Tacoma Link Internal Safety Audit

Report #: 2023-06

Executive Summary

Internal Safety Audits are mandated to be completed annually by federal regulations for Tacoma Link rail service, and WSDOT's State Safety Oversight (SSO) program standards. These modal safety audits aim to ensure safety programs for Tacoma Link are performed as documented by the Agency Safety Plan (ASP).

Audit Objective
To independently evaluate safety plans, procedures, and processes for Tacoma Link to determine if actual practices are aligned and in compliance with state and federal safety requirements.

Our audit covered work completed over the previous 12 months, from January 2023 – December 2023.

Audit Results

From our review, we found **three (3) findings** of non-compliance, and **three (3) observations**; briefly expanded upon below and in greater detail later in the report.

<u>Finding #1</u>: Mode-specific goals around continuous improvement and risk reduction were not identified from two (2) Tacoma Link safety committee charters.
- **Criteria**: Sound Transit Agency Safety Plan, section 0.5 (Expected Outcomes) dated October 2023.

<u>Finding #2:</u> There is no formal process for evaluating the effectiveness of mitigations implemented to address safety hazards for Tacoma Link.

<u>Criteria</u>**:** 49 CFR Part 673.27(b)(2): monitor (its) operations to identify any safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended. Sound Transit Agency Safety Plan, section 0.5 (Expected Outcomes) dated October 2023.

Note – We initially rated this issue as an Observation during the draft report preparation period. Following a request for clarification from WSDOT SSO against the federal requirement, we re-examined that issue and found no evidence showing conformance to the federal rule, requiring auditors to upgrade the draft observation to a finding.

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Finding #3: The agency lacks a comprehensive Safety Training Plan covering all safety training types and staff categories.

Criteria: Sound Transit Agency Safety Plan, section 2.4 (Plan Implementation) and section 5.1 (Competencies and Training), dated October 2023.

Observation #1: There is a lack of uniformity between management of the Tacoma Link Safety & Security Committee and management of safety committees for all other modes. Consider transferring management of the Tacoma Link Safety & Security Committee from Tacoma Link Operations to the Transportation Safety & Security (TSS) Division.

Observation #2: While there are numerous operational safety metrics being tracked, there is significantly less maintenance data being obtained, tracked, and analyzed. The Transportation Safety & Security (TSS) Division should obtain, track, and analyze additional Tacoma Link maintenance data to proactively identify and address maintenance related safety issues.

Observation #3: While ST meets WSDOT requirements for monthly reporting of CAP logs and follows a prescribed SOP to ensure this requirement is met, the ASP states CAP reporting as "quarterly" versus monthly. The ASP should be updated to correct this discrepancy.

Audit Results

This audit report is the final audit from our current 3-year audit cycle (2021-2023) covering all elements of the Agency Safety Plan, as required by the WSDOT Rail Safety Oversight Program Standard.

The following table summarizes, by ASP section, the analysis performed during the field work portion of our audit, and associated exceptions (if any).

Criteria (ASP Element)		Test Performed	Results	Finding or Observation
0.0	Introduction	• Have safety committees documented mode-specific goals around continuous improvement and reducing risk? • How are mitigations documented and tracked to ensure additional risks are not introduced? • What methods are used to determine how mitigations are effective and validated? • What methods are used to measure how the agency is meeting or exceeding safety targets? • How is a continuously improved safety culture measured?	See comments below	**Finding # 1 and #2 and Observation #1**

Finding 1: The Employee Safety Committee & Tacoma Link Safety & Security committee charters do not identify mode-specific goals for risk reduction and continuous improvement as stated in the ASP.

Criteria: Sound Transit Agency Safety Plan, Section 0.5, Expected Outcomes.

Finding 2: There is no formal process for evaluating the effectiveness of mitigations implemented to address safety hazards for Tacoma Link. Procedures should be developed to document the steps to be taken to evaluate mitigation success. 49 CFR Part 673.27(b)(2): monitor (its) operations to identify any safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended. **Note – We initially rated this issue as an Observation during the draft report preparation period. Following a request for clarification from WSDOT SSO against the federal requirement, we re-examined that issue and found no evidence showing conformance to the federal rule, requiring auditors to upgrade the draft observation to a finding.**

Criteria: Sound Transit Agency Safety Plan, Section 0.5, Expected Outcomes.

Observation 1: For uniformity with all other modal & agency safety committees, consider transferring management of the Tacoma Link Safety & Security Committee from Tacoma Link Operations to the Transportation Safety & Security (TSS) Division.

Criteria: Sound Transit Agency Safety Plan, Section 0.5, Expected Outcomes.

Comments:
- Continuously improved safety culture is being measured through other methods such as the annual safety culture survey, with enhancements having been made based on those survey results.
- KPIs are established to align with safety objectives and align with NTD reporting requirements of FTA.

Criteria (ASP Element)		Test Performed	Results	Finding or Observation
1.0	Safety Plan	• Are routine observations and data collection performed for operations and maintenance activities? How is safety performance data analyzed to determine trends? • Is the ASP updated annually to meet all Federal, state, and local requirements? • How is safety data communicated across the agency and externally?	See comments below	**Observation #2**

Observation 2: While there are numerous operational safety metrics being tracked, there is significantly less maintenance data being obtained, tracked, and analyzed. The Transportation Safety & Security (TSS) Division should obtain, track, and analyze additional maintenance data from Tacoma Link to proactively identify and address maintenance related safety issues.

Criteria: Sound Transit Agency Safety Plan. Section 1.1, Safety Performance Measures and Targets

Comments:

- WSDOT, via the FTA SSO program, has approved the current ASP. The ASP was signed and approved by the ST Chief Executive Officer.
- There is a dedicated Safety Data analysis team. Data is trended and reported internally at the Monthly Business Review and during JRSSC meetings. Data includes:
    - Collisions, Near Misses & Incursions
    - Slips/Trips/Falls
    - Injuries
    - Security events trends

Criteria (ASP Element)		Test Performed	Results	Finding or Observation
2.0	Safety Management Policy	• How is the Safety Training Plan managed? • Is the Safety Management Policy shared with staff and with external stakeholders? • Is there an adequate document control process for SMS related information and records? • Is the ASP annually reviewed and maintained as a Controlled Document by ST Safety?	See comments below	**None**

The agency lacks a comprehensive Safety Training Plan covering all safety training types and staff categories. (See Finding #3 in Safety Promotion: 5.0).

Criteria: Sound Transit Agency Safety Plan, Section 5.0, Safety Promotion

Comments:

• The Safety Policy is signed by the Chief Safety Officer and is part of required annual safety training for all ST staff. The training is conducted through ST University (the agency Learning Management System). The policy is part of the ASP which is shared with external stakeholders.
• There is a robust document control process in place for all safety-related documents, records, and other information in compliance with 49 CFR part 673.31 and best practices. There are SOPs in place for this document control process within the Safety Department.
• Annual Reviews of the ASP are completed in consultation with Operations and other internal stakeholders. The ASP is controlled by ST Safety with copies distributed to personnel as required. Updates to the ASP are submitted to WSDOT for approval.

Criteria (ASP Element)		Test Performed	Results	Finding or Observation
3.0	Safety Risk Management	• Is there an approved Transit Asset Management (TAM) plan that meets Part 625 requirements? • How is condition assessment managed for inventoried assets? • How is State of Good Repair (SGR) managed for capital assets such as equipment, rolling stock, infrastructure, and facilities?	See comments below	**None** (Refer to Findings from Performance Audit 2023_09)

Comments:

• WSDOT approved the Agency's Strategic Asset Management Plan (SAMP) as meeting the required elements of a TAM plan. However, in an ST internal performance audit, it was found that the SAMP does not meet all requirements of CFR Part 625. The Asset Management group is developing a separate TAM plan compliant with Part 625 requirements. This issue has been raised as a separate audit finding in that performance audit.
• Condition assessments are conducted for assets and assigned a rating based on risk level. However, the ST internal performance Audit also found that condition data resulting from assessments could be better utilized to inform State of Good Repair (SGR) decisions. This issue has been raised as a separate audit finding in that performance audit.
• There is a request for a new position in the Operations-Asset Planning group that will provide a single point of contact for SGR issues.

Criteria (ASP Element)		Test Performed	Results	Finding or Observation
3.0	Hazardous Materials Program (Safety Risk Management)	• Is there an effective hazardous materials program in place to prevent hazards from materials from entering the system? • What plans are in place to ensure hazardous materials are addressed and mitigated?	Pass	**None**

Comments:

• New materials require approval prior to purchase and are vetted by the Employee Health & Safety (EHS) group. There is a list of approved chemicals already reviewed by EHS.
• The risk of exposure and harm from hazardous materials is mitigated through adherence to the agency's Hazard Communication Program and SOP EHS08-HAZ-COM.

Criteria (ASP Element)		Test Performed	Results	Finding or Observation
3.0	Drug & Alcohol Program(Safety Risk Management)	• Have Drug & Alcohol Management System (DAMIS) reports been submitted to FTA in each of the past three years? • Are Safety-Sensitive positions subject to the D&A program identified and receiving required training? • Are there procedures for post-accident drug & alcohol testing?	Pass	**None**

Comments:

• Drug & Alcohol Management Information System (DAMIS) reporting has been submitted by ST annually, with acknowledgement from FTA.
• The FTA Post-Accident Decision Making form is followed for drug & alcohol testing when there is an accident.

Criteria (ASP Element)		Test Performed	Results	Finding or Observation
4.0	Safety Assurance	• Are there routine maintenance compliance reviews and inspections? • Is safety data being collected, reviewed, analyzed, and then shared with decision makers? • Has all reporting been submitted to external parties as required by WSDOT and FTA? • Is there an established and documented process for Corrective Action Plans (CAP)? • Is there a process to prevent or mitigate risk resulting from changes to the system? • Does ST Procurement and Contracts Dept. (PCD) support the Safety Assurance element by proactively maintaining policies, procedures, and strategies? • Are there actions being taken towards the continuous improvement of the agency SMS? Is safety culture being assessed and measured?	See comments below	**Observation #3**

		Is there a documented management review of safety performance outcomes?		

Observation #3: While ST meets WSDOT requirements for monthly reporting of CAP logs and follows a prescribed SOP to ensure this requirement is met, the ASP states CAP reporting as "quarterly" vice monthly.
Criteria: Sound Transit Agency Safety Plan, Section 4.1.7, Corrective Action Plans

Comments:

- There are monthly facility inspections and employee safety meetings where issues are identified and escalated as needed.
- Data is presented to decision makers at Management Business Review meetings.
- ST is meeting all FTA and WSDOT reporting requirements for transit safety oversight, drug and alcohol compliance, transit asset management, and for the National Transit Database (NTD).
- There is specific SOP, updated last in 2022, for the CAP process covering from initiation to closeout. This SOP is being effectively implemented. CAP logs are reported each month to WSDOT, in compliance with WSDOT requirements for monthly reporting.
- The ST Safety Management Plan (SMP) identifies processes to be used for risk reduction for capital projects. The CCB and CRB processes are in place to ensure that changes do not introduce new risks to the system that are without acceptable mitigation.
- Procurement and Contracts Administration Manual (PCAM) requires Procurement to get concurrence from internal stakeholders for safety items. Policy 604 delegates authority from the CEO for procurement programs in the agency.
- Opportunities for safety program improvements are discussed at monthly safety division meetings. Additionally, safety data analysis and results from annual employee safety culture surveys aid in the identification of opportunities for improvement to the SMS.
- A 2023 internal audit of the SMS identified that no formal annual management review process has been established to evaluate safety performance. Note: This was captured as an observation during that internal audit and will not be raised as a finding or observation during this audit.

Criteria (ASP Element)		Test Performed	Results	Finding or Observation
5.0	Safety Promotion	• Is there a Safety Training Plan that integrates all safety training at ST? • Is there a process established for Safety Training? How is this training documented? • What minimum safety training is required for all ST staff? How is this training tracked?	See comments below	**Finding #3**

Finding #3 (2.4 Plan Implementation and 5.1 Competencies and Training) The agency lacks a comprehensive Safety Training Plan covering all safety training types and staff categories.

Comments:

- There is a Safety Training SOP; however, this is for EHS training only. Training is tracked and documented for each employee using ST University, the LMS. PTCSAP training is an exception and is tracked separately in Excel by TSS.
- Tacoma Link Operations has its' own training program and is well managed.
- ST staff are required to take "SMS Awareness" every two years. The training is tracked in ST University (the LMS).
- There are positions dedicated to technical and compliance training for Tacoma Link staff.

Background

FTA 49 CFR Part 673, the Washington State Rail Safety Oversight Program Standard, Sound Transit's Agency Safety Plan, and Audit Division policy requires that an annual internal safety audit is conducted on each of the agency's four modes of transportation (Link, Tacoma Link, Sounder Commuter Rail, and ST Express Bus service).

Internal safety audits occur to ensure the agency independently evaluates compliance with federal, state, and local requirements; identifies hazardous and risk conditions, and verifies that the agency is fully implementing its safety program as described in our plans and procedures.

All internal safety audits are resourced on a three-year audit plan that is communicated agency wide. Results of all annual audits are documented in an annual report that is presented to the Finance & Audit Committee (FAC) and distributed to Washington State Department of Transportation (WSDOT). The annual report is also distributed to agency leadership and management, as required.

Methodology

Standards

We conducted this audit in accordance with Audit Division policies & procedures, which are governed by our Audit Charter; and meet several sets of applicable federal and local auditing standards.

Audit Processes

Each audit starts by examining the current processes in place relative to (1) laws or regulatory requirements, (2) agency policies and procedures and (3) industry best practices.

During the audit "planning" phase, we assess the engagement-specific conditions and risk, informing and confirming the audits' objectives and scope. At this time, relevant controls to mitigate these risks are also identified.

The audit "field work" phase then examines the design of the identified controls to determine if the intent meets the regulations, policies, etc. If the controls are designed to adequately mitigate the risk (control environment), we move on to assess the degree to which the controls are mitigating the risk (control activities). Any areas identified where the control environment or activities do not adequately mitigate the identified risk are identified as an exception. Exceptions are then defined as either findings or observations.

- **Findings** are the results of the evaluation and verification of evidence against audit criteria showing non-compliance with a policy, procedure, manual, standard, or industry best-practice.

- **Observations** are issues that may be compliant with requirements, however, the auditor has determined that the issue poses the potential risk of becoming a finding in the future if recommended changes are not put in place to prevent occurrence.

Report Prepared by:

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Approved for release by:

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Appendices

Appendix A: Sound Transit's Title VI notice of rights

Sound Transit conducts Title VI equity analyses for service and fare decisions to ensure they are made as equitably as possible.

More information on Sound Transit's Title VI notice of rights and the procedures to file a complaint may be obtained by:

- Phone: 888-889-6368; TTY Relay 711;
- Email: **stdiscriminationcomplaint@soundtransit.org**;
- Mailing to Sound Transit, Attn: Customer Service, 401 S. Jackson St. Seattle, Washington 98104-2826; or
- Visiting our offices located at 401 S. Jackson St. Seattle, Washington 98104.

A complaint may be filed directly with the Federal Transit Administration Office of Civil Rights, Attention: Complaint Team, East Building, 5th Floor – TCR, 1200 New Jersey Avenue, SE, Washington, DC 20590 or call 888-446-4511.

Appendix B: Personnel Interviewed – By Position Title

Sound Transit Staff
Executive Operations Director, Tacoma Link
Director, Transportation Safety & Security
Deputy Director, Tacoma Link
Director, Enterprise Asset Management
Deputy Director, Enterprise Asset Management
Deputy Director, Safety
Deputy Director, Transit Assets-Operations
Deputy Director, Employee Health & Safety
Deputy Director, Safety Business Processes
Chief of Staff, Safety
Sr. Technical Trainer, Tacoma Link
Sr. Business Analysist, Tacoma Link
Manager, Tacoma Link Operations
Manager, Health & Safety
Manager, Rail Systems Maintenance, Tacoma Link

Manager, Security & Safety Management System
Manager, Transportation Safety & Security
Program Manager, Safety & Security Data
Program Manager, Industrial Hygiene
Sr. Specialist, Safety Management System
Sr. Safety & Security Coordinator
Program Specialist, Safety
Program Manager, D&A Compliance
Sr. Specialist, Transportation Safety & Security
Specialist, Transportation Safety & Security

Appendix C: Documents Reviewed

Resolution No. R2017-13 Safety Policy
Sound Transit Agency Safety Plan, January 2023
WSDOT Rail Safety Oversight Program Standard, Version 6.0, Feb 2023
SMS Implementation Smartsheet's
Safety Data, Key Performance Indicators, Power Bi, current as of Sep 2023
Safety Department Monthly Meeting Agendas/Minutes, Jan-Aug 2023
Safety Department Monthly Reports (Internal) Jan-Aug 2023
2022 Safety Department Annual Reports (NTD/WSDOT)
FTA State Safety Oversight Audit Report, Sep 2023
Employee Safety Committee Charter, Meeting Agenda & Minutes, Jan-Aug 2023
Safety Document Control Master Tracking List (SharePoint)
Safety SOP Template (form)
Agency Safety and Security Management Plan, Rev 8 Mar 2022
Framework for Developing SOPs, SEO-ADMN01 Rev 0.0 Dec 2021
Document Lifecycle Management, SEO-ADMN02, Rev 0.0 Jan 2022
Periodic Review of Controlled Documents, SEO-ADMN06, Rev 0.0 Jan 2022
Safety Document Control Dashboard (SharePoint)
Employee Reporting Tool Data, QuickBase, Current as of Aug 2023
Safety Risk Management Process, CES-SOP-EHS02, Rev 1.0 Nov 2022
Wildfire Smoke Response Plan, CES-SOP-EHS012, Rev 0.0 Jun 2022

Operational Hazard Analysis SOP, TSS-SOP-TSS14-OHA, Rev 0.0 Jul 2022
Accident Prevention Program, Version 7.0 Feb 2023
Procurement & Contract Administration Manual (PCAM), Jan 2023
Hazard Management Manual, Rev 0.0 Sep 2022
Agency Policy 604Procurement, Agreements and Spend Control, Feb 2019
Procurement Integrity Curriculum, Rev 5 Jun 2023
Hazard Communication Program, Version 2.4 Mar 2022
Job Safety Training Assessment (JSTA) Form
Completed JSTAs, 15% sample of ST employees
Monthly Business Review Safety Report (PowerBi), current as of Oct 2023
TLink CAP log, open items as of Oct 2023
TLink Capital Asset Inventory/Condition Rating Review, Current as of Oct 2023
TLink Safety and Security Committee Charter, Rev 01 Mar 2022
TLink, Job Safety Briefing, TLR-SMP-10002, Rev1.1 Mar 2023
Operator Training/Re-Certification/Retraining, TLR-SOP-10009, Rev 2.0 Mar 2023
Tacoma Link Substance Abuse Policy, R2023-23 Aug 2023
Tacoma Link Safety Committee Charter, Meeting Minutes, Jan-Aug 2023
Drug & Alcohol, DAMIS Reports, 2021-2023