



ATLANTA STREETCAR

CORRECTIVE ACTION PLAN PROGRAM

December 6, 2014

1.0 Purpose

The Atlanta Streetcar has developed this Corrective Action Plan (CAP) Program Plan (the Program or Plan) focusing on the systematic identification and tracking of root causes of identified problems or unacceptable risks in an attempt to prevent their occurrence or recurrence.

2.0 Scope

This Plan is intended to assist Atlanta Streetcar in identifying a corrective action process in a logical and organized manner. In developing this plan, Atlanta Streetcar has incorporated the relevant portions of applicable safety policies, plans, and governmental reporting requirements:

- *Atlanta Streetcar System Safety Program Plan*
- *Georgia Department Of Transportation (GDOT) Program Standard for Rail Safety and Security Oversight*
- *49 CFR 659 - Rail Fixed Guideway Systems; State Safety Oversight (SSO)*
- *National Transportation Safety Board (NTSB) 49 CFR 840.3 - Notification Rules*
- *49 CFR 831 - Accident Investigation Procedures*
- *American Public Transportation Association (APTA) Standard for Rail Transit Accident / Incident Investigation;*
- *The Atlanta Streetcar Accident / Incident Investigation SOP;*
- *Atlanta Streetcar Hazard Management Plan.*

3.0 Roles and Responsibilities

Internal

The Atlanta Streetcar **Director of Streetcar Services** is responsible for ensuring awareness of, and compliance with, this plan throughout the organization and execution of the actions outlined herein.

Per the ASC SSPP and the Intergovernmental Agreement for the Operation and Maintenance of the Atlanta Streetcar (hereinafter IGA), the Safety Certification and Security Committee is responsible for addressing, deciding and resolving all issues related to safety and security including the adoption and resolution of corrective action plans

The Atlanta Streetcar **Director of Safety, Security and Training** will:

- Manage the Atlanta Streetcar Corrective Action Plan Program in concert with the Atlanta Streetcar Accident / Incident Investigation Program, Internal Safety and Security Audit Program and Hazard Management Program.
- Function as the primary point of contact with GDOT, NTSB, FTA, and other external agencies and regulatory bodies.
- Implement this plan and procedure with their staff and internal Atlanta Streetcar stakeholders.

External

Georgia Department of Transportation

To ensure GDOT has an ongoing role in the oversight of Atlanta Streetcar’s Safety, the Director of Safety, Security and Training will make its Corrective Action Plan tracking log available. GDOT may review the log at any time and direct questions to the Director of Safety, Security and Training in writing, but may not remove any materials from the property. In addition to facilitating this on-site review, Atlanta Streetcar will submit its CAP tracking log and other corresponding materials to GDOT quarterly.

Contractors

The Executive Director, the Director of Safety, Security and Training and the Safety Certification and Security Committee may decide separately or together to request the assistance of a 3rd party contractor to support implementation of corrective action measures. Atlanta Streetcar will define the duties of that contractor upon retention of such contractor, and will provide duties to GDOT as requested by GDOT.

4.0 Corrective Action Plan Development Process

Corrective action plans will be developed when deficiencies are found during the following conditions:

- a. **Internal Safety and Security Audit Program** - CAPs will be developed when findings of non-compliance is identified from Atlanta Streetcar internal safety and security audit final reports.
- b. **Hazard Analysis** – CAPs will be developed to correct elements or activities identified to be unacceptable hazardous conditions (UHC) as a result of Atlanta Streetcar or external investigations. CAPs will also be developed as a result of findings and recommendations from formal hazard analyses (Preliminary Hazard Analysis, Failure Mode and Effects Analysis, Operations Hazard Analysis, Fault Tree Analysis).
- c. **Accident / Incident Investigation** - CAPs will be developed when the results of an accident or incident investigation that identify in cause or contributing factors that can be minimized, controlled, or corrected such that the identical or similar situations will not reoccur.
- d. **NTSB Investigation** - CAPs may be developed based on the findings and recommendations included in the NTSB final accident report.
- e. **GDOT Investigation** - during the course of an investigation or hazard assessment GDOT may implement a CAP to eliminate reoccurrence of the unsafe conditions or address systemic problem.
- f. **Three-Year On-Site Safety and Security Reviews** - CAPs will be developed for deficiencies and areas of concern resulting from a GDOT SSO Three-Year On-Site Safety Review or Three-Year On-Site Security Review.
- g. **Other** - CAPs will be developed when FTA or GDOT’s various oversight activities indicate the opportunity to intervene with an identified systemic problem or other concern / deficiency before it can manifest as a reportable event (“proactive”).

5.0 Corrective Action Plan Content

In accordance with the GDOT Program Standard, Atlanta Streetcar CAPs will identify the following:

Item	Description
CAP ID Number	Refers to the number assigned to the CAP by Atlanta Streetcar
CAP Title	Refers to a brief title describing the nature of the CAP
Date CAP Opened	Refers to the date the need for the CAP was identified.
CAP Source ID	Refers to the number assigned to the source (internal audit, accident / incident, three-year review findings, etc.) of the CAP
Finding	Refers to a brief narrative summary of the finding that led to the CAP – what it is, what evaluation criteria was used, what the area of concern or deficiency is, etc.
CAP Requirements	Refers to the description of the corrective action required by Atlanta Streetcar to address the finding.
CAP Status Updates	Refers to the periodic updates provided by the responsible individual / department to implement the agreed upon CAP
Individual / Department Responsible for CAP Implementation	Refers to the individual (name and title) and department assigned responsibility for implementation of the CAP
CAP Alternative	If the Atlanta Streetcar wishes to modify an open action, the proposed alternative must be described in sufficient detail so that GDOT SSO can determine its acceptability as a substitute for the originally-approved CAP. If there is disagreement between Atlanta Streetcar and GDOT regarding CAP changes, the process described in Section 8 of the Standard will be implemented to resolve differences.
CAP Verification	For CAPs closed since the last submittal, the log must indicate when and how Atlanta Streetcar verified implementation.
CAP Due Date	Refers to the estimated date of completion of the corrective action plan
Issues Preventing Resolution	Refers to issues that prevent the timely and adequate resolution to identified CAP
CAP Completion Date	Refers to the estimated completion date for the identified CAP
Status	Refers to the status of the CAP. Status may be designed as pending, open, in progress, or closed

CAP Team – As needed or requested by the SCSC or Executive Director, a CAP Team designated by the Executive Director with SCSC approval will review findings that address systemic problems and recommendations from formal hazards analysis, Failure Mode and Effects Analysis and Fault Tree Analysis and develop a corrective action plan. A description of each CAP will identify:

- Identified hazard or deficiency
- Planned activities or actions to resolve deficiency or hazard
- The department and personnel responsible for implementing corrective action
- Schedule of completion for implementation.

CAP Modification - Should the Operation and Maintenance Superintendents change or amend the CAP they must submit a plan and justification to be reviewed and approved by the CAP Team. Once approved, the CAP Team will amend the CAP to incorporate the change.

6.0 Corrective Action Plan Notification Process

a. Internal Notification

When CAPs are identified through the means set forth in Section 4 above, responsible parties will be identified by the Director of Safety, Security and Training, briefed on the content of the underlying issue and the content of the CAP, and establishes timelines for updates and response. The Director of Safety, Security and Training will monitor the status of each CAP and keep the Executive Director and the SCSC informed as to any issues or discrepancies requiring their involvement or additional support.

b. External Notification Atlanta Streetcar will develop a corrective action plan with the intent of addressing the hazard or deficiency identified as a result of an accident investigation, the hazard management process, or the internal safety and security audits performed by Atlanta Streetcar, or external reviews performed by FTA, NTSB or GDOT.

Atlanta Streetcar will notify GDOT that a corrective action plan will be developed and the date when the corrective action plan will be submitted to GDOT within **30 calendar days** after the need for the corrective action plan has been identified by Atlanta Streetcar Director of Safety, Security and Training or GDOT.

The Director of Safety, Security and Training will transmit a CAP log electronically by email or fax, when a specific investigation occur requiring corrective action or at minimum on a **quarterly** basis to an identified GDOT point-of-contact. In addition to the CAP tracking log the Director of Safety, Security and Training will submit all supporting documents, reports, audits checklists regarding submitted CAP's. The Director of Safety, Security and Training will also inform GDOT concerning any alternative actions, plans or processes for implementing a corrective action plan.

The Director of Safety, Security and Training will manage the overall CAP process. Operations and Maintenance Superintendents assigned to implement corrective actions will partner with the Director of Safety, Security and Training and work together to eliminate and close the CAP. It is the responsibility of the Manager of Streetcar Services to ensure all corrective actions have been implemented and closed. It is also the responsibility of these Managers to review all operational and maintenance policies, plans, procedures and rules to eliminate, or in some cases prevent reoccurrence of hazards or systemic problems.

GDOT, or its contractor, can also conduct an investigation report that includes a description of activities, findings, identified causal factors, and a corrective action plan (if required). This report will be finished within **thirty (30) calendar days** after completion of the investigation, and will be delivered to the Director of Safety, Security and Training for review. Atlanta Streetcar will have **fifteen (15) days** to prepare a corrective action plan if required, and submit it to the GDOT point-of-contact.

7.0 Corrective Action Plan Monitoring and Tracking

The CAP Program will include a discussion of the process to monitor and track the development and implementation of each CAP during revenue service operations. Atlanta Streetcar will develop and maintain a CAP Log, which summarizes the status of all open corrective actions related to the state oversight program and all actions closed since the last submittal. The Atlanta Streetcar will update the log with CAP implementation activities on a no less than quarterly basis. The Corrective Action Plan Tracking Log must include the required information.

This log will be transmitted quarterly to the GDOT SSO Program Manager in electronic form via email, hard copy via standard mail, or by fax. It is due within the first 15 calendar days of the next quarter. Within 15 calendar days of receiving a quarterly CAP Log, GDOT SSO will acknowledge review and approval in writing. GDOT SSO will review the CAP Log, using the checklist provided in Appendix P of its Program Standard. Upon approval, GDOT SSO will provide a copy of the completed checklist to its Atlanta Streetcar point-of-contact.

8. Correction Action Plan Review and Approval Process

The Atlanta Streetcar Director of Safety, Security and Training will issue the CAP log to GDOT **quarterly**, via email or fax. GDOT will acknowledge receipt of the CAP log and within **fifteen (15) calendar days** review the quarterly CAP log and approve or reject it.

GDOT SSO will notify the Atlanta Streetcar Director of Safety, Security and Training of its approval or rejection of a CAP within **ten (10) calendar days** of receiving the CAP. In the event GDOT rejects a CAP, GDOT SSO will state its reasons in writing and recommend revisions. Director of Safety, Security and Training will submit a revised CAP to GDOT SSO, no later than **thirty (30) calendar days** following the rejection.

Once a CAP has been closed out by the Director of Safety, Security and Training it must be issued to GDOT for verification that CAP has been implemented. Should the CAP Team recommend an alternative plan for closure the Director of Safety, Security and Training will submit the CAP for GDOT approval.

9.0 Corrective Action Plan Program Review and Modification

Once the internal review of the ASC Corrective Action Plan Program is complete the Director of Safety, Security and Training, the Manager of Streetcar Services and the SCSC will submit the updated CAP Program for review and approval to the ASC Executive Director, Chairman of the Streetcar Management Committee. At the completion of the review a signature page will cover the updated SSPP with signatures from; the ASC Executive Director and the Chairman of Atlanta Streetcar Management Committee; with concurrence from the General Manager and CEO of MARTA, the Chief Operating Officer of MARTA and the MARTA Assistant General Manager of Safety.

Annual Submission

Director of Safety, Security and Training will conduct an annual review of its CAP program and update it as necessary to ensure that the SOP is current at all times. In the event that the Director of Safety, Security and Training conducts its annual review and determines that an update is not necessary for the year, it must prepare and submit by **January 1** formal correspondence notifying the GDOT SSO point-of-contact of this determination. If GDOT SSO wishes to object to this determination, the GDOT SSO point-of-contact will notify the Director of Safety, Security and Training within **thirty (30) calendar days**. In the event that Director of Safety, Security and Training conducts its annual CAP program review and determines that an update is necessary for the year, Director of Safety, Security and Training will submit a revised CAP program to the GDOT SSO Program Manager by **January 31**. As appropriate, referenced materials affected by the revision(s) must also be submitted with the CAP program.

Periodic Submission

At any given time, reviews of the Atlanta Streetcar CAP program may be required to address specific issues based on; implementation and compliance to MAP-21, Section 5329, GDOT SSO program standard procedures, review of the Atlanta Streetcar's documents or other safety related project information. Upon receipt of a written notification from GDOT for a review of the CAP program, the Atlanta Streetcar will submit a revised CAP program to GDOT SSO within **thirty (30) calendar days**. In the event that the Atlanta Streetcar initiates updates, they will submit the modified CAP program, and any subsequently modified CAPs, to GDOT SSO for review and approval within **thirty (30) calendar days** of the effective date of the change.

APPENDIX A – SAMPLE CAP LOG

CAP ID Number	CAP Title	Date CAP Open	CAP Source ID	Finding	CAP Requirements	CAP Status Updates	Individual / Department Responsible for CAP Implementation	CAP Alternative	CAP Verification	CAP Due Date	Issues Preventing Resolution	CAP Comp Date	Status
2014.01.11	Water leak VMF	11/1/2014	Hazard reported by shop employee: Employee shop inspection: Streetcar Technician Bob Jones #19236 reports excessive water leak on shop floor.	10/30/14 - Source of water leak confirmed by Supervisor Smith. Water penetrating VMF roof, in the northeast corner area of building. Hazardous area marked by traffic cones. Leak monitored by Maintenance Custodian Lee.	Roof installation is still under warranty. Superintendent Oswald will contact roofing contractor.	Roof contractor conducted an inspection on 11/4/2014. Submitted work plan to conduct repair on 11/10/14.	Superintendent of Maintenance Oswald will manage roof contractor work force.	No alternative plan required. Hazardous area constantly being monitored by VMF contract maintenance employees.	Post water test and wet weather condition verification to be conducted over a 60 day period.	11/5/2014	None	1/10/2015	Post repair water leak test successful. Post repair still under assessment for required 60 day wet weather test.