

# **2020 FTA Joint State Safety Oversight and Rail Transit Agency Virtual Workshop**

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**U.S. Department  
of Transportation**

**Federal Transit  
Administration**



U.S. Department of Transportation  
Federal Transit Administration

# FTA Two-Hour Accident Notification and Investigations

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# Overview

- Background (Accident Notification Requirements and Guidance)
- Two-Hour Accident Notification Interactive Poll
- Background (Accident Investigation Requirements and Guidance)
- Accident Investigations Poll
- Key Takeaways

# Two-Hour Accident Notification Requirements

## Part 674.33 Notifications of accidents.

- a) Two-hour notification. In addition to the requirements for accident notification set forth in an SSO program standard, an RTA must notify both the SSO and the FTA within two hours of any accident occurring on a rail fixed guideway public transportation system. The criteria and thresholds for accident notification and reporting are defined in a reporting manual developed for the electronic reporting system specified by FTA a required in Part 674.39(b), and in appendix A.



# Two-Hour Accident Notification Guidance

- The FTA has published Two-Hour Accident Notification Guidance
  - Two-Hour Accident Notification Guide
  - Two-Hour Accident Notification Quick Reference Checklist
  - <https://www.transit.dot.gov/regulations-and-guidance/safety/two-hour-accident-notification-guide>
- Relevant guidance also is available in the National Transit Database (NTD) glossary
  - <https://www.transit.dot.gov/ntd/national-transit-database-ntd-glossary>

# Two-Hour Accident Notification Guidance

- Accident notifications from the RTA to the FTA must be:
  - Submitted to the DOT's Transportation Operations Center (TOC) (*previously known as the Crisis Management Center (CMC)*) – email notification recommended
  - In accordance with the 49 CFR Part 674.33 accident criteria and thresholds
  - Aligned with the FTA's Two-Hour Accident Notification Guide

# Accident Notification and Investigations Poll

- Today, we will conduct a poll. Part one of the poll focuses on Two-Hour Accident Notifications, and part two of the poll focuses on Accident Investigation.
  - Select the best answers using the interactive polling selections
  - You will have a set time to answer each question before the poll closes for that question
  - We will review each question and the correct answer together so we can stay aligned along the way

# Accident Notification and Investigations Poll

**The goal of the poll: Prevent recurrence of common audit findings**

- Noncompliance with Part 674.33(a) notification and reporting requirements
  - Findings of unreported accidents to the SSOA and FTA vary
  - Findings related to accident notification and annual report adjudication
- FTA continues to receive notifications about non-reportable events (over-reporting)



## Accident Notification Poll

- I. When the accident and incident notification requirements in an SSOA's program standard exceed the FTA Two-Hour Accident Notification thresholds, the RTA must?
  - a) Not provide these additional notifications to the FTA
  - b) Follow the SSOA Program Standard notification and reporting requirements
  - c) Provide notification of required SSOA incidents to the SSOA only
  - d) All of the above

## Accident Notification Poll

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## Accident Notification Poll

2. When assessing if there is a serious injury, you should?
  - a) Review facts and observations, and use best judgment
  - b) Use observations of severe burns, broken bones or severe bleeding
  - c) Use injury descriptions provided by first responders or transit employees
  - d) All the above

## Accident Notification Poll

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## Accident Notification Poll

3. When should you provide notification of an injury when the seriousness of the injury has not yet been determined or was unknown?
- a) When there was an immediate transport for medical treatment
  - b) When the serious injury is first identified or reported
  - c) When there was a medical transport resulting from illness or other natural causes
  - d) Both a) & b)

## Accident Notification Poll

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  - d) Both a) & b)**



## Accident Notification Poll

4. Which of the following fatalities and injuries do not require accident notification?
- a) Death or injury resulting from a criminal homicide or assault that is not related to a collision with a rail transit vehicle
  - b) A car hits a person on a city street and throws the person onto the rail right-of-way
  - c) A person is injured or assaulted off transit property and seeks assistance at a station
  - d) All the above

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## Accident Notification Poll

5. Which of the following is considered a Rail Transit Vehicle (RTV) as defined by the NTD?
- a) Any rolling stock used on a rail fixed guideway public transportation system, including but not limited to passenger and maintenance vehicles
  - b) Roadway Maintenance Machines (RMMs)
  - c) A train, RMM or Hi-Rail vehicle moving on yard tracks
  - d) All the above

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  - d) All the above**

## Accident Notification Poll

6. What are some collision-related facts that should be included in an accident notification when there is a collision involving a Rail Transit Vehicle (RTV)?
- a) That there was a collision between two RTVs
  - b) Number of fatalities, serious injuries or persons immediately transported
  - c) Collision resulted in substantial damage to train, POV or other property, or the RTV or POV were towed
  - d) All the above

## Accident Notification Poll

6. What are some collision-related facts that should be included in an accident notification when there is a collision involving a Rail Transit Vehicle (RTV)?
- a) That there was a collision between two RTVs
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## Accident Notification Poll

7. Substantial damage includes damage 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.
  - a) True
  - b) False

## Accident Notification Poll

7. Substantial damage includes damage 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.

**a) True**

b) False

## Accident Notification Poll

8. What is **NOT** considered an evacuation for life safety reasons?
- a) Evacuations or off-loading of passengers for service problems such as mechanical breakdowns or loss of power
  - b) Evacuations for fire or smoke in train, train cab or station
  - c) Evacuations for fumes, gas leak or fuel leak
  - d) Evacuations for electrical arcing or sparking wires

## Accident Notification Poll

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- a) **Evacuations or off-loading of passengers for service problems such as mechanical breakdowns or loss of power**
  - b) Evacuations for fire or smoke in train, train cab or station
  - c) Evacuations for fumes, gas leak or fuel leak
  - d) Evacuations for electrical arcing or sparking wires

## Accident Notification Poll

9. The SSO rule requires accident notifications for all evacuations that are for life safety reasons. What are some security situations that could create life safety reasons for an evacuation?
- a) A suspicious item
  - b) A bomb threat or active shooter
  - c) An arson fire and smoke
  - d) All of the above

## Accident Notification Poll

9. The SSO rule requires accident notifications for all evacuations that are for life safety reasons. What are some security situations that could create life safety reasons for an evacuation?
- a) A suspicious item
  - b) A Bomb Threat or active shooter
  - c) An arson fire and smoke
  - d) All of the above**



## Accident Notification Poll

10. After a notification of an evacuation for life safety reasons, what are some activities the RTA safety function and the SSOA would expect to be involved in?
- a) Participating in the hotwash
  - b) Reviewing effectiveness of emergency procedures
  - c) Reviewing effectiveness of communications or systems in place to protect life safety
  - d) All of the above

## Accident Notification Poll

10. After a notification of an evacuation for life safety reasons, what are some activities the RTA safety function and the SSOA would expect to be involved in?
- a) Participating in the hotwash
  - b) Reviewing effectiveness of emergency procedures
  - c) Reviewing effectiveness of communications or systems in place to protect life safety
  - d) All of the above**

## Accident Notification Poll

11. For the purpose of reporting to NTD and investigations tracked in SSOR, FTA defines a derailment as:

“A non-collision event in which one or more wheels of a rail transit vehicle unintentionally leaves the rails”

- a) True
- b) False

## Accident Notification Poll

11. For the purpose of reporting to NTD and investigations tracked in the SSOR, FTA defines a derailment as:

“A non-collision event in which one or more wheels of a rail transit vehicle unintentionally leaves the rails”

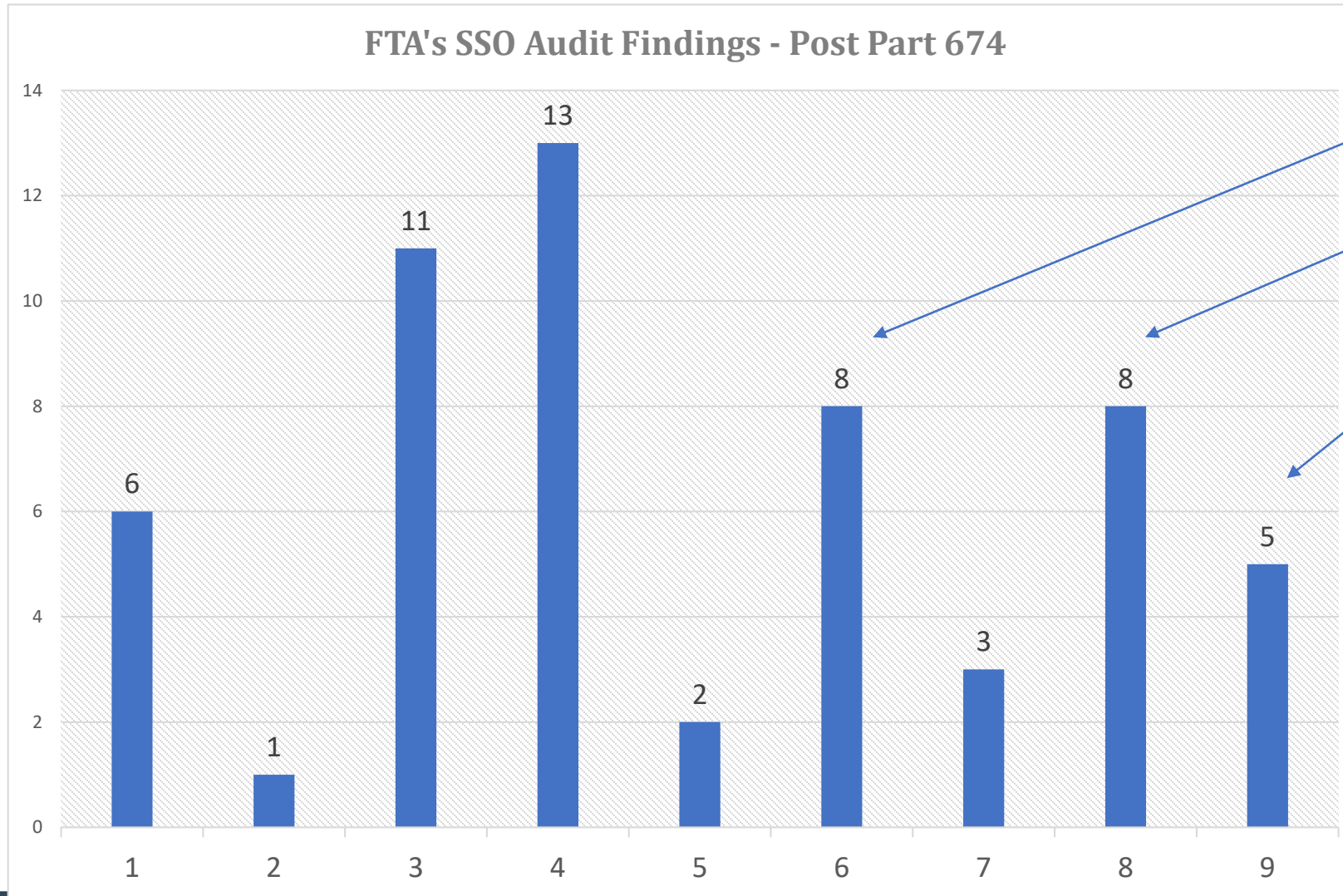
**a) True**

b) False

# From Accident Notification to Investigation

- Submitting the Two-Hour Accident Notification is just the first step.
- The next step is conducting the Accident Investigation.
- The next section of this presentation and polling topic will:
  - Focus on the SSOA responsibilities in the Accident Investigation process, and
  - Identify common audit findings related to those responsibilities.

# FTA SSO Audits - Accident Related Findings



9 Audits conducted w/ 57 Findings

8 Findings related to Accidents

Also 2 CAP Findings & 2 Annual Reports Findings related to Accidents

Total of 12 Findings (21%) related to Accidents

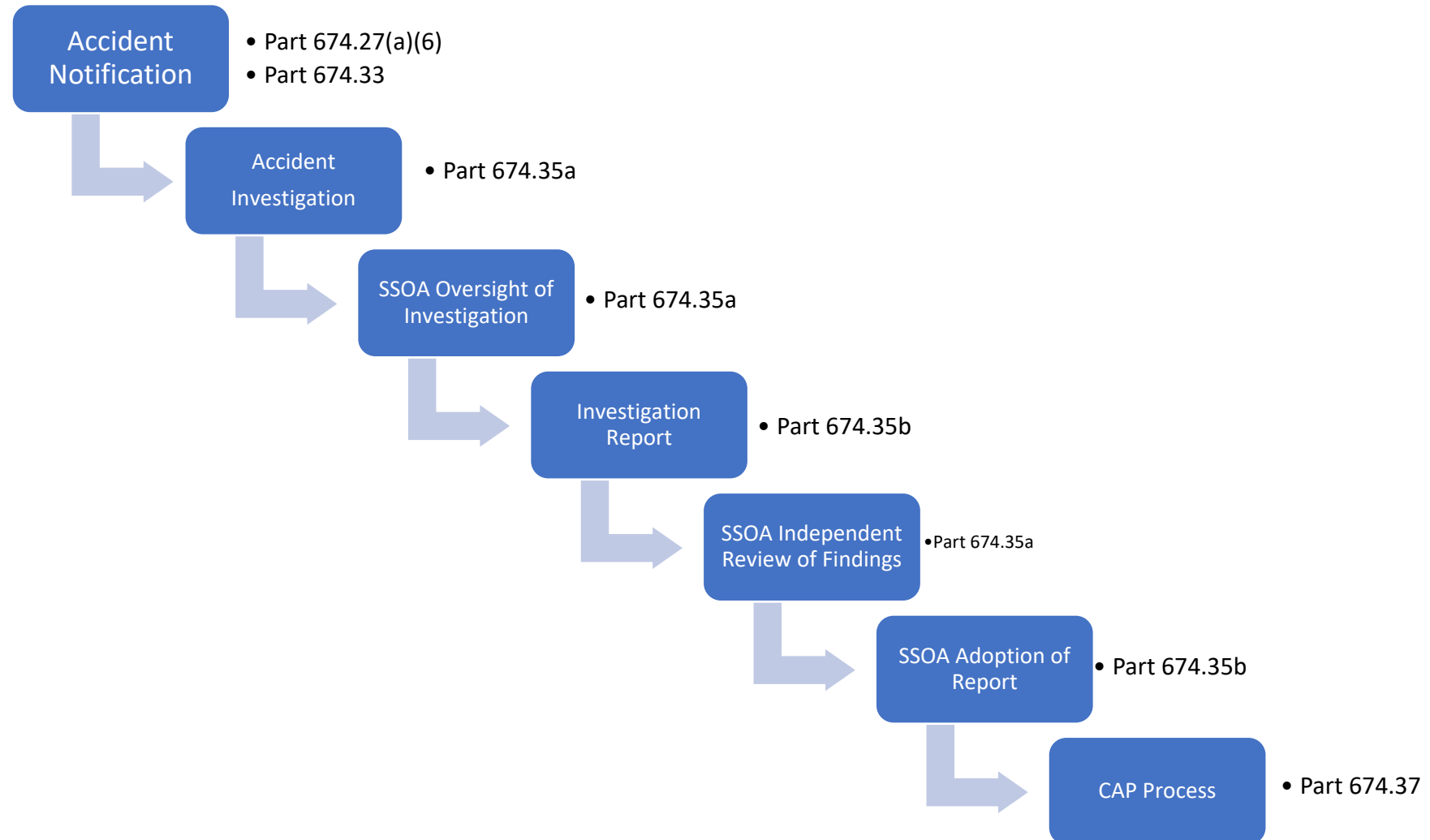


# Accident Investigations

## Part 674.35 Investigations.

- a) An SSOA must investigate or require an investigation of any accident and is ultimately responsible for the sufficiency and thoroughness of all investigations, whether conducted by the SSOA or RTA. If an SSOA requires an RTA to investigate an accident, the SSOA must conduct an independent review of the RTA's findings of causation
- b) Within a reasonable time, an SSOA must issue a written report on its investigation of an accident or review of an RTA's accident investigation in accordance with the reporting requirements established by the SSOA. The report must describe the investigation activities; identify the factors that caused or contributed to the accident; and set forth a corrective action plan, as necessary or appropriate.

# Accident Investigation Process



## Accident Investigation Poll

12. Is the SSOA required to provide the RTA notification when it conducts an independent investigation?
- a) Yes
  - b) Depends on Program Standard
  - c) Only if NTSB or FTA also investigate an accident

## Accident Investigation Poll

12. Is the SSOA required to provide the RTA notification when it conducts an independent investigation?
- a) Yes
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### Part 674.35 Investigations.

(a) An SSOA must investigate or require an investigation of any accident and is ultimately responsible for the sufficiency and thoroughness of all investigations, whether conducted by the SSOA or RTA. If an SSOA requires an RTA to investigate an accident, the SSOA must conduct an independent review of the RTA's findings of causation. In any instance in which an RTA is conducting its own internal investigation of the accident or incident, the SSOA and the RTA must coordinate their investigations in accordance with the **SSO program standard** and any agreements in effect.

## Accident Investigation Poll

13. All personnel and contractors investigating accidents on behalf of an SSOA must be registered in the Public Transportation Safety Certification Training Program.
- a) True
  - b) False

## Accident Investigation Poll

13. All personnel and contractors investigating accidents on behalf of an SSOA must be registered in the Public Transportation Safety Certification Training Program.

**a) True**

b) False

### Part 674.35 Investigations.

(c) All personnel and contractors that conduct investigations on behalf of an SSOA must be trained to perform their functions in accordance with the Public Transportation Safety Certification Training Program.

## Accident Investigation Poll

14. What must be included in an accident investigation report?
- a) Investigation activities
  - b) Factors that caused or contributed to the accident
  - c) Corrective action plan
  - d) Program Standard requirements
  - e) All the above

## Accident Investigation Poll

14. What must be included in an accident investigation report?
- a) Investigation activities
  - b) Factors that caused or contributed to the accident
  - c) Corrective action plan
  - d) Program Standard requirements
  - e) All the above**

### Part 674.35 Investigations.

(b) ...The report must describe the investigation activities; identify the factors that caused or contributed to the accident; and set forth a corrective action plan, as necessary or appropriate...



# Accident Investigation Poll

## Question 14 – Follow-up

Other common elements included in an investigation report:

- Event description
- Notification, Incident Response, and Incident Command
- Initiating Event
- Immediate Corrective Actions
- Operator Information – Fatigue Evaluation and Training
- Investigation Records
  - Operator event report
  - Field supervision report
  - Employee record/history
  - Post-accident safety inspection
  - Video analysis/ Event data recorder
  - Communications analysis

## Accident Investigation Poll

15. What is a root cause factor that contributed to a derailment?
- a) Various track variances
  - b) Operator/Human error
  - c) Wide track gauge resulting from missing Pandrol clips and lack of inspection
  - d) Train derailed

## Accident Investigation Poll

15. What is a root cause factor that contributed to a derailment?
- a) Various track variances
  - b) Operator/Human error
  - c) Wide track gauge resulting from missing Pandrol clips and lack of inspection**
  - d) Train derailed

# Accident Investigation Poll

## Question 15 – Follow-up

- “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”
  - Purpose of investigation - Determine root cause and prevent accident
  - Challenge – To avoid minimal “root causes”:
    - Car turned left into train
    - Pedestrian walked into path of train
    - Train overspeed

## Accident Investigation Poll

16. Part 674 requires SSOA approval of RTA accident investigation procedures.
- a) True
  - b) False

## Accident Investigation Poll

16. Part 674 requires SSOA approval of RTA accident investigation procedures.
- a) True
  - b) False**

# Accident Investigation Poll

## Question 16 – Follow-up

Although Part 674 does not require Accident Investigation Procedures (AIP), this is an effective practice implemented from Part 659.

- Program Standard typically requires AIP approval from SSOA
- Ensures consistent investigations
- SSOA may also follow AIP for independent investigations
- Effective practice - SSOAs using “accident investigation checklist” to ensure comprehensive report approvals

## Accident Investigation Poll

17. Are accident investigation reports formally "adopted" or "approved" by the SSOA?
- a) Adopted
  - b) Approved



## Accident Investigation Poll

17. Are accident investigation reports formally "adopted" or "approved" by the SSOA?
- a) **Adopted**
  - b) Approved
- Part 674.35 Investigation:
    - (b).The SSOA must formally **adopt** the report of an accident and transmit that report to the RTA for review and concurrence.

## Key Takeaways

- Validate event data to ensure all required accident notifications and reports are provided.
- Collisions other than RTV to RTV must include a fatality, serious injury or substantial property damage to trigger an FTA two-hour notification.
- Evacuations for life safety reasons:
  - Require RTAs to conduct appropriate investigations and SSOAs to evaluate the evacuation to ensure proper safety protocols were followed
  - Do *not* require an investigation that identifies a probable cause *if* the precipitating event was security-related
- Include primary and contributory causes in accident investigation reports.
- Ensure state accident investigation reports are comprehensive, and include Program Standard requirements



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## Contact Information

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