BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 22R-0070R

IN THE MATTER OF THE PROPOSED AMENDMENTS TO THE STATE SAFETY OVERSIGHT PROGRAM STANDARD FOR RAIL FIXED GUIDEWAY PUBLIC TRANSPORTATION SYSTEMS RULES, 4 CODE OF COLORADO REGULATIONS 723-7-7340 THROUGH 7352.

RECOMMENDED DECISION OF ADMINISTRATIVE LAW JUDGE MELODY MIRBABA ADOPTING RULES

Mailed Date: March 30, 2022

TABLE OF CONTENTS

I. STATEMENT AND BACKGROUND						
	A.	Sur	nmary	2		
	B. Procedural History and Background					
II.	DIS	SCUS	SSION, FINDINGS, AND CONCLUSIONS	5		
	A.	Stat	tutory Authority to Promulgate Rules	5		
	B.	Rul	e Amendments	5		
		1.	Rules 7340 – Applicability, and 7341 - Definitions	5		
			a. Discussion, Findings, and Conclusions	6		
		2.	Rule 7342 - Incorporation by Reference	6		
			a. Discussion, Findings, and Conclusions	7		
		3.	Rule 7345 - Public Transportation Agency Safety Plan	7		
			a. Discussion, Findings, and Conclusions	8		
		4.	Rule 7347 - Corrective Action Plan	9		
			a. Discussion, Findings, and Conclusions	9		
		5.	Rule 7348 - Accident Notification	10		
			a. Discussion, Findings, and Conclusions	10		
		6.	Rule 7349 - Investigations and Reporting Procedures for Accidents	11		
			a. Discussion, Findings, and Conclusions	11		

Before the Public Utilities Commission of the State of Colorado

		7.	Rule 7350 - Investigations and Reporting Procedures for Hazards	13
			a. Discussion, Findings, and Conclusions	13
		8.	Rule 7351 - RTA Internal Safety Reviews	16
			a. Discussion, Findings, and Conclusions	16
		9.	Rule 7352 - Commission Safety Audits	16
			a. Discussion, Findings, and Conclusions	17
		10.	Other Minor Changes.	17
	C.	Cor	nclusion	17
III.	OR	DER	۲	18
	A.	The	e Commission Orders That:	18

I. <u>STATEMENT AND BACKGROUND</u>

A. Summary

1. This Decision adopts amendments to the Colorado Public Utilities Commission's (Commission) Rules Regulating Railroads, Rail Fixed Guideways, Transportation by Rail, and Rail Crossings, 4 *Code of Colorado Regulations* 723-7 (Rail Rules or Rules), Rules 7340 through 7355. The amendments focus on the State Safety Oversight (SSO) Program Standard for Rail Fixed Guideway Public Transportation Systems (RFGPTS), (the SSO Program Standard), and are made to conform to recently-adopted rule changes at the federal level.

B. Procedural History and Background

2. On February 10, 2022, the Commission issued the Notice of Proposed Rulemaking (NOPR) (Decision No. C22-0087) to consider amendments to Rules 7340 through 7355 to update the SSO Program Standard as necessary under recently-adopted federal rule changes.

PROCEEDING NO. 22R-0070R

3. Specifically, the NOPR was issued to conform to revisions to: (a) the Public Transportation Agency Safety Plan (PTASP) Rules found at 49 *Code of Federal Regulations* (CFR) Part 673 (Part 673), issued by the Federal Transit Administration (FTA); and (b) the FTA's final Public Transportation Safety Certification Training Program Rules found at 49 CFR Part 672 (Part 672). In order to adopt NTSB Safety Recommendation No. R-17-013,¹ the NOPR also seeks to add a new rule requirement that a rail transit agency (RTA) install forward facing and in-cab facing cameras. In addition, the NOPR proposes changes relating to how accidents are reported to the Commission, and changes relating to investigations and reporting procedures for hazards.

4. In the NOPR, the Commission referred this matter to an Administrative Law Judge (ALJ) for a recommended decision, and scheduled a remote public hearing on the proposed rules for March 21, 2022 at 9:00 a.m.

5. On March 18, 2021, Commission Staff (Staff) filed comments in this proceeding explaining that since the NOPR was issued, the FTA held a webinar explaining that transit agencies must establish a safety committee (per 49 USC 5329) by July 31, 2022.² The NOPR does not include rule changes addressing safety committee requirements. Staff requests that the rules be amended to include the safety committee requirements, and notes that if such requirements are not included, the FTA's July 31, 2022 deadline cannot be met. In addition, Staff suggests several other minor changes to augment and clarify proposed rules concerning in-cab

¹ NTSB Safety Recommendation No. R-17-013 requires the installation of forward facing and in-cab facing cameras as investigative and safety tools. Recommendation No R-17-013 may be found at:

https://www.ntsb.gov/Pages/search.aspx#k=rsr-17-02.

² See Memorandum to Proceeding No. 22R-007R, filed on March 18, 2022; "Bipartisan Infrastructure Law Changes to Public Transportation Agency Safety Plan (PTASP) Requirements" authored by the FTA, dated March 1, 2022, filed on March 18, 2022 (hereinafter Bipartisan Infrastructure Law Changes).

PROCEEDING NO. 22R-0070R

cameras, including clearer language indicating that cameras must be installed and used, and a deadline by which this must be accomplished. With these comments, Staff filed an updated version of the relevant rules (adding the above changes), in redline and clean format, and a copy of the FTA webinar presentation that explains certain required changes.³

6. On March 21, 2022, the ALJ held the public comment hearing as noticed. Dr. Pamela Fischhaber, speaking on behalf of Staff, provided public comments explaining Staff's March 18, 2022 filings, and the need to make additional rule amendments, consistent with the above discussion. She also noted that the additional changes that Staff proposes are reasonably within the subject matter of the NOPR because they seek to amend rules to comply with federal PTASP requirements, which also relate to the additional suggested changes.

7. In addition, during the hearing, Mr. Roger Kane provided public comment on behalf of the State's only RTA, the Regional Transportation District (the RTD). The RTD supports the proposed rule changes, including Staff's additional proposed changes, in its March 18, 2022 filings. The RTD agrees that Staff's additional proposed rule changes are reasonably within the subject matter of the NOPR.

8. At the conclusion of the March 21, 2022 hearing, the ALJ noted that the record would be held open until close of business on that same day for any additional written public comments.

9. Other than the public comments discussed above, no other public comments were submitted in this proceeding.

³ See Redlined Rules, Clean Rules, and Bipartisan Infrastructure Law Changes, all filed on March 18, 2022.

II. <u>DISCUSSION, FINDINGS, AND CONCLUSIONS.</u>

A. Statutory Authority to Promulgate Rules

10. Under, § 40-18-103, C.R.S., the Commission has specific authority to promulgate rules governing, among other items, the following: rail fixed guideway system safety program standards; hazard and accident investigations; and transit agency corrective action. Section 40-18-102, C.R.S., requires the Commission to establish a rail fixed guideway system safety oversight program for the safety and security of rail fixed guideway systems. Under § 40-2-108, C.R.S., the Commission has general statutory authority to promulgate such rules as are necessary for the proper administration and enforcement of title 40. Because the proposed Rules directly relate to administering article 18 of title 40, including § 40-18-102, C.R.S., the Commission has both specific and general rulemaking authority to adopt the proposed Rules.⁴

B. Rule Amendments

1. Rules 7340 – Applicability, and 7341 - Definitions

11. The NOPR seeks to amend Rule 7340 to clarify that Rules 7341 to 7355 apply to all transit agencies and rail fixed guideway systems operating within Colorado.

12. The NOPR proposes to amend and add definitions in Rule 7341 to align with the regulatory changes recently adopted at the federal level, to ensure clarity for rule requirements, and to align with other rule changes. Specifically, proposed amendments: add a definition for "cameras" that other rule amendments require be installed (proposed paragraph (d)); modifies the definition of "corrective action plan" to align with proposed changes to the risk assessment code matrix in the Program Standard (proposed paragraph (h)); adds a definition for "near miss" to help define the difference between triggering events and close calls (proposed paragraph (t));

⁴ §§ 40-2-108 and 40-18-102 – 104, C.R.S.

PROCEEDING NO. 22R-0070R

replaces the definition of "performance criteria" with a "performance measure" definition to conform to Part 673 (proposed paragraph (y); adds definitions of "procedure" (paragraph (bb)) and "process" (proposed paragraph (cc)), to ensure clarity of other requirements; modifies the definition of "public transportation safety certification training program" to conform to the Part 672 (proposed paragraph (ff)); replaces "safety risk evaluation" with "safety risk assessment" (without any other changes) to conform to Part 673 (proposed paragraph (vv)); and deletes the definition of "system safety program plan," as unnecessary given other rules.

a. Discussion, Findings, and Conclusions.

13. The ALJ finds that the above-referenced changes provide clarity on rule applicability and terminology used later in the rules, and helps align the rules with changes to relevant federal rules in Part 673. These changes make the rules more understandable and ensure internal consistency. For these reasons, the ALJ adopts the proposed changes as set forth in the NOPR.

2. Rule 7342 - Incorporation by Reference

14. The NOPR seeks to amend materials that are incorporated by reference so that incorporated federal rules are the most current rules in effect. It also deletes incorporation of an outdated risk assessment matrix (MIL Standard 882E), and adds language with a link from the original federal government issuing agency to the incorporated rules so that the public has additional sources to locate the incorporated materials.

a. Discussion, Findings, and Conclusions.

15. The ALJ finds that the proposed changes⁵ appropriately ensure that Commission rules incorporate the most current relevant federal regulations by reference while eliminating outdated rules and materials. For these reasons, the ALJ adopts the proposed changes as set forth in the NOPR.

3. Rule 7345 - Public Transportation Agency Safety Plan

16. The NOPR amends the majority of existing Rule 7345 to: align with updated federal regulatory requirements in Part 673 relating to the PTASP; eliminates redundant or unnecessary language; and reorganizes the PTASP requirements into the Safety Management System elements outlined in Part 673 Rules to improve clarity, understandability, and RTAs' ability to submit easily understandable documents tracking the same rule requirements.

17. Through its March 18, 2022 filing, Staff suggests that the safety risk mitigation proposed in the NOPR be amended to require RTAs to "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 the Disease Control and Prevention or a State health authority, minimize exposure to infectious diseases."⁶ Staff suggests these changes be made by adding a subparagraph (iii) to Rule 7345(b)(III)(A). Staff also suggests that a new paragraph (f) be added to Rule 7345 in order to establish requirements for RTAs to form a safety committee, including committee membership and responsibilities.⁷

⁵ The changes delete references to 49 C.F.R. 659 (Part 659), the former federal regulation governing Rail Fixed Guideway Systems and State Safety Oversight. Part 659 was removed and reserved, effective February 7, 2022. *See* 87 FR 6783, 6785. The ALJ notes that § 40-18-103(2), C.R.S., specifically requires the Commission to promulgate rules that meet the minimum requirements in Part 659. Given that Part 659 is no longer effective, and the proposed rules seek to meet the requirements in 49 CFR 674, the successor to Part 659, the proposed changes meet the spirit and intent of § 40-18-103(2), C.R.S.

⁶ Redlined Rules filed March 18, 2022 at 17.

⁷ Redlined Rules filed March 18, 2022 at 21.

a. Discussion, Findings, and Conclusions.

18. Much like other rule changes, the ALJ finds that the NOPR's proposed changes appropriately ensure that Commission rules conform to the current relevant federal regulatory standards in Parts 673 and 674, make the rules more understandable, and ensure consistency within the rules.

19. Much of Staff's additional proposed rule changes repeat verbatim language from the federal Infrastructure Investment and Jobs Act, enacted on November 21, 2021, to wit, 49 USC 5329(d)(1) and (5). While Staff's additional suggested changes were not in the NOPR, they are consistent with the subject matter set forth in the NOPR because they conform to federal statutory requirements relating to RTAs' PTASP, which are squarely addressed in the NOPR. As such, the ALJ concludes that Staff's additional proposed changes may be appropriately included in the amended rules, consistent with § 24-4-103(4)(c), C.R.S. According to the timeline in the FTA's materials, the safety committee must be formed by July 31, 2022, and must meet certain responsibilities (relating to updates to RTAs' PTASP) by December 31, 2022.⁸ These additional changes are necessary to put Colorado's sole rail transit agency, the RTD, in a position to be able to comply with new federal requirements. The ALJ makes minor changes (mostly grammatical) to Staff's proposed language in subparagraph (f)(III) to improve clarity.

20. All these proposed changes are in the public interest as they directly relate to safety standards and requirements for rail transit authorities. For all these reasons, the ALJ adopts the proposed changes as set forth in the NOPR, and the relevant changes set forth in Staff's Redlined Rules, filed on March 18, 2022, with minor modifications as discussed.

⁸ "Bipartisan Infrastructure Law Changes to Public Transportation Agency Safety Plan Requirements" dated March 1, 2022 filed on March 18, 2022.

PROCEEDING NO. 22R-0070R

4. Rule 7347 - Corrective Action Plan

21. Proposed Rule 7347 clarifies circumstances that prompt a requirement for an RTA to develop a Corrective Action Plan (CAP) to include situations where a safety review or audit results in a noncompliance finding, and where a hazard meets a risk assessment code outlined in paragraph (d)(I) of the same rule, (proposed paragraph (a)). The NOPR also makes changes setting a 45-day deadline to file a CAP with the Commission (proposed paragraph (b)); and updates risk assessment codes, clarifies which codes trigger a CAP, and identifies which CAPs can be reviewed and preliminarily approved by Staff (proposed paragraph (d)).

a. Discussion, Findings, and Conclusions.

22. The proposed changes clarify requirements for CAPs, and serve to ensure that RTAs have clear direction on the circumstances requiring a CAP, and those do that do not. However, the ALJ finds that one minor change will help ensure that the rule is internally consistent. Specifically, under proposed subparagraph (a)(III), an RTA is required to develop a CAP only for any hazard meeting a risk assessment code in subparagraph (d)(I)(high risk assessment codes), but proposed subparagraph (d)(II)(serious risk assessment codes), and (d)(III) plainly contemplate that RTAs also develop a CAP for any hazard that meets a serious risk assessment code in (d)(II). The ALJ will make a minor modification to proposed paragraph (a)(III) to add a reference to the risk assessment codes in paragraph (d)(II). This ensures that RTAs understand that a CAP is required for hazards meeting a risk assessment code in (d)(II). With this change, the ALJ finds that the proposed rules serve the public interest. For all these reasons, the ALJ will adopt the proposed rules as provided in the NOPR with the modification discussed above.

5. Rule 7348 - Accident Notification

23. The NOPR proposes changes to Rule 7348 that: clarify that an RTA must notify the Commission and the FTA within two hours of a collision at a grade crossing that results in a serious injury or fatality (paragraph (a)(V); that only the Commission (and not the FTA) needs to be notified within two hours of less serious accidents at an RFGPTS grade crossing (paragraph (b); requires such Commission notifications to be made by electronic mail within two hours of the accident (paragraph (d)); and clarifies existing requirements that the RTA must include in that electronic mail notification (paragraph (d)(I)).

a. Discussion, Findings, and Conclusions.

24. These changes make it easier on RTAs to notify both the Commission and the FTA of accidents by allowing them to notify the Commission by email, rather than the prior requirement to notify the Commission by telephone, then later, by email. The changes also provide helpful clarification on the circumstances under which only the Commission must be notified of an accident, consistent with the FTA's preference to only receive notification of accidents involving serious injuries and fatalities.⁹ For all these reasons, the ALJ finds that the changes better facilitate prompt and appropriate accident reporting, and thus, are in the public interest. That said, the ALJ finds that several non-substantive changes to proposed paragraphs (b) and (c) will improve readability and understandability. As such, the ALJ adopts Rule 7348 as proposed in the NOPR, with minor edits to proposed paragraphs (b) and (c), outlined below:

(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

⁹ *See* Decision No. C22-0087, **₽** 20.

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.

6. Rule 7349 - Investigations and Reporting Procedures for Accidents

25. Proposed Rule 7349(b) would require rail transit agencies to equip light rail vehicles with forward facing and operator facing in-cab cameras on all light rail vehicles. Staff suggests additional revisions to paragraph (b) to: require cameras to be used when the light rail vehicles are powered on (*i.e.*, in use); give RTAs a five-year deadline to install and use such cameras; and require RTAs who already have such cameras to use them immediately.¹⁰ The NOPR also updates rule cross-references to align with changes to another rule; modifies signature requirements for reports so that they may be signed electronically or by hand (*i.e.*, wet ink) (proposed paragraph (d)(III)(H)); requires that accident reports provide camera footage and event data recorder information (proposed paragraph (d)(III)(J)); and clarifies that RTAs may use and maintain their highly confidential accident investigation reports to aid in maintaining safe light rail operations (proposed paragraph (d)(IV)).

a. Discussion, Findings, and Conclusions

26. The ALJ finds that requiring in-cab cameras will provide valuable information both for accident investigations, and to address other activities that may impact operations and passenger safety. Specifically, forward facing cameras are intended to capture the activities that occur in front of each light rail vehicle, so that, for example, accidents are recorded. Likewise, cameras aimed at the light rail vehicle's operator will provide helpful information on the

¹⁰ Redlined Rules filed March 18, 2022 at 27.

operator's attempts to avoid accidents and reactions to accidents. For these reasons, the ALJ finds that these new rule requirements serve the public interest.

27. As noted in the NOPR, the Commission seeks to add camera requirements to comply with NTSB Safety Recommendation No. R-17-013.¹¹ That Safety Recommendation suggests that inward and outward facing cameras be installed in all locomotive cabs and cab car operating compartments that are crash and fire-protected, have a minimum of 12-hour continuous recording capability to be used in accident investigations, and as a tool to improve operational safety.¹² By and large, proposed Rule 7349(b) accomplishes this.¹³ Staff's suggested additional changes to paragraph (b) provide helpful direction for RTAs implementing the rules, though the ALJ makes additional minor, and non-substantive changes to improve understandability and rule implementation, including identifying a specific date, (instead of the rules' effective date) as the deadline to install and use cameras. For the reasons discussed, the ALJ adopts the following language for Rule 7349(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. In all accident investigations, whether performed by Commission staff or the RTA, footage from such cameras must be reviewed.

28. The ALJ clarifies that rule language requiring RTAs to use their cameras when light rail vehicles are powered on does not require cameras be used when the vehicles are

¹¹ Decision No. C22-0087, **₽** 21.

¹² See NTSB Recommendation No R-17-013, <u>https://www.ntsb.gov/Pages/search.aspx#k=rsr-17-02</u>.

¹³ The proposed rule does not include requirements as to crash and fire-proof cameras or minimum number of continuous hours of recording capability.

PROCEEDING NO. 22R-0070R

powered on for vehicle repairs or maintenance. Of course, an RTA may opt to do this, but this is not a rule requirement.

29. As to the other changes proposed in the NOPR, the ALJ finds that they offer appropriate clarifications and improvements as to the Commission's expectations for accident reports, while making it clear that RTAs may use accident reports, including any evidence gathered in relation to such reports, to help them maintain safe light rail operations. All of this serves the public interest. As such, except for paragraph (b) (discussed above), the ALJ adopts the remaining changes as proposed in the NOPR.

7. Rule 7350 - Investigations and Reporting Procedures for Hazards

30. The NOPR proposes significant changes to this rule. Significantly, proposed paragraph (a) outlines the types of hazards that RTAs must report, whereas the prior version of the rule did not identify specific hazards (other than by severity level), and specifies that the notification must occur within 24 hours. Other proposed changes include: clarifying training requirements for those who perform hazard investigations (proposed paragraph (b)); allowing RTAs to notify the Commission by electronic mail, and clarifying the timeframe within which such notification must occur (proposed paragraph (c)); updating internal rule cross-references to align with other rule changes; using a different risk assessment matrix (and associated severity categories) in order to move away from the prior matrix (MIL-STD-882E) (proposed paragraph (d)); and clarifies the information and evidence that must be included with hazard investigation reports (proposed paragraph (e)).

a. Discussion, Findings, and Conclusions.

31. Overall, the ALJ finds that the proposed changes provide needed clarity on hazard investigations generally, and reporting hazards. For example, proposed changes to paragraph (a)

13

PROCEEDING NO. 22R-0070R

helps RTAs identify the types of hazards that automatically trigger a hazard analysis and report, as opposed to any hazard at all, including a minor slip, trip, or fall. Updated risk assessment standards and codes provide a more helpful scale for RTAs to use in determining the severity of a hazard, which helps them better understand their responsibilities under the rule. All of this is in the public interest.

32. But, the ALJ finds that several minor changes should be made to Rule 7350 to improve clarity and understandability. Specifically, minor changes to proposed paragraphs (a) and (c) ensure the rule is internally consistent as to reporting timing, and to improve understandability. The ALJ also modifies paragraph (a) to make it clear that RTAs must investigate the hazards listed in the subparagraphs that follow. Prior rule language required RTAs to investigate all hazards. The NOPR narrows down the types of hazards that require scrutiny, but dropped language requiring investigations. The ALJ views this as an unintentional oversight, and not an intentional effort to eliminate investigation requirements, particularly when viewed in context. In addition, the ALJ modifies paragraph (c) to specify that the timeframe within which RTAs must report hazards is calculated based upon the earliest of the identified trigger events (time of the event, when the event was discovered, or when the risk assessment code was determined).

33. As to proposed paragraph (b), the ALJ deletes "Requirements for investigating hazards," which is essentially a topic header. This is somewhat misleading given that paragraph (b) addresses training requirements for those who investigate hazards.

34. Likewise, the ALJ finds that minor changes to proposed paragraph (e) are needed to clarify that it applies to the hazards identified in paragraph (a). The ALJ makes other changes to paragraph (e) to clarify that RTAs are required to include a CAP when one is required by

14

Commission rule, or when the RTA determines one is needed. This provides a clear standard, particularly as compared to the proposed language, which sets an undefined "as needed" standard. Other changes to paragraph (e) confirm that a hazard analysis is required. And, because the ALJ is already modifying paragraph (e) to clarify that the hazard investigation report is only required for hazards identified in Rule 7350(a), these changes provide added internal consistency by making it clear that less serious hazards are excluded. The ALJ also slightly reorganizes paragraph (e) to improve understandability. For the reasons discussed, the ALJ adopts the following rule language for paragraphs (a), (b), (c), and (e):

(a) Each RTA must investigate and report the following hazards to the Commission:

[subparagraphs (a)(I) to (VII) omitted]

- (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.
- (c) Each RTA must notify Commission staff of the hazards specified in paragraph 7350(a) by electronic mail as soon as practicable, but not later than 24 hours from the earlier of the time or discovery of the occurrence or determination of risk assessment code, except that hazards specified in subparagraph 7350(a)(IX) must be reported within 24 hours of the determination of the risk assessment code.

[paragraph (d) omitted]

(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. Other safety events investigated by the RTA per their event reporting processes and procedures shall be documented.

35. For the reasons discussed above, the ALJ adopts the remaining language as proposed in the NOPR for Rule 7350.

8. Rule 7351 - RTA Internal Safety Reviews

36. The NOPR proposes that this rule be modified to require RTAs' internal safety review process to include the review schedule for the three-year internal safety review cycle (proposed paragraph (b)(III)); and to clarify that the existing 30-day notification requirement for scheduled internal safety reviews is intended to allow Staff to observe the internal review (proposed paragraph (c)).

a. Discussion, Findings, and Conclusions.

37. The ALJ finds that the proposed changes to paragraph (b)(III) to include the three-year internal safety review schedule in its safety review process helpfully directs RTAs to plan the schedule for the full three-year safety review cycle. Changes to proposed paragraph (c) make it clear that Staff may observe an RTA's internal safety reviews, and ensures that Staff has adequate notice so it may do this. All of this serves the public interest. The ALJ identified a typographical error in paragraph (e) that warrants correction. For all these reasons, the ALJ adopts the rule language as proposed in the NOPR, with the addition of the following change to paragraph (e):

(e) The RTA to <u>must</u> annually submit to the Commission a report documenting internal safety review activities and the status of subsequent findings and corrective actions.

9. Rule 7352 - Commission Safety Audits

38. The NOPR proposes three minor changes to this rule, that is: eliminate recommendations from the audit process; clarify that semi-annual audits are required in the fall and spring, by calendar year (as opposed to the State fiscal year) (proposed paragraph (a)); and to

16

clarify what the Commission will include in its three-year report, and that it will provide that report to the FTA (proposed paragraph (d)).

a. Discussion, Findings, and Conclusions.

39. As noted in the NOPR, new FTA requirements no longer oblige the Commission to include recommendations in the on-site safety audit that the Commission must provide the FTA.¹⁴ As such, eliminating existing language that requires recommendations appropriately aligns the Commission's rule with FTA requirements. Other changes memorialize the Commission's current process¹⁵ as to preparing and filing a report with the FTA, and therefore, improve transparency in the Commission's actions. For all these reasons, the ALJ finds that the proposed rule is in the public interest. The ALJ adopts the rule as proposed in the NOPR.

10. Other Minor Changes.

40. The NOPR seeks to makes other minor changes not discussed above, such as renumbering paragraphs and updating internal rule cross-references to align with paragraph numbering changes. The ALJ adopts those minor changes as proposed in the NOPR, and makes other similar non-substantive changes.

C. Conclusion

41. For the reasons and authorities discussed above, the ALJ recommends that the Commission adopt changes to the Rules as outlined in Attachments A and B to the NOPR, with the modifications discussed above. A version of the proposed Rules with the modifications discussed herein in legislative format (*i.e.*, redline) is included as Attachment A; and a clean version of the same is included as Attachment B.

¹⁴ Decision No. C22-0087 at **№** 26.

¹⁵ Decision No. C22-0087 at **₽** 26.

42. Being fully advised in this matter and consistent with the above discussion, in accordance with § 40-6-109, C.R.S., the ALJ now transmits to the Commission the record in this proceeding along with this written recommended decision and attachments.

III. ORDER

A. The Commission Orders That:

1. The Rules Regulating Railroads, Rail Fixed Guideways, Transportation by Rail, and Rail Crossings, 4 *Code of Colorado Regulations* 723-7, attached to this Recommended Decision as Attachments A and B are adopted.

2. The rules in final and legislative format (Attachments A and B), are also available through the Commission's E-Filings system at:

https://www.dora.state.co.us/pls/efi/EFI.Show_Docket?p_session_id=&p_docket_id=22R-0070R

3. This Recommended Decision will be effective on the day it becomes the Decision of the Commission, if that is the case, and is entered as of the date above.

4. As provided by § 40-6-109, C.R.S., copies of this Recommended Decision will be served upon the parties, who may file exceptions to it.

5. If no exceptions are filed within 20 days after service or within any extended period of time authorized, or unless the decision is stayed by the Commission upon its own motion, the recommended decision will become the decision of the Commission and subject to the provisions of § 40-6-114, C.R.S.

6. If a party seeks to amend, modify, annul, or reverse basic findings of fact in its exceptions, that party must request and pay for a transcript to be filed, or the parties may stipulate to portions of the transcript according to the procedure stated in § 40-6-113, C.R.S. If no transcript or stipulation is filed, the Commission is bound by the facts set out by the

18

administrative law judge and the parties cannot challenge these facts. This will limit what the Commission can review if exceptions are filed.

7. If exceptions to this Decision are filed, they may not exceed 30 pages in length,

unless the Commission for good cause shown permits this limit to be exceeded.



THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

MELODY MIRBABA

Administrative Law Judge

ATTEST: A TRUE COPY

Youg Dean

Doug Dean, Director

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.
- (<u>e</u>d) "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.
- (<u>i</u>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.
- (ji) "Examination" means a process for gathering or analyzing facts or information related to the safety of a RFGPTS.
- (kj) "Event" means an accident, incident, or occurrence.
- (<u>Ik</u>) "Finding" means non-compliance with the RTA's PTASP, rules, procedures, programs, or other regulatory guidelines, which results in the formulation of a CAP.
- (<u>m</u>!) "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.
- (<u>on</u>) "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(<u>xx</u>#)); one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a RTA.
- (gp) "Inspection" means a physical observation of equipment, facilities, rolling stock, operations, or records for the purpose of gathering or analyzing facts or information.
- (<u>r</u>**q**) "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>s</u>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.
- (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.
- (<u>v</u>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>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>↓) "Passenger operations" means the period of time when any aspect of RTA operations are initiated with the intent to carry passengers.
- (y₩) "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.
- (<u>z</u>x) "Performance target" means a <u>quantifiable</u><u>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<u>measure over a specified timeframe</u>.
- (<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.
- (<u>eeaa</u>) "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.
- (hhdd) "Rail transit agency" (RTA) means any entity that provides services on a RFGPTS.

- (<u>iiee</u>) "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.
- (<u>IIhh</u>) "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.
- (nnjj) "Safety" means freedom from harm resulting from unintentional acts or circumstances.
- (<u>ookk</u>) "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.
- (ppll) "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.
- (<u>qqmm</u>) "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.
- (SSOO) "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>wwss</u>) "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. <u>659.19Part 673</u> 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. <u>659.19 andPart 673 and</u>-Part 674 revised as of <u>December 30, 2021March 16, 2016</u>. References to 49 C.F.R. <u>659.19Part 673</u> and Part 674 do not include later amendments to, or editions of, 49 C.F.R. <u>659.19,Part 673</u> 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. <u>659.19Part 673</u> 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.

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[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:

- (A) 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 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;

- (B) techniques used to conduct inspections and testing;
- (C) inspection schedules and procedures; and
- (D) description of how results are entered into the hazard management process.
- (VII) A description of the process used by the RTA to develop an approved coordinated schedule for all emergency management program activities including:
 - (A) meetings with external agencies;
 - (B) emergency planning responsibilities and requirements;
 - (C) process used to evaluate emergency preparedness, such as annual emergency field exercises;
 - (D) after action reports and implementation of findings;
 - (E) revision and distribution of emergency response procedures;
 - (F) familiarization training for public safety organizations;
 - (G) employee training; and
 - (H) an emergency preparedness and response plan or procedures that includes planning updates and addresses, at a minimum:
 - (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, 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 information to support implementation of the system safety program.
- (XI) 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 including:
 - (A) identification of operating and maintenance rules and procedures subject to review;

- (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:
 - 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:
 - 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.
 - (i) 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;

Attachment A - Adopted Rules in Legislative Format Decision No. R22-0188 Proceeding No. 22R-0070R Page 19 of 38

- (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 training program. The employee and contractor safety certification training program. The employee and contractor training and 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) <u>hazard</u>findings<u>of noncompliance</u> from safety reviews <u>or audits</u> 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)(ll)-safety condition reported through the RTA established safety condition reporting process.
- (b) <u>All CAPs are required to be filed within 45 days of identification of the need for a CAP unless</u> 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 <u>high</u> risk assessment code of 1A, 2A, 1B, <u>or</u> 2B, <u>or</u> 1C, of <u>sub</u>paragraph 7350(<u>de</u>)(<u>I)(C</u>), 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 <u>3Boutlined in subparagraph (c)(I) above</u>, 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:
 - (I) a fatality at the scene; or where a person is confirmed dead within thirty days of the accident;
 - serious injuries as defined in <u>rule-paragraph</u> 7341(<u>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) <u>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</u>
- (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 <u>electronic mail</u>telephone first within two hours <u>of occurrence of the accident</u>. The RTA shall provide the following information <u>as part of the electronic mail notification</u>: 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. In all accident investigations, whether performed by Commission staff or the RTA, footage from such cameras must be reviewed.
- (c) 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 transit-controlled 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 by either an electronic signature or wet ink;
- (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 <u>S</u>taff, Commission <u>Litigation_Trial s</u>taff, 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.
- (<u>ed</u>) 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>he</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:

- (A) 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.
- (<u>i</u>h) The Commission shall review reports that document investigation activities and findings on a quarterly basis.
- (ji) The Commission shall participate in any investigation conducted or findings and recommendations made by the NTSB, FRA, or FTA.
- (kj) 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 <u>Certification training program.</u> 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 <u>mustshall</u> notify Commission staff of <u>the</u> hazards <u>specified in paragraph 7350(a)</u> by <u>electronic mailtelephone</u> as soon as practicable, but not later than 24 hours from <u>the earlier of</u> the time or<u>f occurrence or</u> discovery of the occurrence -or determination of risk assessment code, 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> <u>7350(d)derived from the MIL-STD-882E</u>.
 - (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	<u>Severity</u> <u>Category</u>	Mishap Result Criteria		
<u>Catastrophic</u>	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.		
Modest	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.		

Negligible	<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
regigiore	<u> </u>	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	₿	Will occur several times in the life of an item.	Will occur frequently.		
Occasional	e	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	Æ	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					
<u>Frequent</u>	A	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.		
<u>Remote</u>	<u>C</u>	Likely to occur sometime in the life of an item.	Will occur several times.		
Improbable	D	Unlikely, but possible to occur in the life of an item.	Unlikely, but can reasonably be expected to occur.		
<u>Highly</u> Improbable	Ē	So unlikely, it can be assumed occurrence may not be experienced in the life of an item.	Unlikely to occur, but possible.		

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

E.

Improbable (D)	<u>Medium</u>	<u>Medium</u>	<u>Moderate</u>	Low	Low
<u>Highly</u> Improbable (E)	<u>Medium</u>	<u>Moderate</u>	<u>Low</u>	<u>Low</u>	<u>Low</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 required by paragraph 7350(a) must be documented in a final report that includes: a description of investigation activities, identified causal and contributing factors, <u>a</u> <u>CAP when required by paragraph 7347(a)</u>, or when the RTA determines a CAP is needed, a <u>hazard analysis</u>, 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 <u>audio recordings</u>. 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> 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.

(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.

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 agencies or 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(xx)); 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.
- (e) "C.F.R." means the Code of Federal Regulations.
- (f) "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.

- (g) "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.
- (h) "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.
- (i) "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.
- (j) "Examination" means a process for gathering or analyzing facts or information related to the safety of a RFGPTS.
- (k) "Event" means an accident, incident, or occurrence.
- (I) "Finding" means non-compliance with the RTA's PTASP, rules, procedures, programs, or other regulatory guidelines, which results in the formulation of a CAP.
- (m) "FRA" means the Federal Railroad Administration, an agency of the United States Department of Transportation.
- (n) "FTA" means the Federal Transit Administration, an agency of the United States Department of Transportation.
- (o) "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.
- (p) "Incident" means an event that involves any of the following: A personal injury that is not a serious injury (as defined in paragraph 7341(xx)); one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a RTA.
- (q) "Inspection" means a physical observation of equipment, facilities, rolling stock, operations, or records for the purpose of gathering or analyzing facts or information.
- (r) "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.
- (s) "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) "NTSB" means the National Transportation Safety Board, an independent Federal agency.
- (v) "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.
- (w) "Passenger" means a person who is on board, boarding, or alighting from a rail transit vehicle for the purpose of travel.
- (x) "Passenger operations" means the period of time when any aspect of RTA operations are initiated with the intent to carry passengers.
- (y) "Performance measure" means an expression based on a quantifiable indicator of performance or condition that is used to establish targets and to assess progress toward meeting the established targets.
- (z) "Performance target" means a quantifiable 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.
- (aa) "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.
- (dd) "Program standard" means the standards in rules 7340 through 7355, which codify the policies, objectives, responsibilities, and procedures used to provide RTA safety oversight.
- (ee) "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.
- (ff) "Public transportation safety certification training program" means 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, authorized by 49 U.S.C. 5329(c)(1) and established by the regulations set forth in 49 C.F.R. Part 672.
- (gg) "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.
- (hh) "Rail transit agency" (RTA) means any entity that provides services on a RFGPTS.

- (ii) "Recommendation" means a suggestion or proposal for improvements to how the PTASP is implemented by a RTA.
- (jj) "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.
- (kk) "Risk" means the composite of predicted severity and likelihood of the potential effect of a hazard.
- (II) "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.
- (mm) "Risk mitigation" means a method or methods to eliminate or reduce the effects of hazards.
- (nn) "Safety" means freedom from harm resulting from unintentional acts or circumstances.
- (oo) "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.
- (pp) "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.
- (qq) "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.
- (rr) "Safety management system executive" means a safety officer or an equivalent.
- (ss) "Safety performance target" means a performance target related to safety management activities.
- (tt) "Safety promotion" means a combination of training and communication of safety information to support SMS as applied to the RTA's RFGPTS.
- (uu) "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.
- (vv) "Safety risk assessment" means the formal activity whereby a RTA determines safety risk management priorities by establishing the significance or value of its safety risks.
- (ww) "Safety risk management" means a process within a RTA's safety plan for identifying hazards and analyzing, assessing, and mitigating safety risk.
- (xx) "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.
- (yy) "State of good repair" means the condition in which a capital asset is able to operate at a full level of performance.
- (zz) "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.
- (aaa) "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.
- (bbb) "Testing" means an assessment of equipment, facilities, rolling stock, or operations of a RFGPTS.
- (ccc) "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.
- (ddd) "U.S.C." means the United States Code.
- (eee) "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. 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. Part 673 and Part 674 revised as of December 30, 2021. References to 49 C.F.R. Part 673 and Part 674 do not include later amendments to, or editions of, 49 C.F.R. Part 673 and Part 674. 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. Part 673 and Part 674 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.

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[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. The RTA will establish a PTASP that complies with the program standard and includes the following sections.

- (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:
 - 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;
 - 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:

- 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:
 - 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:
 - 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;
- a description of the process for conducting internal safety reviews, including the development of written checklists and procedures and the issuance of findings;
- 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 and 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 training program. The employee and contractor training and certification shall also include:
 - (i) categories of safety-related work requiring training and certification;
 - 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 event investigations, in which the RTA or the SSOA identify causal and contributing factors that require corrective actions;
 - (II) 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)(l).
- (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.
- (d) 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, of paragraph 7350(d), 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 meet the serious risk assessment code of IC, 2C, 3A, or 3B, 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.
- (e) 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.
- (f) 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.
- (g) 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.
- (h) 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:
 - (I) a fatality at the scene; or where a person is confirmed dead within thirty days of the accident;
 - (II) serious injuries as defined in paragraph 7341(xx) 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.
- (d) The Commission's required method of notification of accidents is by electronic mail within two hours of occurrence of the accident. The RTA shall provide the following information as part of the electronic mail notification:
 - (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.
- (e) 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. In all accident investigations, whether performed by Commission staff or the RTA, footage from such cameras must be reviewed.
- (c) 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.
- (d) 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 transit-controlled 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;
 - the signature and title of the person authorized to certify the accuracy of the report, together with the date the report is signed by either an electronic signature or wet ink;
 - (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 staff, Commission Trial staff, 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.
- (e) 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).
- (f) 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.

- (g) 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.
- (h) 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:
 - (A) 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.
- (i) The Commission shall review reports that document investigation activities and findings on a quarterly basis.
- (j) The Commission shall participate in any investigation conducted or findings and recommendations made by the NTSB, FRA, or FTA.
- (k) 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.
- (c) Each RTA must notify Commission staff of the hazards specified in paragraph 7350(a) by electronic mail as soon as practicable, but not later than 24 hours from the earlier of the time or discovery of the occurrence or determination of risk assessment code, except that hazards specified in subparagraph 7350(a)(IX) must be reported within 24 hours of the determination of the risk assessment code.
- (d) 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 included in paragraph 7350(d).
 - (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.			
Grave	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.			
Significant	3	Could result in one or more of the following: injury or occupational illness resulting in one or more lost workday(s), reversible moderate environment impact, or monetary loss equal to or exceeding \$100K but less than \$1M.			
Modest	4	Could result in one or more of the following: injury or occupational illner not resulting in a lost workday, minimal environmental impact, or moneta loss equal to or exceeding \$25K, but less than \$100K.			
Negligible	5	Could result in one or more of the following: no injuries or occupational illness, no environmental impact, minor public inconvenience or nuisance, o monetary loss less than \$25K.			

(B) Probability levels shall be identified as follows:

PROBABILITY LEVELS								
Description	Level	Specific Individual Item	Fleet or Inventory					
Frequent	Α	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.					
Remote	С	Likely to occur sometime in the life of an item.	Will occur several times.					
Improbable	D	Unlikely, but possible to occur in the life of an item.	Unlikely, but can reasonably be expected to occur.					
Highly Improbable	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)	Grave (2)	Significant (3)	Modest (4)	Negligible (5)			
Frequent (A)	High	High	Serious	Medium	Medium			
Probable (B)	High	High	Serious	Medium	Moderate			
Remote (C)	Serious	Serious	Medium	Moderate	Low			
Improbable (D)	Medium	Medium	Moderate	Low	Low			
Highly Improbable (E)	Medium	Moderate	Low	Low	Low			

(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. 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:
 - describe the process used by the RTA to determine if all identified elements of its PTSAP are performing as intended;
 - (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 must 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 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.
- (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.

Decision No. C22-0263

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 22R-0070R

IN THE MATTER OF THE PROPOSED AMENDMENTS TO THE STATE SAFETY OVERSIGHT PROGRAM STANDARD FOR RAIL FIXED GUIDEWAY PUBLIC TRANSPORTATION SYSTEMS RULES, 4 CODE OF COLORADO REGULATIONS 723-7-7340 THROUGH 7352.

DECISION GRANTING EXCEPTION TO RECOMMENDED DECISION NO. R22-0188

Mailed Date: April 29, 2022 Adopted Date: April 27, 2022

I. <u>BY THE COMMISSION</u>

A. Statement

1. Through this Decision, the Commission addresses the exceptions to Recommended Decision No. R22-0188, issued March 30, 2022, by Administrative Law Judge (ALJ) Melody Mirbaba (Recommended Decision). The Commission grants the exception filed on April 19, 2022, by the Regional Transportation District (RTD), pursuant to § 40-6-109(2), C.R.S. RTD requests the Commission adopt certain additional language in Rule 7349(b), 4 *Code of Colorado Regulations* (CCR) 723-7, concerning use of in-cab cameras on light rail vehicles.

2. The adopted Rules Regulating Railroads, Rail Fixed Guideways, Transportation by Rail, and Rail Crossings, incorporating this further revision, are attached to this Decision in legislative (*i.e.*, strikeout/underline) as Attachment A, and in final format as Attachment B.

B. Findings and Conclusions

RTD requests the Commission adopt certain additional language in Rule 7349(b),
4 CCR 723-7. This Rule 7349(b) addresses installation and use of forward facing and operator

facing in-cab cameras on all light rail vehicles. RTD requests the Commission adopt the following additional (bolded) language in this rule:

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

4. In support of its exception, RTD explains, without the additional language, the rule only specifically requires use of in-camera footage for *accident investigations*. RTD maintains, however, the intent of this new rule is to require use of such footage for both management of safe light rail operations as well as accident investigations.

5. RTD explains, as the ALJ confirmed in the Recommended Decision, the intent of Rule 7349(b) is to implement National Transportation Safety Board (NTSB) Safety Recommendation No. R-17-013. RTD further explains, the NTSB's safety recommendation contemplates that the recommended inward and outward facing cameras would be used as a tool to improve operational safety *and* for the investigation of accidents.

6. RTD states that improvement of operational safety equates to management of safe light rail operations. RTD continues, effective use of in-cab camera footage in management of safe light rail operations includes, at a minimum, use in initial or supplemental training, identification of equipment or infrastructure inadequacies or failures, identification and correction of potentially hazardous behaviors, and identification and correction of hazardous conditions pursuant to § 40-18-103(1)(c), C.R.S.

7. RTD concludes that adopting the proposed additional language would ensure the Commission's rule more closely adopts NTSB Safety Recommendation No. R-17-013. RTD

2

adds this revision would also enhance RTD's light rail operational safety by explicitly placing the authority of the Commission behind the requirement for in-cab cameras.

8. No responses were filed supporting or opposing RTD's exception. Given that RTD has been the only active participant in this rulemaking to date, the Commission finds good cause to waive, on its own motion, the remaining response time to RTD's exception.

9. The Commission finds good cause to grant RTD's exception and will adopt the proposed additional language in Rule 7349(b). We agree this revision ensures that our rule properly and fully implements the requirements in NTSB Safety Recommendation No. R-17-013.

II. ORDER

A. The Commission Orders That:

1. The exception to Recommended Decision No. R22-0188, filed April 19, 2022, by the Regional Transportation District, is granted.

2. Remaining response time to the exception is waived.

3. The Rules Regulating Railroads, Rail Fixed Guideways, Transportation by Rail, and Rail Crossings, 4 *Code of Colorado Regulations* 723-7, Rules 7340 through 7355, incorporating the further revision adopted in this Decision, are adopted.

4. The adopted rules are attached to this Decision in legislative (*i.e.*, strikeout/underline) as Attachment A, and in final format as Attachment B. The adopted rules are also available through the Commission's E-Filings system, which can be accessed at:

https://www.dora.state.co.us/pls/efi/EFI.Show_Docket?p_session_id=&p_docket_id=22R-0070R

5. Subject to a filing of an application for rehearing, reargument, or reconsideration, the opinion of the Attorney General of the State of Colorado shall be obtained regarding

3

constitutionality and legality of the rules as finally adopted. A copy of the final, adopted rules shall be filed with the Office of the Secretary of State. The rules shall be effective 20 days after publication in *The Colorado Register* by the Office of the Secretary of State.

6. The 20-day period provided for in § 40-6-114, C.R.S., within which to file applications for rehearing, reargument, or reconsideration, begins on the first day following the effective date of this Decision.

7. This Decision is effective upon its Mailed Date.

B. ADOPTED IN COMMISSIONERS' WEEKLY MEETING April 27, 2022.



THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

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JOHN GAVAN

ATTEST: A TRUE COPY

Doug Dean, Director

MEGAN M. GILMAN

Commissioners

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.
- (<u>i</u>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.
- (ji) "Examination" means a process for gathering or analyzing facts or information related to the safety of a RFGPTS.
- (kj) "Event" means an accident, incident, or occurrence.
- (<u>Ik</u>) "Finding" means non-compliance with the RTA's PTASP, rules, procedures, programs, or other regulatory guidelines, which results in the formulation of a CAP.
- (<u>m</u>!) "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.
- (<u>on</u>) "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(<u>xx</u>#)); one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a RTA.
- (gp) "Inspection" means a physical observation of equipment, facilities, rolling stock, operations, or records for the purpose of gathering or analyzing facts or information.
- (<u>r</u>**q**) "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>s</u>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.
- (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.
- (<u>v</u>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>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>↓) "Passenger operations" means the period of time when any aspect of RTA operations are initiated with the intent to carry passengers.
- (y₩) "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.
- (<u>z</u>x) "Performance target" means a <u>quantifiable</u><u>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<u>measure over a specified timeframe</u>.
- (<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.
- (<u>eeaa</u>) "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.
- (hhdd) "Rail transit agency" (RTA) means any entity that provides services on a RFGPTS.

- (<u>iiee</u>) "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.
- (<u>IIhh</u>) "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.
- (nnjj) "Safety" means freedom from harm resulting from unintentional acts or circumstances.
- (<u>ookk</u>) "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.
- (ppll) "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.
- (<u>qqmm</u>) "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.
- (SSOO) "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>wwss</u>) "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. <u>659.19Part 673</u> 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. <u>659.19 andPart 673 and</u>-Part 674 revised as of <u>December 30, 2021March 16, 2016</u>. References to 49 C.F.R. <u>659.19Part 673</u> and Part 674 do not include later amendments to, or editions of, 49 C.F.R. <u>659.19,Part 673</u> 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. <u>659.19Part 673</u> 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.

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[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:

- (A) 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 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;

- (B) techniques used to conduct inspections and testing;
- (C) inspection schedules and procedures; and
- (D) description of how results are entered into the hazard management process.
- (VII) A description of the process used by the RTA to develop an approved coordinated schedule for all emergency management program activities including:
 - (A) meetings with external agencies;
 - (B) emergency planning responsibilities and requirements;
 - (C) process used to evaluate emergency preparedness, such as annual emergency field exercises;
 - (D) after action reports and implementation of findings;
 - (E) revision and distribution of emergency response procedures;
 - (F) familiarization training for public safety organizations;
 - (G) employee training; and
 - (H) an emergency preparedness and response plan or procedures that includes planning updates and addresses, at a minimum:
 - (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, 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 information to support implementation of the system safety program.
- (XI) 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 including:
 - (A) identification of operating and maintenance rules and procedures subject to review;

- (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:
 - 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 <u>Metropolitan Planning Organizations in the selection of state and Metropolitan</u> <u>Planning Organization safety performance targets.</u>
- (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.
 - (i) 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;

Attachment A - Adopted Rules in Legislative Format Decision No. C22-0263 Proceeding No. 22R-0070R Page 19 of 38

- (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 training program. The employee and contractor safety certification training program. The employee and contractor training and 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) <u>hazard findings of noncompliance</u> from safety reviews <u>or audits</u> 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)(ll)-safety condition reported through the RTA established safety condition reporting process.
- (b) <u>All CAPs are required to be filed within 45 days of identification of the need for a CAP unless</u> 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 <u>high</u> risk assessment code of 1A, 2A, 1B, <u>or</u> 2B, <u>or 1C</u>, of <u>sub</u>paragraph 7350(<u>de</u>)(<u>I)(C</u>), 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 <u>3Boutlined in subparagraph (c)(I) above</u>, 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:
 - (I) a fatality at the scene; or where a person is confirmed dead within thirty days of the accident;
 - serious injuries as defined in <u>rule-paragraph</u> 7341(<u>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) <u>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</u>
- (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 <u>electronic mail</u>telephone first within two hours <u>of occurrence of the accident</u>. The RTA shall provide the following information <u>as part of the electronic mail notification</u>: 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.
- (c) 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 transit-controlled 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 <u>S</u>taff, Commission <u>Litigation_Trial s</u>taff, 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.
- (<u>ed</u>) 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>he</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:

- (A) 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.
- (<u>i</u>h) The Commission shall review reports that document investigation activities and findings on a quarterly basis.
- (ji) The Commission shall participate in any investigation conducted or findings and recommendations made by the NTSB, FRA, or FTA.
- (kj) 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 <u>Certification training program.</u> 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 <u>mustshall</u> notify Commission staff of <u>the</u> hazards <u>specified in paragraph 7350(a)</u> by <u>electronic mailtelephone</u> as soon as practicable, but not later than 24 hours from <u>the earlier of</u> the time or<u>f occurrence or</u> discovery of the occurrence -or determination of risk assessment code, 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> <u>7350(d)derived from the MIL-STD-882E</u>.
 - (A) Severity categories shall be identified as follows:

	SEVERITY CATEGORIES					
Description	Severity Category	Mishap Result Criteria				
Catastrophic	ł	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	<u>Severity</u> <u>Category</u>	Mishap Result Criteria				
<u>Catastrophic</u>	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.				
Modest	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.				

Negligible	<u>5</u>	<u>Could result in one or more of the following: no injuries or occupational</u> <u>illness, no environmental impact, minor public inconvenience or nuisance, or</u>
11081181010	-	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	₿	Will occur several times in the life of an item.	Will occur frequently.			
Occasional	e	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	Æ	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			
<u>Frequent</u>	A	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.			
<u>Remote</u>	<u>C</u>	Likely to occur sometime in the life of an item.	Will occur several times.			
Improbable	D	Unlikely, but possible to occur in the life of an item.	Unlikely, but can reasonably be expected to occur.			
<u>Highly</u> Improbable	Ē	So unlikely, it can be assumed occurrence may not be experienced in the life of an item.	Unlikely to occur, but possible.			

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

E.

Improbable (D)	<u>Medium</u>	<u>Medium</u>	<u>Moderate</u>	Low	Low
<u>Highly</u> Improbable (E)	<u>Medium</u>	<u>Moderate</u>	<u>Low</u>	<u>Low</u>	<u>Low</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 required by paragraph 7350(a) must be documented in a final report that includes: a description of investigation activities, identified causal and contributing factors, <u>a</u> <u>CAP when required by paragraph 7347(a)</u>, or when the RTA determines a CAP is needed, a <u>hazard analysis</u>, 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 <u>audio recordings</u>. 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> 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.

(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.

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 agencies or 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(xx)); 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.
- (e) "C.F.R." means the Code of Federal Regulations.
- (f) "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.

- (g) "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.
- (h) "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.
- (i) "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.
- (j) "Examination" means a process for gathering or analyzing facts or information related to the safety of a RFGPTS.
- (k) "Event" means an accident, incident, or occurrence.
- (I) "Finding" means non-compliance with the RTA's PTASP, rules, procedures, programs, or other regulatory guidelines, which results in the formulation of a CAP.
- (m) "FRA" means the Federal Railroad Administration, an agency of the United States Department of Transportation.
- (n) "FTA" means the Federal Transit Administration, an agency of the United States Department of Transportation.
- (o) "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.
- (p) "Incident" means an event that involves any of the following: A personal injury that is not a serious injury (as defined in paragraph 7341(xx)); one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a RTA.
- (q) "Inspection" means a physical observation of equipment, facilities, rolling stock, operations, or records for the purpose of gathering or analyzing facts or information.
- (r) "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.
- (s) "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) "NTSB" means the National Transportation Safety Board, an independent Federal agency.
- (v) "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.
- (w) "Passenger" means a person who is on board, boarding, or alighting from a rail transit vehicle for the purpose of travel.
- (x) "Passenger operations" means the period of time when any aspect of RTA operations are initiated with the intent to carry passengers.
- (y) "Performance measure" means an expression based on a quantifiable indicator of performance or condition that is used to establish targets and to assess progress toward meeting the established targets.
- (z) "Performance target" means a quantifiable 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.
- (aa) "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.
- (dd) "Program standard" means the standards in rules 7340 through 7355, which codify the policies, objectives, responsibilities, and procedures used to provide RTA safety oversight.
- (ee) "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.
- (ff) "Public transportation safety certification training program" means 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, authorized by 49 U.S.C. 5329(c)(1) and established by the regulations set forth in 49 C.F.R. Part 672.
- (gg) "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.
- (hh) "Rail transit agency" (RTA) means any entity that provides services on a RFGPTS.

- (ii) "Recommendation" means a suggestion or proposal for improvements to how the PTASP is implemented by a RTA.
- (jj) "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.
- (kk) "Risk" means the composite of predicted severity and likelihood of the potential effect of a hazard.
- (II) "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.
- (mm) "Risk mitigation" means a method or methods to eliminate or reduce the effects of hazards.
- (nn) "Safety" means freedom from harm resulting from unintentional acts or circumstances.
- (oo) "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.
- (pp) "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.
- (qq) "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.
- (rr) "Safety management system executive" means a safety officer or an equivalent.
- (ss) "Safety performance target" means a performance target related to safety management activities.
- (tt) "Safety promotion" means a combination of training and communication of safety information to support SMS as applied to the RTA's RFGPTS.
- (uu) "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.
- (vv) "Safety risk assessment" means the formal activity whereby a RTA determines safety risk management priorities by establishing the significance or value of its safety risks.
- (ww) "Safety risk management" means a process within a RTA's safety plan for identifying hazards and analyzing, assessing, and mitigating safety risk.
- (xx) "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.
- (yy) "State of good repair" means the condition in which a capital asset is able to operate at a full level of performance.
- (zz) "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.
- (aaa) "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.
- (bbb) "Testing" means an assessment of equipment, facilities, rolling stock, or operations of a RFGPTS.
- (ccc) "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.
- (ddd) "U.S.C." means the United States Code.
- (eee) "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. 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. Part 673 and Part 674 revised as of December 30, 2021. References to 49 C.F.R. Part 673 and Part 674 do not include later amendments to, or editions of, 49 C.F.R. Part 673 and Part 674. 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. Part 673 and Part 674 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.

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[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. The RTA will establish a PTASP that complies with the program standard and includes the following sections.

- (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:
 - 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;
 - 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:

- 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:
 - 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;
- a description of the process for conducting internal safety reviews, including the development of written checklists and procedures and the issuance of findings;
- 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 and apply with the requirements of the public transportation safety 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 event investigations, in which the RTA or the SSOA identify causal and contributing factors that require corrective actions;
 - (II) 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)(I) and (d)(I).
- (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.
- (d) 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, of paragraph 7350(d), 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 meet the serious risk assessment code of IC, 2C, 3A, or 3B, 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.
- (e) 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.
- (f) 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.
- (g) 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.
- (h) 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:
 - (I) a fatality at the scene; or where a person is confirmed dead within thirty days of the accident;
 - (II) serious injuries as defined in paragraph 7341(xx) 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.
- (d) The Commission's required method of notification of accidents is by electronic mail within two hours of occurrence of the accident. The RTA shall provide the following information as part of the electronic mail notification:
 - (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.
- (e) 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 forage 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.
- (c) 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.
- (d) 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 by either an electronic signature or wet ink;
 - (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 staff, Commission Trial staff, 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.
- (e) 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).
- (f) 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.

- (g) 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.
- (h) 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:
 - (A) 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.
- (i) The Commission shall review reports that document investigation activities and findings on a quarterly basis.
- (j) The Commission shall participate in any investigation conducted or findings and recommendations made by the NTSB, FRA, or FTA.
- (k) 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.
- (c) Each RTA must notify Commission staff of the hazards specified in paragraph 7350(a) by electronic mail as soon as practicable, but not later than 24 hours from the earlier of the time or discovery of the occurrence or determination of risk assessment code, except that hazards specified in subparagraph 7350(a)(IX) must be reported within 24 hours of the determination of the risk assessment code.
- (d) 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 included in paragraph 7350(d).
 - (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.			
Grave	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.			
Significant	3	Could result in one or more of the following: injury or occupational illness resulting in one or more lost workday(s), reversible moderate environmenta impact, or monetary loss equal to or exceeding \$100K but less than \$1M.			
Modest	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.			
Negligible	5	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	Fleet or Inventory				
Frequent	А	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.			
Remote	С	Likely to occur sometime in the life of an item.	Will occur several times.			
Improbable	D	Unlikely, but possible to occur in the life of an item.	Unlikely, but can reasonably be expected to occur.			
Highly Improbable	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)	Grave (2)	Significant (3)	Modest (4)	Negligible (5)		
Frequent (A)	High	High	Serious	Medium	Medium		
Probable (B)	High	High	Serious	Medium	Moderate		
Remote (C)	Serious	Serious	Medium	Moderate	Low		
Improbable (D)	Medium	Medium	Moderate	Low	Low		
Highly Improbable (E)	Medium	Moderate	Low	Low	Low		

(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. 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:
 - describe the process used by the RTA to determine if all identified elements of its PTSAP are performing as intended;
 - (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 must 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 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.
- (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.