

AGENDA ITEM 1 F  
Consent Item

**MEMORANDUM**

**DATE:** December 1, 2022

**TO:** El Dorado County Transit Authority

**FROM:** Christine Parker, Safety Coordinator

**SUBJECT:** Revisions to the El Dorado County Transit Authority Agency Safety Plan

**REQUESTED ACTION:**

**BY MOTION,**

**Adopt Resolution No. 22-34 approving the El Dorado County Transit Authority Agency Safety Plan revisions**

**BACKGROUND**

On July 19, 2018, The Federal Transit Administration (FTA) published the Public Transportation Agency Safety Plan (PTASP) Final Rule, 49 CFR Part 673. The PTASP regulation requires recipients and subrecipients of financial assistance under the FTA Section 5307 Urbanized Area Formula Program to develop and maintain an Agency Safety Plan (ASP). The ASP supports application of a proactive, risk-based approach to managing transit safety, including processes and procedures to implement standardized safety management systems. Transit providers were required to have a certified ASP by July 20, 2021.

The El Dorado County Transit Authority ASP was adopted by the Board on November 5, 2020. On November 15, 2021, the Bipartisan Infrastructure Law was signed into law amending the PTASP regulations, with compliance required by December 31, 2022.

**DISCUSSION**

In accordance with the current Federal PTASP regulations, staff recommends adoption of the attached Resolution No. 22-34 implementing updates to the ASP including formal establishment of a more robust and involved Safety Committee and annual updates to the required safety targets. The Safety Committee is a valuable means to further the commitment to safety performance within all departments of the agency.

A redline version of the updated El Dorado County Transit Authority ASP is attached for Board review and approval.

**FISCAL IMPACT**

None.

El Dorado County Transit Authority  
December 1, 2022

**EL DORADO COUNTY TRANSIT AUTHORITY  
RESOLUTION NO. 22-34**

RESOLUTION OF THE BOARD OF DIRECTORS OF THE EL DORADO COUNTY  
TRANSIT AUTHORITY APPROVING THE PUBLIC TRANSPORTATION AGENCY  
SAFETY PLAN

**WHEREAS**, the Federal Transportation Administration (FTA) adopted principles of the Safety Management System for enhancing safety within public transportation in the form of the Public Transportation Agency Safety Plan (PTASP) Final Rule, 49 CFR Part 673; and

**WHEREAS**, FTA requires that all public agencies receiving Section 5307 Federal Funds must establish and implement a PTASP that meets the requirements of 49 CFR Part 673 by December 31, 2020; and

**WHEREAS**, the last revision to the PTASP was on November 4, 2021; and

**WHEREAS**, the PTASP must document the processes and activities related to the Agency's Safety Management System and include performance targets based on the safety performance measures established under the National Public Transportation Safety Plan that are shared with the regional Metropolitan Planning Organizations; and

**WHEREAS**, the PTASP and ongoing updates must be signed by the Accountable Executive and approved by the agency's Board of Directors; and

**WHEREAS**, El Dorado County Transit Authority has established a written PTASP that complies with all parts of 49 CFR Part 673 and is dedicated to the ongoing support of safety performance through established practices and procedures to identify, mitigate and monitor safety risks; and

**NOW, THEREFORE, BE IT RESOLVED**, that the El Dorado County Transit Authority Board of Directors approves and adopts the updated El Dorado County Transit Authority Public Transportation Agency Safety Plan.

**PASSED AND ADOPTED BY THE GOVERNING BOARD OF THE EL DORADO COUNTY TRANSIT AUTHORITY** at a regular meeting of the Board held on the 1st day of December 2022, by the following vote of the Board:

AYES:

NOES:

ABSTAIN:

ABSENT:

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John Hidahl, Chairperson

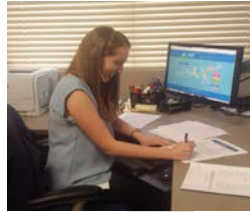
ATTEST:

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Megan Wilcher, Secretary to the Board



**EL DORADO TRANSIT**



# Public Transportation Agency Safety Plan (PTASP)

**Implemented:** 2020

**Adopted:** ~~November~~ December 14, 2021

**Prepared by:** El Dorado County Transit Authority  
6565 Commerce Way  
Diamond Springs, CA 95619  
(530) 642-5383  
[www.eldoradotransit.com](http://www.eldoradotransit.com)

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## Transit Agency Information

Transit Agency: El Dorado County Transit Authority (Agency)

Transit Agency Address: 6565/6567 Commerce Way  
Diamond Springs, CA 95619

Accountable Executive: Matthew Mauk, Executive Director

Chief Safety Officer: Christine Parker, Safety Coordinator

Modes of Service Covered: Commuter Bus, Motor Bus, Demand Response

List of FTA Funding Received: Sections 5307, 5310, 5311 and 5339

El Dorado Transit directly provides service and employs individuals to supply the necessary labor to operate revenue vehicles.

## Key Terms

Term	Definition
Accident	Accident means an Event that involves any of the following: a loss of life; a report of a serious injury to a person; a collision of public transportation vehicles; a runaway train; an evacuation for life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause. (per § 673.5)
Accountable Executive	<p><b>§ 673.5 Definitions</b> – Accountable Executive means a single, identifiable person who has ultimate responsibility for carrying out the Public Transportation Agency Safety Plan of a public transportation agency; responsibility for carrying out the agency’s Transit Asset Management Plan; and control or direction over the human and capital resources needed to develop and maintain both the agency’s Public Transportation Agency Safety Plan, in accordance with 49 U.S.C. § 5329(d), and the agency’s Transit Asset Management Plan in accordance with 49 U.S.C. § 5326.</p> <p><b>§ 673.23(d)(1)</b> – The transit agency must identify an Accountable Executive. The Accountable Executive is accountable for ensuring that the agency’s SMS is effectively implemented throughout the agency’s public transportation system. The Accountable Executive is accountable for ensuring action is taken, as necessary, to address substandard performance in the agency’s SMS. The Accountable Executive may delegate specific responsibilities, but the ultimate accountability for the transit agency’s safety performance cannot be delegated and always rests with the Accountable Executive.</p>

Term	Definition
Chief Safety Officer	<p><b>§ 673.31 Definitions</b> – Chief Safety Officer means an adequately trained individual who has responsibility for safety and reports directly to a transit agency’s chief executive officer, general manager, president, or equivalent officer. A Chief Safety Officer may not serve in other operational or maintenance capacities, unless the Chief Safety Officer is employed by a transit agency that is a small public transportation provider as defined in this part, or a public transportation provider that does not operate a rail fixed guideway public transportation system.</p> <p>Safety Management System (SMS) Executive means a Chief Safety Officer or an equivalent.</p> <p><b>§ 673.23(d)(2)</b> – The Accountable Executive must designate a Chief Safety Officer or SMS Executive who has the authority and responsibility for day-to-day implementation and operation of an agency’s SMS. The Chief Safety Officer or SMS Executive must hold a direct line of reporting to the Accountable Executive. A transit agency may allow the Accountable Executive to also serve as the Chief Safety Officer or SMS Executive.</p>
Consequence	Consequences are outcomes or what those conditions can cause. Transit agencies should assess the likelihood and severity of the <i>consequences</i> of a hazard, not of the hazard itself (per <b>§ 673.5</b> )
Event	Event means any Accident, Incident, or Occurrence. (per <b>§ 673.5</b> )
Fatalities	Deaths, excluding suicides or trespassers
Hazard	Hazard means any real or potential condition that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment. Hazards are conditions. (per <b>§ 673.5</b> )
Incident	Incident means an Event that involves any of the following: A personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a transit agency. (per <b>§ 673.5</b> )
Injuries	Not including assaults or injuries due to crimes
Occurrence	Occurrence means an Event without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt the operations of a transit agency. (per <b>§ 673.5</b> )
Performance Target	Performance target means a quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the Federal Transit Administration (FTA). (per <b>§ 673.5</b> )
Safety Event	Reportable derailments, collisions, fires, and evacuations.
Safety Management System	Formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of a transit agency’s safety risk mitigation. SMS includes systematic procedures, practices, and policies for managing risks and hazards



Term	Definition
Safety Performance Target	Safety performance target means a Performance Target related to safety management activities. (per § 673.5)
Serious Injury	Serious injury means any injury which: (1) Requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received; (2) Results in a fracture of any bone (except simple fractures of fingers, toes, or noses); (3) Causes severe hemorrhages, nerve, muscle, or tendon damage; (4) Involves any internal organ; or (5) Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface. (per § 673.5)
Risk	The composite of predicted severity and likelihood of the potential effect of a hazard
Risk Mitigation	Method or methods to eliminate or reduce the effects of hazards

**Resource: National Public Transportation Safety Plan**

## Plan Development, Approval, and Updates

### Development

El Dorado County Transit Authority drafted this plan. By signature below, the Accountable Executive confirms the development this plan.

\_\_\_\_\_  
Accountable Executive

\_\_\_\_\_  
Date Signed

### Approval

The Agency Board of Directors approved this plan as so indicated by the signature of the Board of Directors' Chair on the date noted below and as specified in the El Dorado County Transit Authority Board Meeting Agenda for ~~November~~ December 1-4, 2021 with resolution # ~~22-34~~ 21-26.

\_\_\_\_\_  
Agency Board of Directors Chair

\_\_\_\_\_  
Date Signed

### Certification

El Dorado County Transit Authority is responsible for certifying the plan to ensure it meets the requirements set forth by 49 CFR Part 673. The Agency Safety Plan was certified by El Dorado County Transit Authority, on November 5, 2020.

### Record of Revisions

Version Number	Section/Pages Affected	Reason For Change	Date Issued
1	1-17	New Document	11/5/2020
2	Safety Performance Targets and minor revisions	Updates	11/4/2021
<u>3</u>	<u>Safety Performance Targets and the addition of the Safety Team</u>	<u>Updates and compliant to Bipartisan Law</u>	<u>12/1/2022</u>

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### **Annual Review and Update of the Public Transportation Agency Safety Plan (PTASP)**

The Agency's PTASP will be reviewed by the PTASP Committee:

- Annually, each year in July
- And when the Agency:
  - Determines its approach to mitigating safety deficiencies is ineffective
  - Makes significant changes to service delivery
  - Introduces new processes or procedures that may significantly impact safety
  - Changes or re-prioritizes resources available to support Safety Management Systems
  - Significantly changes its organizational structure

Revisions will be submitted to the Board for approval at their regular -November meeting, or as soon as possible thereafter. Amendments to the PTASP will be published to the employees and the public at large in accordance with the Agency's standard communication process.

The Agency's PTASP Committee will consist of the Safety Team, and will be presented to the following: ~~the~~ Accountable Executive, Safety Coordinator, Operations Manager, Maintenance and Facilities Supervisor, ~~Marketing and Planning~~ Planning and Marketing Manager, Transit Operations Supervisor(s), Finance Manager, Human Resources Manager.

## Safety Performance Targets

The Agency will develop safety performance targets that will be reviewed and updated annually, if needed. The specific performance targets are based on the safety performance measures established under the *National Public Transportation Safety Plan* and any additional performance goals set by the Agency. 21/22 fiscal year targets are based on a ~~5-year~~5-year trend and System Reliability is based on a 3-year trend.

## Safety Performance Targets

<del>2020/2021</del> 2021/2022 Results							
Mode of Transit Service	Fatalities	Fatalities (per 100k miles)	Injuries	Injuries (per 100k miles)	Safety Events	Safety Event (per 100k miles)	*System Reliability
Demand Response (DR)	0	0	0	0	0	0	<del>77,924</del> 44,0 36 mi.
Motor Bus (MB)	0	0	0	0	0	0	<del>25,020</del> 21,5 53 mi.
Commuter Bus (CB)	0	0	0	0	0	0	<del>21,996</del> 12,3 58 mi.
<del>2020/2021</del> 2022-2023 Targets							
Mode of Transit Service	Fatalities	Fatalities (per 100k miles)	Injuries	Injuries (per 100k miles)	Safety Events	Safety Event (per 100k miles)	*System Reliability
Demand Response (DR)	0	0	<del>1</del> .8	<del>..12259</del> 088	<del>1</del> .6	<del>..12259</del> 066	<del>43,843</del> 51,5 54 mi.
Motor Bus (MB)	0	0	1	<del>.12559</del> .10	1	<del>.12259</del> 109	<del>19,084</del> 2069 2 mi.
Commuter Bus (Bus)	0	0	0	0	.2	<del>.12259</del> 022	<del>21,162</del> 1955 9 mi

\*measured in service miles between major vehicle malfunctions

## Safety Performance Target Coordination

After Board approval, Safety Performance Targets and other necessary information will be submitted to Sacramento Area Council of Governments (SACOG) and the California Department of Transportation annually.

Targets Transmitted to the State	State Entity Name	Dates Targets Transmitted
	California Department of Transportation (Caltrans)	<del>11/12/04/2022</del> 4/2021
Targets Transmitted to the Metropolitan Planning Organization	Metropolitan Planning Organization Name	Dates Targets Transmitted
	Sacramento Area Council of Governments	<del>12/04/11/0/2022</del> 4/2021

## **Safety Management Policy**

### **Safety Management Policy Statement**

El Dorado Transit is committed to Safety Management as a systematic and comprehensive approach to identifying safety hazards and risks associated with transit system operations and related maintenance activities. El Dorado Transit will maintain an active Safety Management System (SMS) that encourages the open sharing of information on all safety issues. To continue a culture of safety, we expect all employees to report their safety concerns to agency management and not to compromise safety for the sake of completing the job.

Our overall safety objective is to proactively manage safety hazards and their associated safety risk, with the intent to eliminate unacceptable safety risk in our transit operations. To that end, we will continuously examine our operations for hazards. We will establish a non-punitive employee safety reporting program, train staff on safety management, document our findings and safety risk mitigations, and strive for continuous improvement of our safety performance.

As required by the Federal Transit Administration, we have established annual safety performance targets to help us measure the safety of our transit service.

In addition, to address our overall safety objective, we will conduct hazard identification workshops with all frontline, supervisory, and management personnel during this calendar year. We will also work to increase the annual number of voluntary reports received from employees by 10 percent and actively track our safety risk mitigations. To ensure we meet this objective, our safety department will report out each quarter to our entire agency on the number of:

- Hazard identification workshops carried out in the quarter
- Number and type of hazard reports received per employee in the quarter versus the same quarter last year
- Number and type of safety risk mitigations implementation in the quarter.

Ultimate responsibility for safety at El Dorado Transit rests with the Accountable Executive.

Responsibility for making our operations safer for everyone lies with each one of us, from executive management to frontline employees. Each manager is responsible for implementing the SMS in their area of responsibility and will be held accountable to ensure all reasonable steps are taken to perform activities established as part of the SMS.

### **Safety Management Policy Communication**

The Safety Management Policy was first shared with employees in October 2020. The Safety Management Policy is posted on the safety boards in the Operations and Maintenance departments. Additionally, El Dorado Transit provided the Safety Management Policy on the website in November 5, 2020.

To ensure new hires understand the importance of safety and our Safety Management process, new hire orientation includes distribution and training of our Safety Management Policy. Ongoing training and refresher training will continue annually and/or on an as needed basis.

## **Authorities, Accountabilities, and Responsibilities**

### **Accountable Executive**

Our Accountable Executive provided input during development of the draft policy and reviewed it following development. The Accountable Executive then submitted the policy to the Agency Board of Directors for approval. Once their approval was given, the Accountable Executive signed the policy. Additional responsibilities include, but are not limited to:

- Decision-making about resources (e.g., people and funds) to support asset management, SMS activities, and capital investments
- Signing SMS implementation planning documents
- Endorsing SMS implementation

### **Chief Safety Officer**

Our Chief Safety Officer was the lead in developing the Safety Management Policy. Our Chief Safety Officer worked with managers, supervisors, and staff to develop the plan. Our Chief Safety Officer was the team's liaison with the Accountable Executive. The Chief Safety Officer's duties include, but are not limited to:

- Developing and maintaining SMS documentation
- Directing hazard identification and safety risk assessment
- Monitoring safety risk mitigation activities
- Providing periodic reports on safety performance
- Briefing the Accountable Executive on SMS implementation progress
- Planning safety management training

### **Safety Team**

El Dorado Transit understands the value of how a safety team can contribute to the overall safety performance of the agency and a stronger relationship between frontline staff and management. The Safety Team consists of operators, maintenance staff, supervisors, management, and the safety coordinator and will meet 8-12 times a year.

The Safety Team is designed to maximize the two-way communication by fostering a collaborative work environment to increase safety and buy in for the agency. The meetings will allow for current safety trends, industry trends, policies and procedures discussions and improve the risk assessment and mitigation process.

The Safety Team Duties include, but are not limited to:

- Conduct regularly scheduled and documented meetings

- [Recognize, review, and evaluate potential and current hazards and assist with risk assessment and mitigation](#)
- [Monitor and evaluate the effectiveness of safety recommendations and improvements](#)
- [Assist with encouraging employees to commit to working safely, promote a safe environment and actively continue to learn safety.](#)

## **Agency Leadership and Employees**

All agency leaders have authority and responsibilities for day-to-day SMS implementation and operation of the SMS under this plan. El Dorado Transit's agency leadership is comprised of the following:

- Operations Manager
- Human Resources Manager
- Finance Manager
- Planning and Marketing Manager
- Transit Operation Supervisor
- [Maintenance and Facilities Supervisor](#)

Agency leadership must take an active role in the Safety Risk Management process and ensure that Safety Assurance functions are adequately supported. Agency leadership is also responsible for ensuring that Safety Risk Management is being performed in their operational areas of control so that safety risk associated with safety hazards is assessed and mitigated.

In addition, all employees and contractors will support safety management by ensuring that safety concerns are identified and reported.

## **Employee Reporting Program**

Identifying hazards through audits and evaluations can provide necessary data and initiates hazard assessment. However, to fully comprehend the hazards employees experience daily, an employee reporting program has been established. Any employee can self-report in the following methods:

- Verbal or written safety report to Safety Coordinator, Manager, Supervisor
- Anonymous report
- Safety Team Meetings
- Operator Meetings
- Reports over the radio through dispatch
- Email

Examples of information typically reported include:

- Safety concerns in the operation environment
- Policies and procedures that are not working as intended
- Events that senior managers might not otherwise know about
- Information about why a safety event occurred (for example, radio communication challenges)

On a regular basis, the Chief Safety Officer reviews the dispatch logs, checks the comment box and documents identified safety conditions in the Safety Risk Register. The Chief Safety Officer will review and address each employee report ensuring that hazards and their consequences are appropriately identified and resolved through the Safety Risk Management and that reported deficiencies and non-compliance with rules or procedures are managed through the Safety Assurance process. The Safety Team will assist with reviews as needed.

El Dorado Transit's Chief Safety Officer discusses actions taken to address reported safety conditions during the quarterly all-staff meetings. Additionally, if the reporting employee provided his or her name during the reporting process, the Chief Safety Officer or designee follows up directly with the employee whether actions are or are not taken.

### **Non-Punitive Reporting Policy**

El Dorado Transit is committed to the safest transit operating standards practicable. To achieve this, it is imperative that El Dorado Transit encourage reporting of all safety events that may compromise safe operations. To this end, every employee is responsible for the communication of any information that may affect the integrity of transit safety. Such communication must be completely free of any form of reprisal.

This policy shall not apply to information received by El Dorado Transit from a source other than the employee, or that involves an illegal act, or a deliberate or willful disregard of rules, regulations, or agency policies or procedures.

### **Safety Risk Management**

At El Dorado Transit, safety can be achieved through teamwork. El Dorado Transit uses the Safety Risk Management Process (SRM) as a primary method to ensure the safety of our operations, passengers, employees, vehicles, and facilities. Hazards and their consequences are identified, assessed for potential safety risk, and resolved in a manner acceptable to senior leadership. The SRM allows for examination of what could cause harm and determine mitigations to minimize the risk.

The SRM process applies to all elements of our system including operations, maintenance, facilities, vehicles, recruitment, training, and supervision. Chief Safety Officer leads the SRM process with assistance of safety team and other experts in the field, as necessary. The results are documented in the Safety Risk Register.

### **Safety Hazard Identification**

Establishing an effective hazard identification program is fundamental to safety management at El Dorado Transit. Hazard identification can be reactive or proactive in nature. Safety event reporting, incident investigation, and trend monitoring are essentially reactive. Other hazard identification methods proactively seek feedback through data collection, observation, and day-to-day operations analysis. Common hazard identification activities include, but are not limited to:

- Operator Evaluations
- Safety assessments



- Trend monitoring
  - Safety Events
  - Worker's Compensation Claims
  - Liability Claims
- [Industry Trends](#)
- [Local Trends](#)
- Hazard and safety event reporting (with causal factor analysis)
- Safety audits
- Inspections
  - Routine Maintenance
  - Vehicle Pre/Post trips
  - Bus Stop
  - Facility
- Evaluating customer suggestions and complaints
- Industry Publications and Oversight Authorities such as the Federal Transit Administration (FTA)

### **Safety Risk Management Process**

Inspections are conducted and are an important source of information about hazards. Results from inspections assist in identifying areas where mitigation designs to manage safety risks are not being carried out as required, or gaps in standard operating procedures. Inspections include personnel, vehicles, facilities, and data that identify potential safety concerns or issues. Inspections focus on:

- Compliance checks, which may identify the following:
  - Non-compliance with safety rules
  - Challenges in complying with safety rules; and
  - Emerging practices
- Operations personnel fitness-for-duty checks, which may identify:
  - Impairment
  - Fatigue
  - Absence of corrective lenses
  - Apparent injuries
  - Uniform or equipment issues
- Radio or digital communication checks, which may identify radio failures, dead spots, and areas of high interference
- Review Employee Pull Notice –(EPN) which may identify driver non-compliance with driving regulations and requirements.
- Pre-trip inspections, which may identify instances of a bus beginning revenue service after failing a pre-trip inspection
- Vehicle inspection, which may identify a series of defects in components and parts with the potential to impact the safety performance of the vehicle
- Facilities inspections, which may identify conditions with the potential to impact safety

## Safety Risk Assessment

El Dorado Transit assesses safety risk associated with identified safety hazards using safety risk assessment process. The assessment includes placing importance on likelihood and severity of the consequences of the hazards, including existing mitigation, and prioritizing hazards based on safety risk.

The Chief Safety Officer, with the assistance of field experts (e.g., operations staff, Safety Team members, department heads, FTA etc.) conducts risk assessments using the Safety Risk Matrix. The matrix is a tool to assess a hazard rating of High, Medium, or Low by using a combination of one severity category and one likelihood level. By categorizing the hazard rating, El Dorado Transit can prioritize mitigation based on the associated safety risk. See the following Risk Assessment Matrix:

Risk Assessment Matrix				
Likelihood	Severity			
	1 (Catastrophic)	2 (Critical)	3 (Marginal)	4 (Negligible)
A (Frequent)	1A	2A	3A	4A
B (Probable)	1B	2B	3B	4B
C (Occasional)	1C	2C	3C	4C
D (Remote)	1D	2D	3D	4D
E (Improbable)	1E	2E	3E	4E

Risk Assessment Matrix Color Code	
<i>"Tolerability" based on identified severity and likelihood.</i>	
	Unacceptable under the existing circumstances.
	Acceptable based upon mitigations.
	Acceptable with senior management approval.

Once the safety risk assessment has been completed, the Chief Safety Officer will complete all necessary recordings in the Safety Risk Register. All assessments are documented and must be kept for a minimum of three years.

## Safety Risk Mitigation

The Accountable Executive, Operations Manager and Chief Safety Officer will review current methods of safety risk mitigation and establish methods or procedures to mitigate or eliminate safety risk associated with specific hazards based on assessments and recommendations by the Chief Safety Officer and expert staff. The Chief Safety Officer tracks and updates safety risk mitigation information in the Safety Risk Register and provides updates to staff and the Safety

Team regularly. The Safety Risk Register will document any specific measure or activities such as reviews, observations, or audits that are conducted to monitor the effectiveness of mitigations once implemented.

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## **Safety Assurance**

El Dorado Transit understands practical drift and how it can be detrimental to the safety of El Dorado Transit. Practical drift is where actual performance varies from ‘ideal’ or designed performance and can arise from several factors, including unrealistic procedures and technology that does not always operate as designed. To avoid practical drift, staff employs the following to ensure Safety Assurance on an ongoing basis:

- Evaluates our compliance with operations and maintenance procedures to determine whether our existing rules and procedures are sufficient to control our safety risk
- Assess the effectiveness of safety risk mitigations to make sure the mitigations are appropriate and are implemented as intended
- Investigates safety events to identify causal factors
- Analyzes information from safety reporting including data about safety failures, defects, or conditions.

## **Safety Performance Monitoring and Measurement**

El Dorado Transit monitors its entire transit system for compliance with operations and maintenance procedures including:

- Safety audits
- Informal/formal inspections
- Review of onboard camera footage to assess specific incidents
- Employee Reporting Program
- Investigations of safety occurrences
- Safety review prior to the launch or medication of any facet of service
- Daily data gathering and monitoring of data related to the delivery of service
- Regular vehicle inspections and preventative maintenance

On at least a quarterly basis, the Chief Safety Officer compares results from the processes listed above against recent performance trends to determine where action needs to be taken. The Chief Safety Officer enters any identified, non-compliant or ineffective activities, including mitigations, back into the SRM process for reevaluation.

## **Activities to Monitor Operations**

El Dorado Transit monitors safety risk mitigations to determine if they have been implemented and are appropriate and effective. The Chief Safety Officer maintains a list of safety risk mitigations in the Safety Risk Register. The process for monitoring safety risk mitigations varies depending on the mitigation.

The Chief Safety Officer establishes one or more processes for monitoring safety risk mitigations as part of the mitigation implementation process. Monitoring activities are completed by the appropriate staff and/or Chief Safety Officer. Monitoring may include tracking a specific metric on daily, weekly, or monthly logs or reports; conducting job performance observations; or other activities. The Chief Safety Officer will use existing processes and activities if possible before developing and utilizing new information collection activities.

The Safety Team will assist in reviewing implementation of safety risk mitigations during Safety Team meetings and determine if mitigations are working as intended. If the implemented mitigation is not working as intended, the Safety Team will discuss and propose other mitigations. The Chief Safety Officer will approve or modify and propose the updated potential mitigations to Management for further review and approval.

The Chief Safety Officer works with necessary staff to carry out and document all monitoring activities.

### **Casual Factor Activities**

El Dorado Transit investigates, documents and determines causal factors for events including accidents, incidents and occurrences that result in a trend or significant safety event. A trend is typically three unrelated events with similar locations or outcomes. A significant safety event is an event that may have resulted in major damage, injury, or fatality. Any event can lead to a causal factor determination including vehicle events, passenger events and employee events regardless of a trend or a significant safety event, if the Chief Safety Officer or designee determines an investigation is necessary.

To find causal and contributing factors, fact finding typically includes reviewing the following data sources regarding employees, vehicles, and the operating environment:

- Training records
- Vehicle maintenance records
- Pre-trip records
- Circumstances specific to the event
- Safety event trends
- Interviewing relevant staff
- Investigation results
- Industry

The Chief Safety Officer maintains all documentation of the investigation processes, forms, checklists, activities, and results. Events investigated for causal factors are reviewed and discussed typically with Transit Operation's Supervisor, Maintenance and Facilities Supervisor, Operations Manager, and Accountable Executive. If other parties such as Human Resources, Planning and Marketing, or labor representatives are involved with causal factors, they are included in the review.

During the review of a safety event, the following will be discussed:

- Accident determination which includes Preventable and Chargeable; Preventable and Non-Chargeable; Non- Preventable and Non-Chargeable
- Appropriate discipline or retraining, if necessary
- Any causal factor(s) indicating that a safety hazard contributed to or was present during the event; and
- Any apparent underlying organizational causal factors beyond just individual employee behavior

All safety events are categorized into accident, incident, or occurrence, but not all safety events go through causal factor activities.

### **Internal Safety Reporting Program Activities**

The Chief Safety Officer routinely reviews safety data captured in employee safety reports, safety meeting minutes, customer complaints, and other safety communication channels. When necessary, the Chief Safety Officer ensures that the concerns are investigated or analyzed through El Dorado Transit's SRM process.

The Chief Safety Officer also reviews internal and external reviews which include audits, inspections and assessments and identifies findings concerning El Dorado Transit's safety performance, compliance with operations and maintenance procedures, or the effectiveness of safety risk mitigations.

### **Safety Promotion**

#### **Competencies and Training**

Employees directly responsible for safety need to complete training to be able to fulfill their safety-related roles and responsibilities. These positions include the following:

- Transit Operators
- Transit Dispatchers
- Maintenance Technicians
- Equipment Technicians
- Managers and Supervisors
- Chief Safety Officer
- Accountable Executive

Initial training will be completed at hire and/or assignment, and refresher training will be provided when behaviors indicate a need, and/or there are changes to the PTASP, operations, procedures, organizational structure, and when new hazards are identified and mitigation measures are developed.

### **Safety Communication**

El Dorado Transit recognizes communication between management and staff is key to a successful health and safety program. The Chief Safety Officer will oversee safety communication activities.

*Communicating safety and safety performance information throughout the agency:* Quarterly updates will be presented to staff and management in all staff meetings. Safety bulletins and flyers will be updated often on the safety boards in the maintenance break room and operator break room. Information typically will include relevant safety topics, summary of safety performance, updates to the PTASP, and information which may affect safety.

*Communicating information on hazards, safety risks relevant to employee's roles and responsibilities throughout the agency:* The new hire training orientation will include distribution of safety policies and procedures to all relevant employees. This is in the form of the Personnel

Policy and Procedure Manual and Operator Handbook. Trainings on safety policies and procedures are completed in initial training and occur regularly in Verification of Transit Training (VTT) and refresher training for Operators, Dispatchers and Maintenance staff.

*Safety action taken in response to reports submitted through the Employee Reporting Program:* Communication is shared in the following manor:

- Safety Trainings/VTT will be scheduled often to discuss safety topics and refresh safety policies and procedures.
- Tailgate meetings
- Safety meetings
- Safety bulletin boards
- Posters
- Annual reports to the Board of Directors

## **Record Keeping**

El Dorado Transit will maintain documentation related to the implementation of its SMS; the programs, policies and procedures used to carry out this PTASP; and the results from its SMS processes and activities for a minimum of three years. They will be available to the FTA or other Federal or Oversight entities upon request. Examples of resources and documentation used in the implementation and to continue the policies of the SMS may include but are not limited to the following:

- Personnel Policies and Procedures
- Operator's Handbook
- Best Practices
- Accident Investigation
- Incident forms
- Risk Register
- Safety Analysis'
- Accident Data
- Maintenance Data

## Reference

### Commonly used Acronyms

Acronym	Word or Phrase
Caltrans	California Department of Transportation
FTA	Federal Transit Administration
MPO	Metropolitan Planning Organization
PTASP	Public Transportation Agency Safety Plan
SACOG	Sacramento Area Council of Governments
SMS	Safety Management System
SRM	Safety Risk Management
VTT	Verification of Transit Training

DRAFT



## Safety and Security Quick Reference Guide

<p>Reportable Event: A safety or security event occurring on transit right-of-way or infrastructure, at a transit revenue facility, at a maintenance facility or rail yard, during a transit-related maintenance activity, or involving a transit revenue vehicle. Excluded from this event reporting requirement are events that occur off transit property where affected persons, vehicles, or objects come to rest on transit property after the event, OSHA events in administrative buildings, deaths that are a result of illness or other natural causes, other events (assault, robbery, non-transit vehicle collisions, etc.) occurring at bus stops or shelters that are not on transit-controlled property, collisions that occur while travelling to or from a transit-related maintenance activity, collisions involving a supervisor car, or other transit service vehicle operating on public roads.</p> <p>Alaska (AR) and Commuter rail (CR) modes report only SECURITY events that meet a Major event threshold.</p>	
<b>S&amp;S-40 Major Event Report</b>	<b>S&amp;S-50 Non-Major Monthly Summary</b>
<b>MAJOR THRESHOLDS</b>	<b>NON-MAJOR THRESHOLDS</b>
<p>An event meeting the reportable event definition AND meeting <i>one or more</i> of the following reporting thresholds:</p> <ul style="list-style-type: none"> <li>• A fatality confirmed within 30 days (including suicide)</li> <li>• An injury requiring transport away from the scene for medical attention for one or more persons (partial exception in the case of Other Safety Events)</li> <li>• Estimated property damage equal to or exceeding \$25,000</li> <li>• An evacuation for life safety reasons</li> <li>• Collisions involving transit roadway revenue vehicles that require towing away of a transit roadway vehicle or other non-transit roadway vehicle</li> </ul> <p><b>Reports are due within 30 days of the date of the event.</b></p>	<p>Less severe Other Safety Occurrence Not Otherwise Classified (OSONOC) injuries meeting the reportable event definition that is NOT a result of a collision, derailment, evacuation, security event, hazmat spill, or Act of God and non-major fires.</p> <p>OSONOC:</p> <ul style="list-style-type: none"> <li>• Single injury event requiring transport away from the scene for medical attention (do not report “minor” collisions on S&amp;S-50)</li> </ul> <p><b>Fires:</b></p> <ul style="list-style-type: none"> <li>• Requires suppression that does not meet a major incident reporting threshold <i>injury, fatality, evacuation, or property damage of \$25,000 or more</i></li> </ul> <p><b>Reports due by the end of the following month (e.g., January data due by end of February)</b></p>
<b>S&amp;S-40 Major Event Report</b>	<b>S&amp;S-50 Non-Major Monthly Summary</b>
<b>EVENT TYPES</b>	<b>EVENT TYPES</b>

<ul style="list-style-type: none"> <li>• A collision (including suicide/attempted suicide)</li> <li>• A fire</li> <li>• A hazardous material spill (requires <i>specialized</i> clean-up)</li> <li>• Acts of God (nature)</li> <li>• System security: <ul style="list-style-type: none"> <li>○ Arson</li> <li>○ Bomb threat/bombing</li> <li>○ Burglary/vandalism</li> <li>○ Chemical/biological/radiological/nuclear release</li> <li>○ Cyber security event</li> <li>○ Hijacking</li> <li>○ Sabotage</li> <li>○ Suspicious package</li> <li>○ Other security event (shots fired, projectiles, etc.)</li> </ul> </li> <li>• Personal Security: <ul style="list-style-type: none"> <li>○ Assault</li> <li>○ Homicide</li> <li>○ Robbery</li> <li>○ Larceny/theft</li> <li>○ Motor vehicle theft</li> <li>○ Rape</li> <li>○ Other personal security events (non-collision suicide/attempted suicide, etc.)</li> </ul> </li> <li>• OSONOC (two injuries and/or another threshold) <ul style="list-style-type: none"> <li>○ Miscellaneous events that meet a threshold</li> </ul> </li> </ul>	<p>OSONOC:</p> <p><b>Injury due to:</b></p> <ul style="list-style-type: none"> <li>• Slip/trip</li> <li>• Fall <ul style="list-style-type: none"> <li>○ Including person making contact with a non-moving transit vehicle</li> </ul> </li> <li>• Injury to maintenance workers</li> <li>• Boarding/alighting</li> <li>• Electric shock/burns</li> <li>• Abrupt or evasive transit vehicle maneuvers</li> <li>• Mobility device (e.g. wheelchair) securement issues</li> <li>• Injury sustained on a mobility device lift</li> <li>• Stairs/elevator/escalator injury</li> </ul> <p><b>Fire:</b></p> <ul style="list-style-type: none"> <li>• Requires suppression but no major threshold is met <ul style="list-style-type: none"> <li>○ Small fire in transit station</li> <li>○ Small engine fire on transit vehicle</li> </ul> </li> </ul>
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**Resources- National Transit Data Base**