

Agency Safety Plan





Transit Agency Information

Memphis Area Transit Authority (MATA)
1370 Levee Road
Memphis, Tennessee 38108
(901) 722-7100

Board of Commissioners	Emily Greer Brandon Arrindell Cynthia Bailey Sandi Klink Brian Marflak Jackson McNeil Anna McQuiston Dana Pointer Maya Siggers	<i>Chair</i>
Accountable Executive	John Lewis	<i>Interim Chief Executive Officer</i>
SMS Executive	Keith Watson	<i>Chief Safety & Security Officer</i>
Modes	Multimodal	<i>Trolley Fixed-Route Bus Paratransit Reservations</i>
FTA Funding Types	5307, 5309, 5310, 5337, and 5339	<i>Urban Area and Advanced Mobility Capital Investments Enhanced Mobility of Seniors & Individuals with Disabilities State of Good Repair Bus and Bus Facility Program</i>

Revision History

Section	Description of change
Version 1.0, July 20, 2020	
Entire document	Initial release
Version 2.0 Dec. 15, 2023	
Safety Plan Certification	Updated signatures
Version 3.0 Jan. 21, 2025	
Transit Agency Information	Updated to reflect Board of Commissions, CEO & CSSO
Safety Plan Certification	Updated to reflect Accountable Executive
Concurrences and Approvals	Added MATA's executive team
Safety Management Policy Statement	Updated to reflect Accountable Executive
Acronyms	Updated to reflect new positions and remove non-existing
Definitions	Updated to reflect definitions in alignment with State Safety Program Standard v 5.0
Definitions xiv Footnote	Updated to reflect SSPS Jan 12, 2024, reference
Entire Document	Updated to reflect MTM personnel instead of MATA personnel
Footnote page 29	Updated to reflect SSPS v 5 and page number for reference
Footnote page 87	Updated to reflect SSPS v 5 and page number for reference
2.0 Purpose and Scope	Updated Figure 2 SMS Framework Mode
4.0 System Overview	Updated Table 2 to reflect ridership for fiscal year 2024
4.1 Infrastructure	Updated fixed route bus services
4.2 Rolling Stock	Updated to reflect the current fleet
5.0 Safety Performance Targets	Updated Safety Performance Outcomes (2024) and Safety Performance Goals, Targets & Benchmarks (2025-2026)
5.1 Fatality Rate	Updated Table 5 to reflect fiscal year 2024
5.2 Injury Rate	Updated Table 6 to reflect fiscal year 2024
5.3 Safety Event Rate	Updated Table 7 to reflect fiscal year 2024
5.4 System Reliability	Updated Table 8 to reflect fiscal year 2024
5.5 Risk Reduction Program	Updated to reflect 2025
8.1 Chief Executive Officer	Updated to reflect Interim CEO
8.4 Agency Leadership and Executive Management	Updated to reflect current Executive Management Team
8.4.4 Chief Operations Officer – Trolley Division	Updated to reflect new position and responsibilities
8.4.10 Director of Building & Grounds	Updated to reflect new position and responsibilities
8.4.13 Director of Planning Scheduling	Updated to reflect new position and responsibilities
Appendix-A.1 Executive Management Structure	Updated to reflect current executives
Appendix-A.2 Safety and Security Department Structure	Updated to reflect current safety and security personnel
Appendix-D Configuration Change Request Form	Revised form 01/24/2025
Appendix-G ASP Checklist	Added checklist to ASP
Appendix-H Safety Meeting Minutes MB/DR ASP Vote	Added safety meeting minutes for ASP review and vote
Appendix-I Safety Meeting Minutes SR ASP Vote	Added safety meeting minutes for ASP review and vote

Table of Contents

Transit Agency Information	i
Revision History	ii
Table of Contents.....	iii
List of Tables	v
List of Figures	vi
Safety Plan (MATA's Safety Plan) Certification	vii
Concurrences and Approvals	viii
Safety Management Policy Statement	ix
Acronyms.....	xi
Definitions	xiv
Referenced Documents	xxii
Part A: Program Overview	23
1.0 Introduction.....	23
2.0 Purpose and Scope	26
3.0 Program Administration	28
3.1 MATA's Safety Plan Schedule	29
3.2 Document Control and Updates	29
3.3 Authority.....	30
4.0 System Overview.....	32
4.1 Infrastructure.....	34
4.2 Rolling Stock.....	36
Part B: Safety Performance.....	36
5.0 Safety Performance Targets	36
5.1 Fatality Rate.....	38
5.2 Injury Rate	39
5.3 Safety Event Rate	39
5.4 System Reliability.....	39
5.5 Risk Reduction Program – 2025.....	40
6.0 Metropolitan Planning Organization	42
Part C: Safety Management Policy.....	42
7.0 Safety Management Policy Statement	43
7.1 Safety Goals	43
7.2 Safety Objectives	44
8.0 Accountabilities and Responsibilities	45
8.1 Chief Executive Officer / Accountable Executive	45
8.2 Deputy Chief Executive Officer.....	46
8.3 Chief Safety & Security Officer.....	46
8.4 Agency Leadership and Executive Management.....	47
8.5 SMS Safety Committee	48
8.6 Office of the Chief Safety & Security Officer (Office of the CSSO).....	48
8.7 Chief Operations Officer (COO)	51
8.9 Chief Operations Officer – Trolley Division.....	52
8.10 Chief Compliance Officer / EEO Officer.....	52
8.11 Chief Administrative Officer.....	52
8.12 Chief Financial Officer.....	53
8.13 Director of Operations (DOO).....	53
8.14 Director of Maintenance (DOM).....	55
8.15 Director of Buildings & Grounds	57
8.16 Director of Information Technology	58

8.17 Director of Grants.....	58
8.18 Director of Planning and Scheduling	58
8.19 Operations & Maintenance Personnel.....	59
8.20 Contractors	59
9.0 Employee Safety Reporting Program.....	61
9.1 Committee Structures	62
9.1 Safety Executive Management Review Committee (SMRC)	63
9.2 SMS Safety Committees	64
9.3 SMS Safety Committee Structure.....	64
10.0 Integration with Emergency Management & Public Safety	65
10.1 Emergency Preparedness Responsibilities	65
10.2 Evaluation of Emergency Management.....	66
10.3 After Action Reports	68
10.4 Meetings with External Agencies.....	68
10.5 Emergency Procedures.....	68
10.6 Emergency Training	68
10.7 Familiarization Training	69
11.0 Safety Management Policy Communication.....	69
Part D: Safety Risk Management	70
12.0 Safety Hazard Identification	71
13.0 Safety Risk Analysis & Evaluation	71
13.1 Hazard Categorization	71
14.0 Safety Risk Mitigation	74
15.0 Safety Risk Tracking.....	75
16.0 Hazard Prioritization	75
16.1 Hazard Acceptance.....	75
16.2 Fatalities & Serious Injuries Unrelated to MATA.....	76
17.0 Coordination with SSOA	76
18.0 Hazardous Materials Program	77
Part E: Safety Assurance	78
19.0 Safety Performance Monitoring & Measuring.....	78
19.1 Safety Data Acquisition and Analysis	78
19.2 Investigations of Safety Events	80
19.3 Internal Notifications.....	82
19.4 Coordination with TDOT.....	86
19.5 Safety Rules Compliance.....	86
19.6 Inspection and Maintenance Program.....	89
19.7 Training and Certification Reviews	91
20.0 Management of Change	92
20.1 Change Management Process.....	92
20.2 Safety and Security Certification	95
21.0 Continuous Improvement.....	95
21.1 Internal Safety Review Program.....	96
22.0 Corrective Action Plans	97
22.1 Notification	98
22.2 Monitoring and Tracking.....	98
22.3 Verification and Closure of CAPs	99
23.0 Drug and Alcohol Program.....	99
23.1 Program Monitoring.....	100
24.0 Procurement.....	100
Part F: Safety Promotion.....	101



25.0 Competencies and Training	101
25.1 Designated Personnel	101
25.2 MTM Personnel	102
25.3 Contractors	103
25.4 Training Record Keeping	104
26.0 Safety Communication	104
Appendix A: Organizational Chart	105
Appendix A.1 Executive Management Structure	106
Appendix A.2 Safety and Security Department Structure	107
Appendix B: Safety Risk Management Tracking Management Log / Risk Registry	108
Appendix C: Accident Investigation Report	109
Appendix D: Configuration Change Request Form	111
Appendix E: Configuration Management Tracking Matrix	112
Appendix F: CAP Tracking Log	113
Appendix G: ASP Checklist	114
Appendix H: ASP Review Safety Meeting Minutes – MB/DR	128
Appendix I: ASP Review Safety Meeting Minutes - SR	130

List of Tables

Table 1: SAFETY PLAN Management Schedule	29
Table 2: Fiscal Year Ridership by Mode	33
Table 3: MATA Fleet Count	36
Table 4: Safety Performance Indicators	37
Table 5: Fatality Rate by Mode	39
Table 6: Injury Rate by Mode	39
Table 7: Safety Events Rate by Mode	39
Table 8: System Reliability Rate by Mode	40
Table 9: SMS Program Goals	44
Table 10: SMS Program Objectives	44
Table 11: Safety and Security Committee Structure	62
Table 12: Emergency Preparedness Matrix	66
Table 13: Severity Categories	72
Table 14: Probability Categories	73
Table 15: TDOT SSPS Accident Threshold Table	83
Table 16: TDOT Notification Information	84
Table 17: FTA Notification Information	85
Table 18: Federal Agency Notification Requirements	85
Table 19: Trolley Rules and Procedures Review Schedule	87
Table 20: Fixed-Route Rules and Procedures Review Schedule	87
Table 21: Paratransit Rules and Procedures Review Schedule	87
Table 22: Equipment Inspections	89
Table 23: Internal Review Milestones and Schedule	97
Table 24: CAP Notification Requirements	98
Table 25: PTSCTP Required Curriculum	101

List of Figures

Figure 1: “Current” Rate Equation	37
Figure 2: HSEEP Exercise Cycle	67
Figure 3: SRM 4-Step Process.....	70
Figure 4: Safety Risk Matrix	73
Figure 5: NIOSH Hierarchy of Controls	74



Safety Plan (MATA's Safety Plan) Certification

This Multimodal Agency Safety Plan (MATA's Safety Plan) was drafted By the Memphis Area Transit Authority (MATA).

The following signatures provide certification that MATA's Safety Plan complies with 49 CFR Part 673 as well as the Safety Oversight Program Standard (SSPS) established by the Tennessee Department of Transportation's (TDOT) Safety Oversight Program.

**1. Signature by the
Accountable
Executive**


John Lewis
Interim Chief Executive Officer /
Accountable Executive*
3/7/25
Date of Signature

**2. Approval by the
Board of
Commissioners**


Emily Greer
Chair, Board of Commissioners
3/7/25
Date of Approval

**3. Certification of
Compliance with 49
CFR Part 673 and
TDOT SSPS**


Keith Watson
Chief Safety & Security Officer/
SMS Executive
03/07/25
Date of Certification

*See Section 8.1

Concurrences and Approvals

MATA Public Transportation Agency Safety Plan


Erik Stevenson
Chief Administrative Officer


Anthony Amos
Chief Compliance Officer


La Barbara Houston
Chief Operations Officer


Thomas Davidson
Chief Operations Officer – Trolley
Division

Safety Management Policy Statement

It shall be the responsibility of management at all levels of the organization, as well as employees in each division to be accountable for delivery of the highest level of safety performance, beginning with the Chief Executive Officer (CEO).

Therefore, MATA is committed to achieving the following objectives:

1. **Supporting** the SMS approach to safety by providing appropriate resources to establish an organizational safety culture that fosters safe operating practices, encourages effective safety reporting, and actively manages safety with the same attention to results as that given to the other management systems of MATA.
2. **Integrating** the management of safety as part of the primary responsibilities of all MATA executives, managers, and employees, including MATA's contractors, vendors, suppliers, and services.
3. **Clearly Defining** accountabilities and responsibilities of all executives, managers, employees, contractors, vendors, suppliers, and services alike, to uphold the organization's safety, security, and asset performance goals and implementation of the Safety Management System (SMS).
4. **Establishing and Operating** a Safety Risk Management (SRM) program that advocates hazard identification, analysis, and risk evaluation from all sources including the utilization of an employee reporting program as an integral source for information gathering.
5. **Prioritizing** mitigation or elimination efforts to address safety and security risks from operations, systems, state of good repair, or inadequate design conditions or activities, to a level consistent with MATA's acceptable safety performance goals and objectives and risk reduction endeavors.
6. **Ensuring** that no action will be taken against any employee who discloses a safety concern through an employee safety reporting program, unless disclosure indicates through the investigative process and beyond a reasonable doubt, an illegal act, gross negligence, or a deliberate or willful disregard of regulations or procedures was committed.
7. **Complying** with, or exceeding, when possible, legislative, and regulatory requirements and safety standards.
8. **Ensuring** sufficiently trained and knowledgeable human capital is available to implement the various SMS processes, including as part of service delivery operations.
9. **Ensuring** all employees are provided with adequate and appropriate core job skills to perform job duties safely, safety-related information and training, competency in safety management processes and subject, and assigned tasks commensurate with their skills.
10. **Establishing and Measuring** safety and security performance against data-driven safety performance indicators, benchmarks, and targets.
11. **Continuous Improvement** of safety performance and the SMS through management processes that ensure appropriate safety risk management, safety assurance, and safety promotion activities are identified, implemented, and effective.
12. **Ensuring** externally supplied systems and services to support MATA operations are delivered in a manner to meet safety performance standards.
13. **Collaborating** with stakeholders, community entities, and regulators to utilize risk management approaches to identify, assess and mitigate safety, security, operational, and state of good repair risks from internal or external potential impact trigger events that may cause harm to MATA's transit system, passengers, employees, emergency responders, and public.
14. **Defining** processes to address conditions when disciplinary actions will be exempt based on the actions of an employee, in support of promoting a positive safety culture.



To implement MATA's Safety Plan, MTM personnel and contractors, vendors, suppliers, and services must focus on the following Safety Management System components:

- **Safety Management Policies** to guide the development, implementation, and maintenance of the SMS processes.
- **Safety Risk Management** process for identifying hazards and analyzing, assessing, and mitigating safety risk to the lowest reasonable level.
- **Safety Assurance** to ensure the implementation and effectiveness of safety risk mitigation, and to ensure that MATA meets or exceeds its safety objectives through the collection, analysis, assessment, and trending of information.
- **Safety Promotion** to support SMS, including safety communications and training.

This policy statement will be reviewed and updated to align SMS processes with ongoing and evolving safety performance goals and objectives.



John Lewis
Interim Chief Executive Officer*
Memphis Area Transit Authority

*See Section 8.1



Acronyms

AAR	After-Action Reports
ACSE	American Society of Safety Engineers
ADA	Americans with Disabilities Act
ANSI	American National Standards institute
APTA	American Public Transit Association
ASTM	American Society for Testing and Materials
AVL	Automatic Vehicle Locator
BMP	Bus Maintenance Plan
CAO	Chief Administrative Officer
CAP	Corrective Action Plan(s)
CCB	Change Control Board
CCR	Configuration Change Request
CEO	Chief Executive Officer
CFO	Chief Finance Officer
CFR	Code of Federal Regulations
COO	Chief Operations Officer
COOP	Continuity of Operations Plan
CSSO	Chief Safety and Security Officer
DBE	Disadvantaged Business Enterprise
DC	Direct Current
DHS	Department of Homeland Security
DoD	United States Department of Defense
DOD	Director of Operations
EMA	Emergency Management Agency
EMP	Emergency Management Program
EPA	Environmental Protection Agency
ERP	Emergency Response Plan
ESRP	Employee Safety Reporting Program
EX	Emergency Exercise
FAMP	MATA Trolley Facilities Management Plan
FLSC	Fire Life Safety and Security Working Group
FRA	Federal Railroad Administration
FSE	Full-Scale Exercise
FTA	Federal Transit Ad
GPS	Global Positioning Satellite
HAZCOM	Hazardous Communications
HMP	Hazardous Management Plan
HSEEP	Homeland Security Exercise and Evaluation Program
IAPP	Internal Audit Program Plan
ICS	Incident Command System
ID	Identification
ISA	Internal Safety Audit
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITP	Individual Training Program
KPI	Key Performance Indicators
MAP-21	Moving Ahead for Progress in the 21 st Century
MATA	Memphis Area Transit Authority
MBE	Minority Business Enterprise
MDOT	Mississippi Department of Transportation



MIL-STD	Military Standard
MOTM	Manager of Trolley Maintenance
MPD	Memphis Police Department
MPO	Metropolitan Planning Organization
MSCAA	Memphis-Shelby County Airport Authority
MSCPC	Memphis-Shelby County Port Commission
MSDS	Material Safety Data Sheets <i>also see SDS</i>
MSF	Maintenance and Storage Facility
MTI	Manager of Trolley Infrastructure
MTM	Mid-South Transportation Management, Inc.
N/A	Not Applicable
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NPTSP	National Public Transportation Safety Plan <i>also see NSP</i>
NSC	National Safety Council
NSP	National Safety Plan <i>also see NPTSP</i>
NTD	National Transit Database
NTI	National Transportation Institute
NTSB	National Transportation Safety Board
O&M	Operation and Maintenance
OCS	Overhead Contact Systems
OCSO	Office of the Chief Safety and Security Officer
OEM	Original Equipment Manufacturer
OLI	Operation Lifesaver, Inc.
OMP	Operations and Maintenance Plan
OSHA	Occupational Safety and Health Administration
PHA	Preliminary Hazard Analysis
PM	Preventative Maintenance
PMI	Preventative Maintenance Inspection
PMMS	Preventative Maintenance Management System
PPE	Personal Protective Equipment
PRO	Pre-Revenue Operations
PTASP	Public Transportation Agency Safety Plan
PTSCTP	Public Transportation Safety Certification Training Program
QA	Quality Assurance
QC	Quality Control
RAC	Rail Activation Committee
RCC	Radio Control Center
RFGPTS	Rail Fixed Guideway Public Transportation System
ROW	Right-Of-Way
RTA	Rail Transit Agency
RWP	Roadway Worker Protection
SA	Safety Assurance
Safety Plan	Public Transportation Agency Safety Plan
SDS	Safety Data Sheet <i>also see MSDS</i>
SGR	State of Good Repair
SIT	System integration testing
SME	Subject Matter Expert
SMRC	Safety Management Review Committee
SMS	Safety Management System
SOP	Standard Operating Procedures



SPC	Safety Performance Criteria
SPI	Safety Performance Indicators
SPT	Safety Performance Targets
SRA	Safety Risk Analysis
SRCP	Safety Rules Compliance Program
SRL	Safety Risk Log
SRM	Safety Risk Management
SRMP	Safety Risk Management Plan
SSC	Safety and Security Certification
SSCP	Safety and Security Certification Plan(s)
SSEPP	System Security and Emergency Preparedness Plan
SSO	State Safety Oversight
SSOA	State Safety Oversight Agency
SSPP	System Safety Program plan
SSPS	State Safety Oversight Program Standard
SSWG	Safety and Security Working Group
T.C.A.	Tennessee Code Annotated
TAM	Transit Asset Management Plan
TDOT	Tennessee Department of Transportation
TEPW	Training and Exercise Planning Workshop
TPSS	Traction Power Sub Station
TSA	Transportation Security Administration
TTP	Technical Training Plan
TTX	Tabletop Exercise
TVA	Threat and Vulnerability Analysis
U.S.C.	United State Code
UASI	Urban Area Security Initiative
UC	Unified Command
VRM	Vehicle Revenue Miles
WBE	Woman Business Enterprise
WHTC	William Hudson Transit Center
WSO	World Safety Organization

Definitions¹

Accident means an (event) that 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 for life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause. An accident must be reported in accordance with the thresholds for notification and reporting set forth in this Program Standard. Loss of life resulting from illness or other natural causes are not considered reportable accidents.

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.

Agency Safety Plan (ASP) means the comprehensive agency safety plan for a transit agency, including a Rail Transit Agency, that is required by 49 U.S.C. 5329(d) and based on a Safety Management System.

AIP means Accident/Incident Investigation Plan.

APTA means American Public Transportation Association.

Asset Inventory means a register of capital assets, and information about those assets.

Audit means a review or analysis of records and related materials, including, but not limited to, those related to financial accounts.

Chief Safety & Security Officer means the person to whom the Accountable Executive has delegated day-to-day responsibility for carrying out the safety management system at the RTA, including the development and implementation of the Public Transportation Agency Safety Plan (PTASP), Transit Asset Management (TAM) Plan, and subordinate policies and procedures and practices in accordance with 49 U.S.C. 5329 and 49 U.S.C. 5326.

Collision (non-Rail Grade Crossing) includes a train to train, train to vehicle, train to object, and train to individual collision that DO NOT OCCUR at a Rail Grade Crossing. Suicides or trespassing-related collisions not occurring at a Rail Grade Crossing are defined as "Collision (non-Rail Grade Crossing)" with a probable cause of "suicide" or "trespasser" as applicable.

Configuration Management means a process to ensure that all documentation that describes a system and its various components is current and reflects the actual functional and physical characteristics of the system throughout its life cycle.

Consultation means the process of seeking, discussing, and considering the views of other participants, and, where feasible, seeking agreement with them regarding matters.

Contractor means an entity that performs tasks on behalf of FTA, a State Safety Oversight Agency, or an RTA, through contract or other agreement. The RTA may not be a contractor for the State Safety Oversight Agency.

¹ Definitions are referenced from 49 CFR Part 673 as well as the [TDOT's SSPS January 12, 2024, Version 5](#)



Corrective Action Plan (CAP) means a plan developed by the (RTA) that describes the actions the (RTA) will take to minimize, control, correct, or eliminate risks and hazards, and the schedule for taking those actions. These plans also refer to actions taken to address deficiencies identified through internal and external audit findings or to prevent recurrence of the causal factors identified from (event) investigations. Either TDOT or FTA may require an RTA to develop and carry out a Corrective Action Plan.²

Derailment means a non-collision event in which one or more wheels of a rail transit vehicle unintentionally leaves the rails.

Designated Personnel means one (1) Employees identified by a rail public transportation system whose job function requires them to be directly responsible for safety oversight of the public transportation provided by the system; or two (2) Employees and contractors of a State Safety Oversight Agency whose job function requires them to conduct safety audits and safety examinations of the rail public transportation systems subject to the jurisdiction of the State Safety Oversight Agency. Designated personnel may also be referred to as “covered” personnel.

Emergency means a situation which is life threatening, or which causes damage to or in any RTA facility, right- of-way or vehicle.

Equivalent Authority means an entity that carries out duties like 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.

Evacuation due to life safety reasons means all evacuations of (Rail Transit Controlled Property) for life safety events. A life safety event is one that presents an imminent danger to ALL people in or on (Rail Transit Controlled Property). This includes evacuations of rail transit vehicles and rail transit property, such as stations. The evacuation may be due to the presence of smoke, fuel fumes, suspicious packages, bomb threat, etc.

Evacuation for non-life safety reasons means evacuations that are not for a life safety reason such as an evacuation of a train into the right-of-way or onto adjacent track; or customer self-evacuation or transfer of passengers to rescue vehicles or alternate means of transportation due to obstructions, loss of power, mechanical breakdown and system failures, or damage.

Event means an Accident, Incident, or Occurrence.

Facility means a building or structure that is used in providing public transportation.

Fatality means a death or suicide occurring at the scene or within 30 days following the accident; excludes deaths resulting from illness or other natural causes and criminal homicides that are not related to collisions with a rail transit vehicle.

Findings of Non-Compliance means those instances where the RTA’s SSPP, SSP/SEPP or supporting documents and manuals do not meet state or federal requirements, or in cases where internal practices do not follow the RTA’s own plans or procedures.

Findings with Recommendation means identify conditions, practices, or procedures that are undocumented, inconsistently applied, or are non-existent despite being important to safety and security of the transit system. Industry best practices and gaps or deficiencies in the RTA’s policies, procedures, or in the implementation of policies and procedures may also be accounted for.

² 49 U.S.C. § 5329 (k) Risk-Based Inspection Toolkit



FRA means the Federal Railroad Administration, an agency within the U.S. Department of Transportation.

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

Hazard means any real or potential condition as defined in the RTA's hazard management process that can cause injury, illness, or death; damage to, or loss of, the facilities, equipment, rolling stock, or infrastructure of a Rail Fixed Guideway Public Transportation System; or damage to the environment.

Hazard Analysis means a systematic analysis performed to identify hazards and establish requirements for their elimination or control.

Hazardous Condition means a condition that may endanger human life or property (formally called "unacceptable hazardous condition")

Hazardous Material means any commodity or product identified or regulated by the United States Department of Transportation in title 49 CFR Parts 171 -179 which may be transported under restricted conditions.

HMP means Hazard Management Plan.

IAPP means Internal Audit Program Plan.

Implementation Strategy means an (RTA's) approach to carrying out (TAM) practices, including establishing a schedule, accountabilities, tasks, dependencies, and roles and responsibilities.

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 an RTA. An Incident must be reported to FTA's National Transit Database in accordance with the thresholds for reporting set forth in this Program Standard. If an RTA or TDOT later determines that an Incident meets the definition of Accident as specified in § 674.7, that Event) must be reported to the TDOT in accordance with the thresholds for notification and reporting set forth in this Program Standard.

Individual means a passenger, employee, contractor, rail transit facility worker, pedestrian, trespasser, or any person on the property of a Rail Fixed Guideway Public Transportation System.

Infrastructure means the underlying framework or structures that support a public transportation system.

Injury means a human condition of the magnitude requiring medical treatment or transport to a health care facility for medical treatment.

Inspection means a physical observation of equipment, facilities, rolling stock, operations, or records for the purpose of gathering or analyzing facts or information.

Inspection Data means data that includes, but is not limited to, inspection records and report forms, records of failures and defects with severity, records of speed restrictions, including the reason for applying, incident and safety risk mitigation verification, adherence to inspection schedules, including reports/documentation of inspections not performed, and capital project schedules and progress.

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.



Life Safety Reasons means a situation such as a fire; the presence of smoke or noxious fumes; a fuel leak; a vehicle fuel leak; an electrical hazard; a bomb threat; a suspicious item or other hazard that constitutes a real or potential danger to any person.

Life Cycle means the course of developmental change, which a transit system passes through from its inception to its retirement and disposal

Maintenance Data means data that includes, but is not limited to, major maintenance activity schedule and progress, adherence to maintenance schedules, including reports/documentation of deferred maintenance, records of failures and defects with severity if applicable, and records of revenue vehicles out of service, including causal information.

Mid-South Transportation Management, Inc. (MTM) is the employer of all transit personnel at MATA's public transportation system. MTM is a Tennessee not-for-profit corporation created in 1983. MTM enables MATA to fulfill its obligations under Section 13(c) of the Federal Transit Act.

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.

New Start Project means any rail fixed guideway system funded under FTA's 49 U.S.C. 5309 discretionary construction program.

NTD means National Transit Database, a federal reporting system for transit statistics.

NTSB means the National Transportation Safety Board, an independent federal agency.

Observations mean concerns that do not warrant a formal finding. Observations may include site-specific or non-systemic deficiencies found. Alternately, Observations may highlight the RTA's practices deemed commendable by TDOT.

Occurrence means an (Event) without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt the operations of a RTA.

Office of Transit Safety and Oversight (TSO) means the FTA office administers a national transit safety program and program compliance oversight process through adherence with legislative, policy and regulatory requirements as established by FTA.

On-Site Safety Audit means a formal, comprehensive, on-site examination by the Oversight Agency of a transit agency's safety practices to determine whether they comply with the policies and procedures required under the transit agency's SSPP.

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

Passenger Operations means the period of time when any aspect of the RTA rail operations is initiated with the intent to carry passengers.

Patron means, for the purposes of (Event) reporting, an individual waiting for or leaving rail transit at stations, in mezzanines, on stairs, escalators, or elevators, in parking lots, and other transit-controlled properties.

Pedestrian Grade Crossing means a location where one (1) or more fixed guideway system tracks cross a public sidewalk or pathway by pedestrians at a grade.

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 (e.g., a measure for on-time performance is the percent of trains that arrive



on time, and a corresponding quantifiable indicator of performance or condition is an arithmetic difference between scheduled and actual arrival time for each train).

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

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

Potential Impact Trigger Event means a change, occurrence, or other event caused by external or internal factors that may cause harm to the transit system, employees, passengers, emergency responders, and public. (Ex. Municipality changes or modifies mixed-use roadway configuration that may increase risk to the transit agency.)

Public Transportation Agency Safety Plan means the comprehensive agency safety plan for a transit agency, including a Rail Transit Agency, that is required by 49 U.S.C. 5329(d) and based on a Safety Management System. Until one year after the effective date of FTA's PTASP final rule, a System Safety Program Plan (SSPP) developed pursuant to 49 CFR part 659 will serve as the rail transit agency's safety plan.

Public Transportation Safety Certification Training Program (PTSCTP) 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).

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 Grade Crossing (as defined in the National Transit Database glossary) means an intersection of roadways, railroad tracks, or dedicated transit rail tracks that run across mixed traffic situations with motor vehicles, streetcar (SC), light rail (LR), commuter rail (CR), heavy rail (HR) or pedestrian traffic, either in mixed traffic or semi-exclusive situations. The boundaries of the intersection will be defined by the municipal, county, or State jurisdiction that owns and controls the roadway.

Rail Transit Agency (RTA) means any entity that provides services on a Rail Fixed Guideway Public Transportation System. This includes entities which provide services via a third-party contractor.

Recipient means an entity that receives Federal financial assistance under 49 U.S.C. Chapter 53, either directly from FTA or as a subrecipient.

Reportable Accidents means any accident which exceed the thresholds described in Section 7 of the SSPPS and which are associated with the operation and maintenance of rail transit vehicles, other on-track equipment, signal systems, traction power systems, or the maintenance of track and other wayside equipment.

Right-of-way (ROW) means the area through which a rail transit vehicle travels the vehicle's dynamic envelope.



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

Risk-Based Inspection means the use of qualitative and quantitative data analysis to inform ongoing inspection activities. Risk Based inspection programs are designed to prioritize inspections to address safety concerns and hazards associated with the highest levels of safety risk.

Risk-Based Inspection Data Management System means a physical or digital system that follows administrative policies and procedures that identify data storage, organizational, and management processes for risk-based inspections.

Risk-Based Inspection Program means a risk-based inspection program uses qualitative and quantitative data analysis to inform ongoing inspection activities. Risk-based inspection programs are designed to prioritize inspections to address safety concerns and hazards associated with the highest levels of safety risk.

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

Rolling Stock means a revenue vehicle used in providing public transportation, including rolling stock, including, but not limited to, passenger and maintenance vehicles.

Runaway Train means a train that is no longer under the control of a driver regardless of whether the operator is physically on the vehicle at the time.

Safety means freedom from harm resulting from unintentional acts or circumstances.

Safety and Security Certification means the process applied to project development to ensure that all practical steps have been taken to optimize the operational safety and security of the project during engineering, design, construction, and testing before the start of passenger operation.

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 regarding 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 Program Data means data that includes, but is not limited to, event data, hazard data, safety risk ratings, mitigation data, CAP data, near miss data, and ongoing monitoring data

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 and Security Audit means a formal, comprehensive, internal on-site examination by the RTA of all, or part of a system's safety and security practices conducted annually to determine



whether they comply with the policies and procedures required under the system's SSPP and SEPP.

Safety Related Activities means an activity that is performed in a prescribed manner to assure that the RTA meets its stated safety goals and objectives. Typical examples include designing, acquiring, constructing, inspecting, testing, operating, maintaining, repairing, modifying or extending those elements of the public transit guideway that are important to preventing or mitigating accidents.

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 means a process within a transit agency's Public Transportation Agency Safety Plan for identifying hazards and analyzing, assessing, and mitigating safety risk.

Security: freedom from harm resulting from intentional acts or circumstances.

Security and Emergency Preparedness Plan (SEPP) means a document developed and adopted by the RTA describing the application of operating, technical, and management techniques and principles to the security aspects of the system throughout its life to reduce threats and vulnerabilities and describing the emergency preparedness policies and procedures for mobilizing the system and other public safety resources to assure rapid, controlled, and predictable responses to various types of transportation and community emergencies.

Serious Injury means any injury which:

1. Requires hospitalization for more than 48 hours, commencing within 7 days from the date of when the injury was received;
2. Results in a fracture of any bone (except simple fractures of fingers, toes, or noses);
3. Causes severe hemorrhages, nerves, muscle, or tendon damage;
4. Involve any internal organ; or
5. Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.

Service Vehicle means a unit of equipment that is used primarily either to support maintenance and repair work for a public transportation system or for delivery of materials, equipment, or tools.

Small Public Transportation Provide is 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.

SMS means Safety Management System.

SSO means State Safety Oversight.

SSO Program Manager means the State Safety Oversight Agency representatives. For TDOT this position refers to the Program Manager which is assigned to each RTA.

State is 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 (SGR) means the condition in which a capital asset can safely 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.

State Safety Program Standard (SSPS) is a document developed and adopted by the oversight agency, describing the State Safety Oversight program policies, objectives, responsibilities, and procedures to provide rail transit agency safety and security oversight.

Subrecipient means an entity that receives Federal transit grant funds indirectly through a State or a direct recipient.

Substantial Damage means any physical damage to transit or non-transit property including vehicles, facilities, equipment, rolling stock, or infrastructure ... which adversely affects the structural strength, performance, or operating characteristics of the vehicle, facility, equipment, rolling stock, or infrastructure requiring towing, rescue, onsite maintenance, or immediate removal prior to safe operation."

System Safety Program Plan (SSPP) is a document developed and adopted by the RTA, describing its safety policies, objectives, responsibilities, and procedures. Document derived in accordance with the TDOT SPSP. Until one year after the issuance of 49 CFR Part 673 (July 2020) as a final rule, the SSPP shall take the place of MATA's Safety Plan required under 49 CFR Part 674.

System Security and Emergency Preparedness Plan (SEPP) is a document, like the SEPP, developed and adopted describing its security policies, objectives, responsibilities, and procedures of fixed-route and paratransit systems.

TDOT means the Tennessee Department of Transportation.

Transit Agency is 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.

TransPro Consulting is providing oversight of MATA pursuant a contract with the City of Memphis for a term of 8 months. TransPro's executive leadership team is headed by Interim Chief Executive Officer (CEO) John Lewis.

TTP means Technical Training Plan.

Vehicle means any rolling stock used on a rail fixed guideway public transportation system, including but not limited to passenger and maintenance vehicles. vehicles used for carrying passengers on fare-free services.

Vulnerability means a characteristic of passengers, employees, vehicles, and/or facilities that increases the probability of a security breach.

Worker means, for the purposes of (Event) reporting, a (RTA) employee or contractor.



Referenced Documents

	Document Name	Version
1.	Bus Operations Rulebook	N/A
2.	Drug and Alcohol Policy	1
3.	Environment Manual	1
4.	Infrastructure Maintenance Plan	3
5.	Internal Audit Program Plan	2
6.	MATA Trolley Preventative Maintenance Management System	3
7.	Operations and Maintenance Plan	3
8.	Hazard Management Plan	1
9.	SOP 000-033: Daily Operator Inspections	2
10.	SOP 000-202: Employee Qualification and Requalification.	4
11.	SOP 002-200: Employee Records	1
12.	SOP 002-400: Configuration Management	2
13.	SOP 004-003: Accident/Incident Investigations	1
14.	SOP 004-008: Procurement of Safety Critical and Hazardous Materials	1
15.	SOP 200-004: Maintenance and Operations Records.	1
16.	SOP 200-011: Traffic Control Devices Maintenance	2
17.	SOP 204-002: ROW Work Request	2
18.	SOP 204-000: Roadway Worker Protection	3
19.	System Security and Emergency Preparedness Plan	1
20.	Tennessee Department of Transportation State Safety Program Standard	3
21.	Transit Asset Management Plan	18
22.	Trolley Operations Rulebook	3

Part A: Program Overview

1.0 Introduction

Modern safety management practices that systematically and proactively identify factors contributing to unsafe events and prevent or minimize the likelihood of their occurrence have proven effective in addressing similar concerns in other transportation industries.

Such practices call for:

- setting safety performance goals and objectives,
- defining clear levels of accountability and responsibility for safety,
- establishing proactive approaches to managing risks and hazards in the day-to-day activities,
- risk-based resource allocation,
- monitoring and evaluating performance towards goals, and
- continuous learning and improvement.

Safety management is based upon the idea that safety is not an absolute condition; there will always be hazards and risks in public transportation. However, the traditional approach of primarily reacting to accidents by prescribing measures to prevent recurrence alone will not contribute to sustaining and improving public transportation safety. The need for a new approach to addressing public transportation safety has become especially urgent considering high-profile rail transit accidents.

To advance a comprehensive approach to safety decision-making and progress modern safety principles, the Federal Transit Administration (FTA) adopted a Safety Management System (SMS) model to develop and implement the National Safety Program initially established by the Moving Ahead for Progress in the 21st Century Act (MAP-21).

The requirements for a Rail Fixed Guideway Public Transportation System (RFGPTS) to implement an SMS were first introduced by the FTA in 2016 through the publication of the National Public Transportation Safety Plan (NPTSP) defined in 49 Code of Federal Regulation (CFR) Part 670.

Two (2) years following the release of 49 CFR Part 670, the FTA published 49 CFR Part 673, which states that “any State, local governmental authority, and any other operator of a public transportation system that receives Federal financial assistance under 49 U.S.C. Chapter 53” shall develop a Public Transportation Agency Safety Plan (Safety Plan).³

Under this rule, the requirements for a Safety Plan encompasses any public transportation agency that has over one hundred (100) vehicles in peak revenue service, including those that do not operate an RFGPTS. The NPTSP now serves as the basis for establishing a safety program that includes safety performance standards, SMS guidelines, best practices, and technical assistance.

The Memphis Area Transit Authority’s (MATA) Multimodal Public Transportation Agency Safety Plan (MATA’s Safety Plan) is thus developed to meet the following requirements:

- FTA required practices pursuant to 49 CFR Part 673
- FTA requirement to set safety performance targets based on the performance measures in the National Safety Plan (NSP) pursuant to 49 CFR Part 670

³ 49 CFR Part 673.1(a)

- State of Tennessee's Department of Transportation (TDOT) State Safety Oversight (SSO) Program, Rail Fixed Guideway System Safety Program Standard (SSPS)
- FTA Special Directive 22-46 (Oct. 21, 2022)
- Risk-Based Inspection Program (RBI) 49 U.S.C. § 5329 (k) and 49 CFR Part 670
- Bipartisan Infrastructure Law, signed into law on Nov.15, 2021

These publications establish the minimum content required elements detailed in this MATA's Safety Plan, including but not limited to SMS principles and methodology. The model below emphasizes the core components of SMS.



Figure 1: SMS Four Pillars Model – Just Safety Culture – Top Level Commitment

Safety Management System (SMS) is an internationally recognized approach to safety that combines safety engineering & management into a performance-based approach to safety, with clearly defined organizational commitments, goals, objectives, processes, measurements, and accountabilities.

A Safety Management System defines the safety culture (framework) of MATA and includes senior leadership commitment, front-line engagement, management accountability and continual safety process improvements derived from data-driven safety risk assessment.

One of the aims is to establish safety specific targets, safety benchmarks, and safety performance indicators (SPI's) that quantifies MATA's path towards continuous improvement that safeguards employees, passengers, and public from harm, injury, loss, or death.

Top Level Commitment starts with MATA's board, CEO, executive, and management team, who combined with the full commitment of all MTM personnel and stakeholders.

Safety Vigilance: Crucial to the success of the agency's SMS, the establishment of a positive safety culture and an environment conducive to the achievement of the agency's safety objectives is the ability of an organization to retain a healthy respect for, and be wary of, hazards that could develop into safety risks.

It is especially important for employees to be knowledgeable about risks that are considered accident precursors and be enabled to report or act on these hazards. Being watchful and maintaining a vigilant attitude are characteristics of a positive safety culture and affect the values, attitudes, and behaviors of all employees. These activities support the higher reliability of safety efforts to become sustainable over the long term.

SMS comprises four pillars, and is represented above in the showing SMS

1. **Safety Policies & Objectives:** The most important aspect of SMS is the organization's commitment, goals, and objectives towards safety. It starts at the top with MATA's Board, CEO, and management team; however, it also involves a safety culture where every employee is able and encouraged to report safety concerns without fear of reprimand. **MATA's Safety Management Policy Statement** and **MATA's Safety Plan** provides a strategic map to achieving high levels of safety performance and safety improvement.
2. **Safety Risk Management:** The core of MATA's Safety Plan is to identify hazards to reduce or eliminate risk. Basically, every manager, employee, or stakeholder should be looking for hazards. A hazard is anything that has the potential to cause damage, injury, harm, or death. Examples include physical hazards (e.g., uneven flooring), lack of training, inadequate supervision, unclear procedures, design defects, equipment failure, etc.
3. **Safety Assurance:** Safety assurance activities are integral to MATA's SMS program and are at the core of the safety management system (SMS) as it measures safety performance. Safety assurance includes organizational arrangements and systematic processes for continuous surveillance and recording of the organization's safety performance, as well as evaluation of the safety management processes and practices. Safety assurance is the means to demonstrate that organizational arrangements and processes for safety achievement are properly applied and continue to achieve their intended objectives.
4. **Safety Promotion:** Is a set of processes that are used to develop, sustain, and improve safety through awareness and changing behaviors. Safety promotion includes the development of a variety of initiatives and actions through training, reports, directives, advisories, bulletins, technical publications, leaflets and posters, audio-visual material, toolkits, manuals and guides, social media, and e-applications, and conferences, safety events, road shows, and campaigns.

Just Safety Culture: One key to the successful implementation of SMS is to attain a "Just Safety Culture".

- Develop an effective reporting safety culture without placing blame or affixing punishment, except in cases of willful, deliberate, flagrant, or reckless behavior.
- Realize that most unsafe actions are due to human errors or systemic weaknesses and do not warrant blame or punishment.
- Recognize that only a small proportion of human actions represent unacceptable behavior or are willful deliberate, flagrant, or reckless acts for which discipline is warranted. (e.g., criminal activity, repetitive disregard of safety, substance abuse, use of controlled substances, reckless noncompliance, sabotage, etc.)

- A “just safety culture”, is an atmosphere of trust in which people are encouraged, even rewarded, for reporting safety concerns or hazards.
- Properly and thoroughly investigate accidents, incidents, near misses, minor occurrences, and safety concerns or hazards to identify causal factors, systemic issues, and organizational weaknesses to improve safety.
- Safety analysis and investigation is a necessary and effective means of improving safety, by learning the appropriate lessons from safety occurrences and adopting preventative actions.
- Promote a positive safety culture where occurrences and hazards are reported without fear of retribution or blame, that necessary processes are in place for effective investigations, and collaborative efforts exist to develop and implement effective safety mitigations, preventative actions, and corrective actions to continuously improve safety.

2.0 Purpose and Scope

MATA’s Safety Plan has been developed to encompass the following modes and functions of transportation at MATA:

1. Trolley Operations & Maintenance
2. Fixed-Route Bus Operations & Maintenance
3. MATA Plus Operations & Maintenance
4. Building & Grounds Maintenance
5. Planning, Scheduling, Acquisitions, and Capital Projects
6. Customer Service and Marketing
7. Human Resources, Training, and Drug & Alcohol
8. System-wide Accessibility
9. Other MATA administrative and support
10. Contractors, vendors, services, and other stake Holders

Per the National Safety Plan, 49 CFR Part 673, and the TDOT SSPS, MATA is formally adopting the processes and standards of SMS. The SMS has appropriately scaled to the size, scope, and complexity of MATA based on the gap analysis and implementation strategy identified in the SMS Gap Analysis Report and SMS Implementation Plan. Copies of these documents can be available upon request to MATA’s Chief Safety & Security Officer (CSSO).

SMS is a 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. The process offers a means to reduce the potential for public transportation accidents by integrating safety into all aspects of a transit system’s activities, including planning, design, construction, operations, and maintenance.

SMS builds on the public transportation industry’s three (3) decades of experience with system safety by bringing management processes, integrated data analysis, and organizational culture more squarely into the industry’s overall risk management framework.

SMS is a management approach that provides processes that ensure each public transportation agency, no matter its size or service environment, has the necessary organizational structures, accountabilities, and policies and procedures in place to direct and control resources to manage safety optimally. When systematically applied, the SMS approach provides a set of decision-making tools that allow transit agencies to prioritize safety and sound transit asset management when making informed operating and capital investment decisions.

SMS combines established system safety engineering principles with advanced organizational management techniques, and supports continuous improvement in safety performance through a positive safety culture founded on four (4) key components and eleven (11) sub-components:

Components 1 Safety Management Policy

- A. Safety Management Policy Statement
- B. Safety Accountabilities and Responsibilities
- C. Integration with Public Safety and Emergency Management
- D. SMS Documentation and Records

Components 2 Safety Risk Management

- A. Hazard Identification and Analysis
- B. Safety Risk Evaluation

Components 3 Safety Assurance

- A. Safety Performance Monitoring and Measurement
- B. Management of Change
- C. Continuous Improvement

Components 4 Safety Promotion

- A. Safety Communications
- B. Competencies and Training

Safety management policy, safety risk management, safety assurance and safety promotion (referred to as the four pillars) are the foundation for the Safety Management System Plan. This is depicted graphically below and defined in the FTA SMS Framework, September 2024.

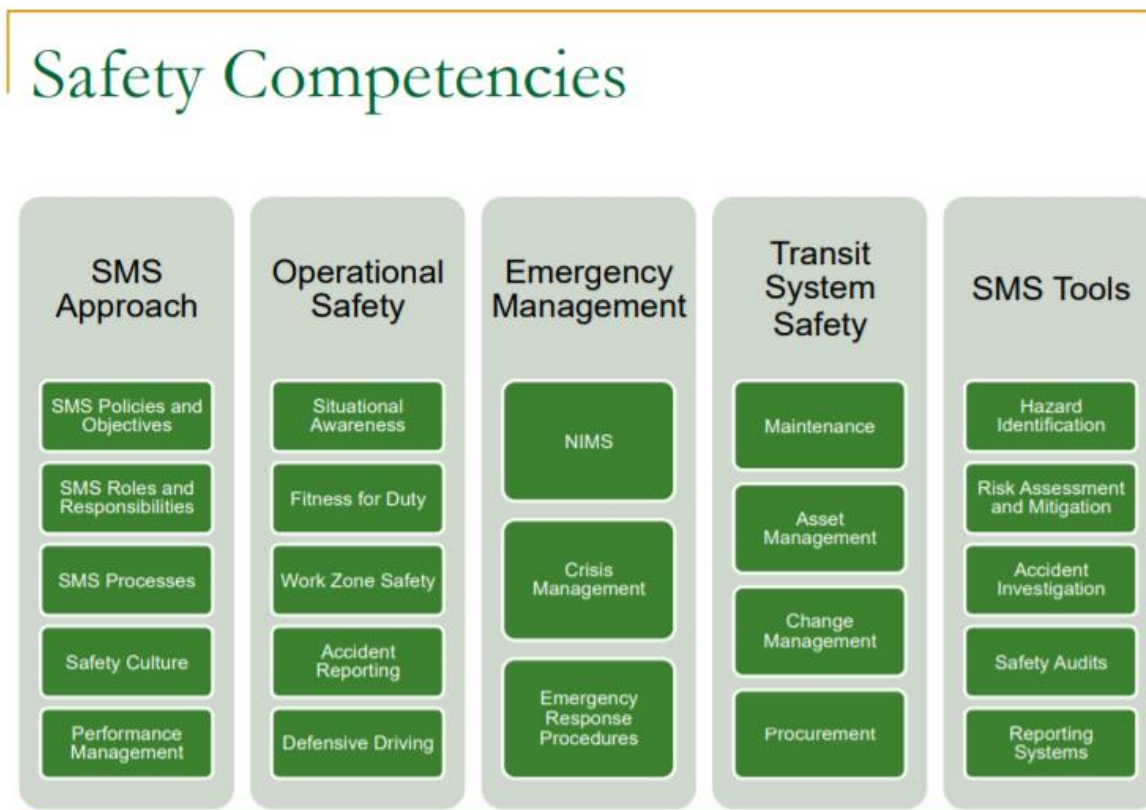


Figure 2: FTA SMS Framework SMS Model⁴

Within the SMS Framework are specific areas that MATA will evaluate and determine organizational safety competencies, in the areas of SMS approach, Operational Safety, Emergency Management, and SMS Tools.

⁴ APTA Safety Management System Manual, 3.22.16

Figure 3: Safety Competencies⁵



Safety Management System approach as defined by the Transportation Research Board (TRB585, January 25, 2011) states:

“An organized set of programs, principles, processes and procedures for the allocation of resources to achieve the condition where safety risks are managed to acceptable levels”.

Safety, Management, and System are defined as follows:

- **Safety** – the condition to which risks of harm arising out of agency’s decisions and operations are managed to acceptable levels
- **Management** - the allocation of resources to achieve specific goals (leading/directing, planning, organizing, improving, performance measurement)
- **System** - organized set of programs, processes and procedures used to deliver services.
- **Safety culture** is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that can determine the commitment to, style and proficiency of the public transportation agency.⁶

3.0 Program Administration

The following section will describe how MATA will maintain SMS documentation and ensure all SMS documentation will be maintained for no less than three (3) years after this Safety Plan has

⁵ APTA Safety Management System Manual 3.22.16

⁶ APTA Safety Management System Manual. Quote: Dr. Ahmed, TRB585, January 25, 2011

been approved. MATA will ensure that the FTA and other federal entities, as applicable, as well as TDOT, have access to any SMS documentation maintained by the Rail Transit Authority (RTA) upon request. Other critical processes supporting the SMS, but not specific to MATA's Safety Plan are included within those process-specific documents such as the SSEPP.

3.1 MATA's Safety Plan Schedule

The following schedule has been and will be used to ensure MATA's Safety Plan is implemented, reviewed, and maintained in accordance with federal and state requirements.

Table 1: SAFETY PLAN Management Schedule⁷

Milestone	Schedule
MATA Safety Plan Initial Certification	<i>July 20, 2020</i>
Annual Revisions to TDOT	<i>December 31st</i>
Ongoing Revisions	<i>30 Days prior to effective date</i>
Pre-Revenue, Capital Projects	<i>180 Days Prior to Revenue Service</i>

MATA will submit its revised Safety Plan to TDOT on or before December 31 of each year. TDOT will issue written approval of MATA's Safety Plan within thirty (30) calendar days.⁸

3.2 Document Control and Updates

Based on the SSPS requirements as well as the requirements 49 CFR Part 673 and 49 CFR Part 674, MATA submitted its Safety Plan to TDOT as scheduled on July 20, 2020, which was accepted and approved. Additionally, MATA is to submit the Safety Plan to TDOT for review and approval in the event it is significantly modified, and when MATA completes its annual review and update. All operating rules, procedures, and materials referenced in MATA's Safety Plan should also be submitted to the TDOT along with MATA's Safety Plan to ensure an efficient and complete review of the safety program.⁹

The CSSO will develop and manage the review processes of MATA's Safety Plan in coordination with other safety and security staff members. It will be the CSSO's responsibility to ensure proposed changes from the findings and recommendations of internal safety audits, incident, accident and hazard investigations, corrective action plans, changes in regulations, system modifications and expansions, transit industry advancements, technology advancements and changes in operating conditions are incorporated, as needed.

3.2.1 Annual Revisions

Per the TDOT's SSPS, MATA will review MATA's Safety Plan, at least, annually and make any modifications as needed to ensure that the plan is current and accurate. MATA will submit an updated draft Safety Plan to TDOT for review and approval by the end of every year on December 31st.¹⁰ Each updated draft Safety Plan submitted to TDOT should include a summary identifying

⁷ TDOT SSPS, Revisions 5

⁸ TDOT SSPS, Revision 5, p.34

⁹ TDOT SSPS, Revision 5, p.34

¹⁰ TDOT SSPS, Revisions 5, Section 4.3



and explaining the changes. No changes to MATA's Safety Plan should also be indicated in the review and approval process.

This Safety Plan will be updated as relevant organizational, or process changes occur and at a minimum annually¹¹ In addition, MATA will maintain its Safety Plan in accordance with recordkeeping requirements¹² and will maintain its relevant SMS documents and those referenced herein for a minimum of three (3) years after they are created.¹³

The annual revisions process includes a review and approval by the SMS Safety Committees, and the board of directors as well as a preliminary review by TDOT or the FTA's PTASP TAC team.

3.2.2 Ongoing Revisions

MATA's Safety Plan is a living document that governs safety compliance for MATA Trolley, Fixed-Route Bus, and Paratransit systems including meeting all internal and external requirements. As such, changes to the operating system may require changes to MATA's Safety Plan. Changes may also be required from external audit findings, internal reviews, investigations, or changing trends in safety and security data and information analysis.

Revisions to MATA's Safety Plan initiated by MATA will be submitted to TDOT for review and approval within thirty (30) calendar days of the effective date of the change.¹⁴ If changes are requested from TDOT, MATA will coordinate with State Safety Oversight Agency (SSOA) representatives to negotiate a timeframe and set a deadline for completing the revision.

3.3 Authority

MATA is the public transportation provider for the Memphis area. As one of the largest public transit operators in the state of Tennessee, MATA transports customers in the City of Memphis and parts of Shelby County on fixed-route buses, paratransit vehicles, and vintage rail trolleys. The system is governed by a board appointed by the City Mayor and approved by the Memphis City Council.

3.3.1 Federal Transit Act

In response to congressional concern regarding the potential for catastrophic accidents and security incidents on rail transit systems, the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) added Section 28 to the Federal Transit Act (codified at 49 U.S.C. Section 5330). This section requires the FTA to issue a rule creating the state-managed oversight program for rail transit safety and security.

The FTA published the revised Rail Fixed Guideway Systems: State Safety Oversight Rule on April 29, 2005, codified as 49 CFR Part 659, subsequently referred to as State Safety Oversight Rule. Only those states with RFGPTS meeting the definition specified in 49 CFR Part 659 were required to comply with the FTA's State Oversight Rule revisions. On March 16, 2016, the FTA published a new State Safety Oversight Rule, 49 CFR Part 674, which went into effect on April 15, 2016. Three (3) years after this date, on April 15, 2019, 49 CFR Part 674 took effect, superseding 49 CFR Part 659. Under 49 CFR Part 674, MATA is required to produce an agency approved Safety Plan, which must then be submitted to the State Safety Oversight Agency (SSOA) for review and certification, at least annually. It is also the obligation of the SSOA to

¹¹ 49 CFR Part 673.11(a)(5)

¹² 49 CFR Part 673.11(c)

¹³ TDOT SPSS

¹⁴ TDOT SPSS

enforce the execution of MATA's Safety Plan, through the order of Corrective Action Plans (CAP) or by any other means. Other requirements include investigating accidents that are defined in the SSOA program standards, further regulating MATA's rail transit system.

Further requirements are defined in 49 CFR Part 673, requiring MATA to develop a Safety Plan by July 20, 2020, which further requires the Rail Transit Agency (RTA) to establish and implement an SMS. MATA's Safety Plan, and any subsequent updates are to be signed by the CEO and approved by the Board of Commissioners and subsequently certified annually by the SSOA. Further requirements of 49 CFR Part 673 require compliance with the minimum safety performance standards authorized under 49 U.S.C. 5329(b)(2)(C).

Requirements for an agency to adopt an SMS were effective on July 19, 2019, when the prior regulation, 49 CFR Part 659, were superseded by 49 CFR Part 673: Public Transportation Agency Safety Plan. The new rule requires public transit agencies to develop and implement a Safety Plan using the four (4) components of SMS. Through 49 CFR Part 673 and section 5329(d)(1) of title 49, U.S.C., requires each transit agency that receives certain FTA funding to certify that it has established a comprehensive Safety Plan. Additionally, the FTA published 49 CFR Part 674 which grants greater authority to the States to oversee RTA's safety program, including its SMS.

3.3.2 State Safety Oversight Agency

Moving Ahead for Progress in the 21st Century Act (MAP-21), enacted as 49 U.S.C. 5329, set in motion a process whereby SSOA must enhance their standards and practices and become certified by FTA. The law called for FTA to develop and issue a new State Safety Oversight Rule, codified as 49 CFR Part 674, which became a final rule in 2016. The rule requires that states with an RFGPTS identify an agency to hold oversight responsibilities of the rail transit system.

Through Tennessee Code Annotated (T.C.A.) 13-10-101 seq, the Tennessee General Assembly assigned the TDOT, Office of Multimodal Transportation Resource Division as the agency responsible for rail transit safety and security oversight in the state. As such, the TDOT was designated as the SSOA responsible for MATA Trolley-operated rail transit safety and security oversight. To implement these responsibilities, the SSOA has established its SSPS, which outlines the SMS requirements MATA Trolley must implement under the provisions of the State Safety and Security Oversight Program under 49 CFR Part 674.

TDOT's SSPS defines the requirement for MATA to create and maintain a Safety Plan that specifies the adoption of an SMS program in accordance with 49 CFR Part 673. It is further specified that MATA should prepare and submit an Agency Safety Plan to the TDOT SSO program for review and written approval based on compliance with the TDOT Rail Transit SSPS, at least on an annual basis.

To ensure an ongoing involvement in MATA Trolley's SMS programs, MTM personnel will continue to coordinate with TDOT to foster ongoing safety performance and improvement processes, including holding quarterly meetings with program participants, and monthly status reports for all CAPs related to the TDOT SSO program.

In accordance with 49 CFR Part 673 and 49 CFR Part 674 MATA Trolley will coordinate with the SSO to ensure that the rules, policies, and procedures provided within this Safety Plan, and implemented by MATA Trolley, comply with the SSPS.

The SSO is invited to observe or participate in all tabletop exercises and emergency exercises scheduled by MATA Trolley and will be advised in advance of all future exercises and drills, so they can observe or participate in MATA Trolley activities. MATA Trolley will advise the SSO at least seven (7) days in advance of all future exercises.



3.3.3 Accountable Executive

The Accountable Executive for MATA is the Chief Executive Officer (CEO). The CEO is the single identifiable person who:¹⁵

- Has ultimate responsibility for carrying out MATA's Safety Plan
- Responsibility for implementing MATA's Transit Asset Management Plan
- Control or direction over the human and capital resources needed to develop and maintain both MATA's Safety Plan and Transit Asset Management (TAM) Plan
- Ensuring that MATA's SMS is effectively implemented
- Ensure action is taken, when necessary, to address the substandard safety performance of MATA.

The CEO may delegate specific safety responsibilities; however, they are ultimately accountable for the agency's safety performance.

3.3.4 Chief Safety & Security Officer

MATA's Chief Safety & Security (CSSO) is designated by MATA's CEO as the SMS Executive and holds a direct line of reporting to the CEO.¹⁶ Overall, the CSSO/SMS Executive has the authority and responsibility for the day-to-day implementation and operations of the SMS program and does not serve in other operational or maintenance capacities.

Due to the size of the organization, the SMS Executive does maintain oversight of MATA's security functions as well, as authorized by Department of Homeland Security (DHS) and Transportation Security Administration (TSA) guidance and directives.

4.0 System Overview

MATA is the public transportation provider for the Memphis area. This authority was established in 1975 to serve the Memphis metropolitan area, and its mission is to ensure a reliable, safe, accessible, clean, and customer-friendly public transportation system that meets the needs of the community.

Mobility is a vital issue to improve the quality of life; MATA is designed to offer connectivity to medical, nutrition, education, employment, social, recreation, and commercial services to meet the public transportation demand of elderly, those with disabilities, transit-dependent people, youth, the public, and low-income citizens to enhance metropolitan area's economy and livability.

To ensure the mobility of the Memphis metropolitan area, MATA directly provides service and uses its employees to supply the necessary labor to operate the revenue vehicles for three (3) primary categories of service

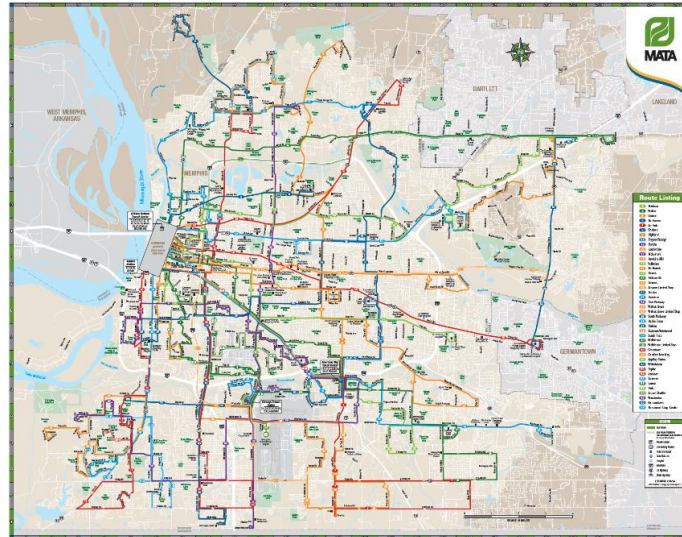
1. Rail trolley service,
2. Fixed-route bus route service, and
3. Paratransit service for people with disabilities.

¹⁵ 49 CFR Part 673.23(d)(1)

¹⁶ 49 CFR Part 673.23(d)(2)

Figure 3 represents the major streets and areas in the city served by MATA's system map.

Figure 3: MATA System Map



As one of the largest transit operators in the state of Tennessee, MATA provides transit service in the City of Memphis, portions of Bartlett and Germantown, and parts of Shelby County, on fixed-route bus, paratransit, and vintage rail trolleys. The transit system covers approximately three hundred (300) square miles providing service to a population of about 750,000. A breakdown of the ridership figures can be found in the table below:

Table 2: Fiscal Year 2024 Ridership by Mode

Mode	Ridership
Trolley	269,774 Passengers
Fixed-Route, Bus	2,527,976 Passengers
MATApplus (Paratransit)	429,245 Passengers

The Main Street Line began operations in 1993, becoming the first trolley line to operate in Memphis since 1947. Prior to June of 2014, MATA Trolley operated three (3) trolley lines in Downtown Memphis along 6.4 miles of track. In 2014, MATA ceased trolley operations due to a series of safety events, requiring MATA to implement a comprehensive system renewal and safety and security certification process. After four (4) years of redeveloping safety programs, MATA recommissioned service in April 2018 and now operates the Trolley exclusively on the Main Street Line, with service to twenty-three (23) stations. Services were suspended in August 2024 due to safety concerns.

The Main Street Line will operate according to a similar schedule to what existed prior to the suspension of service in 2014.

Main Street Line Schedule

Monday - Friday	6:45 AM - 12:15 AM
Saturday	8:00 AM - 12:10 AM
Sunday	10:00 AM - 6:10 PM

MATA Trolley was designed to operate a shuttle service on the Riverfront Loop and Madison Avenue Line according to the current schedules:



Riverfront Loop Schedule

Monday - Friday	9:00 AM - 9:00 PM
Saturday	8:30 AM - 11:30 PM
Sunday	10:30 AM - 6:00 PM

Madison Ave. Schedule

Monday - Friday	6:45 AM - 6:00 PM
Saturday	8:15 AM - 6:30 PM
Sunday	No Service

All operations on the Main Street Line are line of sight, and trolleys are restricted to posted mixed traffic speeds or track-specific speed restrictions - on the mall, at special track work, in the Main Street Facility (MSF), etc., whichever is the lowest.

MATApplus is a shared ride paratransit service designed to meet the transportation needs of people with disabilities in MATA's service area. The service covers the same area as the MATA's fixed-route bus system and operates during the same days and hours as the fixed-route bus system but extends its service area three-quarters (3/4) of a mile beyond the fixed-routes. Two types of services are offered through MATApplus: Advance/Demand Response, which allows riders to book reservations in advance, and a subscription service that allows riders to use the service to take them to their destination and back.

4.1 Infrastructure

Prior to the suspension of rail service in June of 2014, MATA Trolley operated three trolley lines in Downtown Memphis. The Main Street Line runs north and south for 1.84 miles from the William Hudson Transit Center (WHTC) to a tail track at G.E. Patterson Avenue. The Madison Avenue Line runs east and west along a double track for 2.2 miles between the Main Street Pedestrian Mall, where it joins the Main Street Line, and a tail track just east of Cleveland Street. Finally, the Riverfront Loop diverges west from the Main Street Line between Sycamore Avenue and A.W. Willis Avenue to the north and runs southbound as a single track for 2.4 miles before reconnecting to the Main Street Line at G.E. Patterson Avenue.

The Main Street Line consists of 1.84 miles of embedded track, including .96 miles of double track in mixed traffic, .75 miles of double-track, exclusive Right-of-Way (ROW) in two tracks along the mall, and .13 miles of single track in a reserved lane. The alignment has 23 open-air passenger stations, including one (1) stop at the WHTC with transfers available to MATA buses. All stations along the street-running track are curbside; all stations along the mall are at grade; and all stations employ ADA-compliant lifts or platforms for non-ambulatory passengers. The Main Street Line interfaces with mixed traffic signals or signs at all mixed-traffic intersections (all intersections are at grade), and vehicles are fitted with predictive priority equipment for interaction with wayside traffic signals.

Traction power is delivered to the Main Street Line from two 750 kW Traction Power Sub Station (TPSS) via the Overhead Contact Systems (OCS). While the Main Street Line shares its TPSS with the Riverfront Loop, the Riverfront OCS will remain de-energized until MATA chooses to recertify and reactivate the alignment.

MATA's fixed-route bus service covers 319 square miles. Bus service operates:

- 250 Shelters
- 3,691 bus stops
- 150 Fixed Routes



4.1.1 Administrative Facilities

MATA currently has six (6) locations that house major operations for the organization

1. Hudson Transit Center located at 444 North Main
2. Trolley Maintenance and Storage Facility located at 547 North Main
3. Airways Transit Center located at 3033 Airways
4. American Way Transit Center located at 3921 American Way
5. Administration, Bus Operations, and Maintenance located at 1370 Levee Road
6. Corporate Administration – One Commerce Square located at 40 South Main Street

4.1.2 Trolley Facilities and Maintenance Shops

One (1) Maintenance and Storage Facility (MSF) currently serves the Main Street alignment. The MSF utilizes an embedded track on N. Main Street and inside the facility, and open track behind the facility. The trolleys are powered via a single trolley wire that is extended overhead by poles located in the MSF yard, with OCS on the North and South sides of the facility. Trolleys are stored in the MSF when not in revenue service, after hours, and for maintenance.

The MSF has six (6) tracks for maintenance and storage and holds two (2) power source substations, which control power to the Main Street Line and the MSF respectively.

The MSF is approximately 60,000 square feet and includes 1,500 square feet of office space. The building provides the following amenities:

- Trolley administrative, oversight staff offices reception/conference area
- Restroom facilities, locker rooms, and staff break rooms
- Office space for systems and facilities maintenance staff
- Six maintenance & storage tracks
- Two-track vehicle maintenance pit
- Paint booth
- Maintenance of way support shops
- Operator report area
- TPSS

The MSF contains a dedicated TPSS to enable trolleys to maneuver in and around the trolley facility, independently of the mainline. The MSF is equipped with a system of emergency power shut offs, strategically placed to protect MATA's mechanics working throughout the facility.

4.1.3 Bus and Paratransit Facilities and Maintenance Shops

Bus and Paratransit maintenance activities as well as the storage of vehicles are located at 1370 Levee Road. The following capabilities are found at this location:

- Routine vehicle maintenance
- Vehicle wash bays
- Fueling
- Vehicle storage

4.2 Rolling Stock

MATA has a total of 249 vehicles within its asset inventory. The fleet count is in the table below:

Table 3: 2024 Fiscal Year MATA Fleet Count

Vehicle Type	Count
Trolley	5
Fixed-Route, Bus	104
MATApplus (Paratransit)	65
Service, Non-Revenue	75

4.2.1 MATA Trolley Rolling Stock

MATA Trolley currently uses six (6) steel-wheeled trolleys: four (4) in-service and two (2) spares. This includes one (1) double-truck Birney replica and five (5) Melbourne vehicles. The Melbourne trolleys are approximately 48 feet, 10 inches in length, weigh 17.5 tons, and contain four (4) 40-horsepower, 600-volt DC motors. The Birney trolley is approximately 46 feet in length and weighs approximately 23 tons. It also has four (4) 40-horsepower motors.

The MATA Trolley is all-electric and is powered from an overhead contact wire powered at 600 volts DC. An operator's control cab is at each end of the car for bi-directional use.

The trolleys are equipped with interior cameras, onboard radios in each cab, automatic passenger counters, and Global Positioning Satellite (GPS), Automatic Vehicle Locator (AVL) capabilities. MATA has established procedures for video access and retention. MATA Trolley has coordinated with the Memphis Police Department (MPD) to validate that the current policy is consistent with any existing MPD or City of Memphis standards and requirements. Future revisions to the policy will be vetted with MPD and other relevant agencies.

Part B: Safety Performance

MAP-21 transformed how transit agencies monitor and improve their overall performance by establishing safety management structures and asset management programs. Through the establishment of goals, measures, targets, and plans, performance management refocuses the attention of agency leadership on accountability and transparency, which improves decision-making capabilities through performance-based planning. By defining attainable **Safety Performance Targets (SPT)**, MATA will increase its capacity to monitor and evaluate its safety performance, which will facilitate more effective resource investments.

5.0 Safety Performance Targets

MATA's SPT's are based on the **Safety Performance Criteria (SPC)** defined by the NSP as required in 49 CFR Part 670, Subpart D.¹⁷ In addition to the requirements set forth in the NSP, the safety performance targets for **System Reliability** correlate to the requisites identified in 49 CFR Part 625 for the agency TAM, which is further referenced in the NSP. In accordance with 49 CFR Part 670, the following **Performance Criteria** are measured:

1. Fatalities
2. Injuries
3. Safety Events
4. System Reliability

¹⁷ 49 CFR Part 673.11(3)

To define SPT rates, MATA must first identify its **Safety Performance Indicators (SPI)**. SPIs are specific data points that must be monitored to track the agency's overall safety performance. In essence, SPIs illustrate the ability of MATA to fulfill its SPTs. Data sets that support performance metrics include, but are not limited to:

Table 4: Safety Performance Indicators¹⁸

Safety Performance Target Criteria	Safety Performance Indicators	SPI Examples (rates)
1. Fatalities Total number of reportable fatalities and rate per total vehicle revenue miles, by mode.	A. Trolley Fatalities B. Bus Fatalities C. Paratransit Fatalities D. Employee Fatalities	a) <i>Suicides</i> b) <i>Workplace Accidents</i> c) <i>Collisions</i>
2. Injuries Total number of reportable injuries and rate per total vehicle revenue miles, by mode.	A. Trolley Passenger Injuries B. Bus Passenger Injuries C. Paratransit Passenger Injuries D. Employee Injuries	a) <i>Onboard vehicles</i> b) <i>Within a facility/station</i>
3. Safety Events Total number of reportable safety events and rate per total vehicle revenue miles, by mode.	A. Trolley Events B. Fixed-Route Events C. Paratransit Events	a) <i>Collisions</i> b) <i>Fire/Smoke</i> c) <i>Derailments</i> d) <i>Evacuations</i>
4. System Reliability Mean distance between major mechanical failures, by mode.	A. Trolley Failures B. Fixed-Route Failures C. Paratransit Failures	a) <i>Vehicle failure</i> b) <i>Power disruptions</i> c) <i>Signal Failures</i> d) <i>Other System Failures</i>

For all SPT rates, the total number of events will be multiplied by 100,000 Vehicle Revenue Miles (VRM) then divided by the total number of VRMs traveled in the previous fiscal year. Therefore, the equations to determine the event rate is as follows, unless otherwise specified below:

Figure 1: "Current" Rate Equation

$$\text{Mode Event Rate} = \frac{(\text{Event Count} \times 100,000 \text{ VRM})}{\text{Total Number of (Mode) Revenue Miles}}$$

Once the actual event rate is established, MATA will use any of the following strategies to establish the initial SPT per the NSP:

1. Five-Year Trends
2. Number and Rate Reduction
3. Benchmarking

Due to system characteristics and historical facts of the Trolley system, the development of statistical SPTs for MATA Trolley will not provide meaningful data trends because the system was recently restarted, and tangible historical data is not available. As such, MATA Trolley will benchmark against peer transit agencies to be drawn from National Transit Database (NTD) data. For Bus and Paratransit services, a number and rate reduction will be used to establish an SPT per event type. In other terms, MATA may establish a percentage threshold for event reduction, determined through organizational goals and objectives.

¹⁸ The thresholds for *reportable* fatalities, injuries, and events are defined in the NTD Safety and Security Reporting Manual

SPTs will be made available to state agencies upon request to assist in planning processes. This includes members of the Metropolitan Planning Organization (MPO) and TDOT. The CEO and SMS Executive will coordinate, to the greatest extent possible, with both TDOT and MPO staff to review MATA's SPTs in support of transit improvement efforts.

MATA's SPTs have been presented to and approved by the board in the month of June of 2021. The following shows the Safety Performance Outcomes for all modes of 2024, along with the Safety Performance Benchmarks for 2024:

MATA Office of Safety, Security, & Risk Management

Constructed by: Kevin Hervey, MATA Data Document Control Manager

Directed by: Keith Watson, MATA Chief Safety & Security Officer

Approved by: John Lewis, Interim Chief Executive Officer – Accountable Executive

2024 Safety Performance Outcomes

	MB (Fixed route) 2024 Motor Bus Vehicle Revenue Miles = 3,426,462 miles			DR (MATA Plus) 2024 Demand Response Vehicle Revenue Miles = 1,239,889 miles			SR (Trolley) 2024 Trolley Vehicle Revenue Miles = 89,191 miles	
	2024 Outcomes Number of Fatalities	2024 Outcomes Rate of Fatalities per 100K VRM	2024 Outcomes Number of Injuries	2024 Outcomes Rate of Injuries Per 100K VRM	2024 Outcomes Number of Safety Events	2024 Outcomes Rate of Safety Events Per 100K VRM	2024 Outcomes Total of Major Mechanical Failures	2024 Outcomes Miles between Major Mechanical Failures
MB	0	0	15	0.437	6	0.175	1,099	3,118
DR	0	0	2	0.161	3	0.241	150	8,266
SR	0	0	0	0	2	2.242	1	89,191

2025-26 Safety Performance Goals, Targets & Benchmarks*

	2025-26 Targets Number of Fatalities	2025-26 Targets Rate of Fatalities per 100K VRM	2025-26 Targets Number of Injuries	2025-26 Targets Rate of Injuries Per 100K VRM	2025-26 Targets Number of Safety Events	2025-26 Targets Rate of Safety Events Per 100K VRM	2025-26 Targets Total of Major Mechanical Failures	2025-26 Targets Miles between Major Mechanical Failures
MB	0	0	7	0.205	3	0.088	1,000	3,426
DR	0	0	1	0.080	2	0.161	135	9,184
SR	0	0	0	0	0	0	0	0

*2025-26 Safety Performance Goals, Targets & Benchmarks: Goal 50% reduction # of Fatalities, Injuries, Safety Events, & Major Mechanical Failures over 12 months.

5.1 Fatality Rate

A reportable fatality is a death due to a:

1. Collision, including suicides
2. Derailment
3. Fire
4. Hazardous Materials Spill
5. Act of God (i.e., hurricane, earthquake)
6. Other safety events

Fatalities that occur because of illnesses or other natural causes - including individuals who are found deceased, are not reportable and are thus not required to be measured as part of the Safety Performance criteria.

Table 5: 2024 Fatality Rate by Mode

Fatality Rate	Count (Total)	Total VRM 2024	Current (See equation above)	Target (See equation above)	Variance $\frac{\text{Target Rate}}{\text{Current Rate}}$
Trolley	0	89,191	0.0	0.0	0.0
Fixed-Route	0	3,426,462	0.0	0.0	0.0
Paratransit	0	1,239,889	0.0	0.0	0.0

5.2 Injury Rate

An Injury is defined as harm to a person, requiring that person to be transported from the scene of an incident to a hospital or medical facility for treatment. This includes any damage or harm to people that require immediate medical attention away from the scene because a reportable event must be reported as an injury. Reportable events further require monitoring of serious injuries as well as injuries where an individual seeks medical care several hours after an event, or in the days following an event. The Injury Rate is thus based on NTD Reporting Criteria.

Table 6: 2024 Injury Rate by Mode

Injury Rate	Count (Total)	Total VRM 2024	Current (See equation above)	Target (See equation above)	Variance $\frac{\text{Target Rate}}{\text{Current Rate}}$
Trolley	0	89,191	0.0	0.0	0.0
Fixed-Route	15	3,426,462	0.437	0.350	80%
Paratransit	2	1,239,889	0.161	0.080	50%

5.3 Safety Event Rate

A Safety Event, also referred to as an Event, is defined as any Accident, Incident, or Occurrence. The *Safety Event Rate* by mode is calculated using the following equation:

Table 7: 2024 Safety Events Rate by Mode

Safety Events	Count (Total)	Total VRM 2024	Current (See equation above)	Target (See equation above)	Variance $\frac{\text{Target Rate}}{\text{Current Rate}}$
Trolley	2	89,191	2.242	0.0	0.0
Fixed-Route	6	3,426,462	0.175	0.116	66%
Paratransit	3	1,239,889	0.241	0.161	66%

5.4 System Reliability

Safety and performance of MATA are collectively dependent, in part, on the condition of its assets. When transit assets are in a state of disrepair, the likelihood of consequential events occurring increases, as well as the likely impact against the system, with on time performance. Therefore,

system reliability metrics illustrate the relationship between safety and the asset condition. The data collected for system reliability should support and provide input into MATA's TAM.

System Reliability is thus calculated through the following equation:

$$\text{System Reliability (By Mode)} = \frac{\text{Revenue Miles Operated (By Mode)}}{\text{Number of Major Mechanical Failures}}$$

Table 8: 2024 System Reliability Rate by Mode

System Reliability	Count (Total)	Total VRM 2024	Current (See equation above)	Target (See equation above)	Variance = $\frac{\text{Target}}{\text{Current}}$
Trolley	1	89,191	89,191	0	0
Fixed-Route	1,099	3,426,462	3,118	3,426	110%
Paratransit	150	1,239,889	8,266	9,184	111%

5.5 Risk Reduction Program – 2025

Based on the Bipartisan Infrastructure Bill, and FTA directives, guidance, and industry best practices, the following Risk-Based initiatives have been introduced into MATA's Safety Plan for development and implementation in 2023. MATA has developed the appropriate programs, policies, plans, procedures, processes, practices, and training, as applicable, in the following areas:

1. **Safety Committee:** MATA formed Safety Committees on or before December 31, 2022, with the following provision:
 - a) MATA has modified its Safety Plan to describe the formation of joint labor-management committees for fixed route/paratransit and trolley/streetcar consisting of equal numbers of frontline employee representatives and management representatives
 - b) Approval of a charter or memorandum of understanding approved by management, labor, and the CEO, as the accountable executive
 - c) The committee(s) will, at a minimum, meet monthly to identify and recommend risk-based mitigations and strategies, including determining effectiveness, appropriateness of such, and identifying safety deficiencies towards continuous improvement
 - d) The committee(s) will produce agenda, minutes, and action items that will be tracked, monitored, and closed. The office of the CSSO serves as technical advisors and facilitators
2. **Risk Reduction Program:** Incorporation of FTA risk-reduction initiative into MATA's existing risk reduction program, with the following objectives:
 - a) MATA intends to enhance and improve its risk reduction efforts through a process of reducing the number of accidents, injuries, and assaults on transit workers
 - b) Bus shields, a physical barrier between the Bus Operator and potential assailants, have been installed on all MATA buses. While the impact of bus shields is difficult to measure quantitatively, their efficacy has been demonstrated through experience and the evaluation of reports. They have proven instrumental in safeguarding bus operators by reducing the number and severity of assaults

- c) MATA provides De-Escalation and Stress Management Training to transit workers. This program is designed to equip participants with essential skills to effectively manage their mindset, enhance awareness, improve communication abilities, de-escalate challenging situations, and foster personal resilience. By focusing on these critical areas, the training empowers employees to navigate potentially tense interactions with customers, promoting a safer and more secure environment for all parties involved
 - d) MATA has a robust CCTV system across its network, aiming to deter incidents and facilitate the resolution of assaults involving customers and employees. The installation and ongoing maintenance of this system are prioritized. All buses are equipped with audio and video recording capabilities, and to further deter unwanted behaviors, most are equipped with stickers that make patrons aware of being under surveillance
 - e) Additionally, MATA works to reduce vehicular and pedestrian accidents, including retrofits to reduce visibility impairments and a Safe Turn Alert (STA) System which is a standalone, passive warning system to play an audible warning message external and/or internal to the vehicle when the vehicle is making a right or left-hand turn
 - f) MATA will continue its efforts to mitigate assaults of transit workers to determine barriers and other measures to reduce assault risk
 - g) MATA plans to add these components for review and analysis by the Safety Committees, and will include performance data analysis, trending, targets, and benchmarking to better determine effectiveness and incident reductions
- 3. Safety Training:** MATA will enhance its current comprehensive core competency and safety training program with the following objectives:
- a) In stages over the next four (4) years, ensure the enhancement, development and implementation of a MATA training plan as approved management, training, and the accountable executive for safety-sensitive and personnel responsible for safety
 - b) The operations and maintenance personnel and personnel directly responsible for the safety of the recipient that includes the completion of a safety training program
 - c) Core competencies, refresher, education, and recertification training
 - d) Continuing safety education and training
 - e) De-escalation training
- 4. Infectious Diseases:** Over the past three years MATA has developed and implemented numerous program elements dealing with infectious diseases (COVID-19):
- a) Review past lessons learned and strategies to minimize, control, and protect from exposure to MTM personnel, and property to hazards and unsafe conditions, and consistent with guidelines of the Centers for Disease Control and Prevention or a State health authority, minimize exposure to infectious diseases
 - b) MATA will consider mitigations or strategies related to exposure to infectious diseases through the safety risk management process described in the MATA Safety Plan
- 5. Risk-Based Inspection Program:** A risk-based inspection program uses qualitative and quantitative data analysis to inform ongoing inspection activities. Risk-based inspection programs are designed to prioritize inspections to address safety concerns and hazards associated with the highest levels of safety risk. MATA will work with TDOT SSOA in efforts to meet Federal and TDOT requirements and guidance.
- a) As part of a collaboration with the TDOT SSOA, MATA will develop and implement a Risk-Based Inspection Program over the next 18 months into mid-year 2025
 - b) The Risk-Based Inspection program development and implementation will follow:

- Category 1:** *Performance of Risk-Based Inspections*
- Category 2:** *Risk-Based Inspection Policies and Procedures*
- Category 3:** *Data Sources and Collection*
- Category 4:** *Inspection Prioritization Schedule*
- Category 5:** *Risk-Based Inspection Programs Commensurate with Number, Size, and Complexity of MATA*
- Category 6:** *MATA Staffing, Qualifications, and Training*

6.0 Metropolitan Planning Organization

MATA will coordinate quarterly with the Memphis Urban Area Metropolitan Planning Organization (Memphis MPO) by making its safety performance targets available to aid in the planning process.¹⁹

The Memphis MPO was created in 1977, and is responsible for the transportation policy development, planning, and programming for the counties of Shelby and Fayette, Tennessee, and DeSoto and Marshall Counties, Mississippi. Federal Regulations require that an MPO be designated to carry out a comprehensive, continuing, and coordinated (3-C) transportation planning process for urbanized areas with a population of 50,000 or more.

The Memphis MPO consists of twenty-four (24) elected officials, MATA, Memphis-Shelby County Airport Authority (MSCAA), Memphis-Shelby County Port Commission (MSCPC), and representatives from the Tennessee Department of Transportation (TDOT) and Mississippi Department of Transportation (MDOT). The Shelby County Department of Regional Services provides staff to the Memphis MPO and serves as its fiscal and administrative agent.

Using federal regulations for guidance, short and long-term transportation plans that meet community objectives are developed and implemented. A multi-modal planning approach is used to assure a vibrant and growing system of roads, rail, transit systems, pedestrian/bicycle trails, airports, and waterways. To the greatest extent possible, MATA will coordinate with Memphis MPO in the identification of safety performance targets.²⁰

MATA coordinates to the maximum extent practicable with TDOT to support the selection of safety performance targets (§ 49 CFR Part 673.11(a)(3)).

Part C: Safety Management Policy

The Safety Management Policy²¹ is the keystone of MATA's SMS and provides direction for effective Safety Risk Management, Safety Assurance, and Safety Promotion. Per 49 CFR Part 673, MATA must establish the following sub-components of the Safety Management Policy:

- 49 CFR Part 673.23(a) Safety Management Policy Statement
- 49 CFR Part 673.23(a) Organizational Accountabilities and Responsibilities
- 49 CFR Part 673.23(b) Employee Reporting Program
- 49 CFR Part 673.11(6)(b) Integration with Public Safety and Emergency Management
- 49 CFR Part 673.23(d) Accountabilities and Responsibilities
- 49 CFR Part 673.31 Documentation and Recordkeeping

¹⁹ 49 CFR Part 673.15

²⁰ 49 CFR Part 673.15(b)

²¹ 49 CFR Part 673.23

The Safety Management Policy thus assists in assuring management's involvement and commitment to the SMS and MATA-wide safety improvement, by laying out the policies and procedures required to carry out the SMS. This is only accomplished through a clearly defined statement that defines the organizational structures, effectively identifies accountabilities, and SMS planning efforts.

MATA's Safety Management policy is communicated throughout MATA.

7.0 Safety Management Policy Statement

The mission of MATA is to provide a safe and reliable transportation service for the public, healthful and safe working conditions for all MTM personnel, and to comply with all applicable Federal, State, and local laws and regulations.

MATA is fully committed to SMS and to providing its customers with a safe transportation service, maintaining a strong safety culture, and providing a working environment that ensures the safety and health of its employees and protects the environment. MATA is further committed to developing, implementing, maintaining, and continuously improving its processes to ensure that all transit service delivery activities occur under a balanced allocation of organizational resources, aimed at achieving the highest level of safety performance and meeting the established standards. As such, MATA is placing the management of safety as one of the core business functions of the organization, across all modes of transportation.

It shall be the responsibility of management at all levels of the organization, as well as employees in each division are accountable for the delivery of the highest level of safety performance, beginning with the CEO. The CEO, through the CSSO, will ensure MATA's Safety Plan, its processes, and the intent of the SMS is well communicated throughout the agency, and that all employees, agents, and contractors are working towards achieving its goals and objectives.

This policy statement will be reviewed and updated to align SMS processes with ongoing and evolving safety performance goals and objectives.

The full and signed Safety Management Policy Statement can be found on Page vi to vii of this Safety Plan.

7.1 Safety Goals

The goal of this Safety Plan is to establish processes and procedures of the SMS that will support the efforts of the organization to provide reliable service. The processes defined in MATA's Safety Plan will ensure programs effectively address, manage, and monitor safety performance efforts throughout the four (4) components of SMS.

MATA has established three (3) goals to optimize the SMS and manage its safety risks across all three (3) modes of transportation. These goals aim to certify compliance with the Safety Performance Targets. As the SMS programs mature, the goals and objectives of the Agency may change to accommodate the changing environment.


Table 9: SMS Program Goals

No.	Goal	Responsibility
1.	Establish and maintain a SMS approach across all modes operated by MATA that will sustain a positive safety culture permissive of effective communications, continuous improvement, and risk reduction.	-CEO -CSSO -MATA Chiefs/Directors -Office of the CSSO -SMRC, Safety Committee
2.	Integrate Safety Risk Management processes into organizational efforts, programs, and procedures to identify, analyze, evaluate, and mitigate hazards to the lowest practical level to meet Safety Performance Targets.	-CEO -CSSO -Office of the CSSO -SMRC, Safety Committee's -MATA Chiefs/Directors -Managers / Supervisors -Front Line Staff -Contractors, Vendors, Service
3.	Establish and maintain a high level of safety for Trolley, Bus and Paratransit services, consistent with industry safety standards, guidance, practices, and all applicable requirements.	-CEO -CSSO -Office of the CSSO -SMRC, Safety Committee's -MATA Chiefs/Directors

7.2 Safety Objectives

MATA's safety objectives provide greater insight into the safety goals defined above. The objectives will further support MATA's ability to achieve the SPTs. The objectives will be reviewed and updated annually or as needed.

Table 10: SMS Program Objectives

No.	Objective
A.	Support the SMS and the management of safety by providing appropriate resources to support an organizational culture that fosters safe operational practices, encourages effective safety reporting and communication, and actively manages safety with the same attention to results as that given to the other management systems of MATA
B.	Integrate the management of safety as part of the primary responsibilities of all MATA managers and employees
C.	Define accountabilities and responsibilities of all employees and managers alike, to uphold the organization's safety performance goals and performance of the SMS
D.	Establish and operate a Safety Risk Management process that allows for hazard identification, analysis, and risk evaluation utilizing an employee reporting program as a principal source for information gathering
E.	Prioritize the elimination or mitigation of calculated, identified safety risks created by operating conditions or activities to a level consistent with the agency's acceptable level of safety performance
F.	Ensure that no action will be taken against any employee who discloses a safety concern through an employee safety reporting program, unless disclosure indicates through the investigative process and beyond a reasonable doubt, an illegal act, gross negligence, or a deliberate or willful disregard of regulations or procedures was committed
G.	Comply with, or exceed, when possible, legislative, and regulatory requirements and standards
H.	Ensure sufficiently trained and knowledgeable human capital is available to implement the various SMS processes, including as part of service delivery operations

I.	Ensuring all employees are provided with adequate and appropriate safety-related information and training, competent in safety management processes and subject, and allocated only tasks commensurate with their skills
J.	Establishing and Measuring safety performance against data-driven safety performance indicators and targets
K.	Continuous Improvement of safety performance and the SMS through management processes that ensure appropriate safety risk management, assurance, and promotion activities are identified, implemented, and effective
L.	Ensure externally supplied systems and services to support MATA operations are delivered in a manner to meet safety performance standards
M.	Define processes to address conditions when disciplinary actions will be exempted based on the actions of an employee, in support of promoting a positive safety culture
N.	Establish and improve MATA's Occupational Health & Safety Program to comply with OSHA and industry best practices

8.0 Accountabilities and Responsibilities

This section describes the integration of safety throughout the MATA's three (3) modes of transportation: Trolley, Fixed-Route Bus, and Paratransit. It will describe the accountabilities and responsibilities of MATA's CEO, CSSO, the Executive Management Team, Directors, and Key Staff, for their respective departments/divisions.

Ultimately, the management of safety is a MATA-wide function that encompasses all departments, employees, and is supported by the Safety and Security Department that provides technical guidance, safety performance information, safety recommendations, and risk analysis. All employees play a part in safety, including executive management and front-line employees.

The organizational chart is in Appendix A.

8.1 Chief Executive Officer / Accountable Executive²²

The Accountable Executive for MATA is the CEO and is the single identifiable person who:

- Has ultimate responsibility for carrying out MATA's Safety Plan of a public transportation agency
- Responsibility for carrying out the agency's Transit Asset Management Plan
- Control or direction over the human and capital resources needed to develop and maintain both the agency's Safety Plan and TAM

In addition to these responsibilities, the CEO is accountable for ensuring that the agency's SMS is effectively implemented. Additionally, the CEO must ensure action is taken, when necessary, to address substandard safety performance of the agency. The CEO may delegate specific safety responsibilities; however, they are ultimately accountability for the agency's safety performance. The position of Chief Executive Officer is currently vacant. Beginning January 2025, John Lewis of TransPro Consulting is serving as Interim Chief Executive Officer pursuant to a contract between TransPro Consulting and the City of Memphis for a term of 8 months. Thereafter MATA will advise FTA as to the Chief Executive Officer/Accountable Executive.

²² 49 CFR Part 673.23(d)(1)

8.2 Deputy Chief Executive Officer

The Deputy Chief Executive Officer manages and oversees the senior executive team under the direction of the CEO. The Deputy Chief Executive Officer also manages communications, marketing, and public outreach. The Deputy Chief Executive Officer works with the CSSO, Office of the CSSO, and with the SMRC committee to facilitate MATA's Safety Plan, SMS, safety & security communications, campaigns, outreach, and messaging. The Deputy Chief Executive Officer Staff has assigned a member of her team to assist the CEO, CSSO, SMRC, and the Office of the CSSO as part of MATA's SMS Promotion component of the safety plan.

8.3 Chief Safety & Security Officer

MATA's CSSO is designated by the CEO as the SMS Executive and holds a direct line of reporting to the CEO.²³ Overall, MATA's SMS Executive has the authority and responsibility for the day-to-day implementation and operations of the SMS program and does not serve in other operational or maintenance capacities. MATA's SMS Executive has been delegated the responsibility to maintain oversight of MATA's security, emergency management, and risk functions.

Roles and responsibilities of the CSSO for Safety and Security include:

- Providing safety, health, security, emergency management, and risk management technical direction, support, guidance, and recommendations
- Presenting safety, health, security, emergency management, and risk management applicable standards, guidance, best practice, and safety recommendations (e.g., NTSB, FTA, FRA, TDOT, OSHA, etc.)
- Overseeing and managing the safety risk management process
- Overseeing and managing accident/incident investigations
- Overseeing and managing security, emergency management, and other risks, including TVA's, baseline assessments, after action reports, and other activities
- Overseeing and managing occupational health, safety, and environmental risk management processes
- Issuing health, safety, security, emergency management, risk management communications, directives, advisories, bulletins, training, initiatives, campaigns, and guidance
- Evaluating, assessing, and prioritizing state of good repair of safety critical assets, infrastructure, rolling stock, equipment, systems, and other assets
- Analyzing human, work environment, organizational, systemic, and practical drift factors that impact health, safety, and security
- Developing and producing safety, security, emergency management
- Conducting safety assessments, hazard analysis, and risk assessments
- Ensuring coordination with TDOT, OSHA, FTA, FRA, EPA, TDEC and other Federal, state, and local regulatory agencies, including, but not limited to audits, annual certifications, CAP's, inspections, investigations, and other regulatory activities
- Communicate and coordinate with other MATA Executive Leaders and the Board of Commissioners to ensure continuous safety improvement
- Overseeing safety and security certifications
- Exercise the authority to suspend unsafe operations, as necessary

²³ 49 CFR Part 673.23(d)(2)



During the implementation of the SMS, MATA's CSSO/SMS Executive holds the following responsibilities:

- Coordinate Key Staff, Executive Management, management, employees, contactors, vendors, and service providers to support SMS implementation
- Facilitate the development, implementation, and continuous improvement of SMS processes and activities
- Procure technical and personnel resources for SMS implementation
- Socialize SMS activities with agency executives and staff as necessary
- Communicate SMS implementation progress and challenges

MATA's CSSO will utilize Subject Matter Experts (SME) of each division or department to support the development and integration of SMS into the agency that is appropriately scaled and sized to meet the needs of the organization.

8.4 Agency Leadership and Executive Management

MATA's **Executive Management Team** is comprised of the following individuals,

- Chief Executive Officer
- Deputy Chief Executive Officer
- Chief Administrative Officer
- Chief Operations Officer
- Chief Operations Officer – Trolley Division
- Chief Financial Officer
- Chief Compliance Officer / EEO Officer
- Chief Safety and Security Officer
- Director of Operations
- Director of Maintenance
- Director of Building and Grounds
- Director of Information Technology
- Director of Grants
- Director of Planning and Scheduling

MATA's Executive Management team will support MATA's CSSO / SMS Executive by ensuring safety management practices are incorporated into the agency's operational areas. The Executive Management Team will comprise **MATA's Safety Management Executive Review Committee (SMRC)**.

MATA's SMRC meets regularly to review, discuss, and approve safety, security, emergency management, and risk management concerns, investigations, risk assessments, hazard analysis, safety improvements, CAP's, safety initiatives, and other items. The SMRC will meet on a regular and scheduled basis in person, virtually, or by email distribution.

MATA's Executive Management team will advance and ensure safety performance expectations and accountabilities within their respective divisions and departments as well as establish and maintain clear lines of safety communication to front-line staff by means of the SMS Key Staff identified below.

The responsibility of MATA's Executive Management team further includes reasonably designating representatives from operations, maintenance, and other revenue service support functions to serve as SMS Key Staff. Doing so depicts management's oversight of the safety management process, which will entice greater support and training opportunities for staff.

8.5 SMS Safety Committee

SMS Safety Committee: In accordance with the Bipartisan Infrastructure Law, signed into law on November 15, 2021, MATA has formed an SMS Safety Committee convened by a joint labor–management process and that consists of an equal number of frontline employee representatives and management representatives. The Safety Committee is responsible for the following:

1. Approving MATA Safety Plan and any updates to the Safety Plan
2. Identifying and recommending risk-based mitigations or strategies necessary to reduce the likelihood and severity of consequences identified through the agency’s safety risk assessment processes
3. Identifying mitigations or strategies that may be ineffective, inappropriate, or were not implemented as intended
4. Identifying safety deficiencies for purposes of continuous improvement
5. Establishing performance targets for MATA’s risk reduction program

As MATA is a multi-modal transit agency, MATA has established the Trolley/Streetcar Safety Committee and the Fixed route/paratransit Safety Committee.

8.6 Office of the Chief Safety & Security Officer (Office of the CSSO)

MATA’s Office of the CSSO comprises safety officers, safety specialists, safety analysts that are directed, managed, and supported by the CSSO.

Office of the CSSO employees and contractors report directly to the CSSO through a hierarchy as displayed and are authorized to perform, implement, and lead various safety and security functions and activities related to safety, security, emergency management, and risk management.

The Office of the CSSO coordinates with MATA’s various transportation modes, functions, and activities. Employees and contractors of the Office of the CSSO perform, including, but not limited to:

- Advising the MATA’s CSSO, SMRC, SMS Safety Committees and other officers, senior managers, and staff as appropriate, concerning safety, health, security, emergency management, risk management, and regulatory compliance analyses SMS
- Implement policies and programs that ensure all aspects of respective departments are effectively and successfully operating under the overarching umbrella of SMS and support the goals, objectives, and mission of MATA
- Coordinate safety activities and develop programs to support Safety Assurance practices
- Advise and coordinate with all departments to ensure that all safety, security, emergency management, and environmental-related activities conducted by the departments are performed in accordance with MATA’s Safety Plan and compliance with applicable codes and regulations
- Provide assessments and analyses of key issues and policy decisions
- Provide direction, technical advice, and support for Safety Risk Management efforts, safety and environmental policy development, comprehensive accident investigations, compliance reviews, engineering, industrial hygiene studies, and comprehensive occupational safety and environmental management programs

- Establish and maintain effective communication, liaison, and cooperative relationships with federal, state, and local governmental agencies, labor unions, and the Safety Committees of the American Public Transit Association (APTA) and the National Safety Council (NSC), American Society of Safety Engineers (ASSE), Operation Lifesaver, Inc, and the World Safety Organization (WSO)
- Provide oversight of compliance with the safety standards, safety regulations, and best practices
- In collaboration with the training department, management, and other stakeholders assist in the development of effective safety and environmental training and education programs for employees, and as required, for the public, and contractors.
- Preparing specialized accident/incident reports and corrective action plans as required by MATA's Safety Plan and in accordance with the State Safety Oversight program as required by regulation, rules, and procedures, as applicable.
- Preparing specialized accident/incident reports and corrective action plans as required by MATA's Safety Plan and in accordance with OSHA, DHS/TSA, FTA, FRA, and other Federal, state, and other regulatory agencies.
- Enforcing safety, security, and emergency management policy for MATA Trolley in conformance with all MATA Trolley, federal, state, and local rules, laws, and regulations
- Overseeing all operations and maintenance activities pertaining to safety, security, and emergency management for MATA Trolley
- Responding to, conducting, and participating in investigations, assessments, analysis, research, and studies
- Reviewing MATA policies, procedures, and plans to ensure compatibility with MATA safety, security and emergency management programs and plans.
- Participating in the evaluation, review, and content update of the MATA 's Safety Plan, mandated by 49 CFR Part 673 and TDOT requirements.
- Recommending to the CSSO the appropriate level of resources needed to ensure that adequate capital and personnel are available to accomplish safety, security and emergency management goals and objectives.
- Co-chairing the SMRC, SMS Safety Committees, and other committees, working groups, and task teams
- Co-chairing safety & security working groups or committees on other safety and security initiatives, including design reviews
- Serving on all safety and security-related MATA committees and subcommittees.
- Supporting the CSSO as with the SSO, including meeting all requirements stated in 49 CFR Part 673 and the TDOT SSPS, including other regulatory agencies, as applicable
- Supporting the CSSO's MATA coordination efforts with all federal, area, and Memphis law enforcement and emergency response agencies
- Providing recommendations on safety and security design criteria, and, if necessary, ensuring their inclusion in all design and construction documents
- Ensuring the establishment of safety and security criteria and priorities through policies and procedures and reviewing all MATA contracts to ensure safety, security, and emergency management requirements are included
- Conducting operations and safety training for MTM personnel, and contractors, including the Executive Management Team, and SMS Safety Committee members
- Assisting in the development and implementation of safety policies and procedures.
- Monitoring and reporting of safety and security compliance issues, including substance abuse and employee assistance programs
- Overseeing workplace safety, environmental and hazardous materials compliance

- Leading the Internal Audit Program Plan (IAPP)
- Coordinating and facilitating emergency exercises, tabletops, and drills, as appropriate
- Supporting and guiding the SMS Implementation Process

8.6.1 Safety Performance Measurement, Analysis, & Reporting

The Office of the CSSO officers, specialists, analysts, and contractors reports to the CSSO to perform safety performance measurements, analysis, dashboards, and reporting as a collective function using MATA's safety & security transit management software information system, "Track-It". MATA's Track-It system will integrate with other MATA information systems to populate and provide vital SMS, safety, security, SGR, and other safety performance information. Track-it when fully implemented, include the following functions:

- Safety Management Information System
- Asset Management System
- State of Good Repair Monitoring, Forecasting, and Analysis System
- Accident Management System
- Rules Compliance System – Operator Safety Improvement Program
- MATA-Wide Safety Notifications
- Hazard Tracking List
- CAP Log
- Web-Based Employee Safety Reporting
- Compliance Management System
- Training & Certification Compliance
- Incident Management System
- Customer Service Feedback

The Office of the CSSO will support executive management's processes to develop, implement, and maintain the SMS. Key responsibilities of the employees and contractors of the Office of the CSSO include supporting MATA's Safety Assurance function to ensure that the SMS is effective in meeting MATA's safety and security goals, objectives, and safety performance targets.

This will be accomplished through the collection and analysis of safety data compiled through existing and new channels of information, including, but not limited to accident/incident investigations, safety rules compliance programs, Preventative Maintenance Inspections (PMI), internal safety audits, and safety risk analyses.

The Office of the CSSO will also support other safety, security, and emergency management functions consistent with MATA's Safety Plan and MATA's Security & Emergency Management Plan.

Safety, security, emergency management, and risk management responsibilities include, but are not limited to the following:

- Supporting the development and management of MATA's SMS, by providing technical assistance to identify trends in implementation success and program monitoring
- Supporting the development and monitoring of MATA's Safety Assurance function, including identification, and updating of safety performance measure thresholds required in the NSP.
- Conducting comprehensive analyses to determine if safety risk mitigations are implemented, adhered to, appropriate, effective, and sufficient in addressing the potential consequences of identified hazards and vulnerabilities

- Working collaboratively with MTM personnel, including managers, supervisors, and frontline staff to identify, analyze, mitigate, and track hazards for rail, bus, and paratransit services
- Working closely with the SMRC and Safety Committees to identify, analyze, track, and mitigate safety/security issues
- Preparing safety risk analyses to identify trends in safety data that will inform management on means of improving safety strategies of the organization
- Collaborating with MTM personnel to provide safety data, analysis, and recommendations that will inform the MATA's TAM and State of Good Repair (SGR) objectives
- Supporting the compilation and reporting of safety-critical data to oversight authorities including, but not limited to TDOT, FTA, and the NTD
- Coordinating with all operating departments of MATA, encompassing Trolley, Fixed-Route, and Paratransit, to document and track safety events.
- Actively monitor and participate in workplace safety observations, inspections, audits, and other activities designed to support safety oversight and safety performance monitoring of the transit agency's operations and maintenance activities
- Preparing presentations, technical reports, and analyses to department leadership, senior management, the Board of Commissioners, oversight authorities, and Safety Committees illustrating trends in safety and security data as well as the maturity of the SMS
- Producing safety metrics monthly, or as needed/requested by MATA executive staff and the SMS Steering Committee
- Participating as a member of the Safety Audit team in the administration and execution of the Internal Safety Audit program to ensure adherence to MATA's Safety Plan, Security and Emergency Preparedness Plan (SEPP), and System Security and Emergency Preparedness Plan (SSEPP), federal, state, and local regulations, industry standards, and MATA policies and procedures
- Performing field observations to ensure compliance with safety policies and procedures
- Developing, updating, and maintaining databases relating to SMS programs
- Documenting and monitoring lessons learned from past major capital projects, accidents, incidents, and other relevant safety events to ensure mitigations remain effective and similar scenarios do not repeat
- Managing the tracking and disposition of all MATA CAP's
- Track recommendations/findings generated from accident/incident investigations, Internal Safety Audits (ISA), SSO audits, FTA findings and recommendations, as well as any published safety bulletins and advisories, and recommendations generated from emergency exercises based on After Action Reports
- Coordinate with maintenance supervisory personnel to develop and implement a quality assurance (QA)/quality control (QC) program for routine maintenance and Preventative Maintenance Inspection (PMI) activities

8.7 Chief Operations Officer (COO)

MATA's Chief Operating Officer is ultimately responsible for safety, security, emergency management, and asset management for the operations division, consisting of trolley, fixed route, paratransit, facilities, and non-revenue vehicles/equipment. The COO has delegated responsibility for the execution of MATA's safety, security, emergency management, and asset management programs to the Director of Operations, Director of Maintenance, and the Director of Buildings & Grounds. The COO works closely with the CSSO SMS executive and the office of the CSSO to manage, implement, and improve MATA's SMS program as defined within MATA's Safety Plan, and other supporting documents.

8.9 Chief Operations Officer – Trolley Division

Chief Operations Officer – Trolley Division is responsible for overseeing the day-to-day operations of the MATA Rail system. Responsibilities include managing rail services, facilities maintenance, and ensuring smooth running of all Rail operations; reporting directly to the executive leadership and making critical decisions to maintain efficient service for riders; essentially acting as the leader of all operational functions within MATA Rail. Key responsibilities may include managing the daily operations of rail services including scheduling and monitoring real-time performance; leading and managing a large team of Rail operations staff, including managers, drivers, dispatchers, and maintenance personnel; coordinating responses to operational disruptions, delays, or emergencies on the Rail system; analyzing operational data to identify areas for improvement and implement efficiency measures; overseeing operational Rail budgets and ensuring cost-effective service delivery and ensuring adherence to all safety regulations, transit authority policies, and federal guidelines.

8.10 Chief Compliance Officer / EEO Officer

The Chief Compliance Officer is responsible for the management of and compliance with the Americans with Disabilities Act (ADA) regulations. Additionally, the Chief Compliance Officer maintains responsibility for MATA's Disadvantaged Business Enterprise (DBE), Minority Business Enterprise (MBE), Woman Business Enterprise (WBE) program to support procurements efforts. Essential duties and responsibilities to support the SMS include, but are not limited to:

- Managing the ADA eligibility process in compliance with local, state, and federal rules and regulations
- Completing regular audits of ADA paratransit eligibility regulations
- Assisting with the receipt, tracking, resolution, and response of ADA compliance-related concerns from the public in collaboration with appropriate departments and services as the point of contact for escalated issues
- Developing and updating policies and procedures to maintain compliance with all ADA related laws
- Participating in informational outreach events with various groups, managers, customers and the general public as appropriate to promote the paratransit program
- Conducting on board observations of MATA's operating system and facilities to ensure compliance and provides written reports of ADA deficiencies
- Designing and conducting individualized, structured travel-training sessions for customers that will enable them to successfully utilize MATA's public transportation system
- Conducting staff training on all ADA guidelines to include Trolley, Fixed Route Bus and MATApplus service and facilities
- Providing data reports and analysis of ADA data and deficiencies to management
- Planning, implementing, and overseeing the overall activities and initiatives that will enhance diversity among our procurement process
- Conducting field construction site visits to ensure that DBE, MBE, and/or WBEs are performing within the scope of work

8.11 Chief Administrative Officer

The Chief Administrative Officer (CAO) reports to the CEO. This individual will be responsible for coordinating directly with the CSSO for two (2) primary SMS initiatives:

1. Integrating Safety and Security into new job postings

2. Developing Safety Promotion efforts to coincide with labor relation efforts

In addition to collaborating with the CSSO, the CAO will work as necessary, with operations and maintenance divisions to promote safety efforts and afford training to employees including but not limited to job-specific training and SMS-related education.

The Chief Administrative Officer oversee, manages, and determines MATA operational performance measurements, targets, and indicators and reports to the COO and CEO. The director works with the CSSO, SMRC, Safety Committee, and other management to collaborate and assist with safety performance measurement systems. The Chief Administrative Officer also serves as part of the CSSO's internal audit executive team as co-chair with the CSSO.

8.12 Chief Financial Officer

MATA's Chief Financial Officer (CFO) oversees and manages MATA's budget, allocation, and finance in coordination with executives and management. The CFO works closely with the CEO, DCEO, CSSO, COO, and SMRC committee to ensure adequate resources within the CFO's span of influence.

8.13 Director of Operations (DOO)

MATA's Director of Operations (DOO) reports to the Chief Operating Officer (COO) and is responsible for operations of MATA's fixed route and paratransit operations. The DOO's safety responsibilities include, but are not limited to the following:

- **Safety Collaboration:** Notify, coordinate, collaborate, and engage with the Office of the CSSO to investigate safety, security, emergency management, state of good repair and other events, defects, and conditions to identify and address unacceptable risk.
- **Document Control:** Record, document, store, and maintain accurate records, data, and other information, as follows:

Safety Program Data, which includes:

- Records of events, including primary source information from MATA investigations
- Hazard records, including hazard source, associated consequences, safety risk ratings, and the status of any mitigations
- Safety risk mitigation records, including before and after risk ratings, and how the MATA will monitor the implementation and effectiveness of safety risk mitigations
- Corrective Action Plans
- Records of near misses

Operational Data, which includes:

- Operator, supervisor, and superintendent training, citations, and certifications records
 - Efficiency, performance, and other testing
 - Incident, accident, and other safety event records, reports, and data
 - Operator inspection records, reports, and data
 - Pre-trip inspection records
- **Workplace Safety:** Ensure that workplaces are safe for MTM personnel, contractors, emergency responders, and visitors, and comply with OSHA, and other safety, security, ordinances, emergency management, environmental, and other regulatory requirements. Ensure employees are provided proper PPE for work being performed and other protections to safeguard employees and others from harm, injury, or death.

- **Passenger Safety:** Identify, record, notify, and report unsafe conditions, hazards, or threats to the office of the CSSO that may affect the safety security, and wellbeing of passengers on revenue vehicles, at stations, centers, or stops, and other MATA locations.
- **Security:** Ensuring the physical security of all vehicles and critical infrastructure
- **Emergency Management:** Ensuring maintenance facilities are properly equipped for emergency response. Coordinating with the Office of the CSSO to ensure all personnel know and implement all safety, security, and emergency management programs, plans, and procedures.
- **Emergency Drills, Exercises, & Tabletops:** Coordinating with the office of the CSSO, TSA, and other regulators to ensure all personnel receive the appropriate training in emergency response and security measures, and actively practice their training in annual drills
- **Emergency Response & Recovery:** Ensuring adequate response to all incidents, including implementation of the COOP
- **Management:** Managing all operations, including superintendents, supervisors, operators, and support staff utilizing SMS approach to safety, security, emergency management, and asset management.
- **Safety Policy Development:** Developing and implementing safety, security, emergency management, asset management plans, rules policies, standard operating procedures (SOP), directives, instructions, and bulletins
- **Training:** In coordination with the training department, and the Office of the CSSO, develop, deliver, document, and ensure that all employees receive adequate core competency training and skill development to perform work assignments, tasks and activities in accordance with manufacturer instructions and specifications, and MATA procedures, processes, and practices to ensure reliability, safety, and security, including SMS safety, OSHA, and other regulatory safety requirements.
- **Resources:** Ensuring adequate capital and personnel resources are allocated to accomplish safety and security goals and objectives of operations. Ensuring adequate resources are available to respond to all safety, security, and other events, including implementation of the Continuity of Operations Plan (COOP) for operations and maintenance personnel.
- **Safety Promotion:** Participating as an active member of the Safety, Safety Certification, Pre-revenue Testing, System Activation (rail, fixed-route, paratransit), Fire Life Safety, and other safety, security, and emergency management committees, working groups, and task teams as applicable.
- **Employee Recognition:** Recognize, commend, and celebrate employee safety reporting, individual efforts, and safety suggestions to promote a just and positive safety culture.
- **Safety Audits:** Supporting internal and external safety audits, including FTA and TDOT SSO audits, and participating in all tabletop exercises and emergency exercises
- **Fare Collection:** Ensuring fare collection systems are in place and adequately enforced and monitored
- **Collaboration:** Coordinating with the CSSO, Office of the CSSO, SMRC, and Safety Committees to ensure that all personnel fully understand, implement, and document safety, security, and emergency management incidents, events, activities, and tasks, and that information on these activities are properly delivered to the Office of the CSSO in a timely manner
- **SMS Approach:** Ensuring operational and maintenance activities feed into the Safety Risk Management and Safety Assurance components of the SMS by coordinating with management, staff, supervisors, and operators

- **Safety Performance:** Tracking and identifying Safety Performance Indicators (SPI) to monitor safety performance and address SGR requirements as defined in the TAM.
- Ensuring adequate resources are available to respond to all safety events, including implementation of the Continuity of Operations Plan (COOP) for operations and maintenance personnel

8.14 Director of Maintenance (DOM)

The Director of Maintenance (DOM) reports directly to the COO and is responsible for ensuring proper and safe maintenance of all fixed-route, paratransit, non-revenue vehicles, and mobile equipment. The DOM's safety, security, emergency management, reliability, and state of good repair responsibilities include, but are not limited to the following:

- **Safety Collaboration:** Notify, coordinate, collaborate, and engage with the Office of the CSSO to investigate safety, security, emergency management, state of good repair and other events, defects, and conditions to identify and address unacceptable risk.
- **Document Control:** Record, document, store, and maintain accurate records, data, and other information, as follows:

Maintenance Data, which includes:

- Inspection and maintenance records and report forms
- Work orders
- Records of failures and defects
- Records of revenue vehicles out of service, including causal information
- Major maintenance activity schedule and progress
- Adherence to maintenance schedules, including reports and documentation of deferred maintenance

Inspection Data, which includes:

- Inspection records and report forms
 - Records of failures and defects
 - Records of speed restrictions
 - Incident and Safety Risk Mitigation Verification
 - Adherence to inspection schedules, including reports and documentation of inspections not performed
 - Capital project schedules and progress
- **Risk-Based Inspections & Maintenance:** Establish, implement, and document reliability, performance, state of good repair, and risk-based broad and specific inspection and maintenance schedules, timelines, parameters, reports, and practices for rolling stock, equipment, and infrastructure
 - **Preventive Maintenance:** Develop and maintain preventive maintenance procedures, including measures to ensure that the introduction of new parts, systems, subsystems, components, training, or policies conform to configuration management or management of change principles, practices, and standards and meet all safety, security, emergency management, and asset management requirements
 - **Workplace Safety:** Ensure that workplaces are safe for MTM personnel, contractors, emergency responders, and visitors, and comply with OSHA, and other safety, security, ordinances, emergency management, environmental, and other regulatory requirements

- **Personal Protective Equipment (PPE):** Ensure employees are provided proper PPE for work being performed and other protections to safeguard employees and others from harm, injury, or death.
- **Training:** In coordination with the training department, and the Office of the CSSO, develop, deliver, document, and ensure that all employees receive adequate core competency training and skill development to perform work assignments, tasks and activities in accordance with manufacturer instructions and specifications, and MATA procedures, processes, and practices to ensure reliability, safety, and security, including SMS safety, OSHA, and other regulatory safety requirements
- **Emergency Management:** Ensuring maintenance facilities are properly equipped for emergency response. Coordinating with the Office of the CSSO to ensure all personnel know and implement all safety, security and emergency management programs, plans and procedures
- **Emergency Drills, Exercises, & Tabletops:** Coordinating with the office of the CSSO, TSA, and other regulators to ensure all personnel receive the appropriate training in emergency response and security measures, and actively practice their training in annual drills
- **Management:** Managing all operations, including foremen, mechanics, laborers, and support staff utilizing SMS approach to safety, security, emergency management, and asset management
- **Resources:** Ensuring adequate capital and personnel resources are allocated to accomplish safety and security goals and objectives of operations. Ensuring adequate resources are available to respond to all safety, security, and other events, including implementation of the Continuity of Operations Plan (COOP) for operations and maintenance personnel
- **Employee Recognition:** Recognize, commend, and celebrate employee safety reporting, individual efforts, and safety suggestions to promote a just and positive safety culture
- **Safety Audits:** Supporting internal and external safety audits, including FTA and TDOT SSO audits, and participating in all tabletop exercises and emergency exercises
- **Fare Collection:** Ensuring fare collection systems are in place and adequately enforced and monitored
- **Onboard CCTV Security System:** ensure MATA onboard CCTV security systems are inspected, maintained, replaced, improved, and secured to maximize immediate access, retrieval, storage, and benefit to assist and improve safety, security, and emergency management of MATA.
- **Collaboration:** Coordinating with the CSSO, Office of the CSSO, SMRC, and Safety Committees to ensure that all personnel fully understand, implement, and document safety, security, and emergency management incidents, events, activities, and tasks, and that information on these activities are properly delivered to the Office of the CSSO in a timely manner
- **SMS Approach:** Ensuring operational and maintenance activities feed into the Safety Risk Management and Safety Assurance components of the SMS by coordinating with management, staff, supervisors, and operators
- **Security:** Ensuring the physical security of all vehicles
- **Emergency Management:** Ensuring maintenance facilities are properly equipped for emergency response and the coordination with the Office of the CSSO to ensure all maintenance personnel know and implement all safety, security and emergency management programs, plans and procedures

8.15 Director of Buildings & Grounds

The Director of Buildings and Grounds reports to the COO. The Director of Buildings and Grounds' safety responsibilities include, but are not limited to the following:

Maintenance Data, which includes:

- Facility inspection and facility maintenance records and report forms
 - Work orders
 - Records of failures and defects
 - Major facility maintenance activity schedule and progress
 - Adherence to facility maintenance schedules, including reports and documentation of deferred facility maintenance
-
- **Risk-Based Inspections & Maintenance:** Establish, implement, and document reliability, performance, state of good repair, and risk-based broad and specific inspection and maintenance schedules, timelines, parameters, reports, and practices for equipment, and infrastructure
 - **Imminent or Immediate Safety Concerns:** Establish and implement policies and procedures for the management of immediate or imminent safety concerns or defects, including prompt notification and reporting to the Office of the CSSO, and the steps, processes, and actions to ensure safety, investigate and probable root cause(s), implement interim risk mitigations, and remedial actions
 - **Training:** In coordination with the training department, and the Office of the CSSO, develop, deliver, document, and ensure that all employees receive adequate core competency training and skill development to perform work assignments, tasks and activities in accordance with manufacturer instructions and specifications, and MATA procedures, processes, and practices to ensure reliability, safety, and security, including SMS safety, OSHA, and other regulatory safety requirements
 - **Passenger Safety:** Identify, record, notify, and report unsafe conditions, hazards, or threats to the office of the CSSO that may affect the safety security, and wellbeing of passengers on revenue vehicles, at stations, centers, or stops, and other MATA locations
 - **Emergency Management:** Ensuring maintenance facilities are properly equipped for emergency response. Coordinating with the Office of the CSSO to ensure all personnel know and implement all safety, security and emergency management programs, plans and procedures
 - **Emergency Drills, Exercises, & Tabletops:** Coordinating with the office of the CSSO, TSA, and other regulators to ensure all personnel receive the appropriate training in emergency response and security measures, and actively practice their training in annual drills
 - **Collaboration:** Coordinating with the CSSO, Office of the CSSO, SMRC, and Safety Committees to ensure that all personnel fully understand, implement, and document safety, security, and emergency management incidents, events, activities, and tasks, and that information on these activities are properly delivered to the Office of the CSSO in a timely manner
 - **Employee Recognition:** Recognize, commend, and celebrate employee safety reporting, individual efforts, and safety suggestions to promote a just and positive safety culture
 - **Facility Inspections:** Facilitating and in collaboration with management for each mode of transportation, vehicle maintenance department, capital infrastructure planning, Office of the CSSO, and other functions to conduct regular and scheduled PMI inspections of:

- Maintenance buildings and infrastructure
- Transit centers, stations, busways, ADA devices, and other passenger systems
- Administration building, infrastructure, IT (e.g., rooms, cabinets, hardware), and systems
- Building, maintenance, and operational support equipment, systems, and subsystems (e.g., lifts, compressors, pneumatic systems, HVAC, and other assets, exhaust fans, etc.), and
- Other operational and maintenance support buildings, equipment, and systems

8.16 Director of Information Technology

The Director of Information Technology reports to the CFO. This individual is responsible for ensuring coordination between all MATA divisions during the development, implementation, and maintenance of critical databases. This includes databases for safety data information and TAM data collection requirements.

- **Security:** Ensuring the physical workplace, passenger, operational, and cyber security of all vehicles, equipment, systems, and critical infrastructure fully operational
- **Safety Collaboration:** Notify, coordinate, collaborate, and engage with the Office of the CSSO to investigate safety, security, emergency management, state of good repair, and other events, defects, and conditions to identify and address unacceptable risks
- **Facility CCTV Security System:** ensure MATA facility CCTV security systems are inspected, maintained, replaced, improved, and secured to maximize immediate access, retrieval, storage, and benefit to assist and improve safety, security, and emergency management of MATA
- **Emergency Drills, Exercises, & Tabletops:** Coordinating with the office of the CSSO, TSA, and other regulators to ensure all personnel receive the appropriate training in emergency response and security measures, and actively practice their training in annual drills
- **Employee Recognition:** Recognize, commend, and celebrate employee safety reporting, individual efforts, and safety suggestions to promote a just and positive safety culture

8.17 Director of Grants

The Director of Grants is responsible for managing a centralized procurement process that complies with all federal, state, local, and agency safety requirements. This involves coordination with all key staff and the Chief Finance Officer (CFO) to ensure procurement of resources is completed in accordance with safety standards.

8.18 Director of Planning and Scheduling

The Development Director reports to the CAO. This individual is responsible for coordinating with the following entities to ensure timetables, system service modifications, and other elements of the system do not create hazardous operating conditions:

- Manager of Trolley Operations and Maintenance
- Director of Operations
- Director of Maintenance

The Development Director will also coordinate with operations personnel to determine the impact of any schedule changes for both Trolley and fixed-route operations.

The director oversees and manages capital projects and improvement, and serves on the SMRC and Capital Assets, Certification, & Change Safety Committees.

Additionally, this individual will collect and maintain safety-critical data to support safety performance metric monitoring.

8.19 Operations & Maintenance Personnel

Operations and maintenance personnel are responsible in the course of their normal duties for complying with and implementing all MATA rules and procedures as follows:

- Reporting any safety conditions to the on-duty supervisor and/or the safety department
- Contributing ideas and suggestions for improving the safety of conditions or procedures to their immediate supervisor, who will follow up with the Safety and Security Department
- Using individual knowledge and influence to improve safety performance
- Attending safety training and safety meetings
- Reporting accidents and injuries to supervisory and management staff immediately
- Reporting any suspicious activity, persons, or objects observed
- Abiding by the safety rules and regulations
- Always having regard for the safety of fellow workers and clients

It is the responsibility of each employee to abide by all rules and regulations and to comply with all laws pertaining to safety and health in the workplace. Safety becomes a shared responsibility between management and the employee and working safely is a condition of employment.

8.20 Contractors

MATA may retain the services of outside contractors, vendors, or contract services (contractors) to assist with various aspects of the system's operations, maintenance, safety, capital projects, capital acquisitions and other functions. All contractors are subject to the requirements of MATA's Safety Plan and all applicable requirements. The CSSO, or their designee will conduct periodic reviews of contractor onsite work practices to ensure compliance with the MATA's Safety Plan.

MATA will require each contractor to assign safety and quality assurance functions to its personnel working on the MATA property, and to ensure compliance with MATA's Safety Plan, and applicable Federal, State, and local regulations.

MATA's procurement and safety management processes will include safety, security, health, emergency management provisions, risk management, and assurance requirements, and performances as part of contract expectations and accountabilities and to include but not limited to:

- Contractor compliance with Federal, State, and local safety and security laws, regulations, codes, standards, and ordinances, including best practices.
- Contractor compliance with Federal, State, and local occupational health, safety, and environmental laws, regulations, codes, standards, and ordinances, including best practices.
- Contractor compliance with Federal, State, and local environmental laws, regulations, codes, standards, and ordinances, including best practices.
- Contractor compliance with MATA's Safety Policy, Safety Plan, safety & security program/plans, safety SOP's, training, and other MATA safety and security requirements

- Submit contractor health, safety, security, and environmental programs, plans, policies, and other documents to MATA that meet or exceed Federal, State, local, and MATA laws, regulations, standards, and MATA's safety & security programs, including best practices.
- Perform safety and security certification, design, safety & security engineering, verification, testing, integration testing, commissioning, operational readiness, and validation activities for MATA capital projects, capital acquisitions, and capital systems, as follows:
 - **Tier-1 Safety and Security Certification (Tier-1 SSC)** of MATA's major capital projects and acquisitions as required by FTA, TDOT, and or at the direction of the CSSO. Tier-1 Safety & Security Certification requires compliance with FTA SSC guidance, circulars, requirements, and expectations, and MATA safety & security certification program Requirements.
 - **Tier-2 Safety and Security Certification (Tier-2 SSC)** of other capital projects and acquisitions at the discretion and direction of the CSSO. Tier-2 SSC is a modified and simplified safety and security certification process, using principles, elements, and processes derived from safety and security engineering and management methodology, and FTA SSC guidance, circulars, and expectations, and as required by MATA, and MATA SSC Tier-2 SSC processes.
- **Asset Management & State of Good Repair:** For infrastructure, rolling stock, equipment, consumables, and other assets greater than \$3,000, provide life-cycle performance, and technical specifications, including inspection, tooling/calibration, training, asset maintenance, schedules, structural maintenance, routine maintenance, preventative maintenance, planned maintenance, major maintenance, software maintenance, and replacement, rehabilitation, renewal, refurbishment, and disposal recommendations over the life of the structure, asset, or system.
- Provide MATA and the Office of the CSSO with primary and alternate points of contact for safety, security, and emergency management concerns, issues, and coordination.
- Provide accident, incident, noncompliance, hazard, and other safety and security event verbal (e.g., phone call, in-person) and written notifications (e.g., email, text) to MATA and the Office of the CSSO within 2 hours. Notification will include:
 - Date, time, and location of the safety or security event
 - Description of the safety or security event
 - Work or contractor service description
 - Number and description of injuries or fatalities
 - Damage to MATA infrastructure, rolling stock, vehicles, equipment, or systems
 - Impact to revenue service
 - Temporary mitigations in place
 - Point of contact – company, name, title, phone number, and email
- Provide a safety and security event investigation report with:
 - Description of the event
 - Investigative findings
 - Evidence (e.g., statements, photographs, reports, etc.)
 - Probable cause(s)
 - Contributory cause(s)

- Temporary mitigation action
- Corrective action plan, and
- Other information as applicable
- Submitted to MATA and the Office of the CSSO, within 5 days of the event.

Based upon the scope of the project, the SMRC, the CSSO may recommend the assignment of a dedicated contract employee to carry out these tasks. Contractor personnel will work in cooperation with the Office of the CSSO and conduct a variety of activities in support of this plan, including:

- Reviewing the Original Equipment Manufacturer (OEM) submittals and specifications
- Developing a safety training program for their contractor personnel
- Maintaining compliance with occupational safety standards and guidelines
- Reporting on all activities as required
- Conducting any required safety or security activity deemed necessary
- Maintaining records consistent with Safety Risk Management and Safety Assurance components

9.0 Employee Safety Reporting Program

MATA has established a process that allows all employees, including relevant contract employees, to report safety conditions to senior management.²⁴ This program is intended to help the CEO, CSSO, and key staff obtains important safety information throughout the agency.

The defined **Employee Safety Reporting Program (ESRP)** is aimed at building a greater level of trust, which will improve MATA's ability to learn about safety conditions and make meaningful changes in collaboration with frontline staff. Employees can report safety concerns through the following mediums:

- Email – "safety@matatransit.com"
- Phone – (901) 722-7173 Safety Officer
- QR code linked to Track-it system (e.g., posters, intranet, newsletters, links)
- In person to employees of the Office of CSSO
- In person to a member of management (e.g., CEO, executives, management, supervisors, foreman, etc.)
- SMRC, SMS Safety Committee, and SMS Task Teams
- Departmental Safety Committees, roundtables, or toolbox sessions

Employees who report safety concerns or hazards will be informed that the Office of the CSSO will investigate and analyze the safety concerns, including providing the employee, if requested, a general outcome of the investigation, mitigations, corrective actions or other safety or security measures that will be taken.

Employees may receive a commendation for reporting a safety concern that warrants recognition and improves safety. Employees that prefer to remain anonymous can do and are able to report the safety concern, confidentiality.

If an employee reports the safety concern to a member of management, or as part of a Safety Committee, working group or task team, the safety concern will be reviewed and mitigated immediately or as expeditiously as possible. If the safety concern cannot be addressed

²⁴ 49 CFR Part 673.23(b)

immediately or handled expeditiously, the safety concern will be forwarded to the Office of the CSSO using any communication medium described herein.

MATA supports a proactive anti-retaliation policy designed to:

- (1) receive and respond appropriately to employees' safety concerns (i.e., hazards, risks, safety violations, etc.)
- (2) prevent and address retaliation against employees who raise or report safety concerns or participate in a safety or security investigation of a safety concern.

MATA's Safety Management Policy Statement signed by the CEO states:

"Therefore, MATA is committed to achieving the following objectives:

Ensuring that no action will be taken against any employee who discloses a safety concern through an employee safety reporting program, unless disclosure indicates through the investigative process and beyond a reasonable doubt, an illegal act, gross negligence, or a deliberate or willful disregard of regulations or procedures was committed."

MATA will ensure there is no coercion, retaliation, intimidation, disparagement, or harassment directed against any employee who makes a report of a safety concern, risk, or noncompliance, or who participates or acts as a witness in a safety or security investigation, reported concern, or complaint, or serves as a witness.

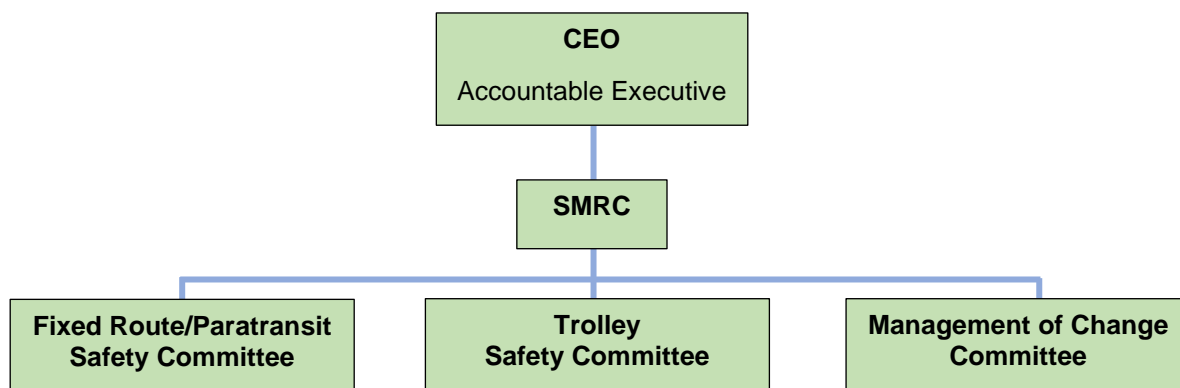
If an employee reports a complaint of retaliation for reporting a safety concern, the matter will be directed to MATA's CAO. An investigation will be conducted in coordination of MATA's CSSO. Violations of the anti-retaliation policy will result in appropriate action taken by MATA, up to and including termination.

9.1 Committee Structures

MATA's committee structure provides an open forum for safety concerns to be communicated, or reported, from the frontline staff through to senior executives and up towards the CEO. Similarly, this structure allows executive management to communicate safety and security topics more uniformly through the organization.

The figure below provides the hierarchy of the committee structure, which provides a mechanism for employees to report safety and security concerns.

Table 11: Safety and Security Committee Structure



9.1 Safety Executive Management Review Committee (SMRC)

The SMRC is MATA's senior executive Safety Committee responsible to execute and advance MATA's SMS strategic direction, implementation, and safety performance. Under the direction of the CEO, the SMRC defines, measures, and modifies MATA's vision, core values, goals, and objectives.

Additionally, the SMRC directly oversees and leads MATA's SMS safety policy, risk management, safety assurance, and safety promotion initiatives, and determines resource availability, prioritization, and performance schedules. and forwards recommendations to the CEO for final approvals, some of which require MATA Board review and approval depending on monetary thresholds.

The SMRC, under the delegated authority from the CEO, will effectively lead, direct, measure, and promote the functional day-to-day aspects of safety and security as MATA's top priority, and comply with MATA's Safety Plan.

MATA CSSO serves as the SMRC chair, with a senior safety & security analyst serving as secretary. The SMRC maintains an agenda, minutes, and actions items list.

The SMRC responsibility is to review and approve aspects of SMS as described below, to include but is not limited to the following:

- SMS Safety Committee and SMS Task Team safety, security, and emergency management recommendations
- Accidents, incidents, derailments, near misses, and other safety events
- Safety, security, emergency management, and risk management assessments
- Hazard and risk analysis, assessments, and studies
- Mitigation strategies to address high safety or security risks
- Safety performance targets, benchmarks, indicators, and trends
- Corrective Action Plans (CAP's) to address high safety or security risks
- Prioritization, resourcing, and budgeting to address deficiencies, hazards, or CAP's
- New or revised safety, security, and emergency management policies, plans, programs, procedures, and processes, as applicable
- New or revised safety critical operating rules, procedures, bulletins, and other communications, as applicable
- New or revised safety critical inspection and maintenance rules, procedures, inspection lists, and other communications, as applicable
- Safety and Security Certification
- Asset Management - safety & security critical assets, systems, subsystems, and components
- State of Good Repair – safety & security critical assets, systems, subsystems, or components
- Management of Change – Configuration management & control (e.g., New, revisions, or changes to safety or security design criteria design, construction, rules, procedures, training, timetables, and organizational changes, as applicable)
- Safety, security, and emergency management plan, efforts, drills, exercises, and after-action reports
- Other SMS Policy, Risk Management, Safety Assurance, and Safety Promotion functions, activities, and efforts, as deemed necessary

The SMRC meets bi-monthly but may meet more frequently as required. SMRC committee members include:



- Chief Executive Officer
- Deputy Chief Executive Officer
- Chief Operations Officer
- Chief Operation Officer – Trolley Division
- Chief Administrative Officer
- Chief Safety and Security Officer
- Chief Compliance Officer
- Chief Financial Officer
- Executive Assistant – Secretary

9.2 SMS Safety Committees

MATA has established (Safety Committees) as part of its organizational safety structure to implement MATA's Safety Plan, SMS initiatives, and to achieve MATA's goals, and objectives at the operational, functional, capital asset, employee, and service levels, review, analyze, manage, and improve safety, security, emergency management, and risk management:

1. **Trolley Safety Committee:** oversee and manages trolley operations, maintenance, asset management, and management of change at the trolley level
2. **Fixed route/paratransit Safety Committee:** oversees and manages fixed-route/paratransit operations, maintenance, asset management, and management of change at the fixed-route/paratransit level
3. **Management of Change Committee:** oversee system-wide assets, safety & security certification, asset management, and management of change for the entire transit system

Safety Committees are formed to discuss safety and security-related issues, implement SMS, address hazards, and other activities, and comprise MATA's middle management, and supervisory level. The Safety and Security Working Group (SSWG) will be based on each mode of service to focus on the specific requirements of each division. Safety and security matters that cannot be handled due to risk level (high), inadequate resources, or other factors are presented to the SMRC with recommendations for review, approval, prioritization, and resource allocation.

They will be comprised of both maintenance, operations, and capital planning personnel. Regular meetings are scheduled and facilitated by the respective departments and include supervisors, forepersons, officials, union representatives, and employees.

Meeting minutes and action items are recorded and tracked by each respective department to resolution. The Safety Committee's function under the authority, direction, and guidance of the SMRC and the office of the CSSO.

9.3 SMS Safety Committee Structure

The SMS Safety Committee consists of managers, supervisors, and frontline staff members supported by the Office of the CSSO, and report to MATA's safety committee, and SMRC, as applicable.

The SMS Safety Committee works is the operational front-line level advocates that perform SMS activities, mentoring, and other efforts. Members of the SMS Safety Committee participate in and assist the Office of the CSSO during safety audits, internal reviews, inspections, and other activities, as needed to improve coordination efforts and buy-in.

Members of the SMS Safety Committee will receive initial and ongoing SMS, safety, security, and emergency management training. Members will show leadership of the SMS, and their responsibilities and accountabilities to include their need to actively support and promote the

SMS, ensure that they and their staff comply with the SMS processes and procedures, ensure resources are made available to achieve the outcomes of the SMS, and continually monitor their area of SMS responsibility.

SMS Key Staff will serve as the **Subject Matter Experts** representing their divisions throughout the SMS implementation process. Their responsibilities include providing insight into how to adapt existing departmental practices to work in concert with the SMS.

This will include identifying departmental data and information resources to support SMRC and Safety Committee goals and objectives, as well as ongoing SMS decision making processes. Ultimately, their responsibility will be to identify and provide concerns and solutions for the SMS that ensures MATA is adhering to its safety performing targets and the SMS is functioning in tandem with organizational practices.

10.0 Integration with Emergency Management & Public Safety

MATA coordinates emergency management activities, which include meetings with external agencies, emergency planning processes, including emergency exercises, After-Action Reports (AAR) and implementation of findings, revision, and distribution of emergency response procedures familiarization training for public safety organizations, and employee training.

Emergency management and public safety is incorporated into MATA's SMRC, Trolley – Safety Committee, Fixed-route/paratransit – Safety Committee, and CCC – Safety Committee agenda items, minutes, and action items. These functions include Fire Life Safety, as an additional agenda item, minutes, and action items.

Due to the limited size of MATA intermodal system, coordination efforts with fire, police, and EMS services are performed as needed for events, safety & security certification, integration of new infrastructure, rolling stock, or equipment that may have an impact on the community and may require fire, police, or EMS services.

The MATA, Safety Committees, and the office of the CSSO maintains current contact interfaces with key fire, police, and EMS personnel, and coordinates with these personnel as needed and required. In the event of a meeting with external agencies, the SMS task team will be formed under the direction of the applicable Safety Committee, who will maintain an agenda, minutes, and action items.

Detailed emergency preparedness activities for fixed-route and paratransit systems can be found in the **MATA System Security & Emergency Preparedness Plan Version 1, May 3, 2019**. Detailed emergency preparedness activities for MATA Trolley can be found in the **System Security & Emergency Preparedness Plan, and Safety, Security Emergency Plan (SSEPP, SEPP)**.²⁵

10.1 Emergency Preparedness Responsibilities

The CEO has designated the CSSO as the Emergency Preparedness point of contact for the development and implementation of the Emergency Management Program (EMP). The CSSO has been granted the authority to utilize MATA resources to develop the SEPP and SSEPP to monitor its implementation, and to ensure attainment of security and emergency preparedness goals and objectives.

²⁵ SSEPP Section 3.3.2

The CSSO will also be assisted in these responsibilities by the Office of the CSSO, SMRC, and SMS Safety Committee and agency management and executive leadership. All emergency management and response plans and procedures will be vetted with first responder partners to ensure they conform to existing Memphis policies and procedures.

Tasks have been identified to provide direction in the implementation of the SSEPP. These tasks are on-going and are considered minimum requirements. Tasks are identified in the matrices below. Also identified are the organizational / participant responsibilities for each task. The table follows the roles and responsibilities found in section 3.3.2 of the SSEPP. The organizational/participant responsibilities for each task, as designated by the following code:

- P** Primary Task Responsibility
- S** Secondary or Support Responsibility
- R** Review/Comment Responsibility
- A** Approval Responsibility

Table 12: Emergency Preparedness Matrix

Task	CEO	CSSO	SMRC	COO	Training	Frequency
Conduct Emergency Preparedness Training		S	R	S	P	As Required
Develop Emergency Response Plans	A	R	P	R	R	As Required
Review Emergency SOPs		R	R	P	R	As Required
Review Emergency Management Trends		P	R	R	R	Regularly
Develop Emergency Operations Plans		P	S	P	S	As Required
Review Current Incidents		P	S	P		Regularly
Ensuring Integration in the County's ERP		P	P			Yearly
Conduct Internal Training Audits		P	R	S	P	Monthly
External Audits		P	S	R	R	As Required
Emergency Exercises		P	S	P	S	Annually
Liaison with Public Safety Agencies		P	S	S		Regularly

10.2 Evaluation of Emergency Management

MATA will evaluate its emergency management function by implementing a comprehensive drills and exercise program in accordance with the ***Homeland Security Exercise & Evaluation Program (HSEEP)***. The program will organize various emergency response agencies to critique emergency preparedness activities by simulating scenarios involving MATA various system

components, including infrastructure, vehicles, facilities, and equipment. Drills and exercises MATA will incorporate include, but are not limited to, the following:

1. **Tabletop Exercise (TTX):** A TTX is intended to generate discussion of various issues regarding a hypothetical, simulated emergency. TTXs can be used to enhance general awareness, validate plans and procedures, rehearse concepts, and/or assess the types of systems needed to guide the prevention of, protection from, mitigation of, response to, and recovery from a defined incident. Generally, TTXs are aimed at facilitating conceptual understanding, identifying strengths and areas for improvement, and/or achieving changes in perceptions.
2. **Drills:** A drill is a coordinated, supervised activity usually employed to validate a specific function or capability in a single agency or organization. Drills are commonly used to provide training on new equipment, validate procedures, or practice and maintain current skills. For example, drills may be appropriate for establishing a community-designated disaster receiving center or shelter. Drills can also be used to determine if plans can be executed as designed, to assess whether more training is required, or to reinforce best practices. A drill is useful as a stand-alone tool, but a series of drills can be used to prepare several organizations to collaborate in a Full-Scale Exercise (FSE).
3. **Full-Scale Exercise (FSE):** FSEs are typically the most complex and resource-intensive type of exercise. They involve multiple agencies, organizations, and jurisdictions and validate many facets of preparedness. FSEs often include many players operating under cooperative systems such as the Incident Command System (ICS) or Unified Command (UC). In an FSE, events are projected through an exercise scenario with event updates that drive activity at the operational level.

MATA will conduct one of the above types of emergency preparedness activities at least once annually. The Agency may also implement other drills and exercises defined in the HSEEP framework and will utilize the exercise methodology illustrated below.

Figure 2: HSEEP Exercise Cycle



Exercise program should be based on a set of strategic, high-level priorities selected by MATA's OSSCR, CSSO, and management staff. These priorities guide the development of exercise objectives, ensuring that individual exercises build and sustain preparedness in a progressive and coordinated fashion. Exercise program priorities are developed at the **Training & Exercise Planning Workshop (TEPW)**.



10.3 After Action Reports

An evaluation will be completed after each exercise to provide MTM personnel with the opportunity to assess the capabilities needed to accomplish a mission, function, or objective. This will be completed through the AAR, which will document key information related to evaluation. The length, format, and development timeframe of the AAR depend on the exercise type and scope. The focus of the AAR is the analysis of core capabilities and will include the following sections:

- Exercise name
- Type of exercise
- Date of the exercise
- Location(s) of the exercise
- Participating organizations
- Mission area(s)
- Specific threat or hazard
- A brief scenario description
- The name of the exercise sponsor and Point of Contact
- Analysis of Core Capabilities
- Corrective Action Plan(s), as necessary

CAPs will be developed and monitored in accordance with Section 20 below.

10.4 Meetings with External Agencies

The CSSO, Office of the CSSO, and members of management as needed, will participate in a variety of committees and groups to maintain open lines of communication with MATA's Public Safety Partners to include the following:

- Urban Area Security Initiative (UASI) working group
- Executive Board member of the FBI Joint Terrorism Task Force
- Participate in the Memphis Police Department Command meetings

Additionally, MTM personnel conduct peer reviews of other transit organizations and share best practices. One of those agencies is WeGo Public Transit in Nashville. MTM personnel also participate in FTA's Transportation Safety Institute training programs across the country.

10.5 Emergency Procedures

MATA's Emergency Procedures are contained in the Trolley SEPP, bus, and paratransit SSEPP, SOPs, and the various rulebooks, and for Fixed route/paratransit the MATA System Security & Emergency Preparedness Plan Initial documents will be reviewed as indicated in the proceeding sections and will be evaluated at least annually per MATA procedures. Emergency procedures will also be evaluated after any event and after the Drills and Exercise program. The CSSO, or their designee, will distribute updated documents to the appropriate divisions, personnel, and if necessary, external public safety agencies.

10.6 Emergency Training

Emergency training is the responsibility of the MATA CSSO, corporate training, and departmental training as determined most effective. The SOPs and operating rules have been developed will provide a basis for training all employees in their security related responsibilities. All operations and maintenance personnel are required to undergo emergency response training to ensure they

have a thorough understanding of their roles and responsibilities during an emergency. At a minimum, training is provided to MTM personnel based on job description and function. MTM personnel are also trained for specific threats such as workplace violence and active shooter situations.

Ad-hoc training for internal or external personnel may be performed at the discretion of the CSSO, should the need arise, depending on local or international events of a security or emergency response nature, response to a specific credible threat to the system, required corrective action, program enhancement or any other appropriate reason at any time.

10.7 Familiarization Training

Periodic familiarization and refresher training is provided by MATA to local emergency response personnel. This training, which is in addition to scheduled tabletop exercises and drills, has included a video/slide presentation and several printed takeaways, covering vehicle access, vehicle emergency equipment, and communications.

11.0 Safety Management Policy Communication

In accordance with 673.29(b), MATA will ensure that all employees are aware of any policies, activities, and procedures that are related to their safety-related roles and responsibilities. Safety communications may include Safety & Security Directives, Advisories, Bulletins, and information on hazards and safety risks that are relevant to the employee's role and responsibilities.

These communications will include introduction or changes to policies, activities, or procedures; and explain to an employee when actions are taken in response to reports submitted by the employee through the employee safety reporting program.

Safety & Security Communications will be prepared by the Office of the CSSO, reviewed and accepted by applicable members of management, and coordinated through the Communications Department, follow prescribed processes for tracking, distributing, and ensuring communications have been effectively read and understood by employees.



Part D: Safety Risk Management

The FTA and TDOT require MATA to develop and document in its Safety Plan, a process to identify and resolve hazards for new starts projects, extensions, or modifications of existing systems, operational or environmental changes, or from hazards discovered from employee reports, public complaints, reviews, audits, inspections, and investigations.

Additionally, MATA will review NTSB Safety Recommendations, FTA directives, advisories, or circulars, and TDOT recommendations, orders, or advisories issued to MATA or to other transit agencies to determine applicability and if similar risks or deficiencies exist at MATA to address industry safety risks.

MATA's risk management process will also review industry or other applicable safety and security standards to determine viability of such at MATA to address SMS, hazards, or other concerns as deemed appropriate.

Safety Risk Management (SRM) is an essential process within MATA's SMS for identifying hazards and analyzing, assessing, and mitigating safety risks. The SRM component has two (2) major sub-components

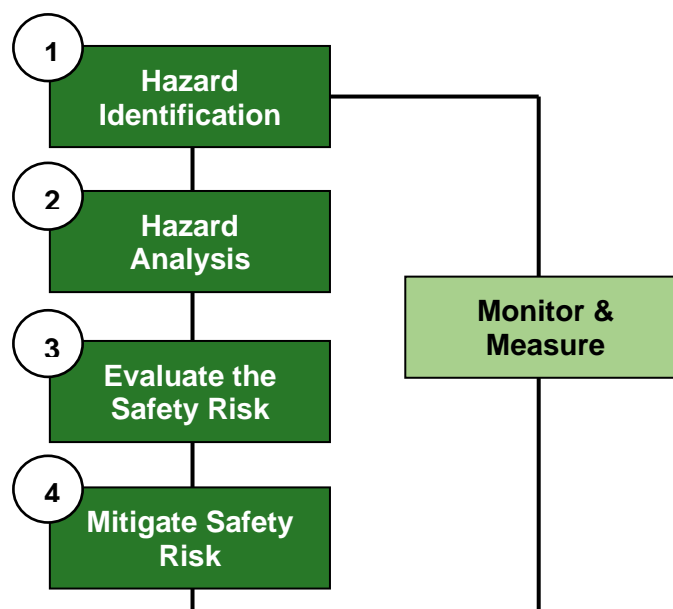
1. Hazard Identification and Analysis, and
2. Safety Risk Evaluation and Mitigation

The SRM process and its sub-components provides a formal process to systematically identify, evaluate, and mitigate potential hazards associated with the construction, maintenance, and operation of MATA operating systems for patrons, employees, and the public.

Known hazards are categorized as to their potential severity and probability, analyzed for potential impact, and resolved by design, procedure, warning device, or other methods so they fall within a level of risk acceptable to MATA. This process provides MATA's executive management team and mid-level managers with the necessary information to prioritize decision making efforts.

The following figure provides an illustration of steps used in Safety Risk Management process:

Figure 3: SRM 4-Step Process



The proceeding sections document the risk management process and MATA's approach to hazard investigations, including the notification and investigation requirements specified by TDOT in the SSPS.

12.0 Safety Hazard Identification

49 CFR Part 673 requires MATA to establish methods or processes to identify hazards and consequences of hazards. A hazard will inform the agency of what is wrong, while a consequence identifies what could happen. When MATA properly identifies and clearly defines hazards, MATA can more easily identify potential consequences that will help management allocate safety resources based on safety risk.

MATA must include data and information provided by TDOT and the FTA (e.g., Safety Bulletin, General Directive, or Notices). MATA will also consider the outputs of Safety Assurance (SA) activities, such as employee safety reporting programs, event investigations, monitoring of operations and maintenance procedures, or system changes, as sources for hazard and consequence information. MATA will also use the Track-it system to consolidate consequence and hazard information in one location for easier sorting and analysis to share information and enable analysis.

MATA uses a variety of methodologies in identifying hazards on the system, including, but not limited to

- Employee or patron reports
- Near miss/close call events
- Capital projects/construction activity
- Drills and exercises
- New systems testing
- Safety data trend analysis
- Event investigations
- Discussions and deliberations from Safety Committee meetings
- Reports from operations and maintenance personnel
- Results from rules compliance checks and evaluations
- Analysis of maintenance data
- Results from facilities and vehicles inspections
- Findings from internal safety and security audits
- Annual TDOT on-site inspections
- NTSB, FTA, TDOT, OSHA and other regulatory agencies

13.0 Safety Risk Analysis & Evaluation

Hazards which are not resolved at the operating, maintenance, or other front-line department level are appropriately investigated by the Office of the CSSO, assisted by the responsible operations and maintenance department. Investigation findings are documented and reported to the local Safety Committees (e.g., SMS Safety Committee). Those issues that the local Safety Committees are unable to resolve are escalated to the SSC through the CSSO for resolution.

13.1 Hazard Categorization

This involves categorizing identified hazards in terms of each one's severity or consequence and its probability of occurrence. The ***United States Department of Defense (DoD) Standard Practice for System Safety, Military Standard (MIL-STD) 882 Version E***, establishes system



safety criteria guidelines for determining hazard severity and probability and is the standard relied on by MATA in its hazard identification and resolution process.

The hazard severity categories listed below provide the qualitative indication of the relative severity of the possible consequences of the hazardous conditions. MATA assigns hazard categories based on the “worst-case” event.

Table 13: Severity Categories

Description	Score	Mishap Result Criteria
Catastrophic	1	Could result in one or more of the following: death, permanent total disability, irreversible significant environmental impact, major system disruption of more than 2 hours or monetary loss equal to or exceeding \$500,000.
Critical	2	Could result in one or more of the following: permanent partial disability, injuries or occupational illness that may result in hospitalization, reversible significant environmental impact, moderate to major system disruption of more than 1 hour but less than 2 hours, or monetary loss equal to or exceeding \$ 250,000 but less than \$500,000.
Marginal	3	Could result in one or more of the following: injury or occupational illness resulting in one or more lost workday(s), reversible moderate environmental impact, minor to moderate system disruption of more than 30 minutes but less than 1 hour, or monetary loss equal to or exceeding \$100,000 but less than \$ 250,000.
Negligible	4	Could result in one or more of the following: injury or occupational illness not resulting in a lost workday, minimal environmental impact, minor to no system disruption of less than 30 minutes, or monetary loss less than \$100,000.

Once a hazard’s severity has been determined, the analysis will consider the probability, or likelihood of the consequences will exist if the hazard is not corrected or controlled. The susceptibility of a location to a hazard occurring is measured using the following table.

Description	Score	Specific Individual Item	Fleet or Inventory
Frequent	A	Likely to occur often in the life of an item.	Continuously experienced
Probable	B	Will occur several times in the life of an item.	Will occur frequently
Occasional	C	Likely to occur sometime in the life of an item.	Will occur several times
Remote	D	Unlikely, but possible to occur in the life of an item.	Unlikely, but can reasonably be expected to occur
Improbable	E	So unlikely, it can be assumed occurrence may not be experienced in the life of an item.	Unlikely to occur, but possible
Eliminated	F	Incapable of occurrence. This level is used when potential hazards are identified and later eliminated.	Incapable of occurrence. This level is used when potential hazards are identified and later eliminated.

Table 14: Probability Categories

Together, the hazard severity and probability properties measure the **Safety Risk Score** and the priority for applying control measures. Using this scale, the CSSO and members of the SMRC and or Safety Committees examine, quantify, and resolve the hazards based on the severity of a potential outcome and the likelihood that such an outcome will occur.

Figure 4: Safety Risk Matrix

Severity Probability	Catastrophic 1	Critical 2	Marginal 3	Negligible 4
A - Frequent	1A	2A	3A	4A
B - Probable	1B	2B	3B	4B
C - Occasional	1C	2C	3C	4C
D - Remote	1D	2D	3D	4D
E - Improbable	1E	2E	3E	4E
F - Eliminated	Eliminated			

1A, 1B, 1C, 2A, 2B

1D, 2C, 3A, 3B

1E, 2D, 2E, 3C, 3D, 3E, 4A, 4B

4C, 4D, 4E

F

High
Serious
Medium
Low
Eliminated

Unacceptable

Undesirable, management decision is required

Acceptable, with review by the SMRC

Acceptable, without review by the SMRC

Eliminated

The results from using the **Safety Risk Matrix** will then be used to determine whether a hazardous condition should be eliminated, controlled, or accepted. Hazards rated as or **“High”** must be addressed to control or eliminate the risk to the lowest practical level through the processes defined in section 14.0 below. Hazards classified as **“Serious”** may be tolerable if it can be demonstrated that its occurrence is highly improbable.

High/Unacceptable: The risk cannot remain and must be mitigated through the SMRC. The Safety Risk Analysis (SRA) and subsequent analyses will present options for elimination or reductions of high risks.

Serious/Undesirable: The risk should be reduced if at all practical to do so with support from the SMRC. The Safety Risk Analysis (SRA) and subsequent hazard analyses will provide options, where possible, to reduce risks.

Medium/Acceptable, With Review: The risk can be acceptable after review by management and the SMRC. The Safety Risk Analysis will recommend either that the hazard be left as is or be acted upon to further reduce risk. The SMRC makes final determination.

Low/Acceptable: The risk is acceptable as is and does not require further review. The Safety Risk Analysis will not recommend any action be taken to address a low risk. Final determination is made by the CSSO.

Eliminated: The risk no longer exists.

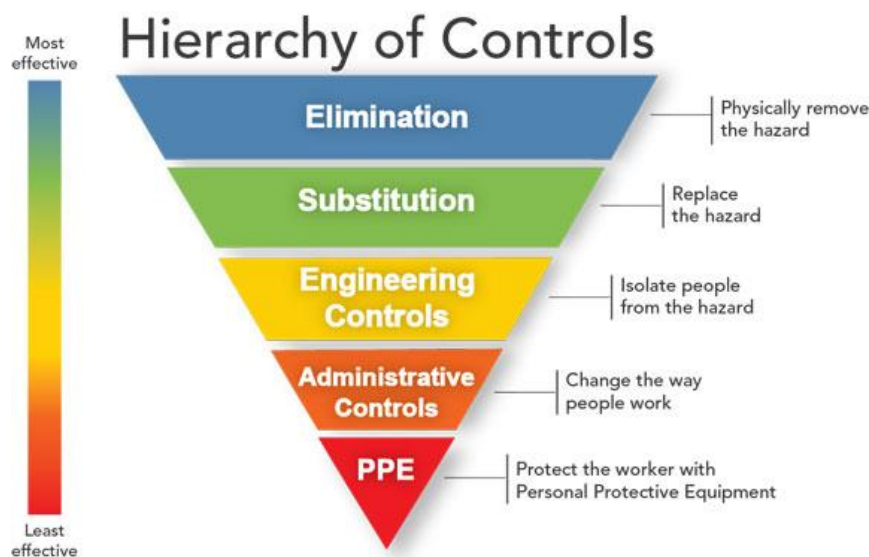
14.0 Safety Risk Mitigation

49 CFR Part 673 requires MATA to establish methods or processes to identify mitigations or strategies necessary, because of agencies' safety risk assessment, to reduce the likelihood and/or severity of the consequences.

The goal of risk mitigation is to reduce the assessed risk rating to an acceptable level; however, mitigations do not typically eliminate the risk entirely. MATA will consider input from SME from different departments to ensure that the selected safety risk mitigation is appropriate. Input from multiple sources can help prevent unintended effects, including new hazards.

Hazard control process will follow the **Hierarchy of Controls** as defined by the National Institute for Occupational Safety and Health (NIOSH)

Figure 5: NIOSH Hierarchy of Controls²⁶



A combination of controls may be used when no single method fully protects the system or components of the system.

Elimination or Substitution: While most effective at reducing hazards, these methods tend to be the most difficult to implement in an existing process. The core methodology between elimination and substitution is the separation of the hazard from the system or sub-system either by means of removal or modification/replacement. These steps are most effectively implemented at the early stages of a process, and if the process is still at the design or development stage, elimination and substitution of hazards may be inexpensive and simple to implement.

Where some hazards are inherent and cannot be eliminated completely through design, they should be substituted, if possible, to reduce the risk to the lowest acceptable level. This can be accomplished by incorporating, as necessary, fail-safe devices and principles in design, incorporating high-reliability system components, and using redundant or backup hardware and software devices.

Engineering Controls: This methodology is designed to remove the hazard at the source before it encounters the worker. Well-designed engineering controls can be highly effective in protecting

²⁶ OSHA Hazard Prevention and Control

workers and will typically be independent of worker interactions to provide this high level of protection. The initial cost of engineering controls can be higher than the cost of administrative controls or Personal Protective Equipment (PPE), but over the longer term, operating costs are frequently lower, and in some instances, can provide cost savings in other areas of the process. Examples include reducing exposure to noise through redesigning equipment or infrastructure or increasing air circulation to eliminate heat related stress of workers and patrons.

Administrative Controls and PPE: Administrative controls and PPE are frequently used with existing processes where hazards are not particularly well controlled. Administrative controls and PPE programs may be relatively inexpensive to establish but, over the long term, can be very costly to sustain. Administrative controls essentially change the way people work. This method limits exposure to the hazard rather than removing it. Similarly, PPE does not eliminate hazards and may result in workers being exposed if the equipment fails.

Therefore, these methods for protecting workers have also proven to be less effective than other measures, requiring significant effort by the affected workers. As such, Administrative Controls and PPE should be used as a last resort if the other methodologies are not feasible.

15.0 Safety Risk Tracking

When a potential hazard is identified, it is added to MATA's **Safety Risk Tracking Log (SRTL)** per the procedures defined in the **Safety Risk Management Plan (SRMP)**. MATA will submit the SRTL monthly or make the log available upon request from the SSO Program Manager. The tracking log will contain, at a minimum:

- Safety risk description
- Immediate mitigation (if needed)
- Origin of safety risk
- Date safety risk was identified
- Responsible investigator or committee leader
- Safety risk analysis results
- Proposed CAP(s) including all relevant information
- Date safety risk closed

The SRTL template can be found in Appendix B of this Safety Plan. Further, the SRTL will be reviewed regularly by TDOT.

16.0 Hazard Prioritization

All hazards will be prioritized based on the Safety Risk Score calculated during the Analysis and Evaluation process. The score is achieved by combining the Severity rating with its Probability. The greater the score, the higher the hazard prioritization. Hazard ranked as High/Unacceptable or Serious/Undesirable should be mitigated first, with High/Unacceptable ranking as the greatest. Prioritizing risks will support management in the decision-making process by elevating the hazards and vulnerabilities that need immediate attention to the forefront for action.

16.1 Hazard Acceptance

If it is not possible to reduce a hazard by any means, a decision must be made to accept the hazard or to dispose of the system. This decision is made by the SMRC. The CSSO has final signatory authority for hazard acceptance, through agreement with the SMRC. As in all other hazard management activities, full documentation of hazard acceptance will be maintained by MATA's Safety and Security department according to the internal procedures.



16.1.2 Hazard Notification

Unacceptable, or High, hazardous conditions must be reported to TDOT. Additional hazards identified by MATA may also be reportable to TDOT and this determination will be made by the SMRC and/or CSSO as needed.

16.1.3 Notification of Unacceptable Hazards

Unacceptable hazardous conditions must also be reported to TDOT within one (1) day of discovery. In the event the RTA determines that the final risk assessment of the hazard is “unacceptable” using the criteria and assessment process in its Safety Plan, the RTA shall notify TDOT by 5:00 p.m. on the next regular working day following the determination of the unsafe condition as “unacceptable”.

16.2 Fatalities & Serious Injuries Unrelated to MATA

In accordance with the **FTA Two-Hour Accident Notification Guide** (February 2018) TDOT will not treat certain fatalities and serious injuries as reportable Accidents under 49 CFR Part 674 event reporting criteria. Instead, such fatalities and serious injuries shall be treated as Unacceptable hazards, to be reported to TDOT within one (1) business day of discovery. Examples include:

- Death resulting from illness, drugs, or natural causes occurring on rail transit property
- Criminal homicide occurring on rail transit property
- Serious injury resulting from illness, drugs, or natural causes occurring on rail transit property; or
- Serious injury resulting from criminal assault occurring on rail transit property.

MATA shall perform an investigation of deaths and serious injuries occurring on rail transit property, in accordance with its existing rules and practices. Following initial notification of a death or serious injury, TDOT may request additional information from the RTA, may request to participate in the investigation, and/or may launch a TDOT investigation.

17.0 Coordination with SSOA

MATA Trolley will track progress on addressing hazards through entries onto the Hazard Tracking Log and provide updated copies to the SSO monthly. MATA Trolley will have quarterly meetings with the SSO to review the SRL and other MATA Trolley activities associated with the Safety Risk Management process.

After the initial notification, MATA Trolley shall submit the investigation report to the SSOA by fax or email. The sample form can be found in Appendix C of this Safety Plan. MATA Trolley shall submit to the SSO the initial report of its investigation of the reportable hazardous conditions within seven calendar days of the hazard being reported to the SSO. MATA Trolley may transmit an electronic copy via email or a hard copy via mail or fax. MATA Trolley shall submit to the SSO reports on the subject hazard investigation monthly until the investigation is completed. MATA Trolley may transmit these status reports as an electronic copy via email or as hard copy via mail or fax.

MATA Trolley shall prepare and submit to TDOT for review and approval a final report that includes a description of activities, findings, identified causal factors, and a corrective action plan. MATA Trolley shall transmit an electronic copy of the final investigation report to TDOT via email. Within thirty (30) calendar days of receiving a report designated as final, TDOT will review the report. Within thirty (30) calendar days of acceptance of the MATA Trolley investigation report,



the SSOA will issue to MATA Trolley written approval of the report. If the SSO does not accept the MATA Trolley report, TDOT will communicate in writing the area(s) of disagreement or concern. The report shall not be considered final until all conditions are met, and the report is agreed upon by MATA Trolley and TDOT.

Under the SSPS, the TDOT reserves the right to conduct independent investigations of identified hazardous conditions.

MATA Trolley will track progress on addressing hazards through entries onto the Hazard Tracking Log and provide updated copies to the SSO monthly. MATA Trolley will have quarterly meetings with TDOT SSO to review the SRL and other MATA Trolley activities associated with the Safety Risk Management process.

After the initial notification, MATA Trolley shall submit the investigation report to the TDOT SSO by fax or email. The sample form can be found in Appendix C of this Safety Plan. MATA Trolley shall submit to the SSO the initial report of its investigation of the reportable hazardous conditions within seven calendar days of the hazard being reported to the TDOT SSO.

TDOT SSO may also require MATA to notify, investigate, and report hazards and risks derived from the Risk-Based Inspection Program, NTD data or trending, and other sources at TDOT SSO's discretion and towards continuous improvement.

The qualifications of the investigator shall comply with the uniform curriculum for safety training that consists of minimum requirements to enhance the technical proficiency of rail transit safety personnel. The new rule, 49 CFR Part 672, implements FTA's statutory requirements at 49 U.S.C. § 5329(c). The Training Rule sets forth federal requirements for the certification and training of the State Safety Oversight Agency (SSOA) personnel and contractors who conduct safety audits and examinations of rail transit systems and rail transit agency (RTA) personnel and contractors who are directly responsible for safety oversight.

FTA encourages other safety personnel to voluntarily participate in the safety certification training program, including bus safety personnel.

18.0 Hazardous Materials Program

MATA will minimize and control the generation of hazardous waste and pollutants to protect the environment. All MATA activities must comply with applicable federal and local environmental protection laws. Procedures have been established in the MATA Trolley Environmental Manual to control hazards associated with procurement, storage, transfer, use, and disposal of hazardous substances. Methods used in the program include product and process evaluations, procurement procedures, monitoring, testing, inspections, and training.

Examples of MATA Trolley's handling of hazardous materials and waste include an accessible collection of Safety Data Sheets (SDS) and procedures regarding chemical labeling, chemical, and waste disposal, and employee awareness. Hazardous Communications (HAZCOM) Training is conducted by the Training Department or designee. Records of training are maintained in the employee file and electronically.

SOPs are also in place to address hazardous materials concerns. Refer to ***SOP 004-004, Hazardous Materials Policy and Procedure, SOP 001-001, Hazmat Spill Response Maintenance and Storage Facility, and SOP 004-008, Procurement of Safety Critical and Hazardous Materials, for further detail.***

The bus and paratransit environmental safety program can be found in the Environmental Manual, Bus Maintenance Facility document.

Part E: Safety Assurance

Safety Assurance is Component 3 of the SMS framework. It is the process within MATA's SMS that function to ensure the implementation and effectiveness of safety risk mitigation and to ensure that the MATA meets or exceeds its safety objectives through the collection, analysis, and assessment of information. This section will describe the activities.

MATA will use this to monitor its system for compliance with, and sufficiency of, the agency's procedures for operations and maintenance. Furthermore, during these processes MATA will review system functions to identify safety risk mitigations that may require further improvements or are functioning as intended.

19.0 Safety Performance Monitoring & Measuring

Safety Performance Monitoring and Measuring activities are aimed at the quantification of MATA's safety effectiveness and efficiency during service delivery operations. This is accomplished through a combination defining and tracking SPI to measure MATA's ability to meet its SPTs. This is a continuous process that aims to provide feedback to the SMS on how well safety performance targets are being met.

The data used to monitor and measure the SPT will be supplemented by information collected from SMEs and data input from this process will be reviewed, monitored, and analyzed for trends through various lenses of MATA's operations (i.e., by mode, department, location, line, day of the week, time of day, employee, etc.).

Reports will be developed, as necessary and provided to MATA's SMRC and management staff for review and identification of mitigation if required. Specific SPTs are defined in Part B, Section 6 of this Safety Plan.

19.1 Safety Data Acquisition and Analysis

It is critical to safety assurance at MATA that safety-related data is acquired from various sources. Furthermore, analysis and distribution of that data to MATA management and staff is also critical to ensure safe operation and performance. In some instances, the acquired data is used to meet external reporting requirements for TDOT or the FTA. Trend analysis is performed on the acquired data as a means of identifying trends in accidents and occupational injuries to develop and implement corrective action to predict and prevent further occurrences.

Safety data is collected from numerous sources by MATA. Sources include but are not limited to the following:

Accident Statistics	Maintenance Records
Accident/Incident Reports	NTSB Reports
Claims Reports	Occupational Injury Reports
Customer Feedback	Public Comment / Concerns
Daily Activity Logs	Control Center Reports
Drills and Exercises	Rules Compliance Program
Drug & Alcohol Testing	Safety Meetings and Committees
Employee Reporting Program	Security Reports
First Responders	SSOA Reviews
Inspection Reports	Supervisor Logs

Internal Audits

MPD Crime Data

Safety data analysis also involves obtaining technical information from external sources for use in identifying trends and developing and implementing corrective actions. Sources for such data include but are not limited to the following:

- Peer agencies
- American National Standards Institute (ANSI)
- American Public Transportation Association (APTA)
- American Society for Testing and Materials (ASTM)
- Department of Homeland Security (DHS)
- Environmental Protection Agency (EPA)
- Federal Transit Administration (FTA)
- Municipal Statutes and Public Laws
- Safety Data Sheets (SDS)
- National Fire Protection Association (NFPA)
- National Transportation Institute (NTI)
- Occupational Safety and Health Administration (OSHA)
- Transportation Security Administration (TSA)
- Other transit systems

Other data sources, standards and guidelines will be identified, as they are applicable to the analysis being conducted. The CSSO is responsible for ensuring that appropriate and adequate safety data collection is maintained for the operations and maintenance activities and adequate analysis is performed on the data, shared appropriate system-wide and acted upon to predict and prevent adverse events for safety assurance purposes.

19.1.1 Access to Data

All departments are charged with providing analysis of internal data as directed by the CSSO. The data is indicated in the table above. Please note this is not an exhaustive list, but simply a basic guideline. The CSSO will ensure that each department is aware of the data and is required to collect, analyze, and subsequently provide to the CSSO for review, further analysis, and corrective action. Data from individual departments will be made available to the Safety and Security Department upon request and similarly, the Safety and Security Department will distribute any data analysis as appropriate to the applicable division(s).

19.1.2 Data Analysis

The CSSO will delegate to the Safety Data Analyst the responsibility to track safety-related data to identify trends, including those related to hazards. The data analysis process will involve collaborating with SMEs and the Safety and Security Officers. Identified trends for all data are then analyzed and/or investigated by the CSSO or their designee with the cooperation of the appropriate department(s) to determine causal factors.

19.1.3 Safety Performance Indicators

SPI are quantifiable parameters used for monitoring and assessing safety performance and SPT. SPIs should be clearly defined with input on what the indicators are based on data and information provided by the SMEs. More importantly, SPIs should be quantified, and measured by using the data provided in Section 17.1. There are two (2) common types of indicators:

Lagging Indicators: Data related to things that have already happened. MATA will define lagging SPIs using historical data of negative outcomes, such as accidents, incidents, and occurrences.

Leading Indicators: Measure conditions that have the potential to become or contribute to a negative outcome before the outcome occurs. Leading indicators can be very valuable because it will allow MATA to monitor precursors to events and offer the opportunity to act before something bad happens.

MATA will use both lagging and leading indicators to measure and monitor its safety performance and feed the SPTs.

19.2 Investigations of Safety Events

The investigation process is a critical component of the ISA function of the SMS and is one (1) indicator to measure safety performance success.

MATA shall investigate any reportable Accident or Unacceptable hazardous condition, as well as any other safety events as deemed necessary by the agency or TDOT. Each investigation conducted on behalf of the SSO must be conducted in accordance with the reporting procedure outlined in the SSPS. The investigation will be documented in a final report that includes a description of investigation activities, findings, identified causal factors, and CAP(s) as necessary. At the discretion of the MATA management, the final investigation report will be separated into two parts as follows:

- Description of investigation activities, investigation findings, and determination of the most probable cause and additional contributing causes
- Recommendations to prevent recurrence and a corrective action plan, if required

Additionally, The SSO reserves the right to conduct independent investigations on its own behalf of any reportable event involving the Trolley, in accordance with the SSPS. The SSO will inform the CSSO of its intention to investigate or participate in an investigation of a reported event no later than seven (7) calendar days following receipt of the initial report.

MATA will use the procedures defined in SOP 004-003 as summarized below, as well as incorporate the following requirements:

1. Each RTA investigation shall be documented in a final report that includes a description of investigation activities, findings, identified causal factors, and CAP(s) as warranted.
2. The investigation report shall be submitted to the TDOT within thirty (30) calendar days following completion of the investigation.
3. TDOT will review and formally approve each RTA draft final investigation report within thirty (30) calendar days following receipt of the report.
4. MATA shall provide quarterly status reports to the TDOT that document investigation activities and findings.

19.2.1 Investigation Procedure

The steps required to conduct a safety event investigation are described in SOP 004-003. At a minimum, an investigation must determine the facts related to the cause of the event, including the identification of causal factors. The investigation must document specific actions that should be taken to prevent or reduce the likelihood of further occurrences. MATA Trolley has established the following investigation classifications of accidents and incidents:

The on-scene investigation will focus on the following tasks:



1. Evaluate the accident scene to determine what occurred, document the final uncontrolled position of employee, type and severity of injury, position of vehicles and equipment involved, and any other relevant situational data
2. Evaluate the accident scene to determine any mechanical, physical and environmental conditions that may have contributed to the accident/incident
3. Conduct interviews of persons essential to the investigation of the incident, such as the vehicle operator, witnesses, injured persons, supervisors, and dispatchers
4. Evaluate what job the employee was performing or assigned to, and whether the employee was properly trained and qualified to perform the duty assigned at the time of the accident and incident
5. Make a preliminary assessment of whether an unsafe action or unsafe condition contributed to the accident and incident
6. Determine what personal protective equipment was required for the job being performed, whether it was being worn, and whether it was in good condition and proper for hazard protection

The investigator is responsible for the initial investigation of all non-criminal incidents, unless directed otherwise by the CSSO. This includes obtaining information required for the preparation of the Preliminary Investigation Report. In situations where a serious crime has occurred or where MPD has selected to assume jurisdiction, the investigator will work closely with MPD personnel to ensure the scene is secured and information is exchanged appropriately. The lead investigator shall focus on, at a minimum:

- Interviewing employees, witnesses, and passengers
- Focusing on the conditions and hazards that caused the accident
- Collecting and protecting or directing the collection and protection of all physical evidence. This might include the presence, absence, and description of skid marks, marks on the rail, condition of the rail and other road defects, traffic control signals, and devices, area speed limit signs, and other warning or control signs or devices for both rail and vehicular traffic
- Examining the operating compartments, working environments, and other environmental conditions involved with the operation of the system leading to the events occurrence
- Ensuring that a description of the event is recorded. Required documentation includes photographs, measurements, and sketches at a minimum. Other documentation should be obtained to the greatest extent possible.

At an accident/incident scene, upon being briefed by personnel already on the scene, the office of the CSSO, under direction of the CSSO, or CSSO may assume command of MATA activities, working closely with the ICS and other MATA responders and response personnel from Memphis or area emergency response agencies. Depending on the severity of the accident or incident, the office of the CSSO, under the direction of the CSSO, or CSSO may remain in command of the situation until the scene is cleared, assist the any listed responsibilities, or return command authority to the investigator.

Based on the above information, the lead investigator will complete and submit the initial investigation report within twenty-four (24) hours to the CSSO or their designee, as necessary for review. The lead investigator shall assist, as directed by the CSSO, in completing any follow-up investigation, as necessary.

19.2.2 Investigator Qualifications

The office of the CSSO is trained in basic investigation processes and procedures for all three (3) modes of transportation. Under conditions where an employee in the Office of the CSSO is hired



or job functions change, training for personnel will include review and understanding of existing procedures, as well as other industry courses relevant to incident investigations, including those required under 49 CFR Part 672 as defined in Part F of this Safety Plan.

19.2.3 Investigation Reports

Upon completion of the Accident Investigation, MATA will prepare and submit to TDOT a final draft report that includes the following information, at a minimum:

1. Investigation Report General Outline

- a. Event description
- b. Notification, Incident Response, and Incident Command
- c. Initiating Event
- d. Immediate Corrective Actions
- e. Operator Information – fatigue evaluation, training and post-accident drug test results
- f. Investigation
- g. Operator event report
- h. Field supervision report
- i. Employee record/history

2. Post-Accident Safety Inspection

- a. Video analysis
- b. Communications analysis
- c. Findings, Potential causal factors, and recommendations (CAPs)
- d. Investigator
- e. Date of report
- f. Distribution

19.3 Internal Notifications

MTM personnel are required to make a verbal report to the Command Center (CC) immediately of all events, followed as soon as practical by written reports. MATA Trolley SOPs cover accident response in detail. The MATA Trolley accident/incident reporting and investigation procedures and forms are included in MATA SOP 004-003, “Accident/Incident Investigation,” and are briefly summarized here.

Since each accident and incident may be different, the process and task detailed in this document will not necessarily be applied to, nor required for, every investigation. That decision is based upon experience and good judgment of Management and that of the investigative team.

19.3.1 Notification to TDOT

The following table provides information on the notification process and requirements to TDOT for a Safety Event.

Table 15: TDOT SSPS Accident Threshold Table

Event / Threshold	Human Factors	Property Damage	Types of Events	Actions
Accident: RTA to Notify SSOA and FTA within two hours	<ul style="list-style-type: none"> - Fatality (occurring at the scene or within 30 days following the accident) - One or more persons suffering serious injury 	<ul style="list-style-type: none"> - Property damage resulting from a collision involving a rail transit vehicle; or any derailment of a rail transit vehicle 	<ul style="list-style-type: none"> - A collision between a rail transit vehicle and another rail transit vehicle - A collision at a grade crossing resulting in serious injury or fatality - A collision with a person resulting in serious injury or fatality - A collision with an object resulting in serious injury or fatality - A runaway vehicle car - Evacuation due to life safety reasons - A derailment (mainline or yard) - Fires resulting in a serious injury or fatality 	<ul style="list-style-type: none"> - RTA to notify SSOA and FTA within 2 hours; investigation required - RTA to report to FTA within 30 days via the NTD - RTA to record for SMS Analysis
Incident: RTA to Report to FTA (NTD) within 30 days	<ul style="list-style-type: none"> - A personal injury that is not a serious injury - One or more injuries requiring medical transportation away from the event. 	<ul style="list-style-type: none"> - Non-collision related damage to equipment, rolling stock, or infrastructure that disrupts the operations of a transit agency 	<ul style="list-style-type: none"> - Evacuation of the transit vehicle into the right-of-way; or customer self-evacuation - Collisions involving a rail transit vehicle that result in a non-serious injury or property damage - Damage to catenary or Incline cable equipment that disrupts transit operations - Fires that result in a non-serious injury or property damage - A train stopping due to an obstruction in the tracks - All hazardous material spills >25 Gallons exposed 	<ul style="list-style-type: none"> - RTA to report to FTA within 30 days via the NTD - RTA to record for SMS Analysis
Occurrence: RTA to record data and make available for SSO and/or FTA review	<ul style="list-style-type: none"> - No personal injury 	<ul style="list-style-type: none"> - Non-collision related damage to equipment, rolling stock, or infrastructure that does not disrupt the operations of a transit agency 	<ul style="list-style-type: none"> - Close Calls/Near Misses - Safety rule violations - Violations of safety policies - Damage to catenary or Incline cable equipment that do not disrupt operations - Vandalism or theft 	<ul style="list-style-type: none"> - RTA will collect, track and analyze data on Occurrences to reduce the likelihood of recurrence and inform the practice of SMS

As part of the initial phone call to TDOT, MATA will provide any known facts about the accident that has occurred. MATA and TDOT will discuss whether the accident requires notification, investigation, and reporting by the FTA or other meets other reporting requirements. In some cases, the notification ends with this phone call if it is deemed not required either by FTA or TDOT.

Table 16: TDOT Notification Information

Primary TDOT Contact: Christopher Broach	
Cell Phone	615-306-2273
Alternate TDOT Contact: Dan Pallme	
Cell Phone	931-553-2875
Contingency Contact	
Tennessee Emergency Management Agency	
Telephone	800-336-3300

For the initial notifications, MATA will provide a follow-up email with an Initial Notification Form to TDOT within 7 days after making the initial telephone notification. The following information provided by the RTA in the initial notification of the event is mandatory.

- Name and job title of person reporting and name of RTA
- Include notification times to other agencies, ex. FTA
- Drug & alcohol tested completed
- Event type (fatality, injuries, property damage, evacuation, derailment or other)
- Location, time, and date
- Notification time for TDOT SSO program
- Number of fatalities
- Number of injuries
- Rail transit vehicle(s) involved (type, number)
- Other vehicle(s) involved (type, number)
- Property damage estimate
- NTSB, TSA reportable
- MATA's primary point of contact conducting the investigation, including:
 - Name
 - Title
 - Phone and fax numbers
 - Email address
- Provide a brief description of the event, generating a notification

If the information is not pertinent to the event, then identify it as such on the Initial Notification Form as not applicable (N/A).

MATA may also be required to provide additional information to TDOT upon request. Additionally, MATA will maintain a current list of contact information for all primary and alternate contact personnel, including email addresses, telephone, cell phone, and fax numbers.



19.3.2 Notification to the FTA

Table 17: FTA Notification Information

Agency	Timeline	Criteria Reference	Contact Info.
FTA	Within Two (2) Hours	49 CFR Part 674.33	US DOT Crisis Management Center (CMC) TOC-01@dot.gov (P) or (202) 366-1863 (S)

- i) The CSSO or designee will notify the FTA Office of Safety and Security of major accidents, and service disruptions in accordance with its requirements. Current requirements include telephone notification and/or e-mail notification.
(<https://www.transit.dot.gov/regulations-and-guidance/safety/two-hour-accident-notification-guide>)

19.3.3 Additional Notification Requirements

The following table provides additional notification requirements for MATA.

Table 18: Federal Agency Notification Requirements

Agency	Timeline	Criteria Reference	Contact Info.
NTSB	Within Two (2) Hours	49 CFR Part 840.3(a)	National Response Center 1 (800) 424-0201
	Within Four (4) Hours	49 CFR Part 840.3(b)	
TSA	-	49 CFR Part 1580.203	DHS Freedom Center (866) 615-5150

For TSA notifications and because the RTA may notify the security department, a separate Initial Notification Form is acceptable.

19.3.4 NTSB Notifications

The CSSO or designee will notify the National Transportation Safety Board (NTSB) at the earliest practical time following any one of the following accidents:

- No later than 2 hours after an accident that results in:
 - A passenger or employee fatality or serious injury to two or more crew members or passengers requiring admission to a hospital
 - The evacuation of a passenger train
 - A fatality at a grade crossing
- No later than 4 hours after an accident which does not involve any of the circumstances enumerated in bullet one above, but which results in:
 - Damage (based upon a preliminary gross estimate) of \$150,000 or more for repairs, or the current replacement cost, to railroad and non-railroad property
 - Damage of \$25,000 or more to a passenger train and railroad and non-railroad property



19.3.5 FRA Notifications

Since the MATA Trolley shares track with a general railroad system and is subject to the FRA notification requirements, MATA Trolley shall notify TDOT within two (2) hours by phone of an incident for which the MATA Trolley must notify the FRA. MATA has been granted a waiver (FRA Docket Number FRA-2008-0063). As such, the MATA Trolley will comply with FRA's regulations by either reporting the accident itself or by assisting the IC and/or Amtrak with its reporting. The FRA has waived the requirements of 49 CFR Part 225 regarding the reporting of injuries.

19.4 Coordination with TDOT

TDOT has delegated investigation responsibilities to MATA through the SSPS. Therefore, MATA will coordinate with TDOT during investigations of accident, unacceptable hazardous conditions, and any other condition or event as deemed necessary. For all investigations led by the MATA, TDOT will review and approve all accompanying reports before the investigation is finalized and adopted. Under certain circumstances, TDOT may determine the need to conduct an independent investigation, separate and apart from MATA's. Under these circumstances, MATA will continue to conduct its own concurrent investigation, while supporting the independent investigation, as necessary.

AS described in the preceding sections, MATA shall submit a final draft report to TDOT for review and approval. Once a draft investigation report is submitted to TDOT, the SSOA will review the report within thirty (30) calendar days and issue a written reply either accepting or rejecting the report. If TDOT does not accept a report, TDOT will communicate, in writing, the area(s) of disagreement or concern. MATA will coordinate with TDOT to ensure all concerns and comments have been addressed prior to finalizing the report. The report shall not be considered final until all conditions are met, and the report is approved and adopted by TDOT in writing.

Additional coordination and communication efforts with the SSO regarding safety events or related matters will be made via phone (for reporting of incidents) and by fax, email, or hardcopy for reports as outlined the SSPS and the SSO Notification section of SOP 004-003.

19.5 Safety Rules Compliance

Operational rules and procedures are contained in the MATA Rulebook. Additional procedures (i.e., SOPs, and in plans, programs and other documentation) are developed to support all operations as needed. These procedures are generally developed and maintained by department. Other safety rules, processes, and practices may be contained in these procedures.

19.5.1 Review of Rules and Procedures

Operational and facilities rules and procedures pertaining to safety and security are contained in the MATA rulebooks and SOPs. Additional procedures have been or are being developed in support of all system operations. Rulebooks and procedures are maintained by the departments to which they apply.

The following table provides a schedule for when rules and procedures, by mode, are reviewed and revised, if needed, and with whom the responsibility lies. Other rules and procedures may be reviewed but are not listed below.



Table 19: Trolley Rules and Procedures Review Schedule

Procedure(s)	Freq.	Responsibility
Vehicle PMIs	Annually	Manager of Trolley Maintenance
Operating Rulebook	Annually	Manager of Trolley Operations
Supervisor	Annually	Manager of Trolley Operations

Table 20: Fixed-Route Rules and Procedures Review Schedule

Procedure(s)	Freq.	Responsibility
Vehicle PMIs	Triennially	Director of Maintenance
Operating Rulebook	Annually	Director of Operations
Dispatcher SOPs	Annually	Superintendent of Street Service Delivery

Table 21: Paratransit Rules and Procedures Review Schedule

Procedure(s)	Freq.	Responsibility
Vehicle PMIs	Triennially	Director of Maintenance
Operating Rulebook	Annually	Director of Operations
Run Dispatchers	Annually	Director of Operations
Radio Dispatchers	Annually	Director of Operations
Supervisors	Annually	Superintendent of Street Service Delivery

Responsibilities may be delegated by the responsible party, as appropriate.

Any changes to operating procedures, rulebooks, or maintenance plans with safety implications will be reviewed by the SMRC for final approval. Upon approval, changes are made, and the rulebook is signed and distributed by the Chief Operations Office – Trolley Division according to the rulebook requirements. Individuals receiving a new or revised rulebook are required to sign, date, and return a form indicating receipt.

All MTM personnel and contractors are responsible for always knowing and abiding by the rules and procedures of the agency and for its appropriate implementation while on duty. MTM personnel must know and follow the rules when on MATA property.

19.5.2 Safety Rules Compliance Program

The **Safety Rules Compliance Program (SRCP)** is the process used by MATA to develop, maintain, and ensure compliance with rules and procedures having a safety impact, including identification of operating and maintenance rules and procedures subject to review; techniques used to assess the implementation of operating and maintenance rules and procedures by employees.²⁷ There are three (3) fundamental outputs for the SRCP:

1. Measure the effectiveness of supervision relating to implementation of operating and maintenance rules
2. Documentation of results
3. Incorporation of findings into the SRM

Supervisory and management personnel will be required to make periodic checks of employees to ensure compliance with the Rulebook and relevant SOPs. Management level personnel are also expected to observe inspections during daily operations and on-the-job training for all employees. The procedure for conducting these periodic performance and compliance reviews is described in **SOP 000-202, Employee Qualification and Requalification**.

²⁷ TDOT SSPS Version 5, Section 4, p.32

The following techniques will be used to monitor compliance for operations and maintenance personnel.

A. Assessment of Operations Personnel: Periodic operational checks are made in the field by supervisors and the Safety and Security Officers, including but are not limited to the following:

- Speed Checks
- Observation of safety vehicle operations
- Proper use of safety devices
- Observation on the use of safety devices
- Wheelchair securement practices
- Wheelchair ramp operations

Periodic spot checks are made when requested or deemed necessary by management. The Safety and Security Officers may conduct random safety checks that include but are not limited to the following:

- General vehicle operations
- Attention to duty
- Signal compliance
- Door operations

B. Assessment of Maintenance Personnel: Maintenance Managers and Forepersons enforce rules and procedures by observing and monitoring employee and contractor performance in shops and yards. Rules and procedures monitored and observed for compliance include but are not limited to the following:

- General safety
- Proper use of tools, equipment, and machinery
- Proper use of personal protective equipment
- Roadway Worker Protection (RWP)
- Fire Life safety
- Materials handling and storage
- Quality Assurance activities

Maintenance Manager and Forepersons also conduct follow-up activities following any non-compliance as a technique to ensure reinstruction of employees has resulted in compliance with maintenance rules.

C. Supervisory Personnel: Periodic reviews of supervisors and forepersons are performed by their respective managers and shall include required supervisory activities defined in the Rulebook and SOPs, as well as the individual's job description and the safety and security requirements outlined in this plan, the SEPP, and SSEPP.

Follow-ups will occur periodically following a finding of rules/procedure non-compliance.

19.5.3 Documentation

Supervisory personnel are primarily responsible for formally documenting procedures and rules observed for compliance. Violations are to be documented and brought to the attention of managers and the CSSO who will ensure that appropriate documentation is maintained. Records of rules and procedures violations are maintained by each department and copies will be submitted to the Safety and Security Department for continued review and monitoring.



Formal ride checks are documented on the appropriate forms per the SOP, and copies are provided to the Safety and Security Department. Formal weekly and monthly reports on rules and procedure compliance will also be provided by the Chief Operations Officer – Trolley Division and Manager of Trolley Maintenance to the Safety and Security Department.

19.6 Inspection and Maintenance Program

All MATA facilities, vehicles, stations, and TPSS are inspected at regular intervals per procedures provided in maintenance SOPs, the MATA Trolley Preventative Maintenance Management System (PMMS) for vehicles, and the MATA Trolley Facilities Management Plan (FAMP). Inspection data are recorded on checklists, as described in Section 14.3 of this plan. Maintenance and inspection records are maintained by MATA departments as described per *SOP 200-004, Maintenance and Operations Records*.

Critical items/conditions disclosed during inspection are repaired immediately or taken out of service until work can be performed. Non-critical items/conditions are cycled through the work order process. Inspection notes recorded on checklists are given to the Maintenance Department for review and filing. When reports of defects or problems are reported from other sources, they are responded to, inspected, and followed up via immediate repair, work order, or out-of-service status per criticality and crew availability.

19.6.1 Facility Inspections

An essential element of the MATA SMS is regular inspection of all system facilities to ensure safe and effective operation. The Safety and Security Officers will work closely with the Director of Building and Grounds to ensure that appropriate checklists and procedures are in place to monitor fire/life safety, industrial, and occupational safety requirements are met.

The FAMP describes all facilities maintenance programs for MATA Trolley in detail and is subject to the approval of the SMRC. Facility inspections are performed daily and semi-annually by the Maintenance Department and at least bi-annually by the Safety and Security Department.

19.6.2 Equipment Inspections

Equipment inspections are performed according to OEM requirements and recommendations, statutory requirements, industry best practices, equipment conditions and use and other applicable requirements.

Table 22: Equipment Inspections

Equipment	Typical Items Inspected/Tested
Signal System	Signals, switches, crossovers, electric switch machines, warning signals
Traction Power System & OCS	Substation, transformers, breakers, overhead contact wire, support poles, and mast arms
Track	Rail, rail joints, ballast, ties, special work, track profile, rail fixation, sewer drains, crossings and stops, rail surface defects, roadway defects and tree/vegetation
Non-Revenue Vehicles	Cars and light trucks, emergency generators, rerailling equipment, forklifts, and hi-rail vehicles
Revenue Vehicles	Wheelchair ramps, interior lighting, communication equipment, ADA equipment, exterior lighting, gauges



19.6.2.1 Vehicle Maintenance Inspections, Trolley

Per MATA Trolley SOP 000-033, “Daily Operator Inspections” a daily inspection is performed by Operators on all trolleys before leaving the Maintenance and Storage Facility during pull-out, at relief, and at pull-in. The inspection covers the interior and exterior of the trolley and related safety-critical systems. The intent is to look for safety defects, external panel damage and/or abnormal conditions. Typical items to be checked are the brakes, sand, controllers, air pressure, mirrors, door operation, gongs, whistles, radio, etc.

Per the PMMS, a trolley vehicle Preventative Maintenance (PM) service shall be conducted upon completion of 402.5 miles, which equates approximately to eighty (80) hours. Given even the distribution of service among the six (6) car fleet, MATA projects an interval of approximately seven (7) days for the most frequent PM service.

There are three (3) levels of PM schedules, designated A through C. Trolleys may be serviced prior to the due dates dictated by the PM schedule, but the maximum number of miles a trolley may run overdue is ten (10) percent of the most frequent interval. If this number is exceeded, the trolley must not be used until serviced, and if in service it will need to be removed to prevent possible system/component failure. A complete PM schedule and checklists for all PM services are attached to the PMMS.

If any trolley is detected with a system or equipment that is not within acceptable tolerances (i.e., which could compromise the above statement), it shall not be allowed to operate in passenger service. Devices - such as flags and lock-out/tag-outs are in place to prevent the operation of trolleys with such faults.

19.6.2.2 Vehicle Maintenance Inspections, Bus

MATA maintains and inspects its vehicles in accordance with the Bus Maintenance Plan (BMP). The BMP is designed to guide actions within the Bus Maintenance Department. As new technologies are phased into MATA, it may become necessary to institute new infrastructure, personnel training, and changes to this plan. The plan will serve as the primary policy for the Bus Maintenance Department and will be used to guide Bus Maintenance Department employees in safe and efficient maintenance practices and provide a high level of customer service. The plan will be utilized as a guide in making decisions daily and may be updated as required.

All fleet vehicles, both revenue and non-revenue, are incorporated into the preventative maintenance inspection interval. Inspection tasks and intervals will be structured around the manufacturer’s published recommendations and updates. The Director of Maintenance may approve additional tasks and increase intervals based upon trend analysis, information from OEM providers and other transit maintenance professionals, and experience of maintenance foremen and mechanics. The Foreman, who manages the preventative maintenance inspection program, assigns mechanics to PM inspections, and ensures all PM services are completed and all mechanical repairs possible are completed during the inspection shift. Where inspection mechanical repairs are not completed, the Third Shift Foreman continues managing repair efforts with the PM inspectors. Additionally, first shift paint & body mechanics perform repair of body shop tasks noted during the vehicle inspection.

19.6.2.3 Signal System Inspections and Maintenance

Signals affecting the movement of trolleys are those controlling the movement of traffic, including both vehicles and trolleys and the interlocking signal crossing CN. Signal aspects are maintained by the City of Memphis.



Operators are trained to approach and move through a signaled intersection with care and to have their trolley always under control. Any minor faults noted with signalization are reported at the end of the shift to the manager or supervisor, who refers it to the appropriate department head for repair. MATA Trolley personnel who observe a major defect in signals, which may compromise safe operations, will contact a Rail Supervisor and immediately report the defect. The Radio Control Center (RCC) will notify emergency responders accordingly.

The Manager of Trolley Maintenance is responsible for ensuring that all defects are followed up to closure, and for taking appropriate action to ensure closure.

19.6.2.4 ROW System Inspections

All other system elements along the ROW are included in a program of regular inspections and maintenance activities. Inspection requirements for these elements are also detailed in the following MATA Trolley documents:

- SOP 200-011, Traffic Control Devices Maintenance
- Infrastructure Maintenance Plan (IMP)

19.6.3 Inspection Checklists

The Safety and Security Officers will work closely with vehicle maintenance divisions and building and grounds department to ensure that appropriate checklists and procedures are in conformance with fire/life safety, industrial safety, and occupational safety requirements. The Operations and Maintenance Plan (OMP), describes all inspection and maintenance programs that are currently in effect. Inspection checklists pertaining to specific system elements are contained in relevant maintenance SOPs and plans.

19.6.4 Corrective Actions

Findings identified during maintenance audits/inspections are recorded and monitored until resolved and closed in accordance with the SRM and CAP processes. Hazards that require coordination across departments or additional resources are addressed by the CSSO and SMRC. In addition, the departmental managers will formally notify the CSSO upon identification of a hazardous condition. Unresolved hazardous conditions may be submitted to the SMRC for review, analysis, and resolution.

19.7 Training and Certification Reviews

Compliance with training requirements is assessed by the CSSO or their designee on an on-going basis. Assessments of compliance are based on student course evaluations, instructor course evaluations, and an annual management review of courses for content and relevance. All recommendations for changes in course content or delivery mechanism will be approved by the CSSO and appropriate division manager as appropriate prior to any substantial changes.

20.0 Management of Change

All changes or modifications in MATA's system must be controlled to ensure that safety and security are managed throughout the process. Change management is the process through which MATA will ensure that any changes or proposed changes do not introduce new hazards or vulnerabilities. If changes have introduced newly identified risks, MATA will measure the risks to mitigate their potential consequences are implemented.

MATA may experience change due to the following reasons

- Expansion of the system
- Changes to its existing rules
- Procurement of equipment
- Modifications to programs and services
- Introduction of new equipment or procedures

Hazards may inadvertently be introduced into the system whenever change occurs. Changes can also impact on the appropriateness and/or the effectiveness of existing safety risk mitigation strategies. Changes may be external to the organization, or internal; however, MATA will ensure that all changes are evaluated through the Safety Risk Management process. The process requires a review of all system documentation by the SMRC for compliance with MATA's Safety Plan and SSEPP and the inclusion of proper safety and security requirements where appropriate.

The CSSO, through the SMRC, is responsible for ensuring that all MATA departments have appropriate processes for documenting their configuration, including, but not limited to:

- Specifications, drawings, and diagrams
- Procedures, policies, and guidelines
- Equipment and vehicles
- Facilities, structures, and infrastructure
- Administrative, quality, security, and emergency processes
- IT systems and processes

In lieu of a Change Control Board (CCB) to review, consider, and approve/disapprove/modify all requested System changes, any proposed changes will be reviewed by the SMRC.

20.1 Change Management Process

While it is anticipated that most individually initiated proposals for configuration change will result from an observed need by operations supervisors, maintenance forepersons, or managers, employee improvement suggestions may also lead to modifications that require configuration management assessment. All proposals, whether originally from an employee suggestion or originated at a higher level, are to be submitted on the Configuration Change Request (CCR) Form shown in Appendix of *SOP 002-400, Configuration Management* as well as in Appendix D this Safety Plan.

Configuration Change Requests (CCR) may result from needs identified during formal targeted operations or maintenance reviews, hazard analysis or threat and vulnerability assessment findings, annual safety, and security audits, triennial SSO reviews, or accident investigations. These will likely be discussed by the SMRC before a decision is made to initiate a proposal to change configuration. The CCR Form referenced above will also be used for Review Initiated requests.

All CCRs will be screened on two levels.

1. First, it will be determined whether the proposed change is a change in configuration. If it is determined that the change does not affect a system's configuration, it will be addressed independent of SOP 002-400
2. Second, if it is determined to be a configuration change, the change will be evaluated to determine whether the nature of the proposed change is such that it will require formal safety and security certification as discussed in Section 20.1.1 below or if it may be verified as acceptable without formal certification

Once a determination is made as to the degree of impact the change will have, the evaluation of the proposed modification can continue with determining merit, cost, safety and security impact, implementation schedule, and potential impact on other MATA elements.

All CCRs are to be assigned a number and entered the Configuration Management Tracking Matrix. The matrix will contain every CCR entered in numerical (and chronological) order, whether rejected, approved, completed, or in progress. From the Matrix the SMRC can view completed configuration changes, in progress changes, and changes that are under review. The matrix will be produced each time any change of configuration is completed and filed with the MATA Trolley configuration documentation. The active change matrix will also be produced from the master, at least monthly, for use to track the status of change proposals in progress and to report to the SMRC. Further, it will be available online for review by all managers and departmental supervisors. A sample of the Matrix can be found in Appendix E of this Safety Plan.

20.1.1 Authority for Change Management

The SMRC maintains the following authority for the management of change:

- Review and approve or reject all proposed major configuration changes
- Review and approve certification documentation for previously approved changes after they are implemented and tested
- Review and comment, as deemed appropriate, on all proposed minor configuration changes

In support of the SMRC, the following individuals will have additional responsibilities for managing change:

A. Chief Safety & Security Officer

- Review all configuration change proposals and determine if each represents a major change requiring formal safety and security certification and SMRC approvals, or a minor change requiring less than formal certification and COO approval
- Determine the certification requirements to be used for minor changes
- For all proposed changes, determines if formal hazard analyses or threat and vulnerability assessments are required, and what level of training or retraining of personnel will be required
- Maintain the Configuration Change Tracking Matrix and signs off on all proposals to verify that implementation will not degrade safety or security

B. Chief Operations Officer – Trolley Division

- Review all proposed major configuration changes and recommend approval or disapproval to the SMRC
- Approves implementation of minor changes to MATA Trolley if the SMRC raises no questions, approves documentation certifying their acceptable installation, or changes do not require their review

C. Director of Maintenance

- Review all proposed major configuration changes and recommend approval or disapproval to the SMRC
- Approves implementation of minor changes to MATA Trolley if the SMRC raises no questions, approves documentation certifying their acceptable installation, or changes do not require their review

D. Manager of Trolley Maintenance

- Review all configuration change proposals generated by Trolley maintenance personnel, or by others, to assess impact on maintainability, reliability, and safety
- After evaluating received comments, forward the comments to the SMRC with a recommendation for submission for approval or for rejection
- Regularly monitor the status of maintenance related proposals and provide updated information to the SMRC

E. Operations Manager of Maintenance

- Review all configuration change proposals generated by fleet maintenance personnel, or by others, to assess impact on maintainability, reliability, and safety
- After evaluating received comments, forward the comments to the SMRC with a recommendation for submission for approval or for rejection
- Regularly monitor the status of maintenance related proposals and provide updated information to the SMRC

F. Director of Operations

- Review all proposed major configuration changes of MATA Fixed Route and Paratransit operations and recommend approval or disapproval to the SMRC
- Approves implementation of minor changes to MATA Fixed-Route and Paratransit operations if the SMRC raises no questions, approves documentation certifying their acceptable installation, or changes do not require their review

20.1.2 Formal Notification to All Involved Departments

It is required, under oversight of the CSSO, that the initiators of any change request, or proposed alteration of any existing system or facility configuration, notify all departments that may be impacted by the change. The notification should include a description of the proposed change, its likely impact on system maintenance and operations, both during its implementation and after it is implemented, and any known information on impacts on specific departments. This process is explained in the above referenced configuration management procedures.

20.2 Safety and Security Certification

When applicable, MATA will implement a Safety and Security Certification (SSC) process for major capital projects. Certification is a formal process that provides documented verification that all project components comply with all safety and security standards, criteria, and requirements. The SSC establishes program requirements for capital projects and describes how all safety and security components are reviewed, analyzed, and verified throughout all phases of a project's life cycle. The SSC process will identify the certification processes to verify and document that:

1. Design; construction; installation, testing, and pre-revenue operations (PRO) of stations, facilities, systems, equipment, and construction testing follows safety and security requirements to ensure that all hazards, threats, and vulnerabilities identified through the Preliminary Hazard Analysis (PHA), Threat and Vulnerability Analysis (TVA), and supplemental hazard analyses processes are acceptably resolved or mitigated
2. System Integration Testing (SIT), including emergency exercise (EE), will adequately demonstrate that the interface between all separately certified systems will provide an overall safe and secure system
3. Operation and Maintenance (O&M) personnel and responder training, rulebooks, SOPs, manuals, SSOA required plans and procedures, as-built drawings, all other required materials and documentation, and PRO have been performed or delivered to ensure the provision of safe and secure revenue service

To accomplish this, MATA's certification process will follow the FTA's 10-step methodology, however modifications to the process can be made depending on the scope of the work. This determination will be made by the CSSO. The SSC thus will be accomplished through a formal process that will begin early in design and continue until revenue operations begin. The steps in the process will be implemented by application of procedures that ensure consistency in the certification of each element. The steps in the process are:

1. Identify Certifiable Elements
2. Develop Safety and Security Design Criteria
3. Develop and Complete Design Criteria Conformance Checklist
4. Perform Construction Specification Conformance
5. Identify Additional Safety and Security Test Requirements
6. Perform Testing and Validation in Support of the SSC Program
7. Manage Integrated Tests for the SSC Program
8. Manage "pen items" in the SSC Program
9. Verify Operational Readiness
10. Conduct Final Determination of Project Readiness and Issue Safety and Security Certification

Detailed processes will be identified in project specific Safety and Security Certification Plans (SSCP) using the Safety Risk Management process.

21.0 Continuous Improvement

The continuous improvement of the SMS is guided by the ability to achieve the defined safety objectives and safety performance targets. The CSSO, in coordination with each department, will implement MATA's internal review process. This process allows MATA to examine its own compliance continually and objectively with the requirements prescribed in this Safety Plan and identify any deviations from meeting the SPTs, Safety Objectives, and Safety Goals. MATA's assessment of safety performance includes developing and carrying out a plan (or plans), under

the direction of the Accountable Executive, to address safety deficiencies identified during a safety performance assessment (§673.27(d)(2)).

In addition to the internal review process, MATA will continuously monitor, track, and report on safety data in effort to identify trends towards achieving SPTs.

21.1 Internal Safety Review Program

The CSSO develops, coordinates, and executes the Internal Safety Audit Program to monitor the application of this Safety Plan. The internal safety and security audit process is a Safety Assurance activity required to ensure a proactive approach to identifying hazards before they become accidents or incidents, and to verify that safety and security programs have been developed and implemented. Specifically, items assessed during the audit process will include:

- The level of effectiveness of safety and security programs
- Process effectiveness
- Hazards and potential hazards in the system
- Verification that prior corrective actions are implemented, tracked to closure and effective
- System safety and system security improvements

The CSSO, under the authority of the CEO, has the responsibility to audit any system activities, operations, or processes across all MATA divisions.

MATA's detailed internal audit program is defined in the IAPP.

21.1.1 Scope of Activities

The Internal Safety Audit Program is intended to assist MATA Safety and Security Department in implementing an internal auditing process in a logical and organized manner. In developing this plan, MATA has incorporated the safety policies, plans, and governmental reporting requirements from the following references:

- 49 CFR Part 673
- 49 CFR Part 674
- TDOT System Safety Program Standard
- MATA Safety Plan
- MATA Corrective Action Plan Program
- MATA Safety Risk Management Program
- MATA Safety Assurance Program

21.1.2 Program Overview

MATA's Safety and Security Department will conduct planned and scheduled internal safety and security reviews to ensure compliance with MATA's Safety Plan and SEPP including:

- Identification of departments and functions subject to review
- Responsibility for scheduling reviews
- Process for conducting reviews, including the development of checklists, and procedures, and the issue of findings
- Review reporting requirements
- Tracking the status of implemented recommendations
- Coordination with the TDOT Program Manager

21.1.3 Internal Review Internal Audit Checklists

MATA's CSSO or their designee will use internal departmental SOPs and other pertinent process documents as a basis for preparing the internal audit checklists. The checklists will provide sufficient criteria to determine if all audited criteria are performing as intended. Examples of referenced documents include, but are not limited to:

- System operating rule books, bulletins, notices, and procedures
- Maintenance manuals and procedures
- Preventive maintenance inspection processes
- Employee training programs
- Environmental compliance procedures
- Other documents deemed by the CSSO
- Previous internal and external audits, including FTA and SSOA audit reports
- CAPs for accidents, security incidents, and unacceptable hazards
- NTSB accident investigation reports and other agency peer review reports

The pre-audit checklist is preliminary and subject to modification as the audit process progresses. A sample internal audit checklist is included as Attachment F.

21.1.4 Internal Review Schedule and Milestones

MATA will submit its three (3) year cycle internal safety and security audit schedule to TDOT that shows a review of all components of this Safety Plan. The schedule will be submitted by January 31st of the year starting the three (3) year cycle with a schedule of each of the three (3) years of audits for the safety program. This schedule of internal safety audits can change as needed so long as the overall three (3) year requirement for completing all elements is met. The schedule and progress of internal safety audits each year is tracked as part of the monthly status tracking of CAPs.

Not less than thirty (30) days prior to conducting the audit, MATA Trolley shall notify the TDOT point of contact in writing of the time and location of the audit. TDOT, at its discretion, may participate in all or any part of the audit. At the time of the notification, MATA Trolley shall submit to TDOT all checklists and procedures relevant to the audit. Additionally, MATA will submit to TDOT for their review of the checklists

The table below summarizes key milestones and timelines for the coordination of MATA's Internal Review process with TDOT.

Table 23: Internal Review Milestones and Schedule

No	Milestone to TDOT	Type	Frequency	Date/Timeframe
1.	Triennial Schedule	Submittal	Triennially	January 31 st
2.	Scheduled Audit(s)	Notification	30-Day	Prior to the audit
3.	Internal Review Report	Submittal	Annually	January 31 st
4.	Internal Audit Checklists	Submittal	30-Day	Prior to the audit

22.0 Corrective Action Plans

Per the SSPS, MATA will identify whether a CAP is needed under three (3) conditions:

1. During the investigation of an Accident/Incident to avoid or minimize the reoccurrence of the investigated event or address a related systemic problem
2. To correct safety risks

3. When it is determined by MATA or TDOT that a CAP is required to avoid or minimize the recurrence of the unsafe condition or address a related, systemic problem.

MATA will develop a formal CAP to correct those elements or activities identified as deficient. Within the CAP, MATA will include the following information:

- The hazard or programmatic deficiency
- Action taken to correct the hazard
- Implementation schedule(s)
- The individual(s) and department(s) responsible for the implementation
- Interim/short-term steps taken while awaiting implementations of long-term mitigations

22.1 Notification

The following table illustrates MATA's notification requirements of a CAP to TDOT for review and approval prior to implementation:

Table 24: CAP Notification Requirements

Scenario	Timeline
Normal Condition	30-days prior to identification of the CAP
Revisions Required	15-days following notice
Emergency / Immediate	5:00 PM of the following business day

Fifteen (15) days after submitting a CAP, TDOT will review and provide MATA, in writing, whether they approve or reject the CAP. If the CAP is rejected, TDOT will provide an explanation for its rejection, at which point MATA will submit the revised CAP to TDOT no later than fifteen (15) days following the notice, unless authorized by TDOT. MATA will work with TDOT to discuss the noted deficiencies.

22.1.1 Immediate or Emergency CAPs

There are certain conditions that require MATA to begin implementing a CAP prior to obtaining approval from TDOT to commence the correction. Under these conditions, an exception to TDOT's pre-approval may be made for immediate or emergency corrective actions that must be taken to ensure immediate safety. None the less, MATA will continue to submit the CAP(s) to TDOT for review and approval.

22.2 Monitoring and Tracking

MATA maintains a CAP tracking log that provides pertinent information on specific CAPs. The log contains the following information:

- Identify noted deficiency/finding/hazard
- Date corrective action plan was opened
- Process, plan, or create mechanisms to address and resolve deficiency
- Timeframe for implementation of each part of the plan
- Department(s) and person(s) who will be responsible for implementation
- Source of the CAP
- CAP tracking ID
- Line for SSO Program Manager approval and date of approval
- Proposed implementation date, including interim milestone date(s) as appropriate
- Actual implementation date (once approved and completed)
- Issues preventing resolution

- SSO verification that CAP was implemented
- Other critical information, as appropriate

The content/scope, person responsible, or due date of each CAP cannot be changed once approved without formal agreement from TDOT.

MATA will submit the CAP log to TDOT monthly and shall provide information of monthly updates progressing towards closure. The CAP Log will be submitted electronically, or via other means agreed upon with the TDOT SSO Program Manager. All open or recently closed CAPs will also be discussed at quarterly meetings with TDOT.

The CAP tracking log can be found in Appendix F of this Safety Plan.

22.3 Verification and Closure of CAPs

MATA will submit verification to TDOT for any CAP proposed for closure. Information regarding the closure must be included in the CAP Log and include any additional actions that were implemented to complete the CAP. Verification documentation may include:

- Photographs
- Receipt of new or revised document
- Work order or similar document showing full completion

Per the SSPS, only TDOT has the authority to close a CAP.

23.0 Drug and Alcohol Program

MATA provides safe, dependable, and economical transportation services to its customers. MTM personnel are a valuable resource, and it is also our goal to provide a safe, healthy, and satisfying working environment for our employees. In meeting these goals, it is our policy to:

- Ensure that employees are not impaired in their ability to perform assigned duties in a safe, productive, and healthy manner
- Create a workplace environment free from the adverse effects of drug and alcohol abuse or misuse
- Prohibit the unlawful manufacture, distribution, dispensing, possession, or use of controlled substances
- Encourage employees to seek professional assistance when substance abuse adversely affects their ability to perform their assigned duties

In accordance with **49 CFR Part 655, Prevention of Alcohol Misuse and Prohibited Drug Use in Transit Operations**, and **49 CFR Part 40, Procedures for Transportation Workplace Drug and Alcohol Testing Programs** MATA has established the Mid-South Transportation Management Drug and Alcohol Free Workplace Policy (Drug and Alcohol Policy) to comply with 49 CFR Part 40 and 655 to ensure employee fitness for duty, and to protect employees, passengers, and the general public from the risks posed by the use of alcohol and prohibited drugs. MATA's Drug and Alcohol Policy is also intended to comply with and incorporate 49 CFR Part 32, The Drug-Free Workplace Act of 1988, which requires the establishment of drug-free workplace policies and the reporting of certain drug-related offenses to the FTA, including the reporting of employees convicted of criminal drug offenses that occur in the workplace.

MTM's Drug and Alcohol Policy applies to all safety-sensitive transit system employees as identified and described below as well as paid part-time employees and contractors, when performing safety-sensitive duties.



Safety-Sensitive Employees and Applicants for Safety-Sensitive Positions covered by this Policy include those who:

1. Operate a revenue service vehicle, including when not in revenue service
2. Operate a non-revenue service vehicle when such is required to be operated by a holder of a commercial driver's license
3. Control the movement/dispatch of a revenue service vehicle
4. Perform maintenance on a revenue service vehicle or equipment used in revenue service
5. Carry a firearm for security purposes

23.1 Program Monitoring

MTM's Drug and Alcohol Testing Program is administered by a third (3rd) party vendor assigned by the MATA Human Resources Department. Implementation details are contained in MTM's Drug and Alcohol Policy. The CSSO will monitor the implementation of this program for compliance and will conduct a formal internal audit of the program at least once on a 3-year cycle. The CSSO will review all updates to MTM's Drug and Alcohol Policy.

24.0 Procurement

MATA must ensure that its designated purchasing agent obtains supplies, materials and equipment that meet or exceed required standards. Purchasing procedures for both formal and informal bidding will be documented based on MATA's requirements. Procurements of new equipment, materials and supplies are first reviewed by the user department in conjunction with the Safety and Security Department to ensure safety within the MATA system.

For the procurement of outside contract work, all contracts must stipulate that all work, materials, and equipment used in the project are subject to adequate inspection and testing in accordance with accepted standards and that the contractor must provide the necessary testing and inspection services required by the manufacturer and the contract.

To ensure inclusion of the MATA safety program, MATA will provide a copy of this Safety Plan to all contractors and/or subcontractors, who are obligated to adhere to its provisions during all stages of their work assignments. MATA will also require Safety Plans for its contractors, which will be reviewed and approved by the CSSO prior to the award of any contract.

It is also the policy of MATA to obtain Safety Data Sheets (SDS) for all samples and products for prior approval before samples or products are accepted for review and/or use. The designated purchasing agent is required to make every possible effort to preclude the introduction of unauthorized, hazardous materials and supplies, as well as defective or deficient equipment into a project.

Part F: Safety Promotion

Part F of this Safety Plan outlines the processes in which MATA will promote both SMS practices and safety throughout a transit agency. As part of 49 CFR Part 673, this section will discuss the following two (2) sub-components of Safety Promotion:

- Competencies and training
- Safety communication

25.0 Competencies and Training

MATA provides training in safety, operations, and maintenance to ensure that employees are qualified to perform their tasks safely. Safety training is also integrated into operations and maintenance training as a means of informing employees about hazards associated with their jobs and the appropriate methods for controlling these hazards.

MATA's training programs are based on industry requirements, standards, and recommendations. Training methods include classroom lectures, written materials, video presentation, hands-on training, and assessment of knowledge and skills. There are formal training programs for operators and shopmen. Training programs include classroom instruction, with lesson plans and manuals. Testing is conducted as necessary to ensure training effectiveness.

25.1 Designated Personnel

MATA designated personnel are required by 49 CFR Part 672 to attend required courses to complete Individual Training Program (ITP), also referred to as the Public Transportation Safety Certification Training Program (PTSCTP). MATA designated personnel include MTM personnel and MATA contractors whose job function is directly responsible for safety oversight of MATA. More specifically, this includes personnel whose primary job function includes the development, implementation, and review of this Safety Plan, and/or the TDOT requirements for the agency pursuant to 49 CFR Part 674. These individuals include:

- Chief Safety and Security Officer
- Safety & Security Specialist
- Safety & Security Analyst

Additional designated personnel may be identified as the SMS continues to mature. Required courses for designated personnel include:

Table 25: PTSCTP Required Curriculum

Course Name	Methodology	Duration
SMS Awareness	e-Learning	1 Hour
Safety Assurance	Virtual Classroom	2 Hours
SMS Principals for Transit	Classroom	20 Hours
Rail System Safety	Classroom	36 Hours
Effectively Managing Transit Emergencies	Classroom	32 Hours
Rail Incident Investigation	Classroom	36 Hours

After obtaining PTSCTP certification, all designated employees and contractors are required by the FTA to complete refresher training every two (2) years. The refresher training must include, at a minimum, one (1) hour of safety oversight training to remain certified.

Every year MATA will require PTSCTP designated employees and contractors to take one (1) of the following courses:

1. Rail Operators Rulebook (MATA)
2. Right-Of-Way Worker Protection Plan (MATA)
3. Proof of Attendance for FTA's Joint State Safety Oversight and Rail Transit Agency Workshop
4. Transit Industrial Safety Management (TSI)
5. Repeat any TSI Course (SMS Awareness, SMS Safety Assurance, SMS Principles)

After completing refresher training, employees and contractors must email the FTA at FTASafetyPromotion@dot.gov before their 2-year certificate expiration date, providing a certificate of completion for the refresher training course. Each refresher training certificate must be sent to the FTA via email with an explanation that the completed course was assigned as refresher training by MATA.

25.2 MTM Personnel

MATA uses safety training programs that are integrated into operations and maintenance training as a means of informing employees about hazards associated with their jobs and the appropriate methods for controlling these hazards. As such, safety training is incorporated into three (3) types of curriculums:

1. Initial Training
2. Periodic Training
3. Retraining

Training mechanisms mostly involve classrooms, field exercises, and drills. MATA is currently reviewing other means of providing training, including more virtual programs.

25.2.1 MATA Trolley

To ensure that all operations and maintenance personnel performing safety-related work are properly trained, qualified, and certified, MATA Trolley has established the following safety-related training categories:

- **Safety and Security Training:** MATA has developed, and will continue to develop, as needed, training modules based on an individual employee's position and responsibilities. The modules that an employee may complete include but are not limited to the following:
 - Trolley system safety and security overview
 - Accident/incident definitions, required actions and reporting
 - Emergency preparedness
 - Hazard identification and reporting
- **Trolley Operator Training:** The Manager of Trolley Operations (MTO) or a designee is responsible for providing training to Trolley Operators. All operators will be required to qualify as a Trolley Operator prior to operating a vehicle. The training program for new employees requires completion of a course to be certified per the MATA Trolley Training Plan. Operators who have been absent more than thirty (30) days are required to receive a minimum of eight (8) hours of re-training, including a review of the rulebook and Special Orders (SO). Operators who have been involved in an accident will receive re-training as determined by the MTO, and if necessary, the SMRC based on the outcome of the accident investigation. Re-training beyond the minimum may be required at the discretion

of the CSSO. Policies and procedures covering operator training are defined in SOP 000-202 and the MATA Trolley Training Plan

- **Maintenance Training:** The Manager of Trolley Maintenance or a designee is responsible for providing training to maintenance employees. Training consists of instruction in maintenance methodologies and procedures, safe work practices, MATA Trolley rules and procedures, hazard control procedures, and proper use of tools. Employees also receive training in the use of MATA Trolley forms and proper documentation of their activities. Policies and procedures covering maintenance technician training are defined in SOP 000-202 and the MATA Trolley Training Plan.
- **De-escalation Training:** The Manager of Trolley Maintenance or a designee is responsible for providing training in maintenance, operations, and personnel directly responsible for safety. The training consists of teaching public transportation employees about techniques to defuse stressful passenger situations to reduce the possibility of violence

25.5.2 MATA Fixed Route and Paratransit

Operations and maintenance personnel performing safety-related work are trained, qualified, and certified in accordance with all regulatory requirements and industry standards. The following are some of the areas of focus:

- **Safety and Security Training:** Training is consistent with the employee's responsibilities to include safety and security overviews, accident/incident investigation, report requirements, emergency preparedness, and hazard identification.
- **Operator Training:** The Training Supervisor is responsible for operator training that includes standard bus operating procedures, defensive driving, common bus emergencies, passenger relations, workplace violence, active shooter response, and emergency communication
- **Maintenance Training:** The Director of Maintenance is responsible for the training of maintenance personnel. Training for bus maintenance personnel consists of instruction in maintenance best practices/industry standards, maintenance policy/procedures, and hazard materials control
- **De-escalation Training:** Operations management, supervisor or a designee is responsible for providing training in maintenance, operations, and personnel directly responsible for safety. The training consists of teaching public transportation employees about techniques to defuse stressful passenger situations to reduce the possibility of violence

25.3 Contractors

All MATA Trolley contractors doing work on or about the Trolley ROW and its facilities are required to be knowledgeable of, instructed in, and follow the necessary rules and procedures to ensure safety. The Office of the CSSO maintains close coordination with any employees or contractors doing work on or about the trolleys and trolley facilities to ensure compliance with this policy. Employees and contractors wishing to work within the trolley corridor must receive Roadway Work Protection (RWP) training and awareness training of all MATA Trolley safety rules procedures and regulations. This training will be provided by MATA Trolley. It is MATA's policy that all contractors must comply with all the requirements of MATA's Safety Plan and all relevant regulations pertaining to workplace safety. Requirements for contractors when working on trolley ROW are defined in the MATA Trolley SOPs 204-000, "Roadway Worker Protection," and 204-002, ROW Work Request.

If a contractor or contractor employee is required to work on MATA property under operating conditions, training requirements will be defined in the contract. MATA rules and procedures will be applied without exception to all members of the contractor's workforce affected. Contractors must be instructed on procedures, know the procedures, and follow the procedures. In addition, the contractor must carry a card verifying that the contractor is current with ROW Safety training, which is provided to all contractors who have attended the MATA Trolley course.

25.4 Training Record Keeping

MATA training records will be recorded and maintained in the user's department as well as Human Resources.

26.0 Safety Communication

Communicating with frontline employees about safety and security is crucial in establishing a positive safety culture. Effective safety communication makes personnel aware of safety priorities, initiatives, and ensures that feedback is captured and acted upon as appropriate. MATA will focus on relaying safety-related information on a regular basis, focusing on raising awareness of potential safety risks and the progress of the agency's safety programs.

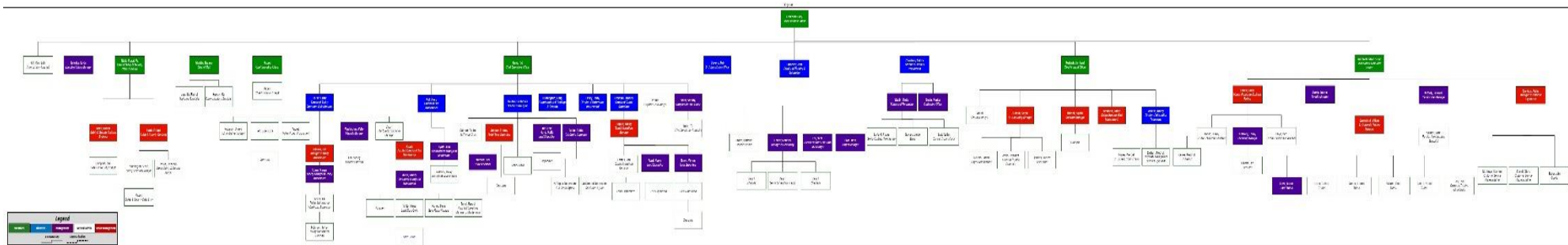
Accomplishing this will encourage employees to report concerns and demonstrate management commitment to both the MTM personnel and the agency's safety performance objectives. In accordance with 49 CFR Part 673.29(b), MATA also will ensure that all employees are aware of any policies, activities, and procedures that are related to their safety-related roles and responsibilities.

Communication of safety programs, including SMS initiatives and achievement of SPTs, goals and Objectives will be led by the Safety and Security Department in coordination with department managers and supervisors. Mechanisms for communication include, but are not limited to:

- Employee Reporting Program
- Safety Committees
- Training
- MATA Policies and Procedures (i.e. Right to Know, HAZCOM)

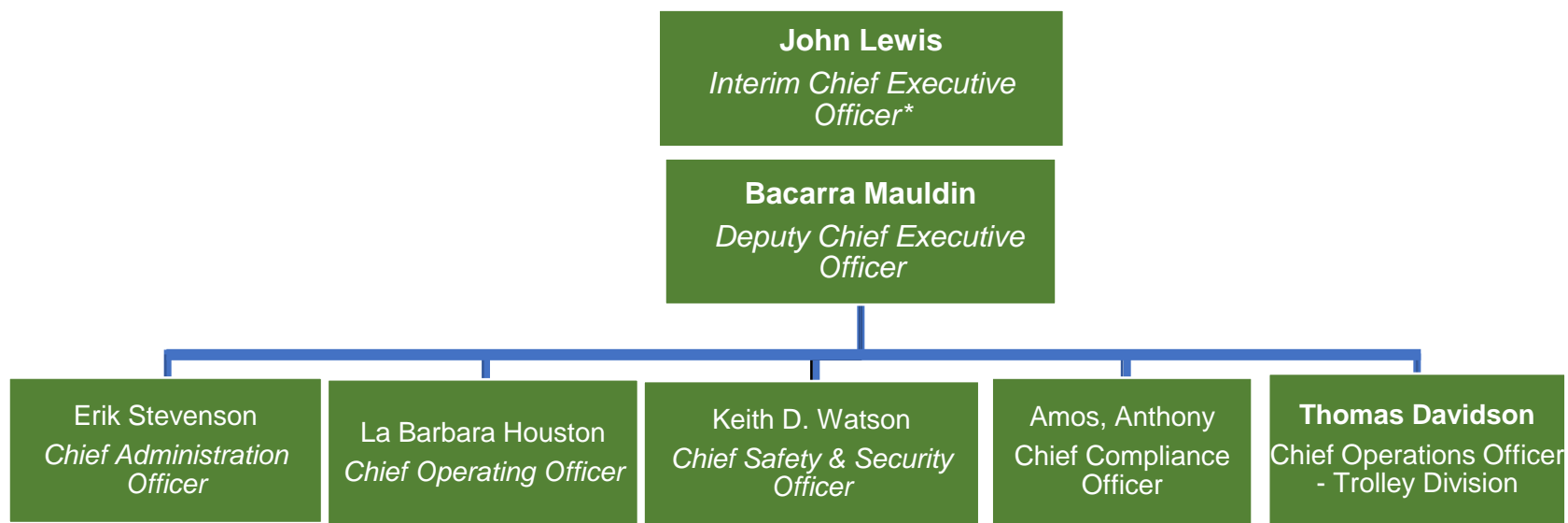
Safety communications will include information on safety risks that are relevant to the employee's role and responsibilities, explain reasons that a transit agency introduces or changes policies, activities, or procedures, and explain to an employee when actions are taken in response to reports submitted by the employee through the employee safety reporting program.

Appendix A: Organizational Chart



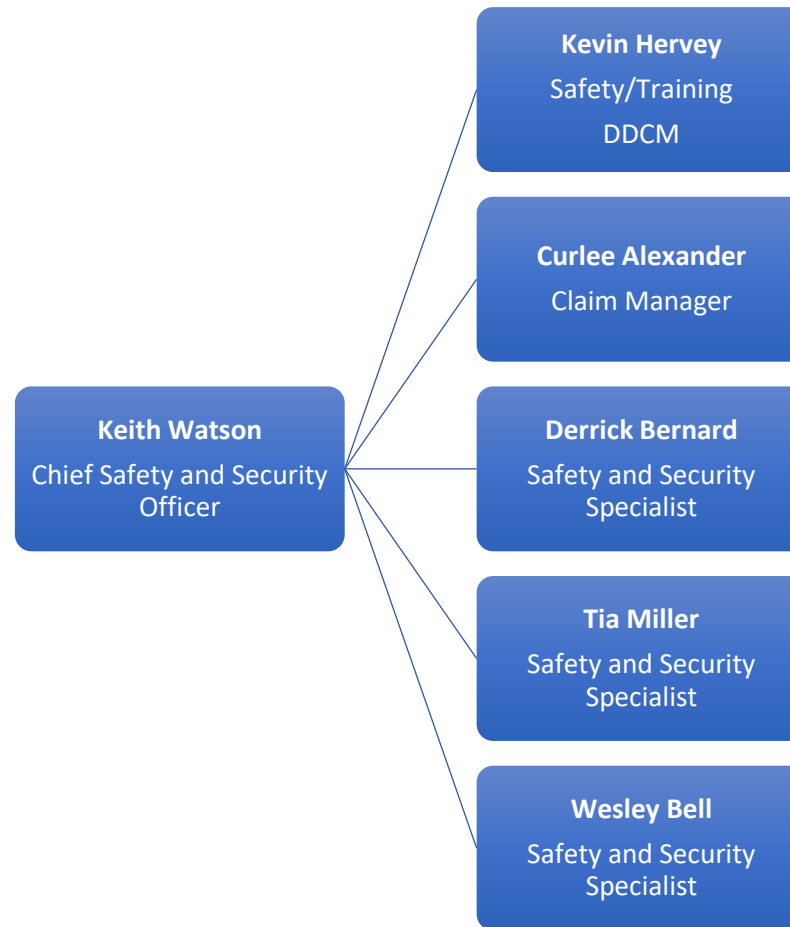
NOTE: MATA is currently undergoing a major organizational transformation, which will be completed within the first quarter of 2024. Once the transformation is complete a new organizational chart will be published and provided to TDOT. MATA will keep TDOT apprised of the changes as they occur and will forward the final organizational chart within 10 days of finalization and approval. MATA's organizational chart will be provided upon request.

Appendix A.1 Executive Management Structure



*See Section 8.1

Appendix A.2 Safety and Security Department Structure



Appendix B: Safety Risk Management Tracking Management Log / Risk Registry

MATA Safety Risk Management Tracking Log

Identification								Initial Safety Risk Rating			Status	Further Mitigation Action	Mitigation Owner and Implementation Date			Mitigation Monitoring Activities and Responsible Department	
Hazard	Hazard Type	Identification Date	Identification Source	Analysis Date	Worst Possible, Worst Credible, or Most Common Potential Consequence(s)	Existing Risk Mitigation(s)	State Reportable	Severity of Consequences	Likelihood of Consequences	Safety Risk Index	Hazard Status	Further Mitigation Action	Department Responsible for Mitigation	Estimated Implementation Date	Contact Person	Monitoring Means	Department Responsible for Monitoring Mitigation Effectiveness

SRM Tracking Log Elements

1. Hazard
2. Hazard Type
3. Identification Date
4. Identification Source
5. Analysis Date
6. Worst Possible, Worst Credible, or Most Common Potential Consequence(s)
7. Existing Risk Mitigation(s)
8. State Reportable
9. Severity of Consequences
10. Likelihood of Consequences
11. Safety Risk Index
12. Hazard Status
13. Further Mitigation Action
14. Department Responsible for Mitigation
15. Estimated Implementation Date
16. Contact Person
17. Monitoring Means
18. Department Responsible for Monitoring Mitigation Effectiveness
19. Safety Performance Indicator (SPI)
20. SPI Value
21. Safety Performance Target
22. Final Safety Risk Index

Appendix C: Accident Investigation Report



MINOR ACCIDENT INVESTIGATION REPORT

(For accidents with no fatalities, no serious injuries, and less than \$25,000 damage.)

Accident Tracking Number (YYMMDD HHMM):

Date & time of Accident: Line: Main Street ☐

Date & time of 2-hour notification to TDOT: Trolley #: Operator:

Accident location: Estimated speed at time of accident:

Person who initially reported accident:

NTSB Reportable?	Y <input type="checkbox"/>	N <input type="checkbox"/>		
Mainline derailment	Y <input type="checkbox"/>	N <input type="checkbox"/>	Passenger evacuation	Y <input type="checkbox"/> N <input type="checkbox"/>
Yard derailment	Y <input type="checkbox"/>	N <input type="checkbox"/>	Operator tested for D&A	Y <input type="checkbox"/> N <input type="checkbox"/>
Yard collision	Y <input type="checkbox"/>	N <input type="checkbox"/>	Transit vehicle out of service	Y <input type="checkbox"/> N <input type="checkbox"/>
Mainline collision	Y <input type="checkbox"/>	N <input type="checkbox"/>	Fire suppression	Y <input type="checkbox"/> N <input type="checkbox"/>
Collision between streetcars	Y <input type="checkbox"/>	N <input type="checkbox"/>	Video available for review	Y <input type="checkbox"/> N <input type="checkbox"/>
Collision with person	Y <input type="checkbox"/>	N <input type="checkbox"/>	Police on scene	Y <input type="checkbox"/> N <input type="checkbox"/>
Collision with passenger vehicle	Y <input type="checkbox"/>	N <input type="checkbox"/>	Police report available	Y <input type="checkbox"/> N <input type="checkbox"/>
Motorist cited for violation	Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A	<input type="checkbox"/>

DESCRIPTION OF ACCIDENT/INCIDENT

WEATHER: **LIGHTING:** **CONDITIONS:**

INJURIES? Y ☐ N ☐

FATALITIES? Y ☐ N ☐

NUMBER OF INJURIES (IF ANY)

NUMBER OF FATALITIES (IF ANY)

_____ Passenger
 _____ Patron
 _____ Public
 _____ Worker

_____ Passenger
 _____ Patron
 _____ Public
 _____ Worker



PRIMARY CAUSE:

☐
☐
☐
☐
☐
☐
☐

Action of motorist
Operator rule violation
Pedestrian action
Equipment failure
Trespasser
Other (specify):

☐
☐
☐
☐
☐
☐

Poor maintenance
Slips and falls
Imprudent customer action
Medically related
Suicide

CONTRIBUTING FACTORS:

RECOMMENDATIONS:

Name

Signature

Date

Appendix D: Configuration Change Request Form



Configuration Change Request

Request No: _____
COO Trolley to Enter

1. Initiator: _____
Name Title Date

2. Reason for Proposed Change (check all that apply):

- ☐ Operating Improvement ☐ Maintenance Improvement ☐ Safety Improvement
☐ Security Improvement ☐ Reduced Costs ☐ Regulatory Requirement
☐ Other: _____

3. Description of Change (Provide a clear description of the change and its merits. Attach any supporting documentation):

4. Estimate of Cost (if known): _____ 5. Time to Implement (if known): _____

6. First Review (Manager or Chief): _____

7. First Reviewer Comments and Recommendation: Does the request merit further evaluation?

☐ Yes ☐ No

8. Approvals to Implement:

Type of Requested Change: 8a. ☐ SSC 8b. ☐ Non-SSC

Safety and Security Officer Rail

Date

Chief Operations Officer

Date

Rev. 01-24-2025

Appendix E: Configuration Management Tracking Matrix

MATA Trolley Configuration Change Tracking Log												01/10/20 13:07
CCR #	Initiation Date	Description of Change and/or Purpose	First Reviewer	First Reviewer Recommendation	Configuration Change	SSC/Non-SSC	Engineering Support	Implementation Department	Implementation Responsible Party	QAQC Responsible Party	Current Status	Notes

Appendix F: CAP Tracking Log

MATA Trolley Corrective Action Tracking Log																							
Date (1)	MATA Track-it ID #	Type	Source (1)	Hazard or Programmatic Deficiency	Hazard Cause	Hazard Severity	Hazard Probability	Hazard Consequence - Effect	Initial Risk Score	Interim Mitigation Measures	Corrective Action Measures	Final Risk Value	MATA Dept./ Person (13)	Implementation Schedule (14/Item) (15)	MATA Status: Development, Planning, Implementation, Pending TDOT Acceptance, In Progress, Pending TDOT Closure, Closed (17)	MATA Comments (Item) (16)	MATA Verification Method & Proofs (Item) (18)	MATA OSS Verification Initial/Date (19)	TDOT Responses (Item) (20)	TDOT Issues Preventing CAP Acceptance (Item) (21)	TDOT Acceptance Date (22)	TDOT Verification Initial/Date (23)	TDOT CAP Closed Date (24)

CAP Tracking Log Elements

1. Date
2. CAP log Item #
3. MATA Track-it ID #
4. Source
5. Hazard or Programmatic Deficiency
6. Hazard Cause
7. Hazard Severity
8. Hazard Probability
9. Hazard Consequence
10. Initial Risk Score
11. Interim Mitigation Measures
12. Corrective Action Measures
13. Final/ Residual Risk Score
14. MATA Department/ Person Responsible
15. Implementation Schedule
16. MATA CAP Status
17. MATA Comments
18. MATA Verification Method & Proofs
19. MATA OSS Verification initial/date
20. TDOT Responses
21. TDOT Issues Preventing CAP Acceptance
22. TDOT Acceptance
23. TDOT Verification initials/ date
24. TDOT CAP Closed Date

Appendix G: ASP Checklist

FEDERAL /STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
673.11(a)(1)	The ASP must be signed by the Accountable Executive and approved by the agency's Board of Directors or an Equivalent Authority.	a. Is the plan: a. signed and dated by the accountable executive?			
		b. approved by agency board or equivalent authority?			
673.11 (b)	The ASP must list the mode(s) of transit service covered by the ASP.	Does the plan list each mode covered by ASP?			
673.23(d)(2)	The transit agency must establish the necessary authorities as they relate to the development and management of the transit agency's Safety Management System (SMS): (2) Chief Safety Officer or SMS Executive. The Accountable Executive must designate a Chief Safety Officer or SMS Executive who has the authority and responsibility for day-to-day implementation and operation of an agency's SMS. The Chief Safety Officer or SMS Executive must hold a direct line of reporting to the Accountable Executive.	Does the plan list a Chief Safety Officer (or SMS Executive) who is:			
		a. designated by the Accountable Executive?			
		b. has the authority and responsibility for day-to-day implementation and operation of the agency's SMS			
		c. list a Chief Safety Officer (or SMS Executive) who is adequately trained?			
673.5	The transit agency must ensure the Chief Safety Officer does not serve in other operational or maintenance capacities.	Does the plan list a Chief Safety Officer (or SMS Executive) who does not serve in other operational or maintenance capacities?			
673.5	49 CFR Part 673.5 definitions and acronyms	Does the plan contain definitions and acronyms consistent with § 673? <i>Definitions used in the ASP and associated documentation must be consistent with § 673 & 674, FTA, and TOOT guidance.</i>			
673.11(a)(5), SSPS, Sec 4, & 5329 (d)(1)(E)	Each transit agency must establish a process and timeline for conducting an annual review and update of the ASP.	Does the plan include (TDOT requires the ASP to be reviewed and, if necessary, updated by Jan 1st each year):			
		a. process for conducting the annual review?			
		b. timeline for conducting annual review?			
		c. annual review/update completed by Jan 1st?			

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
673.11(a)(6)	An RTA must include or incorporate by reference in its ASP an emergency preparedness and response plan or assignment of employee responsibilities during an emergency; and coordination with Federal, State, regional, and local officials with roles and responsibilities for emergency preparedness and response in the transit agency's service area.	Is the emergency preparedness and response plan or procedures included within the plan or incorporated by reference? <input type="checkbox"/> include in plan, or <input type="checkbox"/> incorporated by reference.			
		Does the emergency preparedness and response plan or procedures address the following areas: a. assignment of employee responsibilities during an emergency			
		b. coordination with local, regional, state, and federal officials with roles/ responsibilities for emergency preparedness and response in the agency's service area?			
673.11(a)(3) & Nat 'l Safety Plan	673.11(a)(3) The Public Transportation Agency Safety Plan must include performance targets based on the safety performance measures established under the National Public Transportation Safety Plan. Nat 'l Safety Plan p.32: Reducing the number of fatalities is a top priority for the entire Department of Transportation. As an industry, we must try to understand the factors involved in each fatality in order to prevent further occurrences. Measuring the number of fatalities over vehicle revenue miles, by mode, provides a fatality rate from which to assess future performance.	Does the plan have a safety performance measure based on the total number of reportable fatalities and rate per total vehicle revenue miles, by rail transit mode?			
673.11(a)(3) & Nat 'l Safety Plan	673.11(a)(3) The Public Transportation Agency Safety Plan must include performance targets based on the safety performance measures established under the National Public Transportation Safety Plan. Nat 'l Safety Plan p.32: Many transit agencies have never had a fatality, and continued safe operation is exactly what is desired. However, injuries occur much more frequently and are due to a wide variety of circumstances. Analyzing the factors that relate to injuries is a significant step in developing actions to prevent them. Again, measuring the number of injuries by mode, over vehicle revenue miles provides an injury rate from which to assess future performance.	Does the plan have a safety performance measure based on the total number of reportable injuries and rate per total vehicle revenue miles, by rail transit mode?			

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
673.11(a)(3) & Nat 'I Safety Plan	<p>673.11(a)(3) The Public Transportation Agency Safety Plan must include performance targets based on the safety performance measures established under the National Public Transportation Safety Plan.</p> <p>Nat 'I Safety Plan p.32: The safety events measure captures all reported safety events that occur during transit operations and the performance of regular supervisory or maintenance activities. A reduction in safety events will support efforts to reduce fatalities and injuries, as well as damages to transit assets. Measuring the number of safety events by mode over vehicle revenue miles provides a safety event rate from which future performance can be compared.</p>	Does the plan have a safety performance measure based on the total number of reportable events and rate per total vehicle revenue miles, by rail transit mode?			
673.11(a)(3) & Nat'I Safety Plan	<p>673.11(a)(3) The Public Transportation Agency Safety Plan must include performance targets based on the safety performance measures established under the National Public Transportation Safety Plan.</p> <p>Nat 'I Safety Plan p.33: The system reliability measure expresses the relationship between safety and asset condition. The rate of vehicle failures in service, defined as mean distance between major mechanical failures, is measured as revenue miles operated divided by the number of major mechanical failures. This is a measure of how well a fleet of transit vehicles is maintained and operated. FTA recognizes the diversity of the transit industry, and that agencies have varied equipment types, with varied rates of performance, so this measure allows agencies to develop safety performance targets that are specific to their own fleet type, age, operating characteristics, and mode of operation.</p>	Does the plan have a safety performance measure based on the mean (or average) distance between major mechanical failures, by rail transit mode?			

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
673.IS(a) & 673.IS(b)	<p>(a) A State or transit agency must make its safety performance targets available to States and Metropolitan Planning Organizations to aid in the planning process.</p> <p>(b) To the maximum extent practicable, a State or transit agency must coordinate with States and Metropolitan Planning Organizations in the selection of State and MPO safety performance targets.</p>	<p>Does the plan include process to coordinate with and make safety performance targets available to the State and MPO?</p> <p><i>This section must include specific information on the process including who is responsible for making the targets available, to whom the targets are provided to, and when the targets are provided.</i></p>			
673.21	<p>Each transit agency must establish and implement an SMS under this part. A transit agency SMS must be appropriately scaled to the size, scope, and complexity of the transit agency and include the following elements:</p> <p>(a) Safety Management Policy as described in §673.23;</p> <p>Safety Risk Management as described in §673.25;</p> <p>(c) Safety Assurance as described in §673.27; and</p> <p>(d) Safety Promotion as described in §673.29.</p>	Does the plan include the establishment and implementation of an SMS?			
673.23(a)	(a) A transit agency must establish its organizational accountabilities and responsibilities and have a written statement of safety management policy that includes the agency's safety objectives and safety performances targets.	Does the plan contain (Sample Safety Management Policy Statement can be found within Appendix B of the National Public Transportation Safety Plan):			
		a. statement of safety management policy?			
		b. including the agency's safety objectives?			
673.23(b)	(b) A transit agency must establish a process that allows employees to report safety conditions to senior management, protections for employees who report safety conditions to senior management, and a description of employee behaviors that may result in disciplinary action.	c. safety performance targets?			
		Does the plan contain:			
		a. process that allows employees to report safety conditions to senior management?			
		b. protections for employees who report safety conditions to senior management?			
		c. description of employee behaviors that may result in disciplinary action?			

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
673.23(c)	(c) The safety management policy must be communicated throughout the agency's organization.	Does the plan contain process or description of how the safety management policy is communicated throughout the agency?			
673.23(d)	(d) The transit agency must establish the necessary authorities, accountabilities, and responsibilities for the management of safety amongst the following individuals within its organization, as they relate to the development and management of the transit agency's SMS, including.... a. accountable executive b. chief safety officer or SMS executive C. agency leadership or executives d. key staff	Does the plan: a. Establish the necessary authorities, accountabilities, and responsibilities for the management of safety amongst the following individuals within its organization, as they relate to the development and management of the transit agency's SMS?			
		b. list the following by position: <input type="checkbox"/> accountable executive, <input type="checkbox"/> chief safety officer or SMS executive, <input type="checkbox"/> agency leadership or executive with day-to-day SMS implementation duties, <input type="checkbox"/> key staff, groups, or committees with responsibilities in developing, implementing, and operating the agency's SMS			
674.29(b)	(b)The transit agency must include adequate methods to support the execution of the Public Transportation Agency Safety Plan by all employees, agents, and contractors for the rail fixed guideway public transportation system.	Does the plan include adequate methods to ensure the implementation of ASP by all employees, agents, and contractors?			
673.25(a)	(a) Safety Risk Management process. A transit agency must develop and implement a Safety Risk Management process for all elements of its public transportation system. The Safety Risk Management process must be comprised of the following activities: Safety hazard identification, safety risk assessment, and safety risk mitigation.	Does the plan: a. Document a safety risk management process for all elements of its system? Including: <input type="checkbox"/> safety hazard identification <input type="checkbox"/> safety risk management assessment <input type="checkbox"/> safety risk mitigation			

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
674.29(b)	(b)The transit agency must include adequate methods to support the execution of the Public Transportation Agency Safety Plan by all employees, agents, and contractors for the rail fixed guideway public transportation system.	Does the plan include adequate methods to ensure implementation of ASP by all employees, agents, and contractors?			
673.25(a)	(a) Safety Risk Management process. A transit agency must develop and implement a Safety Risk Management process for all elements of its public transportation system. The Safety Risk Management process must be comprised of the following activities: Safety hazard identification, safety risk assessment, and safety risk mitigation.	Does the plan: a. Document a safety risk management process for all elements of its system? Including: <input type="checkbox"/> safety hazard <input type="checkbox"/> safety risk management <input type="checkbox"/> safety risk mitigation			
673.25(b)(I) and (2)	(b) Safety hazard identification. (1) A transit agency must establish methods or processes to identify hazards and consequences of the hazards. (2) A transit agency must consider, as a source for hazard identification, data and information provided by an oversight authority and the FTA.	Does the plan: a. document methods or processes to identify hazards and consequences of hazards?			
		b. include as a source for hazard identification, data and information provide an oversight authority and the FTA?			
673.25(c)(1) and (2)	(c) Safety Risk Assessment. (1) A transit agency must establish methods or processes to assess the safety risks associated with identified safety hazards. (2) A safety risk assessment includes an assessment of the likelihood and severity of the consequences of the hazards, including existing mitigations, and prioritization of the hazards based on the safety risk.	Does the plan: a. describe methods or processes to assess safety risks associated with identified safety hazards?			
		b. does the safety risk assessment include: <input type="checkbox"/> likelihood <input type="checkbox"/> severity <input type="checkbox"/> existing mitigations <input type="checkbox"/> prioritizations of hazards based on safety risks			

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
673.2S(d)	(d) Safety risk mitigation. A transit agency must establish methods or processes to identify mitigations or strategies necessary as a result of the agency's safety risk assessment to reduce the likelihood and severity of the consequences.	Does the plan: a. include methods or processes to identify mitigations or strategies necessary as a result of the agency's safety risk assessment?			
673.27(a)	Safety assurance process. A transit agency must develop and implement a safety assurance process that meets the requirements of sections (b)(c) and (d).	Does the plan include: a. safety assurance process that meets the requirements of sections (b), (c), and (d) listed below? <input type="checkbox"/> Safety performance monitoring and measurement <input type="checkbox"/> Management of change <input type="checkbox"/> Continuous improvement			
673.27(b)	(b) Safety performance monitoring and measurement. A transit agency must establish activities to: (1) Monitor its system for compliance with, and sufficiency of, the agency's procedures for operations and maintenance; (2) Monitor its operations to identify any safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended; (3) Conduct investigations of safety events to identify causal factors; and (4) Monitor information reported through any internal safety reporting programs.	Does the plan include activities to: a. monitor its system for compliance/sufficiency of procedures for operations and maintenance?			
		b. monitor operations to identify any safety risk mitigations that are ineffective, inappropriate, or not implemented as intended?			
		c. conduct investigations of safety events to identify the causes?			
		d. monitor information through any internal safety reporting programs?			
674.27(a)(6) & 674.33(a)	The transit agency should list the SSOA requirements for notifying the SSOA of accidents including time limits for and methods of notification and what information the RTA must submit to the SSOA.	Does the plan include or reference a process for notifying TDOT SSOA of accidents including: <input type="checkbox"/> time limits <input type="checkbox"/> methods of notification <input type="checkbox"/> information the agency must submit to the SSOA			

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
674.35(b)	The transit agency should list what must be included in any investigation report developed on behalf of the SSOA, including, at a minimum, identification of factors that caused or contributed to the accident and setting forth a CAP as appropriate.	Does the plan include investigation reporting requirements that include factors that caused or contributed to the accident?			
		Does the plan include investigation reporting requirements that include setting forth a CAP, when appropriate?			
674.35(a)	How the RTA will work with the SSOA when conducting its own internal investigation of a safety event § 674.35(a)).	Does the plan include a process for coordinating with TDOT when conducting an investigation of a safety event?			
674.35(c)	Training requirements for all personnel and contractors that conduct investigations on behalf of an SSOA in accordance with the Public Transportation Safety Certification Program (§ 674.35(c)).	Does the plan list training requirements for both staff and contractors who conduct safety event investigations?			
673.27(c)	(c) Management of change. (1) A transit agency must establish a process for identifying and assessing changes that may introduce new hazards or impact the transit agency's safety performance. (2) If a transit agency determines that a change may impact its safety performance, then the transit agency must evaluate the proposed change through its SMS process.	Does the plan include: a. process for identifying and assessing changes that may introduce new hazards or impact the transit agency's safety performance?			
		b. process to evaluate changes that may impact safety performance through the safety risk management process?			
673.27(d)(1) & (2), SSPS Section 4	(d) Continuous improvement. (1) A transit agency must establish a process to assess its safety performance. (2) If a transit agency identifies and deficiencies as part of its safety performance assessment, then the transit agency must develop and carry out, under the direction of the Accountable Executive, a plan to address the identified safety deficiencies.	Does the plan include (Section 4 of the TDOT Program Standard requires RTA's to complete an annual internal safety review): a. process to assess its safety performance?			
		b. Does the process include a requirement to address deficiencies through the development and carrying out of a plan to address identified deficiencies?			

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
673.29(a), § 5329 (d)(I)(H)(ii)(I) & (II)	(a) Competencies and training. A transit agency must establish and implement a comprehensive safety training program for all agency employees and contractors directly responsible for safety in the agency's public transportation system. The training program must include refresher training, as necessary.	Does the plan include or reference: a. a comprehensive safety training program for all employees and contractors directly responsible for safety?			
		b. does the training program include refresher training, as necessary?			
673.29(b)	(b) Safety communication. A transit agency must communicate safety and safety performance information throughout the agency's organization that at a minimum, conveys information on hazards and safety risks relevant to employees' roles and responsibilities and informs employees of safety actions taken in response to reports submitted through an employee safety reporting program.	Does the plan communicate safety and safety performance information throughout the agency, which at a minimum: a. conveys info on hazards and safety risks relevant to employees' roles and responsibilities?			
		b. informs employees of safety actions taken in response to reports submitted through the employee safety reporting program?			
SSPS Sec 10	A description of the safety certification process required by the RTA to ensure that safety concerns and hazards are adequately addressed prior to the initiation of passenger operations and for New Starts and subsequent major projects to extend rehabilitate or modify an existing system, or to replace vehicles and equipment.	Does the plan have a formal program of safety and security certification and hazard and security threat/vulnerabilities management			

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
674.37(a)	a. In any instance in which an RTA must develop and carry out a CAP, the SSOA must review and approve the CAP before the RTA carries out the plan; however, an exception may be made for the immediate or emergency corrective actions that must be taken to ensure immediate safety, provided that the SSOA has been given timely notification, and the SSOA provides subsequent review and approval. A CAP must describe, specifically, the actions the RTA will take to minimize, control, correct, or eliminate the risks and hazards identified by the CAP, the schedule for taking those actions, and the individuals responsible for taking those actions. The RTA must periodically report to the SSOA on its progress in carrying out the CAP. The SSOA may monitor the RTA's progress carrying out the CAP through unannounced, on-site inspections, or any other means the SSOA deems necessary or appropriate.	Does the plan identify when the agency must develop and carry out a CAP?			
		Does the plan identify how the agency will submit CAPs to TOOT for review and approval?			
		Does the plan identify how the agency will manage immediate or emergency corrective actions?			
		Does the plan identify what the required contents of a CAP, including: <input type="checkbox"/> describing the actions they will take to minimize, control, correct, or eliminate the risks and hazards identified by the CAP <input type="checkbox"/> the schedule for taking those actions <input type="checkbox"/> individuals responsible for taking those actions the process of reporting to TDOT on its progress in carrying out CAP's			
673.31	Safety Plan Documentation. At all times, a transit agency must maintain documents that set forth its Public Transportation Agency Safety Plan, including those related to the implementation of its SMS, and results from SMS processes and activities. A transit agency must maintain documents that are included as a whole, or by reference, that describe the programs, policies, and procedures that the agency uses to carry out its ASP. These documents must be made available upon request by the Federal Transit Administration or another Federal entity, or a State Safety Oversight Agency having jurisdiction. A transit agency must maintain these documents for a minimum of three years after they are created.	Does the plan include how the agency will document key processes and procedures required to carry out the SMS that are not included or referenced elsewhere in their ASP?			
		Does the plan include how the agency will maintain SMS documentation and ensure that all SMS documentation will be maintained for a period of no less than three years after they are created?			
		Does the plan include how the agency will ensure that FTA, any other Federal entity, and TOOT have access to any SMS documentation maintained by the RTA upon request?			

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
§ 5329 (d)(l)(A)	a requirement that the board of directors (or equivalent entity) of the recipient approve, or, in the case of a recipient receiving assistance under section 5307 that is serving an urbanized area with a population of 200,000 or more, the safety committee of the entity established under paragraph (5), followed by the board of directors (or equivalent entity) of the recipient approve, the agency safety plan and any updates to the agency safety plan;	Does the ASP provide the approval process that includes the approval of a safety committee, followed by the BOD or equivalent?			
§ 5329 (d)(l)(B)	or each recipient serving an urbanized area with a population of fewer than 200,000, a requirement that the agency safety plan be developed in cooperation with frontline employee representatives;	Does the ASP provide the process for development of the plan with frontline employee representation?			Items part of the new BIL changes will only be marked deficient if past the FTA enforcement date. If within 30 days of enforcement, RTA must have a discussion with the SSOA.
§ 5329 (d)(l)(D)	strategies to minimize the exposure of the public, personnel, and property to hazards and unsafe conditions, and consistent with guidelines of the Centers for Disease Control and Prevention or a State health authority, minimize exposure to infectious diseases;	Does the ASP specify the strategies to minimize public, personnel, and property exposure to unsafe conditions?			
		Does this include exposure to infectious diseases consistent with CDC or State health authority?			Items part of the new BIL changes will only be marked deficient if past the FTA enforcement date. If within 30 days of enforcement, RTA must have a discussion with the SSOA.
§ 5329 (d)(l)(F)	performance targets based on- the safety performance criteria and state of good repair standards established under subparagraphs (A) and (B), respectively, of subsection (b)(2); or in the case of a recipient receiving assistance under section 5307 that is serving an urbanized area with a population of 200,000 or more, safety performance measures established under the national public transportation safety plan, as described in subsection (b)(2)(A)	Are the safety performance measures based on the national public transportation safety plan as described in, as described in subsection (b)(2)(A)?			Items part of the new BIL changes will only be marked deficient if past the FTA enforcement date. If within 30 days of enforcement, RTA must have a discussion with the SSOA.

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
§ 5329 (d)(l)(H)ii	<p>a comprehensive staff training program for-</p> <p>in the case of a recipient receiving assistance under section 5307 that is serving an urbanized area with a population of 200,000 or more, the operations and maintenance personnel and personnel directly responsible for safety of the recipient that includes-</p> <p>(1) the completion of a safety training program;</p> <p>(II) continuing safety education and training; and (III) de-escalation training.</p>	<p>Does the ASP include or reference a comprehensive staff training program for the operations personnel, maintenance personnel, and personnel directly responsible for the safety of the recipient that includes:</p> <p><input type="checkbox"/> The completion of a safety training program</p> <p><input type="checkbox"/> Continues safety education and training</p> <p><input type="checkbox"/> De-escalation training</p>			<p>Items part of the new BIL changes will only be marked deficient if past the FTA enforcement date. If within 30 days of enforcement, RTA must have a discussion with the SSOA.</p>
§ 5329 (d)(1)(l)	<p>(l) in the case of a recipient receiving assistance under section 5307 that is serving an urbanized area with a population of 200,000 or more, a risk reduction program for transit operations to improve safety by reducing the number and rates of accidents, injuries, and assaults on transit workers based on data submitted to the national transit database under section 5335, including-</p> <p>a reduction of vehicular and pedestrian accidents involving buses that includes measures to reduce visibility impairments for bus operators that contribute to accidents, including retrofits to buses in revenue service and specifications for future procurements that reduce visibility impairments; and</p> <p>the mitigation of assaults on transit workers, including the deployment of assault mitigation infrastructure and technology on buses, including barriers to restrict the unwanted entry of individuals and objects into the workstations of bus operators when a risk analysis performed by the safety committee of the recipient established under paragraph (5) determines that such barriers or other measures would reduce assaults on transit workers and injuries to transit workers.</p>	<p>Does the ASP include or reference a risk reduction program for transit operations to improve safety by reducing the number and rates of accidents, injuries, and assaults on transit workers based on data submitted to the national transit database that includes:</p> <p><input type="checkbox"/> a reduction of vehicular and pedestrian accidents involving buses that include measures to reduce visibility impairments for bus operators that contribute to accidents, including retrofits to buses in revenue service and specifications for future procurements that reduce visibility impairments</p> <p><input type="checkbox"/> the mitigation of assaults on transit workers, including the deployment of assault mitigation infrastructure and technology on buses, including barriers to restrict the unwanted entry of individuals and objects into the workstations of bus operators when a risk analysis performed by the safety committee of the recipient established under paragraph (5) determines that such barriers or other measures would reduce assaults on transit workers and injuries to transit workers.</p>			<p>Items part of the new BIL changes will only be marked deficient if past the FTA enforcement date. If within 30 days of enforcement, RTA must have a discussion with the SSOA.</p>

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
§ 5329 (d)(4)(A)	In general. -The safety committee of a recipient receiving assistance under section 5307 that is serving an urbanized area with a population of 200,000 or more established under paragraph (5) shall establish performance targets for the risk reduction program required under paragraph (1)(1) using a 3-year rolling average of the data submitted by the recipient to the national transit database under section 5335.	Does the ASP establish performance targets for the required risk reduction programming a 3-year rolling average of the data submitted by the recipient to the national transit database?			Items part of the new BIL changes will only be marked deficient if past the FTA enforcement date. If within 30 days of enforcement, RTA must have a discussion with the SSOA.
§ 5329 (d)(4)(B)	Safety set aside. -A recipient receiving assistance under section 5307 that is serving an urbanized area with a population of 200,000 or more shall allocate not less than 0.75 percent of those funds to safety-related projects eligible under section 5307.				Items part of the new BIL changes will only be marked deficient if past the FTA enforcement date. If within 30 days of enforcement, RTA must have a discussion with the SSOA.
§ 5329 (d)(4)(C)	Failure to meet performance targets. -A recipient receiving assistance under section 5307 that is serving an urbanized area with a population of 200,000 or more that does not meet the performance targets established under subparagraph (A) shall allocate the amount made available in subparagraph (B) in the following fiscal year to projects described in subparagraph (D).	Does the ASP outline that the RTA will allocate the amount made available in subparagraph (B) in the following fiscal year to projects described in subparagraph (D)?			Items part of the new BIL changes will only be marked deficient if past the FTA enforcement date. If within 30 days of enforcement, RTA must have a discussion with the SSOA.
§ 5329 (d)(4)(D)	Eligible projects. -Funds set aside under subparagraph (C) shall be used for projects that are reasonably likely to assist the recipient in meeting the performance targets established in subparagraph (A), including modifications to rolling stock and de-escalation training.				Items part of the new BIL changes will only be marked deficient if past the FTA enforcement date. If within 30 days of enforcement, RTA must have a discussion with the SSOA.

FEDERAL /STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
§ 5329 (d)(5)	<p>Safety committee.-</p> <p>(A) In general.-For purposes of this subsection, the safety committee of a recipient shall-</p> <p>(i) be convened by a joint labor-management process;</p> <p>(ii) consist of an equal number of-</p> <p>(I) frontline employee representatives, selected by a labor organization representing the plurality of the frontline workforce employed by the recipient or, if applicable, a contractor to the recipient, to the extent frontline employees are represented by labor organizations; and</p> <p>(II) management representatives; and</p> <p>(iii) have, at a minimum, responsibility for-</p> <p>(I) identifying and recommending risk-based mitigations or strategies necessary to reduce the likelihood and severity of consequences identified through the agency's safety risk assessment;</p> <p>(II) identifying mitigations or strategies that may be ineffective, inappropriate, or were not implemented as intended; and</p> <p>(III) identifying safety deficiencies for purposes of continuous improvement</p>	<p>Does the ASP outline the RTA has a safety committee that:</p> <p><input type="checkbox"/> Is convened by a joint labor-management process;</p> <p>Does the Safety Committee consist of an equal number of-</p> <p><input type="checkbox"/> Frontline employee representatives, selected by a labor organization representing the plurality of the frontline workforce employed by the recipient or, if applicable, a contractor to the recipient, to the extent frontline employees, are represented by labor organizations; and</p> <p><input type="checkbox"/> Management representatives</p> <p>Does the Safety Committee have responsibility for:</p> <p><input type="checkbox"/> Identifying and recommending risk-based mitigations or strategies necessary to reduce the likelihood and severity of consequences identified through the agency's safety risk assessment;</p> <p><input type="checkbox"/> Identifying mitigations or strategies that may be ineffective, inappropriate, or were not implemented as intended; and</p> <p><input type="checkbox"/> Identifying safety deficiencies for purposes of continuous improvement</p>			<p>Items part of the new BIL changes will only be marked deficient if past the FTA enforcement date. If within 30 days of enforcement, RTA must have a discussion with the SSOA.</p>

Appending H: ASP Review Safety Meeting Minutes – MB/DR

Meeting Group: MB/DR Safety Committee Meeting

Date: Tuesday, February 11, 2025

Time: 10 a.m. – 11 p.m.

Facilitator: Derrick Bernard

Location: MATA Boardroom / Teams

Confidentiality of Information

Tennessee Code Annotated, Title 13 Public Planning & Housing, Chap. 10 – Mass Transit Part – 2,

State Safety Oversight 13-10-204, “Confidentiality of Information

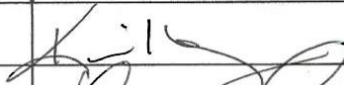
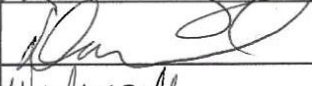

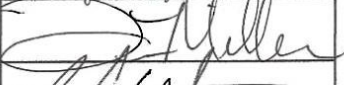
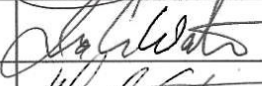

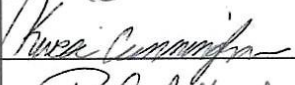

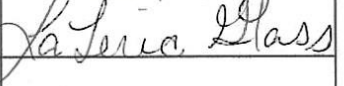
	Agenda Item	Time	Presenter
1.	Roll Call		
2.	Program Overview/Safety Management Policy <ul style="list-style-type: none"> Gave an overview of SMS and the Safety Management Policy 	5 minutes	Kevin Hervey
3.	Safety Performance <ul style="list-style-type: none"> Spoke on Safety Performance, MAP-21 and its definition, Safety Performance Targets, Performance Criteria and how it is measured, and Risk Reduction 	5 minutes	Wesley Bell
4.	Safety Risk Management <ul style="list-style-type: none"> Spoke on Safety Hazard identification, Safety Risk Assessment and Safety Risk Mitigation; Talked about Safety Performance Monitoring and Measurements, Configuration Management and Continuous Improvement methods 	5 minutes	Tia Miller
5.	Safety Assurance/Promotion <ul style="list-style-type: none"> Defined the function of Safety Assurance and how MATA will use this to monitor its system for compliance with and sufficiency of the agency's procedures; Talked about how MATA can continue Safety Promotion through safety communication, competencies and training 	5 minutes	Derrick Bernard
6.	Voting on the plan <ul style="list-style-type: none"> Avery Mull motioned to approve Robert Harris second motion 	3 Minutes	Committee

MB/DR

PTASP - Safety Committee (Voting Approval)

Date: 02/11/2025



Name	Title	Signature
Kevin Harvey	DDCM	
Derrick Bernard	Safety & Security	
Wesley Bell	safety & security	
Tia Miller	Safety + Security	
Ira Watson	Fixed Route	
DAVID STENNIS	COMMAND CENTER	
Kura Cunningham	Fixed Route	
Robert Harris Jr	Supt. of Ops & Command	
Latoria Glass	Wablen Account manager	
Avery Mull	Director of Maint	Teams
Randal Terrell	Maint Fleet Planner	Teams
Tiena Cwinn	Director of Planning	Teams

Appendix I: ASP Review Safety Meeting Minutes - SR

Meeting Group: SR Safety Committee Meeting

Date: Wednesday, February 12, 2025

Time: 10 a.m. – 11 p.m.

Facilitator: Tia Miller

Location: Trolley MSF Boardroom / Teams

Confidentiality of Information

Tennessee Code Annotated, Title 13 Public Planning & Housing, Chap. 10 – Mass Transit Part – 2,

State Safety Oversight 13-10-204, “Confidentiality of Information

	Agenda Item	Time	Presenter
7.	Roll Call		
8.	Program Overview/Safety Management Policy <ul style="list-style-type: none"> Gave an overview of SMS and the Safety Management Policy 	5 minutes	Kevin Hervey
9.	Safety Performance <ul style="list-style-type: none"> Spoke on Safety Performance, MAP-21 and its definition, Safety Performance Targets, Performance Criteria and how it is measured, and Risk Reduction 	5 minutes	Wesley Bell
10.	Safety Risk Management <ul style="list-style-type: none"> Spoke on Safety Hazard identification, Safety Risk Assessment and Safety Risk Mitigation; Talked about Safety Performance Monitoring and Measurements, Configuration Management and Continuous Improvement methods 	5 minutes	Tia Miller
11.	Safety Assurance/Promotion <ul style="list-style-type: none"> Defined the function of Safety Assurance and how MATA will use this to monitor its system for compliance with and sufficiency of the agency's procedures; Talked about how MATA can continue Safety Promotion through safety communication, competencies and training 	5 minutes	Derrick Bernard
12.	Voting on the plan <ul style="list-style-type: none"> Derrick Bernard motioned to approve Thomas Davidson second motion 	3 Minutes	Committee

SR

PTASP - Safety Committee (Voting Approval)

Date: 02/12/2025



Name	Title	Signature
Wesley Bell	Safety	Wesley Bell
Reggie Adams	Maintenance	Reggie Adams
Terry Isaac	Operations	Terry Isaac
Neandre Lovehart	Track Maintainer	Neandre Lovehart
Tyrone Harper	Supervisor	Tyrone Harper
Christopher Cummins	Lead Electro Mech.	Christopher Cummins
Derrick Bernard	Safety and Security	Derrick Bernard
Thomas Davidson	CCO - Trolley Division	Thomas Davidson
Tia Miller	Safety	Tia Miller
Linda Gibbs	Maintenance	Linda Gibbs
GREG CHALSON	Gen. Manager	GREG CHALSON
Sandra Scott	Chairman	Sandra Scott
Keith Watson	Safety	Keith Watson
Kevin Herry	Safety	Kevin Herry