COLORADO DEPARTMENT OF REGULATORY AGENCIES

Public Utilities Commission

4 CODE OF COLORADO REGULATIONS (CCR) 723-7

PART 7 RULES REGULATING RAILROADS, RAIL FIXED GUIDEWAYS, TRANSPORTATION BY RAIL, AND RAIL CROSSINGS

State Safety Oversight Program Standard for Rail Fixed Guideway Public Transportation Systems

7340. Applicability.

Rules 7341 through 7355 apply to all transit agencies and rail fixed guideway systems operating within the State of Colorado, which <u>agencies or</u> systems are regulated by the Commission pursuant to Title 40, Article 18, C.R.S.

7341. Definitions.

The following definitions apply only in the context of rules 7341 through 7355:

- (a) "Accident" means an event that involves any of the following: a loss of life; a report of a serious injury to a person (as defined in paragraph 7341(xxtt)); a collision involving a rail transit vehicle; 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. An accident must be reported in accordance with the thresholds for notification and reporting set forth in rule 7348.
- (b) "Accountable executive" means a single identifiable individual who has ultimate responsibility for carrying out the PTASP of a public transportation agency; responsibility for carrying out the agency's TAMP; and control or direction over the human and capital resources needed to develop and maintain both the agency's PTASP, in accordance with 49 U.S.C. 5329(d), and the agency's TAMP in accordance with 49 U.S.C. 5326.
- (c) "Audit" means a review and analysis of records and related materials.
- (d) "Cameras" means any device that can produce audio and image recordings capable of providing a means to continuously record and verify actions.
- (ed) "C.F.R." means the Code of Federal Regulations.
- (fe) "Chief safety officer" means an adequately trained individual who has responsibility for safety and reports directly to a RTA's chief executive officer, general manager, president, or equivalent officer. A chief safety officer may not serve in other operational or maintenance capacities.

- (gf) "Contractor" means an entity that performs direct RFGPTS PTASP oversight tasks required on behalf of the Commission or direct RFGPTS PTASP tasks for a RTA through contract or other agreement. The RTA is not a contractor for the Commission.
- (hg) "Corrective action plan" (CAP) means a plan developed by the RTA that describes the actions the RTA will take to minimize, control, correct, or eliminate risks and hazards with a high-risk assessment code of 1A, 2A, 1B, or 2B, a serious risk assessment code of 1C, 2C, 3A, or 3B, or resulting from a reportable accident, and the schedule for implementing those actions.
- (ih) "Equivalent authority" means an entity that carries out duties similar to that of a Board of Directors, for a recipient or sub-recipient of FTA funds under 49 U.S.C. Chapter 53, including sufficient authority to review and approve a recipient or sub-recipient's PTASP.
- (ji) "Examination" means a process for gathering or analyzing facts or information related to the safety of a RFGPTS.
- (ki) "Event" means an accident, incident, or occurrence.
- (!k) "Finding" means non-compliance with the RTA's PTASP, rules, procedures, programs, or other regulatory guidelines, which results in the formulation of a CAP.
- (ml) "FRA" means the Federal Railroad Administration, an agency of the United States Department of Transportation.
- (nm) "FTA" means the Federal Transit Administration, an agency of the United States Department of Transportation.
- (On) "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 RFGPTS; or damage to the environment.
- (pe) "Incident" means an event that involves any of the following: A personal injury that is not a serious injury (as defined in paragraph 7341(xxtt)); one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a RTA.
- (qp) "Inspection" means a physical observation of equipment, facilities, rolling stock, operations, or records for the purpose of gathering or analyzing facts or information.
- (re) "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.
- (<u>sr</u>) "National public transportation safety plan" (NPTSP) means the plan to improve the safety of all public transportation systems that receive Federal financial assistance under 49 U.S.C. Chapter 53.
- (t) "Near miss" means an event where no property was damaged and no personal injury was sustained, but where given a slight shift in time or position, damage and/or injury could have occurred.

- (<u>us</u>) "NTSB" means the National Transportation Safety Board, an independent Federal agency.
- (vt) "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 RTA.
- (<u>w</u>u) "Passenger" means a person who is on board, boarding, or alighting from a rail transit vehicle for the purpose of travel.
- (<u>x</u>v) "Passenger operations" means the period of time when any aspect of RTA operations are initiated with the intent to carry passengers.
- (yw) "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 targetscriteria" means categories of measures indicating the level of safe performance within a RTA.
- "Performance target" means a <u>quantifiable specific</u> level of performance for a given performance or condition, expressed as a value for the measure, to be achieved within a time period required by the FTA measure over a specified timeframe.
- (<u>aay</u>) "Person" means a passenger, employee, contractor, pedestrian, trespasser, or any individual on the property of a RFGPTS.
- (bb) "Procedure" means an established or official way of doing something.
- (cc) "Process" means a series of actions or steps taken to achieve a particular end.
- (ddz) "Program standard" means the standards in rules 7340 through 7355, which codify the policies, objectives, responsibilities, and procedures used to provide RTA safety oversight.
- (eeaa) "Public Transportation Agency Safety Plan" (PTASP) means the documented comprehensive agency safety plan for a transit agency, including a RTA, which is required by 49 U.S.C. 5329(d) and based on an SMS.
- (ffbb) "Public transportation safety certification training program" means either the certification training program for federal and state employees, or other designated personnel, who conduct safety audits and examinations of public transportation systems, and employees of public transportation agencies directly responsible for safety oversight, established through interim provisions in accordance with 49 U.S.C. 5329(c)(2), or the program authorized by 49 U.S.C. 5329(c)(1) and established by the regulations set forth in 49 C.F.R. Part 672.
- (ggee) "Rail fixed guideway public transportation system" (RFGPTS) means those rail fixed guideway systems as defined in paragraph 7001(c) that use rail, are operated for public transportation, are within the jurisdiction of the Commission, and are not subject to the jurisdiction of the FRA, or any such system in engineering or construction. A RFGPTS includes, but is not limited to, rapid rail, heavy rail, light rail, monorail, trolley, inclined plane, funicular, and automated guideway that are under the jurisdiction of the Commission.
- (<u>hhdd</u>) "Rail transit agency" (RTA) means any entity that provides services on a RFGPTS.

- (iiee) "Recommendation" means a suggestion or proposal for improvements to how the PTASP is implemented by a RTA.
- (jjff) "Record" means any writing, drawing, map, recording, diskette, DVD, CD-ROM, tape, film, photograph, electronic file, or other documentary material by which information is preserved. The term record also includes any such documentary material stored electronically.
- (kkgg) "Risk" means the composite of predicted severity and likelihood of the potential effect of a hazard.
- (IIhh) "Risk assessment code" means the combination of a severity ranking and a probability level to identify the risk of a specific hazard as defined in rule 7350.
- (mmii) "Risk mitigation" means a method or methods to eliminate or reduce the effects of hazards.
- (nnii) "Safety" means freedom from harm resulting from unintentional acts or circumstances.
- (ookk) "Safety assurance" means processes within a RTA's SMS that function to ensure the implementation and effectiveness or safety risk mitigation, and to ensure that the RTA meets or exceeds its safety objectives through the collection, analysis, and assessment of information.
- (ppH) "Safety management policy" means a RTA's documented commitment to safety, which defines the RTA's safety objectives and the accountabilities and responsibilities of its employees and contractors in regard to safety.
- (qqmm) "Safety management system" (SMS) means the formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of a RTA's safety risk mitigation. SMS includes systematic procedures, practices, and policies for managing risks and hazards.
- (rrnn) "Safety management system executive" means a safety officer or an equivalent.
- (ssee) "Safety performance target" means a performance target related to safety management activities.
- (ttpp) "Safety promotion" means a combination of training and communication of safety information to support SMS as applied to the RTA's RFGPTS.
- (<u>uuqq</u>) "Safety risk" means the assessed probability and severity of the potential consequence(s) of a hazard, using as reference the worst foreseeable, but credible, outcome.
- (<u>vvrr</u>) "Safety risk <u>assessmentevaluation</u>" means the formal activity whereby a RTA determines safety risk management priorities by establishing the significance or value of its safety risks.
- (<u>ww</u>ss) "Safety risk management" means a process within a RTA's safety plan for identifying hazards and analyzing, assessing, and mitigating safety risk.
- (xxtt) "Serious injury" means any injury which:
 - (I) requires hospitalization for more than 48 hours, commencing within seven days from the date of the injury was received;

- (II) results in a fracture of any bone (except simple fractures of fingers, toes, or nose);
- (III) causes severe hemorrhages, nerve, muscle, or tendon damage;
- (IV) involves any internal organ; or
- (V) involves second- or third-degree burns, or any burns affecting more than five percent of the body surface.
- (yyuu) "State of good repair" means the condition in which a capital asset is able to operate at a full level of performance.
- (ZZVV) "State safety oversight agency" (SSOA) means the Colorado Public Utilities Commission, the agency established by Colorado that meets the requirements and performs the functions specified by 49 U.S.C. 5329(e) and the regulations set forth in 49 C.F.R. Part 674.
- (aaaww) "Substantial property damage" means physical damage to transit or non-transit property including vehicles, facilities, equipment, rolling stock, or infrastructure which adversely affects the structural strength, performance, or operating characteristics of the vehicle, facility, equipment, rolling stock, or infrastructure requiring towing, rescue, onsite maintenance, or immediate removal prior to safe operation.
- (xx) "System safety program plan" (SSPP) means a document developed and adopted by the RTA, describing its safety policies, objectives, responsibilities, and procedures. Until one year after the effective date of the final rule enacted in 49 C.F.R. Part 673, an SSPP developed pursuant to 49 C.F.R. Part 659.19 will serve as the RTA's PTASP.
- (bbbyy) "Testing" means an assessment of equipment, facilities, rolling stock, or operations of a RFGPTS.
- (<u>ccc</u>zz) "Transit asset management plan" (TAMP) means a plan developed by a RTA that includes, at a minimum, capital asset inventories and condition assessments, decision support tools, and investment prioritization.
- (dddaaa) "U.S.C." means the United States Code.
- (<u>eeebbb</u>) "Vehicle" means any rolling stock used on a RFGPTS, including but not limited to passenger and maintenance vehicles.

7342. Incorporation by Reference.

References in these rules to 49 C.F.R. 659.19 Part 673 and Part 674 are rules issued by the FTA and are hereby incorporated by reference in these rules. These rules may be found at 49 C.F.R. 659.19 and Part 673 and Part 674 revised as of December 30, 2021 March 16, 2016. References to 49 C.F.R. 659.19 Part 673 and Part 674 do not include later amendments to, or editions of, 49 C.F.R. 659.19, Part 673 and Part 674. The Commission also incorporates by reference in these rules the severity categories (Table I), probability levels (Table II), and risk assessment matrix (Table III) from the Department of Defense Standard Practice System Safety MIL-STD-882E dated May 11, 2012. A copy of all material that has been incorporated by reference is maintained at the offices of the Colorado Public Utilities Commission, 1560 Broadway, Suite 250, Denver, Colorado 80202, and is available for inspection during normal

business hours. Copies of the incorporated rules shall be provided at cost upon request. The Director of the Commission will provide information regarding how 49 C.F.R. 659.19Part 673 and Part 674, and the MIL-STD-882E may be obtained or examined. This incorporated material may be examined at any state publications depository library. The incorporated federal regulations are also available from the original issuing agency at: www.govinfo.gov/help/cfr.

* * *

[indicates omission of unaffected rules]

7345. Public Transportation Agency Safety Plan.

Every RTA shall establish and maintain a written PTASP. The PTASP must be consistent with the regulations implementing such plans, consistent with the NPTSP, based on the principles of SMS, and in compliance with the requirements of rule 7345. Until one year after the effective date of the final rule enacted in 49 C.F.R. Part 673, tThe RTA will establish a PTASP that meets the requirements of a SSPP pursuant to 49 C.F.R. Part 659.19 that complies with the program standard and includes the following sections.

- (a) Introduction. The introduction section of the PTASP shall contain the following information.
 - (I) A safety management policy supporting the PTASP signed by the accountable executive and the chief safety officer or safety management system executive of the RTA and approved by the Board of Directors or equivalent authority.
 - (A) The safety management policy must state how the policy will be communicated throughout the RTA.
 - (B) The safety management policy must establish a process that allows employees to report safety conditions to senior management, protections for employees who report safety conditions to senior management, and a description of employee behaviors that may result in disciplinary action.
 - (II) A statement of the legal authority for the PTASP.
 - (III) A description of the purpose and scope of the PTASP.
 - (IV) A clear definition of the SMS safety goals, safety objectives, safety performance criteria, and safety performance targets of the PTASP, and the state of good repair standards established that implement the National Transit Asset Management System, are included in the NPTSP, and will be implemented through the RTA TAMP.
 - (V) A statement of the organizational and safety accountabilities and responsibilities to ensure the goals and objectives of the PTASP are achieved.
 - (VI) Specifications of policies in place to support implementation of the PTASP and a description of the specific activities required to implement the PTASP including:

- tasks to be performed by the RTA safety department, by position and management accountability, specified in matrices and narrative format;
- (B) safety-related tasks to be performed by other RTA departments, by position and management accountability, specified in matrices and narrative format; and
- (C) the adequate methods that will be used to support the execution of the PTASP by all employees, agents, and contractors for the RTA.
- (VII) Identification of the process and procedures for controlling updates and modifications to the PTASP including specification of an annual assessment of whether the PTASP should be updated and a requirement of coordination with the Commission, including timeframes for submission, revision, and approval.
- (VIII) A description of the explicit process used by the RTA to implement its safety risk management, safety assurance, and safety promotion programs, including activities for:
 - (A) safety hazard identification and analysis;
 - (B) safety risk evaluation and mitigation;
 - (C) safety performance tracking, monitoring and measurement;
 - (D) safety communication of safety performance information throughout the RTA's organization that, at a minimum, conveys information on hazards and safety risks relevant to employees' roles and responsibilities and inform employees of safety actions taken in response to reports submitted through an employee safety reporting program; and
 - (E) employee and contractor competencies and training.
- (IX) A description of the safety risk management process used by the RTA to ensure that safety concerns are addressed in modifications to existing systems, vehicles, and equipment, which do not require formal safety certification but which may have safety impacts.
 - (A) Management of change.
 - (i) A RTA must establish a process for identifying and assessing changes that may introduce new hazards or impact the RTA's safety performance.
 - (ii) If a RTA determines that a change may impact its safety performance, then the RTA must evaluate the proposed change through its Safety Risk Management process.
 - (B) Continuous improvement.
 - (i) A RTA must establish a process to assess its safety performance.

- (ii) If a RTA identifies any deficiencies as part of its safety performance assessment, then the RTA must develop and carry out, under the direction of the accountable executive, a plan to address the identified safety deficiencies.
- (b) System description. The system description section of the PTASP shall include the following information.
 - (I) A brief history of the RFGPTS(s) operated by the RTA.
 - (II) The scope of service the RTA provides.
 - (III) A description of the organizational structure of the RTA, including organizational diagrams of the RTA and the safety unit that identify the lines of authority and communications used by the RTA to manage safety issues and define responsibilities within the RTA as they relate to the development and management of the RTA SMS including:
 - (A) accountable executive;
 - (B) chief safety officer or SMS executive;
 - (C) RTA leadership and executive management; and
 - (D) key staff.
 - (IV) A description of how the safety function of the agency is integrated into the rest of the rail transit organization.
 - (V) A description of the physical plant including track, signal and communication system, vehicle type and operating characteristics, station facilities and maintenance facilities.
 - (VI) A description of the management of change process (as outlined in rule7345(a)(IX)(A)) to modify the system. The management of change system modification review and approval process shall include the following:
 - (A) the identification of the unit or group of the RTA responsible for ensuring that the hazards associated with system expansions or modifications are included in the RTA's hazard resolution process and are assessed for the introduction of new hazards or impacts to the RTA safety performance;
 - (B) participation of operating and safety department personnel in the design review process for new equipment and system expansions or modifications;
 - (C) a sign-off and certification process for verification of operational readiness of new equipment and system expansions or modifications prior to entering revenue service:

- (D) documentation of responsibility and authority for approval of modification exceptions to established design criteria for new equipment and system expansions; and
- (E) procurement procedures that preclude the introduction into the RFGPTS of unauthorized hazardous materials and supplies, as well as defective or deficient equipment.
- (VII) A description of the safety assurance process that discusses the safety certification process required by the RTA to ensure that safety concerns and hazards are adequately addressed prior to the initiation of passenger operations for new starts projects, and subsequent major projects to extend, rehabilitate or modify an existing system, or to replace vehicles and equipment.
- (c) Safety department activities of the RTA. The safety department activities of the RTA section of the PTASP shall contain the following information.
 - (I) A description of the safety accountabilities and responsibilities of those in charge of managing the safety process within the RTA.
 - (II) A description of the hazard identification and safety risk management process used to identify and resolve hazards during operation including any hazards resulting from subsequent system extensions or modifications, operational changes or other changes within the RFGPTS environment.
 - (III) The hazard identification and safety risk management process shall include the following:
 - (A) a description of the RTA's approach to hazard identification and safety risk management and the implementation of an integrated system-wide hazard resolution process;
 - (B) specification of the sources of, and the mechanisms to support, the on-going identification of hazards including data and information provided to the RTA by the SSOA and the FTA;
 - (C) a description of the process by which identified hazards will be analyzed, evaluated and prioritized for elimination or control including hazards associated with operations, maintenance, and engineering. Such process shall require that safety risk assessments be evaluated in terms of probability and severity, take into account safety risk mitigation efforts already in place to reduce the probability or severity of the potential consequence(s) analyzed, and include data and information provided to the RTA by the SSOA and the FTA;
 - (D) a description of the process and mechanism used to track through resolution the identified hazard(s);
 - (E) a description of the established criteria for the development of safety risk mitigations that are necessary based on the result of the RTA's safety risk evaluation; and

- (F) a description of the process by which the RTA will provide on-going reporting of hazard resolution activities to the Commission.
- (IV) A procedure for accident, incident, occurrence and hazard notification, reporting and investigation. This procedure shall comply with rules 7348, 7349, and 7350 and shall include the following:
 - (A) notification thresholds for internal and external organizations;
 - (B) the criteria for determining which accidents require investigation and who is responsible for conducting the investigation;
 - (C) a description of the safety risk management process and safety assurance process and procedures used for conducting accident investigations which include the reporting of findings to internal and external organizations, conclusions, development, implementation and tracking of corrective actions that address investigation findings, and follow up to verify corrective action implementation; and
 - (D) coordination with the Commission.
- (V) A comprehensive employee and contractor training and certification safety program including training and certification, drug and alcohol testing, as well as information about drug and alcohol abuse. The employee and contractor certification and training program shall include a description of the training material and documentation of training test scores and dates and must maintain such training records. The comprehensive employee and contractor training program shall apply to personnel directly responsible for safety of the RFGPTS and shall comply with the requirements of the public transportation safety certification training program. The employee and contractor training and certification shall also include:
 - (A) categories of safety-related work requiring training and certification;
 - (B) a description of the training and certification program for employees and contractors in safety-related positions including a description of the training material used:
 - (C) a -process used to maintain and access employee and contractor records including documentation of training test scores and dates, when applicable; and
 - (D) a process used to assess compliance with training and certification requirements.
- (VI) A safety risk management process and safety assurance processes for internal safety inspection of operation and maintenance facilities and equipment including audits and review of procedures that complies with rule 7351, and an investigation of Events to identify causal factors, that includes:
 - (A) identification of the facilities and equipment subject to regular safety-related inspection and testing;

- techniques used to conduct inspections and testing; inspection schedules and procedures; and description of how results are entered into the hazard management process. A description of the process used by the RTA to develop an approved coordinated schedule for all emergency management program activities including: meetings with external agencies; emergency planning responsibilities and requirements; process used to evaluate emergency preparedness, such as annual emergency field exercises: after action reports and implementation of findings; revision and distribution of emergency response procedures; familiarization training for public safety organizations; employee training; and (H) an emergency preparedness and response plan or procedures that includes planning updates and addresses, at a minimum: assignment of employee responsibilities during an emergency; coordination with federal, state, regional, and local officials with roles and responsibilities for emergency preparedness and response in the RTA's service area. (VIII) A description of the hazardous materials program including the process to ensure knowledge of and compliance with program requirements. A contractor safety coordination program. A description of the process used to collect, maintain, analyze, and distribute safety data, including data and information provided to the RTA by the SSOA and the FTA, to ensure that the safety function within the rail transit organization receives the necessary
 - (A) identification of operating and maintenance rules and procedures subject to review;

A description of the safety assurance process used by the RTA to develop, maintain, monitor and ensure compliance with rules and procedures having a safety impact

information to support implementation of the system safety program.

including:

- (B) techniques used to assess the implementation of operating and maintenance rules and procedures by employees, such as performance testing;
- (C) techniques used to assess the effectiveness of supervision relating to the implementation of operating and maintenance rules; and
- (D) processes for documenting results and incorporating them into the hazard management program.
- (XII) A description of the maintenance audits and inspections program, including identification of the affected facilities and equipment, maintenance cycles, documentation required, and the process for integrating identified problems into the hazard management process.
- (XIII) A description of the configuration management control process including:
 - (A) the authority and authorized RTA personnel to make configuration changes;
 - (B) the process for making changes that includes how a change may impact a RTA's safety performance and how the RTA will evaluate the proposed change through its safety risk management, safety assurance and safety documentation processes; and
 - (C) assurances necessary for formally notifying all involved departments of the RTA.
- (XIV) A description of the safety program for employees and contractors that incorporates the applicable local, state and federal requirements including:
 - (A) safety requirements that employees and contractors must follow when working on, or in close proximity to RTA property; and
 - (B) processes for ensuring the employees and contractors know and follow the requirements including required competencies and training, and the RTA's safety communication process.
- (XV) A description of the drug and alcohol program and the process used to ensure knowledge of and compliance with program requirements.
- (XVI) A description of the safety promotion, measures, control, and safety assurances in place to ensure that safety principles, requirements and representatives are included in the RTA's procurement process.
- (d) Safety-related activities of other departments of the RTA. The safety-related activities of other departments of the RTA section of the PTASP shall contain the following:
 - (I) a process of coordination of safety related tasks with other departments; and
 - (II) a matrix of safety related tasks that shows department responsibility.

- (e) PTASP implementation and maintenance. The PTASP implementation and maintenance section of the PTASP shall contain the following information:
 - (I) The program schedule for implementation and maintenance of the PTASP which shall contain the following:
 - (A) specified time intervals between PTASP reviews to determine whether or not the PTASP needs to be revised because of changed operating conditions and/or system modifications;
 - (B) a detailed description of the PTASP revision process including the identification of the persons responsible for initiating, developing, and approving changes to the PTASP; and
 - (C) a statement that the Commission will be notified of all changes to the PTASP and supplied with a copy of all revised pages.
 - (II) A description of the process and procedure for conducting, at a minimum annually, planned and scheduled internal safety reviews and safety assessments to evaluate compliance with the PTASP and comply with rule 7351 including the review and modification of the PTASP based upon audit results. This procedure shall include the following:
 - (A) identification of the RTA departments and functions subject to review;
 - (B) identification of the RTA's schedule for conducting internal reviews and the responsibility for scheduling such reviews;
 - (C) a description of the process for conducting reviews, including the development of written checklists and procedures and the issuance of findings;
 - (D) written documentation of the process and procedures for issuing audit findings including an evaluation of the adequacy and effectiveness of the PTASP;
 - (E) a description of the process to assess the RTA's safety performance;
 - (F) a process for the review of reporting requirements, identification of any deficiencies as part of the safety performance assessment, and how the RTA will develop and carryout, under the direction of the accountable executive and chief safety officer a plan to address the identified safety deficiencies;
 - (G) a description of the process for tracking the status of implemented recommendations:
 - (H) a requirement for an annual audit report, a copy of which must be submitted to the Commission by February 15th each year, which summarizes the results of the internal audits performed during the previous year, including a summary of required corrective actions taken, if any, and provision for follow up to ensure timely implementation and to determine effectiveness; and

- (I) coordination with the Commission.
- (f) PTASP verification. The PTASP verification section of the PTASP shall contain the following:
 - (I) a process to ensure that the design and construction of new systems and/or extensions follow the safety assurance process and comply with the PTASP:
 - (II) a process to ensure compliance of existing operating systems with the PTASP; and
 - (III) a process to ensure that safety audits and review of the PTASP are conducted including consideration of occupational safety and health, fire protection, safety training, and safety information and reporting.
- (g) PTASP documentation. The RTA must maintain documents that set forth its PTASP, including those related to the implementation of its SMS, and results from SMS processes and activities.
 - (I) Documents that are included in whole, or by reference, that describe the programs, policies, and procedures that the RTA uses to carry out its PTASP must be maintained for a minimum of three years and must be made available upon request to the FTA or other Federal entity, or the SSOA.
 - (II) A RTA must maintain records of safety risk mitigations developed in accordance with subparagraph 7345(c)(III)(E).
 - (III) A RTA must maintain results from the RTA's safety performance assessments as required under subparagraph 7345(c)(III)(C and D).
 - (IV) A RTA must maintain employee safety training records taken for purposes of compliance with subparagraph 7345(c)(V) and the public transportation safety certification training program.
- (h) Coordination with metropolitan, statewide, and non-metropolitan planning processes.
 - (I) The RTA must make its safety performance targets available to States and Metropolitan Planning Organizations to aid in the planning process.
- (II) To the maximum extent practicable, a RTA must coordinate with States and Metropolitan Planning Organizations in the selection of State and Metropolitan Planning Organization safety performance targets.
- (a) Safety management policy. The safety management policy section of the PTASP shall contain the following information.
 - (I) Introduction.
 - (A) A safety management policy supporting the PTASP signed by the accountable executive and the chief safety officer or safety management system executive of the RTA and approved by the Board of Directors or equivalent authority.

 Additionally, the safety management policy must:

- (i) establish the RTA's organizational accountabilities and responsibilities and have a written statement of the safety management policy that includes the RTA's safety objectives and include performance targets based on the safety performance measures established under the NPTSP;
- (ii) establish and implement a process that allows employees to report
 safety conditions to senior management, protections for employees who
 report safety conditions to senior management, and a description of
 employee behaviors that may result in disciplinary action;
- (iii) state how the policy will be communicated throughout the RTA;
- (iv) state the legal authority for the PTASP;
- (v) establish the necessary authorities, accountabilities, and responsibilities for the management of safety including organizational diagrams of the RTA and the safety unit that identify the lines of authority and communications used by the RTA amongst the following individuals including the:
 - (1) accountable executive;
 - (2) chief safety officer or SMS executive;
 - (3) RTA leadership and executive management; and
 - (4) key staff.
- (II) PTASP implementation and maintenance. The PTASP implementation and maintenance section of the PTASP shall contain the following information:
 - (A) specified time intervals between PTASP reviews to determine whether or not the PTASP needs to be revised because of changed operating conditions and/or system modifications;
 - (B) a detailed description of the PTASP revision process including the identification of the persons responsible for initiating, developing, and approving changes to the PTASP; and
 - (C) a statement that the Commission will be notified of all changes to the PTASP and supplied with a copy of all revised pages.
- (III) Emergency preparedness and response plans and procedures. The PTASP must include or incorporate by reference an emergency preparedness and response plan or procedures that address, at a minimum:
 - (A) the assignment of employee responsibilities during an emergency; and

- (B) coordination with federal, state, regional, and local officials with roles and responsibilities for emergency preparedness and response in the RTA's service area.
- (IV) Coordination with metropolitan, statewide, and non-metropolitan planning processes.
 - (A) The RTA must make its safety performance targets available to states and Metropolitan Planning Organizations to aid in the planning process.
 - (B) To the maximum extent practicable, a RTA must coordinate with states and Metropolitan Planning Organizations in the selection of state and Metropolitan Planning Organization safety performance targets.
- (b) Safety risk management. The safety risk management section of the PTASP shall develop and implement a safety risk management process that will be comprised of the following activities including: safety hazard identification, safety risk assessment, and safety risk mitigation.
 - (I) Safety hazard identification.
 - (A) Pursuant to 49 U.S.C. Section 5329(d)(1)(C), the RTA must establish methods for identifying and evaluating safety risks throughout all FTA regulated elements of its public transportation system. For purposes of the requirements of this State Safety Program Standard, the RTA must establish methods for identifying and evaluating safety risks for its RFGPTS. The methods or processes applicable to the RFGPTS must include a description of:
 - (i) how hazards will be analyzed, evaluated and ranked for elimination or control including hazards associated with operations, maintenance, and engineering;
 - (ii) the process and mechanism used to track identified hazard(s) through resolution to the extent practicable; and
 - (iii) how the RTA will provide on-going reporting of hazard resolution activities to the Commission.
 - (B) The RTA must consider as a source for hazard identification, data and information provided by the SSOA and the FTA.
 - (II) Safety risk assessment.
 - (A) The RTA must establish methods or processes to assess the safety risks associated with identified safety hazards.
 - (B) A safety risk assessment includes an assessment of the likelihood (probability) and severity of the consequences of the hazards, including existing mitigations, and prioritization of the hazards based on the safety risk.
 - (III) Safety risk mitigation.

- (A) The RTA must establish methods or processes to identify mitigations or strategies necessary as a result of the RTA's safety risk assessment to reduce the likelihood (probability) and severity of the consequences. The methods or processes must:
 - (i) include a description of the established criteria for the development of safety risk mitigations that are necessary based on the result of the RTA's safety risk assessment;
 - (ii) take into account safety risk mitigation efforts already in place to reduce the probability or severity of the potential consequence(s) analyzed; and
 - (iii) identify mitigations or strategies to minimize the exposure of the public, personnel, and property to hazards and unsafe conditions, and consistent with the guidelines of the Centers for Disease Control and Prevention or a State health authority, minimize exposure to infectious diseases.
- (c) Safety assurance. The safety assurance section of the PTASP shall develop and implement a safety assurance process that will be comprised of the following activities including: safety performance monitoring and measurement, management of change, and continuous improvement.
 - (I) Safety performance monitoring and measurement.
 - (A) The RTA shall monitor its system for compliance with, and sufficiency of, the RTA's procedures for operations and maintenance.
 - (B) The RTA shall monitor its operations to identify any safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended.
 - (C) The RTA shall conduct investigations of safety events to identify causal factors and contributing factors.
 - (D) The RTA shall monitor information reported through any internal safety reporting programs.
 - (II) Management of change.
 - (A) The RTA must establish a configuration management control process for identifying and assessing changes that may introduce new hazards or impact the RTA's safety performance. The process shall include:
 - (i) the identification of the unit(s) or group(s) of the RTA responsible for ensuring that the hazards associated with the system expansions or modifications are included in the RTA's hazard resolution process and are assessed for the introduction of new hazards or impacts to the RTA safety performance;

- (ii) participation of operating and safety department personnel in the design review process for new equipment, new or replacement vehicles, new starts projects, subsequent major projects to extend, rehabilitate, modify, or expand the existing system to ensure that safety concerns and hazards are adequately addressed;
- (iii) a safety certification and sign-off process for verification of operational readiness of new equipment and system expansions of modifications prior to entering revenue service;
- (iv) documentation of responsibility and authority for approval of modification exceptions to established design criteria for new equipment and system expansions; and
- (v) procurement procedures that preclude the introduction into the RFGPTS of unauthorized hazardous materials and supplies, as well as defective or deficient equipment.
- (B) If the RTA determines that a change may impact its safety performance, then the RTA must evaluate the proposed change through its safety risk management process.

(III) Continuous improvement.

- (A) The RTA must establish a process to assess its safety performance.
 - Assessment of safety performance must include a process and procedure for conducting, at a minimum annually, planned and scheduled internal safety reviews and safety assessments to evaluate compliance with the PTASP and comply with rule 7351 including the review and modification of the PTASP based upon the results. This procedure shall include the following:
 - (1) identification of the RTA departments and functions subject to review;
 - (2) identification of the RTA's schedule for conducting internal safety reviews and the responsibility for scheduling such reviews;
 - (3) a description of the process for conducting internal safety reviews, including the development of written checklists and procedures and the issuance of findings;
 - (4) written documentation of the process and procedures for issuing internal safety review findings including an evaluation of the adequacy and effectiveness of the PTASP;
 - (5) a description of the process to assess the RTA's safety performance;

- (6) a process for the review of reporting requirements, identification of any deficiencies as part of the safety performance assessment, and how the RTA will develop and carryout, under the direction of the accountable executive and chief safety officer a plan to address the identified safety deficiencies;
- (7) a description of the process for tracking the status of implemented recommendations;
- (8) a requirement for an annual internal safety review and audit report, a copy of which must be submitted to the Commission by February 15th each year, which summarizes the results of the internal safety reviews performed during the previous year, including a summary of required corrective actions taken, if any, and provision for follow up to ensure timely implementation and to determine effectiveness; and
- (9) coordination with the Commission.
- (ii) Assessment of safety performance must include a procedure for accident, incident, occurrence, and hazard notification, reporting and investigation. This procedure shall comply with rules 7348, 7349, and 7350 and shall include the following:
 - (1) notification thresholds for internal and external organizations;
 - (2) the criteria for determining which accidents require investigation and who is responsible for conducting the investigation;
 - (3) a description of the safety risk management process and safety assurance process and procedures used for conducting accident investigations which include the reporting of findings to internal and external organizations, conclusions, development, implementation and tracking of corrective actions that address investigation findings, and follow up to verify corrective action implementation; and
 - (4) coordination with the Commission.
- (iii) A description of the process used to monitor, collect, maintain, analyze and distribute safety data, including data and information provided to the RTA by the SSOA, the FTA, and any internal safety reporting programs to ensure that the safety function within the RTA receives the necessary information to support implementation of the PTASP.
- (B) If a RTA identifies any deficiencies as part of its safety performance assessment, then the transit agency must develop and carry out, under the direction of the accountable executive, a plan to address the identified safety deficiencies.

- (d) Safety promotion. The safety promotion section of the PTASP shall develop and implement a safety promotion process for the RTA that will include the following activities: establish competencies and training and safety communication.
 - (I) Competencies and training.
 - (A) The RTA must establish and implement a comprehensive training program for all agency employees and contractors directly responsible for safety in the agency's public transportation system. The training program must include refresher training, as necessary. The program must include training and certification, drug and alcohol testing, as well as information about drug and alcohol abuse, and a hazardous materials program. The employee and contractor certification and training program shall include a description of the training material and documentation of training test scores and dates and must maintain such training records. The comprehensive employee and contractor training program shall apply to personnel directly responsible for safety of the RFGPTS and shall comply with the requirements of the public transportation safety certification training program. The employee and contractor training and certification shall also include:
 - (i) categories of safety-related work requiring training and certification;
 - (ii) a description of the training and certification program for employees and contractors in safety-related positions including a description of the training material used;
 - (iii) a process used to maintain and access employee and contractor records including documentation of training test scores and dates, when applicable; and
 - (iv) a process used to assess compliance with training and certification requirements.

(II) Safety communication.

- (A) The RTA must communicate safety and safety performance information throughout the RTA's organization that, at a minimum, conveys information on hazards and safety risks relevant to employees' roles and responsibilities and informs employees of safety actions taken in response to reports submitted through an employee safety reporting program.
- (e) Safety plan documentation. The RTA must maintain documents that set forth its PTASP, including those related to the implementation of its SMS, and results from SMS processes and activities. The RTA must maintain documents that are included in whole, or by reference, that describe the programs, policies, and procedures that the RTA uses to carry out its PTASP. These documents must be made available upon request by the FRA or other federal entity, or the SSOA. The RTA must maintain these documents for a minimum of three years after they are created.

- (f) Safety Committee. A RTA is required to form a safety committee that:
 - (I) is convened by a joint labor-management process.
 - (II) consists of an equal number of:
 - (A) frontline employee representatives, selected by a labor organization representing the plurality of the frontline workforce employed by the RTA or, if applicable, a contractor to the RTA, to the extent frontline employees are represented by labor organizations; and
 - (B) management representatives.
 - (III) Safety Committee minimum responsibilities. The Safety Committee is responsible for:
 - (A) identifying and recommending risk-based mitigations or strategies necessary to reduce the likelihood and severity of consequences identified through the agency's safety risk assessment;
 - (B) identifying mitigations or strategies that may be ineffective, inappropriate, or were not implemented as intended;
 - (C) identifying safety deficiencies for purposes of continuous improvement; and
 - (D) establishing risk reduction performance targets using a three-year rolling average of the data submitted by the RTA to the National Transit Database under 49 U.S.C. Section 5335. Risk reduction performance targets are not required to be in place until after FTA updates the NPTSP to include applicable performance measures.
 - (IV) Safety Committee PTASP approval. The Safety Committee is required to approve the PTASP prior to providing the PTASP to the RTA Board of Directors for approval.

7346. Submittal and Review of the Public Transportation Agency Safety Plan.

- (a) On or before November 1st of the first year of operation for new systems, and each November 1st thereafter, each RTA subject to rules 7340 through 7355 shall file its PTASP as an application for Commission approval. The Commission shall give ten days' notice of the filing of the application.
- (b) On or before December 20th, the Commission shall review the plan and shall approve the plan that complies with rules 7340 through 7355. All plans approved shall be approved by Commission order.
- (c) In the event that the Commission finds that the PTSAP does not comply with rule 7345, the Commission shall specify, in writing, the sections not in compliance, recommend appropriate modifications and/or additions necessary to bring the PTASP into compliance, and set a time frame for bringing the PTASP into compliance.

(d) On an annual basis, the RTA must certify to the FTA, using the FTA's determined certification method, which the RTA has established and is in compliance with a PTASP meeting the requirements of rule 7345 and approved by the Commission pursuant to this rule.

7347. Corrective Action Plan (CAP)

Every RTA required to develop a CAP for the RFGPTS shall develop a CAP for the RFGPTS that is based upon a hazard analysis that complies with the following standards.

- (a) CAP Development. The RTA shall develop a CAP for the following:
 - (I) results from <u>event</u> investigations, in which the RTA or the SSOA identify causal and contributing factors -that require corrective actions;
 - (II) hazard findings of noncompliance from safety reviews or audits performed by the SSOA or RTA internal safety reviews; and
 - (III) any hazard that meets a risk assessment code outlined in subparagraphs 7347(d)(l) and (d)(II)-safety condition reported through the RTA established safety condition reporting process.
- (b) All CAPs are required to be filed within 45 days of identification of the need for a CAP unless otherwise ordered by the Commission.
- (c) Each CAP and associated hazard analysis shall identify:
 - (I) the element or activity identified including the assigned tracking number;
 - (II) the action or actions to be taken by the RTA to minimize, control, correct, or eliminate the risks and hazards identified by the CAP;
 - (III) the interim measures the RTA plans to implement to prevent recurrence before the final corrective actions are implemented;
 - (IV) the CAP implementation schedule;
 - (V) the method(s) the RTA will use to validate the effectiveness of the corrective measures;
 - (VI) the individual responsible for the CAP implementation; and
 - (VII) any specific actions required by the Commission.
- (de) A CAP must be reviewed by the Commission or Commission staff and formally approved by the Commission.
 - (I) For hazards that meet a high risk assessment code of 1A, 2A, 1B, or 2B, or 1C, of subparagraph 7350(de)(l)(C), the Commission must review and formally approve the CAP before the RTA begins its safety risk mitigation activities.

- (A) The Commission shall open an investigation docket and notify the RTA by order that a CAP is required.
- (B) The RTA shall file a CAP and associated hazard analysis, if necessary, in the investigation docket within 30 days of the Commission order notifying the RTA that a CAP is required.
- (C) The Commission shall issue an order in the investigation docket approving or rejecting the CAP within 15 days of receiving the RTA's CAP.
- (D) If the CAP is rejected, the Commission order rejecting the CAP will provide the reasons for rejection and recommended revisions.
- (E) If the CAP is rejected, the RTA shall submit a revised CAP within 15 days of the Commission's order rejecting the CAP.
- (F) The Commission shall issue an order in the investigation docket approving or rejecting the revised CAP within 10 days of receiving the RTA's revised CAP.
- (G) If the revised CAP is rejected, the Commission shall initiate its dispute resolution process.
- (II) For hazards that do not meet the serious risk assessment code of IC, 2C, 3A, or 3Boutlined in subparagraph (c)(I) above, Commission staff will review and preliminarily approve the CAP before the RTA begins its safety risk mitigation activities.
 - (A) Commission staff shall review the proposed CAP through the RTA hazard and CAP tracking system and shall provide preliminary approval of the CAP safety risk mitigation measures.
 - (B) If the CAP is rejected by Commission staff, Commission staff shall provide reasons for the rejection and recommended revisions.
 - (C) If the CAP is rejected, the RTA shall submit a revised CAP within five business days of Commission staff's rejection of the CAP.
- (III) For hazards that do not meet the risk assessment codes outlined in subparagraphs (d)(I) or (d)(II) above, a CAP is not required.
- (IV) If an emergency corrective action must be taken immediately to ensure safety, the RTA must notify the Commission immediately of the issue and then must follow up with the Commission for subsequent review and approval of a CAP pursuant to the criteria outlined in (I) and (II) above within five business days.
- (V) The Commission will review and provide final approval of CAP's on a quarterly basis.
- (ed) The Commission's dispute resolution process will be used to resolve disputes between the Commission and the RTA, or the Commission staff and the RTA resulting from the development or enforcement of a CAP.

- (fe) The Commission will evaluate the findings from any NTSB accident investigation and will determine if a CAP should be developed by either the Commission or the RTA to address the NTSB findings.
- (gf) The RTA must provide to the Commission the following information:
 - verification that the corrective action(s) has been implemented as described in the CAP, or that a proposed alternate action(s) has been implemented subject to Commission review and approval; and
 - (II) periodic reports requested by the Commission describing the status of each corrective action(s) not completely implemented as described in the CAP.
- (hg) The Commission will monitor and track the implementation of each approved CAP using the following procedure:
 - (I) The RTA shall submit quarterly reports on the status of the actions and activities contained in the CAP. The quarterly report shall address, at a minimum, the following:
 - (A) actions and activities associated with the CAP that has occurred in the interim or since the last report;
 - (B) a statement as to whether the actions and activities are on-schedule, behind schedule, or ahead of schedule;
 - (C) if actions and activities are behind schedule, a statement as to the causes of the delay and the planned measures to meet the schedule;
 - (D) any changes in key personnel assigned to implementing the CAP;
 - (E) any management issues:
 - (F) effectiveness of safety measures;
 - (G) a statement as to the effectiveness of actions and/or activities that have already been implemented; and
 - (H) if a like accident and/or hazardous condition has been identified subsequently to the CAP, a statement about the possible impacts on the CAP.
 - (II) The Commission shall actively monitor the progress of the CAP by meeting periodically with the RTA and shall develop a monitoring plan in cooperation with the RTA.
 - (III) The Commission may monitor the RTA's progress in carrying out a CAP through unannounced, on-site inspections, or any other means the Commission deems necessary or appropriate.
 - (IV) All CAP related correspondence between the Commission and the RTA will include a CAP tracking number.

(V) The Commission shall have access to the RTA computerized log for tracking and recordkeeping of CAP's, shall monitor all quarterly status reports, additional information, and information from the finalization of the CAP, and shall check CAP due dates.

7348. Accident Notification.

- (a) The Commission shall require the RTA to notify the Commission's staff and the FTA within two hours of any accident occurring on a RFGPTS where one or more of the following occurs:
 - a fatality at the scene; or where a person is confirmed dead within thirty days of the accident;
 - (II) serious injuries as defined in <u>rule_paragraph_7341(xx</u>tt) requiring immediate medical attention away from the scene for one or more persons;
 - (III) substantial property damage resulting from a collision involving a rail transit vehicle;
 - (IV) an evacuation due to life safety reasons;
 - (V) a collision at a grade crossing resulting in a serious injury or fatality;
 - (VI) any derailment of a rail transit vehicle;
 - (VII) a runaway train; or
 - (VIII) a collision between a rail transit vehicle and a second rail transit vehicle, or a rail transit non-revenue vehicle.
- (b) RTAs must notify Commission staff within two hours of any accident occurring at a RFGPTS grade crossing that does not involve substantial property damage resulting from the collision, does not result in a serious injury, or does not result in a fatality. The Commission does not require RTAs to notify the FTA of such accidents
- (c) RTAs that share tracks with the general railroad system and are subject to FRA notification requirements must notify both Commission staff and the FTA within two hours of an incident for which the RTA must also notify the FRA. The Commission shall require each RTA that shares track with the general railroad system and is subject to FRA notification requirements to notify the Commission's staff and the FTA within two hours of an incident for which the RTA must also notify the FRA.
- (de) The Commission's required method of notification of accidents is by electronic mailtelephone first within two hours of occurrence of the accident. The RTA shall provide the following information as part of the electronic mail notification: followed by an electronic mail within five business days of the occurrence of the accident to the Commission on a form prescribed by the Commission of initial notification information and any additional information sheets which shall contain the following information:
 - (I) the nature of the accident as described in subparagraphs 7348(a)(I through VIII) and paragraph 7348(b) above;

- (II) the time, date, and location of the accident;
- (III) the time and date of the notification to the Commission;
- (IV) a description of the accident including vehicles, rail transit vehicles, passengers, persons, all property involved in the accident, and the direction vehicles and rail transit vehicles were traveling at the time of the accident, if known; and
- (V) whether the accident has been reported to the FRA or the NTSB.
- (ed) Pursuant to 49 C.F.R. Part 674, an incident must be reported to FTA's National Transit Database in accordance with the thresholds for reporting set forth in Appendix A to 49 C.F.R. Part 674. If a RTA or SSOA later determines that an incident meets the definition of an accident as outlined in this rule 7348, that accident must be reported to the SSOA in accordance with the thresholds for notification and reporting set forth in this rule 7348.

7349. Investigations and Reporting Procedures for Accidents.

- (a) The Commission shall investigate, or cause to be investigated, at a minimum, any accident meeting the notification thresholds identified in paragraphs 7348(a) and (b).
- (b) No later than June 30, 2027, RTAs must install and use forward facing and operator facing in-cab cameras on all light rail vehicles to record activity at all times when the light rail vehicle power is on. RTAs that already have such cameras installed must immediately begin using them to record activity at all times when the light rail vehicle power is on. RTAs must use footage from the cameras to assist in the management of safe light rail operations. In all accident investigations, whether performed by Commission staff or the RTA, footage from such cameras must be reviewed.
- The Commission shall use its own investigation procedures or those that have been formally adopted from the RTA and that have been submitted to FTA.
- (de) Investigation of accidents.
 - (I) Each RTA shall investigate accidents on behalf of Commission staff. Commission staff may also perform separate, independent investigations at its discretion. If Commission staff performs a separate, independent investigation, such investigation shall be coordinated with any internal investigation of the accident by the RTA.
 - (II) When investigating an accident as defined in paragraphs 7348(a) and (b), the RTA shall give prior sufficient telephone notice to Commission staff of the times that an accident investigation team will convene to conduct interviews, inspections, examinations, or tests to determine the cause of the accident. Commission staff will oversee a RTA's internal investigation through participation in the RTA's accident investigation team activities, as necessary, and through monthly investigation review meetings.
 - (III) The RTA shall document its investigation in a written report. The RTA shall submit the report summary describing the investigation activities to the Commission on forms available from the Commission and additional investigation report documentation as

needed. The report shall be submitted within 45 days after the accident occurred and shall state if the report is an initial accident report because of outstanding documentation needed from outside agencies, or the final accident report. Reports shall be submitted for all accidents, as specified in paragraphs 7348(a) and (b). The Accident Report shall contain the following information:

- (A) the name of the RTA and the name of the RFGPTS if different.
- (B) the following accident data, if applicable: the accident date and time; the accident's location; the type of accident; whether the accident occurred at a grade crossing; the number of fatalities; the number of injuries; and the estimated damage in dollars to the rail fixed guideway system, vehicles, or other rail transitcontrolled property.
- (C) a written description of the accident;
- (D) a diagrammatic sketch of the accident;
- (E) an explanation of the accident's most probable cause and any additional contributing causes;
- (F) a CAP to prevent reoccurrence of the accident if a determination is made that a CAP is warranted, or a statement that a CAP is not necessary under paragraph 7347(a);
- (G) the schedule for the implementation of the CAP if a CAP is warranted;
- (H) the signature and title of the person authorized to certify the accuracy of the report, together with the date the report is signed <u>by either an electronic</u> <u>signature or wet ink;</u>
- (I) all photographs of the accident, or a statement that no such photographs exist;
- (J) any evidence that exists in the form of magnetic media, such as video, forward facing and operator facing in-cab camera footage, event data recorder information, or audio recordings of the event, or a statement that none exists;
- (K) any report from an outside agency that was involved in the investigation (e.g., local police investigation reports or coroners' reports), or a statement explaining why none is available. Copies of police reports must include, if available, information regarding whether a citation or notice of violation was issued and to whom it was issued;
- (L) a statement regarding whether drug and/or alcohol testing was performed on any RTA employees or contractors in connection with the accident, and copies of the results of any such drug and/or alcohol tests or an affidavit reporting the results of any such testing;
- (M) any witness statements; and

- (N) any other information, reports, or statements that would aid in the formation of a conclusion as to the cause of the accident.
- (IV) The RTA shall submit its accident investigation report, including its CAP and implementation schedule, if necessary, to SSOA staff. Such report shall be submitted under seal and identified as a Highly Confidential Report filed in accordance with extraordinary protections afforded by Commission rules and §40-18-104, C.R.S. Upon submission, such report, in whole or in part, is an investigative report of the Commission, defined in § 40-18-104, C.R.S. that shall be afforded extraordinary protections as highly confidential information. Unless modified by subsequent Commission decision, such extraordinary protections shall restrict access to the Highly Confidential Report only to Commissioners, Administrative Law Judges, Commission Advisory setaff, Commission Litigation Trial setaff, and legal counsel for each of these groups; provided however, the RTA may maintain and use copies of such accident investigation reports and components thereof to assist in the management of safe light rail operations.
- (V) Commission staff may request that the Commission consider the RTA's investigation and report thereon. The Commission may, after considering the RTA's investigation and report, make such order as it deems necessary, including an order mandating a staff investigation. If a staff investigation is ordered, the Commission shall consider staff's report and issue an appropriate order. Nothing in this subparagraph shall preclude Commission staff from, in its discretion, performing its own investigation without an order of the Commission.
- (ed) The threshold for the Commission's investigation of accidents is the same as the RTA's threshold for reporting accidents as set forth in paragraphs 7348(a) and (b).
- (fe) The Commission authorizes the RTA to conduct investigations on the Commission's behalf and requires the RTA to use investigation procedures that have been formally approved by the Commission.
- (gf) Each investigation must be documented in a final report that includes a description of investigation activities, identified causal and contributing factors, and a CAP and hazard analysis if warranted.
- (<u>hg</u>) The Commission shall formally adopt a final investigation report for each investigation. Such adoption shall include the following information.
 - (I) If the Commission has conducted the investigation, the Commission shall formally transmit its initial investigation report to the RTA within 45 days of the occurrence of the accident. The Commission shall formally transmit its final investigation report to the RTA once all required documentation from outside agencies has been provided and included in the report.
 - (II) If the RTA does not concur with the findings of the Commission's accident investigation report, the RTA agency shall either:

- request a meeting with Commission staff to discuss the items of non-concurrence and to negotiate with Commission staff until a resolution on the findings is reached; or
- (B) formally transmit the RTA's dissent to the findings of the investigation in writing, to the Commission, and negotiate with the Commission until a resolution on the findings is reached.
- (III) The Commission shall review and formally adopt the final investigation report conducted by the RTA or any other entity that the Commission authorizes to conduct an accident investigation.
- (IV) If the Commission does not concur with the findings of the RTA investigation report, the Commission shall either:
 - (A) conduct a Commission investigation according to rule 7349; or
 - (B) formally transmit to the RTA the Commission's disagreement with the findings of the RTA's investigation and discuss the Commission's areas of disagreement with the RTA until a resolution of the findings is reached.
- (V) The Commission shall formally adopt final investigation reports on a quarterly basis.
- (ih) The Commission shall review reports that document investigation activities and findings on a quarterly basis.
- The Commission shall participate in any investigation conducted or findings and recommendations made by the NTSB, FRA, or FTA.
- Pursuant to 49 C.F.R. Part 674.35(d), the FTA administrator may conduct an independent investigation of accident or review SSOA or RTA findings of causation of an accident.

7350. Investigations and Reporting Procedures for Hazards.

- (a) Each RTA must investigate and report the following hazards to the Commission:
 - (I) activation failure, partial activation, or false activation of a highway-rail grade crossing warning system;
 - (II) broken rail causing impassable track;
 - (III) broken Messenger or Contact wire, or Overhead Contact System wire;
 - (IV) train separation (train uncoupling) in revenue service;
 - (V) incapacitated train operator in revenue service;
 - (VI) red signal violations;

- (VII) vehicle door opening on wrong side, opening away from station platforms, or opening during train movement;
- (VIII) near miss collision with employee, contractor, or other individual including trespassers on the rail right-of-way; or
- (IX) any other hazard that meets a high risk assessment code of 1A, 2A, 1B, or 2B, or a serious risk assessment code of 1C, 2C, 3A, or 3B.
- (b) All RTA employees, contractors, and SSOA employees that conduct investigations of hazards must be trained to perform their functions in accordance with the Public Transportation Safety Certification training program. The Commission shall cause to be investigated, at a minimum, all hazards.
- (I) All RTA employees and contractors that conduct investigations must be trained to perform their functions in accordance with the public transportation safety certification training program.
- (II) All SSOA employees and contractors that conduct investigations must be trained to perform their functions in accordance with the public transportation safety certification training program.
- (cb) Each RTA mustshall notify Commission staff of the hazards specified in paragraph 7350(a) by electronic mailtelephone as soon as practicable, but not later than 24 hours from the earlier of the time or except that hazards specified in subparagraph 7350(a)(IX) must be reported within 24 hours of the determination of the risk assessment code.
- (de) Risk assessment code.
 - (I) Each hazard shall be assigned a risk assessment code. The risk assessment code shall consist of a severity category and a probability level. Descriptions of severity categories, probability levels, and the resulting risk assessment matrix are <u>included in paragraph</u> 7350(d)derived from the MIL-STD-882E.
 - (A) Severity categories shall be identified as follows:

	SEVERITY CATEGORIES			
Description	Severity Category	Mishap Result Criteria		
Catastrophic	1	Could result in one or more of the following: death, permanent total disability, irreversible significant environmental impact, or monetary loss equal to or exceeding \$10M.		
Critical	2	Could result in one or more of the following: permanent partial disability, injuries or occupational illness that may result in hospitalization of at least three personnel, reversible significant environmental impact, or monetary loss equal to or exceeding \$1M but less than \$10M.		
Marginal	3	Could result in one or more of the following: injury or occupational illness resulting in one or more lost work day(s), reversible moderate environmental impact, or monetary loss equal to or exceeding \$100K but less than \$1M.		
Negligible	4	Could result in one or more of the following: injure or occupational illness not resulting in a lost work day, minimal environmental impact, or monetary loss less than \$100K.		
		SEVERITY CATEGORIES		
Description	Severity Category	Mishap Result Criteria		
Catastrophic	1	Could result in one or more of the following: death, permanent total disability, irreversible significant environmental impact, or monetary loss equal to or exceeding \$10M.		
<u>Grave</u>	2	Could result in one or more of the following: permanent partial disability, injuries or occupational illness that may result in hospitalization of at least three personnel, reversible significant environmental impact, or monetary loss equal to or exceeding \$1M but less than \$10M.		
<u>Significant</u>	<u>3</u>	Could result in one or more of the following: injury or occupational illness resulting in one or more lost workday(s), reversible moderate environmental impact, or monetary loss equal to or exceeding \$100K but less than \$1M.		
<u>Modest</u>	4	Could result in one or more of the following: injury or occupational illness not resulting in a lost workday, minimal environmental impact, or monetary loss equal to or exceeding \$25K, but less than \$100K.		

<u>Negligible</u>	<u>5</u>	Could result in one or more of the following: no injuries or occupational illness, no environmental impact, minor public inconvenience or nuisance, or monetary loss less than \$25K.
-------------------	----------	---

(B) Probability levels shall be identified as follows:

PROBABILITY LEVELS					
Description	Level	Specific Individual Item	Fleet or Inventory		
Frequent	A	Likely to occur often in the life of an item.	Continuously experienced.		
Probable	В	Will occur several times in the life of an item.	Will occur frequently.		
Occasional	c	Likely to occur sometime in the life of an item.	Will occur several times.		
Remote	Ð	Unlikely, but possible to occur in the life of an item.	Unlikely, but can reasonably be expected to occur.		
Improbable	£	So unlikely, it can be assumed occurrence may not be experienced in the life of an item.	Unlikely to occur, but possible.		
Eliminated	F	Incapable of occurrence. This level is used when potential hazards are identified and later eliminated.	Incapable of occurrence. This level is used when potential hazards are identified and later eliminated.		
PROBABILITY LEVELS					
Description Level Specific Individual Item		Fleet or Inventory			
Frequent	<u>A</u>	Likely to occur often in the life of an item.	Continuously experienced.		
<u>Probable</u>	<u>B</u>	Will occur several times in the life of an item.	Will occur frequently.		
Remote	<u>C</u>	Likely to occur sometime in the life of an item.	Will occur several times.		
<u>Improbable</u>	<u>D</u>	Unlikely, but possible to occur in the life of an item.	Unlikely, but can reasonably be expected to occur.		
<u>Highly</u> <u>Improbable</u>	E	So unlikely, it can be assumed occurrence may not be experienced in the life of an item.	Unlikely to occur, but possible.		

(C) Risk assessment categories shall be identified as in the following risk assessment matrix:

RISK ASSESSMENT MATRIX					
Severity\ Probability	Catastrophic (1)	Critical (2)	Marginal (3)	Negligible (4)	
Frequent (A)	High		Serious	Medium	
Probable (B)	High	High	Serious	Medium	
Occasional (C)	High	Serious	Medium	Low	
Remote (D)	Serious	Medium	Medium	Low	
Improbable (E)	Medium	Medium	Medium	Low	
Eliminated (F)	Eliminated				

RISK ASSESSMENT MATRIX					
Severity Probability	Catastrophic (1)	<u>Grave</u> (2)	Significant (3)	Modest (4)	Negligible (5)
Frequent (A)	High		<u>Serious</u>	Medium	<u>Medium</u>
Probable (B)	<u>High</u>		<u>Serious</u>	Medium	Moderate
Remote (C)	<u>Serious</u>	<u>Serious</u>	<u>Medium</u>	Moderate	<u>Low</u>

Improbable (D)	<u>Medium</u>	<u>Medium</u>	<u>Moderate</u>	<u>Low</u>	<u>Low</u>
Highly Improbable (E)	<u>Medium</u>	Moderate	Low	<u>Low</u>	Low

- (d) Investigation of hazards.
- (I) Each RTA shall investigate all hazards.
- (II) The RTA shall investigate each hazard in compliance with the procedures contained in the RTA's approved PTASP.
- (III) The RTA shall document its investigation in a written report. The RTA shall make available to the Commission the written report summary describing the investigation activities. The report shall be submitted within 45 days after the hazard was discovered. Written reports shall be made available for all hazards. Hazard reports shall contain the following:
- (A) the name of the RTA and the name of the RFGPTS if different;
- (B) the following hazard data, if applicable: the date the hazard was identified; the location of the hazard; the type of hazard; the name of the person who identified the hazard; the manner in which such person identified the hazard; the severity of the hazard; the probability of the hazard, the risk assessment code assigned to the hazard; and the probability that the hazard could cause death or injury to passengers, contractors, or employees if not immediately corrected;
- (C) a written description of the hazard;
- (D) a diagrammatic sketch of the hazard, if necessary;
- (E) an explanation of the hazard's most probable cause and any additional contributing causes;
- (F) a CAP to eliminate the hazard, if a determination is made that a CAP is warranted, or a statement that a CAP is not necessary (see paragraph 7347(a));
- (G) the schedule for the implementation of the CAP if a CAP is warranted;
- (H) a signature and title of the person authorized to certify the accuracy of the report, together with the date the report is signed;
- (I) all photographs regarding the hazard, or a statement that no such photographs exist;
- (J) any evidence that exists in the form of magnetic media, such as video or audio recordings of the event, or a statement that none exists;
- (K) any report from an outside agency that was involved in the investigation (e.g., local police investigation reports or coroners' reports), or a statement explaining why none is available.

Copies of police reports must include, if available, information regarding whether a citation or notice of violation was issued and to whom it was issued;

- (L) any witness statements; and
- (M) any other information, reports, or statements that would aid in the formation of a conclusion as to the cause of the hazard.
- (e) Each hazard investigation required by paragraph 7350(a) must be documented in a final report that includes: a description of investigation activities, identified causal and contributing factors, a CAP when required by paragraph 7347(a), or when the RTA determines a CAP is needed, a hazard analysis, and any evidence that exists in the form of magnetic media such as video, forward facing and operator facing in-cab camera footage, event data recorder information, and audio recordings. and a CAP and hazard analysis. Other safety events investigated, by the RTA per their event reporting processes and procedures, shall be documented.

7351. RTA Internal Safety Reviews.

- (a) The RTA is required to develop and document in its PTASP the process for the performance of on-going internal safety reviews.
- (b) The internal safety review process must:
 - (I) describe the process used by the RTA to determine if all identified elements of its PTSAP are performing as intended; and
 - (II) ensure that all elements of the PTSAP are reviewed in an on-going manner and completed over a three-year cycle; and
 - (III) provide the internal review schedule for the three-year internal safety review cycle.
- (c) The RTA must notify the Commission at least 30 days before the conduct of scheduled internal safety review to allow Commission staff to observe the internal review.
- (d) The RTA shall submit to the Commission any checklists or procedures it will use during the internal safety review prior to conducting such review.
- (e) The RTA <u>must</u>te annually submit to the Commission a report documenting internal safety review activities and the status of subsequent findings and corrective actions.
- (f) The annual report must be accompanied by a formal letter of certification signed by the RTA's accountable executive, indicating that the RTA is in compliance with its PTASP.
- (g) If the RTA determines that findings from its internal safety review indicate that the RTA is not in compliance with its PTASP, the accountable executive must identify the activities the RTA will take to achieve compliance.
- (h) The Commission must formally review and approve the annual report.

- (I) The RTA shall file its annual report on or before February 15th of the first year of operation for new systems, and each February 15th thereafter as an application for Commission approval. The Commission shall give ten days' notice of the filing of the application.
- (II) On or before April 5th of the year in which the application for approval of the annual report is filed, the Commission shall review the annual report and shall approve those annual reports that conform to this rule.
- (III) In the event the Commission finds that the annual report does not comply with this rule, the Commission shall specify the sections not in compliance, recommend appropriate modifications and/or additions necessary to bring the annual report into compliance, and set a time frame for bringing the annual report into compliance.

7352. Commission Safety Audits.

At least once every three years, beginning with the initiation of RTA passenger operations, the Commission shall conduct a complete on-site safety audit of each RTA's implementation of its PTASP in an on-going manner. Audits may include record examinations, inspections, observations, field checks, interviews, and testing. At the conclusion of the three-year review cycle during which all parts of the PTASP have been audited, the Commission shall prepare and issue a report containing findings and recommendations—resulting from the audits, which at a minimum must include an analysis of the effectiveness of the PTASP, and a determination of whether the PTASP should be updated.

- (a) The Commission shall conduct six semi-annual safety audits during the three-year review process. Semi-annual audits shall be conducted during the spring and fall of a calendar year. Commission staff shall notify the RTA at least 30 days prior to the start of the semi-annual safety audit which checklists will be reviewed and to determine the appropriate RTA personnel to include for each checklist. The first five semi-annual audits shall involve a review of approximately five to ten areas of interest such that the entire PTASP is fully examined during the first five semi-annual audits. The sixth semi-annual audit shall be comprised of a review of the auditing process and procedures used during the previous five semi-annual audits, and preparation of the checklists to be used for the next three-year review process.
- (b) For each semi-annual audit during the three-year review process, Commission staff shall prepare audit checklists that identify the safety areas of interest and the compliance criteria to be used for the audit during the specific semi-annual audit.
- (c) For each semi-annual audit during the three-year review process, Commission staff shall prepare a draft report for the semi-annual audit with completed audit checklists, and audit findings and/or recommendations. This draft report will be provided to the RTA for a 30-day review and comment by the RTA. The RTA shall provide written responses to all audit report findings and/or recommendations, any written comments, and proposed CAP's and implementation schedules within 30 days of receipt of the Commission's audit report. The RTA shall also be allowed to make corrections to any findings and/or recommendations outlined in the draft report within the 30-day review period. The Commission shall incorporate comments, CAP's and implementation schedules in a final audit report for the semi-annual audit. The Commission shall approve the final audit report for each semi-annual audit.

Attachment A - Adopted Rules in Legislative Format Decision No. C22-0263 Proceeding No. 22R-0070R Page 38 of 38

(d) At the conclusion of the three-year review cycle, the Commission shall prepare and issue a report summarizing the audits conducted during the three-year cycle, including the six semi-annual audit reports, and shall file this report with the FTA.as outlined in rule 7352.