



Appendix O

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NJDOT SSO Program Investigation Procedures

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Procedure for NJDOT SSO Program Investigations

The NJDOT SSO program may choose to participate in or lead an investigation at an RTA/RFGPTS, under the jurisdiction of New Jersey. In all cases, it is assumed that the RTA/RFGPTS will be at least the initial investigator, even if the NJDOT SSO program joins or leads the investigation. If and when the NJDOT SSO program team participates or leads an investigation, the adopted and approved investigation procedures from the RTA/RFGPTS will be used, as well as applicable RTA/RFGPTS safety procedures, as documented in the minimum safety standards.

In establishing these procedures, FTA expects that the SSO agency will address the following:

- Options to observe RTA/RFGPTS investigation activities. The SSO agency may observe RTA/RFGPTS staff during portions of the investigation, such as on-scene response or records reviews, attend and observe all meetings of the investigation team, and review all versions of reports and briefs resulting from investigation into safety events.
- Performing a checklist-based independent review of all accident investigations to ensure all required elements are included in the report.
- Performing an audit of accident investigations to examine how evidence collected during the investigation is reflected in content of the final investigation report, strength of causal analysis determinations, and comprehensiveness of investigations.
- Performing an audit of the investigation process, including adherence to notification protocols, submission of draft reports, status updates, and final reports within required timeframes, and record keeping of final reports among other items.

There are several technical rail system and vehicle topics for which the NJDOT SSO team (including contractors and/or New Jersey Federal Railroad Administration Inspectors) might provide technical assistance and/or investigation services (as needed and resources allow), for topics such as the following:

- Track – rails, ties, road bed, switches
- Structures, Tunnels, and supporting infrastructure (e.g., ventilation, end-of-line devices and braking strategies)
- Stations and access areas
- Substations/power – to include grounding issues and safety placarding
- Power/Load Control/SCADA
- Overhead catenary/contact system (OCS)
- Third rail and contact system
- Radio control and communications
- Signals and control systems (including wayside signal huts and rooms)
- Rail vehicles
- Rail vehicle maintenance facilities and special maintenance equipment – including Yard movement and control



- Rules and procedures for operations, maintenance, and command and control (including Right-of-Way Worker Protection – RWP)
- Capital projects and safety and security certification and auditing/examinations

Notification of SSO Program Participation

- (1) The NJDOT SSO program will inform the CSO of its decision to conduct or participate in an investigation, using investigation personnel distinct from the RTA/RFGPTS staff.
- (2) The NJDOT SSO program will advise the CSO as to the personnel who will be participating or leading the investigation.
- (3) All NJDOT SSO program authorized investigation personnel are granted authority, under the New Jersey Statutes Amended (N.J.S.A.) and New Jersey Administrative Code (N.J.A.C.), to access records, materials, data, analysis, and other information which is pertinent to the investigation. The RTA/RFGPTS is expected to provide the NJDOT SSO program investigation team with the resources and information necessary to conduct the investigation in an effective and efficient manner.
- (4) The NJDOT SSO program investigation team will arrive at the RTA/RFGPTS as soon as practicable, which will generally be within 2-3 hours after notification. The NJDOT SSO program investigation team will wait until the RTA/RFGPTS and/or other emergency response personnel have secured the scene before commencing its participation in the investigation. The NJDOT SSO program reserves the right to request that the RTA/RFGPTS preserve the scene to the maximum extent feasible until arrival and start of participation in the investigation.

Information Collection and Analysis

- (1) The NJDOT SSO program investigation team may observe or participate in field analysis, operational surveys, interviews, record checks, data analysis, and other on-site and off-site tasks that may be necessary for a comprehensive investigation.
- (2) The NJDOT SSO program investigation team may observe or participate in assessing physical evidence of the scene and document the environmental and physical factors of the scene through measurements, diagrams, and photographs.
- (3) As part of the investigation, the NJDOT SSO program investigation team may observe or participate in assessing compliance with operating rules and procedures; conducting follow-up interviews (if required); analyzing employee records and the results of post-accident drug and alcohol tests; and conducting vehicle and equipment inspections.
- (4) If the NJDOT SSO program investigation team requires information or analysis which is not readily available, or which may require additional resources by the RTA/RFGPTS, it will request this information or analysis in a written request to the CSO.

Reporting and Recommendations

- (1) Upon completion of the on-site and off-site investigation requirements, the NJDOT SSO program investigation team will participate or lead in preparing a draft investigation report.



- (2) All information gathered from the investigation will be documented and included in the investigation report.
- (3) The NJDOT SSO program investigation team and the CSO will coordinate review and completion of the investigation report. The progress and final reports will follow the process described in Program Standard Section 7. Any disagreements between the NJDOT SSO program investigation team and the CSO will be either resolved through discussion or documented as part of the investigation report.
- (4) A final investigation report will be adopted and approved or issued by the NJDOT SSO program and shared with the CSO.

Follow Up

- (1) The final investigation report may contain findings and recommendations for addressing all deficiencies or unsafe conditions identified during the investigation process. The CSO will be responsible for developing appropriate CAPs for these issues from the investigation report, and the NJDOT SSO program will review/approve the CAPs. Recommendations are required to be considered for developing a CAP and the determinations be documented.



Procedure for Accident/Incident and Hazardous Condition Investigation, Analysis and Report Development

Purpose

The purpose of this procedure is to provide investigation and report development guidance for accidents/incidents and hazardous conditions that occur on, involve the equipment or personnel, or during the construction, testing, maintenance, or operation of a RTA/RFGPTS or involve the public and a RTA/RFGPTS. The RTA/RFGPTS should include detailed guidance and a process in its Agency Safety Plan (ASP), or prepare a separate procedure, for investigation, analysis and report development for accidents/incidents and hazardous conditions that occur on, at, or as a result of its RTA/RFGPTS.

Scope

This procedure provides guidance to the NJDOT SSO program when it is advised of accidents/incidents and hazardous conditions on an RTA/RFGPTS. It provides guidance to an RTA/RFGPTS and specifies that the RTA/RFGPTS must assure that accidents/incidents and hazardous conditions: 1) are reported to the NJDOT SSO program; 2) will be thoroughly investigated; 3) the most probable cause and contributing factors will be determined; 4) a procedure and process is in place for preparing and submitting appropriate corrective actions that mitigate or minimize the recurrence of an accident/incident or hazardous condition; and 5) a comprehensive report (identifying probable cause, other contributing factors, corrective actions, and a plan for implementing the corrective actions) is formally prepared and submitted to the NJDOT SSO program for review and concurrence.

General Requirements – RTAs/RFGPTS

Accidents, incidents, and hazardous conditions must be reported to the NJDOT SSO program by the RTA/RFGPTS. An operator of a fixed guideway transit system shall notify the NJDOT SSO program in accordance with Procedure SSO-003.

Very minor incidents or conditions (for ill passengers and slips, trips and falls of a minor nature and never for crashes, derailments or serious hazards or injuries) are documented in daily dispatch, and incident/occurrence logs.

Each RTA/RFGPTS investigates accidents, incidents, and hazardous conditions, according to its approved ASP and NJDOT SSO program approved Accident Investigation procedure. Procedures used by the RTA/RFGPTS must be approved by the NJDOT SSO program and are to be submitted annually with the RTA/RFGPTS ASP. The NJDOT SSO program at all times can participate in an RTA/RFGPTS investigation. **Each CSO must review its accident/incident procedures on an annual basis with the review being completed no later than April 30th. Any changes that are required in the procedures must be completed and submitted directly to the NJDOT SSO program by the CSO no later than July 1st of each calendar year for review and approval by the NJDOT SSO program.**



The RTA/RFGPTS is required to fully cooperate with the NJDOT SSO program in its investigation of accidents, incidents, and hazardous conditions.

In the event that the NJDOT SSO program decides to investigate, the RTA/RFGPTS is required to maintain the scene in an undisturbed manner to preserve all information possibly applicable to or associated with the accident investigation.

After the comprehensive investigation, the RTA/RFGPTS then develops an in depth, comprehensive report which includes the scenario, facts, analysis, data and results, probable cause and the corrective actions with the schedule and responsible person and section for completing the corrective action. The Corrective Action part of the report shall be a separate section from the findings and recommendations. If there are “No” corrective actions, it should be noted that there are “No Corrective Actions.”

Status updates must be provided to the NJDOT SSO program every thirty (30) calendar days, and when requested by the NJDOT SSO program. Updates may include but are not limited to the following:

- Minutes of any meeting held by the RTA/RFGPTS regarding the incident/accident
- List and schedule of activities that have occurred and are anticipated
- Disclosure of any immediate corrective actions the RTA/RFGPTS has planned or completed
- Principal issues or items currently being evaluated
- Overall progress and status of the investigation.

The NJDOT SSO program is notified about and the NJDOT SSO program may, at its option, elect to participate in the following activities, or receive documents regarding:

- Meetings with investigating teams, consultants, review boards, etc.
- Visual examination and measurements of individual items and component parts
- Non-destructive examinations by radiographic, ultrasonic, magnetic particle and liquid dye penetrate testing
- Equipment and facilities testing and inspection
- Review maintenance procedures and historical events
- Review of employee training and certification records
- Review of photographs, drawings, and sketches
- Review of operating rules and procedures
- Review of drug and alcohol test results
- Review of hours of service records
- Review of recorded operational data, event recorders, and communications
- Review of police and coroner reports
- Other similar investigation activities.

The RTA/RFGPTS, when conducting an investigation, documents and safeguards all information.



The CSO must submit a draft accident/incident investigation report to the NJDOT SSO program within thirty (30) calendar days of the event, or progress and status of the investigation.

The CSO must submit, as part of the monthly report to the NJDOT SSO program, a substantive status update of all ongoing investigations until the final reports are issued.

Having the RTA/RFGPTS conduct the investigation does not preclude the NJDOT SSO program from conducting an investigation at a later date.

The NJDOT SSO program reviews each investigation report to confirm that the probable cause, contributing factors, findings, and any corrective action taken/plan are included.

The RTA/RFGPTS are referred to the Conducting the Investigation, Investigation Process and The Investigation Report parts of this procedure. Additionally, the forms and checklists are pertinent and germane and are expected to strongly influence the RTA/RFGPTS ASP and procedure.

The report and all supporting documentation shall be captured digitally. The report and all supporting documents and all other digital information shall become part of the permanent record of the RTA/RFGPTS and shall be protected by the fixed guideway system and not destroyed. It shall be available so that if there is a similar occurrence it will be available for reference.

Internal logs are required to be updated with the results of the investigation, recommendations, and any corrective action taken/plans.

NJDOT SSO Program – Decision to Undertake Investigation

The NJDOT SSO program is responsible for the investigation of accidents/incidents and hazardous conditions occurring on fixed guideway transit systems, unless it delegates that responsibility to the RTA/RFGPTS, or the NTSB will investigate.

It is the practice of the NJDOT SSO program to “automatically” delegate to the RTA/RFGPTS the responsibility to conduct accident, incident or hazard investigations unless advised by the NJDOT SSO program.

Based upon information received from the RTA/RFGPTS, the NJDOT SSO program determines to: 1) defer its’ investigation to the NTSB; 2) conduct its own investigation; or 3) participate in the RTA/RFGPTS investigation; or 4) continue its normal practice of delegating the investigation to the RTA/RFGPTS.

The NJDOT SSO program reviews information, transmitted by the RTA/RFGPTS, as received via the initial notification. The NJDOT SSO program determines whether to perform (or not perform) an independent investigation of the safety event.

Criteria – Accident/Incident Investigations. Upon notification of an accident, incident, or hazardous condition, the NJDOT SSO program is guided heavily by the following in determining whether to undertake an investigation:



- The safety event involves serious injuries, fatalities, or major property damage/loss on a Fixed Guideway Operating System (this includes new construction and modifications to existing systems).
- Significant information is provided to indicate safety or security was compromised.
- It is a repetitive occurrence.
- There is potential for involvement of either jurisdictional or highly sensitive matters related to the occurrence.

If the NJDOT SSO program chooses NOT to have the RTA/RFGPTS conduct the investigation on its behalf, the NJDOT SSO program will instruct the RTA/RFGPTS immediately of the NJDOT SSO program's intent verbally by phone or in person and then in writing, via letter, or email, that the NJDOT SSO program will conduct the investigation. Having the RTA/RFGPTS conduct the investigation does not preclude the NJDOT SSO program from conducting an investigation at a later date. The RTA/RFGPTS must safeguard all data, records, photographs, test information, etc. relating or potentially relating to the situation under investigation.

If the NJDOT SSO program conducts the investigation, the NJDOT SSO program will:

- (1) Advise the RTA/RFGPTS as to the personnel who will be conducting the independent investigation.
- (2) Provide a preliminary schedule as to the investigation process to the extent possible.
- (3) Expect the RTA/RFGPTS to safeguard all records, materials, data, equipment, analysis, and other information which could be in anyway possibly pertinent to the investigation.
- (4) Expect that RTA/RFGPTS arrange for the incident/accident scene be secured to the maximum extent feasible using police or security forces until the NJDOT SSO program's accident investigation team has completed its on-site investigation.

Actions of the NJDOT SSO Program in Response to Accidents/Incidents and Hazardous Conditions

After each notification, for each accident, incident, or hazardous condition, the NJDOT SSO program makes an entry in its log assigning each log/case a number. The log contains a listing of activities tracking these reports from submittal to approval and close-out. The NJDOT SSO program records information about the situation in the log, as information becomes available from the RTA/RFGPTS in the log. Based upon information received from the RTA/RFGPTS, the NJDOT SSO program determines to:

- (1) Defer its investigation to the NTSB
- (2) Conduct its own investigation
- (3) Participate in the RTA/RFGPTS investigation
- (4) Continue its normal practice of delegating the investigation to the RTA/RFGPTS.

In any case, the NJDOT SSO program should be notified about and the NJDOT SSO program may, at its option, elect to participate in the following activities as the investigation develops on an ad hoc basis, and in any case receive the documents:



- Meetings with investigating teams, consultants, review boards, etc.
- Visual examination and measurements of individual items and component parts
- Non-destructive examinations by radiographic, ultrasonic, magnetic particle and liquid dye penetrate testing
- Equipment and facilities testing and inspection
- Review maintenance procedures and historical events
- Review of employee training and certification records
- Review of photographs, drawings, and sketches
- Review of operating rules and procedures
- Review of drug and alcohol test results
- Review of hours of service records
- Review of recorded operational data, event recorders, and communications
- Review of police and coroner reports
- Other similar investigation activities.

The contents for each report submitted directly by aCSO is reviewed for the following information:

- Pertinent facts were gathered and properly analyzed
- The most probable cause and other contributing factors were identified
- An appropriate corrective action plan was developed
- A reasonable schedule was adopted for implementing the corrective action plan
- A comprehensive investigation report was prepared.

After receipt of the final report, the NJDOT SSO program tracks any open items until completion and enters the results in the appropriate case file.

If an RTA/RFGPTS issues its final report before agreement on the draft working papers, the NJDOT SSO program prepares a response stating the areas of agreement as well as areas of disagreement and issues a report for reconciliation by the CSO. Further action may be required by the NJDOT SSO program to resolve any outstanding differences before the case file can be closed. A case report may be heard by an appointed committee with the findings issued to the CSO. In case the parties cannot reach an agreement, the final report issued by each party will be filled and the case will remain open. All safety and security findings (corrective actions) must be resolved by using the Hazard Management Process and submitted to the NJDOT SSO program. Failure to comply with this part will result in a withdrawal of the Safety Certification for the RTA/RFGPTS.

The CSO may elect to submit its investigation report in two parts:

- (1) Covering the determination of the most probable cause and additional contributing causes in one report
- (2) Covering the corrective action plan and schedule in a separate second follow-up report.



The NJDOT SSO program keeps the case file open until the RTA/RFGPTS completes its investigation and submits and completes its corrective action plan and schedule. The NJDOT SSO program issues a final notification upon completion of the corrective action plan.

An NJDOT SSO program case file will be considered “closed” upon completion of the following action items:

- All entries have been made. (Such as areas of disagreement with RTA/RFGPTS investigation report).
- The NJDOT SSO program determines the action items to be complete and enters the appropriate signature as to completion of all entries.
- The NJDOT SSO program issues its approval and notifies the CSO.

Conducting the Investigation

When conducting an investigation of an accident/incident or hazardous condition, the RTA/RFGPTS, and the NJDOT SSO program are guided by the following:

- FRA Railroad Investigator’s Handbook
- Transit Rail Accident Investigation (TSI) guidance
- Train Derailment Cause Finding (AAR, FRA, RPI, and TDC)
- Industry best practices
- Current transit industry standard from APTA (See Program Standard 7.1)

Data, analysis, and analytical reports must be protected by the RTA/RFGPTS from loss and alteration. This includes operator, witness reports, recorded or video statements; also, all photographic film, photos or electronic files or records deemed relevant or not. SCADA data, black boxes, event recorders, etc. and their records and down loaded information must be protected.

The Investigator must document that all tests, reconstruction, simulations, photographs, and documents related to the event are complete and secured under his/her jurisdiction. A log of all materials, records files, data, and reports should be made, maintained, and retained as part of the permanent record. When conducting an independent investigation, the investigator(s) documents and safeguards all information gathered from the accident/incident investigation and establishes a schedule for the completion of the on-site and off-site accident investigation requirements.

The System Safety Manager or system manager should provide potential system investigators and system department managers the checklist used for reviewing accident investigation reports (included as part of this appendix) in advance of investigating accidents, incidents, and hazards as part of a training session.

It is the responsibility of the RTA/RFGPTS to assure that the total scene is secure. Immediately, police, EMS or fire officers may secure parts of the scene to assist the injured or gather evidence. However, they may not be concerned with the whole scene and they are not concerned with the system safety, security, or NTSB investigation. This also may involve the RTA/RFGPTS negotiating with private landowners and the local police or fire department to secure the scene.



Securing the accident scene means using local police under contract, transit police or employing trained security guards to protect the site and its contents from the intrusion of the public or any non-authorized persons. It may also mean physically protecting the scene using tents, tarps, or other suitable coverings. After discussions with the police, fire, NJDOT SSO program (and NTSB if they are involved) it could mean moving the scene contents to a protected site such as a warehouse to facilitate analysis which would still involve securing that site. In some cases, rail or other vehicles or equipment must be impounded.

Investigation Process

The investigation process includes an assessment of the incident/accident and a review of potential causal and/or contributing factors. The incident/accident scene must be secured to the maximum extent feasible until on-site investigation is completed. Vehicles, data, equipment, etc. that were part of the accident or impacted by the accident must be kept secure and protected from damage, the weather, non-qualified or non-approved interested parties, theft, or vandalism.

An assessment of an incident/accident includes:

- Assessing physical evidence of the accident scene including: damage and debris analysis; skid mark analysis; the use of measurements, diagrams and photographs, and the documentation of the environmental and physical factors of the accident scene.
- Assessing as part of the investigation, compliance with operating rules and procedures; conducting follow-up interviews (if required); analyzing employee records and the results of post-accident drug and alcohol tests; and conducting vehicle and equipment inspections.

A complete photographic record (film or digital) of the whole scene, from every direction and perspective is critical. This also includes shots toward the center of the scene wide angle and telephoto; and from the center of the scene outward. It would include all buildings, vehicles, facilities, and equipment from a gross as well as a detailed perspective. All damage to the site, be it fixed guideway equipment, landscape, furniture must be captured photographically. The location of injured persons must be captured photographically both on the outside and inside fixed guideway vehicles, other vehicles, or buildings or outside (if the photos capture individuals they must be safeguarded from spurious viewing). If the incident happened at night or during inclement weather the scene will have to be re-photographed to capture what might have been missed. Video photography may certainly be helpful but cannot replace still photography.

At grade crossing or in-street-running situations where a motor vehicle, bicycle, or pedestrian is involved with fixed guideway vehicles, then that non-fixed guideway component of the accident must be thoroughly investigated for cause. Police investigations may be limited to fault and do not always focus on cause.

Therefore, the reasons causing the motor vehicle, bicycle, or pedestrian crash must be thoroughly explored including but certainly not limited to traffic control devices, pavement condition, lighting, glare. (FTA/TSI offers Bus Collision Investigation courses which discuss motor vehicle aspects of crashes, incidents, and accidents.)



The NJDOT SSO program may identify areas of concern regarding causal factors and/or findings relating to an occurrence.

The investigator(s) catalogue all information of any sort gathered during the investigation. That catalog becomes part of the permanent record and should be an appendix to the report.

Data and analysis and analytical reports must be protected from loss and alteration. This includes operator, witness statements, reports, recorded or video statements; also all photographic film, photos or electronic files or records. The relevance of anything cannot be determined until after the whole process including the report acceptance by the NJDOT SSO program is completed. SCADA data, black boxes, event recorders, etc. and their records and downloaded information must be protected.

No destructive testing may be done unless approved by the NJDOT SSO program.

At any point the NJDOT SSO program may request that additional investigation be undertaken.

The Investigation Report

At the completion of the investigation activities the NJDOT SSO program if it led the investigation will issue a draft report and consult with the CSO; and then finalize the report. Based on the NJDOT SSO program's report (or the NTSB report and findings), the CSO develops the corrective action plan. Each corrective action should include an implementation schedule and the department/section and person responsible.

Upon completion of investigation activities by the RTA/RFGPTS, the CSO prepares and submits its draft final report to the NJDOT SSO program for review and approval. It should include any corrective action taken/plans including an implementation schedule and department/section and person responsible for each corrective action.

Investigation reports provided to the NJDOT SSO program will be reviewed in accordance with the *Rail Transit State Safety Oversight (SSO) Program Independent Investigation Review Checklist*. The NJDOT SSO program may conduct a meeting to discuss the draft final report with the CSO and may request the report be revised based on the comments.

The NJDOT SSO program is to be made aware as interim information is available and is to be provided to the NJDOT SSO program, as determined necessary by the NJDOT SSO program. Interim reports may include:

- Minutes of any meeting held by the RTA/RTS regarding the incident/accident
- Disclosure of any immediate corrective actions the RTA/RFGPTS has planned or completed
- Police reports
- Injury reports
- Crash analysis
- Deaths after the accident



- Detailed scientific, engineering, or technical data and the analysis
- Principal issues or items currently being evaluated
- Overall progress and status of the investigation.

The RTA/RFGPTS must include a status report for all accidents, incidents, and hazards in the monthly report, subsequent to the occurrence, until the final report is issued.

A final investigation report is provided to the NJDOT SSO program for review and approval. It must be comprehensive and must include a description of investigation activities, resultant findings, identified causal factors and any contributing factors, and a corrective action plan with the responsible person and schedule set out. **At a minimum, the investigation must be signed (and dated) by the investigating team members (including security manager in the case of a security event) and safety staff. The CSO must accept the investigation report and submit it to the NJDOT SSO program with any supporting documents.** A corrective action plan, submitted by the RTA/RFGPTS, sets forth in detail the actions by their organization to minimize, control, correct, or eliminate and investigate unsafe or hazardous conditions.

Parts of the report:

- (a) Executive Summary
- (b) Sequence of Events, (prior to the accident/incident, the accident/incident, subsequent to the accident/incident)
- (c) Description of the injuries, including: Nature of the injuries
- (d) Where the injured were located on the vehicle (use of a vehicle diagram is acceptable)
Number of persons transported for medical treatment and where they were transported to.
- (e) Analysis/Findings: discussions of technical, engineering, or scientific tests including pertinence and relevance
- (f) Conclusions
- (g) Probable Cause
- (h) Contributory Causes
- (i) Recommendations
- (j) Corrective Actions Taken/Plan
- (k) Appendices:
 - Data
 - i. Including SCADA Downloads,
 - ii. VHLC Downloads
 - iii. Vehicle Event Recorder downloads (if the vehicle is equipped with more than one event recorder, all event recorder data must be included)
 - iv. Vehicle Inspection reports (Include the most current prior to the incident and the post incident inspection)
 - v. Last Track inspection report
 - vi. Last Switch inspection report
 - vii. Last Signal/Grade crossing inspection report
 - Supporting memos,



- Technical and engineering and other analytical reports,
 - Charts,
 - Graphs,
 - Field Sketch (with geographic North indicate on drawing),
 - Pictures of the incident scene, including photos of damage and other information,
- (l) Police, fire, coroner, fire marshal, EMS, and other agency investigative report(s).

Depending on the size of the report, a table of contents for the report body and appendices is helpful or necessary.

The report should include various items such as a location map, site diagram (with indication of north), photos, charts, graphs, and other supporting documentation/material. If the incident deals with machinery or equipment site and equipment photos and equipment exploded diagrams or drawings may be necessary.

The RTA/RFGPTS CSO must submit its accident/incident investigation report to the NJDOT SSO program within thirty (30) calendar days of the event.

Investigation reports provided to the NJDOT SSO program will be reviewed in accordance with the *Rail Transit State Safety Oversight (SSO) Program Independent Investigation Review Checklist*. If necessary, the NJDOT SSO program may conduct a meeting to discuss the draft report with the CSO and may request the report be revised based on the comments.

The final report issued by the RTA/RFGPTS may be separated into two parts:

- **Part 1** – contains the description of investigation activities, investigation findings, and a determination of the most probable cause and additional contributing causes
- **Part 2** – contains recommendations to prevent recurrence, including a Corrective Action Plan developed and implemented in accordance with RTA/RFGPTS approved Agency Safety Plan (ASP), and/or System Security Plan (SSP).

The NJDOT SSO program issues a letter to approve the report. The contents for each report submitted by an RTA/RFGPTS are reviewed for the following information:

- Pertinent facts were gathered and properly analyzed.
- The most probable cause and other contributing factors were identified.
- An appropriate corrective action plan was developed.
- A reasonable schedule was adopted for implementing the corrective action plan
- A comprehensive investigation report was prepared.

If an RTA/RFGPTS issue its final report before agreement on the draft report, the NJDOT SSO program prepares a response stating the areas of agreement as well as areas of disagreement and issues a report for reconciliation by the CSO. Further action may be required by the NJDOT SSO program to resolve any outstanding differences before the case file can be closed in case the parties cannot reach an agreement, the final report issued by each party will be filled and the case will remain open. All safety and security findings (corrective actions) must be resolved by using the



Hazard Management Process and submitted to the NJDOT SSO program. Failure to comply with this part will result in a withdrawal of the Safety Certification for the RTA/RFGPTS.

An NJDOT SSO program case file will be considered “closed” upon completion of the following action items:

- All entries have been made. (Such as areas of disagreement with RTA/RFGPTS investigation report).
- The investigation report is approved by the NJDOT SSO program and the letter is issued.
- The NJDOT SSO program determines the corrective action items to be complete and enters the appropriate signature as to completion of all entries.
- The NJDOT SSO program issues its approval to the closure of the corrective action(s) and notifies the RTA/RFGPTS.

The report and supporting documents shall be maintained by the NJDOT SSO program.

NTSB Investigations

The NTSB may investigate an accident to achieve its primary function to promote safety in transportation. In such case, the NTSB is responsible for the investigation, determination of facts, conditions, and circumstances and the cause or probable cause or causes of the accident; and, makes recommendations to reduce the likelihood of recurrence of the accident.

Any employee of the NTSB, upon presenting appropriate credentials, is authorized to enter any property wherein a transportation accident has occurred or wreckage from any such accident is located and do all things necessary for proper investigation, including examination or testing of any vehicle, rolling stock, track, or any part of any such item when such examination or testing is determined to be required for purposes of such investigation.

The NTSB will designate an Investigator-In-Charge (IIC) who shall organize, conduct, control, and manage the field investigation. The IIC has the authority to supervise and coordinate all resources and activities of all personnel, both NTSB members and non-members, involved in the investigation.

The IIC designates parties to participate in the investigation. Parties shall be limited to persons, governmental agencies, companies, and associations whose employees, functions, activities, or products were involved in the accident or incident and who can provide suitable qualified personnel to actively assist in the investigation. The NJDOT SSO program Investigator may be designated a party representative by the IIC.

The Investigator, if designated a party representative to participate in the investigation, shall be responsive to the direction of the NTSB representatives and comply with assigned duties. Failure to comply may result in loss of party status. The Investigator must inform the NTSB of the roles and responsibilities, regarding accident and incident investigation, of the agency represented. In the event, the NJDOT SSO program determines to conduct an independent investigation, the NTSB must be informed. The Investigator, as a party representative, may submit written proposed



findings to be drawn from the evidence produced; a proposed probable cause(s); and/or, proposed safety recommendations to prevent future accidents to the IIC.

Any examination or testing shall be conducted in such a manner so as not to interfere with or obstruct unnecessarily the transportation services provided by the owner or operator of such vehicle, rolling stock, or track, and shall be conducted in such a manner so as to preserve, to the maximum extent feasible, any evidence relating to the transportation accident, consistent with the needs of the investigation and with the cooperation of such owner or operator. The employee may inspect, at reasonable times, records, files, papers, processes, controls, and facilities relevant to the investigation of such accident. Each inspection shall be commenced and completed promptly and the results of such inspection, examination, or test made available to the parties.

The NJDOT SSO program will assist the NTSB, if possible, by providing information about the RTA's/RFGPTS safety critical practices and other matters as appropriate. Providing the NTSB releases preliminary findings and recommendations, the NJDOT SSO program will be available for any discussions and reviews with the participating parties. The NJDOT SSO program will assess the NTSB findings, draft, and final reports and make a determination whether or not to adopt the NTSB recommendations. Should the NJDOT SSO program adopt the NTSB recommendations, a notification will be issued to the RTA/RFGPTS for implementation. The RTA/RFGPTS will be required to follow related procedures, as defined in other parts of this Standard.

The RTA/RFGPTS is responsible for the timely briefing of the NJDOT SSO program on NTSB investigation activities including meeting, reviews, requests for data, functional testing, examination of equipment and facilities, and the results of drug and alcohol tests. Additionally, the RTA/RFGPTS must provide the NJDOT SSO program with a copy of all written correspondence to the NTSB concerning a reportable incident or investigation and provide the NJDOT SSO program with a copy of all NTSB reports and recommendations concerning the event or its investigation, when this information is received by the RTA/RFGPTS.



FORMS and CHECKLISTS

- Checklist for Rail Transit State Safety Oversight (SSO) Program Independent Investigation Review Checklist

Updates:

- March 5, 2018 – Initial release with Version 1.0
- July 7, 2020 – minor word choice changes and change of SSPP to Agency Safety Plan
- October 1, 2021 – additional minor changes to match changes made in Section 6 and 7; inclusion of CSO
- March 1, 2022 - Updated with EAR v2.0 24 HR SUMMARY REPORT and INVESTIGATION blank forms.



**Rail Transit State Safety Oversight (SSO) Program
Independent Investigation Review Checklist**

Objective: Complete an independent review of investigation activities and reports to assure sufficiency and thoroughness, per Part 674.35, as well as conduct an independent review of the findings of causation.

Topic	Investigation Report Information
General Safety Event Description	
Rail Transit Agency (RTA)* or System (RFGPTS)	
Investigation Report Number*	
Date and Time of Safety Event*	
Weather Conditions*	
Short Description/Summary*	
Safety Event Type, Reportable Criteria*	
Location of Safety Event – include nearest station and location marker*	
Rail line, direction, track number*	
Train Identification (number of cars in consist)*	
Casualties – Fatalities or Injuries, including location; follow-up*	
Notifications	
Internal RTA/RTS – divisions/departments, radio calls, digital messages	
SSO Program – how contacted, person, date, and time*	
FTA – how contacted, date, and time**	
NTSB – how contacted, report number, date, and time**	
Investigator Notified*	
Others	
Initiating Event and Response Descriptions	
Initiating Event Description – general description of the situation(s) that led up to the safety event occurring	
Response and Incident Command Description – who responded to the scene, transition of command – who and when relieved, when scene transitioned to Safety, when scene released for repairs and back to operations	
Immediate Actions Taken	
Description of what was done to mitigate the situation in the short term, anyone transported for medical attention or drug and alcohol testing**	
SSO Program Approval – reviewed, letter, date**	
Employee Human Factors	
Operator Information	
Other Employees potentially involved and a part of the investigation (Controller, maintainer, field supervision, stations personnel, management, etc.)	



**Rail Transit State Safety Oversight (SSO) Program
Independent Investigation Review Checklist**

Topic	Investigation Report Information
Drug & Alcohol Testing – describe who and when, note meeting the required timeframe, if applicable	
Fatigue Management – Hours of Service, previous rest cycle	
Training Records, including determination of being up-to-date, previous incident history and discipline	
Investigation Data and Analysis	
Operator Event Report	
Field Supervision Report	
Employee record/history	
Interviews (on-scene, off-scene)	
Police Activities/Report	
On-Scene Conditions Summary Description – vehicles, infrastructure, signals	
Post-Accident Safety Inspections – Vehicles, Infrastructure	
Inspection, Maintenance, State of Good Repair Analysis – vehicles, infrastructure	
Video Analysis/Review	
Event Recorder Analysis/Review	
Communications Analysis	
Pictures, drawings, measurements, and visual documentation	
Special technical services – metallurgy, analytical services	
Reconstruction of Safety Event	
Damage/Maintenance, Return to Service	
Description of damage – vehicles, stations, infrastructure, facilities, signals, crossing gates, switches, track	
Labor and Material cost to bring system back to a state of good repair*	
Status for the vehicles	
Status for infrastructure elements damaged	
Determination of Safety Performance and Need for Improvements**	
Staff recognizing the event or potential event	
Following procedures/effectiveness of procedures	
Problem-solving – Rail Operator, Field Supervision, Controllers	
Communication and coordination – Rail Operator, Field Supervision, Controller(s)	
Process of securing the train/scene – problems or issues	
Safety performance of any Passenger/Patron Evacuation – Police, EMS, field supervision	
Process of return to service	



**Rail Transit State Safety Oversight (SSO) Program
Independent Investigation Review Checklist**

Topic	Investigation Report Information
Safety Performance of others responding in the field	
Findings, Causal, and Contributing Factors	
List the findings, causal, and contributing factors*	
Do the findings, causal, and contributing factors identified appear to be appropriate and complete?	
Recommendations and Corrective Actions	
List the Recommendations and Corrective Actions*	
Do the recommendations appear to address all of the findings and factors?	
Are additional recommendations/corrective actions required to address issues reported in the investigation?	
Describe any disputes between the Investigation and Rail Departments/Divisions.	
Reference Reports and Exhibits and Distribution	
List reports and exhibits related to the investigation report – For each document, list owner department or division, person if provided, and date completed**	
List Requests for Information (RFIs) and Requests for Additional Information (RFAIs) required to complete this investigation review – Event Numbers, Drug and Alcohol testing information, information that was missing, any other interactions with the RTA/RTS to complete this review.**	
Report Distribution List – was everyone that had a role in the investigation, approving management, or receiving recommendations included in the distribution?	
Independent Investigator Review	
Investigator Completing the Independent Review**	
Date Review was Completed**	
Review and Process in SSOR database (Noting all Discrepancies)***	
Affirmation of investigation sufficiency and thoroughness, and Concurrence with findings of causation [Electronic Signature]	

* Data may already be collected in the database

** Data should be collected for tracking, analysis, and trending [additional table or added to existing table]

*** Data must be “submitted electronically through a reporting system specified by FTA.” Necessary details are found in “a reporting manual developed for the electronic reporting system specified by FTA.” [Parts 674.39 and 674.33(a)]

Note: Review of Findings, Factors, Recommendations, and Corrective Actions require the review of the other aspects of the investigation, safety performance during and after safety event, and potential improvements that should be considered to assure better response capabilities and/or potential for prevention in the future.

Note: Recommendations and Corrective Actions are also reviewed via checklist, approved, and tracked separately from this independent review of the investigation report.

Independent Investigation Review Checklist
Instructions and Guidance for Information to be Collected from Investigation Report
Updated: 10/01/2021

Objective for Use of the Checklist:

Complete an independent review of investigation activities and reports to assure sufficiency and thoroughness of the investigation, per Part 674.35, as well as conduct an independent review of the findings of causation.

Sufficiency and thoroughness are assessed based on the ability of the reviewer to fill in each checklist row and by determining if anything is missing or has been left out of the investigation report. Then, once the checklist is populated, the reviewer considers whether or not the findings of causation are consistent and complete to address the information from the investigation report in the checklist. This includes causal and contributing factors. Completeness and content of corrective actions are assessed in a separate checklist from this one.

General Instructions:

For each topic, information should be collected from the investigation report and copied/entered into the checklist. If the information is not applicable, use N/A. If the information is not found, that should be indicated with a note as to whether or not it is an issue for the review.

The investigation review checklist includes topics that may only be relevant for significant safety events, and not all investigations. If the topic is not applicable, that should be indicated as N/A. None of the Investigation Report Information rows should be left blank.

Category: General Safety Event Description

Topics

- Rail Fixed Guideway Public Transportation System (RFGPTS)
 - Name of the Rail Transit Agency and RFGPTS
- Investigation Report Number
 - Investigation Report Number from the RFGPTS and the SSO program
- Date and Time of Safety Event
 - Date and Time of the Safety Event – this information may have slight adjustments based on the investigation results
- Weather Conditions
 - Weather Conditions at the time of the Safety Event, if applicable/outside or relevant to the investigation process
- Short Description/Summary
 - Short Description/Summary – this should be consistent with the type of safety event and where it occurred
- Safety Event Type, Reportable Criteria
 - Safety Event Type, Reportable Criteria – this might be FTA reportable or State reportable type, criteria, and threshold for the safety event that occurred.

- Location of Safety Event – include nearest station and location marker
 - Location of Safety Event – a description of the location including station, location marker or any other information to best describe the location of the safety event
 - Rail line, direction, track number
 - Rail line – this could be a color, number/letter, name of rail line; Direction – if on the right of way, which track was the location closest to; Track Number – track number, if they are numbered
 - Train identification (number of cars in consist)
 - Train identification, including number of rail vehicles and each rail vehicles identification number or designation; this might also include the train block or schedule number as well.
 - Casualties – Fatalities or Injuries, including location; follow-up
 - Short description of the number of fatalities or injuries, if people were transported for medical attention, any understanding of potential serious injuries
-

Category: Notifications

Topics

- Internal RFGPTS – divisions/departments, radio calls, digital messages
 - The investigation report or related documentation should provide a description of how internal RFGPTS divisions/departments were contacted; this might include radio call signs for individuals or the digital message system used.
 - SSO Program – how contacted, person, date, and time
 - This should include who from the RFGPTS made contact with the SSO program, how communication was completed, date and time; this might also include the SSO program staff member contacted
 - FTA – how contacted, date, and time
 - For FTA reportable events, how was FTA contacted (email or phone), date, time, and the RFGPTS person completing this contact
 - NTSB – how contacted, report number, date and time
 - For NTSB reportable events, how was NTSB contacted (phone), date, time, the assigned NTSB case number, and the RFGPTS person completing this contact
 - SSO Program Investigator Notified
 - This may be the same person contacted in SSO Program above or may be a separate communication from a central communication center or additional RFGPTS staff making additional contact.
 - Others
 - Include any others that needed to be contacted/notified of interest or relevance to the investigation process
-

Category: Initiating Event and Response Descriptions

Topics

- Initiating Event Description – general description of the situation(s) that led up to the safety event occurring
 - This initiating event description information can be cut and pasted from the investigation report. The investigation reviewer has discretion as to how much of the description is used. Enough information should be provided to fully describe the relevant information describing the initiating event.
 - Response and Incident Command Description – who responded to the scene, transition of command – who and when relieved, when scene transitioned to Safety, when scene released for repairs and back to operations.
 - This description is focused on responders to the scene, including the rail operator, field supervision, emergency responders, management, safety, and others, as appropriate. In addition, the description should be focused on the timeline of the response and by whom, as well as the transition of who was primary incident commander throughout the response. This information can be cut and pasted/copied from the investigation report. The investigation reviewer has discretion as to how much of the description is used.
-

Category: Immediate Actions Taken

Topics

- Description of what was done to mitigate the situation in the short term, anyone transported for medical attention or drug and alcohol testing
 - These might be mitigations taken at the scene and actions taken to secure the scene and return to service. Some actions that might be taken will include transport of patrons, public persons or workers/employees for medical attention; transport of workers/employees for drug and alcohol testing, as deemed necessary.
 - SSO Program Approval – reviewed, letter, date
 - The SSO program reviewer should consider if any of the Immediate Actions Taken rose to the level of a corrective action and if yes, request that those actions be addressed as corrective actions. Otherwise, the immediate actions taken should be formally approved in a timeframe documented in the program standard. The checklist should indicate if these immediate actions taken were reviewed and approved along with an indication of how and the date.
-

Category: Employee Human Factors

Topics

- Operator Information
 - Describe who the operator is, usually a badge/employee number. This might include more than one person if there was another employee in the operator area.
- Other Staff potentially involved and a part of the investigation (Controller, maintainer, field supervision, stations personnel, management, etc.)

- In some cases, other employees might have a role in the safety event or immediate response, such as controllers, maintainers, field supervision, station personnel, management, etc.
 - Drug & Alcohol Testing – describe who and when, note meeting the required timeframe, if applicable.
 - This is an indication of whether or not staff were sent for drug and alcohol testing. This would include who was sent for testing and why. If staff were not sent for testing, what was the reason/determination.
 - Fatigue Management – Hours of Service, previous rest cycle
 - Were there any fatigue management issues that were apparent based on human factors issues.
 - Training Records, including determination of being up-to-date, previous incident history and discipline
 - A review of the training records for staff involved in the safety event, including previous incidents and any discipline, as appropriate.
-

Category: Investigation Data and Analysis

Topics

- Operator Event Report
 - Operator or others in the operating cab reports if train involved in safety event
- Field Supervision Report
 - Field supervision report for responding to safety event
- Staff record/history
 - Any important or summary information regarding staff training or history, should be consistent from the Employee Human Factors
- Interviews (on-scene, off-scene)
 - Summaries of any interviews related to the investigation
- Police Activities/Report
 - If police responded or were involved in the investigation, provide a summary of the police activities or reference to a police report, if there was one
- On-Scene Conditions Summary Description – vehicles, infrastructure, signals
 - Summary description or reference to drawings regarding the on-scene conditions related to the safety event being investigated
- Post-Accident Safety Inspections – Vehicles, Infrastructure
 - Summary description or reference to documentation/work orders for post-accident safety inspections – vehicles and infrastructure
- Inspection, Maintenance, State of Good Repair Analysis – vehicles, infrastructure
 - Summary description or reference to documentation/work orders for inspection, maintenance, state of good repair analysis
- Video Analysis/Review
 - Summary description or reference to use of video analysis/review for the investigation, if completed
- Event Recorder Analysis/Review
 - Summary description or reference to use of event recorder analysis/review for the investigation, if completed

- Communications Analysis
 - Summary description or reference to use of communications analysis/review for the investigation, if completed
- Pictures, drawings, measurements, and visual documentation
 - Summary description or reference to pictures, drawings, measurements, and visual documentation used for the investigation
- Special technical services – metallurgy, analytical services
 - Summary description or reference to any special technical services used for the investigation such as for metallurgy or analytical services
- Reconstruction of Safety Event or After Action
 - Summary description or reference to any reconstruction of the safety event or after-action meeting held to review the safety event being investigated

Category: Damage/Maintenance, Return to Service

Topics

- Description of damage – vehicles, stations, infrastructure, facilities, signals, crossing gates, switches, track
 - Summary description of damage for all aspects of the rail systems and vehicles, may include reference to work orders
- Labor and Material cost to bring system back to a state of good repair
 - Summary description of labor and material costs to bring the rail systems and vehicles to a state of good repair, may include reference to work orders
- Status for the vehicles
 - Summary description of control, movement, inspection, maintenance, and return to service for rail vehicles involved in the safety event and investigation.
- Status for infrastructure elements damaged
 - Summary description of control, actions taken to secure, inspection, maintenance, and return to service for rail system infrastructure elements damaged.

Category: Determination of Safety Performance and Need for Improvements – this category is focused on the organizational accident and contributing factors related to the safety event that occurred and making improvements to potentially preventing a future safety event.

Topics

- Staff recognizing the event or potential event
 - Describe any issues with staff recognizing the safety event or potential safety event.
- Following procedures/effectiveness of procedures
 - Describe any issues with staff following procedures and effectiveness of those procedures.
- Problem-solving – Rail Operators, Field Supervision, Controllers
 - Describe any issues with staff problem-solving, possibly including rail operators, field supervision, or controllers.
- Communication and coordination – Rail Operators, Field Supervision, Controller(s)

- Describe any issues with staff communication and coordination, possibly including rail operators, field supervision, or controller(s).
 - Process of securing the train/scene – problems or issues
 - Describe any issues regarding the process of securing the train/scene.
 - Safety performance of any Passenger/Patron Evacuation – Police, EMS, field supervision
 - Describe any issues regarding safety performance of any passenger or patron evacuations, possibly including police, EMS, or field supervision.
 - Process of return to service issues
 - Describe any issues regarding the process of return to service
 - Safety Performance of others responding in the field
 - Describe any issues regarding safety performance of any others responding in the field
-

Category: Findings, Causal, and Contributing Factors

Topics

- List the findings, causal, and contributing factors
 - Describe the findings, causal, and contributing factors provided in the investigation report.
 - Do the findings, causal, and contributing factors identified appear to be appropriate and complete?
 - Evaluate and describe whether or not the findings, causal, and contributing factors identified in the investigation report appear to be appropriate and complete.
-

Category: Recommendations and Corrective Actions

Topics

- List the Recommendations and Corrective Actions
 - This should include any recommendations and corrective actions listed in the investigation report.
 - Do the recommendations and corrective actions appear to address all of the findings and factors?
 - The reviewer must determine if the recommendations and corrective actions appear to address all of the findings and factors. Additional evaluation for the content of corrective actions should be completed separate from and in addition to this checklist.
 - Are additional recommendations/corrective actions required to address issues reported in the investigation?
 - Describe any issues, recommendations, or corrective actions that need to be considered by the RFGPTS investigator(s) based on the investigation report.
 - Describe any disputes between the Investigation and Rail Departments/Divisions.
 - In some cases, there are disagreements between departments/divisions of the RFGPTS with the results of the investigation. Any disputes should be described here, including any next steps planned.
-

Category: Reference Reports and Exhibits and Distribution

Topics

- List reports and exhibits related to the investigation report – for each document, list owner department or division, person if provided, and date completed
 - Provide a listing of the documents related to the investigation used to complete the checklist.
 - List Requests for Information (RFIs) and Requests for Additional Information (RFAIs) required to complete this investigation review – Case Numbers, Drug and Alcohol testing information, information that was missing, any other interactions with the RFGPTS to complete this review.
 - Provide a summary of any RFIs or RFAIs needed for completion of the checklist
 - Report Distribution List – was everyone that had a role in the investigation, approving management, or receiving recommendations included in the distribution?
 - Provide a summary of those on the report distribution list. Point out if any departments/divisions or staff were left off of the distribution.
-

Category: Independent Investigator Review

Topics

- Investigator Completing the Independent Review
 - Provide the name of the investigator completing the independent review
- Date Review was Completed
 - Provide the date this review was completed
- **Review and Process in SSOR database (Noting all Discrepancies)**
- Affirmation of investigation sufficiency and thoroughness and Concurrence with findings of causation [Electronic Signature]
 - Provide an electronic signature or clear affirmation from the investigator completing the independent review.



NJDOT State Safety Oversight Agency



EAR Number

Property Tracking Number

NJ Tracking Number

24 HR SUMMARY REPORT

EAR v2.0

Reported by

Title

RFGPTS

Event Date

Event Type

Event Time

Event Type Detail

Event Sub Type

Grade Crossing

Tow Required Due to Disablement

Tow-Rail Vehicle

Tow-Motor Vehicle

Station

Serious Injury

Event Location

Fatalities

Injury [Evac. to Hosp.]

Minor Injury

Substantial Damage

Temperature

Environmental Conditions

Vehicle ID	Track	Direction
#1 <input type="text"/>	<input type="text"/>	<input type="text"/>
#2 <input type="text"/>	<input type="text"/>	<input type="text"/>
#3 <input type="text"/>	<input type="text"/>	<input type="text"/>

Summary of Event

[Large empty text area for event summary]

Immediate Action Taken

[Empty text area for immediate action taken]



NJDOT State Safety Oversight Agency



Investigation

EAR Number

EAR v2.0

Property Tracking Number NJ Tracking Number

Reported by Title

RFGPTS Event Date

Event Type Event Time

Event Type Detail

Event Sub Type

Grade Crossing

Tow Required Due to Disablement Tow-Rail Vehicle Tow-Motor Vehicle

Station

Serious Injury

Event Location

Fatalities

Injury [Evac. to Hosp.]

Minor Injury

Substantial Damage

Temperature

Environmental Conditions

	Vehicle ID	Track	Direction
#1	<input type="text"/>	<input type="text"/>	<input type="text"/>
#2	<input type="text"/>	<input type="text"/>	<input type="text"/>
#3	<input type="text"/>	<input type="text"/>	<input type="text"/>

Summary of Event

Sequence of Events



NJDOT State Safety Oversight Agency



Investigation

EAR Number

EAR v2.0

Property Tracking Number NJ Tracking Number

#5

NTD Report Number NTSB Report Number

PD Case Number Property Report ID

Analysis/Significant Findings

Conclusions

DRAFT



NJDOT State Safety Oversight Agency



Investigation

EAR Number

EAR v2.0

Property Tracking Number NJ Tracking Number

Contributory Causes

- Action of Motorist
- Poor Maintenance
- Trespasser
- Operator Rule-Human Factor
- Equipment Failure
- Slips and Falls
- Medically Related
- Imprudent Customer Actions
- Pedestrian Actions
- Suicide
- None
- Other

Probable Cause

Probable Cause Notes

Immediate Action Taken

Corrective Actions

DRAFT



NJDOT State Safety Oversight Agency



Investigation

EAR Number

EAR v2.0

Property Tracking Number

NJ Tracking Number

Investigator Name / Title

Investigator Signature

Any signature (including any electronic symbol or process attached to, or associated with, a contract or other record and adopted by a Person with the intent to sign, authenticate or accept such contract or record) hereto or to any other certificate, agreement or document related to this transaction, and any contract formation or record-keeping through electronic means shall have the same legal validity and enforceability as a manually executed signature or use of a paper-based recordkeeping system to the fullest extent permitted by applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any similar state law based on the Uniform Electronic Transactions Act, and the parties hereby waive any objection to the contrary.

- Reviewer 1: I consent to signing this document electronically
- Reviewer 2: I consent to signing this document electronically
- Reviewer 3: I consent to signing this document electronically
- Reviewer 4: I consent to signing this document electronically
- Reviewer 5: I consent to signing this document electronically