# <u>System Safety State Safety Oversight Program Standard for Rail Fixed Guideway Public Transportation</u> <u>Systems</u>

#### 7340. Applicability.

Rules 7341 through 735<u>5</u>4 apply to all transit agencies and rail fixed guideway systems operating within the State of Colorado, which 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 73554:

- (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(tt)); 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.
- "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) "C.F.R." means the Code of Federal Regulations.
- (e) "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.
- (fa) "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 transit agency through contract or other agreement. The RTA transit agency is not a contractor for the Commission.
- (gb) "Corrective action plan" ("CAP") means a plan developed by the RTAtransit agency that describes the actions the RTAtransit agency will take to minimize, control, correct, or eliminate risks and hazards, and the schedule for implementing those actions.

- (h) "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.
- (i) "Examination" means a process for gathering or analyzing facts or information related to the safety of a RFGPTS.
- (j) "Event" means an accident, incident, or occurrence.
- (ke) "Finding" means non-compliance with the <u>RTA transit agency</u>'s <u>PTASPSSPP</u>, <u>LSSP</u>, rules, procedures, programs, or other regulatory guidelines, which results in the formulation of a CAP.
- (ld) "FRA" means the Federal Railroad Administration, an agency of the United States Department of Transportation.
- (me) "FTA" means the Federal Transit Administration, an agency of the United States Department of Transportation.
- (nf) "Hazard" means any real or potential condition(as defined in the transit agency's hazard management process) that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a RFGPTS; a system, equipment or property; or damage to the environment.
- (o) "Incident" means an event that involves any of the following: A personal injury that is not a serious injury (as defined in paragraph 7341(tt)); one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a RTA.
- (pg) "Individual" means a passenger; employee; contractor; other rail transit facility worker; pedestrian; trespasser; or any person on rail transit-controlled property. "Inspection" means a physical observation of equipment, facilities, rolling stock, operations, or records for the purpose of gathering or analyzing facts or information.
- (gh) "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.used to determine the causal and contributing factors of an accident or hazard, so that actions can be identified to prevent recurrence.
- (r) "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.

- (<u>si</u>) "New starts project" means any rail fixed guideway system funded under FTA's discretionary construction program in 49 U.S.C. 5309.
- "NTSB" means the National Transportation Safety Board, an independent Federal agency.
- (t) "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>uk</u>) "Passenger" means a person who is on board, boarding, or alighting from a rail transit vehicle for the purpose of travel.
- (vl) "Passenger operations" means the period of time when any aspect of <u>RTA</u>transit agency operations are initiated with the intent to carry passengers.
- (w) "Performance criteria" means categories of measures indicating the level of safe performance within a RTA.
- (x) "Performance target" means a specific level of performance for a given performance measure over a specified timeframe.
- (y) "Person" means a passenger, employee, contractor, pedestrian, trespasser, or any individual on the property of a RFGPTS.
- (zm) "Program standard" means the standards in rules 7340 through 735<u>5</u>4, that which codify the policies, objectives, responsibilities, and procedures used to provide <u>RTA transit agency</u> safety and security oversight.
- (aa) "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.
- (bb) "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).
- (<u>ccn</u>) "Rail fixed guideway <u>public transportation</u> system" (<u>RFGPTS</u>) means those rail fixed guideway systems as defined in <u>rule-paragraph</u> 7001(c) <u>that use rail</u>, are operated for <u>public</u> transportation, are within the jurisdiction of the Commission, and are not subject to the <u>jurisdiction of the FRA</u>, 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.of which:
- (I) The rail fixed guideway's route miles are Included in FTA's calculation of rail fixed guideway route miles:
- (II) The rail fixed guideway system receives funding under FTA's formula program for urbanized areas; or
- (III) The rail fixed guideway system has submitted documentation to FTA indicating its intent to be included in FTA's calculation of fixed guideway route miles to receive funding under FTA's formula program for urbanized areas.
- (ddo) "Rail transit-controlled property" means property that is used by the transit agency and may be owned, leased, or maintained by the transit agency. "Rail transit agency" (RTA) means any entity that provides services on a RFGPTS.
- (<u>eep</u>) "Rail transit vehicle" means the transit agency's rolling stock, including but not limited to passenger and maintenance vehicles. "Recommendation" means a suggestion or proposal for improvements to how the PTASP is implemented by a RTA.
- "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.
- (gg) "Risk" means the composite of predicted severity and likelihood of the potential effect of a hazard.
- (hh) "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.
- (ii) "Risk mitigation" means a method or methods to eliminate or reduce the effects of hazards.
- (jjq) "Safety" means freedom from harm resulting from unintentional acts or circumstances.
- (kk) "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.
- (II) "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.

- (mm) "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.
- (nn) "Safety management system executive" means a safety officer or an equivalent.
- (oo) "Safety performance target" means a performance target related to safety management activities.
- (pp) "Safety promotion" means a combination of training and communication of safety information to support SMS as applied to the RTA's RFGPTS.
- (qq) "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.
- (rr) "Safety risk evaluation" means the formal activity whereby a RTA determines safety risk management priorities by establishing the significance or value of its safety risks.
- (ss) "Safety risk management" means a process within a RTA's safety plan for identifying hazards and analyzing, assessing, and mitigating safety risk.
- (<u>tt</u>r) <u>"Security" means freedom from harm resulting from intentional acts or circumstances. "Serious injury" means any injury which:</u>
  - (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.
- (uu) "State of good repair" means the condition in which a capital asset is able to operate at a full level of performance.
- (vv) "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.

- (<u>wws</u>) "System safety program plan" ("SSPP") means a document developed and adopted by the <u>RTAtransit agency</u>, describing its safety policies, objectives, responsibilities, and procedures. <u>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.</u>
- (xxt) "System security plan" ("SSP") means a document developed and adopted by the transit agency describing its security policies, objectives, responsibilities, and procedures. "Testing" means an assessment of equipment, facilities, rolling stock, or operations of a RFGPTS.
- (yy) "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.
- (zz) "U.S.C." means the United States Code
- (aaa) "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 and Part 67459 are rules issued by the FTA and are hereby incorporated by reference in these rules. References in these rules to 49 C.F.R. 15 are rules issued by the Office of the Secretary of the U.S. Department of Transportation and are hereby incorporated by reference in these rules. References in these rules to 49 C.F.R. 1520 are rules issued by Transportation Security Administration Department of Homeland Security and are hereby incorporated by reference in these rules. These rules may be found at 49 C.-F.-R.- 659.19 15, and Part 674 59, and 1520 revised as of March 16, 2016. References to 49 C.-F.-R.- 659.1915, 659 and Part 6741520 do not include later amendments to, or editions of, 49 C.-F.-R.- 659.19,15, 659 and Part 6741520. 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.- 659.1915, 659 and Part 674, 1520 and the MIL-STD-882E may be obtained or examined. This incorporated material may be examined at any state publications depository library.

### 7343. State Safety Oversight Program Management, Policies and Objectives

The Commission is the established SSOA for Colorado. The Commission has the statutory authority under § 40-18-102, C.R.S. and obligation to establish a state safety oversight program and minimum

safety standards for RFGPTS's under its jurisdiction in accordance with the "Moving Ahead for Progress in the 21<sup>st</sup> Century Act", 49 U.S.C. sec. 5329, and Title 49 C.F.R. Part 674, which replaced Title 49 C.F.R. Part 659.

- (a) Commission policies and objectives governing state safety oversight activities.
  - (I) The Commission's statutory charge in rail matters is to prevent accidents and promote public safety.
  - (II) The Commission is responsible for establishing standards for RFGPTS safety and procedures to be used by the RTA. The Commission's program standard outlined in rules 7340 to 7355 is consistent with the NPTSP, the public transportation safety certification training program, the rules for PTASP's, and all applicable federal and state laws.
  - (III) The Commission is responsible for overseeing the safety performance of RTA practices and procedures, RTA internal safety reviews, and the RTA PTASP to ensure compliance with the program standard and compliance with 49 C.F.R. Part 674 through audits once every three years of the RTA PTASP and in an on-going manner.
  - (IV) The Commission has authority to investigate any allegation of noncompliance with the program standard, the RTA PTASP, and the RTA safety policies, practices and procedures pursuant to its statutory authority and federal authority.
  - (V) The Commission has authority to enforce the program standard, the RTA PTASP, the RTA safety policies, practices and procedures, address imminent threat to public safety on a RFGPTS, and address non-responsiveness of a RTA to respond to identified issues and implement corrective action in a timely manner.
  - (VI) The Commission has the primary responsibility for the investigation of an accident on a RFGPTS. The Commission may allow the RTA to perform an accident investigation on its behalf.
  - (VII) The Commission may enter into an agreement with a contractor for assistance in overseeing accident investigations, performing independent accident investigations, and reviewing incidents and occurrences, and for expertise the Commission does not have within its own organization.
  - (VIII) All SSOA staff and contractors the Commission may employ to work on the

    Commission's behalf, including those conducting investigations, must comply with the
    requirements of the public transportation safety certification training program as
    applicable.

- (IX) SSOA staff may develop a procedures manual to outline how Commission staff will conduct activities necessary to meet the requirements of the program standard.
- (b) Commission enforcement authority.
  - (I) The Commission's oversight and enforcement activities will be conducted in an on-going manner.
  - (II) Imminent threats to public safety.
    - (A) If Commission staff determines any imminent threats to public safety requiring immediate action from the RTA, Commission staff shall provide a written request to meet with the chief safety officer, safety department, and necessary rail operations departments for necessary inspections and initial discussion of corrective action, that may include removal of deficient equipment or system infrastructure from service, that will be taken to address the imminent public safety threat;
    - (B) If the initial discussion and CAP development fails to address the imminent public safety threat, Commission staff shall file a formal complaint with the Commission requesting Commission action to correct an unsafe public safety condition;
    - (C) If the imminent public safety threat is not addressed upon determination by the Commission through completion of the formal complaint proceeding, the Commission may take additional action up to and including suspending a RTA's applicable RFGPTS operations until the imminent public safety threat is resolved.

#### (III) RTA non-responsiveness.

- (A) If the RTA fails to complete and implement corrective action in a timely manner pursuant to the requirements of the CAP, Commission staff shall provide a written request to meet with the chief safety officer, safety department, and necessary rail operations departments to discuss the specific CAP and determine necessary action to complete the CAP and a timeline in which to complete the CAP;
- (B) If discussion with Commission staff fails to address the RTA non-responsiveness or failure to implement any CAP, Commission staff shall file a formal complaint with the Commission requesting Commission action to require response and completion of the CAP;

- (C) If required corrective action is not addressed upon determination by the Commission through completion of the formal complaint proceeding, the Commission may take additional action up to and including requiring the accountable executive, the chief safety officer, and others as may be necessary to appear before the Commission for discussion and determination of the failure of the RTA to respond and steps to ensure completion of corrective action and a plan to address the non-responsiveness of the RTA.
- (c) On-going communication between Commission and RTA's.
  - (I) Commission staff, the RTA safety department, and other RTA departments as necessary, shall meet monthly to discuss general safety issues, events, hazards, CAP's, and any other necessary matters.
  - (II) The SSOA program manager and the RTA chief safety officer or SMS executive shall meet at least quarterly.
  - (III) The SSOA program manager and the RTA accountable executive shall meet at least semi-annually.
  - (IV) The SSOA program manager and the RTA Board of Directors or equivalent authority shall meet at least annually to discuss the annual report.
  - (V) Either Commission staff or the RTA can request any additional meetings or conference calls on an as needed basis to discuss any general or specific matters.
- (d) Reporting requirements to the FTA.
  - (I) Annual reporting. On or before March 15th of each year, the Commission shall submit the following information to the FTA through FTA's electronic reporting system:
    - (A) the Commission program standard and any referenced program procedures, with an indication of any revisions made to the program standard and procedures since the last annual submittal;
    - (B) evidence that each of its employees and contractors has completed the requirements of the public transportation safety certification training program, or, if in progress, the anticipated completion date of the training;
    - (C) a publicly available report that summarizes its oversight activities for the preceding twelve months, describes the causal factors of accidents identified through investigation, identifies the status of corrective actions, identifies any changes to the PTASP, includes the Commission order showing review and

- approval of the PTASP, and describes the level of effort by the Commission in carrying out its oversight activities;
- (D) a summary of the triennial audits completed during the preceding twelve months, and the RTA's progress in carrying out CAP's arising from audits conducted in accordance with rule 7352; and
- (E) certification that the Commission is in compliance with the requirements of 49 C.F.R. Part 674.
- (II) The Commission shall provide a copy of its annual report to the Governor of Colorado and to the RTA Board of Directors.
- (III) The Commission shall submit all filings to the FTA electronically using a reporting system specified by FTA.

#### (e) Conflict of interest.

- (I) The Commission is legally and financially independent from a RFGPTS for State Safety

  Oversight activities.
- (II) The Commission does not employ any individual who provides services to a RFGPTS under the State Safety Oversight of the Commission.
- (III) The Commission does not provide any public transportation services in Colorado.
- (IV) The Commission shall prohibit a party or entity from providing services to both the

  Commission and the RTA concerning the PTASP and all State Safety Oversight activities
  so as to avoid appearances of impropriety or conflict of interest pursuant to § 40-6-123,

  C.R.S.

#### 7344. State Safety Oversight Program Standard Development

The Commission will work with Commission staff and affected RTA's to develop any necessary changes that may need to be made to revise minimum standards for safety and update the program standard in rules 7340 through 7355 as required or as needed. The Commission will require Commission staff to review the program standard and any procedures manuals at least annually to determine if changes are required or needed. The Commission will use its rulemaking proceeding, as outlined in rule 1306, to review, adopt, and revise its minimum standards for safety and will distribute those revised standards through publication in the Colorado Register upon completion of the rulemaking process and through its website.

## 7345. Public Transportation Agency Safety Plan7343. System Safety Program Plan.

Every <u>RTAtransit agency</u> shall establish and maintain a written <u>PTASP</u>. The <u>PTASP</u> must be consistent with the regulations implementing such plans, consistent with the <u>NPTSP</u>, based on the principles of <u>SMS</u>, 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, the RTA will establish a <u>PTASP</u> that meets the requirements of a <u>SSPP</u> pursuant to 49 C.F.R. Part 659.19 that system safety program plan, as a separate document from the <u>SSP</u>, that complies with the program standard and includes the following sections:

- (a) Introduction. The <u>lintroduction</u> section of the <u>SSPPPTASP</u> shall contain the following information.
  - (I) A <u>safety management</u> policy <del>statement</del> supporting the <u>SSPPPTASP</u> from the <u>signed by</u> the accountable executive and the chief safety officer or safety management system executive General Manager/Executive Director of the <u>RTAtransit agency</u> 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 SSPPPTASP.
  - (III) A description of the purpose and scope of the SSPPPTASP.
  - (IV) A clear definition of the <u>SMS safety goals</u>, <u>and safety objectives</u>, <u>safety performance criteria</u>, and <u>safety performance targets</u> of the <u>SSPPPTASP</u>, and the state of good repair <u>standards established that implement the National Transit Asset Management System</u>, <u>are included in the NPTSP</u>, and will be implemented through the RTA TAMP.
  - (V) A statement of <u>the organizational and safety accountabilities and management</u> responsibilities to ensure the goals and objectives of the <u>SSPPPTASP</u> are achieved.
  - (VI) Specifications of policies in place to support implementation of the <u>SSPPPTASP</u> and a description of the specific activities required to implement the <u>PTASP</u>system safety <u>program</u> including:

- (A) Ttasks to be performed by the RTA rail transit safety department function, by position and management accountability, specified in matrices and narrative format;
- (B) <u>Ssafety-related tasks to be performed by other RTA rail transit</u> 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 <a href="the-sspp-tasp">the SSPPPTASP</a> including specification of an annual assessment of whether the <a href="https://sspp-tasp">SSPPPTASP</a> should be updated and a requirement of coordination with the Commission, including timeframes for submission, revision, and approval.
- (VIII) A description of the <u>explicit</u> process used by the <u>RTAtransit agency</u> to implement its <u>safety risk hazard</u> management, <u>safety assurance</u>, and <u>safety promotion</u> programs, including activities for:
  - (A) <u>safety h</u>Hazard identification <u>and analysis</u>-;
  - (B) <u>safety risk Hazard investigation</u>, evaluation and analysis and mitigation.;
  - (C) <u>safety performance tracking, monitoring and measurement Hazard control and elimination.</u>;
  - (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 Hazard tracking.
  - (E) <u>employee and contractor competencies and training</u>Requirements for on-going reporting to the oversight agency relating to hazard management activities and status.
- (IX) A description of the <u>safety risk management</u> process used by the <u>RTAtransit agency</u> 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) <u>Continuous improvement.</u>
  - (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 <u>Ddescription</u>. The system description section of the <u>SSPPPTASP</u> shall include the following <u>information</u>.
  - A brief history of the <u>RFGPTSsystem</u>(s) operated by the <u>RTAtransit agency</u>.
  - (II) The scope of service the RTAtransit agency provides.
  - (III) A description of the organizational structure of the <u>RTAtransit agency</u>, including organizational diagrams of the <u>RTAtransit agency</u> and the <u>system</u>-safety unit that identify the lines of authority and communications used by the <u>RTAagency</u> to manage safety issues and define responsibilities within the <u>RTA as they relate to the development and management of the RTA SMS including:organization.</u>
    - (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 <u>management of change</u> process (<u>as outlined in rule7345(a)(IX)(A)</u>) to modify the system. The <u>management of change</u> system modification review and approval process shall include the following:
  - (A) Tthe identification of the unit or group of the RTAtransit agency responsible for ensuring that the hazards associated with system expansions or modifications are included in the RTAtransit agency's hazard resolution process and are assessed for the introduction of new hazards or impacts to the RTA safety performance-;
  - (B) Pparticipation of operating and safety department personnel in the design review process for new equipment and system expansions or modifications.
  - (C) Aa sign-off and certification process for verification of operational readiness of new equipment and system expansions or modifications prior to entering revenue service-;
  - (D) <u>Dd</u>ocumentation of responsibility and authority for approval of modification exceptions to established design criteria for new equipment and system expansions: and
  - (E) Pprocurement procedures that preclude the introduction into the RFGPTS rail fixed guideway system of unauthorized hazardous materials and supplies, as well as defective or deficient equipment.
- (VII) A description of the <u>safety assurance process that discusses the</u> safety certification process required by the <u>RTAtransit agency</u> 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) System Safety Ddepartment Aactivities of the RTATransit Agency. The system safety department activities of the RTAtransit agency section of the SSPPPTASP shall contain the following information.:
  - A description of the <u>safety accountabilities and</u> responsibilities of those in charge of managing the <u>system</u> safety process within the <u>RTAtransit agency</u>.
  - (II) A description of the <u>hazard identification and safety risk management</u>-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 <u>RFGPTSrail transit</u> environment.

- (III) The <u>hazard identification and safety risk management</u> <u>hazard management pp</u>rocess shall include the following:
  - (A) Aa description of the RTAtransit agency's approach to hazard identification and safety risk management hazard management and the implementation of an integrated system-wide hazard resolution process.
  - (B) Sepecification 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) Aa 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) Aa 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
  - (E) Definition of the minimum thresholds for the notification and reporting of hazard(s) to the Commission.
  - (F) Aa description of the process by which the RTA transit agency will provide ongoing 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 73487, and 73498, and 7350 and shall include the following:
  - (A) <u>Nn</u>otification thresholds for internal and external organizations—
  - (B) <u>Tthe</u> criteria for determining which accidents require investigation and who is responsible forgoing to conducting the investigation;
  - (C) Aa description of the <u>safety risk management process and safety assurance</u> 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) <u>Ccoordination</u> with the Commission.
- (V) A comprehensive n 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) <u>Categories of safety-related work requiring training and certification</u>:
  - (B) Aa description of the training and certification program for employees and contractors in safety-related positions including a description of the training material used;
  - (C) <u>a -pP</u>rocess used to maintain and access employee and contractor records including documentation of training test scores and dates, when applicable-; and
  - (D) <u>a p</u>Process used to assess compliance with training and certification requirements.
- (VI) A <u>safety risk management process and safety assurance</u> process<u>es</u> for internal safety inspection of operation and maintenance facilities and equipment including audits and review of procedures that complies with rule 73<u>5149</u>, and an investigation of Events to <u>identify causal factors</u>, <u>that</u>and includes:
  - (A) Lidentification of the facilities and equipment subject to regular safety-related inspection and testing.
  - (B) Techniques used to conduct inspections and testing.;
  - (C) Linspection schedules and procedures; and
  - (D) Dedescription of how results are entered into the hazard management process.

- (VII) A description of the process used by the <u>RTAtransit agency</u> to develop an approved coordinated schedule for all emergency management program activities including:
  - (A) Mmeetings with external agencies-;
  - (B) Eemergency planning responsibilities and requirements.;
  - (C) Pprocess used to evaluate emergency preparedness, such as annual emergency field exercises;
  - (D) Aafter action reports and implementation of findings.
  - (E) Rrevision and distribution of emergency response procedures-;
  - (F) Fefamiliarization training for public safety organizations—;
  - (G) <u>Ee</u>mployee training-; and
  - (H) Aan emergency <u>preparedness and response</u> plan <u>or procedures</u> that includes planning updates <u>and addresses</u>, at a <u>minimum</u>:
    - (i) assignment of employee responsibilities during an emergency;
    - (ii) 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.
- (IX) A contractor safety coordination program.
- (X) A description of the process used to collect, maintain, analyze, and distribute safety data, <u>including data and information provided to the RTA by the SSOA and the FTA</u>, to ensure that the safety function within the rail transit organization receives the necessary information to support implementation of the system safety program.
- (XI) A description of the <u>safety assurance</u> process used by the <u>RTAtransit agency</u> to develop, maintain, <u>monitor</u> and ensure compliance with rules and procedures having a safety impact including:
  - (A) Lidentification of operating and maintenance rules and procedures subject to review-;

- (B) <u>Tt</u>echniques used to assess the implementation of operating and maintenance rules and procedures by employees, such as performance testing:
- (C) Ttechniques used to assess the effectiveness of supervision relating to the implementation of operating and maintenance rules; and
- (D) Pprocesses 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) <u>Ft</u>he authority <u>and authorized RTA personnel</u> to make configuration changes.
  - (B) Fthe 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) Aassurances 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) <u>Ss</u>afety requirements that employees and contractors must follow when working on, or in close proximity to <u>RTAtransit agency</u> property—; and
  - (B) Pprocesses 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 <u>safety promotion</u>, measures, control, and <u>safety</u> assurances in place to ensure that safety principles, requirements and representatives are included in the RTAtransit agency's procurement process.

- (d) Safety-related Aactivities of Oother Ddepartments of the RTATransit Agency. The safety-related activities of other departments of the RTAtransit agency section of the SSPPPTASP shall contain the following:
  - (I) Aa process of coordination of safety related tasks with other departments-; and
  - (II) Aa matrix of safety related tasks that shows department responsibility.
- (e) System Safety Program PlanPTASP Implementation and Mmaintenance. The PTASP system safety program plan implementation and maintenance section of the SSPPPTASP shall contain the following information:
  - (I) <u>The Pprogram schedule for implementation and maintenance of the SSPPPTASP</u> which shall contain the following:
    - (A) <u>Sspecified time intervals between SSPPPTASP</u> reviews to determine whether or not the <u>SSPPPTASP</u> needs to be revised because of changed operating conditions and/or system modifications.
    - (B) Aa detailed description of the SSPPPTASP revision process including the identification of the persons responsible for initiating, developing, and approving changes to the SSPPPTASP; and
    - (C) Aa statement that the Commission will be notified of all changes to the SSPPPTASP 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 <a href="#ssppptasp">SSPPPTASP</a> and comply with rule 735149 including the review and modification of the <a href="#ssppptasp">SSPPPTASP</a> based upon audit results. This procedure shall include the following:
    - (A) Lidentification of the RTA departments and functions subject to review-;
    - (B) <u>identification of Tthe RTAtransit agency</u>'s schedule for conducting internal reviews and the responsibility for scheduling such reviews.
    - (C) Aa description of the process for conducting reviews, including the development of written checklists and procedures and the issuanceing of findings.
    - (D) <u>Ww</u>ritten documentation of the process and procedures <u>for</u> issuing audit findings including an evaluation of the adequacy and effectiveness of the <u>SSPPPTASP</u>;

- (E) a description of the process to assess the RTA's safety performance-;
- (FE) Aa 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.
- (GF) Aa description of the process for tracking the status of implemented recommendations;
- (HG) Aa 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
- (<u>IH</u>) <u>Ccoordination with the Commission.</u>
- (f) System Safety Program Plan<u>PTASP</u> Vverification. The <u>PTASP</u>system safety program plan verification section of the <u>SSPPPTASP</u> shall contain the following:
  - (I) Aa process to ensure that the design and construction of new systems and/or extensions follow the safety assurance process and comply with the SSPPPTASP-;
  - (II) Aa process to ensure compliance of existing operating systems with the SSPPPTASP-; and
  - (III) Aa process to ensure that safety audits and review of the SSPPPTASP 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.

## 7344. System Security Plan.

Every transit agency shall establish and maintain a written system security plan, as a separate document from the SSPP, that complies with the program standard and includes the following sections:

- (a) Introduction. The Introduction section of the SSP shall contain the following:
  - (I) A policy statement supporting the SSP from the General Manager/Executive Director of the transit agency.
  - (II) A statement of the legal authority for the SSP.
  - (III) A description of the purpose and scope of the SSP.
  - (IV) A clear definition of the goals and objectives of the SSP.
  - (V) A statement of management responsibilities to ensure the goals and objectives of the SSP are achieved.
  - (VI) Specifications of policies in place to support implementation of the security portions of the SSP and a description of the specific activities required to implement the system security program including:
    - (A) Tasks to be performed by the rail transit security function, by position and management accountability, specified in matrices and narrative format.

- (B) Security-related tasks to be performed by other rail transit departments, by position and management accountability, specified in matrices and narrative format.
- (VII) Identification of the procedures for controlling updates and modifications to the SSP including specification of an annual assessment of whether the SSP should be updated and a requirement of coordination with the Commission, including timeframes for submission, revision, and approval.
- (b) System Security Department Activities of the Transit Agency. The system security department activities of the transit agency section of the SSP shall contain the following:
  - (I) A description of the transit agency's process for identifying and managing threats and vulnerabilities, both proactive and reactive, during operations, and for major projects, extensions, new vehicles and equipment including integration with the safety certification process. Such process must include the process for assessment and resolution of the threats and vulnerabilities identified.
  - (II) Identification of controls in place that address the personal security of passengers and employees.
  - (III) Documentation of the transit agency's process for conducting internal security reviews to evaluate compliance and measure the effectiveness of the SSP.
  - (IV) Documentation of the transit agency's process for making its SSP and accompanying procedures available to the Commission for review and approval.
  - (V) Emergency response training, coordination and management both internal and external.
  - (VI) A process for the collection and analysis of security data.
- (c) Security-related Activities of Other Departments of the transit agency. The security-related activities of other departments section of the SSP shall contain the following:
  - (I) Security related activities of other departments of the transit agency.
  - (II) A matrix of security related tasks that shows department responsibility.
- (d) System Security Plan Implementation and Maintenance. The system security plan implementation and maintenance section of the SSP shall contain the following:
  - (I) Program schedule for implementation and maintenance of the SSP which shall contain the following:

- (A) Specified time intervals between SSP reviews to determine whether or not the SSP needs to be revised because of changed operating conditions and/or system modifications.
- (B) A detailed description of the SSP revision process including the identification of the persons responsible for initiating, developing, and approving changes to the SSP.
- (C) A statement that the Commission will be notified of all changes to the SSP and supplied with a copy of all revised pages.
- (II) A description of the process and procedure for conducting planned and scheduled internal security reviews to evaluate compliance with the SSP and comply with rule 7349 including the review and modification of the SSP based upon audit results. This procedure shall include the following:
  - (A) Identification of departments and functions subject to review.
  - (B) The transit agency'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 issuing of findings.
  - (D) Written documentation of the process and procedures of issuing audit findings including an evaluation of the adequacy and effectiveness of the SSP.
  - (E) A process for the review of reporting requirements.
  - (F) A process for tracking the status of implemented recommendations.
  - (G) A requirement for an annual audit report, a copy of which must be submitted to the Commission by February 15 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.
  - (H) Coordination with the Commission.
- (e) System Security Plan Verification. The system security plan verification section of the SSP shall contain the following:
  - (I) A process to ensure that the design and construction of new systems and/or extensions comply with the SSP.

- (II) A process to ensure compliance of existing operating systems with the SSP.
- (f) A process to ensure that security audits and review of the SSP are conducted including consideration of security aspects of occupational safety and health, fire protection, safety training, and safety information and reporting.
- 734<u>6</u>5. Submittal and Review of the <u>Public Transportation Agency Safety Plan</u>System Safety Program <u>Plan and System Security Plan</u>.
- (a) On or before November 1st of the first year of operation for new systems, and each November 1st thereafter, each RTAtransit agency subject to rules 73410 through 73554 shall file its PTASPSSPP and SSP as anseparate applications for Commission approval. The Commission shall give ten days' notice of the filing of the applications.
- (b) On or before December 20th of the year in which any applications for SSPP or SSP approval are filed, the Commission shall review theeach plan and shall approve theose plans that compliesy with rules 7340 through 73554. All plans approved shall be approved by Commission order.
- (c) In the event that the Commission finds that the <a href="PTSAPSSPP">PTSAPSSPP</a> does not comply with rule 73453 or that the SSP does not comply with rule 7344, the Commission shall specify, in writing, the sections not in compliance, recommend appropriate modifications and/or additions necessary to bring the <a href="PTASPSSPP">PTASPSSPP</a> or the SSP into compliance, and set a time frame for bringing the <a href="PTASPSSPP">PTASPSSPP</a> or SSP into compliance.
- On or before January 1st of each year, the Commission shall certify to the FTA that each rail fixed guideway system subject to 49 C.F.R. Part 659 has a SSPP and SSP that conform to the program standard set forth in rules 7340 through 7354, or in the alternative, when the rail fixed guideway system will have the SSPP or SSP revised and in compliance. Upon receipt of the revised SSPP or SSP, the Commission will review the revised SSPP or SSP. If the Commission finds that the revised SSPP or SSP is in compliance with rules 7343 and 7344, the Commission shall approve the SSPP or SSP and certify to the FTA that the SSPP or SSP is in compliance. If the Commission finds that the revised SSPP or SSP is not in compliance, the Commission shall set the application for hearing and enter an appropriate order resolving the matter. 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.
- (e) All materials submitted to the Commission in accordance with rule 7345 which pertain to security planning shall be submitted under seal in accordance with Commission rule 1100 regarding confidentiality. The Commission and its staff shall treat such reports as confidential pursuant to Commission rule 1100, and §24-72-204, C.R.S., and 49 C.F.R. Part 15 and Part 1520. All materials submitted to the Commission in accordance with rule 7345 which pertain to

security planning shall be returned to the transit agency upon review and approval by the Commission. The transit agency shall keep at least one original copy of every security plan submitted to the Commission under rule 7345 for review and inspection by the Commission. The Commission shall not retain or image any material submitted to the Commission in accordance with rule 7345 that has been marked as sensitive security information pursuant to 49 C.F.R. Part 15 and Part 1520.

## 73476. Corrective Action Plan (CAP)

Every <u>RTAtransit agency</u> required to develop a CAP <u>for the RFGPTS</u> shall develop a CAP <u>for the RFGPTS</u> that is based upon a hazard analysis, <u>if necessary</u>, and that complies with the following standards:

- (a) CAP Development. The <u>RTAtransit agency</u> shall develop a CAP for the following:
  - (I) Rresults from investigations, in which the RTA or the SSOA identifyied causal and contributing factors are determined by the transit agency or Commission as that requireing corrective actions.
  - (II) <u>hazard</u> <u>Ffindings</u> from safety <del>and security</del> reviews performed by the <u>SSOA or RTA</u> internal safety reviews<del>oversight agency.</del>; and
  - (III) any safety condition reported through the RTA established safety condition reporting process.
- (b) Each CAP and associated hazard analysis, analysis if necessary, shall identify:
  - (I) Fthe element or activity identified including the assigned tracking number.;
  - (II) <u>Tthe action or actions</u> to be taken by the <u>RTAtransit agency</u> to <u>minimize, control,</u> correct, or eliminate the risks and hazards identified by the <u>CAPprevent recurrence</u> and/or mitigate the element, activity, or hazardous condition(s).;
  - (III) Tthe interim measures the <u>RTAtransit agency</u> plans to implement to prevent recurrence before the final corrective actions are implemented.
  - (IV) **Tthe CAP** implementation schedule-;
  - (V) Tthe method(s) the RTAtransit agency will use to validate the effectiveness of the corrective measures;
  - (VI) Tthe individual or department responsible for the <u>CAP</u> implementation, and
  - (VII) Aany specific actions required by the Commission.

- (c) A CAP must be reviewed by the Commission or Commission staff and formally approved by the Commission.
  - (I) For hazards that meet a risk assessment code of 1A, 2A, 1B, 2B, or 1C, of subparagraph 7350(c)(I)(C), the Commission must review and formally approve the CAP before the RTA begins its safety risk mitigation activities.
    - (AI) The Commission shall open an investigation docket and notify the RTAtransit agency by order that a CAP is required.
    - (BH) The <u>RTAtransit agency</u> 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.
    - (CHI) The Commission shall issue an order in the investigation docket approving or rejecting the CAP within 15 days of receiving the RTAtransit agency's CAP.
    - (DIV) If the CAP is rejected, the Commission order rejecting the CAP will provide the reasons for rejection and recommended revisions.
    - (EV) If the CAP is rejected, the <u>RTAtransit agency</u> shall submit a revised CAP within 15 days of the Commission's order rejecting the CAP.
    - (EVI) The Commission shall issue an order in the investigation docket approving or rejecting the revised CAP within 10 days of receiving the RTAtransit agency's revised CAP.
    - (GVII) If the revised CAP is rejected, the Commission shall initiate its dispute resolution process.
  - (II) For hazards that do not meet the risk assessment code outlined 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) 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.
- (IV) The Commission will review and provide final approval of CAP's on a quarterly basis.
- (d) The Commission's dispute resolution process will be used to resolve disputes between the Commission and the RTA transit agency, or the Commission staff and the RTA resulting from the development or enforcement of a CAP.
- (e) 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 <a href="RTAtransit agency">RTAtransit agency</a> to address the NTSB findings.
- (f) The <u>RTAtransit agency</u> must provide to the Commission the following <u>information</u>:
  - (I) 
     <del>V</del>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) Pperiodic reports requested by the Commission describing the status of each corrective action(s) not completely implemented as described in the CAP.
- (g) The Commission will monitor and track the implementation of each approved CAP using the following procedure:
  - (I) The <u>RTAtransit agency</u> 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) Aactions and activitiesy associated with the CAP that has occurred in the interim or since the last report.
    - (B) Aa statement as to whether the actions and activities are on-schedule, behind schedule, or ahead of schedule.
    - (C) Lif actions and activities are behind schedule, a statement as to the causes of the delay and the planned measures to meet the schedule.
    - (D) Aany changes in key personnel assigned to implementing the CAP-;
    - (E) Aany management issues-;

- (F) <u>Ee</u>ffectiveness of <u>interim</u> safety measures.;
- (G) Aa statement as to the effectiveness of actions and/or activities that have already been implemented—; and
- (H) Lif 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 <u>RTAtransit agency</u> and shall develop a monitoring plan in cooperation with the <u>RTAtransit agency</u>.
- (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.
- (IVII) All CAP related correspondence between the Commission and the RTAtransit agency will include a CAP tracking number.
- (IV) The Commission shall have access to the RTA maintain a computerized log for tracking and recordkeeping of CAP's, and shall monitorenter and update all quarterly status reports, additional information, and information from the finalization of the CAP, and shall check CAP due dates.

#### 73487. Accident Notification.

- (a) The Commission shall require the <u>RTAtransit agency</u> to notify the Commission's staff <u>and the FTA</u> within two hours of any <u>accident incident occurring on a RFGPTS involving a rail transit vehicle or taking place on rail transit-controlled property where one or more of the following occurs:</u>
  - (I) Aa fatality at the scene; or where a personn individual is confirmed dead within thirty days of the accidenta rail transit-related incident.;
  - (II) <u>serious i</u>lnjuries <u>as defined in rule 7341(tt)</u> requiring immediate medical attention away from the scene for <u>one</u>two or more <u>persons</u>individuals.;
  - (III) Pproperty damage resulting from a collision involving ato rail transit vehicles, non-rail transit vehicles, other rail transit property or facilities, and non-transit property that equals or exceeds \$25,000.;
  - (IV) Aan evacuation due to life safety reasons-;
  - (V) Aa collision at a grade crossing-;

- (VI) Aany derailment of a rail transit vehicle main-line derailment.;
- (VII) Aa runaway traincollision with an individual on a rail right of way.; or
- (VIII) Aa collision between a rail transit vehicle and a second rail transit vehicle, or a rail transit non-revenue vehicle.
- (b) The Commission shall require each <u>RTAtransit agency</u> that shares track with the general railroad system and <u>isare</u> subject to FRA notification requirements to notify the Commission's <u>staff and the FTA</u> within two hours of an incident for which the <u>RTAtransit agency</u> must also notify the FRA.
- (c) The Commission's required method of notification of accidents is by telephone first within two hours followed by facsimile or an electronic mail within five business days of the occurrence of the accident to the Commission on a form prescribed by the Commission of any initial notification information checklists and any additional information sheets which shall contain the following information::
  - (I) Fthe nature of the accident as described in rule subparagraphs 73487(a)(I through VIII) above:
  - (II) The time, date, and location of the accident;
  - (III) **T**the time and date of the notification to the Commission.
  - (IV) Aa description of the accident including vehicles, rail transit vehicles, passengers, personsindividuals, rail transit-controlled property, and all other property involved in the accident, and the direction vehicles and rail transit vehicles they were traveling at the time of the accidentincident, if known; and
  - (V) whether the accident has been reported to the FRA or the NTSB.
- (d) 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.

## 734<u>98</u>. Investigations and Reporting Procedures for Accidents-and Hazards.

- (a) The Commission shall investigate, or cause to be investigated, at a minimum, any <a href="accident-involving a rail transit-vehicle-or-taking-place-on-rail transit-controlled property">accident-involving a rail transit-vehicle-or-taking-place-on-rail transit-controlled property meeting the notification thresholds identified in rule paragraph 73487(a)-or any hazard that meets the definition outlined in rule 7341 and to which rules 7343(c)(II) and (III) apply.
- (b) The Commission shall use its own investigation procedures or those that have been formally adopted from the RTAtransit agency and that have been submitted to FTA.
- (c) Each transit agency shall notify the Commission's staff of hazards by telephone or facsimile as soon as practicable, but not later than 24 hours from the time of occurrence or discovery.
- (cd) Investigationng of accidents and hazards.
  - (I) Each <u>RTAtransit agency</u> shall investigate accidents and hazards on behalf of the Commission's staff. The Commission's staff may also perform separate, independent investigations at its own-discretion. <u>If Commission staff performs a separate, independent investigation, such investigation shall be coordinated with any internal investigation of the accident by the RTA.</u>
  - (II) When investigating an accident as defined in rule-paragraph 73487(a), the RTAtransit agency shall give prior sufficient telephone or facsimile notice to the Commission's 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 transit agency shall investigate each hazard in compliance with the procedures contained in the transit agency's approved SSPP.
  - (IIIV) The RTAtransit agency shall document its investigation in a written report. The RTAtransit agency 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 or the hazard was discovered 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 paragraph 7348(a) and hazards. The Accident/Hazard Report shall contain the following information:

- (A) Tthe name of the <u>RTAtransit agency</u> and the name of the <u>RFGPTSrail fixed</u> guideway system if different.
- (B) An indication showing whether the report concerns an accident or whether it concerns a hazard.
- (BC) Fthe 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 transit-controlled property.
- (D) The following hazard data, if applicable: the date the hazard was identified; the location of the hazard; the type of hazard; the severity of the hazard; the name of the person who identified the hazard; the manner in which such person identified the hazard; and the probability that the hazard could cause death or injury to passengers or employees if not immediately corrected.
- (CE) Aa written description of the accident-or hazard.;
- (<u>DF</u>) Aa diagrammatic sketch of the accident or hazard.;
- (EG) Aan explanation of the accident accident or hazard's most probable cause and any additional contributing causes;
- (EH) Aa CAP to prevent reoccurrence of the accident or to eliminate the hazard, if a determination is made that a CAP is warranted, or a statement that a CAP is not necessary under paragraph 7347(a).;
- (GI) A copy of the schedule for the implementation of the CAP if a CAP is warranted.
- (HJ) Aathe signature and title of the person authorized to certify the accuracy of the report, together with the date the report is signed.
- (<u>IK</u>) Copies of all photographs of regarding the accident or hazard, or a statement that no such photographs exist.
- (<u>JL</u>) A copy of 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—;
- (<u>KM</u>) Copies of 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-;
- (LN) Aa statement regarding whether drug and/or alcohol testing was performed on any RTAtransit agency 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-;
- (MO) Copies of any witness statements.; and
- (NP) Copies of any other information, reports, or statements that would aid in the formation of a conclusion as to the cause of the accident.
- (IV) The RTAtransit agency shall submit its accident investigation report, including its CAP and implementation schedule if necessary, to the SSOA staffRail/Transit Safety Section of the Commission. 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 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 Staff, Commission Litigation Staff, and legal counsel for each of these groups.—
- (VI) Commission staff may request that the Commission consider the <a href="RTAtransit agency">RTAtransit agency</a>'s investigation and report thereon. The Commission may, after considering the <a href="RTAtransit agency">RTAtransit agency</a>'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.
- (de) The threshold for the Commission's investigation of accidents is the same as the RTAtransit agency's threshold for reporting accidents as set forth in and pursuant to rule paragraph 73487(a).—All hazards shall be investigated.
- (ef) The Commission authorizes the <u>RTAtransit agency</u> to conduct investigations on the Commission's behalf and requires the <u>RTAtransit agency</u> to use investigation procedures that have been formally approved by the Commission.

- (fg) Each investigation must be documented in a final report that includes a description of investigation activities, identified causal and contributing factors, and a <u>CAP corrective action</u> plan and hazard analysis if warranted.
- (gh) The Commission shall formally adopt a final investigation report for each investigation. Such adoption shall include the following <u>information</u>:
  - (I) If the Commission has conducted the investigation, the Commission shall formally transmit its final investigation report to the RTAtransit agency 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:
    - (A) request a meeting with Commission staff to discuss the items of nonconcurrence 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) If the Commission has authorized an entity other than the Commission (including the transit agency) to conduct the investigation on the Commission's behalf, tThe 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.
  - (IVH) If the Commission does not concur with the findings of the RTAtransit agency investigation report, the Commission shall either:
    - (A) Econduct a Commission investigation according to rule 73498; or
    - (B) Formally transmit the Commission's dissent to the findings of the investigation, report the Commission's dissent to the transit agency, and negotiate with the transit agency until a resolution on the findings is reached 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.

- (hi) The Commission shall <u>review require periodic status</u> reports that document investigation activities and findings on a quarterly basis.
- (i) The Commission shall participate in any investigation conducted or findings and recommendations made by the NTSB, FRA, or FTA.
- (j) 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) 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.
- (b) Each RTA shall notify Commission staff of hazards by telephone as soon as practicable, but not later than 24 hours from the time of occurrence or discovery.
- (c) 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 derived from the MIL-STD-882E.

## (A) Severity categories shall be identified as follows:

SEVERITY CATEGORIES				
<b>Description</b>	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 monetal 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.		
<u>Marginal</u>	<u>3</u>	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.		
<u>Negligible</u>	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.		

## (B) Probability levels shall be identified as follows:

	PROBABILITY LEVELS							
<b>Description</b> Level		Specific Individual Item	Fleet or Inventory					
<u>Frequent</u>	<u>A</u>	Likely to occur often in the life of an item.	Continuously experienced.					
Probable	<u>B</u>	Will occur several times in the life of an item.	Will occur frequently.					
Occasional	<u>C</u>	Likely to occur sometime in the life of an item.	Will occur several times.					
Remote	<u>D</u>	Unlikely, but possible to occur in the life of an item.	Unlikely, but can reasonably be expected to occur.					
<u>Improbable</u>	<u>E</u>	So unlikely, it can be assumed occurrence may not be experienced in the life of an item.	Unlikely to occur, but possible.					
<b>Eliminated</b>	<u>F</u>	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.					

(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)			Serious	Medium			
Probable (B)			Serious	Medium			
Occasional (C)		Serious	Medium	Low			
Remote (D)	<u>Serious</u>	Medium	Medium	Low			
Improbable (E)	Medium	Medium	Medium	Low			
Eliminated (F)	<u>Eliminated</u>						

## (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 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.

## 73<u>51</u>49. <u>RTA Internal Safety and Security Reviews.</u>

- (a) The <u>RTAtransit agency</u> is required to develop and document <u>in its PTASP</u> the process for the performance of on-going internal safety <u>and security</u> reviews <u>in its SSPP and SSP</u>.
- (b) The internal safety and security review process must:
  - (I) <u>Pd</u>escribe the process used by the <u>RTAtransit agency</u> to determine if all identified elements of its <u>PTSAPSSPP</u> and <u>SSP</u> are performing as intended.; and
  - (II) <u>Ee</u>nsure that all elements of the <u>PTSAPSSPP and SSP</u> are reviewed in an on-going manner and completed over a three-year cycle.
- (c) The <u>RTAtransit agency</u> must notify the Commission at least 30 days before the conduct of scheduled internal safety and security reviews.
- (d) The <u>RTAtransit agency</u> shall submit to the Commission any checklists or procedures it will use during the <u>internal</u> safety <u>portion of its</u>-review prior to <u>conducting</u> such review.
- (e) The transit agency shall make available to the Commission any checklists or procedures subject to the security portion of its review, consistent with 49 C.F.R. §659.23(e).
- (ef) The Commission requires the RTAtransit agency to annually submit to the Commission a report documenting internal safety and security review activities and the status of subsequent findings and corrective actions. The security part of this report must be made available for Commission review consistent with 49 C.F.R. §659.23(e).
- (fg) The annual report must be accompanied by a formal letter of certification signed by the <a href="RTAtransit agency">RTAtransit agency</a>'s <a href="accountable executivechief executive">accountable executive</a> chief executive, indicating that the <a href="RTAtransit agency">RTATransit agency</a> is in compliance with its <a href="PTASP-system safety program plan and system security plan">PTASP-system safety program plan and system security plan</a>.
- (gh) If the <a href="RTA-transit agency">RTA-transit agency</a> determines that findings from its internal safety and security reviews indicate that the <a href="RTA-transit agency">RTA-transit agency</a> is not in compliance with its <a href="PTASPSSPP">PTASPSSPP</a>, the <a href="accountable executive countable executive compliance">accountable executive compliance</a> must identify the activities the <a href="RTA-transit agency">RTA-transit agency</a> will take to achieve compliance.
- (hi) The Commission must formally review and approve the annual report.
  - (I) The <u>RTAtransit agency</u> shall file its annual report on or before February 15<u>th</u> of the first year of operation for new systems, and each February 15<u>th</u> 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 rulerule 7349.
- (III) In the event the Commission finds that the annual report does not comply with <a href="this">this</a>
  <a href="mailto:rule-rule-7349">rule-rule-7349</a>, 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.

#### 73520. Commission Safety Auditsand Security Reviews.

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

- (a) The Commission shall conduct six semi-annual safety and security review audits during the three-year review process. Semi-annual audits shall be conducted during the spring and fall.

  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 tennine areas of interest such that the entire PTASP SSPP and SSP are 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 in preparation for the next three-year review process.
- (b) For each semi-annual audit during the three-year review process, the Commission staff shall prepare audit checklists that identify the safety and security 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, the 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 RTAtransit agency for a 30-day review and comment by the RTAtransit agency. The RTAtransit agency 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 <u>RTAtransit agency</u> shall also be allowed to make corrections to any findings <u>and/or recommendations</u> outlined in the draft report within the 30<sub>-</sub>-day review period. The transit agency must provide written documentation of the actions implemented to bring any findings into compliance with the accepted criteria as part of the transit agency's written response for the transit agency to avoid inclusion of such findings as documented findings in the final report and avoid development of CAP's for those findings in the final report. 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 <u>for</u> each semi-annual audit.

- (d) The transit agency shall notify the Commission prior to the start of any transit agency internal safety and security review as outlined in rule 7349(c).
- (e) The Commission's safety and security review audits may be conducted in conjunction with the transit agency's internal safety and security reviews.
  - (I) If the transit agency chooses to conduct its internal safety and security reviews in conjunction with the Commission's safety and security review audit, the transit agency shall inform the Commission of its intentions 30 days before the start of the Commission's audit.
  - (II) If the transit agency chooses to conduct its internal safety and security reviews in conjunction with the Commission's safety and security review audit, such combined reviews will consist of the following:
    - (A) Pre-audit meetings where areas of interest and checklists can be compared and/or combined and pertinent documents reviewed.
    - (B) Joint on-site audit(s) of the areas of interest and checklist items.
    - (C) Post-audit meetings where the Commission and the transit agency shall present audit findings and recommended corrective actions.
    - (D) Submittal of the joint final audit report for agreement between the Commission and transit agency, or submittal of separate final audit reports for disagreement between the Commission and transit agency.
- (d|||) At the conclusion of the three-year review cycle, the Commission shall prepare and issue a report as outlined in rule 73520.

# 735<u>3</u>1. Safety Oversight of Rail Fixed Guideway System Design, Construction, Pre-Operational Testing and Operation Start-Up.

The Commission shall provide safety oversight <u>and review of guidance of</u> rail fixed guideway system design, construction, pre-operational testing and operation start-up.

## 73542. Inspection of Records.

All <u>RTA</u>transit agency records required by these rules <u>and necessary for the Commission to perform its</u> <u>State Safety Oversight functions</u> shall be made available upon request to authorized personnel of the Commission.

### 7353. Safety Data Acquisition/Analysis.

The transit agency shall review and analyze all information and documentation required by these rules. The information or data collected shall be analyzed for potential safety impacts, and identified areas of concern shall be reported to appropriate personnel for investigation and resolution.

## 735<u>5</u>4. Variances.

A <u>RTA</u>transit agency may request a variance from these rules. A <u>RTA</u>transit agency seeking such a variance shall comply with the variance request procedures contained in Commission's Rules Regulating Practice and Procedure.

735<u>6</u>5. – 7399. [Reserved].