

# 2022 ST Express Internal Safety Audit

Report #: 2022-03

**Audit Report**



**Sound Transit Audit Division**

June 21, 2022

## 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](mailto: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.

**Report Prepared by:**

DocuSigned by:  
*Javier Perez*  
9929A7F055FA47D...

Javier Perez, Sr. Compliance Auditor (Lead Auditor)

DocuSigned by:  
*Jim Ottman*  
BCB354A255BB43A  
Jim Ottman, Sr. Compliance Auditor

DocuSigned by:  
*Mike Flood*  
39263D297FBD466...

Mike Flood, Sr. Compliance Auditor

**Reviewed (QA/QC) by:**

DocuSigned by:  
*Heather Wright*  
FD9555DA3123457...

Heather Wright, Deputy Director, Audit Division

**Approved for release by:**

DocuSigned by:  
*Patrick Johnson*  
D893DEC00D0B4A6...

Patrick Johnson, Director, Audit Division

# Table of Contents

<b>Executive Summary</b> .....	5
Audit Work and Scope .....	7
Objectives .....	7
Source Documents .....	8
Summary of Results.....	8
Positive Practices.....	8
Summary of Findings and Observations.....	9
Audit Results.....	10
Safety Plan .....	10
Safety Management Policy .....	11
Safety Risk Management .....	14
Safety Assurance .....	16
Safety Promotion .....	18
COVID-19 Mitigation Process.....	19
Conclusion .....	20
Findings & Observations.....	21
Next Steps.....	21
Definitions:.....	21
Appendix A: Findings & Observations Table.....	22
Appendix B: Personnel Interviewed.....	24
Appendix C: Documents Reviewed .....	25

# Executive Summary

## Why did we audit?

As part of our 3-year Agency Audit Plan, Sound Transit's Audit Division performed a safety compliance audit of ST Express Bus Service to verify that our partner agencies are implementing safety procedures and programs and executing specific activities identified in Sound Transit's Agency Safety Plan (ASP).

This audit was aimed specifically to review, evaluate, and ensure modal safety oversight independently by our partner agencies for our ST Express Bus Service.

Additionally, we examined how Sound Transit management and partner agencies (King County Metro, Community Transit, and Pierce Transit) effectively addressed risks and opportunities by integrating Safety Plans into business processes, strategic direction, and decision making.

Ultimately, we audited to ensure of the safe operation of the ST Express Bus Service.

The scope of our audit covered documentation reviews, on-site field observations at agency and partner agency locations for operations & maintenance, verification of process and procedures, and staff interviews, all of which were to determine and support our audit findings and observations.

## Results Summary

It was clear to the audit team that Sound Transit and each of our operating partners are committed to the highest safety standards for our riders. We observed this throughout our audit in the operational and maintenance environments.

The audit team is aware that the ST ASP and corresponding SMS principles are not yet fully implemented for ST Express as of this audit; however, progress will be closely

---

**The Audit Division is Sound Transit's independent assurance function that improves how the agency is operated and managed, ensuring public funds are managed transparently, and ultimately keeping employees, contractors and our riding public safe.**

---



monitored over the course of our three (3) year audit cycle concerning the agency's SMS Implementation Plan.

Based on our review, we conclude that safety controls for ST Express are adequate, and that there are **no (0) identified findings and two (2) observations with recommendations during this audit cycle.** We also noted that (3) observations from the 2021 Internal Safety Audit of the ST Express were open and that we did not review them as part of our scope. We will be following up and ensuring the completion of corrective actions on these items, and report on them during the next audit cycle.

Each of our noted items are explained further in this report, including response procedures and timelines.

Remainder of this page to be left blank

## Audit Work and Scope

The Sound Transit's ASP requirements, federal, state, and Local regulations require this safety compliance audit every year. The scope of this audit included a review of the agency's implementation of specific ASP sections, which had a Safety Plan, Safety Management Policy, Safety Risk Management, Safety Assurance, and Safety Promotion. We also included a review of COVID-19 mitigation policies and practices relating to ST Express Bus Service.

The audit team performed document reviews, interviews, and field visits to assess the overall compliance of the ASP. All audit activities were coordinated with ST Express Operations & Safety staff, with partner agency staff before the audit kick-off meeting, and during our 2-week audit process.

Due to the COVID-19 pandemic, all Compliance Auditors ensured they followed agency COVID Return-to-Work processes, completed necessary COVID-19 Safety Training, and had executive approval to be at Sound Transit locations before commencing this audit. The team wore all the required Personal Protective Equipment (PPE) as prescribed by the Sound Transit Safety Department to keep them safe from incidental COVID exposure.

The audit began with a "Kick-off" meeting to introduce the audit team, review the scope and schedule, and address any concerns before conducting interviews. After the audit fieldwork phase, a closeout meeting took place to provide stakeholders with a summary of the results to review and act upon before issuing the final Audit Report.

### Objectives

The objective of this audit was to independently review Sound Transit's implementation of safety programs and processes for ST Express Bus Service. Furthermore, we sought to examine Sound Transit's safety oversight of each of our maintenance and operations partner agencies through and examination of their specific safety programs.

We also wanted to determine if safety programs meet agency and federal requirements. Additionally, the audit will inform the Agency of potential gaps in processes to improve the Agency's safety program.

Audit Activity	Date(s)
Issuance of Audit Notification Letter:	March 1, 2022
Audit Kick-Off Meeting:	March 30, 2022
Audit Interviews:	April 3 -12, 2022
Field Observations:	March 30 – April 6, 2022
Audit Close-out Meeting:	April 13, 2022

As part of our audit process, the audit team requested and reviewed program plans/procedures, intergovernmental agreements (IGAs), reportable safety data, corrective action plans (CAPs), hazard assessments, performance data, training documentation, and plans relating to ST Express service.

We also reviewed each Agency’s process for documenting, updating, and communicating safety information from partnering agencies and how they report this data to Sound Transit. Document reviews included the Agency’s Corrective Actions log to ensure the implementation and effectiveness of safety risk mitigations. We sought to verify the Agency’s process for addressing risk, mitigation, and continual improvement of the ASP as outlined in the FTA (Federal Transit Administration) 49 CFR (Code of Federal Regulations) (Code of Federal Regulations) Part 673 for safety assurance.

Additionally, the audit team conducted on-site field observations at Pierce Transit, King County Metro, and Community Transit bus bases to observe safety practices and procedures. Lastly, the audit team observed pre & post-trip vehicle inspections and COVID-19 cleaning/sanitizing process & procedures.

## Source Documents

While there is no federal or State Safety Oversight (SSO) programmatic oversight, Sound Transit is responsible for safety oversight of partner agencies operating ST Express service on its behalf. Our review evaluated the effectiveness of this oversight.

This safety compliance audit was conducted per ST Audit procedures and the Agency Audit Plan.

- ✓ FTA 49 CFR 673 requirements
- ✓ Sound Transit Agency Safety Plan (ASP)
- ✓ King County Metro’s Agency Safety Plan
- ✓ Community Transit’s Agency Safety Plan
- ✓ Pierce Transit Agency’s Safety Plan
- ✓ Local Regulatory Requirements

## Summary of Results

### Positive Practices

We found that the partnerships with each of the operating agencies on behalf of Sound Transit go beyond just contractual agreements. Each partner agency focuses on safe, quality service.

Staff interviewed from each agency stressed that they treat our equipment and service as their own and strive to provide the best service possible.



We witnessed consistent and robust communication between STX and its partners. STX Express Operations staff consistently communicate with partnering agencies. There is a strong dynamic of collaboration and transparency between each partner that proactively addresses concerns and shares information.

STX Operations has a rigorous process for addressing Transit Asset Management, state of good repair, and procurement. ST Express collects, tracks, and analyzes data of each asset to support maintenance decisions, procurement considerations, and future purchases for asset replacements. Currently, STX champions an extended life cycle of our buses that exceeds the FTA's 12-year service life guidelines by at least two years.

Also, STX partners have practical safety culture tools in place. Each partner encourages their staff to identify and report hazards with immediate follow-up to those concerns. STX partners empower staff by giving them a voice in safety to improve their work environment and promote a safe culture.

And lastly, COVID mitigations continue to be a priority with STX partners. Each agency follows local, state, and government COVID guidelines. STX partners also plan to continue providing face covering to passengers well beyond expired COVID recommendations.

## Summary of Findings and Observations

This audit resulted in no (0) findings and (2) observations with recommendations relating to the Safety Plan (Interagency Agreements - Emergency Management) and Safety Management Policy (ST Operations Standard Operating Procedures) sections of the Sound Transit ASP.

The following table summarizes the findings and observations identified from this audit:

ASP Sections	Number of Findings	Number of Observations
<b>Safety Plan</b>	0	0
<b>Safety Management Policy</b>	0	2
<b>Safety Risk Management</b>	0	0
<b>Safety Assurance</b>	0	0
<b>Safety Promotion</b>	0	0
<b>COVID-19 Mitigation Process</b>	0	0

# Audit Results

This section describes the results of the audit team's review for each section of the Agency Safety Plan (ASP) that was within the scope of this audit.

## Safety Plan

The audit team reviewed the Agency Safety Plan (ASP) to ensure that ASP Section 1.0 (Safety Risk Management) followed the agency's ASP requirements. It complies with the requirements specified in FTA 49 CFR 673. **The audit team's review of this ASP section identified no (0) findings and one (0) observation with recommendations relating to element 1.0.**

**Introduction** - The Introduction provides a foundation for staff to reference documented processes and procedures relating to safety protocols. Defined in this section is the delegation authority given upon the Chief Executive Officer (CEO) by the Board of Directors and subsequent authorities to the Executive Director of Operations and Chief Safety Officer (CSO). Interviews with the Executive Director-Ops and CSO clarified their roles and responsibilities, (further results from their interview later described in this report).

The scope and purpose of the ASP is clearly defined to include each mode of operation, contractors, consultants, and operating partners (i.e., King Co. Metro, Pierce Transit, and Community Transit).

Safety goals outlined in the introduction of the ASP are a broad-based approach to achieve the intended outcomes of SMS. Each of the goals has key performance indicators (KPI's) and targets used to measure the successes of SMS and provide areas for improvement. KPI's are listed throughout the ASP in their respective sections and sub-sections. **The audit team's review of this section identified no (0) findings, and no (0) observations with recommendations.**

**Safety Performance** – The audit team interviewed the ST Director of Bus Operations, the ST Deputy Director of Bus Operations, and the ST Superintendent of Bus maintenance. The team reviewed the ST ASP and federal regulations. It determined that the Safety Plan and internal procedures align with FTA regulatory requirements and all state and internal processes.

Sound Transit meets the requirements of 49 CFR 673, 674, National Transit Database (NTD) Time Series data, and the National Public Transportation Safety Plan. Sound Transit Express uses an industry standard for a preventable accident rate where each

partner agrees to the matrix of .8 accidents per 1,000 platform miles. This rate is established based on each partner's Safety Plan. ST oversees and reviews partners' safety plans by conducting random inspections to verify process implementations. STX monitors safety trends against targets based on NTD data, listed in the ASP for reference, and tracked by ST Transportation Safety and Security Division (ST TSS) with input from each partnering agency.

To review safety performance, a Joint Bus Safety Committee meets quarterly to share, analyze, and update safety data. This committee meeting is chaired by ST TSS, with committee membership from each partnering agency. The audit team attended the Q1 2022 Joint Bus Safety Committee (JBSC) meeting and reviewed meeting minutes from the previous six (6) months to verify the agencies' communication and data-sharing process. **The audit team's review of this section identified no (0) findings, and no (0) observations with recommendations.**

## Safety Management Policy

The audit team reviewed the Agency Safety Plan (ASP) to ensure that ASP Section 2.0 followed the agency's ASP requirements. **The audit team's review of this ASP section identified no (0) findings and two (2) observations with recommendations relating to elements 2.3.1 – Organizational Roles & Responsibilities and 2.3.2 – Operating Contract Relationships.**

Below is a summary of the audit team's review of this ASP section.

**Safety Management Policy Communication** – Sound Transit's Safety Policy Statement is in the ASP. The ASP has been communicated agency-wide in meetings and posted in the internal HUB for employee accessibility.

ST has implemented an Employee Safety Reporting Tool in the hub. This tool allows employees to report safety hazards to the Safety Department for review and mitigation. ST Employee Health & Safety (EHS) Department reviews this information for mitigation and data reporting purposes.

The audit team also conducted a review of the Policy Statement and confirmed that it is:

- Signed by the ST CEO as the Accountable Executive and inserted into the ASP.
- Provides the context of the Safety Management System and ST's commitment to safety.
- Describes ST's objective to proactively manage safety hazards and risk, with the intent to eliminate unacceptable risk within its operations.
- References Resolution No. R2017-13: Safety Policy on the ST Hub.

Furthermore, the audit team conducted interviews with ST Employee Safety and Health management and safety managers from each partnering agency's safety department.

The audit team concluded that ST and each partnering agency have shared their respective ASPs (Agency Safety Plan) and communicated during Joint Bus Safety Committee (JBSC) meetings from these interviews and document reviews. All STX partners have accepted the ST ASP. If the ASP needs to be updated, the JBSC will discuss any changes required.

ST TSS is currently developing an SOP (Standard Operating Procedures) for communicating and distributing updated ASPs with each ST Express partnering agency as future revisions are published.

**Employee Reporting Program and Feedback** – STX partner agencies have processes for operators to report hazards, unsafe conditions, and near-miss occurrences to management. STX Operations usually receives this information through committee meetings. The STX Superintendent of Maintenance currently has a chair in the Pierce Transit and King County Metro Safety Committees.

STX Operators are encouraged to report hazards. Each STX partner has its reporting process and provides STX Operators feedback with each reported concern. Hazards reported by STX Operators might be reviewed and mitigated with the assistance of an assigned Sound Transit Safety Specialist in the Transit Safety and Security Division. The Safety Specialist will address any concerns within three days and will provide a mitigation to the problem. Hazards reported are recorded in QuickBase for tracking and trending purposes.

**2.3 Safety Accounting and Responsibilities** – Sound Transit maintains Safety Management System (SMS) records in SharePoint, in the Learning Management System (LMS), and Sound Transit University (STU). Records are updated as the SMS process continues to develop. Documents are stored indefinitely until they are sunset and replaced with new policies or procedures.

Sound Transit is implementing phased milestones identified in its' SMS Implementation Plan (currently revision 0.0). The milestone requirements are in the ASP. The ASP is included in the Sound Transit New Hire Orientation process and provided to contractors for their awareness. Sound Transit employees have been trained in the SMS process through the Department of Transportation's Transportation Safety Institute (TSI) courses.

Sound Transit is currently working on offering SMS training through our internal learning management system (LMS). Sound Transit does not have authority over STX

partner agency safety accountability and responsibility processes. STX partners will share this information on request.

**2.3.1 Organizational Roles and Responsibilities** – Sound Transit uses the SIMMS database for storing Safety Certification records and Quick Base for Operations safety data tracking and storage. SMS data is available in these software systems. STX partners meet Sound Transit’s SMS requirements and model their SMS processes as extensions of collaborative partnerships. STX partners record, analysis and share their own data with Sound Transit upon request.

Sound Transit and partner agencies monitor STX’s safety assurance and contract oversight activities. STX Ops oversees and follows up with partners on activities. Safety item reviews take place in monthly meetings. Risks identified are reviewed for mitigation, escalation, or acceptance in the JBSC meeting. Also, accident debriefs are discussed monthly with STX partners.

Because ST Express Operations consists of a staff of two (2), the possibility of a sudden departure of staff members poses a risk in the reliability of processes and procedures. The staffing level for STX Operations is exceedingly small compared to other ST modal operations. We considered the size of STX assets (318 buses) and the management of three (3) contracts worth over \$130M. The workload split between the Superintendent of Bus Operations and the Bus Operations Manager is significantly large. The recommendation is for STX to consider options to reduce a considerable risk of oversight by overworked staff under the current staffing level. **(Observation #1)**

**2.3.2 Operation Contract Relationships** – STX assurance activities and contract oversight activities monitored by Sound Transit and partner agencies use two formal processes:

- 1) Joint Bus Safety Committee, which meets quarterly;
- 2) Monthly STX meeting with contractors

The two processes above highlight STX’s limitations in the IGAs between Sound Transit Express and partnering agencies. The IGAs need to define each side’s explicit roles and responsibilities within the agreements. The phrasing and language used in some areas of the IGAs are vague and not detailed. For example, the IGAs do not address labor shortages, labor strikes, and associated costs to maintain STX service running.

Additionally, the IGAs also do not include language for ST Paratransit services. These examples place constraints on STX’s control or influence within the IGA (Interagency

Agreements). We recommend a comprehensive review of each IGA ST Express has with its partnering agencies and to update specific criteria within the IGAs, given that future operations will include the future merger of BRT (Bus Rapid Transit) and STX services into one operation. **(Observation #2)**

## Safety Risk Management

The audit team reviewed the Agency Safety Plan (ASP) to ensure this section (Safety Risk Management) complies with the requirements specified in FTA 49 CFR 673. **The audit team's review of this ASP section identified no (0) findings and no (0) observations.**

**3.5 Transit Asset Management** – Sound Transit effectively manages its current assets to provide regional transportation services. Vehicle Maintenance Plan (VMP) outlines maintenance for our buses; partners have their VMP, meeting or exceeding our plan. STX does follow up with each partner to review if buses are used effectively for a full-service life. Transit Asset Management standards for buses are 12 years of service life. STX has maintained and operated its fleet of city buses for 14 years and Over the Road (OTR) coaches for 20 years. These STX practices exceed and champion TAM requirements.

New STX assets are introduced into service after they undergo each partner's testing and inspection process. When Sound Transit receives metadata from contractors, assets introduced into the service are inventoried and transitioned into operations. The metadata is part of the contract package. A partner does acceptance testing with checklist criteria. Once the partner completes the inspection process, STX will review test results and sign off to accept the new bus into service.

Information from assets across the agency are synthesized under the guidance of the ST Asset Management Plan. Asset performance is measured against performance targets. Preventive maintenance helps ST understand the type of maintenance and life expected of an asset. Upticks in care will require a project request for state of good repair (which happens once annually). The objective is to determine risks and how to invest in current and new assets. Affordability is considered a future asset. A lesson learned here is that more data is needed.

Sound Transit's Asset Management program conforms with the Moving Ahead for Progress in the 21st Century Act (MAP-21) by using 49 CFR 629 for compliance.

STX Ops do not review Transit Asset Management (TAM). Ops works with sustainability and Asset Management to buy emerging technologies. This policy aims to assure Sound Transit is taking a life cycle approach to an asset's complete life cycle.

Sound Transit is pursuing ISO (International Organization of Standards) 55001 certification by the end of 2024, allowing them to attain the goal of being a "best in class" transit agency. By doing so, Sound Transit will look to reducing insurance premiums, and ensuring we are maintaining our fleet in a cost-effective manner, and ensure the service life of our modes of transit. Sound Transit receives many FTA grants based on outstanding ST asset stewardship. A strategy on how ST will implement asset management establishes the plan's scope and describes stakeholders' responsibility. The ST TAM does not have SMS components yet. An integrated governing body is currently under development for the process.

**Maintenance Audits and Inspections** – Maintenance audits in the ST TAM process analyze 10% of each STX partner's inspections data every quarter. STX Ops examines this data for repeat issues to address emerging potential problems. Discussions between STX Ops and partners occur weekly and monthly to resolve identified issues.

ST Asset Management does not receive information on maintenance audits from ST Ops. Instead, ST Asset Management uses TRAPEEZ, Power BI, E1, and QuickBase data for leading trend indicators.

Maintenance audits and inspections stand recorded in TRAPEEZ, Power BI, E1, and QuickBase for STX Ops trend analysis. STX staff members can sit with the partners and review records. Currently, STX Ops is working with partners to create a data repository. The data repository will help create dashboards to show real-time issues affecting STX assets.

STX partners share maintenance audits and inspection data every quarter. STX Ops and partners track identified issues until the problems are closed.

**Facilities and Equipment Inspections** – ST Asset Management provides information needed to STX Ops on quarterly basis on what is required to deliver assets from deteriorating below a state of good repair.

Sound Transit takes a lifecycle approach to acquire, plan, design, build, operate, monitor, maintain and retire its assets to ensure safe, reliable, and sustainable high-capacity transit services to the communities serviced by Sound Transit. STX partners are required to optimize the reliability of the agency's assets. Partners need to have asset knowledge



to deliver the service levels, system capacity, capabilities, and schedules to achieve transit industry best practices.

## Safety Assurance

The audit team reviewed the Agency Safety Plan (ASP) to ensure that this section complies with the requirements specified in FTA 49 CFR 673. **The audit team's review of this ASP section identified no (0) findings and no (0) observations with recommendations.**

**4.1.1 Safety Performance Monitoring and Measurement** – Key Performance Indicators (KPIs) are reported internally to STX Ops and Sound Transit Transportation Safety and Security (TSS) quarterly. The ST Power BI group puts together dashboards with KPI (Key Performance Indicators) data. KPIs are distributed monthly to ST Safety and Executives. KPI reports are sent yearly to STX partners, WSDOT (Washington State Department of Transportation), the Puget Sound Regional Council, and the National Transit Database (NTD) as part of a five-year plan used for establishing data trends for STX and operating partners.

**4.1.2 State of Good Repair** – A safety risk analysis measures the State of Good Repair (SoGR) standards. This process uses the ST safety risk metrics to identify issues and focus improvement efforts. An example of this measure is how STX Ops looks at driving complaints and a correlation between preventable accidents. The complaints come from the motorist, and a spike in complaints can identify preventable accidents. STX partners also do safety and risk analysis. However, STX Ops does not get into that oversight.

Sound Transit evaluates capital assets such as equipment, rolling stock, infrastructure, and facilities to safety performance objectives in the TAM plan. STX Ops does an asset analysis and condition assessment for procurement decisions every year. This process looks at replacing assets by considering service needs and projections. The method also requires specific infrastructure to be in place before new assets are purchased. STX is dependent on partners' infrastructure that can support our assets and emerging technologies. STX Ops works with ST Procurement to gather data from partners and review lessons learned from current assets to prevent past problems from reoccurring with future asset investments.

**4.4 Procurement** – Sound Transit ensures that materials obtained through the Procurement process do not degrade the transit system's safety. Major procurements process includes ST Legal and ST Contracts Department for review. The ST Environmental & Sustainability group works with STX partners for establishing



requirements and standards. Additionally, Finance, Procurement and Safety groups also review procurements before submitting final approval.

An example the STX procurement process for buses is that we require all buses meet or exceed standards and specifications of the FTA under 49 CFR 665, which require that if we are procuring new buses, they are tested at the Altoona Bus Testing Facility and receive a passing score. As part of this process, STX tracks discovered problems with new buses to make sure vehicles are fixed according to recalls. Vendors provide STX documentation certifying the equipment met the standards.

Additionally, STX staff would like to see certain things on buses like 3-point seatbelts for operators. Federal Motor Vehicle Safety Standards (FMVSS) are basic requirements, but STX looks for higher standards for improving safety for STX buses. STX Operations has a rigorous process for addressing procurements, and currently, STX champions an extended life cycle of STX buses by two years, exceeding the FTA's 12-year service life guidelines.

STX Ops reviews partners Safety Data Sheet (SDS) Program updates for specific materials with checklists. STX Ops has oversight of supplied procurement purchases to the partner agencies. STX partners must meet ST SDS requirements and the FTA Triannual will review the partners SDS program for compliance.

Procurement performance requirements, drawings, prints, commercial industry standards, and other descriptive literature references are updated and documented in close coordination with the partner agencies. Partners update documents and provide STX Ops copies of all documents for reference. In turn, STX Ops will provide partners with any Technical Service Bulletins for equipment issued as current.

**4.6 Safety Culture** – STX partners establish a robust and proactive safety culture in empowering their employees to promote a safe work environment. STX has partners submit their safety plans, and STX will review safety items and issues and look for updates. STX works with partners to identify and improve undesired behaviors throughout the STX operation. The partners also submit their ASP every year for Sound Transit review and to establish requirements that have been met.

STX has established a baseline for a safety culture. STX measures safety culture effectiveness with a preventable accident matrix to mitigate identified hazards reported by STX Operators. STX Partners have practical Safety Culture tools in place. ST Express partners encourage their staff to identify and report hazards with immediate follow-up.

STX partners empower staff by giving them a voice in safety to improve their work environment and promote and grow their safety culture.

Sound Transit has created Agency Goal Teams (AGTs) to promote Safety Culture as part of a five-year plan to implement Safety Management Systems (SMS) into the agency's safety policies. The AGTs identify safety performance measures and meet quarterly to review safety goals to improve hazard identification, reporting, and communication. There is a strong dynamic of collaboration and transparency between ST Express and the partner agencies that is proactive in addressing concerns during regular system operations.

## Safety Promotion

The audit team reviewed the Agency Safety Plan (ASP) to ensure that ASP Section 1.0 (Safety Risk Management) followed the agency's ASP requirements. It complies with the requirements specified in FTA 49 CFR 673. **The audit team's review of this ASP section identified no (0) findings and one (0) observation with recommendations relating to elements 5.0.**

**5.1 Safety Communication** – Sound Transit communicates Safety Promotion in monthly performance meetings. STX Ops participates in these internal monthly meetings. Another performance meeting STX participates in is the Transit Integration Group (TIG). The TIG is a quarterly external, regional meeting where reps from other bus agencies have open discussions and conversations on safety, maintenance, and other prevailing issues affecting bus services. STX Ops participates in these meetings to share and gather information with other bus agencies as a collaborative effort to promote bus safety throughout the region. STX Ops also participates in a monthly Mechanical Issues meeting with the STX partner to address issues, mitigate hazards, and discuss upcoming maintenance projects. With all meetings STX engages in, there is a depth of industry expertise and transparency in sharing data with bus agencies for discussing evolving trends.

Any time STX service has a severe incident, as defined in each IGA, STX Ops is notified within 20 mins by email or telephone call. Less severe incidents have a 24-hour window to report to STX Ops. Sound Transit uses the Command Post system to communicate serious incidents internally. Incident information includes all agencies affected and the Sound Transit Chief Safety Officer (CSO). Depending on the severity, the ST Deputy CEO or the CEO will be included in the incident debrief.

The Joint Bus Safety Committee (JBSC) references serious issues in quarterly events. STX shares conditions and event logs affecting STX service with partnering agencies every quarter and Lessons Learned with positive outcomes. ST Communications is a willing internal communications partner with STX Ops and will distribute safety information when requested.

The ST Communications Department meets to discuss strategic plans and editorial calendar for 'official' employee-facing communications and brand standards. STX Ops meets with ST Communications to review how communication plans. An example of this process is bus re-route communications to the public affecting STX service due to construction or other operational issues. STX Ops also meets every two weeks with ST Passenger Experience to discuss impacts on STX service and preplanning. The preplanning process can include writeups by ST TSS and edits for communication purposes.

## COVID-19 Mitigation Process

The audit team visited each of the 3 partnering agencies bus bases to view each maintenance facility, pre & post trip inspections procedures and their COVID-19 cleaning and sanitizing processes.

Each partnering agency has prompt response and attention to detail when performing COVID-19 cleaning and sanitizing of the buses. The audit team reviewed each agency's written policy and procedures, viewed the sanitizing process and the supply of all cleaning/sanitizing supplies. Each agency has taken the all the right steps to ensure ST Express buses are clean and safe.



COVID mitigations continue to be a priority with STX partners. ST Express partnering agencies follow local, state, and government COVID guidelines. The partners also want to meet any STX requirements for keeping STX buses safe from COVID contamination. STX Partners also plans to continue providing face covering to passengers well beyond expired COVID recommendations.

## Field Observations

The audit team observed cleaning crews diligently inspecting STX buses for drug paraphernalia at each partner agency. Each partner agency has policies in place for removing and deposing drug paraphernalia and on how to report drugs found onboard STX buses.

Those policies have explicit instructions for whom to contact within the agency and how to acquire case information from law enforcement agencies that take possession of recovered drugs. Each agency's cleaners have received training in bloodborne pathogens and, in some cases, biohazard training.



We observed that each agency, despite having their own processes and procedures, are thorough with their safety and cleaning inspections and continue to prioritize occupant safety and service reliability.

Our field observation portion of the audit resulted in zero (0) findings or observations.

## Conclusion

Based on document reviews, interviews, and field observations, we conclude that Sound Transit Express and partner agencies are committed to the highest safety standards. Continuous improvement efforts from this audit will help improve safety and risk controls.

Sound Transit Express entirely relies on its partnering agencies to operate, maintain, and oversee their safety management systems. Sound Transit's Safety and Operations Departments have established relationships with each partner agency to ensure they are informed and up to date on all issues concerning the safety and reliability of ST Express Bus Service.

We appreciate the transparency and cooperation of all Sound Transit and partnering agencies who contributed to this audit.

## Findings & Observations

All findings and observations are outlined further in the attached appendix.

### Next Steps

For the items raised, the Audit staff will work with the ST Express staff to determine the party responsible for addressing the finding's root cause and mitigation. The party responsible will be provided with the appropriate response form, and they will be required to use this form to submit a proposed corrective action back to audit within 30 days (about 4 and a half weeks) upon issuance of the Final Audit Report.

### Definitions:

- a. **Findings** are requirements where Sound Transit is non-compliant with a policy, procedure and/or regulation and must be corrected, and documented in writing on a corrective action plan. Action plans should also include a specific, measurable amount of time it will take to reduce the risk rating and correct the issue.
- b. **Observations with Recommendations** does not mean the issue is deficient, however, the auditor has determined that the issue poses the potential risks of becoming a finding in the future if recommended changes are not put in place to prevent occurrence.

For Observations with Recommendations, responders are not obligated to complete the recommended actions because the identified issue is compliant but are still required to submit the Observation with Recommendations Form (see supplied template). These action plans must be submitted within **30 days (about 4 and a half weeks)** of the distribution of this report.

Recommendation responses shall be sent back using the template response format provided and will be tracked, verified, and if necessary, escalated to achieve satisfactory closure to prevent recurrence.

For recommendations, acceptable responses include:

- (1) Accepted
- (2) Accepted with Modification (include modification description) or
- (3) No Action Taken with Justification (including justification explanation and evidence) and changes are not made to prevent a future recurrence.



## Appendix A: Findings & Observations Table

The following table summarizes the findings and observations listed in the audit report. Please refer to **Appendix C: Audit Hazard Risk Rating Process** for more information.

The table below provides space for the responsible party to respond to each finding and observation. Once received and approved by the appropriate authority, the Audit Division will periodically follow up to ensure that the mitigations are put in place to the identified concerns. Additionally, we will collect and document objective evidence for verification and closure purposes.

### Findings:

There were no **(0)** findings associated with this audit.

### Observations with Recommendations:

At the time of the audit, we identified two **(2)** Observations with Recommendations where if not addressed have the potential to become a finding in the future.

#### Safety Management Policy

**Observation #1:** The IGAs between Sound Transit Express and partnering agencies should consider defining each side's explicit roles and responsibilities. For example, labor shortages or strikes and associated costs are not defined within the IGA for operation STX.

The recommendation is for a thorough review of each IGA ST Express has with its partnering agencies and to update specific criteria within the IGAs.

## Safety Management Policy

**Observation #2:** Staffing levels for STX Operations oversight are lower than expected compared to staffing levels for similar operations and equipment oversight levels for other ST modes. There is inconsistency in the staffing levels across ST modal operations.

The recommendation is for STX to consider options to reduce a considerable risk of oversight or overworked staff under the current staffing level.



## Appendix B: Personnel Interviewed

ST Express Sound Transit Staff
Suraj Shetty, ST Executive Director – Operations
Amy Lindblom, ST Director – Enterprise Asset Management
David Lundeen, ST Manager – Employee Health & Safety
Melissa Durel, ST Manager – Security & Safety Management System
Jeffrey Dosch ST Senior Transportation Safety & Security Specialist
Nicholas George, ST Senior Transportation Safety & Security Specialist
Mike Palazzi, ST Transportation Safety & Security Specialist
Robin Braziel, ST Director – Commuter Rail Bus & Paratransit
Tim Wagner, ST Superintendent – Bus Maintenance
Dave Turissini, ST Manager – Bus Operations
King County Metro
Charity Catalfomo, KCM Safety
Mike Thornton, KCM Manager
Community Transit
E. Wade Mahala, CT Manager – Contracted Transportation Services
Matt Coomes, CT Assistant Manager – Contracted Transportation Services
Don Burr, CT Manager of Safety – Security & Compliance
Barb Fuller, CT Safety
Pierce Transit
Reggie Reese, PT – Safety Manager
Jason Hovde, PT Safety
Rodney Chandler, PT Safety
Marah Harris, PT Fleet Manager – Maintenance
Brent Mackie, PT Operations/Training



## Appendix C: Documents Reviewed

The audit team reviewed the following documents and records during the audit of ST Express.

Agency Safety Plan, <ul style="list-style-type: none"> <li>• Sound Transit, Rev 0.0, Jul 2020</li> <li>• King Co. Metro Rev 1.0. Dec 2020</li> <li>• Pierce Transit, Rev 032621, Jun 2020</li> </ul>
Interagency Agreement <ul style="list-style-type: none"> <li>• Community Transit, 2021</li> <li>• King Co. Metro, 2019</li> <li>• Pierce Transit, 2021</li> </ul>
Organizational Charts <ul style="list-style-type: none"> <li>• Sound Transit, Safety, Operations</li> <li>• King Co. Metro, Safety, Security</li> <li>• Pierce Transit, Safety</li> <li>• Community Transit, Safety</li> </ul>
Sound Transit Accident Prevention Plan, Version 5.0, Feb 2021 <ul style="list-style-type: none"> <li>• Sound Transit, Version 5.0, Feb 2021</li> <li>• Pierce Transit, Aug 2021</li> </ul>
ST Express Operations Oversight Program, Aug 2019
Pierce Transit Maintenance Plan, 2017
Community Transit (First Transit), Accident/Incident Evaluation, SOP #701, Jun 2019
Community Transit BOD Security Briefing, April 2022
Community Transit January 2021 ST Monthly Report
Community Transit December 2021 ST Monthly Report
Sound Transit (Monthly) Safety Executive Report, Jan – Jul 2021
Sound Transit After-Action Debrief SOP, SAF 02, May 2020
Sound Transit Asset Management Policy 610, March 2022
Sound Transit KPI Reports, Jul 2021 – Sep 2021
Sound Transit Express Bus Reference Materials, Aug 2019 – Jan 2021
Sound Transit Express Security Dashboards, Sept 2021 – Feb 2022
Sound Transit, Transit Safety NTD Monthly Reporting SOP, TS 03, Sep 2019
King County Metro Bus Incident Investigation Reports, Sept 2021 – Feb 2022

King County Metro STX Bus Hazard Log, Jun 2021 – Feb 2021
King County Metro Safety Event Investigation Policy, Mar 2021
King County Metro Transit Operator Manual of Rules & Procedures, Oct 2021
Community Transit Pre/Post Trip Inspection Forms
Community Transit Service Recovery Operator Report, 2020, 2021
Community Transit (First Transit) Guidance for Managers on Coronavirus (COVID-19), Mar 2021
ST Express Event Log, Jan – Sep 2021
ST Express Conditions Log (open items), Sep 2021
Joint Bus Safety Meeting Minutes, Q1 – Q3 2021
Joint Bus Safety Committee Charter, Mar 2022