



# Agency Safety Plan


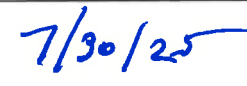
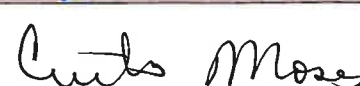
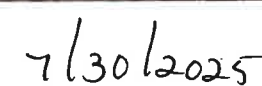


SAN JOAQUIN REGIONAL TRANSIT DISTRICT (RTD)

421 East Weber Avenue • Stockton, California 95202

**Transit Agency Information**

Modes of service covered:	Fixed route, deviated-fixed route, commuter service, mobility on demand, VanGo, and complementary paratransit service
Modes of service provided:	<ul style="list-style-type: none"><li>• Fixed route: Directly operated.</li><li>• Commuter service: Directly operated.</li><li>• Mobility on Demand/Paratransit: Contracted, Ryde Trans Co.</li></ul>
FTA funding type:	<ul style="list-style-type: none"><li>• Section 5307 Urbanized Area Formula Program Grant</li><li>• Congestion Mitigation and Air Quality (CMAQ)</li><li>• Section 5311 Rural Area Formula Grant Program,</li><li>• Section 5339 Bus and Bus Facilities Formula Grant Program</li><li>• Section 5339 Bus and Bus Facilities and Low and No Emission Competitive Grant Programs</li></ul>
Safety Director	Curtis Moses, Safety, Security, and Risk Management
Accountable Executive	Alex Clifford, Chief Executive Officer

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002		Update for 2022
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004		Update for 2025
Recurring Action Items		Frequency *
1. Review changes in industry standards and FTA guidance to determine the current document.		Annual
2. Review and modify this plan to ensure it is consistent with workplace practice and industry standards set forth by the safety management system.		Annual
a. Review this plan and provide comments on revisions to the Safety Director in March.		Annual
3. Review and modify when the approach to mitigating safety deficiencies is determined to be ineffective; when significant changes to service delivery are made; when new processes or procedures that may impact safety are introduced; when resources available to support SMS are changed or reprioritized; and when significant changes are made to the organizational structure		Annual
4. Review and approve all revisions and changes to the Agency Safety Plan		Annual
5. Review and approve all changes to the Agency Safety Plan on board meeting day.		Annual
<p><i>* In the event of personnel changes to the Safety Director or Accountable Executive or an immediate need/urgent rated hazard that results in the fatality, the Safety Director or the Accountable Executive will call a meeting with the executive team members to recommend changes before the annual review process.</i></p>		
Approval Signature of Accountable Executive		
This Agency Safety Plan meets all requirements in 49 C.F.R. part 673. It addresses all applicable requirements and standards outlined in FTA's Public Transportation Agency Safety Program and the National Transportation Safety Plan.		
 Alex Clifford—Chief Executive Officer (CEO)		 Date
Certification of Compliance with 49 CFR Part 673		
 Name of Individual that Certified		 Date





# Agency Safety Plan

## San Joaquin Regional Transit District

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## Introduction

San Joaquin Regional Transit District (RTD) is the regional transit provider for San Joaquin County. RTD is a political subdivision of the State of California, organized and existing under the San Joaquin Regional Transit District Act, as found in the California Public Utilities Code, commencing with Section 50000. Established in 1963 as the Stockton Metropolitan Transit District (SMTD), SMTD began providing service in 1965. With the expansion of its service area to all of San Joaquin County and the Bay Area, SMTD became the San Joaquin Regional Transit District in 1994. RTD is a special district and fiscally independent of the City and San Joaquin County as far as neither makes budget appropriations to RTD.

RTD offers thirty-two (27) routes that serve the Stockton Metropolitan Area (SMA), including Bus Rapid Transit (BRT), seven (7) Metro Hopper SMA deviated fixed routes, seven (7) Intercity and Countywide deviated fixed routes, two (2) interregional commuter fixed routes, SMA Dial-A-Ride (DAR) service for persons that meet the ADA eligibility criteria, and county-wide general public on-demand service, called Van Go!.

In fiscal year 2025, RTD provided 2.5 million passenger trips for convenient connections between its routes and services. RTD has four stations in south, central, north, and southeast Stockton: Downtown Transit Center, Mall Transfer Station, Hammer Transfer Station, and Union Transfer Station, respectively.

RTD has 152 revenue vehicles (97 buses, 34 cutaways), 307 employees (in administration, transportation, and maintenance), and 16 contracted security employees (Platinum) working in conjunction with RTD employees in its three Stockton operations and administrative locations: County Transit Center, Downtown Transit Center, and Regional Transportation Center.

## Safety at RTD

Safety is a priority of RTD's core values: "We prioritize safety at the forefront, ensuring a secure and responsible atmosphere for our employees, customers, and the community around us." Because safety affects all levels of its operations, RTD is establishing its Agency Safety Plan (ASP) with a Safety Management System (SMS) framework to ensure that the proper safety activities are performed correctly and routinely and that these activities have the impact RTD expects. Developed by the Federal Transit Administration (FTA) guidance, the ASP is driven strategically by applying resources to risk. As a multi-directional flow of information, data-driven, and organization-wide collaborative approach to managing safety risks and assuring effective "safety risk reduction programs," the SMS approach emphasizes proactive safety performance rather than a reactive, compliance-only approach. This plan ensures that RTD and its contractors have the organizational infrastructure necessary to support decision-making regarding resource allocation at all levels. It also gathers the safety-related processes and components that RTD already has and organizes them according to the SMS framework.

RTD's primary mission is to provide its customers with safe, reliable, and efficient transportation services. To accomplish its mission and to ensure a safe and responsible environment for its employees, customers, and community, RTD will strategically apply its available resources to minimize safety risks. The ASP ensures that RTD decision-makers will have timely information regarding safety risks so they can proactively address them before incidents occur.

RTD has a Safety department to gather information and promote a safety culture. The Safety department's motto is "Ten fingers, ten toes. The way you came to work is the way you go home." The Safety department focuses on gathering and using data to anticipate future risks, mitigate potential hazards, and prevent safety-related incidents to reach its safety goals. In addition to the Safety department's activities, RTD management uses TransTrack to monitor performance and evaluate Key Performance Indicators (KPI) regularly to ensure that RTD is meeting the goals that it has set.

## Purpose

The ASP describes FTA's SMS requirements to link different safety activities through formal processes and RTD's implementation of processes to satisfy the requirements. The process asks and answers the following questions:

- What are our most serious safety concerns?
- How do we know this?
- What are we going to do about it?

The answers to these questions identify risk areas and guide RTD in creating strategies to minimize exposure to unsafe conditions. It also explains the function of the various components and subcomponents of the SMS so that RTD leadership has guidance to set safety performance targets, directly impacting RTD's risk mitigation investments.

## Scope and Objectives

The ASP defines the management's commitment to establish and meet safety performance targets in the following areas: Operations, Facilities, Maintenance, new capital projects, and management controls (e.g., policies & procedures, practices, plans, communications, data management).

### Goals for this document:

- Implement SMS to meet RTD's safety performance targets and objectives.
- Establish the meeting or committee structure necessary for RTD to ensure safety information moves multi-directionally across the agency.
- Communicate roles and responsibilities to all relevant individuals.
- Review and refine protocols, procedures, and work instructions to verify adherence to requirements and current conditions.
  - *Collision and Incident Investigation Plan (CIIP)* to investigate all collisions, fires, injuries, and near-misses.
  - *Workplace Hazards Protocol* to promptly identify, analyze, and resolve all hazards.
- Meet or exceed federal and state safety requirements in all areas of safety.
- Consider safety and security issues as critical elements of all project phases, including preliminary engineering, final design, procurement, construction, testing, operations, and maintenance.
- Enforce safety procedures and requirements that integrate safety into decision-making and operations (e.g., ensure projects have safety sign-off before proceeding).

- Evaluate the safety implications of all proposed system modifications before implementation.
- Evaluate and verify operational readiness of new bus systems.

#### **ANNUAL ACTIVITIES FOR SPECIFIC OBJECTIVES AND TARGETS**

To move from reactive thinking (responding to events after the fact) to proactive (actively seeking to identify and address hazards and threats before an event) and even predictive thinking (identifying conditions and trends for potential issues), RTD shall set safety-specific objectives and targets annually. These measurable objectives will drive accountability and fiscal responsibility and clarify what RTD must focus on to meet its safety goals for the upcoming fiscal year. The Accountable Executive will schedule this meeting with all managers, executive members, and the safety, security, and risk department, and the human resource director will attend. The planning document will include information gathered in the following process:

1. The Accountable Executive hosts a "Year in Review" meeting with managers, executive members, and the Chief Safety Officer to discuss safety-related strategic goals, objectives, targets, and initiatives.
2. The goals, objectives, targets, and initiatives established at the meeting will be brought before the Safety department during their next regular safety meeting so that they may brainstorm and set specific safety performance objectives and targets as they relate to the established strategic goals and initiatives.
  - a. Safety performance objectives and established targets must be SMART—Specific, Measurable, Attainable, Relevant, and Time-bound to get the most out of the safety system process.
3. At the beginning of the fiscal year, in July, the safety performance objectives and targets are set for the following year. The appropriate tools for gathering KPIs (e.g., Transtrack, SugarCRM) are set to measure the success of the targets. The data should be reviewed during quarterly Safety Committee meetings.
4. The Safety, Security, and Risk Management Director and the Safety Committee will annually document recommendations for capital and operating investments and assess SMS procedures at the end of October and November. These recommendations will be submitted as part of the annual operating and capital requests due to finance in January for the following fiscal year. These requests are ultimately reviewed by the executive team and approved by the board.

## Safety Performance Measures and Targets

(based on the safety performance measures established under the NPTSP. Vehicle Revenue Miles= VRM)

Modes of Transit Service	Major Event	Major Event Rate/VRM	Collision Rate/VRM	Pedestrian Collision Rate/VRM	Vehicular Collision Rate/VRM	Fatalities	Fatality Rate/VRM
NTD: Motor Bus (Fixed Route)	1	0.004	1.36	0	1.11	0	0
NTD: Commuter Bus (Commuter Service)	0	0	0.036	0	0.013	0	0
NTD: Demand Response (Mobility on Demand)	0	0	0.046	0	0.05	0	0
NTD: Demand Response (ADA/Paratransit)	0	0	0	0	0	0	0

Fixed VRM=2,467,183 Commuter VRM=300,698 - DR VRM=200,839- ADA VRM=406,927

Modes of Transit Service	Transit Worker/Contractor Fatality Rate/VRM	Injuries	Injury Rate/VRM	Transit Worker/Contractor Injury Rate/VRM
NTD: Motor Bus (Fixed Route)	0	5	0.020	0.012
NTD: Commuter Bus (Commuter Service)	0	1	0.003	0
NTD: Demand Response (Mobility on Demand)	0	2	0.01	0
NTD: Demand Response (ADA/Paratransit)	0	0	0	0



Modes of Transit Service	Assaults on Transit Workers	Assaults on Transit Workers Rate/VRM	System Reliability
NTD: Motor Bus (Fixed Route)	2	0	20,222
NTD: Commuter Bus (Commuter Service)	0	0	33,410
NTD: Demand Response (Mobility on Demand)	0	0	33,473
NTD: Demand *Response (ADA/Paratransit)	0	0	0*

\*San Joaquin Regional Transit contracts with RydeTrans for Demand response (ADA/Paratransit) services. RydeTrans reported no major system failures for FY25.

### Safety Performance Target Coordination

RTD will make its safety performance measures available to Caltrans and SJCOG to aid in planning. The Accountable Executive will provide target information annually and/or whenever changes are made to safety performance targets. To the maximum extent practicable, the Accountable Executive will coordinate with Caltrans and SJCOG to select state and local safety performance targets.

### Voluntary Safety Standards

RTD has installed safety barriers on the entire revenue bus fleet to protect the Operators from assaults. RTD recognizes this proactive approach to mitigate "Transit Worker Assaults."

RTD has installed "Mobil Eye" technology on 64 revenue buses for pedestrian collision avoidance. This new technology was installed to mitigate safety risk incidents regarding pedestrian safety.

## Safety Management System Components



The graphic above illustrates how the various components of the SMS work together to provide an effective feedback system to ensure safety. The chart below shows the multiple subcomponents that fit into the element. The most updated documents related to the SMS (as outlined in the components below) may be found on RTD's SharePoint in the Safety and Risk's [SMS components](#) folder.

<b>Safety Management Policy</b> <ul style="list-style-type: none"> <li>• <a href="#">Safety Management Policy Statement</a></li> <li>• <a href="#">Safety Accountabilities and Responsibilities</a></li> <li>• <a href="#">Integration with Public Safety and Emergency Management</a></li> <li>• <a href="#">SMS Documentation and Records</a></li> </ul>	<b>Safety Assurance</b> <ul style="list-style-type: none"> <li>• <a href="#">Safety Performance Monitoring and Measurement</a></li> </ul>
<b>Safety Risk Management</b> <ul style="list-style-type: none"> <li>• <a href="#">Safety Hazard Identification</a></li> <li>• <a href="#">Safety Risk Assessment</a></li> <li>• <a href="#">Safety Risk Mitigation</a></li> </ul>	<b>Safety Promotion</b> <ul style="list-style-type: none"> <li>• <a href="#">Safety Communication</a></li> <li>• <a href="#">Competencies and Training</a></li> </ul>

## Safety Management Policy

### SAFETY MANAGEMENT POLICY STATEMENT

The foundation of the ASP is that this subcomponent defines and ensures RTD managements and Board of Directors documented commitment to meeting established safety objectives and safety performance targets. This document is stored on SharePoint.

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### SAFETY MANAGEMENT POLICY SAN JOAQUIN REGIONAL TRANSIT DISTRICT

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Safety is a core value at the San Joaquin Regional Transit District (RTD). RTD is committed to creating a safe and responsible environment for our employees, our customers, and our community by developing, implementing, maintaining, and constantly improving processes to achieve the highest level of safety performance to meet or exceed established standards.

#### **A. Responsibility/Accountability**

RTD's Safety Management Policy statement applies to employees and to every aspect of RTD's activities. A positive safety culture includes ownership by all employees to identify and correct deficiencies at every level; every employee is accountable for delivering the highest level of safety performance, starting with the CEO.

#### **B. Policy Goals**

In support of our strategic initiative to "create a safe and responsible environment for our employees, our customers, and our community," RTD is committed to the following:

- ☐ **Support** safety management through allocating appropriate resources to promote an organizational culture that fosters safe practices and actively manages safety.
- ☐ **Encourage** effective employee safety reporting and communication through the open door policy and the SugarCRM software, which allows reporting safety conditions directly to senior management.
- ☐ **Integrate** the management of safety among the primary responsibilities of all managers and employees.
- ☐ **Clearly define** for all staff their accountabilities and responsibilities for the delivery of RTD's safety performance and the performance of our safety management system.
- ☐ **Establish and operate** hazard identification, analysis, and safety risk evaluation (as outlined in the *Workplace Hazards Protocol*) in order to eliminate safety risks or consequences of hazards which may result from RTD's operations or activities.
- ☐ **Ensure** that no action will be taken against any employee who discloses a safety concern in accordance with the *Workplace Hazards Protocol*, unless disclosure indicates, beyond any responsible doubt an illegal act, gross negligence, or a deliberate or willful disregard of regulations or procedures.
- ☐ **Comply** with and whenever possible exceed legislative and regulatory requirements and standards.
- ☐ **Ensure** that sufficient skilled and trained staff are available to implement safety management processes.
- ☐ **Ensure** that all staff are provided with adequate and appropriate safety-related information and training, are competent in safety management matters, and are assigned only tasks commensurate with their skills.
- ☐ **Establish and measure** RTD's safety performance against realistic and data-driven safety performance indicators and safety performance targets.
- ☐ **Continually improve** RTD's safety performance through management processes that ensure appropriate safety management action is taken and is effective.
- ☐ **Ensure** externally supplied systems and services support RTD's safety performance standards.

Working proactively towards identifying and reducing the existence of hazards and risk in the workplace and our system, RTD implemented a Safety Management System (SMS) to prevent accidents, reduce risk of injury, and minimize damage to property and equipment.

As the Accountable Executive for all operations and activities, I will ensure that resources are available to ensure our SMS is robust and successful. RTD executives, managers, employees, and contractors will take steps to prevent workplace incidents and injuries, providing support of safety initiatives, and encourage employee communication in order to achieve a safer, healthier workplace. I hold executives, Managers, employees, and contractors accountable for safety performance.

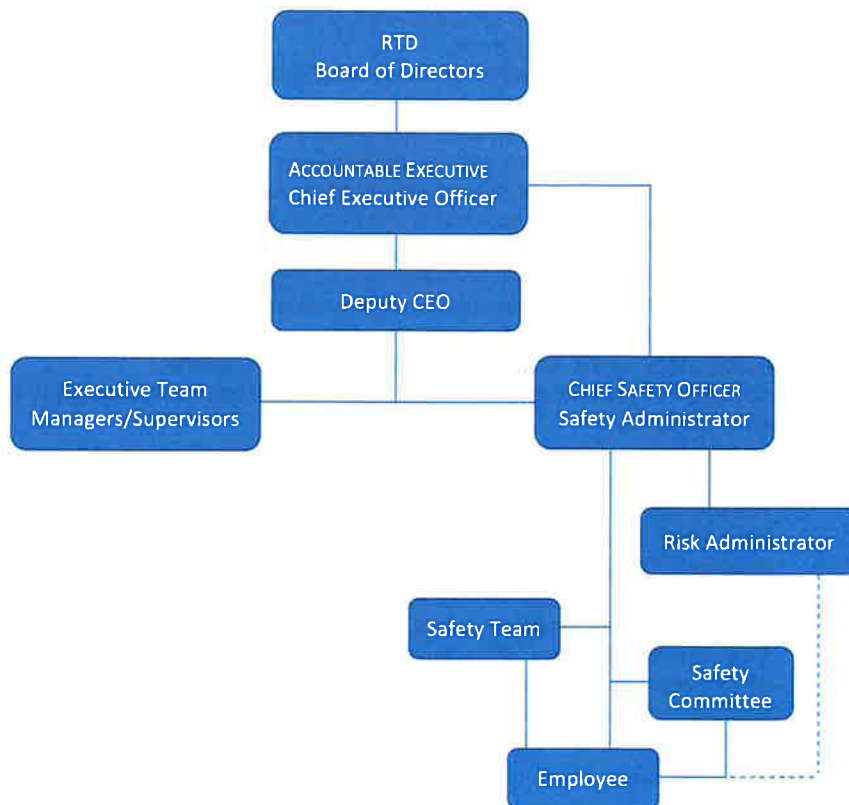
The SMS is managed under my authority by the Chief Safety Officer who reports directly to me. All levels of management and all employees are accountable for the delivery of the highest level of safety performance, starting with the CEO.

### **SAFETY MANAGEMENT POLICY STATEMENT COMMUNICATION**

The Safety, Security, and Risk Management Director, supported by the Accountable Executive, communicates the Safety Management Policy Statement to all RTD employees through New Hire Orientation and employee refresher training. The Policy will be communicated to the contractors upon annual update (or when changes occur in the plan).

### **SAFETY AUTHORITIES, ACCOUNTABILITIES, AND RESPONSIBILITIES**

While safety is everyone's responsibility, this subcomponent defines the accountability structure and identifies safety-related roles and responsibilities.





- **Board of Directors** (five-member board): Appoint CEO and Legal Counsel; establish policy; oversee RTD decisions (including safety-related decisions) of the Accountable Executive; provide governance of RTD.
- **Accountable Executive—CEO:** Has the ultimate responsibility for safety performance, carrying out the ASP and Transit Asset Management (TAM) Plan, and control over the direction of human and capital resources needed to develop and maintain both plans; ensure safety concerns are considered in the ongoing budget planning process; ensure that the SMS is effectively implemented throughout the system; ensure necessary action is taken to address substandard performance of the SMS; establish transparency in safety priorities for Board of Directors and employees; ensure safety policy is appropriate and communicated throughout the agency; make balanced decisions regarding safety and risk within operations and planning; report safety emergency, updates, and concerns to the Board of Directors.
- **Safety, Security, and Risk Management Director (Chief Safety Officer / Safety Administrator):** Holds a direct line of reporting to the Accountable Executive, manages SMS implementation plan on behalf of the accountable executive; establishes guidance on the level of acceptable safety risk with the accountable executive; directs hazard identification and safety risk evaluation; monitor mitigation activities; investigate safety and security events to identify preventability; report and recommend safety hazard resolutions and vulnerabilities to the CEO, executive staff, and managers; provide periodic reports on safety performance to the Board; maintain safety; plan and organize safety training; direct collection and analysis of safety information; advise senior management on safety matters; actively support and promote the SMS; assist in ensuring that resources are available to achieve the outcomes of the SMS; continually monitor their area of SMS responsibility.  
Handles insurance matters for the transit agency. (Excluding Worker Compensation insurance and Employment Risk Management Authority Insurance)
- **Executive Team:** Support and identify resources that focus on safety; ensure staff comply with the SMS processes and procedures; assist in ensuring that resources are available to achieve the outcomes of the SMS; recommend safety resolutions to Accountable Executive and direct safety resolutions to superintendents/managers, administrators, and supervisors in their respective departments.
- **Managers, administrators, and supervisors:** Review submitted safety concerns and suggestions; promote safety at various safety events; respond to safety concerns and follow up with staff as defined by hazard levels; plan and organize safety training; reinforce safety requirements of their employees; train and communicate with employees to mitigate hazards; uphold and promote the SMS; ensure staff complies with the SMS and PPE processes and procedures.
- **Safety department:** Review submitted safety concerns and suggestions; promote safety at various safety events; respond to safety concerns and follow up with staff promptly; monitor mitigation activities; actively conduct inspections and audits for deficiencies; plan and organize safety training; develop safety performance objectives and targets; recommends safety resolutions to Safety, Security, and Risk Management Director, Executive team, and superintendents/managers.
- **Safety Committee:** Focus on safety awareness from an operations standpoint; bring up any safety issues related to workplace hazards, accidents, and fatigue; recommend

workplace safeguards and prevention; have direct access to the members and resources of the Safety department.

- **All employees:** Participate in safety activities; report safety concerns and promote a safety culture; fulfill and comply with the safety requirements of their positions and support the implementation of program objectives; identify and report hazards or potential hazards to their direct supervisor or the Safety department.

#### **EMPLOYEE SAFETY REPORTING—WORKPLACE HAZARD PROTOCOL**

RTD has a formal safety reporting process—Workplace Hazard Protocol—that allows its employees to voluntarily report any safety issues, conditions, or concerns they may see during their day-to-day delivery of transit services (The protocol will be updated to include contractor employee safety reporting). This voluntary safety reporting program is separate from RTD’s mandatory reporting requirements for accidents and incidents.

The Workplace Hazard Protocol clarifies:

- What to report and how to report.
- What managers should do when employees report safety concerns.
- How reports are documented.
- How employees will receive feedback about the results of their reports.

The Workplace Hazard Protocol addresses the following:

- Who is responsible for developing and managing the employee safety reporting program?
- What is a timely response to employee safety reports?
- How does the agency provide feedback to employees on the action(s) taken to address the reported safety issue, condition, or concern?
- What is investigating reported safety issues, conditions, or concerns for causal or contributing factors?
- How does the transit system document and review safety issues, conditions, or concerns to determine if a hazard exists?
- How is the hazard entered into the safety risk management process if the issue is determined to be a hazard?

#### **INTEGRATION WITH PUBLIC SAFETY AND EMERGENCY MANAGEMENT**

This subcomponent ensures that external and internal programs have input and output from the SMS to integrate RTD’s safety management system with its public safety and emergency management procedures.



This subcomponent outlines the various internal and external programs that may affect safety management and procedures that support the transit agency’s public safety and emergency management activities:

- **Public Safety:** RTD uses private security to handle routine, day-to-day public safety for the transit system. RTD's Safety Officer meets daily with contracted security regarding safety and security concerns and outstanding issues.
- **Procedures for Internal Emergency Management and Coordination:** RTD maintains an [Emergency Guide](#) accessible to all employees to respond to emergencies (e.g., earthquakes, fires, floods, active shooter, bomb threats). The [Emergency Action Protocol](#) provides specific instructions for staff responsible for personnel accounting during an emergency or evacuation situation. The [Emergency Communications Plan](#) outlines the communication and coordination of information in an emergency. In its [Operations Evacuation Work Instructions](#), RTD identifies and describes the coordination necessary for dealing with emergencies and abnormal operations with specific instructions for each facility.
- **Emergency Response Planning, Coordination, and Training:** Major incidents—such as bus accidents, fires, floods, violent crime, and terrorist attacks—present significant challenges for public transit agencies. RTD is committed to ensuring emergency preparedness by developing and sustaining relationships with external public safety entities.

Recognizing that safety, security, and emergency preparedness includes not only the system (e.g., employees, facilities, passengers, and operations) but also local responders, RTD aims to develop an integrated emergency response plan in conjunction with the County and local emergency responders that will ensure coordination in response to and recovery from significant emergency incidents.

RTD coordinates with local first responders to provide training for their respective staff (e.g., dispatch training, active shooter training, SWAT team familiarization on RTD buses, and Sheriff's Department's K-9 training).

Each RTD facility must maintain up-to-date, facility-specific emergency evacuation work instructions (see Operations Evacuation Work Instructions) and provide related training to personnel. To test RTD's preparedness level, RTD conducts bi-annual evacuation drills for each significant facility. In addition, emergency response tabletop drills and full-scale exercises are performed as needed.

- **Coordination with Other Agencies:** RTD works with local agencies (e.g., Altamont Commuter Express (ACE) Rail, Amtrak, Stockton Airport, etc.) in tabletop and disaster response scenarios. In 2014, RTD signed a formal agreement with other public transit agencies (TransMAC) to provide mutual transit assistance during emergencies. TransMAC facilitates rapid, short-term deployment of emergency support (personnel, equipment, materials, and other associated services) before, during, and/or after an incident or pre-planned event amongst its membership.

**ASP AND SMS DOCUMENTATION AND RECORDS**

This subcomponent ensures that effective processes are documented to complete specific tasks safely to satisfy federal, state, and local requirements (as applicable) and exceed industry safety standards. Per FTA requirements, RTD will keep records related to implementing its safety plan for at least three years to coincide with state and federal annual and triennial reviews. All documents are available to FTA or other federal or state (e.g., MPO) entities upon request.

A paper copy of the prior three years' ASP will be stored in a filing cabinet in the Safety department, and the digital copies will be stored on SharePoint.

The digitally stored official files will be a "read-only" PDF; editable versions for future revisions are not official copies. Access can only be granted from the administrator (s) who oversees the SharePoint repository.

Per RTD's document management process, each department's superintendent or manager is responsible for documenting procedures and work instructions to ensure tasks are completed safely and following state and federal regulations. It is, therefore, the responsibility of all RTD departments to not only implement necessary changes in safety practices but also to maintain up-to-date documentation in the form of procedures or work instructions about the operation and services provided by the department.

All personnel must remain aware and current regarding the rules, regulations, procedures, and/or protocols related to their departments, job classifications, and RTD.

The general responsibility of personnel and departments concerning RTD's safety process documentation is as follows:

- a. Department superintendents/managers shall thoroughly evaluate all proposed changes and modifications to existing and new documents used by their departments.
- b. Department superintendents/managers shall ensure all applicable personnel and departments are notified of all changes and modifications made to existing documents and the issuance of new documents.
- c. Each department shall maintain accurate procedures, work instructions, documentation, files, and document libraries of all documents about the operations and services of the department and the performance of job duties.
- d. Department superintendents/managers shall ensure all employees and contractors under their supervision receive the training necessary to familiarize staff with the requirements of updated, revised, and new documents as applicable to ensure safety.
- e. All new employees receive safety training, including orientation on the Safety Management Policy Statement.
- f. The updated Safety Management Policy Statement is posted on SharePoint and on the information boards at all RTD facility locations.
- g. All superintendents/managers must train their employees in any updates and changes to the Safety Management Policy. Superintendents/managers will receive



training from the Safety Administrator on the ASP, updates, and changes annually unless immediate attention is needed.

#### Tools Required for day-to-day SMS operation

RTD uses TransTrack, an industry-standard business intelligence solution, to transform volumes of data into meaningful information for executives to use in developing strategies, plans, or immediate actions to ensure optimal operations and performance.

Reports can be generated monthly, quarterly, or annually to show improvements in the performance measure targets identified. Some of the reports currently being produced include:

- Collisions systemwide by month
- Collisions systemwide 5-year historical view
- Collisions by the service provider by month
- Collisions by service provider 5-year historical view
- Collisions systemwide—preventable vs. non-preventable
- Collisions systemwide by service provider—preventable vs. non-preventable
- Collisions systemwide by type
- Collisions by the service provider—preventable by type
- Collision by the service provider—preventable by cause
- Employee injuries by fiscal year
- Employee injuries by the department for the current year versus the prior year

The Risk Administrator gathers and organizes the data so that it is useful for the Safety Officer and executive staff to make safety decisions. The usable data is presented to executive staff quarterly and annually to the Board of Directors.

So that RTD may have customer feedback on its safety performance, it uses SugarCRM, a customer relationship management software, to track customer comments and complaints about risk and safety. RTD is implementing SugarCRM to track safety inspections and hazards.

#### The Management of New or Revised Safety Requirements (regulatory or otherwise)

To ensure accountability in safety processes, RTD documents its safety protocols, procedures, and work instructions to complete specific tasks safely, in compliance with regulations, and accordance with industry's best practices. These documents are stored on RTD's SharePoint within applicable departments' sites: Safety and Risk, Maintenance, Facilities, and Operations.

#### Activities for Documentation of SMS Implementation

To document the activities for SMS implementation, the Risk Administrator and Safety Officer shall prepare annually a Safety Performance Management planning document that outlines the following:

- RTD's Safety Performance Targets
- SMART Objectives (created based on the measurable targets)
- Specific safety performance indicators (both leading and lagging) and relevant, measurable targets

This document will include the previous year's safety performance measures and targets and create SMART safety objectives for the following year. Documenting previous performance data will assist executive staff in making decisions affecting RTD's safety systems.

## Safety Risk Management

RTD uses the safety risk management process as a primary method to ensure the safety of its operations, passengers, employees, vehicles, and facilities. It is a process wherein hazards, and their consequences are identified, assessed for potential safety risks, and resolved in a manner acceptable to transit leadership. This process allows RTD to carefully examine what could cause harm and determine whether RTD has taken sufficient precautions to minimize the damage or if further mitigations are necessary.

This component outlines the processes, activities, and tools RTD uses to identify hazards, assess safety risks in operations, and incorporate mitigations to eliminate safety risks. These processes function together to help RTD's managers/supervisors, and the Safety department determine what faults in the system can cause harm and whether RTD has taken sufficient precautions to minimize the damage or if further mitigations are necessary. This component of the SMS also provides data that is critical for safety decision-making.

Even before applying the SMS framework to guide all safety practices, RTD had already implemented the [Workplace Hazards Protocol](#) following CalOSHA requirements and industry standards to identify and mitigate safety concerns. It outlines how hazards are addressed and ensures the process and resolution are adequately documented. Each department assesses risks to reduce them immediately when possible. When immediate mitigation is impossible, the Safety department takes the reported hazard, assesses the risk level, and prioritizes mitigations accordingly. To address hazards before they escalate into incidents or accidents, this protocol uses proactive hazard identification (e.g., employee safety reporting) and responsive hazard identification (e.g., investigations of incidents and accidents and monthly safety inspections).

RTD monitors contractors to ensure they follow proper safety risk management processes and procedures for hazard identification, risk assessment, and risk mitigation. The contractors' policies, methods, and procedures are also on file.

<b>HAZARD OR SAFETY CONCERN IDENTIFIED</b> Hazards and safety concerns can be identified by any RTD personnel (including contractors) as well as passengers and the general public.	
<b>PROACTIVE</b> <b>HAZARD IDENTIFICATION</b>	<b>RESPONSIVE</b> <b>HAZARD IDENTIFICATION</b>
<b>HAZARD OR SAFETY CONCERN REPORTED</b> Reported according to the workplace hazard protocol using the hazard report form and are formally documented by the risk administrator. Supervisors and managers who have been verbally notified are responsible for taking corrective actions immediately whenever possible.	<b>MAKE SAFETY INSPECTION MONTHLY</b> In accordance with the workplace hazards protocol, the safety team performs monthly safety inspections of facilities, bus stops, bus routes.
<b>RESPOND TO REPORTED HAZARDS</b> Manager/supervisor shall ensure hazards are corrected or controlled immediately so that conditions are safe for all.  Must take corrective actions within two business days of receiving hazard report form if immediate corrective action is not possible;  Document actions taken on hazard report form and forward to safety team	<b>IDENTIFY HAZARD</b> Use the hazard identification review form to identify hazard.
<b>MAKE HAZARD ASSESSMENT</b> Safety team assesses root cause of hazard; evaluate severity and probability factors; determine corrective actions assess priority	<b>ASSESS PRIORITY</b> Follow the hazard assessment information on the hazard identification review form to assess the priority of the hazard and recommend corrective action accordingly.
<b>RESOLVE HAZARDS</b> Assume risk or implement corrective action to eliminate or control; document actions taken.	
<b>EVALUATE HAZARD CORRECTION</b> Monitor corrective actions for effectiveness and provide feedback to reporting party.	

### **SAFETY HAZARD IDENTIFICATION**

All subsequent safety risk management activities are contingent on effectively identifying sources for hazards and the processes to obtain information on hazards. This subcomponent lists RTD's formal safety hazard identification processes in the NPTSP and PTASP categories. Sources for hazard identification include:

- **Employee safety reporting**
  - *Hazard Report* form
  - *Pre-trip Inspection* card
  - Anonymous safety reporting via designated boxes
- **Observation of operations**
  - Operator ride evaluation
- **Internal safety inspections**
  - Bi-monthly Safety department inspections with *Hazard Identification Review* form
  - Maintenance operations inspections (based on PMI and manufacturers' recommendations)
  - Facilities operations inspections (based on PMI and manufacturers' recommendations)
- **Accident reports**
  - Findings from *CIIP* investigations
- **Compliance programs** (i.e., FTA, OSHA, CalOSHA) require the following departmental plans (which also provide opportunities for inspections that would identify and mitigate hazards):
  - Transit Asset Management Plan
  - Vehicle Maintenance Plan
  - Facilities Maintenance Plan
- **Committee reviews:** The following teams/committees will review workplace practices and identify potential hazards.
  - Safety department
  - Joint Labor Safety Committee
- **Governmental sources:** FTA and oversight agencies may periodically provide safety bulletins and notices to guide hazard identification. RTD reviews these sources to ensure workplace practices conform to governmental requirements.
- **Customer and public feedback or complaints:** RTD tracks customer complaints received through the website or email, in person, or on the phone through SugarCRM. SugarCRM sends emails to multiple departments, including the Safety department, if applicable. After reviewing the complaint, various departments, including the Safety department, will discuss a resolution. The Safety department and/or another department will reply to the customer. Department meeting so it can be appropriately documented. The Safety Department systematically tracks and reports the safety hazards identified through the above processes and brings relevant information quarterly to the Safety Committee to ensure the risks are assessed and mitigated to the lowest level.

### **SAFETY RISK ASSESSMENT**

Following safety hazard identification, RTD assesses and analyzes the safety risks associated with identified hazards. Safety risk assessment processes include an assessment of the probability and severity of the consequences of the hazards, including existing mitigations and prioritization of the dangers based on the safety risk.



The data collected through the process helps RTD logically allocate safety resources. This subcomponent examines organizational factors (e.g., resource allocation, operational procedures, supervision of frontline staff, etc.) that contribute to incidents, accidents, and near misses.

As outlined in the [\*Workplace Hazard Protocol\*](#), managers and supervisors responsible for the department where the hazard is found will most likely assess the risk immediately and provide appropriate mitigation to avoid potential harm. Managers and supervisors should use the Hazard Identification Review Form to prioritize mitigation when assessing hazard. The hazard risk assessment matrix (found below) will be helpful in the following instances to prioritize mitigation:

- Evaluating hazards that cannot be fully resolved within two days of complaint.
- Appraising hazards that require more investment that is immediately available.
- Assessing **potential safety risks**. \*
- A safety risk refers to a *potential* hazard that must be managed.

Assessment should answer the following questions: Is the safety risk likely to cause harm? What is the likelihood that this risk will recur? What is already being done now, and what can be done in the future?

Since potential safety risk refers to the likelihood that people could be harmed (or equipment could be damaged) by the possible consequences of a hazard, it is expressed and measured by the predicted probability and severity of a hazard's potential impacts. Risk assessment is made so RTD can prioritize risks based on these factors and use its limited resources to mitigate the most severe risks. The intersection between severity and probability determines hazard risk assessment.

### **Severity of Consequences**

Assessing the probability (likelihood) and severity of hazard consequences is the first step in prioritizing safety risk.

Severity is defined as a subjective measure of the worst credible mishap resulting from personnel error, environmental conditions, design inadequacies, or procedural deficiencies for system, subsystem, or component failure/malfunction and is categorized as follows:

Category	Criteria
<b>1. Catastrophic</b>	Operating conditions are such that human error, environment, design deficiencies, element, subsystem or component failure or procedural <b>deficiencies may commonly cause death involving casualties</b> or major system loss, thereby <b>requiring immediate cessation of the unsafe activity or operation</b> .
<b>2. Serious</b>	Operating conditions are such that human error, environment, design deficiencies, element, subsystem or component failure or procedural deficiencies may commonly <b>cause severe injury</b> or illness or major system damage thereby <b>requiring immediate corrective</b> action.
<b>3. Moderate</b>	Operating conditions may commonly cause minor injury or illness, minor systems damage such that human error, environment, design deficiencies, subsystem/component failure, or procedural deficiencies that <b>can be counteracted or controlled without severe injury</b> , illness, or major system damage.
<b>4. Minor</b>	Operating conditions are such that personnel error, environment, design deficiencies, subsystem/component failure or procedural deficiencies will <b>result in no injury or less than minor injury</b> , and no illness or system damage.

### Probability Levels of Consequences

Probability is the likelihood that a hazard's specific consequence(s) will occur during the planned life expectancy of the system element, subsystem, or component. It can be described subjectively in potential occurrences per unit of time, events, population, items, or activity. A qualitative hazard probability may be derived from research, analysis, and evaluation of safety data from the operating experience of RTD or historical safety data from similar systems. An example of qualitative hazard probability ranking is as follows:

Probability Levels	Likelihood of Occurrence
<b>A. Frequent</b>	Multiple times within a year.
<b>B. Likely</b>	No more than twice per year.
<b>C. Occasional</b>	No more than once per year.
<b>D. Seldom</b>	No more than once every five years.
<b>E. Improbable</b>	Unlikely to occur but possible.

### Hazard Risk Assessment Matrix

A hazard risk assessment matrix helps us determine the probability and severity of consequences and allows for prioritizing safety risks.

Based on the probability and severity, the Hazard Risk Assessment charts show which actions need to be taken:

HAZARD RISK ASSESSMENT MATRIX		SEVERITY			
		CATASTROPHIC (1)	SERIOUS (2)	MODERATE (3)	MINOR (4)
PROBABILITY	FREQUENT (A)	Urgent 1A	Urgent 2A	High 3A	Medium 4A
	LIKELY (B)	Urgent 1B	Urgent 2B	High 3B	Medium 4B
	OCCASIONAL (C)	Urgent 1C	High 2C	Medium 3C	Low 4C
	SELDOM (D)	High 1D	Medium 2D	Medium 3D	Low 4D
	IMPROBABLE (E)	Medium 1E	Medium 2E	Medium 3E	Low 4E

### SAFETY RISK MITIGATION

Developing safety risk mitigations to reduce RTD's safety risk proactively is the culmination of the safety risk management process. This subcomponent enables RTD to minimize risks to an acceptably low level and implement mitigation monitored by the Safety Assurance component. With limited resources to mitigate risks, this process helps RTD prioritize risk mitigation.

Following identifying safety hazards, RTD assesses and analyzes the associated safety risks and measures the potential consequences of identified hazards. The data collected through the process helps RTD logically allocate safety resources. RTD safety risk mitigation steps include:

- Examine the consequences of hazards and their probability and severity.
- Develop strategies to reduce the probability and/or severity of those consequences.
- Ensure the strategy can be realistically implemented with available resources.

RTD uses the below hazard risk categories and acceptance level to identify mitigation strategies to help reduce the likelihood and severity of the consequences of identified hazards:

HAZARD RISK CATEGORIES AND ACCEPTANCE LEVEL		
<b>URGENT:</b> (1A, 1B, 1C, 2A, 2B)	<b>UNACCEPTABLE RISK</b>	Recommended mitigations from the Safety Team would go immediately to the CEO from the Chief Safety Officer (and/or from the department manager). Items under the urgent hazard risk category would not wait for a monthly meeting. The Chief Safety Officer would call an emergency meeting comprised of the Safety Team and applicable department managers in order to resolve the issue.
<b>HIGH:</b> (1D, 2D, 3A, 3B)	<b>UNDESIRABLE RISK</b>	Chief Safety Officer immediately meets with department manager to discuss what should be done differently to eliminate the hazard risk. At the next monthly safety team meeting, discuss the issue with the Safety Team if the issue is still unresolved and Safety Team will provide recommendations for mitigation.
<b>MEDIUM:</b> (1E, 2D, 2E 3C, 3D, 3E, 4A, 4B)	<b>ACCEPTABLE RISK</b> (with approval by department manager)	Address safety hazard during regular monthly meeting, come up with recommendation, and take recommendation to manager for implementation of mitigation.
<b>LOW:</b> (4C, 4D, 4E)	<b>ACCEPTABLE RISK</b> (does not require review)	Chief Safety Officer ensures that the department has implemented the mitigation within the month (before the next Safety Team meeting).

RTD's Safety, Security, and Risk Management Director, along with the Safety Committee, will prioritize the implementation of mitigation using the above chart and present their recommendations for addressing hazards to the respective department managers and/or executive team.

Following the chart above, the executive team will implement the recommended mitigation. These implementation strategies include:

- Who is responsible for implementing the mitigation?
- Where the mitigation will reside within agency activities.
- How the mitigation will be implemented.
- How long should implementation take?

To know that the mitigations are working, RTD tracks and documents the implementation of mitigation to see its effect on safety performance. This can help determine whether a positive impact occurs and whether the mitigation is effective.

After hazards have been identified and assessed, the Safety Committee decides what risk mitigation shall be implemented by evaluating the potential consequence of the identified hazards (e.g., how likely is an inevitable consequence to occur based on this hazard and how severe would that consequence be if it happened?). Hazards that receive the following hazard analysis made by management, the Safety Committee, or the Safety, Security, and Risk Management Director will be prioritized as follows:



In the design of mitigations, the following methods (in order of preference) will be used:

**1: DESIGN TO ELIMINATE OR MINIMIZE HAZARDS**

The primary emphasis and effort of safety mitigation is to eliminate the hazard within the design of the project. When design modifications are not feasible, the use of safety devices, warnings, and procedures must be considered.

**2: USE OF SAFETY DEVICES**

Hazards that cannot be eliminated through design must be reduced or controlled to an acceptable risk level through the use of safety devices. Safety devices include such items as protective shields, barriers, safety interlocks, and separation of personnel from the hazard.

**3: APPLICATION OF WARNING DEVICES**

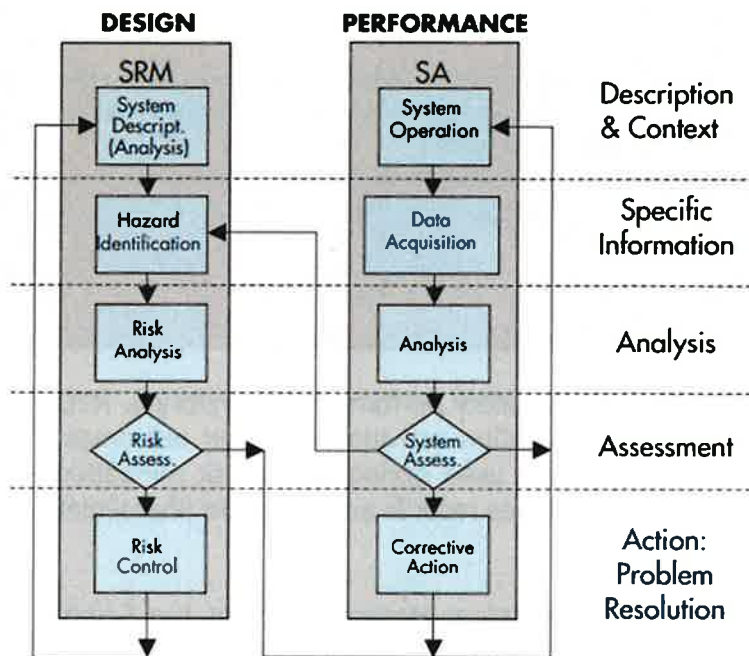
Where it is not possible to eliminate the hazard through design or safety devices, warnings shall be used. Warnings include both visual and audible devices that respond to a detected hazard to provide an adequate warning to personnel prior to it becoming critical or catastrophic.

Documentation of safety risk mitigations feeds safety performance monitoring. RTD establishes and documents its safety risk mitigation activities and their outcomes. Within this process, RTD references any forms used during safety risk mitigation activities; completed safety risk mitigation activities records are stored on SharePoint and/or Y drive.

In addition to hazards identified with the *Workplace Hazards Protocol*, the Safety department meets monthly to discuss the potential risks identified through the *CIIP*. The Safety Committee reviews accidents/incidents and plots the data points using the information in TransTrack to discuss potential patterns and possible mitigations for potential safety risks.

## Safety Assurance

This component helps verify that RTD's safety performance aligns with its safety objectives and targets. It ensures that safety mitigations are implemented and followed and assesses the ASP to ensure the system adequately addresses the potential consequences of identified hazards. The interaction between Safety Risk Management and Safety Assurance is illustrated in the graphic below:



Many of the same components used to identify hazards are used to monitor safety assurance. The main difference is the purpose of the collected data.

- The purpose of identifying hazards is to eliminate them and mitigate risk.
- For safety assurance, monitor whether the system works as it should.

A never-ending, ongoing process that ensures mitigations are working, The Safety Assurance component verifies that the SMS is helping to meet safety performance objectives. The Safety Assurance component consists of subcomponents that analyze the safety performance data collected to ensure the system is effective and efficient. The output of the Safety Assurance component will provide information to assess the effectiveness of the SMS system. This information will be utilized to update the ASP's annual. Through this element, RTD aims to demonstrate that the SMS works appropriately.

To promote safety assurance, RTD monitors its contractors' processes for hazard identification, safety risk assessment, and safety risk mitigation using contractors' policies, methods, and procedures on file to ensure the system is working as it should.

### **SAFETY PERFORMANCE MONITORING AND MEASUREMENT**

This subcomponent requires feedback on safety performance to complete the safety management cycle. The data generated is organized to evaluate whether the safety mitigations implemented are appropriate and effective.

It measures RTD's safety performance against its established safety objectives and performance targets. By routinely monitoring operations and maintenance activities, the collection of this information also provides the annual review of overall safety performance. RTD implements its safety assurance process through the following activities:

- Monitoring the effectiveness of the employee safety reporting program ([\*Workplace Hazards Protocol\*](#)), which provides direct feedback.
- Monitoring operations actively for compliance with and sufficiency of policies and procedures—service delivery activities must include field observations (Operator ride check).
- Conduct routine workplace observations and inspections (facilities inspection).
- Monitoring operational and maintenance data (KPIs in TransTrack).
- Monitor operations and vehicle maintenance functions to identify any safety risk mitigations that may be ineffective, inappropriate, or poorly implemented.
- Conducting safety surveys (annual surveys for Operators, Maintenance, and administrative staff from the Safety department).
- Conducting safety audits, studies, and inspections (*Hazard Inspection Report Form*).
- Conducting safety investigations to identify causal factors (based on reported concerns and reports from *CIIP*).
- Monitor vehicle and facility maintenance to ensure that performed maintenance is consistent with safely meeting its operational requirements and that maintenance activities comply with all regulatory requirements, policies, and procedures.

RTD has many processes to monitor its system for compliance with operations and maintenance procedures, including the following:

- Safety audits.
- Informal inspections.
- Regular review of on-board camera footage to assess drivers and specific incidents.
- Safety surveys.
- Investigation of safety occurrences.
- Safety review before the launch or modification of any facet of service.
- Daily data gathering and monitoring of data relating to service delivery.
- Regular vehicle inspections and preventative and corrective maintenance assessments.

Internal reviews ensure that all RTD areas comply with external regulatory requirements and internal policies and procedures. The primary activities involved in internal safety reviews include:

- Examination of documentation.
- Analysis of safety data and information.

- Observation of equipment, facilities, and in-process tasks.
- Evaluation of system operations, policies, and procedures.
- Interviews with management and relevant staff.
- Examination of maintenance procedures and recall information.

Results from the above processes are compared against recent performance trends to determine where corrective actions need to occur. Identified non-compliant or ineffective activities, including resulting mitigations, will be put through the safety risk management process for reevaluation.

RTD conducts monitoring in the following areas as detailed below:

- **Transportation Operations Monitoring:** Transportation Supervisors conduct and monitor ride observations, ensure on-time performance, and investigate comments. The Transportation Superintendent and the Safety, Security, and Risk Management Director measure the data against targets, objectives, policies, and procedures. The Transportation Superintendent monitors comments through the SugarCRM reporting process. The Safety, Security, and Risk Management Director monitors comments through the Workplace Hazard Protocol process. The Safety, Security, and Risk Management Director will discuss ineffective and inappropriate items with the Transportation Superintendent.
- **Vehicle Maintenance Monitoring and Defect Reporting:** The Maintenance Superintendent uses HxGn EAM maintenance software, a vehicle and equipment managing system, to identify, monitor, and report vehicle maintenance. Maintenance staff conduct an annual inspection with the California Highway Patrol to identify safety hazards. The Maintenance Superintendent reports all ineffective and inappropriate findings to the Safety, Security, and Risk Management Director and the Executive Team.
- **Facility, Shop, and Hazardous Materials (HAZMAT) Safety Inspections:** The Superintendent uses HxGn EAM maintenance software to identify, monitor, and report facility and shop equipment inspections. The Facilities Supervisor conducts Hazmat Safety Inspections weekly. The Safety department conducts a bi-monthly Facility Safety Hazard Inspection.
- **Fire Hazard and Extinguisher Inspections:** The Facilities Supervisor conducts an annual inspection with the City Fire Department to identify fire hazards. The Facilities Superintendent reports all ineffective and inappropriate items to the Safety, Security, and Risk Management Director and Executive Team. The Safety department conducts a bi-monthly Facility Safety Hazard Inspection.
- **Risk Mitigation Monitoring:** The Safety, Security, and Risk Management Director, along with RTD managers, uses TransTrack and SugarCRM to monitor department and contractors' operations to identify and report any safety risk mitigations that

may be ineffective, inappropriate, or not implemented as intended. Department supervisors often carry out the actual field monitoring of the mitigations.

The Safety, Security, and Risk Management Director monitors the effectiveness of safety risk mitigations and identifies the following:

- Working as desired.
  - Needs some modification to work as desired.
  - Not working and needs to be replaced.
  - No longer needed.
- CIIP: RTD performs causal analysis of incidents to help determine if latent organizational factors beyond individual employee behavior may have contributed to an event. RTD documents the results of causal analysis in its Safety Concerns Communication Log on SharePoint and/or Y drive under the Safety Committee.

Results of this analysis for causal factors provide potential hazard identification information that may need to be put through the safety risk management process to reduce the potential risk of recurrence of a similar accident or incident.

- Workplace Hazards Protocol: Effective employee safety reporting supports hazard identification. Safety, Security, and Risk Management Director monitors employee safety reporting through the Workplace Hazard Protocol. Criteria that RTD uses to help it determine if the protocol is performing as desired include the following:
  - Volume of reports received.
  - Value of reports received.
  - Responses to reports received regarding hazard identification, risk assessment, and risk mitigation.
  - Information gathered from the employee safety reporting process and how it is shared and communicated.
  - The timeliness and accuracy of feedback provided to employees who have reported a safety issue, concern, or condition.

#### SAFETY PERFORMANCE MEASUREMENT

Tracking Software: TransTrack and SugarCRM

To monitor internal safety reporting, RTD uses TransTrack to collect safety data for operations (i.e., TransitMaster) and maintenance (i.e., Spear 4i) to ensure compliance and that RTD meets its safety objectives after data analysis. In addition, RTD is also implementing SugarCRM to report, inspect, monitor, and track hazards. Each software is robust and is essential sources of safety data. They can collect, analyze, and assess information reported from programs over time. Using its data, RTD's Safety Committee can more easily identify and evaluate where safety procedures are ineffective, inappropriate, poorly implemented, or not having their intended effect.

#### Safety Committee Safety Assurance Activities



The Safety Committee is the primary safety assurance mechanism of safety activities. It oversees the various safety processes and the communication of safety information. The Safety Assurance activities above produce usable data collected in TransTrack and SugarCRM. The Safety Committee then evaluates the information, looking for lagging or leading indicators to identify potential contributing factors to hazards and analyze their root causes. By investigating the hazard event and working backward, Safety & Security Committee members will identify sub-events and conditions (causal factors) to find the root cause ultimately.

The safety assurance activities that the Safety Committee performs include the following:

- Annual Goalsetting activities
  - Evaluating data and information from external agencies or peers (e.g., APTA, OSHA) to benchmark Safety Performance Targets.
  - Identifying risk mitigations that were ineffective, inappropriate, or poorly implemented.
- Monthly meeting
  - Investigate reported safety events to identify causal factors.
  - Identify contributing factors in safety events, including organizational issues, technical failures, and environmental conditions.
- Bi-monthly facilities safety inspection.
- Weekly bus route inspections: Security personnel travel the actual route of the bus by car to see if there are safety concerns or hazards along the bus route that may have gone unnoticed.
- External safety communication: Examples include safety events at the beginning of the school year at each high school to talk to students about safe boarding (i.e., how to board the bus, do not rush toward the door, etc.).
- Daily security personnel perform jaywalking sweeps at the DTC, UTS, and HTS (to talk to customers about the safety risks of jaywalking).
- Safety booths at community events.
- Safety award events.

#### Department Managers' Safety Assurance Activities

- Participate in the annual compliance review of safety accomplishments and weigh in on goal setting at the annual leadership retreat.
- Evaluate the department's safety compliance and set departmental goals to support safety management.
- Appraise employees' performance in terms of safety.
- Assess and revise department procedures and work instructions (especially those related to safety) annually to ensure that information is up to date.

#### Project-related Safety Assurance Activities

- Include safety line items in project summary forms to ensure that safety is considered in each project.

For processes that do not have an active internal monitoring component, RTD may solicit help from peers or contractors to monitor operations to identify missed hazards through the Safety Risk Management process.

*Transit Asset Management and Safety Assurance*

According to FTA, there is a direct connection between safety and state of good repair (SGR). Because of this, the SMS is designed to work in concert with RTD's Transit Asset Management (TAM) Plan. The three areas of intersection are as follows:

1. Condition Assessment should direct and inform RTD's SMS: The TAM rule requires RTD to perform risk assessment and quality assurance for facilities, equipment, rolling stock, and infrastructure in poor condition. Both Facilities, IT and Maintenance, have plans to ensure their assets remain in SGR.
2. RTD's SMS will inform its TAM Plan and investment prioritization: The information gathered in the Safety Risk Management and Safety Assurance tasks under RTD's SMS will provide valuable input to its TAM Plan (that may even influence a revision of investment priorities). The consistent and deliberate feedback between the TAM and the SMS will bring greater accountability and transparency to RTD's decision-making regarding financial resource allocation.
3. The Accountable Executive for the SMS is also the decision maker in TAM.

## Safety Promotion

RTD's safety culture is driven by its core value: "We are committed to creating a safe and responsible environment for our employees, customers, and community." The Safety Promotion component focuses on making executive management's commitment to safety visible by increasing awareness through safety communication, safety competencies and training, and continuous safety improvement.

Encourage staff involvement from every level at RTD to reach its safety goals through safety contacts on internal monitors. The Safety Committee's primary function is safety promotion. The Safety Committee focuses on data collection and risk mitigation and aims to communicate RTD's safety goals and performance throughout the organization.

RTD monitors contractors to ensure they are following proper processes and procedures to promote safety and have the contractors' policies, methods, and procedures on file.

### **SAFETY COMMUNICATION**

SMS relies on management's continuous commitment to communication. One of the management's most important responsibilities under SMS is encouraging and motivating its employees to communicate openly, authentically, and without concern for reprisal. As outlined above, the *Workplace Hazards Protocol*, safety suggestion boxes, and RTD's open-door policy are implemented to encourage open communication from employees.

To increase transparency and ensure employees and contractors know RTD's current safety focus, the Safety, Security, and Risk Management Director will communicate RTD's Safety Performance Targets by posting the information on bulletin boards and monitors mounted throughout all RTD facilities.

Other safety information displayed may include the following:

- Pressing/urgent safety risks (e.g., dangerous people, excluded passengers, etc.)
- Safety awareness memos
- Other important safety topics
- Employee newsletter
- Employee digital monitor displays located in breakrooms.

Since SMS depends heavily on employee reporting, it is essential to update them on the progress of the reported hazards, so they understand that their concerns are adequately addressed. This is the best way to gain buy-in and continuous input into employee reporting.

- **Organization-wide communication of Safety Hazard and Risk Information**

RTD safety risk management processes aim to reduce safety risks for employees and customers. Because employees are always vulnerable to the consequences of safety hazards within the transit environment, timely reporting of newly identified safety hazards and the safety risks those hazards present can help reduce that vulnerability.

Depending on the level (severity and immediacy) of the safety concerns, the safety hazard and risk will be communicated as follows: verbally by the Supervisor/ Safety Committee, memos, internal monitor displays, and bulletin board postings.

RTD documents its communication of hazards and risks in the Safety Concerns Communication Log located in SharePoint and/or Y drive. The Safety Committee is responsible for making sure this communication takes place and is appropriately documented.

- **Organization-wide communication of New Safety Risk Mitigations**

RTD informs employees at every level of operations about the safety risk mitigations put into effect for the following reasons:

- Communicates to employees that RTD is doing all it can to reduce risk.
- Bring attention to employee roles and responsibilities that may be affected by new mitigations.
- Prepares employees to be a better source of information on determining how well mitigations work.

Upon implementation of new safety risk mitigations, the Safety, Security, and Risk Management Director will ensure it is communicated as follows: verbally by Supervisors, Managers, Safety, Security, and Risk Management Director, or Safety Committee; memos; bulletin board postings.

RTD documents its communication of new safety risk mitigations in the Safety Concerns Communication Log located in SharePoint and/or Y drive. The Safety, Security, and Risk Management Director is responsible for making sure this communication takes place and is appropriately documented.

- **Organization-wide communication of Agency Safety Performance**

RTD implements SMS to continuously improve its safety performance in line with its Safety Performance Targets. Communicating its safety performance information promotes employee participation and understanding of the SMS processes.

To reinforce RTD employees' ownership of safety, RTD communicates monthly statistics on its overall safety performance to all employees, regardless of job function. This includes information related to the progress toward achieving the Safety Performance Targets.

The information is presented to the Safety Committee during its quarterly meeting and given to Safety Committee members to post in their respective departments. The Safety, Security, and Risk Management Director will email the information to its contractors. RTD documents its communication of agency safety performance in the Safety Concerns Communication Log located in SharePoint and/or Y drive. The Safety, Security, and Risk Management Director is responsible for making sure this communication takes place and is appropriately documented.

In addition to internal communication regarding safety, the Safety Communication subcomponent also includes connecting with RTD's passengers and the public. RTD leads and participates in several safety outreach activities and provides safety awareness messages for passengers and the public. The Safety, Security, Risk Management Director, and Safety Committee work directly with the Marketing and Information Technology departments to ensure consistent internal and external safety messaging.

### **COMPETENCIES AND TRAINING**

This subcomponent addresses competency training of employees regarding their roles and responsibilities related to RTD's safety performance. Training is vital for successful SMS implementation.

- Employees must be trained in their roles within SMS. Frontline employees should be trained to be competent in safety reporting (i.e., appropriate content and procedures for reporting).
- The Safety department will train managers and Executive staff in all aspects of the ASP, including how to analyze safety data and extract information from it, turning the information into helpful guidance in allocating resources to safety. The Hazard Report form and emails to the dl-Safety department will log safety data and suggestions.
- Executive management is responsible for allocating resources for training and making safety decisions with SMS data.

In addition to training, as it relates to the SMS, RTD has safety training in place (including refresher training) for all of its employees and ensures comprehensive training. RTD's contractors must implement their safety training programs per RTD's ASP, which RTD's Safety, Security, and Risk Management Director oversees.

### **Training Needs Analysis**

To determine the training necessary to ensure the organization's safety, the Safety, Security, and Risk Management Director monitors safety-related concerns through the Workplace Hazard Protocol process, TransTrack, and SugarCRM. These mechanisms identify critical safety needs. Suppose the safety need is related to training. In that case, the Safety, Security, and Risk Management Director will work with department supervisors and managers to design and carry out training to mitigate safety concerns. If additional investment in training is required, the Safety, Security, and Risk Management Director will incorporate recommendations into the annual SMART objectives planning process.

#### **○ Monitoring Skill Training**

Monitoring skill training helps RTD identify training gaps or outdated lesson plans that may result in hazards. The Safety, Security, and Risk Management Director monitors this training to ensure effectiveness. Specifically, the process includes the following:

- Monitoring training to make sure it delivers the necessary safety skills.
- Establishing a process for reviewing and revising training courses while considering review frequency, reviewers, and decision-making process for revisions.



In addition, the Safety, Security, and Risk Management Director communicates with local first responders in the community to identify additional critical safety training as needed. All training is monitored on TransTrack to ensure it is up to date.

### Training Documentation

Training documentation is a source of hazard identification, providing formal proof that employees were trained and received timely certification and recertification in critical skill areas. Up-to-date training documentation also assists in forecasting future training schedules.

Lesson plans and schedules not only assist instructors in delivering the training, but they also provide a record of the content of the training should it be needed for any other purpose. A hard copy of the completed training is on file in the department. The department Superintendent/Manager/Safety, Security, and Risk Management Director inputs completed training information in TransTrack.

RTD training documentation includes:

- Curricula for initial and refresher training.
- Training schedules and records of all completed training.
- Procedures for revising training materials.
- Course assessment materials.
- Copies of individual employee training records.

RTD records of course completion include:

- Dates the training was held.
- Content covered during training sessions.
- Length of the sessions.
- Signatures of instructor and trainee.

### Current Skills and Safety Training

#### *Ongoing Transportation Staff Training:*

##### *Training Supervisor Larry Bottley*

- **New hire operators:** Classroom, Behind the Wheel (BTW), cadetting  
*New hires Operators without a commercial license will receive a combined average of 420 hours of classroom, BTW, and cadetting.*
- **Bus operator refresher training:** Classroom training uses the Tapco workbook and videos, Canadian Urban Transit Association (CUTA) facilitator guide, Transportation Safety Institute (TSI) materials, and a self-study defensive driving program. BTW, training consists of defensive driving techniques and coach familiarization.
- **Verification of Transit Training (VTT):** All operators receive 8 hours of mandatory VTT per year required by DMV. Topics include:
  - Pedestrian-friendly Transit
  - Customer Service

- Current Laws and Regulations
- Renewal Requirements
- System Security Awareness
- Farebox
- ADA
- Pre-trip Inspection
- Wheelchair Securement
- Passenger Loading and Unloading
- Defensive Driving
- Accident Prevention
- Emergency Procedures
- Drug and Alcohol
- Bloodborne Pathogens
- Dealing with Difficult People/Students
- **As-needed ongoing training**
  - **Post-accident:** All employees receive 2-8 hours of training after accidents, depending on the severity and number of accidents.
  - **Return to work:** All employees will receive between 2-8 hours of training after being off for an extended period; training received will depend on when the employee is off work.
  - **Remedial** (required due to customer comments): All operators receive 2 hours of training in customer comments.
  - **BTW for new equipment or buses:** 1-2 hours or until the operator demonstrates proficiency for new equipment.

*Annual Maintenance Staff Training:*

*Operation Superintendent—Maintenance John Van Camp*

- General Safety Orientation
- Back Lifting Safety
- Hazardous Waste and How It Affects Everyone
- Hazardous Waste Containment
- Hazardous Communications
- Bloodborne Pathogens
- Lock Out, Block Out, Tag Out
- Personal Protective Equipment (PPE)

*Ongoing Machine Shop Safety Training: Facilities Superintendent John Coose*

- Machine Introduction
- Proper Usage
- Safety Knowledge

*Annual Technician Training: Facilities Superintendent John Coose*

- Fall Protection
- Underground Storage Tank Overview
- Storm Water Pollution Prevention & Sample-taking
- Wastewater Contamination Containment & Sample-taking

***Bi-Annual Maintenance Personnel Training: Maintenance Supervisor John Van Camp***

- Initial Forklift Training

***Mechanical Training (as needed): Contractor***

- Allison Hybrid Drive Familiarization and Advanced Diagnostics

**ASP/SMS-related Training**

- **SMS Orientation**

Successful SMS implementation and operation require employee involvement and ownership at every agency level and within every service-delivery-related function. Employees need to understand SMS, their role within it, and how they, the organization, and customers, benefit from its success.

Once the ASP is approved and implemented, the Safety, Security, and Risk Management Director will conduct an SMS orientation to train all staff on the SMS approach to safety. A cross-functional and multi-level understanding of it is necessary to support all SMS-related activities.

After initial SMS orientation, department managers are responsible for keeping their employees up to date on SMS training. All new hires receive SMS training during their employee orientation.

- **Safety Risk Management Orientation for Safety & Security Committee and Management**

Successful proactive safety risk mitigation begins with leadership that clearly understands their responsibilities and the skills required to carry them out. As assigned responsibilities, employees participating in safety risk management activities must understand how to carry out their duties. This orientation also includes the desired outcomes of safety risk management activities and the importance of the effort to its safety performance.

These employees will receive training from the Safety, Security, and Risk Management Director and use this plan, the CIIP, and the Workplace Hazard Protocol to carry out their responsibilities for safety-related incidents. Responsible employees will receive training whenever there is a change to these documents.

- **Safety Performance Monitoring Orientation**

Employees participating in safety performance monitoring activities must know how to carry out their responsibilities. The Safety, Security, and Risk Management Director ensures that these employees receive orientations on their responsibilities, the desired outcomes of safety performance monitoring, and the importance of the effort to overall agency safety performance. The Safety, Security, and Risk Management Director conducts a quarterly meeting to orient SMS leadership on their monitoring responsibilities.

Performance monitoring includes activities as follows:

- Observing the field to ensure employees follow operations policies and procedures correctly.
- Assessing and documenting employee safety performance.
- Monitoring the effectiveness of safety risk mitigations.
- Evaluating the effectiveness of the employee safety program.

- **Orientation on Employee Safety Reporting (Workplace Hazard Protocol)**

An effective employee safety reporting process is one of the most essential tools for hazard identification. While RTD already has its Workplace Hazard Protocol outlining the process for hazard identification in place, it has not previously provided formal training for this protocol.

This orientation will

- New Hire
- Upon changes to the ASP

The orientation is provided in the New Hire Orientation and includes the following minimum information:

- The purpose and benefits of the program
- Guidelines on the types of safety concerns and issues employees should report
- The reporting methods available to employees (how to report)
- An explanation of how the information will be managed and shared
- Protections for employees who report safety concerns
- A description of the operational behaviors that are not protected and may result in discipline
- The agency's commitment to providing feedback on reported safety concerns

## **Additional Information**

RTD will maintain documents that describe the programs, policies, and procedures used to carry out the Agency Safety Plan. It will also preserve documents not included or referenced in this safety plan related to the implementation of its SMS, as well as results from the SMS processes and activities.

These documents will be maintained for at least three years after their creation and made available upon request by the FTA, other federal entities, or Caltrans. The Safety, Security, and Risk Management Director will be a primary point of contact when providing Agency Safety Plan-related information to external agencies to ensure access to these documents.

## **Appendix: Definitions**

**Accident:** An event that involves any of the following: A loss of life; a report of a severe



injury to a person; a collision of public vehicles; a runaway train; an evacuation for safety reasons; or any derailment of a rail transit vehicle any location, at any time, whatever the cause.

**Accountable Executive:** A single, identifiable individual who has the ultimate responsibility for carrying out RTD's Agency Safety Plan; the responsibility for carrying out the agency's Transit Asset Management Plan (as defined below), and control over the direction of human and capital resources needed to develop and maintain both plans per 49 U.S.C. 5329(d) and 49 U.S.C. 5326.

**Collision and Incident Investigation Plan (CIIP):** RTD's plan helps its Safety, Security, and Risk Management Director to examine organizational factors contributing to incidents, accidents, and near misses.

**Consequence:** An effect of a hazard involving injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment.

**Event:** Any accident, incident, or occurrence.

**Hazard:** Any actual or potential condition that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment.

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

**Injury:** Any damage or harm to persons due to an event that requires immediate medical attention away from the scene.

**Investigation:** Determining the causal and contributing factors of an accident, incident, or hazard to prevent recurrence and mitigate risk.

**Mitigation:** Reducing the probability and/or severity of the potential consequences of a hazard.

**NPTSP:** National Public Transportation Safety Plan (Version 1.0)

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

**Performance target:** A quantifiable level of performance or condition expressed as a value for the measure to be achieved within a period required by the Federal Transit Administration (FTA).

**PMI:** Preventative Maintenance Inspection.



**PTASP:** Public Transportation Agency Safety Plan.

**Risk:** The composite of predicted severity and likelihood of the potential effect of a hazard.

**Risk mitigation:** A method to eliminate or reduce the effects of hazards.

**Safety:** Operating within an acceptably low level of risk, being proactive rather than reactive.

**Safety events:** A collision, derailment, fire, hazardous material spill, act of nature (Act of God), evacuation, or other safety occurrences not otherwise classified (OSONOC) occurring on transit right-of-way, in a transit revenue facility, in a transit maintenance facility, or involving a transit revenue vehicle and meeting established NTD thresholds.

**Safety Management System (SMS) framework:** The basis for RTD's new ASP, its practical implementation aims to improve public transportation safety and provide RTD with a structure for understanding and addressing safety risks through proactive and timely organizational decision-making. It ensures that a public transportation agency has the necessary organizational structures, activities, and tools to optimally direct and control resources regardless of its size or service environment.

**Safety, Security, and Risk Management Director:** An adequately trained individual responsible for safety and reports directly to RTD's chief executive officer.

**Safety risk:** The chance that people, equipment, or the environment could be harmed by the consequences of a hazard measured by how likely it is to happen (probability or frequency) and how bad it could be (severity).

**Serious injury:** Defined as any injury which:

- Requires hospitalization for more than 48 hours, commencing within seven days from the date of the injury was received.
- Results in a fracture of any bone (except simple fractures of fingers, toes, or noses).
- It causes severe hemorrhages, nerves, muscle, or tendon damage.
- Involves any internal organ.
- Involves second or third-degree burns or burns that affect more than 5% of the body's surface.

**Small public transportation provider:** A recipient or sub-recipient of federal financial assistance under 49 U.S.C. 5307 with 100 or fewer vehicles in peak revenue service and not operating a rail-fixed guideway public transportation system.

**State of good repair:** A condition sufficient for capital assets to operate at a whole level of performance.

**System reliability:** The condition in which a capital asset can operate at a whole level of performance.



**Transit Asset Management (TAM) Plan:** A plan that outlines 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, to provide safe, cost-effective, and reliable public transportation, as required by 49 U.S.C. 5326 and 49 CFR part 625.