

# **Tahoe Transportation District**

## **Public Transit Agency Safety Plan**





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## **Table of Contents**

Transit Agency Information	4
Plan Development, Approval, and Updates	5
Safety Performance Targets	6
Safety Performance Target Coordination	7
Safety Management System (SMS)	7
Safety Management Policy	8
Safety Management Policy Statement	8
Safety Management Policy Communication	9
Authorities, Accountabilities, and Responsibilities	10
Employee Safety Reporting Program	14
Safety Risk Management Process	15
Safety Assurance	18
Safety Promotion	21
Safety Communication	23
Appendices	25
Appendix A: Record of Revisions	25
Appendix B: Glossary of Terms and Acronyms	26
Appendix C: 2018 NTD Safety & Security Quick Reference Guide – Non-Rail Mode Reporting	29
Appendix D: The Reporting Solution Entry Screens	31
Appendix E: Safety Risk Matrix	33
Appendix F: Risk Score Legend	34



## **Transit Agency Information**

Transit Agency: Tahoe Transportation District (Hereafter referred to as "TTD")

**Transit Agency Addresses** 

Administrative Office: 128 Market St. Suite 3F, Stateline, NV 89449

Corporation Yard: 1669 Shop St. South Lake Tahoe, CA 96150

Y Transit Center: 1000 Emerald Bay Rd. South Lake Tahoe, CA 96150

Accountable Executive: Carl Hasty, District Manager

Chief Safety Officer: George Fink, Transit System Program Manager

Modes of Service: Motor Bus, Commuter Bus, and Demand Response (all directly operated)

FTA Funding Received: 5307, 5310, 5311, 5339, and 5311(f)

Tahoe Transportation District does not provide transit services to another transit agency or service.



## Plan Development, Approval, and Updates

#### **Development**

The Tahoe Transportation District drafted this plan. By signature below, the Accountable Executive confirms the development this plan.

Carl Hasty, Accountable Executive Date Signed

Approval

The Tahoe Transportation District 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 Resolution Number 2020-005 and the Board of Directors Meeting Minutes from May 8, 2020. The meeting minutes can be reviewed on the Tahoe Transportation District website.

Steve Teshara, Chairman, TTD Board of Directors

May 13, 2020

Date Signed

#### Certification

The Tahoe Transportation District's Public Transit Agency Safety Plan (PTASP) addresses all applicable requirements. TTD's Agency Plan was certified by George Fink, Transit System Program Manager, on May 15, 2020, which can be reviewed in Transit Award Management System (TrAMS).

#### Annual Review and Revisions of the Public Transportation Agency Safety Plan

Each spring, the PTASP will be reviewed by the Chief Safety Office and updated, if needed. All substantive revisions will be presented to the Accountable Executive and TTD Board of Directors for annual approval. A table that records the history of revisions made to the Agency's PTASP is contained in Appendix A of this document.



#### **Glossary and Acronyms**

A glossary of terms and acronyms can be found in Appendix B.

#### **Safety Performance Targets**

TTD's safety performance targets are reviewed and updated during the annual review. 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 TTD. These targets are specific numerical targets set by TTD, and must be based on the safety performance measures established by FTA in the National Public Transportation Safety Plan referenced in the Safety and Security Quick Reference Guide in Appendix C.

TTD fleet vehicles are interchanged between modes. TTD uses the Predominant Use Rule when an event affects more than one mode. If two or more transit modes are affected by an event, TTD will report the event in only one mode. Most passengers are served by the fixed routes (motor buses). When an event affects more than one mode, the event will be assigned to a motor bus.

**Fatalities:** Total number of reportable fatalities and rate per total vehicle revenue miles by mode in a calendar year.

**Injuries:** Total number of reportable injuries<sup>1</sup> (defined in the NTD Safety and Security Reporting Manual) and rate per total vehicle revenue miles by mode in a calendar year.

<sup>1</sup>NTD: An injury (employee or passenger) requiring immediate medical attention away from the scene for one or more persons.

**Safety Events:** Total number of reportable events<sup>2</sup> and rate per total vehicle revenue miles by mode in a calendar year.

<sup>2</sup>NTD: Preventable events that occur at transit revenue facilities, on transit infrastructure, or during a transit maintenance activity.

Total injuries and safety events are calculated by averaging previous year totals and the rates are indicated as a fraction with the total over the estimated ridership per mode.



**System Reliability:** Mean distance, in miles, between major mechanical failures by mode in a calendar year.

System reliability is calculated using the Predominant Use Rule. The miles between road calls are averaged for previous years and the total is divided by the percentage assigned to each mode.

Mode of Transit Service	Fatalities (Total)	Fatalities (Rate)	Injuries (Total)	Injuries (Rate)	Safety Events (Total)	Safety Events (Rate)	System Reliability (miles)
Motor Bus (MB)	0	0	4	1/381,539	1	1/381,539	10,000
Commuter Bus (CB)	0	0	1	1/48,802	1	1/48,802	10,000
Demand Response (DR)	0	0	1	1/13,309	1	1/13,309	10,000

## **Safety Performance Target Coordination**

TTD's safety performance targets are provided to California Department of Transportation (Caltrans), Nevada Department of Transportation (NDOT), and Tahoe Metropolitan Planning Organization (TMPO), along with the safety plan.

#### **Targets Transmitted**

Organization	Date Transmitted
ТМРО	May 5, 2020
NDOT	May 5, 2020
Caltrans	May 9, 2020

## **Safety Management System (SMS)**

A Safety Management System (SMS) is a comprehensive approach to managing safety within the transit system. Management and staff work together to control risk, identify and correct hazards, measure and analyze safety performance metrics, and disseminate safety information. The SMS helps transit agencies apply resources to risk and ensure they have an organizational infrastructure to support decision-making at all levels regarding the assignment of resources.



#### Key components include:

- Effective policies and procedures
- Strong executive leadership focused on safety
- Clearly defined safety roles and responsibilities
- Safety accountabilities and communication
- Active employee involvement

### **Safety Management Policy**

#### **Safety Management Policy Statement**

TTD is committed to the management of safety. TTD will develop, implement, maintain, and constantly improve processes to ensure that all the transit service delivery activities take place under a balanced allocation of organizational resources. As a core business function, TTD is aimed at achieving the highest level of safety performance and meeting established standards.

All levels of management and all employees are accountable for the delivery of this highest level of safety performance, starting with the District Manager.

#### TTD is committed to:

- Support safety management through the provision of appropriate resources. This will result in a District culture that fosters safe practices, encourages effective employee reporting and communication;
- Integrate the management of safety among the primary responsibilities of all managers and employees;
- Clearly define for all staff and managers alike their accountabilities and responsibilities for the delivery of the District's safety performance and the performance of the safety management system;
- Establish and operate hazard identification and analysis, and safety risk evaluation activities, including an employee safety reporting program in order to eliminate or mitigate the safety risks resulting from operations or activities consistent with acceptable level of safety performance;
- Ensure that no action will be taken against any employee who discloses a safety concern
  through the employee safety reporting program, unless disclosure indicates, beyond any
  reasonable doubt, an illegal act, gross negligence, or a deliberate or willful disregard of the
  collective bargaining agreement, regulations, policies, or procedures;



- Comply with, and wherever possible exceed, legislative and regulatory requirements and standards;
- Ensure that sufficient skilled and trained staff are available to implement safety management processes;
- Ensure that all staff are provided with adequate and appropriate safety-related information and training, are competent in safety management matters, and are allocated only tasks commensurate with their skills;
- Establish and measure safety performance against realistic and data-driven safety performance indicators and safety performance targets;
- Continually improve safety performance through management processes that ensure appropriate safety management action is taken and is effective; and
- Ensure externally supplied systems and services to support operations are delivered meeting safety performance standards.

### **Safety Management Policy Communication**

The Safety Management Policy is posted at TTD's Administrative Office and in the employee breakroom at the Corporation Yard. The Safety Management Policy was first shared with employees after the completion of the PTASP. TTD disseminated the Safety Management Policy to the public in the following manner:

- TTD Board of Directors meeting (Date of Publication: May 5, 2020)
- TTD website (Date of Publication: May 15, 2020)
- Staff intranet (Date of Publication: pending)
- Employee newsletter (Date of Publication: May 14, 2020)
- New hire orientation-ongoing
- TTD email blasts (Date of Publication: May 18, 2020)

In addition to the Safety Management Policy, TTD has numerous standard operating procedures (SOPs) and operational policies to supplement, detail, and support the overall the SMS. Examples of TTD's policies include Smoking, Cash Variance, Appearance, Vehicle Backing/Spotters, Lost and Found, and Reasonable Modification. Each policy includes safety components to ensure the wellbeing of TTD staff, passengers, and the greater community. Similarly, there are various SOPs (e.g. Snow Routes and Detours, Chaining, Boarding and Securement, Post Collision) for maintenance and operations to safeguard everyone. Staff sign acknowledgments for all policies and procedures after they receive training and have an opportunity to ask questions. Staff participation in all safety trainings and the safety committee meetings is recorded through a sign-in sheet. TTD will maintain documentation



related to the implementation of the SMS; the programs, policies, and procedures used to carry out the PTASP; and the results from its SMS processes and activities for three years after creation. This documentation will be available to the FTA or other Federal or oversight entity upon request.

#### Authorities, Accountabilities, and Responsibilities

Safety is everyone's responsibility at TTD. Anyone may observe a hazard that could result in an event. All employees must remain alert and observant to ensure hazards are mitigated to the greatest extent possible. Below are the authorities, accountabilities, and responsibilities of the following individuals in the development and management of TTD's SMS.

#### **Accountable Executive**

The Accountable Executive may delegate specific responsibilities, but not their accountability for the transit agency's safety performance and PTASP in accordance with 49 U.S.C. 5329(d) and 49 U.S.C. 5326.

TTD's Accountable Executive reviewed the draft policy after it had been developed by staff. Comments and recommended changes were taken into account when the final document was developed. The Accountable Executive then submitted the policy to the TTD Board of Directors for approval. Once approved, the Accountable Executive signed the policy. Additional responsibilities include, but are not limited to:

- Decision-making regarding resources (e.g. staff and funds) to support asset management, SMS activities, and capital investments;
- Signing SMS implementation planning documents; and
- Endorsing SMS implementation team membership.

#### **Chief Safety Officer**

The Chief Safety Officer oversaw the development of the Safety Management Policy. The Chief Safety Officer worked with Chief Financial Officer, Human Resources/Risk Manager, Controller, Fleet and Facilities Manager, Operations Manager, and safety committee to develop the plan. TTD's 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 and Board of Directors on SMS implementation progress; and
- Planning safety management training.



#### **Key Staff**

Below are TTD's managers and supervisors who play leadership roles in providing important data or resources to accomplish the agency's safety goals and ensure the day to day safe operation of TTD's modes of transportation.

#### **District Manager (Accountable Executive)**

- Provides guiding direction to staff on TTD's mission, vision, and goals. Leads the organization's safety culture
- Makes decisions regarding resources (e.g. staff and funds) to support asset management, SMS activities, and capital investments
- Signs SMS implementation planning documents and endorses SMS implementation and team participation

#### **Transit System Program Manager (Chief Safety Officer)**

- Leads all transit efforts
- Allocates funds to transit safety programs (capital and operating)
- Participates in root cause investigations
- Reviews route development for safety consideration
- Ensures compliance to include monitoring the industry for best practices, new regulations, and even trainings

#### **Chief Financial Officer and Controller**

- Reports to funding agencies on revenue mileage, insurance costs, and experience modification
- Reports expenditures on safety and security
- Oversees insurance claims
- Ensures financial securities including:
  - o Daily backups, both to the physical server and cloud
  - Security cameras inside the vault
  - Armored truck collection for cash collection; related protocols
  - Separation of financial duties
  - o Limited access and privileges to accounting software and cash account
  - o Bank verification of expenses
  - Annual financial audits

#### **Human Resources/Risk Manager**

- Records the employee retention rates
- Recordkeeping and reporting OSHA injury and illness
- Coordinates and tracks worker's compensation cases



- Participates on the safety committee
- Coordinates safety meeting facilitators for staff
- Reviews standard operating procedures with staff
- Directs the risk management program, including insurance and liability
- Sets up and monitors records and program functions for risk management activities relating to proper appraisal and insuring of District properties, fixed assets and other items
- Recommends and implements policy/procedure updates as they relate to legal, legislative and other developments concerning risk management matters and related impacts on operations

#### Fleet and Facility Manager

- Supervisory and administrative responsibility for the maintenance and safety of all revenue and non-revenue vehicles, equipment, and facilities
- Administers the Transit Management Plan
- Inspects buildings, equipment, utility systems and facilities to determine needed repairs and maintenance and ensure they are kept in a State of Good Repair, consistent with FTA guidance and TTD adopted standards
- Maintains the collection and provision of maintenance data, such as frequency, cost of materials, and cost of labor for repairs
- Provides training to maintenance staff, assists in safety meeting deliverables, contributes to the safety committee, and participates in root cause investigations
- Establishes and monitors work policies, procedures and safety standards; trains assigned staff accordingly; executes corrective disciplinary actions, as required
- Prepares and maintains records, logs, and reports related to activities, inventory, MSDS (materials data safety sheet) documentation, work requests, accident and safety issues

#### **Operations Manager**

- Monitors and supervises operator performance and policy adherence to assure a safe, high quality, fixed-route and paratransit service is provided to the public
- Assesses, develops, and provides appropriate training as necessary
- Visits the field to interact and develop positive rapport with operators, road supervisors and the public to assure safe, courteous and reliable service
- Conducts investigations and interviews, levies discipline for operators concerning performance issues, up to and including termination
- Updates the PTASP
- Responds to employee incident reports and safety concerns in the Operations Department
- Participates in root cause investigations, manages safety related data collection
- Assists with the development of routes, including timing and safety considerations
- Assists in safety meeting deliverables, coordinates facilitators for safety meetings, contributes to the safety committee, and participates in root cause investigations



- Leads customer complaint investigation
- Leads the develop of SOPs; trains and reviews with staff
- Distributes information to external partners and passengers
  - o Rider alerts posted on social media
  - Rider alerts on the TTD website
  - Transit app alerts

#### **Operations Supervisor**

- Leads root cause investigations, tracks safety events, identifies trends or patterns, and oversees training and retraining of all operations staff
- Leads in route development, including timing and safety considerations
- Schedules road supervisors, operators, and dispatchers; monitors hours per DOT regulations
- Inspects and verifies work in progress and completed work of assigned employees and contractors for accuracy, proper safe work methods, techniques, and compliance with applicable safety standards and specifications
- Participates in the Safety Committee
- Assists in the customer complaint investigation
- Assists in the development of SOPs
- Assists with distribution of external information

#### **Road and Maintenance Supervisors**

- Responsible for self-inspections and reporting unsafe work practices/conditions to one or more
  of the above parties, ensures operators properly complete pre/post-trip inspections
- Observes driving skills and work habits of operators in the field; evaluates and trains operators; responds to problems in the field, such as equipment failures and incidents
- Makes work practice observations to all areas under their supervision
- Completes accident investigation forms and participates in determining the root cause of an accident/incident; assists in investigating and resolving customer complaints
- Oversees and provides input to route changes/emergency needs due to inclement weather or other situations that demand attention
- Ensures all TTD policies and procedures are followed by staff; models safe practices
- Routinely utilizes video management system (VMS) software to document incidents and submit reports and statements as necessary

#### **Shop Stewards**

 Assist in achieving buy-in from frontline staff, monitor safe practices on a daily basis, and provide input from the membership

#### **Trainers**

- Observations of unsafe trends or patterns
- Provisions training needs



- Ensures acceptable pass rates for new operators
- Performs evaluations of new operators

#### **Transit Planner/Analyst**

- Reports to the National Transit Database (NTD)
- Participates in route development, including timing and safety considerations
- Leads Short Range Transit Plan (SRTP) development

#### Safety Sensitive Staff (Operators, Mechanics, Dispatchers, and Utility Workers)

- Responsible for self-inspections and reporting safety concerns immediately, either to a supervisor, Human Resources/Risk Manager, one or more of the above parties, or anonymously by way(s) per the agency's policy
- Responsible for participating in mandatory safety meetings; voluntary participation in safety committee
- Responsible for all aspects related to fitness for duty
- Abides by all Department of Transportation (DOT) regulations
- Obeys all traffic laws
- Monitors passengers' behavior to ensure their safety and the safety of other passengers

### **Employee Safety Reporting Program**

TTD's system of communication (management, supervisors, and employees), is designed to facilitate a continuous flow of two-way safety information in a form that is readily understandable to, and between, all affected personnel. This two-way communication may include language interpreters, when appropriate. Safety information is entered, aggregated, and queried through an information management system, The Reporting Solution. Below are the current methods of information sharing:

- All TTD staff participate in a new staff orientation, including a discussion of site-specific safety and health policies and procedures; the policies and procedures are referenced throughout training to ensure understanding, implementation, and retention
- Transit staff attend monthly safety training meetings which encourage employee participation and dialog, including topic suggestions
- Routine completion of the Daily Vehicle Inspection Reports (DVIRs) of operators to alert maintenance of any mechanical defect
- Staff are trained and encouraged to enter the following in The Reporting Solution (Appendix D):
  - Fleet and Facility Requests for maintenance
  - Service Incidents to alert all staff of impacts on the routes (e.g. detours, hazards, snow routes, etc.)
  - o Employee Incident Reports are required for all near misses and other safety events



- Staff may anonymously report safety concerns and inform management of work place hazards though safety suggestion boxes or the safety concern entry screen in The Reporting Solution (Appendix D)
- Dispatchers, Road Supervisors and management make safety announcements over the two-way radio
- Staff may review safety promotional materials on the safety communication board, agency emails, memorandums, and employee newsletter
- Monthly Safety Committee Meetings
  - o New policies/procedures are discussed to help determine implementation
  - Workplace hazards are discussed in detail on how to prevent events from re-occurring
  - Root cause investigation outcomes are discussed
  - Internal Controls and Personal Protective Equipment (PPE) are evaluated to assist in reducing injuries/illnesses
  - All employees are invited and attendees are urged to suggest ways to maintain a safe working environment and serve as role models for the entire team
  - Anonymous safety concerns are documented in the Safety Committee minutes; the appropriate manager(s) address the concern, and the resolution is documented in the Safety Committee minutes
  - o Safety Committee minutes are posted on the Safety Communication Board

Depending on the method in which the safety concern was communicated will dictate how the manager responds, including how the employee will receive updates, and how the resolution will be communicated. If the report was made to a manager or entered into The Reporting Solution with the employee's name in the "reported by" field, the manager may review the report with the employee to ensure all information is clear and understood. In this situation, the manager will follow-up directly with the employee with status updates and the resolution. If the report was made anonymously, the receipt of the concern is documented in the safety committee meeting minutes, as well as the outcome.

The Collective Bargaining Agreement (CBA) outlines the disciplinary process for all representative staff. Management encourages honest accountability when safety events occur. Unless there is an egregious violation of a serious safety infraction, the employee's honesty in reporting will be considered as a mitigating factor in the disciplinary process.

### **Safety Risk Management Process**

Safety Risk Management is an essential process within TTD's SMS for identifying hazards, assessing, and reducing safety risk.



#### **Safety Hazard Identification**

Routine inspections are an important source of information about safety concerns. Results from inspections may also help identify areas where mitigations were designed and adopted to manage safety risk, but have not been carried out as required. Inspections include personnel, vehicles, facilities, and data that identify potential safety concerns:

#### Personnel:

- Operations personnel fitness-for-duty checks, which may identify:
  - Impairment
  - o Fatigue
  - Absence of corrective lenses
  - Missing credentials (e.g. medical certification, driver's license, VTT)
  - o Apparent injuries, and
  - Uniform or equipment issues
- Operator gate/field checks; operator evaluations
- Customer complaints
- Radio or digital communication checks

#### Vehicles:

- Routine Preventive Maintenance Inspections (PMIs)
- Pre/Post trip vehicle inspections
- Fleet and Facility Requests and Service Incidents
  - Facilities inspections
  - Bus stop inspections
  - Employee observations
- Federal Transit Administration (FTA) notices and announcements
- Transit industry publications

#### Facilities:

- Targeted inspections to identify and evaluate workplace hazards are performed by management when the following situations occur:
  - New substances, processes, procedures, or equipment that presents the potential for new safety concerns are introduced into the workplace
  - New or previously unidentified hazards are recognized
  - New job duties are introduced or assigned
  - o Facility conditions warrant an inspection
  - Transit Asset Management (TAM) assess condition assessments

#### Administrative:

- Rules compliance checks, which may identify:
  - Non-compliance with safety rules
  - Challenges in complying with safety rules



- Emerging practices
- Incident reports, including near misses
  - Trend and pattern identification
- Electronic Pull Notice (EPN) program
- Third Party Administrators for Worker's Compensation and for Liability Claims
  - Cal-OSHA lost and restricted days reported on the Cal-OSHA 300
  - Occupational illnesses/ injuries occurrence (i.e. workers compensation claims)

#### **Safety Risk Assessment**

Methods and processes used to assess the safety risks associated with identified safety concerns and prioritizing the hazards are based on the level of safety risk. Safety risk must be assessed in terms of likelihood or the probability of a consequence occurring and the severity or seriousness of the consequence, if it occurs. On the safety risk matrix, the Y axis is the likelihood/probability and the X axis is the severity/seriousness. Events are analyzed by using the relevant number on the X and Y axis. The square where the relevant X and Y axis score meet is used. The corresponding numbers on the X and Y axis are multiplied and this number is used to identify the score on the risk score legend.

For example, an event that is both definite (5) and catastrophic (5) it will result in a score of 25 and rank the highest on the matrix. Conversely, if the event was rare (1) and insignificant (1), it will result in a score of one and rank lowest on the matrix. Most events will rank somewhere in the middle and as the matrix is utilized, the tool may be refined to better suit the application at TTD. TTD's Safety Risk Matrix and Risk Score Legend is located in Appendices E and F, respectively. When a safety concern is identified, the affected supervisors and/or managers use the matrix and legend to understand when actions are necessary to reduce or mitigate the safety risk and the urgency of the mitigation.

TTD assesses safety risk by evaluating unsafe work conditions, practices or procedures at the facility. Safety risks shall be corrected in a timely manner, based on the severity of the hazards and according to the following procedures:

- When observed, or discovered
- When an imminent hazard exists, which cannot be immediately abated without endangering employees(s) and or property, TTD will remove all exposed employees from the area except those necessary to correct the existing condition. Employees required to remain available to correct the hazardous condition shall be provided with the necessary PPE.
- All such actions taken and dates of the completed corrections will be documented

Investigation of workplace events, hazards, and near misses are completed by the affected employee's supervisor, and include:

- Visiting the scene as soon as possible
- Interviewing affected worker and any witnesses



- Examining the workplace for factors associated with the event/hazard/near miss
- Determine the root cause and any associated causes of event/hazard/near miss
- Near misses are be treated with the same urgency as an actual event
- Take corrective actions to prevent the event from reoccurring
- Document findings and actions taken
- Management is notified immediately of a fatality or serious injury or illness and notifies the nearest office of the Division of Occupational Safety and Health by phone or fax within eight (8) hours (CCR Title 8, Section 342)

#### **Safety Risk Mitigation**

The goal of risk mitigation is to reduce the risk to an acceptable level; however, mitigations do not typically eliminate the risk entirely. The methods or processes to identify mitigations or strategies necessary will depend on the event and who in the agency is qualified to select appropriate safety risk mitigations. TTD may survey other transit agencies to ensure any proposed safety mitigation is appropriate and there are no unintended effects (i.e. new hazards).

The team who evaluates the risk and the mitigation will be determined based on the risk. If an event occurs at the facility, it is likely the Fleet and Facility Manager will be involved in the mitigation assessment to offer insights about the building or property. Facility risks may be mitigated by improved snow removal or upgrades to the building and property.

As TTD identifies operational risks, the operations manager and other operations staff will assess mitigation strategies. New trainings may be implemented or existing training curriculum may be revised to address operational risks. If risks emerge on an existing route, TTD may opt to engage a planner to gather perspective on changes to the path of travel. Each mitigation will depend on the circumstances of the risk and practical, yet creative, options available. TTD will monitors the effectiveness of the approach and make adjustments as needed.

### Safety Assurance

#### **Safety Performance Monitoring and Measurement**

Safety hazards are identified in a number of ways as outlined in the previous sections. TTD's activities to monitor compliance with operations and maintenance procedures are described below.

Direct observation is the most valuable method of monitoring the safety of the system. All TTD employees are responsible for this observation as they navigate through the facilities and greater service area. Environmental challenges such as icy roads, inadequate snow removal, traffic, malfunctioning traffic signals, road construction, and road closures are all common when operating in a mountainous



environment with high visitation. To stay current on all conditions, road supervisors continuously check the service area with heightened attention to the more dangerous regions. Two-way radio communication is the most immediate method to alert operators of potential hazards, move to a detour or snow route, or suspend service.

Operators and road supervisors have the most first-hand opportunities to recognize hazards in the field. As hazards are identified, they are recorded in The Reporting Solution as service incidents or fleet and facility requests. The system emails notifications to supervisors and management when a service incident or fleet and facility request is entered, which can be updated as conditions change. This allows all key personnel to respond as necessary and stay current on the situation. Service incidents and fleet and facility requests can be aggregated and reports are generated to identify patterns. Fleet and facility requests are used to create work orders or to create a ticket with the local Public Works Department for facilities leased by TTD. All of The Reporting Solution entries are saved indefinitely and can be queried at any time.

Employees are encouraged to complete employee incident reports any time something out of the ordinary occurs, including near misses. Each employee incident report is entered into The Reporting Solution. After review of the employee incident report, at least two supervisor(s) or manager(s) will review the video of the incident, depending on the seriousness and probability using the Safety Risk Matrix. If the initial review of the event creates concern around the employee's performance, the deficiency is addressed with retraining and coaching. Depending on the situation, this may include video review of the unsafe behavior with the employee, review of training materials, and hands-on behind the wheel training. All training is documented on a coaching form and, if necessary, disciplinary action is included in the file. All training, coaching, and disciplinary records are retained for at least three years.

Every collision, regardless of how minor, is evaluated using a notice of collision determination form. At least two supervisor(s) or manager(s) review all of the information related to the event and make a determination if it was preventable, non-preventable, or undeterminable. A root cause investigation may be conducted for preventable and undeterminable safety events.

A root cause investigation is an in-depth analysis of all possible causal factors. A root cause investigation is usually conducted by a team, which may include supervisors, operators, risk management, and union representatives. The following factors are evaluated to determine causation or contribution:

- TTD and other vehicle(s)
- Environment (weather, time of day, road conditions)
- Passengers
- Policies & Procedures
- Mobility device, if applicable
- Pedestrians
- Operator's training, previous coaching, and active discipline



All members of the team share their perspectives and a final root cause report is drafted. Root cause reports are shared at the safety committee meetings to reduce the likelihood of the event reoccurring and this information is saved at least three years.

Per TTD standard operating procedure, and in alignment with DOT regulations, operators complete pretrip and post-trip inspections on the vehicles driven over the course of the day using a DVIR. The completed DVIRs are turned into the maintenance department and reviewed for safety defects. Work orders are generated through The Reporting Solution for each defect noted on the DVIR. Each vehicle has a designated clipboard with all open work orders attached, the clipboards are accessible to all staff. This allows operators to see the progress on the defect they reported.

TTD's maintenance department monitors road calls, fleet and facility requests, DVIRs, service incidents, and routinely visually inspects the vehicles. Preventive maintenance inspections are regulated based on a calculation of miles (i.e. annual miles each subfleet traveled divided by the inspection interval miles for that subfleet) and the results of oil analyses. The PMI schedule is tracked in The Reporting Solution and the PMI includes a multi-item checklist, followed by a road test to verify serviceability of the vehicle. PMIs assess the conditions of TTD's assets on a routine basis. TTD's inspections include a multi-item check list that touches on every wearing item/system on the bus and is followed by a road test to verify the serviceability of the bus. Inspection of all electrical equipment including video cameras, farebox, destination signs, and radios are also performed at this time.

Operational Safety Inspections are also tracked through The Reporting Solution and are performed every 90 days in compliance with the California Highway Patrol, California Vehicle Code. The maintenance department monitors technical bulletins, manufacturing notifications, and recall notifications. Defects identified will be handled in-house within TTD's resources and its personnel's scope of training. All other defects are contracted with professionals who specialize in the area of expertise.

All maintenance work, regardless of the source, is entered into The Reporting Solution. Data can be aggregated in various ways to query different reports depending on the need. Updates are entered for ongoing repairs, providing electronic documentation of the full evolution of the repair.

The Reporting Solution allows management to search key words and create reports on any fleet and facility requests, service incidents, employee incidents, or customer comments entered into the software. Custom reports may also be made when a unique situation arises. Key performance indicator reports are available to outline the number of work orders created and closed, labor hours, road calls, bus availability, and part requests. This level of monitoring allows management to identify safety risk mitigations that are ineffective or inappropriate. The Reporting Solution maintains an indefinite retention of data, entries, and reports at this time.



All safety concerns and suggestions, anonymous or not, are reviewed at the monthly safety committee meeting. The concerns/suggestions are documented in the meeting minutes for all staff to review. If the topic requires immediate attention, the approach will be documented in the meeting minutes (i.e. fleet and facility request will be entered to initiate a work order or an investigation will commence). If the suggestion has a limited likelihood of occurring and the severity is negligible, the appropriate person will investigate the issue and report back at the next safety meeting. Depending on the complexity of the matter, the issue might be mitigated or it might require more group input at the next meeting. Regardless of the process, it is documented through the safety committee meeting minutes.

The Cal-OSHA 300 Log is a record of work-related injuries and illnesses. The log classifies work-related injuries and illnesses and notes the extent and severity of each case. When an incident occurs, the log is used to record specific details about what happened and how it occurred. TTD has logs for each physical location. An annual summary shows the totals for the year in each category. The annual summary is posted for employees to be aware of the injuries and illnesses occurring at their workplace. After the Cal-OSHA 300 Log is posted for two months, the Human Resources/Risk Manager retains the log for at least three years.

## **Safety Promotion**

#### **Competencies and Training**

TTD requires employees including the Accountable Executive, Chief Safety Officer, and contractors, to complete training to be able to fulfill their safety-related roles and responsibilities. Initial training will be completed at hire/assignment, refresher training will be provided when behaviors indicate a need, and/or there are changes to the PTASP, operations, procedures, organizational structure, or when new safety concerns are identified and mitigation measures are developed. Each new Director on the TTD Board of Director's receives an orientation packet and the plan will be included.

All transit staff are required to participate in Harassment, Distracted Driving, Injury and Illness Prevention Program, Hazardous Communication, Stress Management, Workplace Violence, Active Shooter, and Ethics. All safety sensitive staff are required to complete the National Rural Transit Assistance Program (RTAP) Substance Abuse Awareness Training Program.

The Transit and Paratransit Company, or TAPTCO, training is the foundation of TTD's road supervisors, dispatchers, and operators. It is augmented with several specialized trainings for TTD's environment, policies/procedures, PASS: Passenger Assistance Safety and Sensitivity, and technologies (i.e. winter driving, chaining, passenger policies, paratransit policies and procedures, sensitivity and securement, electronic farebox procedures, paratransit training with a mobile data terminal (MDT)). The road supervisor and dispatcher training includes more emphasis on the office technologies such as Computer Aided Dispatch and Automatic Vehicle Locator software (CAD-AVL), paratransit scheduling software, and



The Reporting Solution software. The road supervisors also receive training on farebox troubleshooting, video review, and supervisor-specific reasonable suspicion and harassment trainings. All of the training is also available in an open format for retraining to ensure all staff feel confident in their skills.

All CDL holders have a minimum of 15 hours of classroom training and 20 hours of behind the wheel training. The exact number of training hours varies depending on the operator's license and endorsements. Operators who have a CDL with passenger endorsement and no air brake restriction generally receive fewer hours of training. Those who already possess a CDL, but need the air brake restriction removed or need to add the passenger endorsement may require less training. New employees training with TTD to obtain their CDL average over 100 hours of training.

Maintenance staff (Mechanics and Utility Workers) must complete the following trainings:

- Preventive Maintenance checklist training
- Personal Protective Equipment (PPE) selection and use
- Shop cleaning procedures
- Removal of coolant from clothing
- Proper hydration during summer months
- Tire training
- Cold vehicle pull out
- Removing motor oil and grease from hands
- Eye wash use and procedure
- Proper use of a fire extinguisher
- Spill prevention
- Proper air conditioning refrigerant recovery
- Safety Data Sheet (SDS) location and understanding
- Walking safely in shop
- Proper lifting, bending, carrying
- Moving/test driving vehicles
- Use of hydraulic lift
- Working under vehicles
- Use of powered hand tools
- Use of compressed air tools
- Use of air hoses
- General use of electric machinery
- Charging and cleaning batteries
- Battery jump starting

TTD's insurance companies: California Transit Indemnity Pool (CalTIP), CSAC Excess Insurance Authority, and Nevada Public Agency Insurance Pool all provide various in-person and online safety training



opportunities. TTD also prioritizes training for staff through the Transit Safety Institute (TSI) and National Transit Institute (NTI).

Monthly safety meetings are held for all maintenance and operations staff. The topics of the safety trainings are often suggested by staff, as a result of a pattern identified within TTD, or something that is a current transit trend or update.

#### **Safety Communication**

#### **Passengers and Community Communication**

External communication occurs through email distribution lists, social media, TTD website, and mobile application alerts. Additionally, informational flyers and public notices are posted in the buses, bus shelters, and transit centers. Rider guides and passenger policies are distributed to local medical centers, government and non-profit agencies, lodging properties, recreation centers, and other popular destinations in the community.

#### **Internal Communication**

The following is TTD's system of communication, designed to facilitate a continuous flow of two-way (management, supervisors & employees) safety and health information in a form that is readily understandable to and between all affected personnel:

- New worker orientation, including a discussion of site-specific safety and health policies and procedures
- Follow through by supervision to ensure effectiveness
- Monthly safety training meetings that encourages employee input
- Posted and distributed safety information
- Paper and electronic systems for employees to anonymously inform management about workplace hazards or safety concerns
- Safety Communication Board
- Agency e-mails, memorandums, and agency employee newsletter with a safety column
- Posters, notices, memos, white board announcements
- Safety messages over the two-way radio
- Quarterly transit reports to the Board of Directors
- Monthly Safety Committee Meetings
  - All employees are encouraged to attend
  - New policies/procedures are discussed to help determine employee safety
  - Workplace hazards addressed throughout the month are discussed in detail on how to prevent events from re-occurring



- o Status of on-going safety-related improvements
- o Root Cause solutions are discussed
- o Internal Controls and Personal Protective Equipment (PPE) are discussed to assist in reducing injuries/illnesses
- Attendees are urged to contribute to suggestions on how to maintain a safe working environment and serve as role models for the entire team



## **Appendices**

## **Appendix A: Record of Revisions**

A table that records the history of revisions made to the agency's PTASP is contained in the table that follows. The history of the changes was placed in this appendix to help preserve the page numbering to the extent possible.

Plan Version Number and Updates				
Version Number	Section/Pages Affected	Reason for Change	Date Issued	



## Appendix B: Glossary of Terms and Acronyms

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	§ 673.5 Definitions – 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.
	§ 673.23(d)(1) – 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.
	Each transit agency must identify an Accountable Executive within its organization who ultimately is responsible for carrying out and implementing its Safety Plan. A State that drafts a plan on behalf of another recipient or sub-recipient is not the Accountable Executive.
Chief Safety Officer/SMS Executive	§ 673.31 Definitions – 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.  Safety Management System (SMS) Executive means a Chief Safety Officer or an equivalent.
	§ 673.23(d)(2) – 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 hold a direct line of reporting to the Accountable Executive. A transit agency may allow



Term	Definition
	the Accountable Executive to also serve as the Chief Safety Officer or SMS Executive.
	Each transit agency must identify a Chief Safety Officer within its organization who has the authority and responsibility for day-to-day implementation and operation of the agency's SMS. The Chief Safety Officer must meet the requirements specified in § 673.31 and § 673.23(d)(2). For SMS to be successful and effective, this person should have a strong working relationship with the operations and asset management functions at the transit agency.
	Small public transportation providers may designate a Chief Safety Officer or SMS Executive who also manages other functions, such as operations, maintenance, and grant administration. For these transit agencies, the Chief Safety Officer may be a full-time employee of the transit system who has responsibility for duties other than safety, a part-time employee of the transit system, or a contracted employee.
	Bus transit systems that operate more than 100 vehicles in peak revenue service should have a dedicated Chief Safety Officer, given the increased safety risk of those systems. However, this is not a requirement.
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 § 673.5)
Event	Event means any Accident, Incident, or Occurrence. (per § 673.5)
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. Hazard are conditions. (per § 673.5)
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 § 673.5)
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 § 673.5)
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 § 673.5)
Safety Performance Target	Safety performance target means a Performance Target related to safety management activities. (per § 673.5)



Term	Definition
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)

#### Acronyms:

Caltrans: California Department of Transportation

Cal-OSHA: California Department of Occupational Safety and Health

**CB:** Commuter Bus

CSO: Chief Safety Officer

**DR: Demand Response** 

FTA: Federal Transit Administration

MB: Motor Bus

NTD: National Transit Database

NDOT: Nevada Department of Transportation

PPE: Personal Protective Equipment

PTASP: Public Transit Agency Safety Plan

SMS: Safety Management System

**SOP: Standard Operating Procedure** 

TMPO: Tahoe Metropolitan Planning Organization

TTD: Tahoe Transportation District

TrAMS: Transit Award Management System



#### Appendix C: 2018 NTD Safety & Security Quick Reference Guide - Non-Rail Mode Reporting

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.

Alaska (AR) and Commuter rail (CR) modes report only SECURITY events that meet a Major event threshold.

S&S-40 Major Event Report	S&S-50 Non-Major Monthly Summary
MAJOR THRESHOLDS	NON-MAJOR THRESHOLDS
<ul> <li>An event meeting the reportable event definition AND meeting one or more of the following reporting thresholds: <ul> <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</li> </ul> </li> <li>Reports are due within 30 days of the date of the event.</li> </ul>	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.  OSONOC:  Single injury event requiring transport away from the scene for medical attention (do not report "minor" collisions on S&S-50)  Fires:  Requires suppression that does not meet a major incident reporting threshold injury, fatality, evacuation, or property damage of \$25,000 or more)  Reports due by the end of the following month (e.g., January data due by end of
	February)



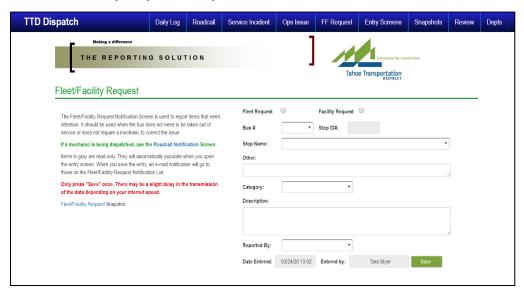
S&S-40 Major Event Report	S&S-50 Non-Major Monthly Summary		
EVENT TYPES	EVENT TYPES		
A collision (including suicide/attempted	OSONOC:		
suicide)	Injury due to:		
A fire	Slip/trip		
A hazardous material spill (requires specialized)	• Fall		
clean-up)	<ul> <li>Including person making contact with</li> </ul>		
Acts of God (nature)	a non-moving transit vehicle		
System security:	Injury to maintenance workers		
o Arson	Boarding/alighting		
<ul> <li>Bomb threat/bombing</li> </ul>	Electric shock/burns		
<ul> <li>Burglary/vandalism</li> </ul>	Abrupt or evasive transit vehicle		
<ul> <li>Chemical/biological/radiological/nuclear</li> </ul>	maneuvers		
release	<ul> <li>Mobility device (e.g. wheelchair)</li> </ul>		
<ul> <li>Cyber security event</li> </ul>	securement issues		
<ul> <li>Hijacking</li> </ul>	Injury sustained on a mobility device lift		
○ Sabotage	Stairs/elevator/escalator injury		
Suspicious package	Fire:		
<ul> <li>Other security event (shots fired,</li> </ul>	<ul> <li>Requires suppression but no major</li> </ul>		
projectiles, etc.)	threshold is met		
Personal Security:	<ul> <li>Small fire in transit station</li> </ul>		
o Assault	<ul> <li>Small engine fire on transit vehicle</li> </ul>		
o Homicide			
o Robbery			
Larceny/theft     Materials theft			
Motor vehicle theft     Range			
<ul><li>Rape</li><li>Other personal security events (non-</li></ul>			
, , , , , , , , , , , , , , , , , , , ,			
<ul><li>collision suicide/attempted suicide, etc.)</li><li>OSONOC (two injuries and/or another</li></ul>			
threshold)			
Miscellaneous events that meet a			
threshold			
unesnou			



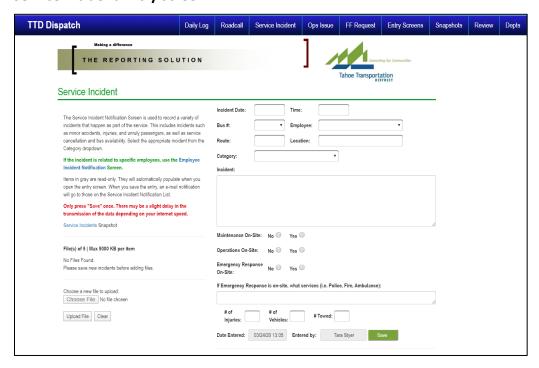
#### **Appendix D: The Reporting Solution Entry Screens**

The Reporting Solution screen shots illustrating the entry screens for safety information collection and ultimately aggregation and reporting

#### Fleet and Facility Request Entry Screen

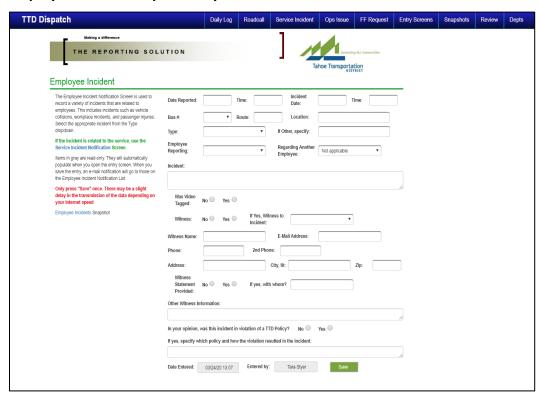


#### **Service Incident Entry Screen**

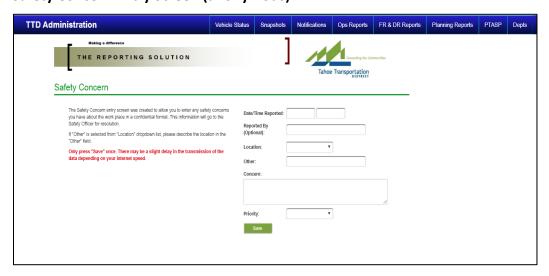




#### **Employee Incident Report Entry Screen**



#### **Safety Concern Entry Screen (anonymous)**





## Appendix E: Safety Risk Matrix

## **Safety Risk Matrix**

Rare (1)					Avalanche
Unlikely (2)					
Possible (3)				Fire	Boulder Slide
Likely (4)	Power Outage		Visitor traffic	Passenger Threat	Serious Injury
Definite (5)	Cold Temperatures Snow Fall	Icy Roads midweek	Icy Roads weekend with visitor traffic	Serious Injury	
	Insignificant (1)	Marginal (2)	Moderate (3)	Critical (4)	Catastrophic (5)

Severity/Seriousness



## Appendix F: Risk Score Legend

## **Risk Score Legend**

Risk Score	Risk Level Category	Description
1-4 (green)	Low Risk	Manage by routine procedures and operations; should not require much attention.
5-9 (yellow)	Moderate Risk	Manage by specific monitoring or response procedures.
10-14 (orange)	High Risk	Requires escalation to management.
15-25 (red)	Critical Risk	Requires escalation to Accountable Executive.



## TAHOE TRANSPORTATION DISTRICT RESOLUTION NO. 2020-005

## A RESOLUTION APPROVING THE PUBLIC TRANSIT AGENCY SAFETY PLAN FOR THE TAHOE TRANSPORTATION DISTRICT

WHEREAS, the Tahoe Transportation District (TTD) is a public entity eligible to receive local, state, and federal funding for transportation and public works improvement projects, through Article IX of Public Law 96-551; and

WHEREAS, TTD is required by the Federal Transit Administration (FTA) to develop a Public Transit Agency Safety Plan (PTASP) under final rule (49 C.F.R. Part 673); and

WHEREAS, TTD has developed safety plans that include the processes and procedures to implement Safety Management Systems (SMS); and

WHEREAS, TTD has developed safety performance targets in compliance with FTA's PTASP guidance; and

WHEREAS, TTD staff has prepared the PTASP in compliance with the final rule attached hereto as Exhibit A;

NOW, THEREFORE, BE IT RESOLVED, that the TTD Board of Directors hereby adopts the Public Transit Agency Safety Plan for the Tahoe Transportation District.

PASSED AND ADOPTED by the TTD Board of Directors at its regular meeting held on May 8, 2020 by the following vote:

Ayes:

Mr. Bass, Ms. Berkbigler, Mr. Chapman, Ms. Gustafson, Ms. Maloney,

Mr. Rice, Mr. Teshara, Mr. Yeates

Nays:

Abstain:

Absent: Mr. Arthur, Ms. Novasel

Steve Teshara

Chairman