

STAFF REPORT

SUBJECT: Approval of Updated Public Transportation Agency Safety Plan

FROM: Mike Tobin, Director of Operations

DATE: July 1, 2024

Actions Requested

Staff requests the Board approve the updated Public Transportation Agency Safety Plan.

Background

In keeping with LAVTA's organizational focus on safety, staff has developed a robust safety and security program implemented in partnership with both our transit operations contractor and our paratransit contractor.

The Federal Transit Administration (FTA) requires that public transportation systems receiving federal funds maintain a Public Transportation Agency Safety Plan (PTASP) that includes the processes and procedures to implement a Safety Management System (SMS). An SMS is a comprehensive approach to bringing management and labor together to better control risk, detect and correct safety problems earlier, and measure safety performance more precisely. The rule (49 CFR Part 673) went into effect on July 19, 2019 with a compliance date of July 20, 2021.

This safety plan formalizes and codifies LAVTA existing safety practices and contractor oversight related to safety in one comprehensive document as well as incorporates the safety plans of the fixed-route and paratransit contractors, and was last approved by the Board in 2023. The PTASP is not required to be updated unless there are changes, but it must be reviewed at least annually.

In April 2024, FTA released and updated their Final Rule outlining requirements for maintaining a safety risk reduction program and conducting safety risk assessments for identified risks in order to make recommendations and mitigations.

Discussion

LAVTA and the Safety Committee have completed the annual review of the PTASP and made updates to the annual safety performance targets to reflect a rolling average of the last 3 years of LAVTA's safety performance data as well as adding a new metric for transit worker assaults, as required by FTA.

Safety Performance Targets								
<i>Annual safety performance targets below based on an average of the previous 3 years of LAVTA's safety performance data (2021 through 2023).</i>								
Mode of Service	Fatalities (total)	Average Annual Fatalities (per 100k VRM)	Injuries (total)	Average Annual Injuries (per 100k VRM)	Average Annual Transit Worker Assaults (per 100k VRM)	Safety Events (total)	Average Annual Safety Events (per 100k VRM)	Average Annual System Reliability (VRM/failures)
Fixed Route Bus	0	0	3	.3	0	3	.3	27,949
ADA / Paratransit	0	0	0	0	0	1	.17	198,440

Table 1 Safety Performance Targets

In FTA's PTASP Final Rule released in April 2024, FTA stipulated requirements for Safety Committee membership and responsibilities to provide frontline workers more input into safety decision-making. It also noted using safety risk reduction programs to mitigate assaults on transit workers and vehicle-pedestrian collisions. These requirements were already outlined the last approved PTASP but LAVTA has made edits to emphasize their importance.

Risk Reduction

In the past year, staff was able to implement an innovative cloud-based software called Trackit that allows employees to conveniently report hazards online as well as document accidents and incidents for investigation. LAVTA and the Safety Committee currently track and assess each reported hazard, determining its level of risk and potential impact and likelihood of occurrence. By thoroughly analyzing these factors, an appropriate risk mitigation plan can be implemented to address the specific hazard and reduce accident rates.

Furthermore, updates to and enforcement of the Code of Conduct and Exclusion Policy as well as ongoing de-escalation training for frontline staff have been deployed to mitigate potential bus operator assaults and increase overall safety of the system.

Recommendation

Staff recommends that the Board of Directors approve Resolution 23-2024 adopting the updated LAVTA Public Transportation Agency Safety Plan.

Attachments:

1. PTASP Resolution 23-2024
2. LAVTA Agency Safety Plan June 2024

RESOLUTION NO. 23-2024

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE LIVERMORE
AMADOR VALLEY TRANSIT AUTHORITY ADOPTING THE UPDATED
LAVTA PUBLIC TRANSPORTATION AGENCY SAFETY PLAN**

WHEREAS the Federal Transit Administration (FTA) requires that public transportation systems receiving federal funds develop a Public Transportation Agency Safety Plan (PTASP) that includes the processes and procedures to implement a Safety Management System (SMS); and

WHEREAS the PTASP is a required document that must be reviewed at least annual and updated if necessary; and

WHEREAS LAVTA has updated the PTASP to comply with requirements of FTA's PTASP Final Rule released April 2024;

NOW, THEREFORE, IT IS HEREBY RESOLVED by the Board of Directors to adopt LAVTA's revised PTASP.

APPROVED AND PASSED this 1st day of July 2024.

Evan Branning, Chair

ATTEST:

Christy Wegener, Executive Director

Livermore Amador Valley **TRANSIT AUTHORITY**



Public Transportation Agency Safety Plan (PTASP)


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1. Transit Agency Information

Transit Agency Name	Livermore Amador Valley Transit Authority		
Transit Agency Address	1362 Rutan Court, Livermore, California. 94551		
Name and Title of Accountable Executive	Christy Wegener, Executive Director		
Name of Chief Safety Officer or SMS Executive	Mike Tobin, Director of Operations		
Mode(s) of Service Covered by This Plan	Fixed Route Bus; Paratransit	List All FTA Funding Types (e.g., 5307, 5310, 5311)	5307, 5339
Mode(s) of Service Provided by the Transit Agency (Directly operated or contracted service)	Fixed Route Bus (contracted); Paratransit (contracted)		
Does the agency provide transit services on behalf of another transit agency or entity?	Yes	No <input checked="" type="checkbox"/>	Description of Arrangement(s) not applicable
Name and Address of Transit Agency(ies) or Entity(ies) for Which Service Is Provided	not applicable		

2. Plan Development, Approval, and Updates

Name of Person Who Drafted This Plan	Christy Wegener, Executive Director	
Signature by the Accountable Executive	Signature of Accountable Executive	Date of Signature
	 Executive Director	6/26/2024
Approval by the Board of Directors	LAVTA Board of Directors	Date of Approval
	Resolution 23-2024	7/1/2024
	Relevant Documentation	
A copy of LAVTA Resolution 23-2024, approving the PTASP, is maintained on file by the Director of Finance, LAVTA		
Addresses FTA 49 CFR Part 670	This PTASP addresses all applicable requirements and standards as set forth in FTA's Public Transportation Safety Program and the National Public Transportation Safety Plan	

Version Number and Updates <i>(History of successive versions of this plan)</i>			
Version Number	Section/Pages Affected	Reason for Change	Date Issued
1		New Document	12/7/2020
2	Section 3, Exhibit 4, Exhibit 11	Update Safety Performance Targets; new Bipartisan Infrastructure requirements	5/31/2022
3	Section 1, Section 3, Section 4, Section 7	Update executives; update safety performance targets; remove redundant language; add information on new ESRP portal; add de-escalation training to Section 7 Safety Promotion	6/6/2023
4	Section 3, Section 5	Update Safety Performance Targets based on a three-year rolling average instead of five, per new PTASP requirements; updated language to reiterate cooperation and commitment to maintaining safety risk reduction programs per updates from FTA's PTASP Final Rule released April 2024	6/26/2024

Annual Review and Update of the Public Transportation Agency Safety Plan

(The process and timeline for conducting an annual review and update of the PTASP)

This plan will be jointly reviewed and updated by the Chief Safety Officer and Accountable Executive by July 1 of each year. The Accountable Executive will review and approve any changes, signing the new PTASP, then forward to the LAVTA Board of Directors for review and approval.

3. Safety Performance Targets

Safety Performance Targets								
<i>Annual safety performance targets below based on an average of the previous 3 years of LAVTA’s safety performance data (2021 through 2023).</i>								
Mode of Service	Fatalities (total)	Average Annual Fatalities (per 100k VRM)	Injuries (total)	Average Annual Injuries (per 100k VRM)	Average Annual Transit Worker Assaults (per 100k VRM)	Safety Events (total)	Average Annual Safety Events (per 100k VRM)	Average Annual System Reliability (VRM/failures)
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Safety Performance Target Coordination		
<i>(How LAVTA coordinates with the State and Metropolitan Planning Organization(s) (MPO) in the selection of State and MPO safety performance targets)</i>		
LAVTA’s Accountable Executive will share our PTASP, including safety performance targets, with the Metropolitan Planning Organization (MPO) in our service area each year after its formal adoption by the LAVTA Board of Directors. LAVTA’s Accountable Executive will also provide a copy of our formally adopted plan to the California Department of Transportation. LAVTA personnel are available to coordinate with the California Department of Transportation and the MPO in the selection of California and MPO safety performance targets upon request.		
Targets Transmitted to the State	State Entity Name	Date Targets Transmitted
	California Department of Transportation	
Targets Transmitted to the Metropolitan Planning Organization(s)	MPO Name	Date Targets Transmitted
	Metropolitan Transportation Commission (MTC)	

4. Safety Management Policy

Safety is a core value at LAVTA, and managing safety is a core business function. We will develop, implement, maintain, and continuously improve processes to ensure the safety of our customers, employees, and the public.

Responsibility/Accountability:

LAVTA's Safety Management Policy applies to employees (including contracted) and to every aspect of LAVTA's activities. A positive safety culture includes ownership by all employees to identify and correct any deficiencies at all levels.

LAVTA is committed to the following safety objectives:

- Communicating the purpose and benefits of the Safety Management System (SMS) to all staff, managers, supervisors, employees, and service contractors.
- Providing a culture of open reporting of all safety concerns, ensuring that no action will be taken against any employee who discloses a safety concern through LAVTA's Employee Safety Reporting Program (ESRP), unless such disclosure indicates, beyond any reasonable doubt, an illegal act, gross negligence, or a deliberate or willful disregard of regulations or procedures.
- Providing appropriate management involvement and the necessary resources to establish an effective ESRP that will encourage employees to communicate and report any unsafe work conditions, hazards, or at-risk behavior to the management team.
- Identifying hazardous and unsafe work conditions and analyzing data from the ESRP. (After thoroughly analyzing provided data, the transit operations division will develop processes and procedures to mitigate safety risk to an acceptable level.)
- Establishing safety performance targets that are realistic, measurable, and data driven. Continually improving our safety performance through management processes that ensure appropriate safety management action is taken and is effective.

Working proactively towards identifying and reducing the existence of hazards and risks in the workplace and our system, LAVTA implemented a Safety Management System (SMS) to prevent accidents, reduce risk of injury and assaults on transit workers, 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. LAVTA executives, employees, and contractors will take steps to prevent workplace incidents and injuries, provide support of safety initiatives, and encourage employee communication in order to achieve a safer, healthier workplace. I hold executives, 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 employees are accountable for the delivery of the highest level of safety performance, starting with the Executive Director/CEO.



Christy Wegener, LAVTA Executive Director and Accountable Executive

<p>Safety Management Policy Communication <i>(How the safety management policy is communicated throughout LAVTA and to contractors)</i></p>	
<p>The Chief Safety Officer, who leads LAVTA’s SMS activities, distributes the Safety Management Policy Statement to employees and contractor staff. The policy is also posted on bulletin boards at headquarters and in the operations and maintenance break areas of the operating division (on-site contractor areas). LAVTA has incorporated distribution of the Safety Management Policy into new-hire orientation and all-staff annual safety refreshers, and into Safety Committee meetings with internal and contractor staff.</p>	
<p>Authorities, Accountabilities, and Responsibilities <i>(For the development and management of the SMS)</i></p>	
<p>Accountable Executive</p>	<p>The Executive Director serves as LAVTA’s Accountable Executive with the following authorities, accountabilities, and responsibilities under this plan:</p> <ul style="list-style-type: none"> • Controls and directs human and capital resources needed to develop and maintain the PTASP and SMS. • Designates an adequately trained Chief Safety Officer who is a direct report. • Ensures that LAVTA's SMS is effectively implemented. • Ensures action is taken to address substandard performance in LAVTA’s SMS. • Assumes ultimate responsibility for carrying out LAVTA's PTASP and SMS. • Maintains responsibility for carrying out the agency's Transit Asset Management Plan.
<p>Chief Safety Officer or SMS Executive</p>	<p>The Accountable Executive designates the Director of Operations as LAVTA’s Chief Safety Officer. The Chief Safety Officer has the following authorities, accountabilities, and responsibilities under this plan:</p> <ul style="list-style-type: none"> • Develops LAVTA’s PTASP and SMS policies and procedures in cooperation with frontline employee representatives. • Ensures and oversees day-to-day implementation and operation of LAVTA's SMS for both agency and contractors, and oversees the ESRP • Coordinates with the Safety Committee to: <ul style="list-style-type: none"> ○ Establish and maintain the Safety Risk Register to monitor and analyze trends in hazards, incidents, and accidents; and ○ Ensure regular meetings are being held and the Safety Committee meets the Bipartisan Infrastructure Law requirement of having an equal number of frontline employee representatives and management representatives; and ○ Ensure that the Safety Committee conducts safety risk assessments for identified risks where needed to make recommendations for safety risk mitigations, and ○ Ensure the Safety Committee reviews/approves updates to the PTASP. • Advises the Accountable Executive on SMS progress and status.

	<ul style="list-style-type: none">• Identifies any substandard performance in LAVTA's SMS and develops action plans for approval by the Accountable Executive.• Ensures LAVTA policies are consistent with LAVTA's safety objectives.• Provides Safety Risk Management (SRM) expertise and support for other LAVTA personnel who conduct and oversee Safety Assurance activities.
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<p style="text-align: center;">Agency Executive Leadership and Contractor Management Staff</p>	<p>LAVTA Executive Leadership and Contractor Management Staff also have authorities and responsibilities for day-to-day SMS implementation and operation of LAVTA’s SMS under this plan. LAVTA Executive Leadership and Contractor Management Staff include:</p> <ul style="list-style-type: none"> • Director of Planning and Marketing (LAVTA), • Director of Finance, Human Resources and Procurement (LAVTA), • Operations/Safety/Maintenance managers and supervisors (contractor) <p>LAVTA Executive Leadership and Contractor Management personnel have the following authorities, accountabilities, and responsibilities:</p> <ul style="list-style-type: none"> • Participate as members of LAVTA’s Safety Committee (operations and maintenance staff will be rotated through the Safety Committee while other positions are permanent members). • Complete training on SMS and LAVTA’s PTASP elements. • Oversee day-to-day operations of the SMS in their departments. • Modify policies in their departments consistent with implementation of the SMS, as necessary. • Provide subject matter expertise to support implementation of the SMS as requested by the Accountable Executive or the Chief Safety Officer, including SRM activities, investigation of safety events, development of a safety risk mitigation and reduction program, and monitoring of mitigation effectiveness.
<p style="text-align: center;">Key Staff and Activities</p>	<p>LAVTA uses the Safety Committee, the Campus Safety Committee, as well as the monthly Drivers’ Meeting and monthly All-Staff Meeting, to support its SMS and safety programs, which includes active participation and compliance from contractors:</p> <ul style="list-style-type: none"> • Safety Committee (LAVTA/contractor): Any safety hazards reported will be jointly evaluated by the Safety Committee and the Chief Safety Officer during the bimonthly meeting. The Safety Committee members include the Chief Safety Officer (Director of Operations), Paratransit Planner, and contractor staff (General Manager, Safety Manager, Road Supervisor, Operator, and Mechanic), who will meet to review issues and make recommendations to improve safety. The safety committee also approves the ASP prior to approval by LAVTA’s Board of Directors or Equivalent Entity. • Campus Safety Committee (LAVTA): Regularly reviews Facilities hazard issues at LAVTA’s properties and follows up with mitigations • Drivers’ Meetings (contractor): A permanent agenda item in all monthly Drivers’ Meetings is dedicated to safety. Safety issues are discussed and documented, and shared with the Safety Committee. • Monthly All-Staff Meetings (LAVTA): Hazard reports and mitigations will be shared, safety topics will be brought up for open discussion, further feedback solicited, and hazard self-reporting further encouraged. Information discussed in these meetings will be documented.

<p>Contracted Staff Responsibilities</p>	<p>Contractors, at a minimum, are required to provide an equivalent level of safety reporting program standards and objectives as outlined in this policy and also implement a process to allow employees to report safety conditions and concerns to management. They may also have their own enhanced safety protocols for risk mitigation beyond what is required from LAVTA. LAVTA provides regularly scheduled oversight of the contractor’s SMS through the described <i>Key Staff and Activities</i> above.</p>
<p>Employee Safety Reporting Program <i>(These are the processes and protections for employees (including contract) to report safety conditions to management)</i></p>	
<p>Our front-line employees are our best source of information for identifying hazards. Nobody knows more about the actual safety performance of the transit system than the employees who deliver the service.</p> <p>The Employee Safety Reporting Program (ESRP) is intended to help the Accountable Executive and other senior managers get important safety information from across the transit agency. It can be an agency's most important source of safety data.</p> <p>There are two types of safety reporting programs: mandatory and voluntary.</p> <ul style="list-style-type: none"> • Mandatory: Employees must report hazards that are compliance-based and address regulatory issues. Employees are required to immediately report every incident and accident. An employee's failure to report or provide truthful information of an unsafe hazard or act could result in disciplinary action. • Voluntary: Employees are strongly encouraged to report hazards and can report anonymously. Every employee is empowered to report any unsafe hazard / risk to their supervisor or senior management without fear of retribution or penalty. <p>Employees will have the option to report anonymously to maintain confidentiality. The ESRP is non-punitive and employees will not be disciplined for the act of reporting the Hazard or Near Miss. However, employees must report hazards that are compliance-based and address regulatory issues. Record falsification, Drug & Alcohol violations, grossly negligent behavior, and failure to report accidents/incidents and serious safety hazards are examples of employee behaviors that may result in disciplinary action.</p> <p>Forms of reporting can include submitting a completed SMS Hazard/Risk Report Form (Exhibit 2) or utilizing a centrally located Safety Suggestion Box in break rooms.</p> <p>The Hazard/Risk Report Form shall be completed immediately, so proactive measures can be taken as soon as possible. Depending on the perceived level of risk and severity, the report shall be submitted immediately or by the end of their shift.</p> <p>LAVTA staff is currently implementing a cloud-based software solution that allows all employees, including frontline, to submit hazards through a convenient online portal. Hazards will be stored in a centralized database that will allow staff to efficiently track and assess each reported hazard, determining its level of risk. This assessment involves a comprehensive evaluation to gauge the potential impact and likelihood of the hazard occurring. By thoroughly analyzing these factors, staff can assign an appropriate risk mitigation plan tailored to address the specific hazard.</p>	

Input by employees into the ESRP can include safety concern reporting, operational system description, hazard identification, safety deficiencies, risk assessments, potential consequences of hazards, or recommended safety risk mitigations.

Examples of reports may include the following:

- Safety hazards in the operating environment (for example, county road conditions)
- Policies and procedures that aren't working as intended (for example, insufficient time to complete pre-trip inspections)
- Events that senior managers might not otherwise know about (for example, near misses)
- Information about why a safety event occurred (for example, radio communication challenges contributed to an incident)

The information we receive through this source will help us resolve the reported hazard and notify the supervisor or senior management of changes that may need to be made to mitigate safety hazards in the future.

The Chief Safety Officer will lead the effort on collection, analysis, resolution, and monitoring of hazards and feedback entered through the ESRP. Safety reports collected by the contractor will be addressed in a timely matter, according to their severity, and shared with the Chief Safety Officer/Director of Operations in regularly scheduled meetings and as needed. The Chief Safety Officer will take the lead on the Safety Risk Management process, with inputs from subject-matter experts in operations and maintenance.

5. Safety Risk Management

Safety Risk Management (SRM) Process

(These are the methods/processes of identifying hazards and their consequences, associated safety risks, and mitigations/strategies to address these things once they've been assessed)

LAVTA uses the SRM process as a primary method to ensure the safety of our operations, passengers, employees, vehicles, and facilities. It is a process whereby hazards and their consequences are identified, assessed for potential safety risk, and resolved in a manner acceptable to LAVTA's leadership. LAVTA's SRM process allows us to carefully examine what could cause harm and determine whether we have taken sufficient precautions to minimize the harm, or if further mitigations are necessary. Our fixed route contractor's SRM process is documented in Exhibit 1. Our paratransit contractor's SRM process is documented in Exhibit 2.

LAVTA's Chief Safety Officer leads LAVTA's SRM process, working with LAVTA's Safety Committee (includes contractors; through regularly scheduled meetings listed in Section 4) to identify hazards and consequences, assess safety risk of potential consequences, and mitigate safety risk as a part of the safety risk reduction program aimed to reduce the rates of accidents, injuries, and assaults on transit workers. The results of LAVTA's SRM process will be documented in our Safety Risk Register and referenced materials.

LAVTA's SRM process applies to all elements of our system including our operations, maintenance, facilities, vehicles, personnel recruitment, training, and supervision.

In carrying out the SRM process, LAVTA uses the following terms:

- **Event** – Any accident, incident, or occurrence.
- **Hazard** – Any real or potential condition that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure belonging to LAVTA; or damage to the environment.
- **Risk** – Composite of predicted severity and likelihood of the potential effect of a hazard.
- **Risk Mitigation** – Method(s) to eliminate or reduce the effects of hazards.
- **Consequence** – An effect of a hazard involving injury, illness, death, or damage to LAVTA property or the environment.

Safety Hazard Identification

The safety hazard identification process offers LAVTA and its contractors the ability to identify hazards and potential consequences in the operation and maintenance of our system. Hazards can be identified through a variety of sources, including:

- ESRP;
- Review of vehicle camera footage;
- Review of monthly performance data and safety performance targets;

- Observations from supervisors (contractor);
- Maintenance reports (contractor);
- Comments from customers, passengers, and third parties, including LAVTA's transit insurance pool and vendors;
- Safety Committee, Drivers', and All-Staff Meetings (LAVTA/contractor);
- Results of audits and inspections of vehicles and facilities;
- Results of training assessments;
- Investigations into safety events, incidents, and occurrences; and
- Federal Transit Administration (FTA) and other oversight authorities (mandatory information source).

When a safety concern is observed by LAVTA's management or supervisory personnel or contractor management staff, whatever the source, it is reported to LAVTA's Chief Safety Officer. Procedures for reporting hazards to LAVTA's Chief Safety Officer are reviewed during All-Staff Meetings and in the Safety Committee meetings. LAVTA's Chief Safety Officer also receives employee reports from the ESRP, customer comments related to safety, and the dispatch daily Operations Log. LAVTA's Chief Safety Officer reviews these sources for hazards and documents them in LAVTA's Safety Risk Register.

LAVTA's Chief Safety Officer also may enter hazards into the Safety Risk Register based on their review of LAVTA's operations and maintenance, the results of audits and observations, and information received from FTA and other oversight authorities, as well as the National Transportation Safety Board.

LAVTA's Chief Safety Officer may conduct further analyses of hazards and consequences entered into the Safety Risk Register to collect information and identify additional consequences and to inform which hazards should be prioritized for safety risk assessment. In following up on identified hazards, LAVTA's Chief Safety Officer may:

- Reach out to the reporting party, if available, to gather all known information about the reported hazard;
- Conduct a walkthrough of the affected area, assessing the possible hazardous condition, generating visual documentation (photographs and/or video), and taking any measurements deemed necessary;
- Conduct interviews with employees in the area to gather potentially relevant information on the reported hazard;
- Review any documentation associated with the hazard (records, reports, procedures, inspections, technical documents, etc.);
- Contact other departments that may have association with or technical knowledge relevant to the reported hazard;
- Review any past reported hazards of a similar nature; and
- Evaluate tasks and/or processes associated with the reported hazard.

LAVTA's Chief Safety Officer will then prepare an agenda to discuss identified hazards and consequences with the Safety Committee during bimonthly meetings. This agenda may include additional background on the hazards and consequences, such as the results of trend analyses, vehicle camera footage, vendor documentation, reports and observations, or information supplied by FTA or other oversight authorities.

Any identified hazard that poses a real and immediate threat to life, property, or the environment must immediately be brought to the attention of the Accountable Executive and addressed through the SRM

process (with or without the full Safety Committee) for safety risk assessment and mitigation. This means that the Chief Safety Officer believes immediate intervention is necessary to preserve life, prevent major property destruction, or avoid harm to the environment that would constitute a violation of Environmental Protection Agency or California environmental protection standards. Otherwise, the Safety Committee will prioritize hazards for further SRM activity.

Safety Risk Assessment

LAVTA assesses safety risk associated with identified safety hazards using its safety risk assessment process. This includes an assessment of the likelihood and severity of the consequences of hazards, including existing mitigations, and prioritizing hazards based on safety risk.

The Chief Safety Officer and Safety Committee (LAVTA/contractor) assess prioritized hazards using LAVTA's Safety Risk Matrix (Exhibit 5) and review the assessments and mitigation in the bimonthly meetings. This matrix expresses assessed risk as a combination of one severity category and one likelihood level, also referred to as a *hazard rating*. For example, a risk may be assessed as "1A" or the combination of a Catastrophic (1) severity category and a Frequent (A) probability level.

This matrix also categorizes combined risks into levels, High, Medium, or Low, based on the likelihood of occurrence and severity of the outcome. For purposes of accepting risk:

- "High" hazard ratings will be considered unacceptable and require action from LAVTA to mitigate the safety risk,
- "Medium" hazard ratings will be considered undesirable and require LAVTA's Safety Committee to make a decision regarding their acceptability, and
- "Low" hazard ratings may be accepted by the Chief Safety Officer without additional review.

Using a categorization of High, Medium, or Low allows for hazards to be prioritized for mitigation based on their associated safety risk.

The Chief Safety Officer schedules safety risk assessment activities on the Safety Committee agenda and prepares a Safety Risk Assessment Package. This package is distributed at least one week in advance of the Safety Committee meeting. During the meeting, the Chief Safety Officer reviews the hazard and its consequence(s) and reviews available information distributed in the Safety Risk Assessment Package on severity and likelihood. The Chief Safety Officer may request support from members of the Safety Committee in obtaining additional information to support the safety risk assessment.

Once sufficient information has been obtained, the Chief Safety Officer will facilitate completion of relevant sections of the Safety Risk Register, using the LAVTA Safety Risk Assessment Matrix, with the Safety Committee. The Chief Safety Officer will document the Safety Committee's safety risk assessment, including hazard rating and mitigation options for each assessed safety hazard in the Safety Risk Register. The Chief Safety Officer will maintain on file Safety Committee agendas, Safety Risk Assessment Packages, additional information collection, and completed Safety Risk Register sections for a period of three years from the date of generation.

Safety Risk Mitigation

LAVTA's Accountable Executive and Chief Safety Officer review current methods of safety risk mitigation and establish methods or procedures to mitigate or eliminate safety risk associated with specific hazards based on recommendations from the Safety Committee (after contractors have gone through their SRM processes documented in Exhibits 1 and 2). LAVTA can reduce safety risk by reducing the likelihood

and/or severity of potential consequences of hazards.

Prioritization of safety risk mitigations is based on the results of safety risk assessments. LAVTA's Chief Safety Officer tracks and updates safety risk mitigation information in the Safety Risk Register and makes the Register available to the Safety Committee and LAVTA staff upon request.

In the event that the agency fails to meet a safety risk reduction program safety performance target, funds not less than 0.75 percent of LAVTA's Section 5307 will be allocated in the following fiscal year to projects reasonably expected to assist in meeting targets.

In the Safety Risk Register, LAVTA's Chief Safety Officer will also document any specific measures or activities, such as reviews, observations, or audits, that will be conducted to monitor the effectiveness of mitigations once implemented.

6. Safety Assurance

Through our Safety Assurance process, LAVTA and contractors:

- Evaluate 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;
- Investigate safety events to identify causal factors; and
- Analyze information from safety reporting, including data about safety failures, defects, or conditions.

Safety Performance Monitoring and Measurement

(Activities used to monitor the system for compliance with procedures for operations and maintenance)

LAVTA has many processes in place to monitor its entire transit system (including contractors) for compliance with operations and maintenance procedures on a quarterly and annual basis and as needed, including:

- Safety audits,
- Informal inspections,
- Regular review of onboard camera footage to assess drivers and specific incidents,
- Safety surveys,
- ESRP,
- Investigation of safety occurrences,
- Safety review prior to the launch or modification of any facet of service,
- Daily data gathering and monitoring of data related to the delivery of service, and
- Regular vehicle inspections and preventative maintenance.

These activities are mirrored by the contractors and outlined in Exhibits 3 and 4. Results from the above processes from both contractors and internal staff are compared against recent performance trends quarterly and annually by the Chief Safety Officer 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 by the Safety Committee (LAVTA/contractor).

(Activities used to monitor operations to identify any safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended).

LAVTA monitors safety risk mitigations to determine if they have been implemented and are effective, appropriate, and working as intended. Contractors will monitor these (per Exhibits 3 and 4) and report back to LAVTA and the Safety Committee (LAVTA/contractor). The Chief Safety Officer maintains a list of safety risk mitigations in the Safety Risk Register. The mechanism for monitoring safety risk mitigations varies depending on the mitigation.

The Chief Safety Officer establishes one or more mechanisms for monitoring safety risk mitigations as part of the mitigation implementation process and assigns monitoring activities to the appropriate director,

manager, or supervisor. These monitoring mechanisms 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 endeavor to make use of existing LAVTA processes and activities before assigning new information collection activities.

LAVTA's Chief Safety Officer and Safety Committee (LAVTA/contractor) review the performance of individual safety risk mitigations during bimonthly Safety Committee meetings, based on the reporting schedule determined for each mitigation, and determine if a specific safety risk mitigation is not implemented or performing as intended. If the mitigation is not implemented or performing as intended, the Safety Committee will propose a course of action to modify the mitigation or take other action to manage the safety risk. Additionally, the system itself is being evaluated to ensure its effectiveness. The Chief Safety Officer will approve or modify this proposed course of action and oversee its execution.

LAVTA's Chief Safety Officer and Safety Committee also monitor LAVTA's operations on a large scale to identify mitigations that may be ineffective, inappropriate, or not implemented as intended by:

- Reviewing results from accident, incident, and occurrence investigations;
- Monitoring employee safety reporting;
- Reviewing results of internal safety audits and inspections; and
- Analyzing operational and safety data to identify emerging safety concerns, including data submitted to the NTD

The Chief Safety Officer works with the Safety Committee and Accountable Executive to carry out and document all monitoring activities.

(Activities used to conduct investigations of safety events to identify causal and latent factors).

LAVTA maintains documented procedures for conducting safety investigations of events (accidents, incidents, and occurrences, as defined by FTA) to find causal and contributing factors and review the existing mitigations in place at the time of the event (see Safety Event Investigation Procedures Manual, Exhibit 6). These procedures also reflect all traffic safety reporting and investigation requirements established by California Department of Motor Vehicles.

The Chief Safety Officer maintains all documentation of LAVTA's and the contractors' investigation policies, processes, forms, checklists, activities, and results. Investigation reports are prepared and shared with the Safety Committee (LAVTA/contractor) for integration into their analysis of the event.

The Safety Committee determines whether:

- The accident was preventable or non-preventable;
- Personnel require discipline or retraining;
- Latent factor(s) (beyond human factors such as errors, violations, the condition of an individual, or lack of communication or coordination between individuals, equipment and infrastructure failures in vehicles or technological components, organizational or environmental elements, or elements outside of the agency's control) contributed to the safety event;
- The causal factor(s) indicate(s) that a safety hazard contributed to or was present during the event;
- There are larger factors outside the control of the agency; and
- The accident appears to involve underlying organizational causal factors beyond just individual employee behavior, such as management elements, and agency/contractor

policies and procedures.
<i>(Activities used to monitor information reported through internal safety reporting programs).</i>
<p>The Chief Safety Officer and Safety Committee (LAVTA/contractor) routinely (bimonthly meetings) review safety data captured in employee safety reports, safety meeting minutes, customer complaints, and other safety communication channels. When necessary, the Chief Safety Officer and Safety Committee ensure that the concerns are investigated or analyzed through LAVTA’s SRM process.</p> <p>The Chief Safety Officer and Safety Committee also review internal and external reviews, including audits and assessments, with findings concerning LAVTA’s safety performance, compliance with operations and maintenance procedures, or the effectiveness of safety risk mitigations.</p>

7. Safety Promotion

Competencies and Training

(The safety training program is relayed and promoted to all agency employees and contractors directly responsible for safety)

LAVTA's comprehensive safety training program applies to all LAVTA employees and contractors directly responsible for safety, including:

- Bus vehicle operators,
- Dispatchers,
- Maintenance technicians,
- Managers and supervisors,
- Agency Leadership and Executive Management, and
- Chief Safety Officer and Accountable Executive.

LAVTA dedicates resources to conduct a comprehensive safety training program, as well as training on SMS roles and responsibilities. The scope of the safety training, including annual refresher training, is appropriate to each employee's individual safety-related job responsibilities and their role in the SMS. Contractors are required to conduct trainings and report status updates to LAVTA's Chief Safety Officer.

Basic training requirements for any employee or contractor operating LAVTA services, including frequencies and refresher training, are documented in the LAVTA Employee Handbook (Exhibit 4), MV Employee Handbook (Exhibit 5), Operator Requirements and Training Program (Exhibit 6) and/or Maintenance Safety Handbook (Exhibit 7).

Operations safety-related skill training (contractor) includes the following:

- Comprehensive new-hire bus vehicle operator classroom and hands-on skills training,
- Bus vehicle operator refresher training,
- Bus vehicle operator retraining (recertification or return to work),
- Bus vehicle operator de-escalation training,
- Classroom and on-the-job training for dispatchers,
- Classroom and on-the-job training for operations supervisors and managers, and
- Accident investigation training for operations supervisors and managers.

Vehicle maintenance safety-related skill training (contractor) includes the following:

- Ongoing vehicle maintenance technician skill training,
- Ongoing skill training for vehicle maintenance supervisors,
- Accident investigation training for vehicle maintenance supervisors,
- Ongoing hazardous material training for vehicle maintenance technicians and supervisors, and
- Training provided by vendors.

LAVTA's Accountable Executive and Agency Leadership and Contractor Management staff must complete FTA's SMS Awareness online training and an executive session on safety management sponsored by LAVTA's transit insurance pool.

Safety Communication

(The processes and activities by which safety and safety performance information is communicated throughout the organization and to contractors)

LAVTA's Chief Safety Officer and Director of Finance (providing the human resources function) coordinate LAVTA's safety communication activities for the SMS. Contractors will, at a minimum, mirror LAVTA's frequency with which safety updates and performance information is communicated to employees and/or as required contractually at monthly meetings and report back to the Chief Safety Officer. LAVTA may also inquire and poll employee and contractor staff to ensure their awareness of the latest safety information shared. These activities focus on the three categories of communication activity established in 49 CFR Part 673:

- **Communicating safety and safety performance information throughout the agency:** LAVTA communicates information on safety and safety performance during monthly All-Staff Meetings. LAVTA also has a permanent agenda item in all monthly Drivers' Meetings (contractor) dedicated to safety. Information typically conveyed during these meetings includes safety performance statistics, lessons learned from recent occurrences, upcoming events that may impact LAVTA's service or safety performance, and updates regarding SMS implementation. LAVTA also requests information from drivers during these meetings, which is recorded in meeting minutes. Finally, LAVTA's Director of Finance, who oversees human resources, posts safety bulletins and flyers on the bulletin boards located in all bus operator and maintenance technician break rooms (contractor areas), advertising safety messages and promoting awareness of safety issues.
- **Communicating information on hazards and safety risks relevant to employees' roles and responsibilities throughout the agency:** As part of new-hire training, LAVTA distributes safety policies and procedures, included in the LAVTA Employee Handbook, to all employees. LAVTA and contractors provide training on these policies and procedures and discuss them during safety talks between supervisors and bus operators and vehicle technicians. Contractors will also communicate their own safety information and trainings as outlined in Exhibits 3, 4, 8, and 9 to staff. For newly emerging issues or safety events at the agency, LAVTA's Chief Safety Officer issues bulletins or messages to employees that are reinforced by supervisors in one-on-one or group discussions with employees. Contractors communicate this information to their employees, log, and report back to the Safety Committee (LAVTA/contractor).
- **Informing employees of safety actions taken in response to reports submitted through the ESRP:** LAVTA provides targeted communications to inform employees of safety actions taken in response to reports submitted through the ESRP, including handouts and flyers, safety talks, updates to bulletin boards, and one-on-one discussions between employees and supervisors. This information is also relayed to contractors so they can pass it on to their staff.

8. Additional Information

Supporting Documentation

(Used to implement and carry out the PTASP that are not included elsewhere in this document)

LAVTA 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 three years after creation. Please also see accompanying Exhibits. They will be available to the FTA or other Federal or oversight entity upon request.

9. Definitions of Terms Used in the Safety Plan

LAVTA incorporates all of FTA's definitions that are in 49 CFR § 673.5 of the Public Transportation Agency Safety Plan regulation.

- **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.
- **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.
- **Equivalent Authority** means an entity that carries out duties similar to that of a Board of Directors for a recipient or subrecipient of FTA funds under 49 U.S.C. Chapter 53, including sufficient authority to review and approve a recipient or subrecipient's Public Transportation Agency Safety Plan.
- **Event** means any Accident, Incident, or Occurrence.
- **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.
- **Incident** means an event that involves any of the following: a personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a transit agency.
- **Investigation** means the process of determining the causal and contributing factors of an accident, incident, or hazard, for the purpose of preventing recurrence and mitigating risk.
- **National Public Transportation Safety Plan** means the plan to improve the safety of all public transportation systems that receive Federal financial assistance under 49 U.S.C. Chapter 53.
- **Occurrence** 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.
- **Operator** of a public transportation system means a provider of public transportation as defined under 49 U.S.C. 5302.
- **Performance measure** means an expression based on a quantifiable indicator of performance or condition that is used to establish targets and to assess progress toward meeting the established targets.
- **Performance target** means a quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the FTA.
- **Public Transportation Agency Safety Plan** means the documented comprehensive Agency Safety Plan for a transit agency that is required by 49 U.S.C. 5329 and Part 673.

- **Risk** means the composite of predicted severity and likelihood of the potential effect of a hazard.
- **Risk mitigation** means a method or methods to eliminate or reduce the effects of hazards.
- **Safety Assurance** means processes within a transit agency's Safety Management System that function to ensure the implementation and effectiveness of safety risk mitigation, and to ensure that the transit agency meets or exceeds its safety objectives through the collection, analysis, and assessment of information.
- **Safety Management Policy** means a transit agency's documented commitment to safety, which defines the transit agency's safety objectives and the accountabilities and responsibilities of its employees in regard to safety.
- **Safety Management System** means the formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of a transit agency's safety risk mitigation. SMS includes systematic procedures, practices, and policies for managing risks and hazards.
- **Safety performance target** means a performance target related to safety management activities.
- **Safety Promotion** means a combination of training and communication of safety information to support SMS as applied to the transit agency's public transportation system.
- **Safety risk assessment** means the formal activity whereby a transit agency determines Safety Risk Management priorities by establishing the significance or value of its safety risks.
- **Safety Risk Management** means a process within a transit agency's Agency Safety Plan for identifying hazards and analyzing, assessing, and mitigating safety risk.
- **Serious injury** means any injury which: (1) Requires hospitalization for more than 48 hours, commencing within 7 days from the date when the injury was received; (2) Results in a fracture of any bone (except simple fractures of fingers, toes, or noses); (3) Causes severe hemorrhages, 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.
- **Transit agency** means an operator of a public transportation system.
- **Transit Asset Management Plan** means the strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risks, and costs over their life cycles, for the purpose of providing safe, cost-effective, and reliable public transportation, as required by 49 U.S.C. 5326 and 49 CFR Part 625.

10. Commonly Used Acronyms

Acronym	Word or Phase
ADA	American's with Disabilities Act of 1990
PTASP	Public Transportation Agency Safety Plan (Part 673)
CFR	Code of Federal Regulations
ESRP	Employee Safety Reporting Program
FTA	Federal Transit Administration
LAVTA	Livermore Amador Valley Transit Authority
MPO	Metropolitan Planning Organization
Part 673	49 CFR Part 673 (Public Transportation Agency Safety Plan)
SMS	Safety Management System
SRM	Safety Risk Management
U.S.C.	United States Code
VRM	Vehicle Revenue Miles

11. Exhibits

Exhibit 1: MV Safety Management System (SMS), Hazard/Risk Report Form, Risk Severity Matrix.....	1
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