

RESOLUTION NO. 2018-81

APPROVING THE AUTHORITY'S SAFETY MANAGEMENT SYSTEMS (SMS)  
FRAMEWORK AND IMPLEMENTATION PLAN

WHEREAS, the Board of Trustees has been granted the power and authority, pursuant to Chapter 306 of the Ohio Revised Code, to manage and conduct the affairs of the Greater Cleveland Regional Transit Authority (GCRTA); and

WHEREAS, the Authority's Safety Management Systems (SMS) Framework and Implementation Plan will serve as the Authority's a guide on how to begin building the Agency Safety Plan and act as the Authority's business plan for managing safety; and

WHEREAS, under federal regulation, 49 CFR Parts 672 and 673, the FTA has set forth requirements and guidelines for an Agency Safety Plan for those with direct oversight of Transit Safety; and

WHEREAS, as set forth in the regulation, the Authority governing board is required to review and approve an Agency Safety Plan by July 20, 2020; and

WHEREAS, on August 7, 2018, the Audit, Safety Compliance & Real Estate Committee considered the SMS Framework and recommended approval to the full Board of Trustees.

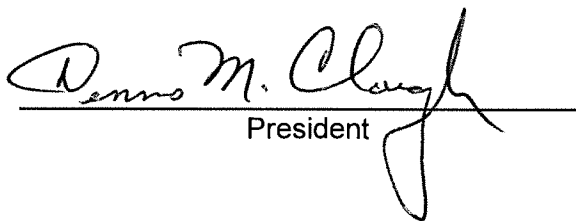
NOW, THEREFORE, BE IT RESOLVED by the Board of Trustees of the Greater Cleveland Regional Transit Authority, Cuyahoga County, Ohio:

Section 1. That the Authority's SMS Framework, which is in the form of the attachment hereto, is approved, and the CEO, General Manager/Secretary-Treasurer is hereby authorized to submit the update to the Federal Transit Administration/State Safety Oversight Agency.

Section 2. That this resolution shall become effective immediately upon its adoption.

Attachment: Safety Management Systems (SMS) Framework & Implementation Plan.

Adopted: August 21, 2018

  
\_\_\_\_\_  
President

Attest:   
\_\_\_\_\_  
CEO, General Manager/Secretary-Treasurer

**Safety Management Systems (SMS) Framework & Implementation Plan**  
**For**  
**Greater Cleveland Regional Transit Authority**



**August, 2018**



# SMS Framework and Implementation Plan

## SMS INTEGRATION PLAN APPROVAL

<input type="checkbox"/> CEO, General Manager/Secretary-Treasurer	<input type="checkbox"/> General Counsel, Deputy General Manager – Legal Affairs
<input type="checkbox"/> Deputy General Manager – Operations	<input type="checkbox"/> CIO, Executive Director, IT
<input type="checkbox"/> Executive Director, Marketing & Communications	<input type="checkbox"/> Executive Director, Office of Management & Budget
<input type="checkbox"/> Executive Director, Internal Audit	<input type="checkbox"/> Deputy General Manager, Human Resources
<input type="checkbox"/> Deputy General Manager, Finance & Administration	<input type="checkbox"/> Director, Procurement
<input type="checkbox"/> Deputy General Manager, Engineering & Project Management	



## SMS Framework and Implementation Plan

### REVISION HISTORY

<b>EDITION</b>	<b>DATE DRAFTED</b>	<b>Notes</b>
1.0	9/2017	SMS Committee DRAFT
2.0	11/2017	CSO DRAFT
2.1	7/2018	CEO & Board President



## SMS Framework and Implementation Plan

### FOREWORD

Safety is a core value at Greater Cleveland Regional Transit Authority (GCRTA). The word “safe” is part of our mission statement. It is our duty to ensure our employees, customers, and the general public are free from unintentional harm. GCRTA must adopt and maintain a **proactive**, systemic approach to managing safety. In addition, this approach must be **combined with a sense of urgency and tempo** in order to detect risk quickly while at the same offering the highest level of service possible. This Safety Management System (SMS) will be the guidance document with regard to System Safety. This *Framework* is connected to the GCRTA Strategic Plan.

GCRTA is committed to embracing the four Pillars of SMS, using data and information collection and analysis to discover emerging risks, prioritize said risks, and mitigate risks through the use of the Hierarchy of Controls. The Hierarchy is a system used to minimize/eliminate exposure to hazards. GCRTA currently works under many of the principles of SMS. GCRTA will augment these practices with greater data collection and analysis in order to better identify emerging risk across all levels of GCRTA. This data analysis will provide for sound allocation of financial resources in order to improve safety through an all hazards approach.

This *Framework* will insure an Agency Safety Plan/System Safety Program Plans (SSPP) are fully implemented, while also providing guidance/overlap for our processes with regard to emergency preparedness, security, cybersecurity, and Continuity of Operations Plan (COOP).

GCRTA is committed to ensuring that Safety training needs are met and all employees have the tools and resources available to do a job in the safest manner practicable while reducing risk to the lowest level practicable. This will be accomplished through:

- Hazard identification, analysis, and monitoring
- Auditing by way of the Safety Department and Internal Audit
- A commitment to public engagement
- Continual training to ensure the most up-to-date safety practices are embraced

The GCRTA Board of Trustees and the Executive Management Team are committed to fully implementing SMS through sound leadership, ethical decision-making, and the proper allocation of financial resources.

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Joseph A. Calabrese

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Date

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Dennis M. Clough

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Date



# SMS Framework and Implementation Plan

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## SMS Framework and Implementation Plan

### 1.0 SAFETY MANAGEMENT SYSTEM (SMS) OVERVIEW

#### 1.1 Introduction

The *GCRTA Mission* is to, “provide safe, reliable, clean and courteous public transportation.” As a corollary to the GCRTA Mission, the GCRTA Safety Mission is, “To lead a proactive approach in decreasing on-the-job injuries and preventable collisions. The safety of our passengers, our employees and the general public is always our top priority.”

GCRTA will use these two mission statements as guidance to integrate the principles of SMS into our everyday Safety Culture. Safety Culture is defined by “attitudes beliefs, perceptions, and values that a group of people share in an organization.” Many of pillars of SMS, to be discussed herein, are/have already been in practice at GCRTA. SMS is owned by the entire GCRTA, starting with the Accountable Executive for Safety, the Chief Executive Office/General Manager (CEO/GM).

This *SMS Framework and Implementation Plan* (hereafter known as SMS) is the result of the efforts of the GCRTA SMS Committee.

The SMS Committee is led by the Director of Safety who is the SMS “Lead” and is assisted by members of the Safety Department. Additionally, the Committee is comprised of employees from Rail, Bus, Paratransit, Engineering and Project Management, Service Quality (SQ), Risk Management, Marketing, Legal, and other Departments as needed. The material herein will be championed by the CEO/GM and the Executive Management Team (EMT).

***SMS is a business approach to managing safety.*** Safety Management is “something we do”. Our *SMS* is “something we have”. It is based on multiple data sources aiding in making decisions, primary based on **leading indicators** where possible and being objective in all findings. It is a GCRTA-wide commitment and team effort. The Safety Department will provide guidance but GCRTA as a whole will own SMS.

This SMS complements the *GCRTA Vision*:

We Will Be:

- The Transportation mode of choice
- Recognized as a transportation Industry leader with a first-class image
- An employer of choice in Northeast Ohio
- A champion of sustainability

We Will Have:

- A sustainable financial position with controlled expenses and a minimum 30-day operating reserve
- An increasing impact in the region by improving efficiency and the coordination of services





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We Will:

- Upgrade and manage technology systems with increased efficiency to best serve our customers
- Achieve an infrastructure and vehicle state-of-good-repair (SOGR) with an effective asset management system
- Fund, plan, coordinate, execute, and deliver quality projects on time and on budget
- Continually improve the quality of our service and enhance the value of RTA to our community

This *GCRTA SMS* complements the GCRTA Values:

- Safety
- Ethics & Integrity
- Service Excellence
- Fiscal Responsibility
- Teamwork
- Responsibility & Accountability
- Respect

This *GCRTA SMS* complements the GCRTA Board of Trustees Policy Goals:

- Customer Focus
- Prepare for the Future
- Improve Financial Health
- Provide Community Benefits

### 1.2 Structure

This *SMS* addresses each safety pillar; Safety Management Policy, Safety Risk Management, Safety Assurance, and Safety Promotion. This *SMS* sets forth ways each of the sub-components of the four *SMS* pillars will be addressed by personnel to foster a more proactive Safety Culture within GCRTA.

This *SMS* is based on FTA's *SMS Framework* and consistent with APTA's *SMS* standards activities.

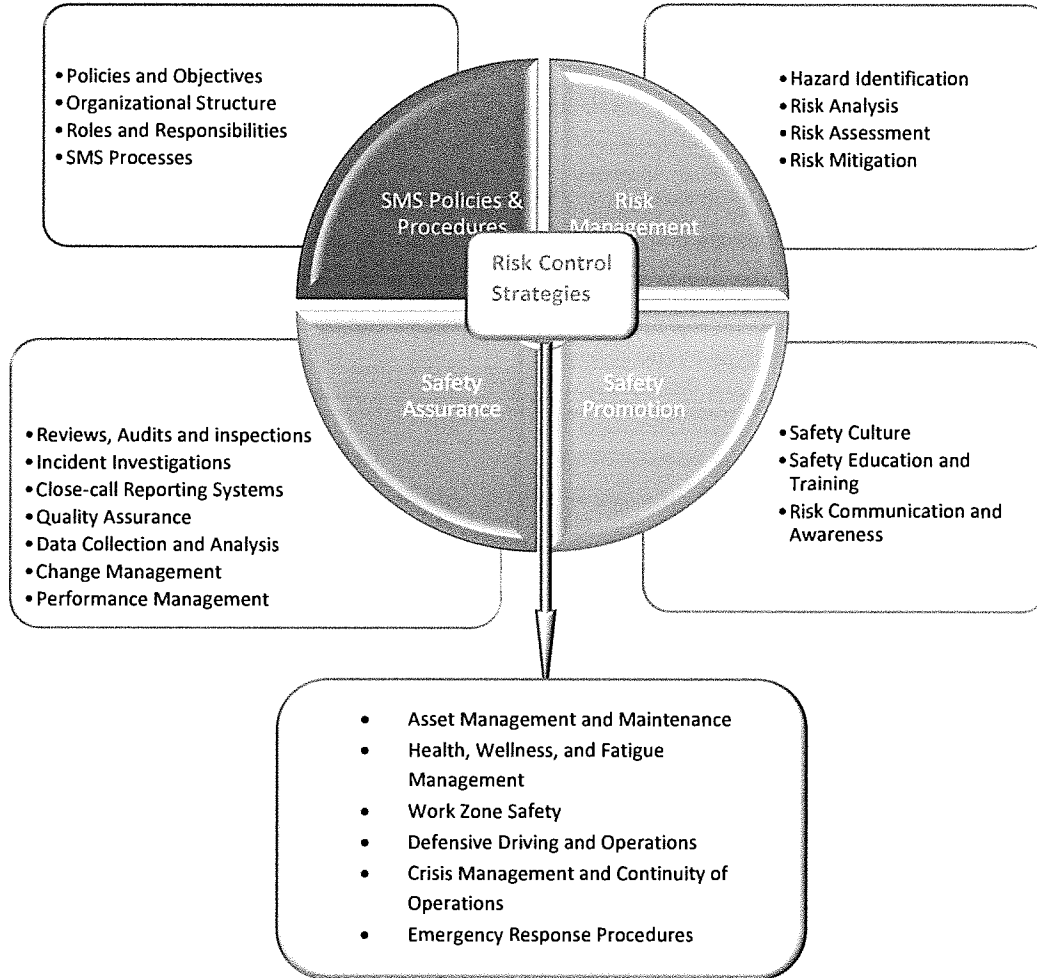
This *SMS* supports the *GCRTA Strategic Plan*. Many aspects of the *Plan* have a part to play in GCRTA *SMS*. These include:

- Strategic Focus: Fiscal Responsibility through increasing revenue and reducing expense
- Strategic Focus: Understand the Voice of the Customer through an enhanced customer experience
- Strategic Focus: Continual Process Improvement through increasing service efficiency, achieving a state-of-good-repair (SOGR), and improving technology



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- Strategic Focus: Improving Innovation and Learning by achieving a vibrant safety culture and improving employee development



**Illustration 1:** SMS Integration Diagram (taken from FTA TRACS report 12-02) shows the four SMS pillars that are explained in this SMS. GCRTA SMS can accomplish improved safety if the subcomponents are embraced and practiced by management and front-line supervisors throughout GCRTA. GCRTA is able to adjust where needed to improve our unique Safety Culture.

### 1.3 SMS Introduction

SMS is designed to be consistent with the National Public Transportation Safety Plan. The goal is to provide GCRTA management with a structure to better understand, assess and address safety risk by being proactive and making timely decisions regarding resource allocation based on safety data.



## SMS Framework and Implementation Plan

SMS (Taken from FTA SMS Framework) is “a formal, top-down organization-wide, data-driven approach to managing safety risks and assuring the effectiveness of safety risk mitigations.” SMS helps a transit agency focus its safety management efforts by ensuring that:

- Management has access to the information necessary to **strategically allocate resources** based on the identified safety priorities of GCRTA
- Lines of safety decision-making accountability are established throughout the organization to support the resolution of safety concerns and thus promote a proactive safety culture; and
- GCRTA addresses organizational factors that may lead to safety breakdowns, identify system-wide trends in safety, and manage hazards before they result in accidents, incidents or occurrences

SMS activities proactively detect safety concerns and organizational factors, and correct them using **data-driven prioritization**. As such, important to SMS success is:

- Effective collection, analysis, and sharing of safety-related data, and
- Active, accurate, and routine safety performance measurements

### **Pillar 1: Safety Management Policy (SMP)**

GCRTA Safety Management Policy is the written foundation of our SMS. It formally commits GCRTA to the development and implementation of the organizational structures and resources necessary to sustain the safety management processes and activities of an SMS. It clearly states that data analysis, tempo, and resource allocation will successfully drive our SMS. It makes clear that our CEO is the Accountable Executive for Safety.

### **Pillar 2: Safety Risk Management (SRM)**

The Safety Risk Management pillar is comprised of the processes, activities, and tools a transit agency needs to identify and analyze hazards and evaluate safety risks in operations and supporting activities. SRM, when combined with Safety Assurance, represents the core of SMS and are the main engines for a dynamic Safety Culture.

### **Pillar 3: Safety Assurance (SA)**

Safety Assurance ensures that appropriate mitigations have been put into place to eliminate/reduce risk. GCRTA accomplishes Safety Assurance through the active monitoring of operations, safety reporting systems, routine workplace observations, inspections, audits, and other activities, designed to support safety oversight and performance monitoring. An effective employee safety reporting program is essential to the Safety Assurance function. GCRTA Safety Assurance is a continuous process. Steady progress is the goal.



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### **Pillar 4: Safety Promotion (SP)**

Safety Promotion provides visibility of executive management's commitment to safety, and fosters improved safety performance by increasing safety awareness through safety communication and training. GCRTA Safety promotion will seek to train on successes and learn from failures. GCRTA Safety Promotion ensures that all employees have a voice that can be heard.

The above pillars are foundations that GCRTA can build on for SMS. Goals associated with the four SMS Pillars need be SMART (Specific, Measurable, Attainable, Results-Focused, and be Timely/encourage Tempo).

#### *1.4 Goal and Objectives*

##### *Goal*

The SMS acts as a balancing force to provide the highest level of safety that is practical, while keeping risks as low as reasonably practical (ALARP) by studying emerging risk through data analysis, understanding tempo, and taking into account financial allocation of resources.

##### *Objectives*

GCRTA is committed to achieve a Safety Culture and performance output level that meets all required standards, while at the same time striving to be a "Gold Standard" for System Safety. This is accomplished by:

- Making known to the Accountable Executive for Safety and the EMT the most pressing safety concerns based on severity and probability
- Understanding how SRM affects the allocation of financial resources
- Maintaining a Hazard Log showing Risk Mitigation strategies that is continuously reviewed
- Maintaining an Occurrence Log to monitor emerging safety risk
- Maintaining a registry of applicable Safety Training for each Department/District based on job description, checked annually at a minimum or whenever a promotion or pick is finalized
- Meeting/exceed TEAM goals monthly and yearly for On-the-Job Injuries (OJI) and Preventable Collisions
- Analyzing the causes of employee and passenger injuries
- Analyzing the causes of close call, collisions, and other safety related incidents
- Training GCRTA employees on SMS
- Adhering to local, state, and federal regulations with regard to Occupational Safety and Health
- Increasing community engagement with regard to safety on each mode of GCRTA transit
- Improve the frequency and scope of safety campaigns
- Continuing frank discussions on safety with the Ohio Department of Transportation (ODOT) and any associated Contract Support entity.



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### *1.5 Purpose*

The purpose of this SMS is to ensure continuous improvement of SMS processes. **It is expected that this SMS will evolve into the GCRTA Agency Safety Plan under the 49 CFR 673 Final Rule, Public Transportation Agency Safety Plan.**

### *1.6 Scope*

This SMS will encompass the life-cycle of all transit processes and equipment that relate to safety in any fashion. Areas will include, but not be limited to: Configuration Management, Transit Asset Management (TAM), Procurement, Engineering, Capital Planning, Budget, Safety Policies and Advisories, Operations, Fleet Management, Maintenance, etc.

This SMS applies to all GCRTA management, employees, and contractors who are involved, directly or indirectly with the planning, construction, testing, commissioning, and operational oversight of all GCRTA modes/systems.

GCRTA SMS is based in accordance with:

- *FTA SMS Framework*
- *National Public Transportation Safety Plan*
- *Agency Safety Plan Notice of Proposed Rule Making*
- *FTAs Transit Rail Advisory Committee for Safety (TRACS) report 12-02*
- *ODOT State Safety Oversight program standard*

### *1.7 SMS Products*

The following outputs will be considered products of GCRTA SMS:

- Rail and Bus System Safety Program Plans/Agency Safety Plan
- Safety Risk Assessments
- Safety data
- Safety investigation documents
- Safety Bulletins
- Quarterly Safety Reports
- Hazard Logs
- Occurrence Log
- Safety Training and Promotion topics

Each of these outputs support GCRTA SRM and SA. They can be used to guide and support management decision-making with regard to all GCRTA transit operations and maintenance procedures that impact safety.

### *1.8 SMS Reviews and Updates*

The Director of Safety, through coordination with the Accountable Executive for Safety and the Chief Safety Officer, will work with the SMS Committee to review SMS documents, policy, and procedure as needed. At a minimum, or SMS will be reviewed annually so as to provide proper guidance for the aforementioned Products. The focus of the review is to:



## SMS Framework and Implementation Plan

- Ensure current safety practices are appropriate
- Improve safety activities where data shows review is needed
- Identify new processes that can enhance GCRTA SMS
- Understand any changing organizational safety-related responsibilities
- Understand and incorporate legal changes

Updates can be added to this *SMS* through the issuance of Safety Bulletins in between annual reviews as well as in cases of Line extension, new construction, or modification to items in the Transit Asset Management Plan, changes to operational guidelines, and catastrophic events.

GCRTA SMS Committee will operate under determined guidelines in order to integrate SMS more fully into GCRTA Safety Culture.

The GCRTA Safety Director/SMS Lead is empowered and authorized by the Accountable Executive for Safety to develop, implement, and administer the SMS. The Director of Safety is responsible for the SMS review process. Any changes will be coordinated with the current Chief Safety Officer acting under the authority of CEO/GM.



## SMS Framework and Implementation Plan

### 2.0 SMS PILLAR 1 – SAFETY MANAGEMENT POLICY (SMP)

#### *2.1 Introduction*

Safety Culture at GCRTA starts at the top with the Accountable Executive for Safety, the CEO/GM. The bedrock of Safety Culture can be found in the GCRTA Safety Management Policy Statement as given below. In line with this policy statement, each defined employee group at GCRTA has roles and responsibilities that must be followed so as to allow for a Safety Culture to continue to grow. The various roles and responsibilities are defined below.

In order to best respond in the event of an emergency, GCRTA is committed to working with Transit Police (TP) as well outside First Responder stakeholders. GCRTA will work with relevant Police, Fire, EMS, and City/County officials to ensure expected actions occur when the need arises. Inside GCRTA, TP is our expert resource and leads security measures. Safety Department supports TP when called upon. Drills and Exercises will strive to have an external emergency management component. In addition, a Fire Life Safety Committee will meet on a regular basis so that timely and accurate information is available to those entities that augment emergency efforts at GCRTA.

All GCRTA SMP documents will be reviewed and updated as needed, with appropriate sign-off and dissemination.

SMP subcomponent 1 – Safety Management Policy Statement

SMP subcomponent 2 – Safety Accountabilities and Responsibilities

SMP subcomponent 3 – Integration with Public Safety and Emergency Management

SMP subcomponent 4 – SMS Documentation and Records

#### *2.2 GCRTA Safety Management Policy Statement*

The Greater Cleveland Regional Transit Authority (GCRTA) was organized with the mission to provide safe, secure, reliable, and effective transportation services to all users. Safety is a primary concern that affects all levels of GCRTA activities including operations, maintenance, planning, design, construction, procurement, testing and training for all modes of transportation. Therefore, all GCRTA personnel are charged with the responsibility of promoting the safety and security of passengers, employees, and the general public who come in contact with GCRTA transportation systems.

The safety and security of our customers and our employees are GCRTA's greatest responsibility. In addition, all employees and contractors of the GCRTA are expected to conduct their duties in a safe manner that will prevent collisions, and reduce injuries and property damage, throughout GCRTA's operations.

Each employee must operate safely; use equipment, tools, and materials properly, and be familiar with work rules and procedures for their areas of responsibility. Each employee shall take an active role in the identification and reporting of hazards. Supervisors shall actively participate in the assessment and resolution of hazards and shall fully cooperate with Safety staff to eliminate or control hazards in all areas of GCRTA transportation systems.



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GCRTA Management will provide leadership in promoting safety throughout the organization. The CEO/General Manager and the executive staff will continually and directly involved in formulating, reviewing and revising the Safety Policy and safety goals and objectives. GCRTA management will provide the authority, support, and resources (financial and material) to establish and maintain high safety standards in operations, maintenance and training throughout the GCRTA.

Every GCRTA employee and contractor shall comply with the provisions of the System Safety Program Plans/Agency Safety Plan and shall fully cooperate with Safety staff in achieving GCRTA's safety goals and objectives.

The Greater Cleveland Regional Transit Authority is committed to:

- Instilling a just Safety Culture that fosters safe practices, encourages effective employee safety reporting and communication, and values SMS as equally as other organizational management systems
- Supporting SMS with the appropriate financial resources
- Establishing safety as the primary responsibility of all employees
- Holding Department/Districts responsible for their safety performance
- Establishing a culture whereby management leads by example
- Engaging in emerging risk/hazard identification and analysis in order to eliminate or mitigate said risks.
- Allocating financial resources to projects with the greatest impact on the management of systems safety
- Ensuring no action will be taken against any employee who discloses a safety concern according to the *GCRTA Non-Punitive Hazard Reporting Policy* and ensuring open, honest communication will be a result of any concern brought forth.
- Complying with federal, state, and GCRTA safety-related requirements, rules, and standards
- Ensuring all Department staffs are provided with appropriate safety-related information and training, are competent in Safety Management matters, and are allocated only tasks commensurate with their skills.
- Measuring safety performance against SMART goals
- Continuously improving our safety performance through data analysis, informed decision-making, and appropriate resource allocation.
- Ensuring external systems and services supporting GCRTA meet GCRTA safety standards

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Joseph A. Calabrese  
CEO/General Manager

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Date





## SMS Framework and Implementation Plan

### *2.3 Roles & Responsibilities*

GCRTA shows a commitment to safety through the various Safety Committees, Bus and Rail Oversight Committees, and Executive Safety Committee. Each meeting is a part of SMS execution and up-keep.

In addition to safety-related committees, documents such as the Train Control Standard Operating Procedures, Right-of-Way Worker Protection Plan, Configuration Management Manual, and the Rail Inspection and Maintenance Manual, among others, all contribute to Safety Culture.

#### 2.3.1 Role of the Safety Department

The Safety Department is an independent unit that will act as the Lead for SMS implementation with regard to safety regulations, rules, etc. The Department has a direct line to the Accountable Executive for Safety, authority to conduct safety investigations, authority to produce Safety Bulletins to mitigate risk, a role in procurement/contracting processes, the ability to immediately halt unsafe acts, the authority to conduct unannounced inspections and audits, and the mandate to enforce relevant Safety Plans.

The Safety Department commits to having technical capacity to do relevant safety work, management experience at appropriate levels, appropriate safety certifications, strong ethics, an objectivity policy statement and up-to-date training.

#### 2.3.2 CEO/GM Responsibilities (Accountable Executive for Safety)

- Holding Chief Safety Officer and Director of Safety Accountable for designing an SMS program that continuously works to maintain and improve safety performance and an effective Safety Culture
- Allocating financial resources to address pressing safety needs
- Providing the Board of Trustees an accurate and ongoing assessment of safety performance and culture at GCRTA
- Be a champion for SMS and promote Safety Culture
- Require all relevant safety-related information be communicated and used in decision-making

#### 2.3.3 Chief Safety Officer Responsibilities

- Responsible for overseeing Strategic Plan Initiatives related to Safety Culture and safety performance
- Provide guidance to Director of Safety and Safety Department
- Chair of Executive Safety Committee
- Be a champion for SMS and promote Safety Culture



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### 2.3.4 Executive Management (Deputy General Manager) Responsibilities

- Actively support and promote SMS activities
- Require all relevant safety-related information be communicated and used in decision-making
- Identify the necessary funds to meet safety performance requirements and incorporate them in budget plans, prioritizing expenditures according to safety risk
- Provide employees with all resources necessary to achieve a safe working environment
- Ensure Contingency Plan and Emergency Procedure is reviewed and kept current
- Ensure personnel are familiar with the Emergency Response and Contingency Plans
- Ensure Safety Committees are staffed and monthly meetings are conducted effectively with relevant information discussed made readily available to all levels of employees
- Address those hazards first that have the greatest impact on workplace and customer safety
- Provide timely, accurate data to Safety Department regarding OJIs and Preventable Collisions along with strategies to address adverse patterns and trends
- Provide a dedicated space in each facility where up-to-date safety information and related safety tools can be disseminated by Safety personnel
- Keep a Safety Action Register for safety-related matters so they are addressed and closed in a timely manner, and share said Register with Safety Department personnel
- Mandate the use of audits/inspections to ensure safe working procedures

### 2.3.5 Director of Safety Responsibilities

- Act as GCRTA SMS “Lead” and Chairs SMS Committee
- Approves all products developed in Safety Department
- Provides guidance for an effective Safety Culture
- Vice Chair of Executive Safety Committee
- Authors the *Safety Quarterly Report*
- Maintains **risk-based, objective** audit schedule
- Ensures Continuity of Operation Plan (COOP) is reviewed and kept current

### 2.3.6 Safety Department Staff Responsibilities

- Lead and facilitate hazard analyses through workshops and Subject Matter Experts
- Conduct, **risk-based, objective** safety audits
- Coordinate the provision of data for tracking and safety purposes
- Be a champion for SMS and support Safety Culture



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### 2.3.7 Director and Mid-Level Manager Responsibilities

- Actively support and promote SMS
- Ensure availability of and training on all GCRTA safety related policies and procedures.
- Ensure availability and use of required Personal Protective Equipment (PPE)
- Ensure compliance with GCRTA safety policies and procedures
- Ensure all direct reports have the correct safety training, to include a review after each promotion and/or pick
- Identify, correct, and monitor any unsafe behavior or condition
- Investigate and report safety related incidents as required
- Conduct audits and submit results to Safety Department

### 2.3.8 Front-line Employees

- Actively support and adhere to SMS
- Report all unsafe conditions
- Report all close calls and mishaps to their Supervisor, in accordance with GCRTA procedures
- Comply with GCRTA safety policies and procedures and utilize PPE as required

## 2.4 Safety Committees

GCRTA has established Safety Committees to review safety data/trends and oversee/evaluate safety processes. The Committees are as follows:

2.4.1 Executive Safety Committee (ESC) - Held once a month, the Committee brings together senior leadership across GCRTA to review and understand safety data/trends. Corrective Action Plans are discussed every other ESC. In addition, there is an Action Register for the tracking of relevant safety projects.

2.4.2 District/Facility Safety Committees – Held a minimum of once a month, these “front-line” safety committees bring together management, employees, and employee representatives to maintain a safe and healthy working environment.

2.4.3 Safety and Security Certification Review Committee (SSCRC) – This committee is used to identify safety risk during new construction. Each relevant project will have a SSCRC formed. A Fire/Life Safety subcommittee is part of the SSCRC

2.4.4 Operational Safety Review Committee (OSRC) – Coming from the 2015 Triennial Review (Rail), this committee is established through a CAP in order to review and approve all operational changes that can affect Rail safety. Documents that have been designated Minimum Standards for Rail Safety are reviewed here. Bus and Paratransit can added as



## SMS Framework and Implementation Plan

relevant. This review is established to ensure Safety, Operations, Training, Engineering, and Service Quality all understand and adhere to changes to safety-centric doctrine.

2.4.5 RACI Matrix for Safety-Centric Topics – The table below is a RACI matrix used to illustrate various levels of responsibility/involvement with SMS as it relates Safety topics. The y-axis along the left side lists areas of focus/activities that are related to SMS. The x-axis along the tops of the matrix lists key positions within GCRTA. The grid portion of the matrix identifies the type of responsibility assigned to each key position for each area of focus.

### 2.4.5.1 RACI Definitions

2.4.5.1(a) *Responsible* – The people who actually do the work. One or more people can be responsible.

2.4.5.1(b) *Accountable* – The approver. The person who signs off on the work. Usually one person, but can be more if required.

2.4.5.1(c) *Consulted* – The subject matter experts who are consulted and sometimes contribute to creating content.

2.4.5.1(d) *Informed* – The people who are informed when a deliverable is complete.

Communication usually goes one way.



## SMS Framework and Implementation Plan

SMS Tasks and Activities	CEO/General Manager	DGM, Operations	General Counsel/CSO	Director of Safety, SMS Lead	Exec. Director, IA	CIO	Director, Fleet	Operations District Directors	District Equipment Managers	Manager, P & W	Director, SQ	Facilities Directors	DGM, E&P	Director, HR	Chief of Police	Director, Training	Director, Procurement
Safety Goals & Objectives	A	C	C	R	I	I	C	C	C	C	C	C	C	I	C	C	I
SMS Control & Update	A	C	A	R	I	I	C	C	C	C	C	C	C	I	C	C	I
Hazard Management Process	I	C	A	R	I	I	I	I	I	I	I	I	I	I	I	I	I
System Modifications	I	C	A	R	I	C	C	C	C	C	I	C	R	I	C	C	R
Safety & Security Certification	I	I	A	R	I	C	C	C	C	C	C	C	R	I	C	C	C
Safety Data & Acquisition	I	C	A	R	I	C	I	I	I	I	C	I	I	I	R	C	I
Accident Notification, Investigations, and Reporting	I	I	A	R	I	I	I	I	I	I	C	I	I	I	C	C	I
Emergency Management	I	C	A	R	I	C	C	C	C	I	C	I	I	I	A/R	C	I
Security	I	C	C	C	I	I	I	C	I	I	C	I	C	I	A/R	I	I
Cybersecurity	I	I	I	I	I	A/R	I	I	I	I	I	I	I	I	I	I	I
Internal Audit Process	I	C	R	R	A/R	C	C	C	C	C	C	C	C	C	C	C	C
Safety Rules Compliance	I	C	A	R	I	C	C	C	C	C	C	C	C	C	C	C	C
Fac. & Eqpt Insp. And Maintenance	I	C	C	C	I	I	R	A	A	R	R	A	C	I	I	C	I
Training & Certification Program	I	C	R	R	I	I	I	I	I	I	I	I	I	I	I	A/R	I
Configuration and Asset Management	I	A	C	C	I	C	C	C	C	C	C	C	R	I	C	C	C
Local, State, & Federal Requirements	I	I	A	R	I	I	I	I	I	I	I	I	I	I	C	C	C
Drug & Alcohol Program	I	I	I	I	I	I	I	I	I	I	I	C	I	A	I	R	I
Procurement	I	I	I	C	I	I	C	C	C	C	C	C	C	C	C	S	A/R

Table 1: RACI Matrix



## SMS Framework and Implementation Plan

### *2.5 Integration with Public Safety and Emergency Management*

GCRTA views First Responders as an essential partner in emergencies. Therefore, communication and appropriate training are needed to ensure an effective relationship. As stated before, TP is the resident security and emergency management expert. The Safety Department and others support TP as needed.

GCRTA SMS is actively involved with TP as well as the other external First Responder stakeholders that may be called upon to assist in an emergency. SMS necessitates a state of readiness by GCRTA in order to respond efficiently and effectively when working with external stakeholders.

GCRTA stays adequately prepared to assist with *Cuyahoga County ESF 1: Transportation*. GCRTA is the lead body for this ESF. GCRTA stays prepared to assist with *Cuyahoga County ESF 8: Public Health and Medical Services*. GCRTA is a supporting agency for this ESF.

GCRTA Safety Department, working with GCRTA Training, strives to conduct a minimum of 2 Field Exercises and 1 Table Top Exercise per calendar year. These efforts can be based off responses from higher authorities (ODOT, FTA, etc.) or due to a need for refresher training and to monitor readiness.

GCRTA is dedicated to providing a safe and orderly environment within our transit system. Central to this is the protection of life and property through the prevention of crime and terrorism. GCRTA has adopted an all hazards approach to mitigate, prepare for, respond to, and recover from threatened or actual disasters, acts of terrorism, or other man-made disasters.

In this challenging environment, GCRTA is committed to ensuring:

- The protection of our passengers, employees, facilities and vehicles from the adverse impacts of natural, accidental and man-made incidents and emergencies, and
- GCRTA's capabilities to support response to incidents and emergencies occurring on our property and in our service area

To this end, GCRTA has adopted safety, security and emergency preparedness as core values in all GCRTA activities, including the planning, design, construction, testing, operation and maintenance of the transit system. GCRTA has established four distinct plans to ensure implementation of, and accountability for, these core values:

GCRTA Bus System Safety Program Plan (BSSPP)  
GCRTA Rail System Safety Program Plan (RSSPP)  
GCRTA System Security Plan (SSP)  
GCRTA Emergency Operations Plan (EOP)



## SMS Framework and Implementation Plan

Combined, these four plans demonstrate GCRTA's commitment to a comprehensive, systematic safety, security and emergency preparedness program which meets or exceeds the best practices of the transit industry. Each of these plans identifies specific safety, security and emergency preparedness goals and objectives that are supported by procedures, policies, agreements, resources, activities, and monitoring and evaluation mechanisms to ensure their achievement.

### 2.5.1 System Security Plan (SSP)

The purpose of the SSP is to provide a planned, documented, organized response to actual and potential threats to the system, and to address those threats with proactive measures and response techniques that manage those threats and minimize the outcome of security breaches or related events.

Proactive measures taken by the TP over the last several years have been successful. In addition, the Authority has identified individual employee and department responsibilities. Their greater participation in the Program facilitates earlier recognition of threats and breaches.

Authority management continually evaluates and modifies the plan to address the changing trends, new threats and the efficacy of existing security policies and procedures. As a result, the Program is dynamic and continues to change and grow to meet the challenges of emerging threats.

The SSP is filed with the FTA, and the Department of Homeland Security (DHS), Transportation Security Administration (TSA). The SSP is marked Sensitive Security Information (SSI) per 49 CFR 15 and 1520. As such, the SSP is only accessed by those with a need-to-know. The SSP address regulatory requirements placed on GCRTA by ODOT, GCRTA's Rail Fixed Guideway State Safety and Security Oversight Agency. The SSP complies with DHS Guidance for the National Response Framework, National Incident Management System (NIMS) and National Preparedness Goal.

In addition, the Regional Transit Security Strategy (RTSS) is integrated with the SSP and share the same goals and objectives. The RTSS was established to promote the Cleveland regional area's capabilities to address the DHS and the Federal Emergency Management Agency's (FEMA) National Preparedness Goal (NPG) of a secure and resilient nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk.

These risks include events such as natural disasters, disease pandemics, chemical spills and other manmade hazards, terrorist attacks and cyber-attacks.



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### 2.5.2 Emergency Operations Plan (EOP)

The GCRTA EOP describes GCRTA's process to ensure that fast, controlled and predictable responses can be made to various types of emergencies that may occur within the GCRTA system. The EOP also identifies how municipal and county agencies can both support, and obtain support from, GCRTA in addressing transit-specific and area-wide emergencies.

The EOP meets requirements specified by the Department of Homeland Security (DHS), Urban Area Security Initiative (UASI), Transit Security Grant Program (TSGP) for the submission of a Security and Emergency Preparedness Plan, in compliance with FTA's *Public Transportation Security and Emergency Preparedness Planning Guide* (January 2003).

The EOP describes GCRTA's emergency preparedness program, including the plans, organization, equipment, training and procedures, and exercises/evaluation to be used by GCRTA during catastrophic natural disasters, or terrorist attacks, appropriately coordinated and integrated with emergency response and management jurisdictions in GCRTA's service area.

The EOP also partially fulfills GCRTA's obligations as specified in its agreement with Cuyahoga County and the Cuyahoga County Emergency Services Advisory Board (CCESAB) to participate in the Cuyahoga County Emergency Operations Plan (CCEOP). The EOP, which identifies GCRTA's Incident Management Organization and emergency notification and response procedures for different classifications of emergency events, demonstrates how GCRTA has adopted the Incident Command System (ICS) and will comply with the CCEOP protocols to ensure a regional capability to implement the National Incident Management System (NIMS) and the National Response Framework (NRF).

### 2.5.3 Rail and Bus System Safety Program Plans

The System Safety Program Plans establish the GCRTA safety philosophy and provides the means for its implementation and administration throughout the operational lifecycle of GCRTA transportation systems. The goal of both plans is to plan design, construct, test, and operate a transportation system that attains an optimum level of safety, meeting or exceeding the norm of other transit systems in the United States.

## 2.6 SMS Documentation and Records

SMS documentation shall be kept by both Safety and each Department/District throughout GCRTA. It is expected that each Department/District will keep an Action Register to record hazards and mitigation efforts, minutes of Safety Committee meetings, data on Preventable Collisions and information on all OJIs. Quarterly updates will be provided to the Accountable Executive for Safety, the Board of Trustees, the ESC, and ODOT/ODOT Contractor.

The SMS Committee shall meet Quarterly at a minimum. Minutes will be taken and disseminated.





## SMS Framework and Implementation Plan

### 2.7 Minimum Standards for Safety

The following documents will be considered as minimum safety standards. These documents help shape the Safety Culture and drive our SMS.

<b>Document</b>	<b>Mode/Sphere of Influence</b>
Rail System Safety Program Plan	Rail
Emergency Operations Plan	All of GCRTA
Rail Operation Rule Book	Rail
ICC Train Control SOP	Rail
Service Quality Supervisor Handbook	Rail, Bus, Paratransit
AP-002 Revenue Vehicle Accident Investigation	Rail, Bus, Paratransit
AP-016 Safety Review Policy and Procedures	All of GCRTA
Safety and Security Certification Plans	All of GCRTA
Right-of-Way Worker Protection Plan	Rail
Rail Inspection & Maintenance Standards	Rail
Configuration Management Plan	All of GCRTA
Transit Asset Management Plan	All of GCRTA
Safety Rules	All of GCRTA
Rail Operations SOPs	Rail
Bus System Safety Program Plan	Bus, Paratransit

*Table 2: Minimum Safety Standards*



## SMS Framework and Implementation Plan

### 3.0 SMS PILLAR 2 – SAFETY RISK MANAGEMENT (SRM)

#### 3.1 Introduction

GCRTA has systems in place to define and identify risk. For Rail the use of the RSSPP, along with State Safety Oversight, provides for checks and balances to ensure a safe rail fixed guideway system. The Accountable Executive, Chief Safety Officer, Safety Department and State Safety Oversight understand communication must be open and effective. For Bus, GCRTA Safety works with the Bus Oversight Safety Committee to manage safety risk.

SRM subcomponent 5 – Hazard Risk Identification and Analysis

SRM subcomponent 6 – Safety Risk Evaluation

#### 3.2 Safety Risk Management (SRM) Defined

**SRM** is defined as, “The ability to express the predicted probability and severity of the most likely consequence of a hazard and providing a countermeasure that reduces said risk to the lowest level as reasonably practicable.”

A **hazard** is defined as any real or potential condition that can cause injury, illness or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; damage to the environment; or reduction of ability to perform a prescribed function.

**Hazard Identification** means formal activities to identify potential hazards during operations related to a provision of service.

**Hazard Analysis** means the formal activities to analyze potential consequences of hazards during operations related to a provision of service.

GCRTA is committed to identifying hazards, often through data analysis. GCRTA performs a hazard analysis whereby the hazard is identified to relevant parties, the components of the hazard are broken down, and probability and severity consequences are determined if no action were to be taken. Once mitigations are accepted, GCRTA use the Hierarchy of Controls to either engineer out the hazard, use engineering controls to reduce the hazard, update administrative controls, or mandate PPE. GCRTA will monitor the mitigation for effectiveness and determine if changes are needed based on data obtained.

GCRTA will attempt to answer the following 5 questions whenever Hazard Analysis is conducted:

- What can go wrong?
- How do we know?
- What are we doing about it?
- Is it working?
- How do we know it is working?



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SRM takes into account People, Procedures, the Environment, and Facilities when analyzing risk. Risk will be studied throughout any stage of a system life cycle (Planning, Design, Construction, Testing, Operations, and Disposal).

SRM at GCRTA is accomplished through the use of the *Hazard Resolution Matrix* as developed in Military Standard 882-E.

<b>RISK ASSESSMENT MATRIX</b>				
<b>SEVERITY</b> <b>PROBABILITY</b>	<b>Catastrophic</b> <b>(1)</b>	<b>Critical</b> <b>(2)</b>	<b>Marginal</b> <b>(3)</b>	<b>Negligible</b> <b>(4)</b>
<b>Frequent</b> <b>(A)</b>	<b>High</b>	<b>High</b>	<b>Serious</b>	<b>Medium</b>
<b>Probable</b> <b>(B)</b>	<b>High</b>	<b>High</b>	<b>Serious</b>	<b>Medium</b>
<b>Occasional</b> <b>(C)</b>	<b>High</b>	<b>Serious</b>	<b>Medium</b>	<b>Low</b>
<b>Remote</b> <b>(D)</b>	<b>Serious</b>	<b>Medium</b>	<b>Medium</b>	<b>Low</b>
<b>Improbable</b> <b>(E)</b>	<b>Medium</b>	<b>Medium</b>	<b>Medium</b>	<b>Low</b>
<b>Eliminated</b> <b>(F)</b>	<b>Eliminated</b>			



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Frequency of Occurrence	Hazard Categories			
	I Catastrophic	II Critical	III Marginal	IV Negligible
(A) Frequent	1A-UN	2A-UN	3A-UN	4A-AC/WR
(B) Probable	1B-UN	2B-UN	3B-UD	4B-AC/WR
(C) Occasional	1C-UN	2C-UD	3C-UD	4C-AC
(D) Remote	ID-UD	2D-UD	3D-AC/WR	4D-AC
(E) Improbable	IE-AC/WR	2E-AC/WR	3E-AC/WR	4E-AC
(F) Eliminated				
<b>Legend:</b>	<b>Hazard Risk Index</b> 1A,1B,1C,2A,2B 1D,2C,2D,3A,3B  1E,2D,2E,3C,3D,3E,4A,4B 4C,4D,4E F		<b>Acceptance Criteria</b> UN-Unacceptable UD-Undesirable (decision required) AC/WR-Acceptable with review AC-Acceptable without review Eliminated	

*Illustration 2: Hazard Resolution Matrix*

GCRT SMS will understand Safety Risk Severity and Safety Risk Probability when making safety-centric changes to any part of a GCRTA system.

**Safety Risk Severity** means the anticipated effects of a consequence, should it materialize, with the worst possible condition.

**Safety Risk Probability** means the likelihood that a consequence will occur, should it materialize, with the worst possible condition.

The best method of resolving potential system hazards is to eliminate them. However, this may be impossible or impractical at times. Determination of the method to be employed can be made by conducting a thorough analysis of the system, considering the possible tradeoffs between various alternatives and the system safety requirements. The philosophy dictating these analyses should result in the resolution of alternatives. In general accordance with MIL-STD 882E practices, a number of different means can be employed to resolve identified risk/hazards. These include design changes, the installation of controls and warning devices,



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and the implementation of special procedures. The order of preference for the means to be used in resolving hazards at the GCRTA shall be as follows:

- **Design for Minimum Hazard:** Design, or redesign, refurbish and retrofit to eliminate (i.e., “design out”) the hazards through design selection. This may be accomplished through the use of fail-safe devices and principles in design, the incorporations of high-reliability systems and components, and the use of redundancy in hardware and software design.
- **Safety Devices:** Hazards that cannot be eliminated or controlled through design selection shall be controlled to an acceptable level through the use of fixed, automatic, or other protective safety design features or devices. Examples of safety devices include interlock switches, protective enclosures, or safety pins. Care must be taken to ascertain that the operation of the safety device reduces the loss or risk and does not introduce an additional hazard. Safety devices shall also permit the system to continue to operate in a limited manner. Provisions shall be made for periodic functional checks of safety devices.
- **Warning Devices:** When neither design nor safety devices can effectively eliminate or control an identified hazard, devices shall be used to detect the condition and generate an adequate warning signal to correct the hazard or provide for remedial action such as evacuation. Warning signals and their application shall be designed to minimize the probability of incorrect personnel reaction to the signals and shall be standardized within similar systems.
- **Procedures and Training:** Where it is impossible to eliminate or adequately control a hazard through design selection or use of safety and warning devices, procedures and training shall be used to control the hazard. Procedures may include the use of personal protective equipment. Precautionary notations shall be standardized as specified by the Safety Department. Safety critical tasks and duties and activities throughout the GCRTA, such as rail and bus operators’ duties, shall require organizational certification of personnel proficiency.

In order to maintain an adequate level of safety while a hazard is being resolved, it may become necessary to stop, limit, or control a particular operation or activity. Such a determination involves translating the Hazard Risk Index to an operational impact assessment and alerting the operations organization to adjust the performance level of the transportation system accordingly. Recommendations for remedial action shall be developed concurrently, but independently, of the preceding hazard risk indexing and corrective action priority rating.

The affected employee who identified the hazard will initiate recommendation for remedial action. It shall be verbally communicated, as well as formally submitted on a Hazard Report Form, through the chain of command, to the Director of Safety for review and comment, and simultaneously to the appropriate Director for approval.



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The priorities for such operations remedial actions will be:

- Priority “1” Remedial Action: The operation shall be stopped under emergency conditions and shall not resume until the condition has been corrected or controlled to an acceptable level, as determined by the Safety Department.
- Priority “2” Remedial Action: The operation must be reduced or slow-ordered, until the condition has been corrected or controlled to an acceptable level. Alternative measures, acceptable to the Safety Department, shall be implemented, which will provide equivalent safety protection as the original design safety requirements.
- Priority “3” Remedial Action: A repair order must be initiated and work completed within a defined schedule. Additional control or observations of the operations may be required. The additional controls shall be reviewed and approved by the Safety Department.
- Priority “4” Remedial Action: A plan must be established for the completion of work within time parameters established by the Safety Department. The time parameters shall be determined on the basis of hazard severity, probability of occurrence, and risk exposure over time.
- Priority “5” Remedial Action: Conditions warrant further study. Item may be placed in “deferred status” temporarily or permanently, with or without workaround, with documented rationale.

Resolution of all identified hazards will be managed and monitored by the Safety Department. The Hazard Reporting Form shall be used for tracking the hazard resolution process. Additional documentation, such as comprehensive corrective action plans, shall be developed for those hazards requiring complex and multifaceted resolutions. The Executive Safety Committee and the affected or involved department heads shall be kept informed of the status of all hazard resolution activities by the Safety Department.

A method for categorizing and codifying quantitative cost equivalence for corrective action resolve hazards, based on both manpower and materials, is shown in Figure 13, Cost Allocation Rating Table. The costs are listed in ascending order unlike the tables for hazard severity and probability. The use of the cost estimate is independent of the determination of hazard severity and probability-of-occurrence determination performed earlier. The cost allocation-rating table will act as a guide in determining hierarchy or corrective action among hazards of the same Hazard Risk Index (critically). The cost estimate will enable GCRTA management to prioritize all unacceptable hazards, within their own group, based on the combination of severity, probability, and cost within the respective groups.



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Code	Calculated Dollar Equivalence
A	Over \$100,000 required to eliminate/control the hazard
B	\$10,000 to \$100,000 required to eliminate/control the hazard
C	\$5,000 to \$10,000 required to eliminate/control the hazard
D	Less than \$5,000 required to eliminate/control the hazard

*Table 3. Cost Allocation Rating Table*

The following investigation procedures for unacceptable hazardous conditions will be utilized:

- The GCRTA Safety Department will institute an initial investigation upon notification of the existence of an unacceptable hazardous condition.
- During the investigation process, the GCRTA Safety Department will provide investigation status reports to the CEO/General Manager and Chief Safety Officer. GCRTA Internal Audit will be notified if deemed necessary.
- Upon completion of the investigation process, the GCRTA Safety Department will submit a draft final unacceptable hazardous condition investigation report to the CEO/General Manager.
- Upon approval of the draft report, the GCRTA will prepare a final report, and it will serve as the official GCRTA Report.
- Upon receipt of the final unacceptable hazardous condition report, the GCRTA will have 30 calendar days to develop a plan of action or methodology to correct identified deficiencies.
- The plan of action must include the following information:
  - Identify noted deficiency.
  - Process, plan, or implementation to resolve deficiency.
  - Time frame for plan implementation.
  - Person who will be responsible for implementation.
  - Other critical information.
  - Cost Codes
- The plan of action will be forwarded to the CEO/General Manager and to the responsible party for implementation.



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Critically	Corrective Action Priority Rating	Severity/Probability/ Cost Codes
	1	1AA
	2	1AB
	3	1AC
	4	1AD
UN	5	1BA
	6	1BB
Unacceptable	7	1BC
	8	1BD
	9	1CA
	10	1CB
	11	1CC
	12	1CD
	13	2AA
	14	2AB
	15	2AC
	16	2AD
	17	2BA
	18	2BB
	19	2BC
	20	2BD
	21	3AA
	22	3AB
	23	3AC
	24	3AD
	25	1DA
UD	26	1DB
	27	1DC
Undesirable	28	1DD
	29	2CA





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Critically	Corrective Action	Severity/Probability/ Cost Codes
	Priority Rating	
	30	2CB
	31	2CC
	32	2CD
	33	2DA
	34	2DB
	35	2DC
	36	2DD
	37	3BA
	38	3BB
	39	3BC
	40	3BD
	41	3CA
	42	3CB
	43	3CC
	44	3CD

*Table 4. Hazard Rating Table – Corrective Action Priority Rating*

### 3.3 Applicability of SRM

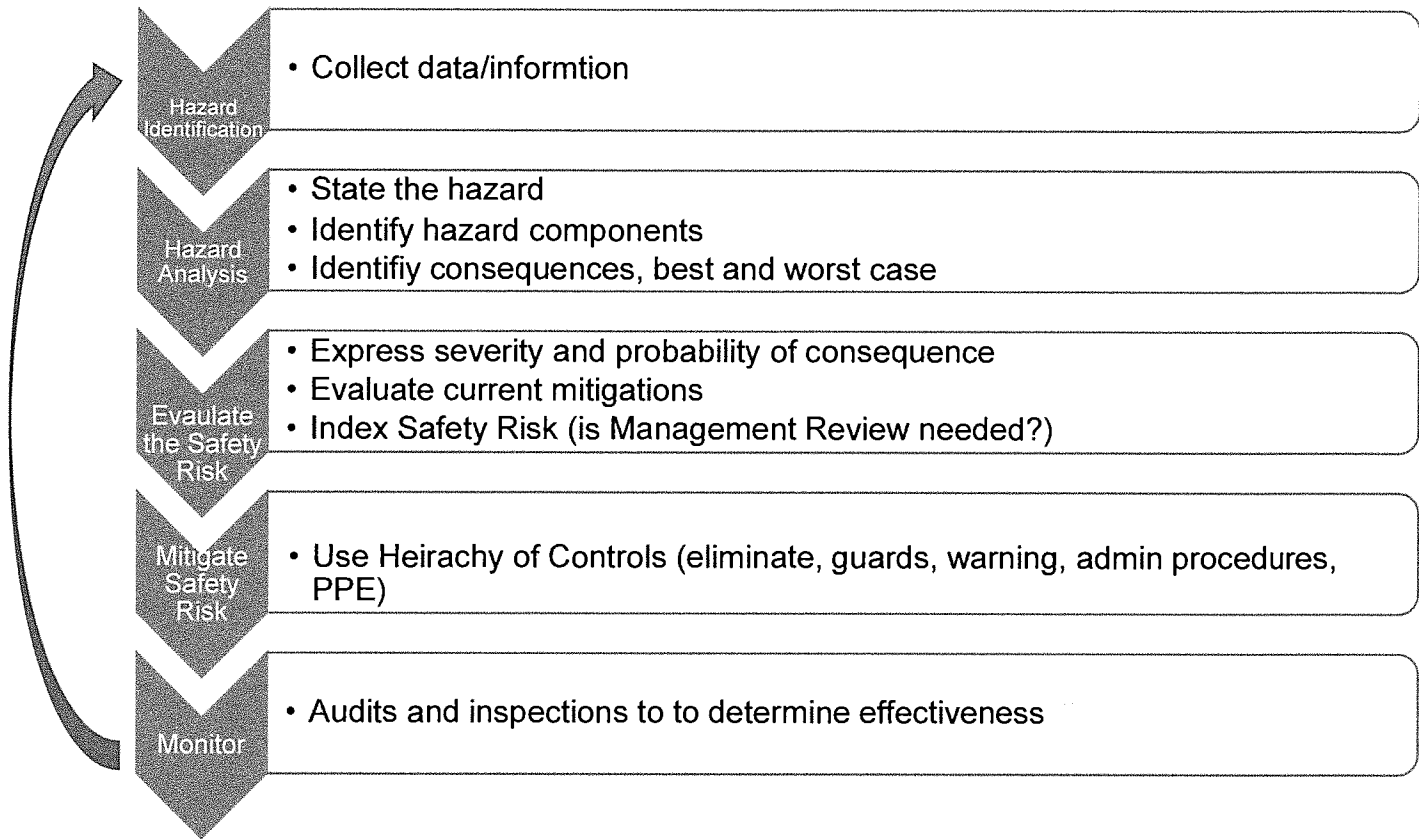
SRM will take the following steps through SMS:

Personnel are required to define a system, identify hazards and undesired events, assess the hazard through probability and severity, resolve said hazard(s) through Hierarchy of Controls and provide follow-up to measure effectiveness of controls. It is important that any risk mitigation does not create an additional hazard. The goal is eliminate a safety risk wherever possible. If this cannot be accomplished, safety guards, administrative controls, and/or PPE requirements can be instituted to lower safety risk.

GCRTA SRM process does allow for reevaluation of hazard(s) if there is new technology and/or process introduced to a system that affects operational or safety standards



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*Illustration 3: GCRTA Safety Risk Management Process*

### 3.4 SRM Tools

GCRTA Safety Department help/support can be requested through any member of the Safety Department, with associated notification to Safety Department Management (Director of Safety and/or Manager of Safety)

GCRTA uses the following to identify safety risk across all modes:

- Employee Reporting Program/Safety Hot Line – Calls can be taken anonymously or by name and Department to report a hazard/verify correction of a hazard. In addition, there is a *GCRTA Non-Punitive Hazard Reporting Policy* in place to not take disciplinary action against employees who report a hazard.
- Observations of operations – STOP audits are conducted to determine procedures for jobs are being followed. Inspections of safe behavior are also conducted by Safety and Service Quality, sometimes augmented by Service Management and IA.
- Inspections – Walk-throughs of facility grounds, review of documents, review of video, etc.



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- Audits – Formal studies meant to determine the effectiveness and efficiency of a given process.
- Internal Safety Investigations – Bus investigations that result in a fatality, or as directed by the Director of Safety are written and disseminated with Corrective Action Plans. For Rail, REPORTABLE, State REPORTABLE, and Non-REPORTABLE are categories used to denote incidents.
- Compliance Programs – Audits by outside stakeholders and IA.
- Committee Review –ESC and the subordinate District Safety Committees
- Industry Data and Government Sources – FTA Safety Advisories, APTA Standards, National Transit Database, product recalls, etc.
- Customer and public feedback – GCRTA Citizens’ Advisory Board, surveys, public outreach events, public hearings, etc.

Safety Risk Mitigation processes define Safety Mitigations, and CAPs and the Hazard Log track the implementation of said mitigations. Safety Risk analysis tracks whether or not those mitigations were/are successful at managing identified hazards/risk.



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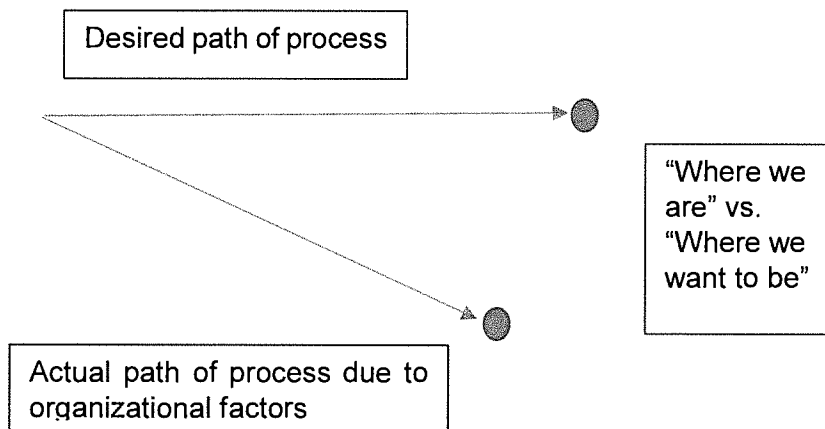
### 4.0 SMS PILLAR 3 – SAFETY ASSURANCE (SA)

#### 4.1 Introduction

GCRTA uses SA to re-enforce and verify risk mitigations are effective and appropriate. SA is used to ensure GCRTA is meeting or exceeding TEAM Goals with regard to OJIs and Preventable Collisions, as well to ensure other processes are followed correctly. SA activities determine if there is sufficient buy-in, allocation of resources, and avoidance of Organizational Drift within GCRTA Safety Culture.

GCRTA SA activities will provide key information for data-driven decision making. The data will validate the effectiveness of GCRTA SRM.

SA will address all Departments, not just Operations. The goal is to avoid “Operational Drift” as illustrated below.



*Illustration 4: Organizational Drift*

SA subcomponent 7 – Safety Performance Monitoring and Measurement

SA subcomponent 8 – Management of Change

SA subcomponent 9 – Continuous Improvement

#### 4.2 Safety Performance Monitoring and Measurement

The *National Public Transportation Safety Plan* is tasked with identifying safety performance measures. This data can be found in the National Transit Database:

**Fatalities** – Total reportable fatalities and rate per total vehicle revenue miles by mode

**Injuries** – total number of reportable injuries and rate per total vehicle revenue miles by mode

**Safety Events** – Total number of reportable events and rate per vehicle revenue miles by mode

**System Reliability** – Mean distance between major mechanical failures by mode



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GCRTA SMS also goes beyond these measures to improve Safety based on GCRTA system attributes.

The goal of Safety Performance Monitoring and Measurement activities is to understand the health of SMS at GCRTA. Finding employees “at fault” is not part of monitoring and measurement.

Data monitoring tools and indicators will be used to understand the health of GCRTA Safety Culture. SMS tasks not only the Safety Department and Risk Management Department to collect and analyze data, but asks each Department/District to know their own data, develop Safety Performance Indicators to measure safety performance, and develop mitigations based on what data shows.

GCRTA SMS engages in the following monitoring activities, with **leading and lagging indicators** where appropriate, to assure safety goals are being met:

- **Monitor safety employee reporting program** – Safety Department personnel will check daily for any calls to the Safety Hotline. Safety Department will provide data on Safety Hotline to relevant Safety Committees when appropriate.
- **Monitor Service Delivery Activities** – Safety will work with Service Quality and Operations to provide live look-ins on operational safety. These activities include revisiting areas of concern derived from previous incidents/investigations, monitoring performance at various facilities, and conducting audits to ensure equipment is in proper working order and policies are being followed. Safety Department will also work with Service Quality to monitor the Riskiest Operators as defined by data provided by outside stakeholders.
- **Monitor Operational and Maintenance Data** – Safety will work with Operations, Fleet, and Maintenance to ensure maintenance logs are accurate, parts are available, and proper procedures are set forth by parts manufacturers are being followed. This can include inviting parts suppliers to GCRTA to verify suggested protocols and procedures are being followed or exceeded.
- **Conduct Safety Surveys** – The SMS Committee will produce and distribute a Safety Culture Survey annually. The survey will ask questions of job function, time on job, and for opinions on various aspects of safety at the respondent’s work location. The data will be collected, analyzed, and presented to the Accountable Executive for Safety, the EMT, Chief Safety Officer, the GCRTA Safety Department, and State Safety Oversight for Rail. The ATU will be asked to participate in development of the survey and to encourage bargaining employees to provide feedback.



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- **Conduct Safety Audits and Inspections** – GCRTA Safety Department will conduct required yearly audits per the BSSPP, RSSPP and/or Agency Safety Plan. Safety will use audits conducted by IA to augment Safety efforts. Audits will be conducted based on emerging risk or due to potential hazards found in data analysis. Inspections will be conducted by Safety, Operations, Service Quality, and IA as a live look-in regarding current attitudes to Safety Culture.
- **Occurrence Log** – An occurrence log will be kept by GCRTA Safety Department. An occurrence is defined as an event without personal injury in which damage to facilities, equipment rolling stock, or infrastructure does not disrupt revenue operations. This log provides opportunity to determine hazards.
- **Safety Investigations** – GCRTA Safety Department will follow guidelines at set forth in AP-002 with respect to performing Safety Investigations. In addition, the Director of Safety can mandate an investigation. The Director of Safety will confer with or take direction from State Safety Oversight personnel if SSO decides to conduct their own investigation or augment efforts of the Safety Department with regard to Rail interests.
- **External Agency and Peer Data** – GCRTA will act on all safety findings/data as presented by State Safety Oversight, FTA, and or NTSB. GCRTA assesses safety information/data presented at relevant peer-based conferences and seminars and will undertake bench-marking activities if current efforts are deemed to be insufficient or could be improved.
- **Quarterly Safety Report** – GCRTA Safety Department will provide a quarterly report to the Accountable Executive for Safety, EMT, Board of Trustees, and State Safety Oversight. The report will provide a concise, detailed account, backed by data, regarding the Safety culture and safety performance of GCRTA. The report will high-light investigations open/closed, audits performed with results, projects to undertake in upcoming Quarters, review of general SMS progress, etc.

### 4.2.1 Performance Measures

GCRTA SMS has identifiable, performance measures that provide an understanding of the GCRTA Safety Culture. Performance Measures are required to be reported based on the guidelines below.



## SMS Framework and Implementation Plan

<b>Time Frame/Business Unit</b>	<b>Data topic</b>
<b>EMT – Monthly</b>	TEAM Goals
<b>Risk Management – Monthly</b>	Collision & Injury Statistics
<b>Safety – Monthly</b>	Rail investigations
	Bus and Paratransit investigations
	Safety observations and inspections
	Occurrence Log
	Safety Hotline calls
	Fire Drill data
	Non-Operations safety data and trends (rest of GCRTA)
<b>Operations – Monthly</b>	Performance Measures (Managers & Supervisors)
	All Districts/facilities will report behavior-based safety findings (STOP program)
<b>Operations – Every Other Month</b>	Top 3 Routes
<b>Operations – Quarterly</b>	Vehicle defect analysis
	OJI Analysis
<b>Training – Quarterly</b>	Trends on most common retrains
<b>As Needed</b>	Security trends & Safety trends (Safety & Security Committee – Board)
	Audits
	Condition of Safety Critical elements of facilities and infrastructure
	Timeliness to complete CAPs and recommendations

*Table 5: GCRTA Safety performance measures*



## SMS Framework and Implementation Plan

To augment the above, GCRTA management has established the following safety performance measure targets. Success or failure to meet the targets are both cause to continuously monitor emerging risk.

Target	2018	2019	2020	2021	2022
Preventable Collisions per 100,00 miles	1.4	1.4	1.35	1.3	1.25
Total Collision Rate	3.5	3.5	3.45	3.4	3.4
Lost Time Injuries per 200,00 hours worked	9.5	9.5	8.5	7.5	7.5
Passenger Injuries per 1,000,000 boardings (new measure)	2.0	2.0	1.9	1.9	1.75

*Table 6: Safety TEAM Goals*

### 4.3 Management of Change

Change is a constant in public transit. Technology improves, vehicle and equipment designs are altered due to better materials, etc. Change, if not instituted properly, can create new hazards or make a safe situation unsafe. GCRTA will identify and assess changes that may introduce new hazards or impact GCRTA's performance.

4.3.1 Configuration Management – The *Plan's* prime objective is to emphasize safety in “the design, construction, maintenance, repair, modification, upgrade or disposal of any part of the GCRTA system and its assets.” This manual ensures that a state-of-good-repair is kept for GCRTA assets and that fiscal responsibility is used in tandem with SMS efforts.

To augment the *Configuration Management Plan*, the *Asset Change Form* is used as a required document that provides for changes to be made and in what form. In addition, all relevant parties will be required to sign off for the change to take effect.

Configuration Management will provide documentation consistency, document changes as they occur, ensure there are accurate drawings related to system changes, and ensure testing of the change does not reveal a new, greater hazard. These rules will provide for enhanced safety, cost savings, maintenance benefits, and ensure there is appropriate control during all phases of a system lifecycle.

Configuration Management will ensure no operations take place where change is to be implemented until an evaluation is made that determines safety impact and needed safety risk evaluations are completed. The change shall be fully supported by the Accountable Executive for Safety or designee with the proper subject matter expertise.

Configuration Management meetings will occur as needed to discuss Change Management and will include all necessary Departments that will be affected by said change.





## SMS Framework and Implementation Plan

Configuration Management will provide GCRTA with an overview of “what we have now” and is it safe based on any modifications.

### 4.3.2 Transit Asset Management Plan and State of Good Repair

TAM is a business model that prioritizes funding based on the condition of transit assets, in order to achieve or maintain transit networks in a state-of-good-repair (SGR). In July 2016, FTA issued a final rule requiring transit agencies to maintain—and document—minimum TAM standards. The new standards will help transit agencies keep their systems operating smoothly and efficiently.

TAM plan must include an asset inventory, condition assessments of inventoried assets, and a prioritized list of investments to improve the SGR of their capital assets.

It is expected that all assets used in the provision of public transit will be included in the TAM Plan asset inventory. This includes (with the exception of equipment) assets that are owned by a third party or shared resources. The inventory must include all service vehicles, and any other owned equipment assets over \$50,000 in acquisition value. GCRTA need to include condition assessment for assets for which they have direct capital responsibility.

GCRTA will report annually to NTD. This submission should include: (1) projected targets for the next fiscal year; (2) condition assessments and performance results; and (3) a narrative report on changes in transit system conditions and the progress toward achieving previous performance targets.

Asset performance is measure by asset class, which mean a subgroup of capital assets within an asset category. The following table shows assets for which performance needs to be reported to the NTD and the measure which will be reported.



## SMS Framework and Implementation Plan

<b>Assets:</b> <i>Only those for which agency has direct capital responsibility</i>	<b>Performance Measure</b>
<b>Equipment:</b> Non-revenue support-service and maintenance vehicles	Percentage of non-revenue vehicles met or exceeded Useful Life Benchmark
<b>Rolling Stock:</b> Revenue vehicles by mode	Percentage of revenue vehicles met or exceeded Useful Life Benchmark
<b>Infrastructure:</b> Only rail fixed-guideway, track, signals and systems	Percentage of track segments with performance restrictions
<b>Facilities:</b> Maintenance and administrative facilities; and passenger stations (buildings) and parking facilities	Percentage of assets with condition rating below 3.0 on FTA TERM Scale

*Table 7: TAM Measures*

GCRTA *TAM Plan* must be updated in its entirety at least every 4 years, and it must cover a horizon period of at least 4 years. The initial TAM plan must be complete by October 1, 2018.

4.3.3 Safety Security Certification – GCRTA uses third parties to assist in the Safety and Security Certification process. A certification process is developed for each project. The Certification process ensure that all phases of each project are carried out according to standard.

#### *4.4 Continuous Improvement/Evaluation of SMS*

SMS activities need to be evaluated and presented as data. To ensure that the SMS is operating effectively and actively improving safety culture, SMS outputs and data need to be part of the Safety Initiative of the *GCRTA Strategic Plan*. The Director of Safety is the “Lead” in presenting this data. Presentation of SMS data determines if SMS efforts are supporting safety-centric TEAM goals and strengthening GCRTA Safety Culture.

SMS committee will also undertake GAP Analysis studies based on what information is gleaned from data.



## SMS Framework and Implementation Plan

### 5.0 SMS PILLAR 4 – SAFETY PROMOTION (SP)

#### 5.1 Introduction

The goal of SP at GCRTA is to encourage safety through effective communication and training. This must be augmented by proactively identifying risk through data analysis.

To promote Safety, GCRTA will adjust safety communication as needed, expressing praise for reaching milestones and accomplishing SMS tasks, and gaining commitment from relevant parties when safety risks have been identified and need addressed.

Safety Training will address not only front-line employees, but Managers/Supervisors, and Executive Management. Training will be up-to-date and provide each level of employee with the tools needed to make decision at one's level.

SP subcomponent 10 – Safety Communication

SP subcomponent 11 – Competencies and Training

#### 5.2 Safety Communication/Culture

The SMS Committee ensures that GCRTA is aware of SMS efforts and the goal and objectives. Safety Department will ensure safety critical information is released to GCRTA through the use of appropriate Safety Committees and the published *Safety Quarterly Report*.

Safety Communication is expressed via *the Safety Management Policy Statement*. This Policy is the backbone of GCRTA commitment to safety.

Safety Communication is meant to flow from the Safety Department and Accountable Executive for Safety. The communication is expected to then flow across the organizational levels horizontally and vertically.

GCRTA will foster a safety culture (taken from National Transportation Safety Board and James Reason work on organizational accidents) that is based on...

Reporting – encourage employees to provide accurate information on known safety hazards

Just – knowing acceptable and unacceptable behaviors whereby employees are rewarded for providing safety information, but are held accountable for deliberate violations and negligence

Flexible – GCRTA can react appropriately given the nature and scale of an event

Professionalism – performing objective, precise, investigations, audits, inspections, and safety studies where the single focus is safety, not blame

Advocacy – Champion safety recommendations



## SMS Framework and Implementation Plan

Leaned – personnel will be made aware of lessons learned and continue to obtain necessary safety training

### 5.2.1 SAFETY MANAGEMENT MATURITY

GCRTA recognizes that principles and effective practices do not happen without sustained systemic change. GCRTA will continue to progress along the safety management maturity continuum:

**Reactive Response:** Agencies at this level have safety processes that are undocumented and in a state of dynamic change, tending to be driven in an ad hoc, uncontrolled, and reactive manner by users or events. This provides a chaotic, unstable, and unsafe environment.

**Regulatory Compliance:** Agencies at this level have safety processes that are repeatable, possibly with consistent results. However, adherence to safety program discipline is due more to demands from outside the agency than being an inherent part of the culture.

**Hazard Analysis Program:** Agencies at this level have defined and documented safety policies and processes that are subject to some degree of improvement over time. Standard processes for hazard analysis are in place and used to establish consistency of safety performance across the agency. Time and resources are increasingly set aside to review and correct safety issues as a priority to the agency's performance.

**Management Accountability Systems:** Agencies at this level manage all hazards using a risk-based approach. In particular, agencies can identify ways to adjust and adapt processes without measurable losses of operation performance or deviations from operational and maintenance requirements. Safety Process Capability is established from this level on. Safety performance and accountability is monitored at all levels of the agency.

**Safety Culture in Action:** Agencies at this level focus on continually improving safety performance by involving the entire agency and integrating safety as a core value and strategic business driver.

GCRTA will continue to increase safety commitment and leadership across the agency, increase the sophistication of safety processes integrated directly into operations and maintenance processes and increase the trust and involvement of the employees to solve critical safety issues.



## SMS Framework and Implementation Plan

### 5.3 Communication Plan

The ability to communicate safety risk information in a timely and professional manner is important for GCRTA SMS to function as intended. All risks reported should:

- Be specific with regard to what the risk is and how it affects GCRTA operations
- Be directed at those who can mitigate the risk and who the risk affects
- Demonstrate any limitations that mitigations will impose
- Based on fact, not fault

The above is not possible unless management encourages and champions voluntary reporting of close calls, near misses, etc. This requirement calls for the continued backing of the *GCRTA Non-Punitive Hazard Reporting Policy* by the Accountable Executive for Safety and the whole of the EMT.

GCRTA Safety will provide safety-related communications that can be distributed to both employees and passengers through GCRTA Marketing that provide best-practices and tips with regard to transit safety.

GCRTA Safety will monitor and report back on relevant safety concerns presented by the Citizens Advisory Board.

GCRTA Safety will partner with GCRTA Labor Relations in order to provide relevant Safety data to ATU Leadership in order to initiate a coordinated Management/Labor response to emerging safety risk.

### 5.4 Competencies and Training

#### Overview

Promotion of safety starts from the moment personnel read and understand a job description and commit to abiding by the rules and values in said description. This is followed by appropriate SMS training at all *New Employee Orientation* sessions. All new employees hired by GCRTA will receive training on:

- *SMS Framework*
- Four pillars of SMS
- Employees Roles and Responsibilities
- *GCRTA Non-Punitive Hazard Reporting Policy*

#### 5.4.1 GCRTA Training Department Role

GCRTA Training will provide personnel to remain actively engaged with GCRTA Department/Districts to provide required technical and safety Training and any training that needs re-certification to maintain current position. It is expected that Department/District leadership will work with GCRTA Training to ensure job-specific training in need of re-certification is completed in a timely manner and cover all relevant topics to safely continue work.



## SMS Framework and Implementation Plan

### 5.4.2 GCRTA Safety Department Role

GCRTA Safety personnel will provide assistance to Department/Districts. Safety assistance will consist of technical and regulatory support to a topic that is deemed relevant by Department/District leadership based on what data is showing with regard to current safety trends. GCRTA Safety will work with outside safety-centric stakeholders to provide subject matter expertise should an identified hazard require such assistance.

GCRTA Safety will have dedicated space at each Operations District (Rail Bus, Paratransit). Safety will work with resident Department/District Business Analysts and Planners to provide accurate, relevant safety data trends that are available to employees and will provide findings of recent investigations in order to avoid repeating unsafe behaviors that can lead to an OJI or a Preventable Collision. Safety will work with Department/Districts to manage, analyze, and mitigate items on a Hazard Log/Action Register.



SMS Framework and Implementation Plan

6.0 SMS IMPLEMENTATION ACTIONS

Action Number	Activity	Due Date
	<b>SMS Pillar 1 – Safety Management Policy (SMP)</b>	
SMP 1	<b>SMS Implementation:</b> Approval and publication of GCRTA SMS Framework and Implementation Plan	9/1/2018
SMP 2	<b>SMS Record Keeping:</b> A record keeping requirement will need to be set up through the GCRTA Records Management Committee. Records include integration activities and any documents that the Accountable Executive and EMT receive in order to monitor GCRTA SMS activities	9/1/2018
SMP 3	<b>Emergency Preparedness:</b> Produce the <i>GCRTA Continuity of Operations Plan</i>	12/31/2019
SMP 4	<b>Minimum Standards for Safety:</b> Rail Standards are in Place. Continue to implement Standards on Bus/Paratransit	10/1/2018
SMP 5	<b>Minimum Standards for Safety:</b> Develop, Publish, and maintain an objectivity policy with regard to audits and investigations	12/31/2018
SMP 6	<b>Minimum Standards for Safety:</b> Develop, implement and maintain an exit conference Administrative Procedure for all audits	12/31/2018
SMP 7	<b>Minimum Standards for Safety:</b> Develop, implement and present to EMT/Board annually detailed risk assessment with corresponding verbiage in each yearly published 4 <sup>th</sup> Quarter Safety Report	1 QTR Yearly
SMP 8	<b>Minimum Standards for Safety:</b> Develop, publish, and maintain a Standard Operating Procedure for Safety-led audits that also includes data-centric indicators.	12/31/2018
	<b>SMS Pillar 2 - Safety Risk Management (SRM)</b>	
	<b>Safety Risk Management Guide:</b> Develop a "how to" guide for GCRTA employees that explains Safety Risk Management (SRM) and Safety Assurance (SA) activities. Provide graphical representations of how SRM and SA progress. Guide will include responsibilities and resources applicable to all level of employees. Provide Hazard Resolution Matrix in order to properly classify risk. Refresh Hazard Reporting Form.	12/31/2019
SRM 1	<b>Enhanced Hazard Identification:</b> Provide ESC and EMT with notable SMS projects completed that reduce risk	Quarterly
SRM 2	<b>Job Hazard Analysis:</b> Codify Job Hazard Analysis project to identify significant safety risks at each facility	12/31/2018
SRM 3	<b>SMS Pillar 3 - Safety Assurance (SA)</b>	
SA 1	<b>Safety Culture Survey:</b> Continue to produce and analyze GCRTA Safety Culture Survey the Fall of each calendar year and provide results to Accountable Executive and EMT	Fall Yearly



SMS Framework and Implementation Plan

SA 2	<b>SMS Committee:</b> Continue activities of SMS Committee to understand emerging risk at GCRTA. Focus will be on developing and adjusting SA mechanisms.	Semi-Yearly
SA 3	<b>Continuous Improvement:</b> Develop process by which GCRTA SMS is audited for SMS compliance through the use of internal and/or external auditors	12/31/2019
SA 4	<b>Safety Performance Measures:</b> Define and enforce collection, analysis, and dissemination of Safety Performance Measures across GCRTA. Safety Performance Measures will be included in the <i>Safety Quarterly Report</i>	12/31/2018
SA 5	<b>Safety Performance Measures:</b> Perform a cost-benefit analysis regarding adding new software/programs to enable more efficient and timely collection of data from the field. Work with IT to determine what if any systems are needed.	12/31/2018
SA 6	<b>Safety Auditing:</b> Enhance Safety Department auditing frequency of Bus and Paratransit modes	03/31/2019
SA 7	<b>Safety Investigations:</b> Refresh TapRoot causal factor taxonomy training for required Safety Department personnel	12/31/2019
	<b>SMS Pillar 4 - Safety Promotion</b>	
SP 1	<b>Safety Space:</b> Obtain dedicated SMS/Safety Department Space at each facility across GCRTA.	10/1/2018
SP 2	<b>Safety Promotion Plan:</b> Develop a Safety Promotion Communication Plan that assures relevant safety messages are reaching internal and external stakeholders. Activities will include: Social Media, Safety Dashboards, Safety outreach throughout Cuyahoga County, and Employee training opportunities	12/31/2018
SP 3	<b>SMS Training:</b> SMS training those with direct oversight of Safety at GCRTA.	07/19/2020
SP 4	<b>Employee SMS guide:</b> Instruct GCRTA personnel on the purpose of the Safety Hotline for reporting safety concerns and reporting close calls.	12/31/2018
SP 5	<b>Safety Competency:</b> Audit ability of GCRTA to competently train employees with regard to Safety and ensure there are processes in place to properly train employees who move within GCRTA or who take on new roles.	06/01/2019





## APPENDIX A: ACRONYMS

ASP – Agency Safety Plan  
BSSPP – Bus System Safety Program Plan  
CEO/GM – Chief Executive Officer/General Manager  
COOP – Continuity of Operations Plan  
CSO – Chief Safety Officer  
EMS – Emergency Medical Services  
EMT – Executive Management Team  
ESF – Emergency Support Function  
FTA – Federal Transit Administration  
GCRTA/Authority – Greater Cleveland Regional Transit Authority  
IA – Internal Audit  
ICC - Integrated Communications Center  
NIMS – National Incident Management System  
NRF – National Response Framework  
NTD – National Transit Database  
NTSB – National Transportation Safety Board  
ODOT – Ohio Department of Transportation  
PPE - Personal Protective Equipment  
RSSPP – Rail System Safety Program Plan  
SA – Safety Assurance  
SMP – Safety Management Policy  
SMS – Safety Management Systems  
SOGR –Stat-of-good-repair  
SP – Safety Promotion  
SQ – Service Quality



## SMS Framework and Implementation Plan

SRM – Safety Risk Management

SSO – State Safety Oversight

TAM – Transit Asset Management

TP – Transit Police



## SMS Framework and Implementation Plan

### APPENDIX B: REFERENCE DOCUMENTS & MATERIALS

2018 CEO/General Manager's Budget

Cuyahoga County Emergency Support Functions 1 and 8

GCRTA Configuration Management Plan

GCRTA Emergency Operations Plan

GCRTA Rail and Bus System Safety Program Plans

FTA SMS Framework document

FTA TRACS report 12-02

ODOT SSO Program Standard (Rail)

TSSP Books for classes FT00543, FT0544, FT00533, FT0435, FT00432, FT00456

GCRTA Strategic Plan 6D material

GCRTA System Security and Emergency Preparedness Plan (SSEPP)

National Transportation Safety Board material

Various proposed SMS Integration Plans

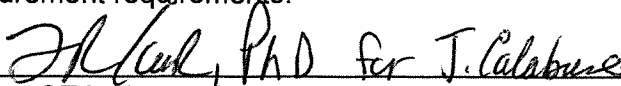


Greater Cleveland Regional Transit Authority  
**STAFF SUMMARY AND COMMENTS**

<b>TITLE/DESCRIPTION:</b> APPROVING THE AUTHORITY'S SAFETY MANAGEMENT SYSTEMS (SMS) FRAMEWORK AND IMPLEMENTATION PLAN	<b>Resolution No.:</b> 2018- 81
	<b>Date:</b> August 16, 2018
	<b>Initiator:</b> Safety Department
<b>ACTION REQUEST:</b> <input type="checkbox"/> Approval <input type="checkbox"/> Review/Comment <input type="checkbox"/> Information Only <input type="checkbox"/> Other _____	

- 1.0 **PURPOSE/SCOPE:** This action will approve the Authority's Safety Management Systems (SMS) Framework and Implementation Plan. Under Federal Transit Administration (FTA) regulations, an Agency Safety Plan must be approved by the transit agency's governing board by July 20, 2020. The approved SMS Framework provides a guide on how to begin building the Agency Safety Plan so the deadline can be met.
- 2.0 **DESCRIPTION/JUSTIFICATION:** The SMS Framework is the Authority's business plan for managing safety in a proactive, risk-based manner. The SMS Framework provides structure for reporting, analyzing, and mitigating/reducing/eliminating emerging risk. The SMS Framework makes it known that Safety concerns carry the same weight and importance of other concerns and receive appropriate financial resources. Departments/Facilities throughout the Authority are required to work with Safety personnel to remedy safety concerns. Safety will be embraced by Authority leadership from the top, down starting with the Accountable Executive for Safety, the CEO/General Manager.
- 3.0 **PROCUREMENT BACKGROUND:** Does not apply.
- 4.0 **DBE/AFFIRMATIVE ACTION BACKGROUND:** Does not apply.
- 5.0 **POLICY IMPACT:** Adoption of the Resolution will enable the Authority to comply with 49 CFR Parts 672 and 673.
- 6.0 **ECONOMIC IMPACT:** Failure to adopt the Resolution may result in failure to meet the deadline of an acceptable, thorough Agency Safety Plan by the July 20, 2020 deadline.
- 7.0 **ALTERNATIVES:** Disapproval of the resolution would impact and delay compliance with FTA regulations.
- 8.0 **RECOMMENDATION:** The plan was discussed at the Audit, Safety Compliance, and Real Estate Committee meeting August 7, 2018 and reviewed and referred to the full Board for approval. It is recommended that the resolution be approved in partial fulfillment of 49 CFR Parts 672 and 673.

Recommended and certified as appropriate to the availability of funds, legal form and conformance with the Procurement requirements.

  
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 CEO, General Manager/Secretary-Treasurer