporting summaries will be made available for access by all departments and areas.

4.1.3 Safety Investigations

WMATA is required to report events as defined by the FTA and the SSOA. Part 674 defines three types of safety events: accidents, incidents, and occurrences, and requires a transit agency (TA) to notify its State Safety Oversight Agency (SSOA) and the FTA within two hours of any event classified as an accident. The FTA defines the following three categories of events:



In addition to the requirements for accident notification set forth in the WMSC Program Standard, WMATA must notify both the WMSC and the FTA within two hours of any accident meeting the definition above that occurs on its rail system. Reporting to the WMSC is defined in the Program Standard, and FTA is notified through the USDOT Transportation Operations Center (TOC) by email at TOC-01@dot.gov (preferred) or at (202) 366-1863. Section II of SOP 800-01 *Incident and Accident Investigations of Rail, Bus, and MetroAccess* describes the SSOA notification and reporting requirements.

The FTA's SMS approach requires investigations to apply the "Organizational Approach;" investigations seek to identify causal factors associated with the organization instead of blaming the person most proximal to the event. Internal investigations of all FTA-defined events are performed by the department or functional area that experienced the event in accordance with the WMATA Incident and Accident Investigation Policy, P/I No. 10.4. Key SMS personnel lead the investigation, and ensure the investigation identifies causal and contributory factors per FTA guidance. SMEs from other departments and the SAFE Investigations Team may support the department in their investigation.

SAFE may investigate hazards or events reported to them outside of departmental or functional area responsibility. Attachment B of SOP 800-01 *Incident and Accident Investigations of Rail, Bus, and MetroAccess* provides a sample final investigation. Each safety investigation evaluates the contributing factors and root causes. Corrective actions are developed by the SAFE investigating entity along with the operational department. These actions are electronically tracked using the Safety Measurement System and monitored through to completion.

SOP 800-1 includes how WMATA interacts with the WMSC when conducting its own investigation. Section 2 – *External Event Notifications* and Section 3 – *Incident and Accident Investigation Process* defines the notification and investigation process, including timelines, investigation milestones, expected reporting outcomes, and how WMATA works with the WMSC. In the event that WMSC leads their own investigation, WMATA will provide the WMSC with the resources and information necessary to conduct the investigation in an effective manner on a timeline set by them. At the conclusion of the investigation, the WMSC provides a draft report to WMATA. SAFE will convene a working group of involved departments to review and comment on the report. WMATA will submit comments to the WMSC within 15 days of receipt of the report.

The following training requirements should be met for SAFE personnel and contractors that conduct investigations on behalf of the WMSC. These requirements should be met within one year of designation.

Minimum training requirements include:

- TSI SMS Awareness
- TSI Safety Assurance
- TSI Rail Incident Investigation
- TSI Rail System Safety
- RWP Level 2
- OSHA 10
- Reid Technique for Interviews

4.1.4 Information Monitoring

WMATA departments and functional areas are each responsible for working with SAFE to identify, collect and analyze the data required to measure the effectiveness of the actions taken to reduce their safety risks as low as reasonably practicable.

This information will be used for three purposes:

1. To ensure all departments and functional areas establish and achieve performance targets related to their daily operations, such as rules and procedure compliance, sufficiency and accuracy of procedures and documentation, safety events, proper management of change, and completion of safety-critical tasks in a timely manner;
2. To ensure that system-wide performance measures are being met through monitoring data associated with them in the appropriate departments; and
3. To ensure, through wide distribution and sharing of safety data and analyses, that all departments and functional areas are aware of trends, hazards, and safety performance in all other departments.

Sources of data at WMATA include, but are not limited to:

- The employee reporting systems, including self-reporting.
- Field reports and observations from supervision and managers.
- Preventive maintenance and other scheduled inspections.
- Results from drills and exercises, and critical incident debriefings from actual emergency events.
- Internal safety audits and internal control reports and activities.
- Quality assurance and quality control inspections, audits and other activities.
- Customer and public comments, complaints and recommendations.
- Employee, passenger and public reports of injury.
- Planning and scheduling data collection.
- Key performance indicators.
- Incident and anomaly reports.
- Investigations (hazards, collisions, derailments, security, etc.);
- NTD data collection and reporting.
- Safety activities (job briefings, awareness campaigns, departmental meetings);
- Safety and security certification, system modification and procurement activities.
- Drug and alcohol compliance programs.

- Training and training QA activities.
- Rules and procedures compliance activities.
- Customer Surveys
- Public meetings.
- Safety committee activities and reports; and
- Transit asset management activities

Each department and functional area will develop a standard operating procedure describing

- The type of data they collect.
- The frequency with which it is analyzed.
- The process of development of annual performance targets and objectives related to SMS compliance, how progress is monitored toward those objectives.
- How data on progress is shared system-wide; and
- How corrective actions for deficiencies or non-compliance in SMS are addressed.

All departments are required to observe their operations, including in the field, and also to gather voluntary, de-identified data and information through its employee reporting program to ensure hazards are identified as soon as possible, that data is collected from the activities to analyze trends and prevent re-occurrences and future adverse consequences. EVPs are expected to be familiar with safety-related data and performance information for each ESC meeting so that deficiencies and lapses may be appropriately addressed in terms of risk and resources system-wide.

4.2 Management of Change

Change management is a process for identifying and assessing changes that may introduce new hazards or impact the transit agency's safety performance.

The FTA provides guidance to the effect that a transit agency must determine how a change may impact its safety performance, then evaluate the proposed change through its Safety Risk Management process to analyze the proper mitigations needed to address risk associated with the change.

The ESC provides management oversight of Metro's safety management systems, including the hazard management process, internal safety and security audit process, safety and security certification process, and environmental management. The ESC also monitors the implementation of ICAPs and ECAPs associated with safety.

A robust SMS requires that the agency understand that all change introduces risk, and that risk must be managed appropriately through the SRM process. Change can introduce new hazards or have an impact on the appropriateness or effectiveness of existing mitigations.

Each department and functional area must, both proactively and through its safety assurance activities, ensure it identifies all change, evaluates it appropriately, and implements mitigations so that risk is managed to acceptable levels during and after the change.

No operations may take place in the changed environment until the change is evaluated to determine the impact on safety; and if there is increased safety risk, the risk is mitigated to an acceptable level.

All changes at WMATA are managed through this process by each department and functional area through its document procedures for change management, which are implemented through the key SMS personnel.

Sources of change at WMATA are:

- External:
    - Regulations
    - Audits
    - Environment; and
    - Passengers
- Internal:
    - Organization
    - Personnel
    - Procedures
    - Equipment; and
    - Systems.

Activities identified to ensure that change is properly identified include the following:

- Monitor service delivery activities (must include field observations);
- Monitor operational and maintenance data;

Assess external information

- Assess employee safety reporting program
- Conduct evaluations of the SMS;
- Conduct safety audits, studies, reviews and inspections;
- Conduct safety surveys; and
- Conduct safety investigations.

4.3 Continuous Improvement

Continuous Improvement is the process by which WMATA examines its safety performance to identify safety deficiencies and carries out a plan to address the identified safety deficiencies. It consists of formal activities designed to evaluate the effectiveness of the SMS.

Specifically, it will:

- Identify the causes of sub-standard performance of the SMS;
- Determine the implications of sub-standard performance of the SMS in operations and maintenance; and
- Eliminate or mitigate such causes.

Its key elements include management of activities through the Safety Risk Management process; proper change management; compliance activities, including those contained herein; and auditing.

The internal controls are primary in this process because they are performed annually and are completed prior to the beginning of the revision process of the ASP. Thus, performance measures for the system, performance targets for the departments and areas, and safety objectives can be keyed to the areas needing improvement.

Once deficiencies in the SMS are identified, corrective action must be implemented.

4.4 Corrective Action Plans

By taking corrective actions, WMATA applies lessons learned to drive continuous improvement. WMATA-INCP-1.11.01 *Corrective Action and Preventive Action Procedure* identifies when CAPs are required. Additionally, under the direction of the Accountable Executive, CAPs are required to address:

- Areas of non-compliances, deficiencies or defects in the SMS
- Risks that require mitigation to an acceptable level
- Areas of non-compliance with internal requirements, legal requirements, or other requirements
- By direction of the WMSC or FTA

Each finding issued by WMSC requires WMATA to develop a suitable CAP. Actions by WMATA oversight entities, such as QICO and SAFE, also require internal CAPs (ICAPs) when areas of noncompliance are identified, or when hazards or risks are identified as part of a safety investigation. A report on QICO ICAPs is provided to the WMSC for review and approval. Based on WMSCs review, additional findings and corresponding CAPs may be required in accordance with the Program Standard. When SAFE's Investigation Team performs an investigation in response to a Safety Event, Recommended Corrective Actions (RCAs) are developed that are designed to mitigate the risk of a re-occurrence. The RCAs are included in the Investigation Reports, which are submitted to the WMSC and subject to their review and adoption in accordance with the Program Standard. Proactive risk mitigations are developed as part of implementing the Safety Risk Management process as described in 3.1, by detecting patterns or trends in data analysis, and through employee safety reporting. The risk mitigations are tracked and managed in the Safety Measurement System. An annual report on risk mitigations will be developed and submitted to the WMSC. At times, an immediate hazard identification or emergency may warrant an expedited corrective action. Executive leadership from the impacted operational departments, along

with SAFE, will be briefed by the subject matter experts of the resulting condition or hazard. This executive working group will develop immediate corrective actions to mitigate the risk. Within 24 hours of the immediate corrective actions, WMATA will provide all information related to the urgent risk and the corrective action that is planned or underway. After a thorough review of the risk where the contributing factors and root causes were identified, the executive working group will develop and implement long term mitigations via a series of corrective actions.

Every CAP requires coordination across relevant WMATA departments to ensure all parties are satisfied, to ensure successful implementation, and to avoid the introduction of unintended hazards. Section 5 of WMATA-INCP-1.11.01, outlines that EVPs/SVPs have the responsibility to: enforce the use of the internal CAP procedure referenced; assign and approve CAPs; ensure effective corrective actions are taken to mitigate risks and non-conformances; and maintain CAP records. Section 6 of WMATA-INCP-1.11.01 describes the procedure of developing a corrective action. CAPs should also include elements that clearly state the identified risk/hazard and intended outcome.

CAPs include the following elements:

- Date the proposed CAP was generated
- Unique CAP number
- Individualized CAP for every finding/recommendation
- Location/source of the finding
- The specific finding or recommendation
- Risk Rating
- Specific deliverables or actionable items
- Anticipated completion date for each item
- Responsible party and department, and
- Date of final approval.

Within 30 days from the date the WMSC issues a finding or recommendation, WMATA will propose a CAP; QICO manages the submittal process, which includes working with the responsible departments on developing a CAP and actionable items that address the finding or recommendation. The WMSC will provide a response to the proposed CAP within 14 days, either approving the CAP or providing comments for adjustments. WMATA will address any noted deficiencies within 14 days, followed by a 14-day WMSC response time. This process will continue until the CAP is approved by the WMSC. WMATA will take the interim steps required to mitigate the risk and provide other safety improvements while CAPs are under development and review in coordination with QICO. These interim steps will be communicated to the WMSC.

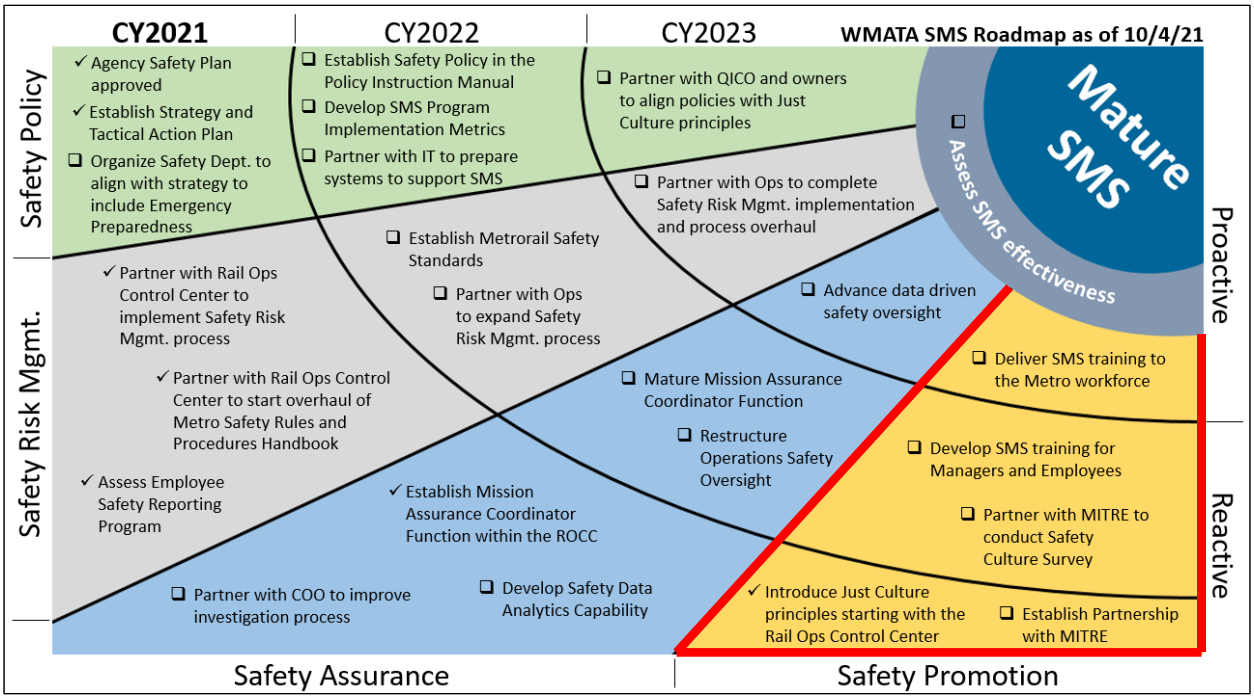
QICO facilitates meetings quarterly with CAP owners to review and receive updates (meetings occur more frequently as deemed necessary). These meetings may be attended by the WMSC; appropriate WMATA representatives from QICO and operating departments will be present to discuss CAP implementation and provide any requested verification documentation to the WMSC. Additionally, QICO maintains a publicly-available site where all CAP statuses are updated monthly; that site is: https://www.wmata.com/initiatives/transparency/

4.5 Documentation, Definition, and Acronyms

Led by the SAFE Director of Safety Policy and Promotion, WMATA is converting to *MetroDocs* as the agency's primary documentation management system. Before and up to completion of the transition to *MetroDocs* each department determines their own system for meeting records management requirements, which is documented as part of their QMP. The SAFE Department has completed the transition to *MetroDocs*. This ASP and key SMS documentation are maintained in *MetroDocs* and that is the official place to pull the latest information available. The documentation archived in *MetroDocs* will be maintained in the system for no less than three years from the date of their publication (the system has the ability to track timing). Applicable definitions and acronyms are maintained as part of this ASP (refer to Appendix A and D). In accordance with WMSC's Program Standard:

- Not less frequently than every three months, WMATA issues a notification to all WMATA officials, employees, consultants, and contractors directing all such personnel to cooperate and respond immediately to any and all requests made by WMSC personnel and to promptly provide any requested information directly to the WMSC.
- WMATA includes this notification as part of every new employee on-boarding. For contractors, WMATA includes this notification to the contractor in each authorization to begin work.
- In addition, WMATA must not retaliate against any official, employee, consultant, or contractor who interacts with the WMSC. WMATA may not proscribe or otherwise discourage communication, cooperation, or the sharing of information with the WMSC. This is also conveyed in the notification.
- WMATA will also cooperate and respond immediately to provide information to Federal entities (DOT, FTA, NTSB, etc.) upon request.

5.0 Safety Promotion



The ultimate goal of Safety Promotion is to shape and reinforce the safety culture required to ensure the long-term, sustained effectiveness of SMS. To achieve the safety culture envisioned, WMATA is aligning polices and procedures with Just Culture principles. Applying these principles means that distinctions are made among honest mistakes, at-risk behaviors, and intentional disregard for safety. In CY2021, the approach to Safety Promotion was consistent with the overall strategy to establish the ROCC as center of excellence for SMS and then expand. The milestone *Introduce Just Culture principles starting with the Rail Ops Control Center* resulted in the development of a new conduct review process. The process emphasizes fairness, use of positive and constructive language, and acknowledgement of intent rather than consequence, with a goal of improving operational efficiency and equipping managers with the tools to make consistent and fair decisions. ROCC personnel also completed instructor-led SMS training, which featured how to submit safety concerns and make a good-faith challenge, both are effective when a culture exists where employees feel comfortable speaking up. Additionally, SAFE has initiated the process to establish complete the milestone *Establish Partnership with MITRE*, a federally funded non-profit that specializes in applying data sciences to advance safety in the Transportation. In accordance with 49 CFR Part 673.29 *Safety Promotion* incudes:

- 5.1 – Competencies and Training
- 5.2 – Safety Communication

In CY2022, SAFE will seek to formalize WMATA's understandings of its cultural baseline by completing the milestone *Partner with MITRE to conduct Safety Culture Survey.* The partnership with MITRE will also focus on transforming the Employee Safety Reporting Program and advancing SAFE's data analytics capabilities. The milestone *Develop SMS training for Managers and Employees* will be completed by incorporating lessons learned to improve upon the training completed with the ROCC. Implementing this training over the course of CY2022 and CY2023 (to include contractors and refresher training) is

considered a priority for shaping and advancing the WMATA's safety culture. The Safety Promotions Manager will capitalize on SAFE's partnership with CSCM to increase communications, engaging both the workforce and public on the efforts we are taking to continuously improve safety at Metro.

5.1 Competencies and Training

Instruction in safe methods of operation and safety procedures is included in manuals, handbooks, and other documentation developed for the training and certification of operations and maintenance personnel. Each department has developed training systems that include in-house classroom training, on-the-job training, equipment safety training, and testing. Each department is responsible for establishing safety-training requirements in conjunction with SAFE. SAFE teaches occupational and environmental safety training at the Carmen Turner Facility (CTF) Safety Training Academy or WMATA facilities and maintenance shops.

Managers are required to review training records periodically to ensure employees are in compliance with training and certification requirements. Employees have the responsibility to review their training records periodically for the purpose of understanding the training requirements associated with their occupation and their completion status. SAFE evaluates departmental safety training programs and provides technical expertise as necessary. Identification of protective devices and emergency equipment is included in the training documentation and instruction.

In addition, safety posters, bulletins and notices are used as appropriate to enhance safety awareness during all phases of system operations. SAFE's Operations Safety Oversight Team monitors training content is monitored and suggestions for improvement are provided to operating offices. Proficiency demonstrations and certifications are required of all operations and maintenance personnel. Safety concerns are incorporated in safety briefings given to personnel prior to their working with equipment or in facilities. A comprehensive listing of safety-related classes may be found in Appendix E.

5.1.1 Employee Safety Training

Safety training is conducted by multiple departments. Each department is responsible for establishing training requirements and assuring that the necessary training is accomplished. The following safety-related courses are provided:

New Employee Orientation – Employee orientation is conducted for all new WMATA employees to inform them of the Authority's current departmental programs and procedures, along with SAFE's program requirements for new WMATA employees.

All new employees must attend mandatory safety training including: Emergency Response Awareness Training for Non-operating Personnel or Roadway Worker Protection Training (RWP) for operating personnel; Personal Protective Equipment; Hazard Communication; and Blood Borne Pathogen Training if applicable. In addition, all new employees receive training on the Agency Safety Plan and Hazard Management Program.

First Aid and CPR Training – First Aid, CPR and Automatic External Defibrillator (AED) training is provided to station managers and other employees, as required by class specification. MTPD personnel receive this training at the Police Training Academy and refresher training during mandatory in-service retraining. The American Red Cross or other nationally accredited courses and instruction methodologies are used for First Aid, AED and CPR.

Special Safety Presentations – Special safety training presentations are made at work locations to instruct employees on methods to prevent traffic, passenger, and employee accidents.

Hazardous Materials/Hazard Communication Training – All maintenance and support personnel who are required to use chemicals and hazardous or toxic substances are trained in the safe use of such substances. Employees who move to new positions are provided training in the use of any new chemicals that they may be assigned to use by the supervisor.

Safety Related Operations and Maintenance Training – Categories of safety related work include, but are not limited to, train operators, bus operators, non-revenue (service) vehicle and equipment operators, maintenance of way employees, rail car maintenance employees, elevator and escalator maintenance employees, supervisors, ROCC and Safety personnel, BMNT employees and police officers.

Safety training is embedded in the technical and operations training courses provided to these categories of employees.

- Safety training is conducted on Metrorail and Metrobus procedures and rules. WMATA's Standard Operating Procedures and Employee Rulebook are issued to all employees who work on the rail and bus system.
- All new train operators are given the Train Operator Training Course, which covers rules, procedures, and actual train operation with an instructor. Each new train operator candidate is certified by RSTO with both written and practical testing to validate operational readiness and knowledge of operating and safety rules and procedures.

  Annually, each train operator is given a refresher course on the rules and procedures. All train operators are re-certified every two years with written and practical testing by RTRA, through the Performance Standardization Program. Each train operator who fails the annual examination is given special retraining. The special retraining focuses on the specific areas the train operator failed. After the special retraining is completed, the train operators must successfully pass the annual examination. Failure to pass the exam by the third attempt results in disqualification as reflected in the Performance Standardization Program Manual for Train Operations. The preparation, administration, and maintenance of these examinations and related records are the responsibility of the employee's department/office. Supervisors perform "ride checks" on train operators to assess knowledge of train operations and MSRPH.
- New Student Bus Operator Candidates are responsible for attending and successfully completing WMATA's bus operator training course. The students learn and adheres to all safety and traffic rules, company regulations, policies and procedures to ensure the well-being of WMATA customers, employees, the public and themselves.
- New MetroAcess contractor operators are provided with the MetroAccess Operator training course. Annual refresher training is provided, and WMATA contractor supervisors perform "ride checks" and observations of operator performance.

5.1.2 Safety Rules and Procedures Training

COO personnel are trained to perform in accordance with the safety rules and procedures applicable to their office. OPMS provides job familiarization training to technical skills employees, which includes an

overview of basic job safety and applicable MSRPH rules. All new SMNT, TRST and CMNT Employees receive new hire familiarization training from OPMS which covers, MSRPH, Safety, Maximo (where applicable), and initial craft training.

All new and existing employees of WMATA who will perform work on the Metrorail system ROW are required to attend an initial RWP safety training class conducted by TSMT that has been approved by SAFE, prior to beginning work.

For RWP training:

- An RWP exam is given to the employee, to test their knowledge on the facts of RWP.
- A certification ID badge is issued by TSMT, upon successfully passing the RWP exam.
- RWP Safety Training is conducted by TSMT (for non-Operations personnel and contractors requiring level 2 or 4 CRWP) and SAFE (for contractors requiring level 1 CRWP).
- Successful completion of refresher training is required annually.

The rules and procedures for each office are established by the appropriate office and coordinated with SAFE. Violations of Metrorail or Metrobus rules, regulations, and/or procedures may result in disciplinary action (cautions, retraining, reprimand, disqualification, suspensions, or dismissals) in accordance with the rulebooks, policies and the union contract.

Emergency Preparedness Training – Front-line employees are provided training on the National Incident Management System through FEMA's NIMS-700 online course. Non-operating employees are provided Emergency Response Awareness Training, as part of New Employee Orientation. Existing non-operating personnel are also provided this training by their assigned departments. Operating employees are provided emergency response training, "Warning Signs" developed by the National Transit Institute. This training is provided by the departments to which employees are assigned. Bus and rail employees are also provided fire extinguisher training, where they extinguish a fire using an extinguisher.

Joint Supervisor Training – Personnel from jurisdictional law enforcement, fire departments and transportation departments are provided training in their role to manage traffic and pedestrian flow in the event of a major Metrorail service delay.

Industrial Hygiene Training and Education – Employees who use or come in contact with chemical, physical or biological hazards receive training in hazard mitigation, industrial hygiene principles and in the care and use of personal protective equipment. SAFE and HR/OHAW provide training in the proper handling of biologically contaminated materials such as tools, syringes and clothing.

OSH Required Safety Training - The following required OSH training courses are identified in the training database for each job classification as required by employee position descriptions and work assignments:

- Personal Protective Equipment
- Respiratory Protection
- Hearing Conversation
- Cranes
- Powered Work Platforms
- HAZWASTE Management

- Hazard Communication
- Permit Required Confined Space
- Confined Space Awareness
- Powered Industrial Truck
- Electrical Safety
- Fall Protection
- Aerial Lifts
- HASWASTE Emergency Response
- First Responder
- Environmental Compliance Officer
- DOT Hazardous Materials
- Fire Extinguisher Training
- Lockout/Tagout
- Other courses as required

5.1.3 Contractor Safety

Contractors are responsible for ensuring compliance with WMATA requirements along with the applicable occupational safety and health statutes and regulations of the District of Columbia, State of Maryland, Commonwealth of Virginia or political subdivision in which the work is being performed, and the U. S. Department of Labor OSH standards.

Contractors who perform work on, or interface with the operating system are required by contract to verify that supervisors and assigned employees attend contractor RWP training. Each contract also requires compliance with applicable Federal and state Occupational Safety and Health regulations.

Contractors must submit to project management all required safety training certifications and documentations of course completion that are pertinent to the work to be performed under the contract. SAFE reviews the certifications and documentation to verify that they are valid and that the training meets all current requirements. SAFE also performs regular safety inspections and audits of contractor work sites to review training records and assess contractor safety compliance. Any deficiencies identified by SAFE are brought to the attention of the contractors' project managers by the Safety Officers performing the oversight for corrective action. The Safety Officer also coordinate their findings with the WMATA project management office.

The contractor must submit a construction safety plan to WMATA's representative for review prior to commencement of work. The contractor must within five (5) days after receipt of Notice to Proceed (NTP), submit through WMATA's representative to SAFE, a request for the Authority to schedule and conduct the roadway worker protection training for all contract personnel who will be engaged in the performance of contract work on or above the Roadway.

SAFE will schedule and conduct contractor roadway worker protection training for all contractors requiring level 1 RWP. Contractor training and certification must be renewed annually. The contractor must not perform work at the contract site(s) on or above the Roadway, until all personnel of the contract work force have attended the RWP training and have been furnished evidence of completion. The contractor must also follow all applicable MSRPH rules and procedures while working in the operating rail system. Other training may include, but not be limited to, Confined Space Training. Copies of training documents must be forwarded to SAFE prior to work. Additional Contractor requirements may be found at the Construction Safety and Environmental Manual located on the SAFE website.

5.1.4 Training Recordkeeping

Training records are maintained in a central training database that is available to supervisors and employees. The course owners (i.e., those giving the course) are responsible for updating and maintaining their training rosters in this database. RWP training records for employee's safety training are maintained and administered by TSMT. TSMT will supply to HRTM the results of initial training and recertification RWP testing for their records. RWP training records for contractor's safety training are maintained and administered by SAFE.

5.1.5 Compliance with Training Requirements

Training requirements for each position and employee are included in the training database. Audits can be performed using the database to review training records of individual employees to determine compliance with training requirements. Per the QMSP, each department head or their designee's responsibility is to develop and maintain a required training matrix for each position and employee within their department and to verify that the matrix is updated and maintained. Periodic notifications are sent to supervisors if required courses are not completed within the required period.

5.1.6 SMS-specific Training Requirements

The FTA has provided in its guidance documentation for 49 CFR 673.29 its expectation that each transit agency establishes a comprehensive safety training program for those directly responsible for safety. WMATA has identified three SMS employee categories whose training is based on their SMS involvement:

- Individuals directly responsible for safety must meet the requirements of 49 CFR 672 (Public Transportation Safety Certification Training Program), including a 2-year refresher training interval. These individuals are those whose primary job function includes the development, implementation, and review of the agency's safety plan, 49 CFR 672 requirements, or the SSOA requirements.

  This group includes the EVP and ACSO, VP and ACSOs, Deputy Chief of Safety Risk Management, Deputy Chief of Safety Assurance, Director of Safety Policy and Promotion, Deputy Chief of Safety Certification and Engineering, Director of Operations Safety Oversight, Director of Safety Investigations , the Fire Marshal, and VP of Quality Assurance, INCP .

- Safety Risk Coordinators are present at the departmental level and are designated to support the Accountable Executive and CSO in implementing and operating this ASP. These individuals are identified in Appendix C by job title. Required training includes: (a) One (1) hour course on SMS Awareness (FTA/TSI E Learning); Two (2) hour course on Safety Assurance (FTA/TSI E Learning) and a 20-hour course on SMS Principles for Transit (FTA/TSI, instruction-led)

- WMATA SMS training for Managers and Employees will be completed by incorporating lessons learned to improve upon the training completed with the ROCC. This training will be developed and implemented over the course of CY2022 and CY2023 (to include contractors and refresher training). The fundamental components of this training will include:
  - Overview of the four components of SMS
  - Required notifications reflected in the WMSC Program Standard
  - Safety Event Reporting and Investigations

- Close Call and Employee Safety Reporting
- SMS Dashboard Access and Usage
- SRCs and Submitting Risks
- Human Factors Awareness (Drug and Alcohol, Fatigue, etc.)

5.2 Safety Communication

Effective safety communication is one of the foundational philosophies of SMS. Its purposes are to:

- Ensure that personnel are aware of the SMS;
- Convey safety-critical information;
- Explain why particular safety actions are taken;
- Explain why safety procedures are introduced or changed; and
- Provide feedback on employee-reported hazards and safety concerns.

The primary safety communication responsibility of Executive Management at WMATA under the requirements of 673.23(c) is to actively and personally communicate the Safety Management Policy to all employees and contractors. Any changes to the Safety Management Policy must be approved and distributed by the ESC to all employees. This is primarily implemented through the committee process, but every executive is also required to visibly endorse the Safety Management Policy to employees in the area they control.

5.2.1 Hazard and Safety Risk Information

Information on Hazards and Safety Risks relevant to employees' roles and responsibilities is primarily conveyed through Job Hazard Analyses (JHAs). These JHAs are conducted using OSHA's methodology, both by SAFE and operational departments, in concert with SMEs and/or the Safety Risk Coordinator of that area. JHAs are maintained on the SAFE internal website by Occupational Safety and Health Program Administrators. The JHAs are reviewed and updated whenever new processes are introduced.

Employees may also obtain relevant job hazard information by the GHS Safety Data Sheet (SDS), referenced below in the Hazardous Materials section. Finally, hazards present in the hazard management database are accessible to employees. These hazards are identified by mode and location, so that employees may review any that may be present in their workplace.

Formal hazards and resulting mitigations identified as part of the Safety Risk Management component will be made available for employees to query by location and/or department through the risk register/hazard management database. Additionally, employee safety reporting hazards will be communicated to personnel through a quarterly newsletter published by SAFE.

5.2.2 Safety Committees

The Executive Safety Committee (ESC) is the primary group responsible to provide guidance and direction to the agency and to the Accountable Executive on acceptable and unacceptable risk, resource allocation, the status of SMS implementation for each of their areas of control and the promulgation of safety policy and SMS agency-wide.

The ESC is composed of the Accountable Executive and all Executive Vice Presidents reporting to the Accountable Executive. Its Chair is the SMS Executive, the Chief Safety Officer. Members may invite departmental and area personnel and SMEs to attend on an as-needed basis, but they do not have voting powers. The ESC may establish subcommittees, such as the SCRC and the Rules Subcommittee (see next paragraph), on an as-needed basis. The ESC meets monthly, and the agenda for the ESC will be published in advance. Each EVP may present a report on the SMS status of their area of control (all four components) as well as address any deficiencies, resource issues, investigations. or corrective actions ongoing in the area with the other members of the ESC. Each EVP may also report progress on safety performance measures, targets and objectives. The ESC is established under WMATA's Policy/Instruction No. 10.2 – Safety Committees.

WMATA Policy/Instruction No. 1.1/3 –Document Governance and Hierarchy establishes procedures for development, revision, maintenance, management, and enforcement of rulebooks. The ESC provides oversight and executive management review of this process to ensure consistency and the integrity of the rules and procedures modification process. These revisions are made on an as-needed basis. The Rail Safety Standards Committee (RSSC) charged with, in part, ensuring Metro safety standards are developed, written, communicated and followed in a consistent manner.

Special Orders, Permanent Orders or Temporary Orders are issued as interim measures until permanent changes are made in the MSRPH. To ensure the appropriate level of executive management oversight, the MSRPH, RWPM, BSEH, and Special Orders, Permanent Orders, Temporary Orders and Change Orders that modify or are intended to permanently establish rules and procedures are issued under the authority and signature of the Accountable Executive.

Under the requirements of 673.29(b), FTA has provided guidance that the ESC must provide information on hazard resolution and SRM, safety performance, and resource issues agency-wide. This is implemented through the ESC's reporting to the lower-level safety committees listed below. In addition, the ESC may provide monthly reports on SMS status to the SSOA.

The Departmental Safety Committees (DSCs) are technical management-level safety committees that serve as the intermediary between the respective Local Safety Committees (LSCs) and the ESC. WMATA currently has DSCs for Bus, Rail and Access Services, as well as MTPD, CMNT, PLNT, SMNT and ELES. A SAFE representative attends each DSC and provides support and guidance to the committee in the SRM and hazard management process according to their charter. Unresolved hazards from the DSC are forwarded to the ESC. DSCs are authorized to re-structure membership as required by their needs.

Local Safety Committees are front-line level safety committees established to address local safety issues through the Safety Risk Management process and to assist in developing effective safety programs. There is typically one LSC at every major facility, and all crafts and employee categories must have available representation on an LSC. The LSCs establish and foster a close working relationship with employees, unions, and management regarding safety issues. Employees are trained that they may report any perceived safety issue or hazard to their LSC representative for investigation and resolution if they choose to do so. SAFE staff also serve as advisors to the LSCs. Membership is determined by each individual committee charter and will include local supervision, union representation, and non-management employees. Unresolved hazards from the LSC are forwarded to the DSC, and in the absence of a DSC, directly to the ESC.

5.2.3 Hazardous Materials

The maintenance and support personnel who are required to use chemicals and hazardous or toxic substances are trained in the safe use of such substances. Employees who move to new positions are provided training in the use of any new chemicals that they may be assigned to use by the supervisor. SAFE is responsible for developing procedures that ensure compliance with the hazardous materials standards and implementing the safety assurance process for hazardous materials.

The GHS Safety Data Sheet (SDS) review process is incorporated into OAP 200-05 Hazard Communication Program. All chemicals and hazardous materials used by WMATA employees or in the WMATA operating system shall be evaluated and approved by SAFE prior to use or testing of the product, in accordance with the Hazard Communication Program.

The affected organization must ensure that SAFE has reviewed and has submitted written approval of requested chemicals, prior to procurement, including procurement utilizing blanket orders, petty cash, purchase cards, construction specifications or equipment specifications.

PRMT does not process requests for chemical products without written approval from SAFE and an approved SDS number on file for that product. PRMT will implement the required quality control procedures to ensure that only chemical and hazardous materials, previously reviewed and approved by SAFE and assigned a unique SDS number, are accepted by the receiving storerooms. Substitutes for chemical products and hazardous materials will have prior SAFE review and approval.

The users of any approved product must read the Evaluation/SDS Approval prior to using the product and follow all instructions and precautions. SAFE may conduct site visits where chemicals are being used to ensure that workers are aware of the hazards and that they are using the proper PPE. Access to the approved SDSs is available through the intranet on SAFE page. Departments whose employees use hazardous materials may also have links from their departmental websites to the SDS Website.

5.2.4 Environmental Management

All executives, directors, managers, supervisors and employees are responsible for environmental compliance and have a personal and corporate responsibility to incorporate this commitment into daily activities and functions. Environmental management and compliance must be integrated into all appropriate decision-making procedures, programs, tasks and other activities a component for addressing environmental concerns and requirements.

Industrial, maintenance, support and construction activities at WMATA must comply with applicable federal, state and local environmental protection laws, standards and regulations.

The Environmental Management Policy and Manual (EMPM) serves as the foundation for WMATA's environmental program and the Environmental Standard Operating Procedures (ESOPs) serve as a daily operations reference for environmental compliance. Specific environmental management policies and procedures are included in the following documents: WMATA's EMPM (SAFE/EMAC Website); WMATA's ESOPs (SAFE/EMAC Website); WMATA Environmental Design Criteria (DECO Website); and WMATA's Construction Safety and Environmental Manual (SAFE Website).

Senior managers at each facility are assigned collateral duties as Environmental Compliance Officers (ECOs) and Deputy Environmental Compliance Officers (DCOs). These individuals are trained to perform their compliance duties and are responsible for ensuring compliance with applicable environmental

regulations. SAFE is responsible for providing technical advice to the ECOs and DCOs and for monitoring regulatory compliance.

5.2.5 Drug and Alcohol Compliance

WMATA has developed a Substance Abuse Policy and Employee Assistance Program to ensure a safe environment for the public and WMATA employees.

The Office of Occupational Health and Wellness (OHAW) has primary responsibility for administering a Substance Abuse Testing Program in accordance with 49 CFR Part 40 - Procedures for Transportation Workplace Drug and Alcohol Testing Programs and 49 CFR Part 655 - Prevention of Alcohol Misuse and Prohibited Drug Use in Transit Operations. WMATA Policy/Instruction No. 7.7.3/6 - Drug and Alcohol Policy and Testing Program establishes requirements and responsibilities for administering the required programs. The Employee Assistance Program supports the agency through referring employees to appropriate medical and/or rehabilitation treatment, and counseling for a variety of issues that may interfere with employees being able to safely perform job responsibilities, tasks and activities.

OHAW provides safety assurance for this program and monitors the Drug and Alcohol Testing Program for WMATA's safety-sensitive Contractors to ensure Metro's compliance with FTA regulations.

Appendix A – Definitions

Accident Event involves any of the following: A loss of life; a report of a serious injury to a person; a collision of public transportation vehicles; a runaway train; an evacuation for life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause. 49 CFR 673.5

Accident Event involves any of the following: A loss of life; a report of a serious injury to a person; a collision involving a rail transit vehicle; a runaway train; an evacuation fir life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause. 49 CFR 674.7

Accountable Executive means a single, identifiable person who has ultimate responsibility for carrying out the Public Transportation Agency Safety Plan of a public transportation agency; responsibility for carrying out the agency's Transit Asset Management Plan; and control or direction over the human and capital resources needed to develop and maintain both the agency's Public Transportation Agency Safety Plan, in accordance with 49 U.S.C. 5329(d), and the agency's Transit Asset Management Plan in accordance with 49 U.S.C. 5326.

Administrator means the Federal Transit Administrator or the Administrator's designee.

Chief Safety Officer means an adequately trained individual who has responsibility for safety and reports directly to a transit agency's chief executive officer, general manager, president, or equivalent officer. A Chief Safety Officer may not serve in other operational or maintenance capacities, unless the Chief Safety Officer is employed by a transit agency that is a small public transportation provider as defined in this part, or a public transportation provider that does not operate a rail fixed guideway public transportation system.

Contractor means an entity that performs tasks through a contract or other agreement.

Corrective action plan means a plan developed by a Rail Transit Agency that describes the actions the Rail Transit Agency will take to minimize, control, correct, or eliminate risks and hazards, and the schedule for taking those actions. Either a State Safety Oversight Agency or FTA may require a Rail Transit Agency to develop and carry out a corrective action plan.

Equivalent Authority means an entity that carries out duties similar to that of a Board of Directors, for a recipient or subrecipient of FTA funds under 49 U.S.C. Chapter 53, including sufficient authority to review and approve a recipient or subrecipient's Public Transportation Agency Safety Plan.

Event means any Accident, Incident, or Occurrence.

FRA means the Federal Railroad Administration, an agency within the United States Department of Transportation.

FTA means the Federal Transit Administration, an operating administration within the United States Department of Transportation.

Hazard (1) means any real or potential condition that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment.

Incident means an event that involves any of the following: A personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a transit agency.

Investigation means the process of determining the causal and contributing factors of an accident, incident, or hazard, for the purpose of preventing recurrence and mitigating risk.

National Public Transportation Safety Plan means the plan to improve the safety of all public transportation systems that receive Federal financial assistance under 49 U.S.C. Chapter 53

Occurrence Event without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt the operations of a transit agency.

Operator of a public transportation system means a provider of public transportation as defined under 49 U.S.C. 5302(14).

Performance Measure means an expression based on a quantifiable indicator of performance or condition that is used to establish targets and to assess progress toward meeting the established targets.

Performance target means a quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the Federal Transit Administration.

Person means a passenger, employee, contractor, consultant, pedestrian, trespasser, or any individual on the property of a rail fixed guideway public transportation system.

Public Transportation Agency Safety Plan means the documented comprehensive agency safety plan for a transit agency that is required by 49 U.S.C. 5329 and this part.

Public Transportation Safety Certification Training Program means either the certification training program for Federal and State employees, or other designated personnel, who conduct safety audits and examinations of public transportation systems, and employees of public transportation agencies directly responsible for safety oversight, established through interim provisions in accordance with 49 U.S.C. 5329(c)(2), or the program authorized by 49 U.S.C. 5329(c)(1).

Rail Fixed Guideway Public Transportation System (RFGPTS) means any fixed guideway system that uses rail, is operated for public transportation, is within the jurisdiction of a State, and is not subject to the jurisdiction of the Federal Railroad Administration, or any such system in engineering or construction. Rail fixed guideway public transportation systems include but are not limited to rapid rail, heavy rail, light rail, monorail, trolley, inclined plane, funicular, and automated guideway.

Rail Transit Agency means any entity that provides services on a rail fixed guideway public transportation system.

Risk means the composite of predicted severity and likelihood of the potential effect of a hazard.

Risk Mitigation means a method or methods to eliminate or reduce the effects of hazards.

Safety Assurance means 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.

Safety Management Policy means a transit agency's documented commitment to safety, which defines the transit agency's safety objectives and the accountabilities and responsibilities of its employees in regard to safety.

Safety Management System (SMS) means the formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of a transit agency's safety risk mitigation. SMS includes systematic procedures, practices, and policies for managing risks and hazards.

Safety Management System (SMS) Executive means a Chief Safety Officer or an equivalent.

Safety Performance target means a Performance Target related to safety management activities.

Safety Promotion means a combination of training and communication of safety information to support SMS as applied to the transit agency's public transportation system.

Safety Risk Assessment means the formal activity whereby a transit agency determines Safety Risk Management priorities by establishing the significance or value of its safety risks.

Safety Risk Management (SRM) means a process within a transit agency's Safety Management System for identifying hazards and analyzing, assessing, and mitigating safety risk.

Serious Injury means any injury which:

1) Requires hospitalization for more than 48 hours, commencing within 7 days from the date of the injury was received;

2) Results in a fracture of any bone (except simple fractures of fingers, toes, or noses);

3) Causes severe hemorrhages, nerve, muscle, or tendon damage;

4) Involves any internal organ; or

5) Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.

Small public transportation provider means a recipient or subrecipient of Federal financial assistance under 49 U.S.C. 5307 that has one hundred (100) or fewer vehicles in peak revenue service and does not operate a rail fixed guideway public transportation system.

State means a State of the United States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, and the Virgin Islands.

State of good repair means the condition in which a capital asset is able to operate at a full level of performance.

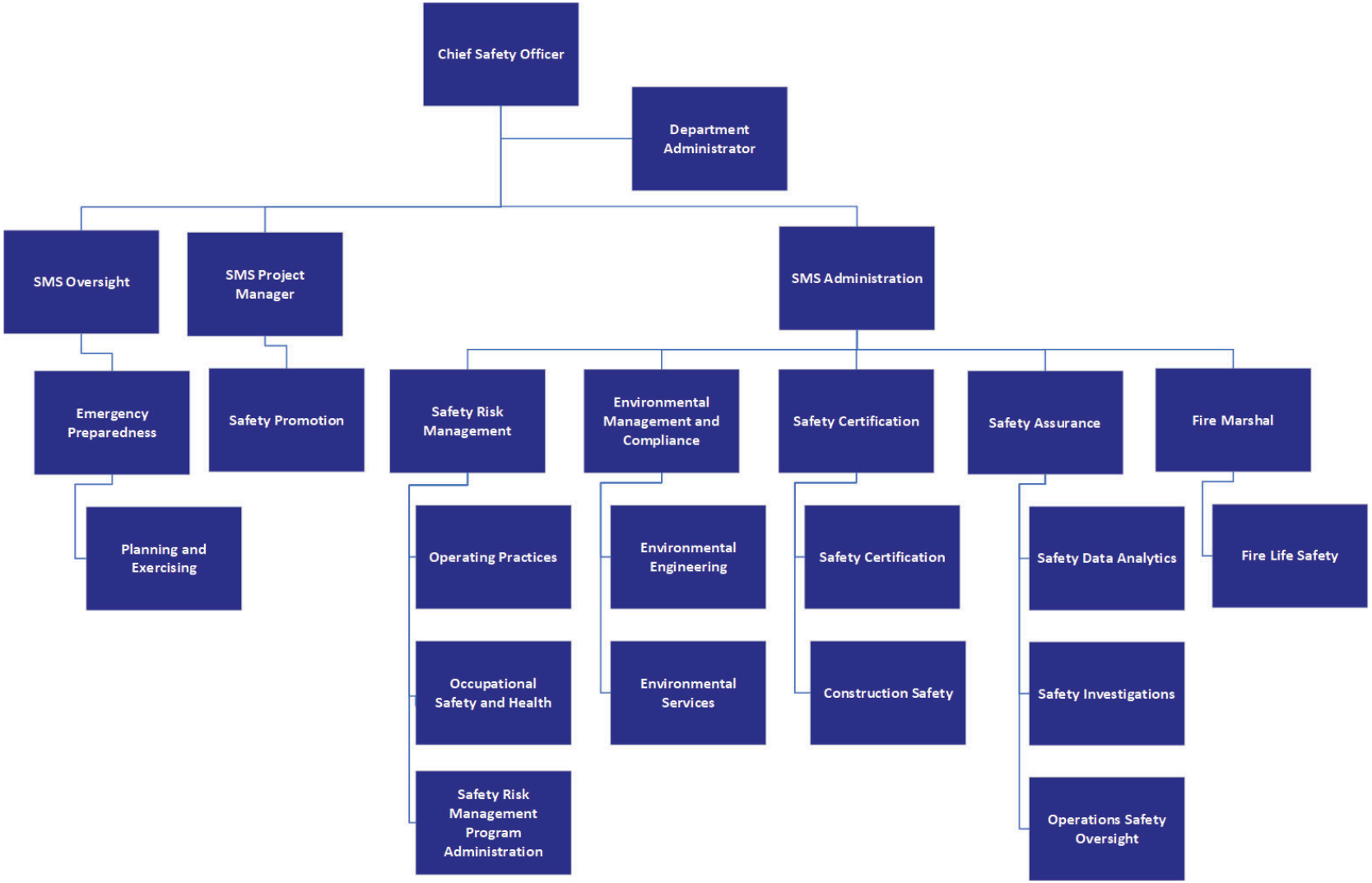
State Safety Oversight Agency (SSOA) means an agency established by a State that meets the requirements and performs the functions specified by 49 U.S.C. 5329(e) and the regulations set forth in 49 CFR part 674.

Transit agency means an operator of a public transportation system.

Transit Asset Management Plan means the strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risks, and costs over their life cycles, for the purpose of providing safe, cost-effective, and reliable public transportation, as required by 49 U.S.C. 5326 and 49 CFR part 625.

Vehicle means any rolling stock used on a rail fixed guideway public transportation system, including but not limited to passenger and maintenance vehicles

Appendix B – SAFE Current State Organizational Chart


Chief Safety Officer
Department Administrator
SMS Oversight
SMS Project Manager
SMS Administration
Emergency Preparedness
Safety Promotion
Safety Risk Management
Environmental Management and Compliance
Safety Certification
Safety Assurance
Fire Marshal
Planning and Exercising
Operating Practices
Occupational Safety and Health
Safety Risk Management Program Administration
Environmental Engineering
Environmental Services
Safety Certification
Construction Safety
Safety Data Analytics
Safety Investigations
Operations Safety Oversight
Fire Life Safety

Appendix C – Safety Risk Coordinators

Organization	Job Title
CAPD	Director, Capital Improvement Program
CFO	Director, Management and Analysis
ROCC	SMS Program Manager
COO - ACCS	Operations Manager
COO - BTRA	Superintendent
COO - BMNT	Department Safety Coordinator
COO - MTPD	Deputy Chief
COO - RTRA	Assistant Superintendent Field Train Operations
COO - RIME	Special Project Manager
COO - MOWE	Chief
COO - CMOR	Assistant General Superintendent
COO - SCM	Director Storerooms and Material Logistics
COO - OBPP	Project Manager
COO - REAM	Director, TAMO
COO - FSVT	Directory, Facilities Asset Management
COUN	COUN Advisor for Safety
EXRL	Federal Relations Officer
IBOP	Strategic Executive Support Administrator
INCP	MARC Director Risk Advisory Services
INCP	QICO Director
SAFE	Safety Operations Manager
SPPM	Director, Capital Planning and Program Development

Note: Assignments are subject to change due to staffing adjustments. Visit the SAFE website for the most recent version and personnel contact information.

Appendix D – Acronyms

ACCS	Access Services
ACSO	Assistant Chief Safety Officer
ACCT	Office of Accounting
ADA	Title I of the Americans with Disabilities Act
AED	Automatic External Defibrillator
ASP	Agency Safety Plan
ATC	Automatic Train Control
ATCM	Automatic Train Control Maintenance
BMNT	Bus Maintenance
BTRA	Bus Transportation
BUS	Bus Services
BUSV	Department of Bus Services
C3RS	Confidential Close Call Transit Safety Reporting System
CAP	Corrective Action Plan
CAP-D	Department of Capital Delivery
CBT	Computer Based Training
CDL	Commercial Driver's License
CENV	Chief Engineer Vehicles
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CIPSEA	Confidential Information Protection and Statistical Efficiency Act
CFR	Code of Federal Regulations
CMOR	Chief Mechanical Office
CMNT	Office of Car Maintenance
COMM	Office of Communications Sections
COO	Chief Operations Officer
COOP	Continuity of Operations Plan
COUN	Counsel Advisor for Safety
CPO	Office of Performance
CPR	Cardiopulmonary Resuscitation
CRWP	Contractor Roadway Worker Protection
CSCM	Customer Service, Communications and Marketing
CSO	Chief Safety Officer
CSVC	Office of Customer Service
CTF	Carmen Turner Facility
CY	Calendar Year
DC	District of Columbia
DCO	Deputy Environmental Compliance Officer
DOT	Department of Transportation
DSC	Departmental Safety Committees
ECO	Environmental Compliance Officer
ELES	Office of Elevators and Escalators
EMAC	Environmental Management and Compliance

EMPM	Environmental Management Policy and Manual
EMT	Executive Management Team
ENGA	Office of Engineering and Architecture
EOP	Emergency Operations Plan
ERM	Enterprise Risk Management
ESC	Executive Safety Committee
ESOP	Environmental Standard Operating Procedure
EVP	Executive Vice President
EXRL	External Relations
FAMO	Facilities Asset Management Office
FEMA	Federal Emergency Management Agency
FERP	Flood Emergency Response Plan
FOIA	Freedom of Information Act
FSVT	Facilities, Systems, and Vertical Transportation Maintenance
FTA	Federal Transit Administration
GM	General Manager
GOVR	Office of Government Relations
HAZWASTE	Hazardous Waste
HR	Human Resources
HVAC	Heating, ventilation, and Air Conditioning
IBOP	Internal Busines Operations
ICAP	Internal Corrective Action Plan
INCP	Internal Compliance
IPLN	Office of Intermodal Planning
IT	Information Technology
JHA	Job Hazard Analyses
KMSRA	Keeping Metro Safe, Reliable, and Affordable
KPI	Key Performance Indicator
LAND	Office of Real Estate and Parking
LVEM	Office of Low Voltage Electrical Maintenance
LSC	Local Safety Committee
MARC	Management Audits, Risk & Compliance
MD	Maryland
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MOWE	Maintenance of Way Engineering
MPLN	Maintenance Planning and Scheduling
MSRPH	Metro Safety Rules and Procedure Handbook
MTPD	Metro Transit Police Department
MWCOG	Metropolitan Washington Council of Governments
NIMS	National Incident Management System
NTD	National Transit Database
NTP	Notice to Proceed
NTSB	National Transportation Safety Board
OBPP	Office of Budget, Planning, and Performance
OEP	Office of Emergency Preparedness

OEM	Office of Emergency Management
OHAW	Occupational Health and Wellness
OIG	Office of the Inspector General
OJT	On-the-Job Training
OMB	Office of Management and Budget
OPMS	Operations Management Services
OPRI	Office of Professional Responsibility
OSH	Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
OSI	Inspections Office of Security and Infrastructure
P/I	Policy/Instruction
PDIP	Office of Project Development and Implementation Planning
PERF	Office of Transit Performance
PICO	Office of Project Implementation and Construction
PIM	Policy and Instruction Manual
PLNT	Office of Plant Maintenance
PPE	Personal Protective Equipment
PRMT	Procurement and Materials
PTSCTP	Public Transportation Safety Certification Training Program
QA	Quality Assurance
QICO	Quality Assurance, Internal Compliance and Oversight
QMP	Quality Management Plans
QMS	Quality Management System
QMSP	Quality Management System Plan
RACI	Responsible, Accountable, Consulted, and Informed
RAIL	Rail Services
RAIL ADM	Rail Administration
RCA	Recommended Corrective Action
REAM	Reliability Engineering, Asset Management
REPA	Reliability Engineering and Performance Analysis
RCPM	Office of Reliability Centered Maintenance Planning
RIME	Rail Infrastructure, Maintenance, and Engineering
ROCC	Rail Operations Control Center
RSSC	Rail Safety Standards Committee
RTRA	Rail Transportation
RWP	Roadway Worker Protection
SAFE	System Safety, Environmental Mgmt, and Emergency Preparedness
SAMS	Office of Shops and Material Support
SCM	Supply Chain Management
SDS	Safety Data Sheet
SLOM	Silver Line Operations and Maintenance
SME	Subject Matter Expert
SMS	Safety Management System
SMNT	Office of Systems Maintenance
SOP	Standard Operating Procedure
SPEC	Special Projects Office

SPPM	Strategy, Planning and Program Management
SRC	Safety Risk Coordinator
SRM	Safety Risk Management
SSOA	State Safety Oversight Agency
TA	Transit Agency
TAMO	Transit Asset Management Office
TOC	Transportation Operations Center
TrAMS	Transit Award Management System
TRES	Office of the Treasurer
TRPM	Traction Power Maintenance
TRST	Track and Structures
TSI	Transit Safety Institute
TSMT	Office of Technical Skills Maintenance Training
TSPM	Office of Technical Services and Portfolio Management
TSSP	Transit Safety and Security Program
VA	Virginia
VP	Vice President
WMATA	Washington Metropolitan Area Transit Authority
WMSC	Washington Metrorail Safety Commission

Appendix E – Safety-related Training by Group

SAFE (provided or outsourced)

- Asbestos
- Bloodborne Pathogens
- Body Mechanics
- Compressed Gas Safety
- Confined Space Entry
- CPR/AED/First Aid
- Crane, Derrick, and Hoist Safety
- Crawler, Locomotive, and Truck Cranes
- Defensive Driving
- Environmental Compliance, Deputy Compliance Officer
- Electrical Safety Work Practices – Qualified Person
- Electrical Safety Work Practices – Awareness
- Emergency Action Plan
- Employee Alarm Systems
- Fall Protection
- Fire Extinguisher Awareness
- Fire Prevention Plan (Fire Watch)
- Fixed and Portable Ladders
- Hand and Portable Power Tools
- Hazard Communication
- Hazardous Waste Management
- Emergency Response Operations Level
- Hearing Conservation
- Hot Work Permits, Welding and Cutting
- Housekeeping
- Incident and Injury Investigations
- Lockout/Tagout
- Machine Guarding/Conveyors/Metal Working Machinery
- Manlifts/Aerial Lifts
- New Employee Orientation – Safety
- OSHA 10 Hour Construction
- OSHA 10 Hour General Industry
- OSHA 30 Hour for Construction
- OHSA 30 Hour for General Industry
- Personal Protective Equipment
- Pesticide Safety
- Power Presses (Mechanical and Hydraulic)
- Respiratory Protection
- Safety Observations
- Scaffolding

- Slings
- Safety Management Systems – Agency Safety Plan
- Safety Measurement Systems – Data Management
- Storage and Handling of Flammable and Combustible Liquids
- Supervisor Safety Management Program

Rail Operations Quality Training

- Train Operations Training
- Central Control Supervisor Training
- Station Manager Training
- Interlocking Operations Training
- Rail Operations Supervisor

Bus Operations Training

- Remedial Bus Operator Training
- Defensive Driving for BMNT Mechanics
- Defensive Driving for Non-Revenue
- Bus Maintenance SOP NPB Training
- DriveCam
- Line Platform Instructor Training / Refresher
- Bus and Rail Assault Response
- Bus Operator Candidate CDL Training
- New Bus Operator Training Course
- Bus Operator Refresher
- Mechanical CDL Training

Bus Maintenance Training

- Basic Mechanical – Orientation
- Service Lane Operation
- Service Lane Annual Refresher
- Wheel & Tire Maintenance
- Steam Cleaning
- Forklift Operation
- Skid Steer Operation
- Basic Electrical
- PLC Electrical
- Engine Familiarization
- Cummins ISL Engine
- CNG Engine Familiarization
- CNG Fuels
- Engine Fault Code
- Basic Hydraulics
- Automatic Transmission
- Hybrid Drive

- Pneumatics Systems
- Entrance & Exit Doors
- MAN Drum Brake, Rear
- MAN Drum Brake, Front
- MAN Disc Brake Axle
- Meritor Drum Brake
- Meritor Disc Brake
- Steering & Suspension
- HVAC System
- RRC 608
- ADA Equipment
- PM Service
- Cummins ISL Tune Up
- BMNT Fall Protection
- Non Passenger Ops for BMNT Employees
- BAE Disconnect Verification Procedure Training
- Driver Safety Training
- Backing Safety Solutions
- Powered Industrial Trucks
- Vendor Safety Training

Technical Skills and Maintenance Training – RWP

- Initial Class RWP Level-1
- Initial Class RWP Level-2
- Initial Class RWP Level-4
- RWP Level-1 CBT-Refresh
- RWP Level-2 CBT-Refresh
- RWP Leve-4 CBT-Refresh
- RWP Level-2 REQUAL
- RWP Level-4 REQUAL

Technical Skills and Maintenance Training – ELES

- Elevator Doors
- Maxton Control Valve and Adjustments
- Kone Escalators Model Trans-180
- TSMT Orientation/101A
- Study Skills /101B
- Customer Service/101C
- Safety, First Aid, CRP AED 102A&B
- Tools and Material Handing / 103
- Mathematics Review/104
- Electrical I - DC Fundamentals / 108
- Electrical I - AC Fundamentals / 109
- Hydraulic Theory & Applications / 110

- Basic Mechanical Theory & Applications / 111a
- Overview of Vertical Transportation/200
- Escalator-Principles of Operation/208
- Elevator-Principles of Operations / 213
- Elevator-Inspection & Basic Maintenance/219
- Elevator-Other Systems/220 (Includes NAESA Exam)
- Advance Level Electrical/Electronic Systems)
- Advance Level Controllers
- Basic Radio Communications

Technical Skills and Maintenance Training – COMM

- PASSENGER INFORMATION DISPLAY SYSTEM
- CCTV/DVR FUNDAMENTAL
- Public Address Systems
- SWING GATE TRAINING
- RAMEX PERS/INTERCOM
- HONEYWELL VISTA - 128BPT

Technical Skills and Maintenance Training – SSRV

- Floor Cleaner Operations
- Ladder & Scaffolding Initial Training
- High Voltage Self Awareness
- Powered Industrial Trucks
- Small Engine Repair
- HVAC Certification
- AC Fundamentals
- DC Fundamentals
- Basic Mechanical
- Basic Motor Controls
- Tunnel Fan PMI
- Overview Drainage Pumping Stations
- Introduction to Custodial Training
- Cleaning for Health / Green Cleaning

Technical Skills and Maintenance Training – ATC

- ATC Informational and Training Session
- OJT Mentor Training
- Practical test prep
- CAB Signal Level ATC Platform and Spillover Measurement
- Baselining Track Circuit and Wayside
- M3 switch - Adjust, Maintain, Troubleshoot
- GM 4000 intro and Switch Adjustments
- ATC Journeyman 10-Day Phase 1 Intro to ATC
- 15-day phase 2 Track circuits

- 10-day phase 3 Track circuit logics
- Phase 4 Switches - 15 day
- Phase 5 Data Transmission
- ATC OJT

Technical Skills and Maintenance Training – TRST

- Initial Track Inspection Training
- Track Inspection Recertification Training
- Initial Equipment Operator Training
- Equipment Operator Recertification Training
- Basic Training Vehicle Flag Person
- Flag Person Recertification
- Hi-Rail Gear Utility Truck (21587)
- Hi-Rail Bridge Lift (Scissor) Truck (22504)
- Hi-Rail Bridge Lift (Scissor) Truck (22501)
- Hi-Rail Bridge Lift (Scissor) Truck 248/260
- Plasser PMC-50
- Aspen Aerial
- Basic Rigging
- Building Condition Assessment Training
- Bridge Inspection Refresher Training
- De-icer Flatcars-RCC and Plasser DI-40
- Equipment Operator Refresher
- Equipment Operator Exam
- Equipment Flag Person Exam
- Frog Welding
- Gauge Rods
- Geismar Operator Training
- Vacuum Truck 21588-589
- Hi-Rail Bridge Lift Truck-Vendor
- Initial Track Inspector Training – Vendor
- Maryland DOT Traffic Control
- Basic Laborer Training
- Safety Inspection of in-Service Bridges 130055
- NORDCO Bundle
- PM SV01&02
- Re-Instruction TRST
- Scissor Lift Truck
- String Lining and Combination Gauge & Level
- Snowplow
- Track Charts
- TGV Operation and Maintenance
- Thermite Welding – Vendor
- Track Repairer 1

- Tunnel Safety Inspection FHWA-NHI-130110
- Ballast Regulator Knox Kershaw Operator
- Plasser Tamper 4x4 Operator
- Silica Power Air Purified Respirator Training
- Reinstruction for TRST Employees

Technical Skills and Maintenance Training – CMNT

- Preventive Maintenance Electrical 2/3/6/7/K
- Preventive Maintenance Mechanical 2/3/6/7/K
- 7KSystem Introduction and Troubleshooting
- 7K Intro CBT Test-out
- 7K Sub-System Electrical
- 7K Sub-System Mechanical
- Train Movement In to/Out of CMNT Shops
- Rail Car Daily Inspection 2/3/6/7 K
- HVAC EPA 608-609
- HVAC Fundamentals Refresher
- 7K Trucks/Couplers
- QA/OJT

Appendix F – PTASP General Manager Certification

Appendix G – WMATA Board Resolution Approval

Appendix H – PTASP SSOA Certification